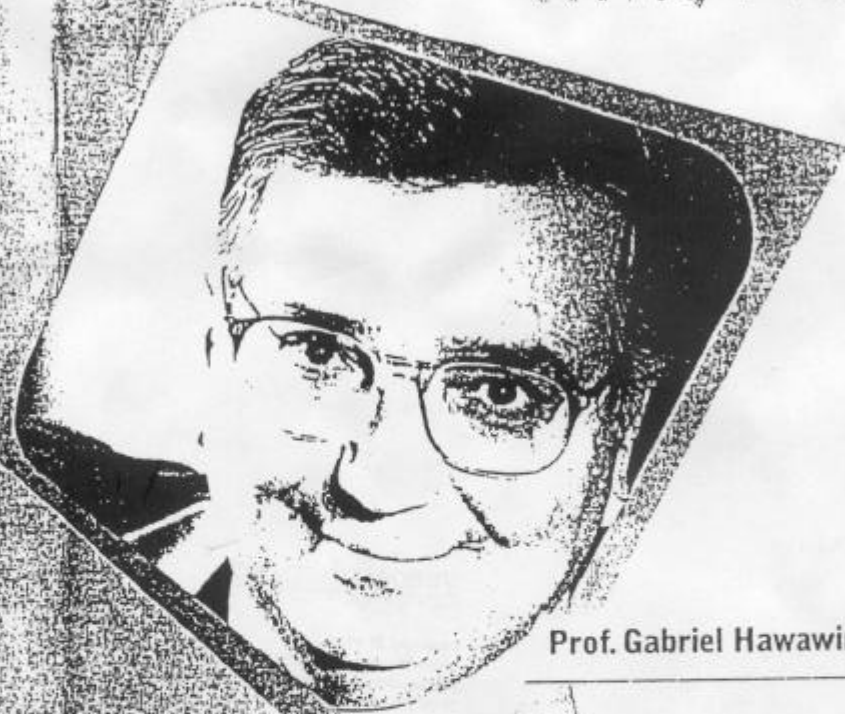


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Prof. Gabriel Hawawini

**Managing For
Shareholder Value**

VIDEO MANAGEMENT

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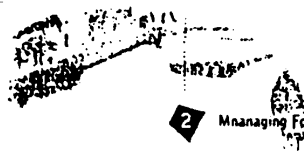
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A man who was going on a journey called in his servants and entrusted his possessions to them. To one he gave five talents. To another, two. To a third, one.

Immediately the one who received five talents traded with them, and made another five. Likewise, the one who received two made another two. But the man who received one dug a hole in the ground and buried his master's money. After a long time the master came back and settled accounts with them.

The one who had received five talents said:

"Master, you gave me five talents. See, I have made five more."

His master said:

"Well done, my good and faithful servant. Since you were faithful in small matters, I will give you great responsibilities."

The one who had received two talents said:

"Master, you gave me two talents. See, I have made two more."

His master said:

"Well done, my good and faithful servant. Since you were faithful in small matters, I will give you great responsibilities."

The one who had received the one talent said:

"Master, I knew you were a demanding person, harvesting where you did not plant and gathering where you did not scatter; so out of fear I buried your talent in the ground. Here it is back."

His master said:

"You wicked, lazy servant! So you knew that I harvest where I did not plant? Should you not then have put my money in the bank so that I could have got it back with interest on my return? Now then! Throw this useless servant into the darkness outside, where there will be wailing and grinding of teeth."

When you think of it, the parable of the talents is 2000 years old. But it would be hard to find a more appropriate opening for this video on shareholder value. You will probably have recognized today's shareholders in the master of the parable. He wanted his talents to be multiplied. Likewise, today's share-

holders want to see their shares grow in value. And today's managers are just like the servants in the parable. Some perform for their shareholders and some don't. Like in the parable, managers who perform get the support of their shareholders. Those who don't perform, had better be careful.

Managing For Shareholder Value

By Professor Gabriel Hawawini (INSEAD)

You can't read an annual report, listen to a corporate speech or read a business article without coming across the term "shareholder value". What does it mean? How is it measured? Why should firms be managed for shareholder value? And where do customers, employees, suppliers and even the community at large come in? And why call it shareholder value? Isn't it the same thing as profits?

A lot of managers ask me why shareholder value has replaced profits as the company's objective. Well, you must first recognize that profits and shareholder value are not the same thing: profits can be compared to your annual income. It is a measure of performance during a single year. But the value of a company is more than just a single year of profits. Value should reflect the capacity of a company to generate a stream of profits over a long period of time into the future. It is the ability of a company to generate profits in the future that makes it valuable today.

To illustrate the difference, think of Amazon.com a company that was worth over \$25 billion in 1998. This was the total amount of money that investors were willing to pay for Amazon.com. Why did investors value the company so highly? Especially considering that this company had not generated a single penny of profits since it was created and is not expected to do so until the next century?

We will further illustrate the difference between profits and shareholder value with the example of two well-known companies, General Motors (GM) and General Electric (GE). Before we do this, let us briefly review some basic principles on how to finance a business investment. You may decide to launch a new product, invest in new equipment or acquire another company. These decisions will require financing. Now, what are the sources of funds a company can use for such investments?

Basically there are 2: funds contributed by the shareholders, the company owners. We call this equity capital. The other source is borrowed money, from banks or the capital markets. We call this debt capital. Equity capital and debt capital are not free. They have a cost because both shareholders and creditors require a return on their investment.

We will show you later how the cost of capital is measured. Let us now look at the figures for two well-known companies, General Motors (GM) & General Electric (GE).

1 GM And GE Compared

General Motors - General Electric		
	General Motors GM	General Electric GE
Market Value	\$62 billion	\$176 billion
- Capital Employed	(\$83 billion)	(\$54 billion)
= Market Value Added	= -\$21 billion	= +\$122 billion
Revenues	\$169 billion	\$70 billion
Employees	709,000	222,000
Profits	\$5.0 billion	\$7.9 billion

Balance sheet GM and GE

\$83 billion is the book value of General Motor's capital at the end of 1996, as it appeared on its balance sheet. It is an accounting number which indicates how much shareholders and creditors have invested in the firm on that date.

This may well be what the accountants tell us the company is worth. But is that what the company is really worth to investors? To find out what the company is really worth, we should look at its market value. The market value of GM's capital on December 31 1996 is an entirely different figure. It is the market value of GM's equity and debt capital on that day. You

can calculate the market value of equity by multiplying the share price of GM on that day by the number of shares GM has issued. To find out the market value of GM's debt capital, you can look at the market value at which its debt, such as corporate bonds, is traded. Let's now have a look at what GM's market value is.

Surprise, surprise! It is less than its book value or balance sheet value. For General Motors, the market value of its equity and debt amounts to only \$62 billion. What does this mean? What is the market telling us? It is telling us that the company is worth less than the \$83 billion investors have put into it.

In other words, we can say that GM has destroyed \$21 billion of value. We call that \$21 billion the market value added, which admittedly sounds odd in this case since no value has been added to the book value at all.

Let us now look at the numbers for GE. At the same point in time General Electric had a book value of \$54 billion and a market value of \$176 billion. In other words, contrary to GM, GE has created rather than destroyed value. Its market value added, and in this case it sounds right, amounts to \$122 billion on December 31 1996.

Put differently, where GM employed \$83 billion of capital to achieve a market value of only \$62 billion, GE employed only \$54 billion to create \$176 billion in value. These findings are even more stunning if we compare some other measures of performance. In the year of our comparison, 1996, GE is indeed much smaller than GM in terms of revenues and in terms of employees.

What can we conclude from this comparison? Size is obviously irrelevant if it does not create value. Another way of putting it is to say that some companies like GM are unable to create shareholder value despite their very large size and significant market share. At the end of 96, GM had not managed to translate its huge market share into value for its shareholders. GM may be a bigger company, but GE has happier shareholders. So you may wonder how GM manages to retain its shareholders? Well, GM retains them by paying them big dividends. Mind you, the failure of GM to create shareholder value at the end of 1996, does not mean that GM was not profitable. Let's look at the profits of the two companies.

In 1996, General Motors still had a profit of \$5 billion, in spite of its negative MVA. This clearly shows that profits and shareholder value are not the same. Profits reflect past performance. Value reflects future performance. In other words, in December '96 the market did not believe that General Motors would be able to sustain its profitability in the future.

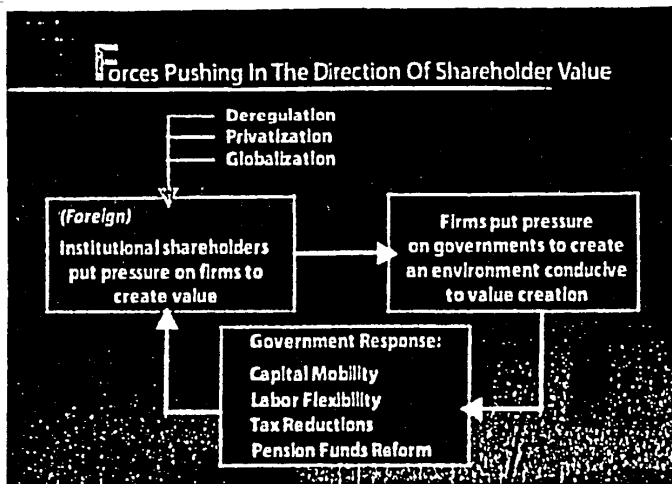
In the case of GE, however, the market had little doubt as to the company's ability to maintain its profitability into the future. In 1996 GE's profits amounted to \$7.3 billion, 46% higher than the profits of the much bigger GM. Its market value was 3 times as high as that of GM, not to mention the stunning difference in the two companies' MVA.

You should understand by now that managing for value creation is more than a business slogan. It means making decisions that raise the firm's market value above the amount of capital the company employs to finance its activities. The question now is, why does shareholder value receive so much attention today?

2 Why Is Managing For Shareholder Value So Important Today?

Look at it this way. The importance of shareholder value can be explained in the same way as the importance of delivering excellent customer service. Better service is an immediate result of more choice. Today customers have choices they did not have before. They can therefore take their business away from whatever company that fails to satisfy them. Deregulation, liberalization and globalization took care of that. Well, the same trends are taking place in the capital markets.

Investors too can take their money from one market to the next if they are not offered competitive returns. Like customers, investors are now free to go elsewhere whenever they are unhappy with the return they get. It has not only become politically possible for them to do so, it has even been made easy. The growth of capitalized pension funds, which are managed by aggressive and professional money managers, has dramatically accelerated this trend.



Forces pushing in the direction of shareholder value

Shareholders, particularly institutional investors such as pension funds, put pressure on firms to create value. As a result, firms put pressure on their governments to create an environment conducive to value creation. Governments usually respond by allowing capital mobility, labor flexibility, tax reductions and pension funds reform. These measures only reinforce the pressure that aggressive pension fund managers can impose on firms.

In a very short period of time, these shareholders have become increasingly "foreign". Players such as the pension fund of the state of California, one of the largest pension funds in the world, are really becoming a major force in stock markets around the world.

Let me tell you a story to illustrate the growing dominance of foreign institutional investors in local stock markets. What do you think is the percentage of foreign ownership of the largest listed French companies? 20%? 30%? 40%? Well, it is now approaching 50%! What is even more surprising is the fact that not long ago, that percentage was negligible. What's the implication of all this? Many companies have already had a hard time learning to listen to their customers. Their challenge now is learning to listen to their shareholders.

Managers definitely feel this pressure already. A firm that fails to create value for its shareholders will be unable to attract the equity capital it

needs to finance its activities. And without equity capital, no firm can survive. So, if managers fail to attract capital, they will soon be replaced by managers who have no problem doing exactly that. Is this all really just a matter of money? What about people? And customers? Where do they come in?

You might ask whether there is no conflict between satisfying the expectations of shareholders on the one hand and the needs of customers and employees on the other. Well, there isn't. Here's the evidence: Fortune Magazine sends out a questionnaire every year to several thousand decision-makers. They are asked to rank companies along several criteria. I will now show you 3 such criteria that are relevant for our discussion.

The ability of the company to grow by providing quality products and services, the ability to attract, develop and keep talented people and finally their responsibility towards the community and the environment. The question now is what was the stock market performance of the companies that scored best on these three criteria?

Ranking Criteria

1. Their ability to grow by providing quality products and services.
2. Their ability to attract, develop and keep talented people.
3. Their community and environmental responsibility.

In order to find that out we will look at how their shares performed during the period from 1985 to 1995. Those that scored highest on the 3 criteria provided an annual average return of 19% to their shareholders. Those that scored lowest had an average annual loss of 5% on their share price per year.

If you know that the average market return was 15% during that period, we can conclude that the companies that are the most admired for their ability to attract and retain better employees and loyal customers, also beat the stock market.

The most admired companies seem to know very well that dealing successfully with customers and employees is a prerequisite to create value for their shareholders. But you should not conclude that the guaranteed recipe for value creation consists of delighting customers, establishing durable relations with suppliers and motivating employees. There are firms that manage to do all that, yet fail to convert this goodwill into a higher market value. I'm sorry, but I have to take you back to GM. Our story is now set in the mid-80s.

THE SATURN CASE

In the mid-eighties GM faced strong competition from foreign producers of small, reliable, and inexpensive cars. In response to this challenge, GM set up a separate company to build an entirely new car, the Saturn. The car was designed, produced, and sold according to the best practices. Workers were highly motivated, car dealers could not keep up with demand, and customers were extremely satisfied. According to these criteria, Saturn was an undeniable success story.

However, the project did not deliver the expected rise in the value of GM's shares. Most observers thought it unlikely to ever become profitable. From the project's inception until the mid-nineties, GM invested more than \$6 billion to develop, produce and launch the Saturn. This amount is so large that, in order for GM to earn an acceptable return for its shareholders, analysts stated that GM would have to operate existing facilities at full capacity forever, earn more than double standard profit margins, and keep 40 percent of the dealer price as net cash flow.

How long should a firm fund a project that delights its customers, its distributors, and its employees but fails to deliver value to its shareholders? Sooner or later, shareholders will question the relevance of a strategy that doesn't produce a satisfactory return on their equity investment. Dissatisfied shareholders, particularly those holding a significant portion of the firm's equity investment, may force the management to change course. They may even try to get rid of them. Or, they may simply withdraw their support by selling their holdings to others that might force changes. In short, no firm can afford to have delighted customers, motivated employees and devoted suppliers for too long if it does not also have satisfied shareholders.

Professor Hawawini is not alone in this opinion. In fact, he is in the company of a few big names. Like Jack Welch, the CEO of General Electric, who stated:

"A proper balance between shareholders, employees, and communities is what we all try to achieve. But it is a tough balancing act because, in the end, if you don't satisfy shareholders, you don't have the flexibility to do the things you have to do to take care of employees or communities."

Roberto Goizueta, the former Chairman and CEO of the Coca-Cola Company, is also very clear about this matter:

"Management doesn't get paid to make shareholders comfortable. We get paid to make the shareholders rich."

Further convincing of the need to manage for shareholder value is probably redundant. Let us therefore deal with how the information and data on value creation should be interpreted.

3 How To Interpret Data On Value Creation?

MONITOR OVER A PERIOD OF TIME

It is important to monitor the changes in market value added over a period of time. We saw these numbers for GM and GE at the end of 1996. How did these companies do the previous year? GM had not only destroyed \$21 billion in 96; it had already destroyed \$8 billion at the end of 95. GE created \$122 billion in 96, but it had already created \$81 billion in 95. In both cases, the 96 figures confirm the direction their market value was taking a year earlier. Most companies do not change from value creators into value destroyers overnight.

Fortune			
December 31, 1996 (in billion \$)			
Top Value Creators	Market Value	Capital Employed	MVA
1. COCA-COLA	136	11	+125
2. GENERAL ELECTRIC	176	54	+122
3. MICROSOFT	96	6	+90
4. INTEL	104	17	+87
6. PHILIP MORRIS	110	43	+67
7. EXXON	114	88	+56
14. WAL-MART STORES	66	31	+35
Top Value Destroyers			
914. WESTINGHOUSE ELECTRIC	20	21	-1
989. UNION PACIFIC	27	28	-1
992. OCCIDENTAL PETROLEUM	16	18	-2
996. KMART	12	15	-3
997. DIGITAL EQUIPMENT	8	12	-4
999. BURNING BROS	23	35	-12
1000. GENERAL MOTORS	62	83	-21

List from Fortune Magazine

The importance of observing the trend in value creation can be clearly shown by comparing successive lists of value creators and destroyers in Fortune Magazine. The list ranks the 1,000 largest U.S. industrial and non-financial services companies according to their estimated MVA on December 31 of the previous year. Six of the top ten value creators in 96 were also ranked among the top ten five years earlier. A company's ability to create value doesn't change overnight, but that doesn't mean the ranking is immutable. For example, Intel went from number 74 in 1991 up to number 4 in 1996, whereas Union Pacific went from number 108 down to number 989 over the same period.

DISTINGUISH MARKET VALUE FROM MVA

This same Fortune list also provides the market value of the companies' total capital (equity and debt), and the corresponding amount of capital employed. The difference is what we saw in the third column, the companies' estimated market value added. This table confirms what we pointed out earlier: the firm with the highest market value is not necessarily the one that has created the most value. General Electric has the largest market value but ranks second by MVA, because it used up more capital than Coca Cola. We measure value creation in absolute terms, but we can also do it per dollar of capital employed.

LOOK AT VALUE CREATION PER DOLLAR OF CAPITAL EMPLOYED

Compare, for example, the performance of Coca-Cola to that of Microsoft. Coca-Cola was the highest absolute value creator on December 31, 1996, with an estimated MVA of \$125 billion. Microsoft was ranked third with a lower estimated MVA of \$90 million. But if value created is measured per dollar of capital employed, Microsoft outperformed Coca-Cola. It created \$15 of value per dollar of capital employed compared to \$11.4 for Coca-Cola.

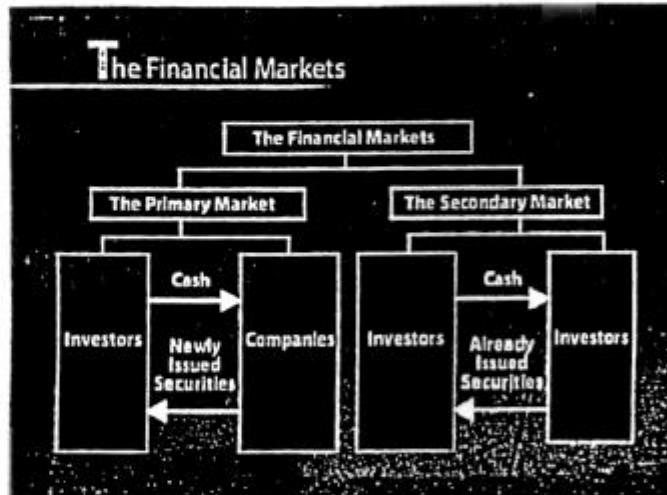
DON'T BLAME IT ON THE SECTOR

Another important lesson we can draw from this table is that a firm's inability to create value cannot be blamed on industry factors alone. Value-creating companies are found in a diversity of sectors. From soft drinks over diversified industrial and financial holdings, software publishing, microprocessors, tobacco, oil, to retailing.

Notice the presence of both value-creating and value-destroying companies in the same or closely related sectors: General Electric and Westinghouse Electric, Philip Morris and RJR Nabisco, Intel and Digital Equipment, Exxon and Occidental Petroleum.

So, the ultimate objective of financial management is value creation. This means that before making a business decision, managers should always ask themselves the key question: will that decision raise the market value of my firm above the amount of capital I need to finance that decision? If you can confidently answer yes, you should go ahead. If the market agrees with you, the value of your company will rise immediately. Clearly, the financial markets play an important role as a judge of performance. I therefore propose to take a closer look at how they function. If you know how they work, skip the next chapter and move on to the following one.

4 The Role Of Financial Markets



Financial markets

Financial markets play a key role in the process of business growth and value creation. As primary markets, they provide the financing to fund new ventures and business growth. They perform this function by acting as intermediaries between individual and institutional investors, the providers of capital, and companies, the users of capital. Primary markets thus are a channel through which companies raise new capital by issuing new securities.

Secondary markets then provide a mechanism for trading securities that have already been issued. They thus convert the decisions of firms into increases or decreases in shareholders' wealth via higher or lower security prices.

Financial markets are therefore not only a source of capital to finance business growth but also a processor of information and an indicator of value creation or destruction. In an efficient equity market, the share price of firms adjusts instantly to new and relevant information: stock prices rise instantly on favorable news and drop instantly on unfavorable news, assuming, of course, that the piece of news was unanticipated. That means that, as soon as a company announces a decision that the markets interpret as positive, the company's market value should rise by an amount equal to the market's estimation of that decision's positive value. Note that shareholders do not have to wait for the firm to carry out its decision. All they have to do is sell their shares immediately to receive their part of the value created by the firm's positive announcement. On the other hand, if market participants believe the decision will have a negative effect, shareholders will suffer an immediate loss. The following story, again involving GM, provides an illustration of how the stock markets react to announcements that could affect the future performance of companies.

THE STORY OF MR. LOPEZ

This is the story of Mr. Lopez in 1993. He was at the time a powerful executive in charge of worldwide purchasing for General Motors. This was a key position, considering GM's bloated cost structure and substandard profit margin. According to press reports, Mr. Lopez and his team were able to shave off close to \$1 billion of GM's annual costs, which made him one of GM's most valuable employees. But valuable employees attract competitors' attention.

In early 1993, Volkswagen, another car manufacturer with a bloated cost structure and a substandard profit margin, approached Mr. Lopez. But GM could not afford to lose his invaluable services and offered him a big raise and a promotion to group vice-president. This seemed to settle the matter: Mr. Lopez was to stay with GM.

March 11, 1993

But on Thursday, March 11, 1993, a rumor began to spread around Detroit and Wall Street: Mr. Lopez was about to leave GM and join Volkswagen.

March 12, 1993

On Friday, March 12, 1993 Volkswagen confirmed that Mr. Lopez would join them. On the New York Stock exchange, the price of GM's shares dropped 4.4 percent between Wednesday's close and Friday's close while the Dow Jones Industrial Index dropped only 1.4 percent over the same two-day period. At that time, a 1-percent drop in the stock price of GM corresponded to a value destruction of \$280 million.

-1 % (GM Stock) = - \$280 million

If we remove the 1.4 percent drop in the market from the 4.4 percent drop in the stock price of GM, the remaining 3 percent corresponds to \$840 million of value destruction in 48 hours, the equivalent of almost one year of cost-cutting efforts.

(-4,4%) (GM Stock) - (-1,4%) (Market)
= - 3 %
= - \$840 million

On the Frankfurt Stock exchange, the price of Volkswagen's shares rose 1.8 percent while the market, in this case, the DAX Index, fell 0.2 percent. Adjusted for market movement, the rise in price of Volkswagen's shares was 2 percent and corresponded at the time to approximately \$90 million of value creation.

(+ 1,8%) (VW Stock) - (- 0,2%) (Market)
= + 2 %
= + \$90 million

Obviously, Mr. Lopez's decision to move from GM to Volkswagen was a value destroying move for GM but a value creating one for Volkswagen. The prevailing consensus among financial analysts was that Mr. Lopez and his team, which was expected to follow him to Volkswagen, were not easily replaceable. Mr. Lopez's transfer from GM to Volkswagen resulted in a net value destruction of \$750 million, the difference between GM's loss and Volkswagen's gain. Given the size of GM, Mr. Lopez and his team were clearly more valuable to GM's shareholders than they were to

Volkswagen's owners



Then, over the weekend, GM made Mr. Lopez an offer he could not refuse: a promotion to executive vice-president responsible for all of GM's North American car operations.

March 15, 1993

Mr. Lopez was staying with GM after all. On Monday, March 15, the stock price of GM rose 1.3 percent on the news, while the U.S. market was up 0.3 percent, and the stock price of Volkswagen fell 2.5 percent, while the German market dropped only 0.3 percent. GM thus recovered a third of its lost value while Volkswagen lost all its previous gains. Still, the markets were not convinced that Mr. Lopez would now stay with GM but also thought it unlikely that he would join Volkswagen. But hold on, the story is not finished yet.

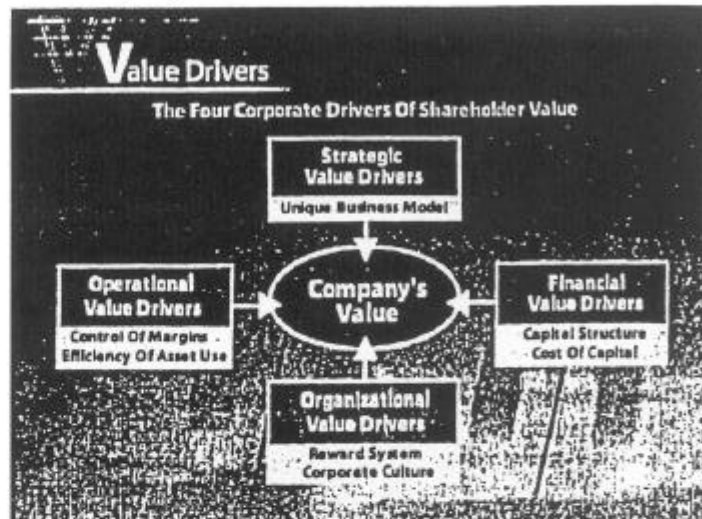
March 16, 1993

On Tuesday, March 16, Volkswagen announced that Mr. Lopez had joined the company as the head of worldwide production and as a member of its managing board. GM confirmed that Mr. Lopez had officially resigned. GM's share price fell 1.3 percent on a flat U.S. market and that of Volkswagen rose 1.8 percent while the German market dropped 0.3 percent. After adjusting for the market movement, Volkswagen thus recovered its previous 2 percent rise and this despite the fact that the same day the company announced a dramatic reduction in both its profits and dividends for 1992.

Mr. Lopez's story clearly illustrates the role played by the U.S. and German stock markets as instantaneous processors of news into value creation when the news is favorable and value destruction when it is unfavorable.

There is even more to that story. It tells us that the ultimate success of a firm is not measured by its capacity to grow its sales, produce profits, or generate cash. In the final analysis, what really matters is whether the firm's activities are creating value for shareholders. The problem of course is that you, as a manager, cannot directly control your company's market value. But I will show you how you can manage a number of key variables that drive your company's market value.

5 Managing For Value Creation



The four corporate drivers of shareholder value

Four groups of corporate drivers determine a company's value: the first group contains strategic value drivers. They refer to the company's ability to design a unique business model. A unique business model is the company's own recipe to grow, to earn higher returns than its competitors and so capture most of the value created in its sector.

Examples of these are Coca-Cola whose business model is to focus on the high-margin and low capital-intensive segment of its value chain. This explains why Coca-Cola reduced its investment in bottling, a low-margin and capital-intensive activity, and focused on producing coke syrup, which has the opposite characteristics, that is, a low capital-intensity and high margins, and on the marketing of the Coca-Cola brand. Other companies with superior business models include Wal-Mart, where information technology is used for superior inventory control and management of consumer demand, and General Electric where superior customer relations are used to extend the product into a total service offering. For example, GE thus went from selling airplane engines to also offering financing, servicing, maintenance, training and upgrading.

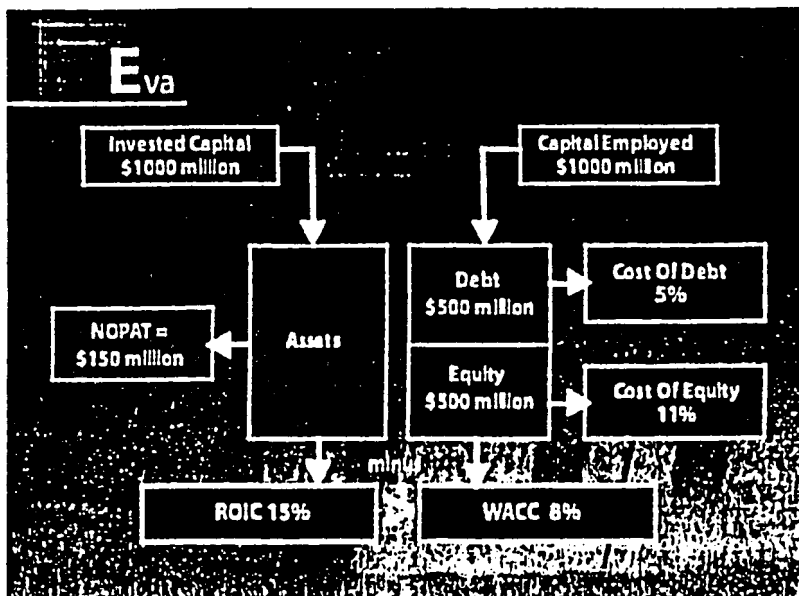
A second group of corporate drivers of shareholder value are operational. These have to do with the control of margins and the efficiency with which a company's assets are used. They are closely related to the

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financial value drivers in which the company's capital structure and its cost of capital play an important role.

Let's stop a moment at those financial value drivers. What is the fundamental principle in finance? Well, it says that managers create value if they make decisions that consistently earn a return on investment that exceeds the cost of financing that investment. This principle is best captured by the notion of economic value added or [®]EVA. Since [®]EVA is central to the process of shareholder value creation, we should carefully define it before we proceed.

6 Defining Economic Value Added Or [®]EVA



Balance sheet

Let's assume a company has generated a net operating profit after tax or NOPAT of \$150 million. To generate that profit, the company needs \$1,000 million of assets, also called invested capital. To finance these assets, the company employs \$1,000 million of financial capital as shown on the right hand side of the balance sheet.

What is the return on the company's invested capital? It's the net operating profit after tax of 150 divided by the invested capital of 1,000, which

[®]EVA is a registered trademark of Stern Stewart & Co

is 15%. This 15% is called return on invested capital or ROIC. In order to create value, ROIC must be higher than the firm's cost of capital; that is, the return on investment must exceed the cost of financing that investment. This means that, if we want to know whether value is created, we must find out whether the firm's cost of capital is lower than its ROIC of 15%. So what is the firm's cost of capital?

The cost of capital depends on the company's capital structure. Let's assume that our company finances its assets with the same proportions of equity and debt capital and that the cost of debt is 5% and the cost of equity 11%.

The cost of debt is the after tax interest rate at which the company is borrowing the 500 million. The cost of debt is always taken after tax because interest payments are a tax-deductible expense.

The cost of equity is an estimate of what the company's shareholders expect as a return on their equity investment. This could be the topic of an entire new video, but for the time being, let's stick to two broad guidelines:

1. The cost of equity will always be higher than the pretax cost of debt (in our case 10% if the tax-rate is 50%) because equity financing is riskier than debt financing and thus shareholders will require a higher return than banks.
2. The second broad guideline is that the average performance of the capital markets will influence the expectations of shareholders and thus determine a firm's cost of equity capital.

We now have all the elements to calculate the weighted average cost of capital or WACC for our company. It is the proportional cost of debt plus the proportional cost of equity, that is to say one half of 5% plus one half of 11% equals 8%.

$$\begin{aligned} \text{WACC} &= 50\% \text{ Of Cost Of Debt} + 50\% \text{ Of Cost Of Equity} \\ &= 50\% \times 5\% + 50\% \times 11\% \\ &= 2.5\% + 5.5\% \\ &= 8\% \end{aligned}$$

Obviously the company is creating value since its return on invested capital of 15% exceeds its WACC of 8%. The difference between ROIC and WACC is called the return spread which in our case equals 7%.

So, according to the fundamental finance principle, a company creates value when its return on investment exceeds its cost of capital and destroys value when its return on investment is lower than its cost of capital. This is the same as saying that a company creates value when its return spread is positive and destroys value when it is negative. Note that when the return spread is zero, the firm neither creates nor destroys value. This does not mean that the firm is unable to remunerate its suppliers of capital. When the return spread is zero, or ROIC is equal to WACC, it means that the firm generates enough profits to provide creditors and shareholders the exact returns they expect and no more.

Note that the return spread of 7% tells us that the company is creating 7 cents of value for each dollar of capital. For a company with a 1,000 million of capital, the amount of value created is 1,000 million times 7 cents or 70 million. This is what we call the company's *EVA.

In other words, *EVA equals the return spread multiplied by the amount of invested capital, or in our case 7%, the difference between 15% and 8%, multiplied by 1,000 million, which equals 70 million. As long as the company keeps generating positive *EVAs, it will create value. This is the case because a positive *EVA implies a return on investment that is higher than the cost of capital and a negative *EVA implies a return on investment that is lower than the cost of capital.

$$\begin{aligned}
 \text{*EVA} &= \text{Return Spread} \times \text{Invested Capital} \\
 &= (\text{ROIC} - \text{WACC}) \times \text{Invested Capital} \\
 &= (15\% - 8\%) \times 1,000 \\
 &= 7\% \times 1,000 \\
 &= 70 \text{ million}
 \end{aligned}$$

*So what's so special about the concept of *EVA? All it does is measure the difference between the return on a company's investment and the cost of financing that investment. What is new with *EVA is that capital includes all sources of capital, and not just debt, but also equity. Many managers confuse the cost of capital with the cost of debt. The cost of capital is more than just the cost of debt. Companies that fail to include the cost of equity in the computation of their own cost of capital will never know whether their decisions will create or destroy value for their shareholders. Let's look at the companies we visited earlier to see the evidence.*

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Earlier we only considered their MVA. But as you can see there is a consistency between MVA and EVA. Those companies with a positive return spread and positive EVA, whose ROIC was higher than their WACC, were the ones that created value as shown by the corresponding sign of their MVA. So, the secret of value creation in the stock market, as measured by positive MVA, is the ability of firms to make decisions that generate positive EVAs.

If the markets observe positive EVAs and expect a firm to continue to generate positive EVAs in the future, its share price will rise and its MVA will be positive. You can think of a firm's MVA as the value today that the market assigns to the future stream of EVAs the firm is expected to generate.

You, as a manager, cannot directly influence your company's MVA. But you can certainly take actions that will increase its future stream of EVAs. If the market agrees with you, your company's MVA will rise. The key then is to encourage managers to make decisions today that are expected to generate high EVAs in the future. This brings us to the fourth and last corporate driver of value creation.

The last set of corporate value drivers are organizational. They refer to the company's reward system and its corporate culture.

The idea here is to use the company's reward system to align the interest of managers with the interest of shareholders. To illustrate the point, suppose that you are in charge of a company's division that has an average return of 17% and a cost of capital of 10%. Let's say you have to decide whether or not to make a single-year investment whose expected return is 14%. Will you go ahead? You certainly should because its expected return of 14% is higher than its cost of capital of 10%, implying that the investment will create value and should be undertaken. Suppose now that your reward system is related to your division's average return, currently at 17%. Would you still go ahead? Probably not. Why? Simply because going ahead with the 14% investment will bring your division's average return below 17%. What we need is a reward system that links your remuneration to your ability to exceed the cost of capital, and hence create value, rather than reject what is a value-creating investment in order to prevent a lowering of your division's average profitability.

*EVA is a registered trademark of DuPont.

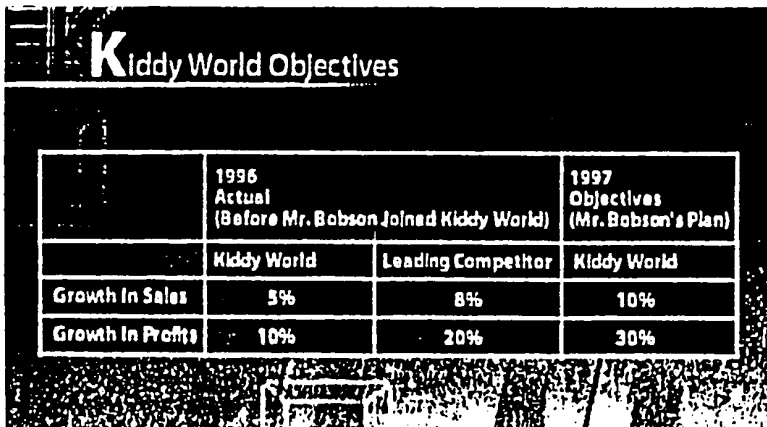
Actually, the reason I'm here, is to explain this message to Mr. Thomas, the only shareholder of Kiddy World, and Mr. Bobson, his general manager. Their relationship went wrong because each of them had a different objective regarding the company's performance. Here is their story.

7 The Kiddy World Story Or How To Link Performance And Remuneration To Value Creation

Mr. Thomas, the sole owner of a toy distribution company called Kiddy World, was concerned about his firm's recent poor performance compared to that of a leading competitor. He decided to step back from the day-to-day managerial duties and hired Mr. Bobson as a general manager to run the company and improve its performance.

Mr. Bobson was a successful business manager who worked for a competitor. Mr. Thomas persuaded him to join Kiddy World in early January 1997. What attracted Mr. Bobson was the challenge of improving the company's performance, as well as a higher salary and a generous bonus plan linked to the company's profits. After getting acquainted with the company, Mr. Bobson submitted his business plan for 1997 to Mr. Thomas.

KIDDY WORLD'S 1996 PERFORMANCE AND 1997 OBJECTIVES



Kiddy World Objectives

	1996 Actual (Before Mr. Bobson Joined Kiddy World)		1997 Objectives (Mr. Bobson's Plan)
	Kiddy World	Leading Competitor	Kiddy World
Growth In Sales	5%	8%	10%
Growth In Profits	10%	20%	30%

Kiddy World 1996 performance and 1997 objectives

The plan had two major objectives. One was to grow sales in 1997 by 10% compared to 5% the previous year and 8% for the leading competitor. The other was to grow profits in 1997 by 30% compared to 10% the previous year and 20% for the leading competitor.

Mr. Thomas approved the plan and gave Mr. Bobson full authority to implement it as he wished.

EARLY 1998

In early 1998, Mr. Thomas wanted to find out whether Mr. Bobson had achieved his sales and profits objectives. He also wondered whether the equity capital he and his family had invested in the company was adequately remunerated for the risks associated with the toy business.

It so happened that he had been contacted by a friend with a proposal to invest in an enterprise whose risk profile was similar to that of the toy distribution business and from which he could expect a return of 20 percent.

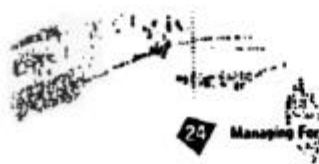
Did the general manager achieve his sales and growth objectives?

Kiddy World Profit & Loss Account

In \$ millions

	1996	1997	% Change
Sales	2000	2200	10%
Less Operating Expenses	1850	2000	8%
Equals Earnings Before Interest & Taxes (EBIT)	150	200	33%
Less Interest Expenses At 10% Of Borrowing	50	55	
Equals Taxable Profits	100	145	45%
Less Taxes At 40%	40	58	
Equals Net Profits	60	87	45%

Kiddy World profit and loss account



To find out, let us examine the company's income statements or profit and loss accounts. We see that in 1997 sales grew by 10%, from 2,000 to 2,200, and profits by 45%, from 60 to 87. Mr. Bobson has indeed achieved his sales-growth objective of 10% and exceeded by far his profits-growth objective of 30%.

Mr. Thomas was pleased. Still, he wanted to know how Mr. Bobson did it and wanted to have a look at the company's balance sheet.

Kiddy World's Balance Sheet

On December 31 In \$ million

Investments	1996	1997	% Change	Financing	1996	1997	% Change
Cash	100	40	-60%	Short-term Debt	150	300	100%
Working Capital	500	700	40%	Long-term Debt	250	250	0%
Net Fixed Assets	300	360	20%	Equity Capital	500	550	10%
Total Invested Capital	900	1100	22%	Total Capital Employed	900	1100	22%

Kiddy World's balance sheet

A closer look at the balance sheet reveals another aspect of Mr. Bobson's performance. The company's invested capital grew by 22%, from 900 million to 1,100 million. This growth is mostly due to the relatively high growth rate of 40% in the firm's investment in working capital.

Working capital is essentially made up of inventories and accounts receivable (these are sales to customers not yet cashed at the date of the balance sheet), net of accounts payable (these are purchases from suppliers not yet paid at the date of the balance sheet).

$$\text{WORKING CAPITAL} = (\text{Inventories} + \text{Accounts Receivable}) - \text{Accounts Payable}$$



Thus, a growth in working capital, far in excess of the 10% growth in sales, means that the company's inventories are building up and that its customers are not paying their bills as fast as they used to.

GROWTH IN WORKING CAPITAL = 40%
versus
GROWTH IN SALES = 10%

A first consequence of the excessive growth in working capital is the deterioration in the company's cash position, which went down from 100 million in 1996 to 40 million in 1997.

A second consequence is the doubling of short-term borrowing, from 150 million in 1996 to 300 million in 1997. Mr. Bobson has increased sales and profits but this outstanding performance in the company's profit and loss account has been unfortunately accompanied by a significant deterioration of the company's balance sheet.

Putting it all together, what can we conclude? Is Mr. Thomas better off or worse off than before Mr. Bobson joined? In other words, sales and profits are up, but has Mr. Bobson created value. This is the question we need to answer. We can find out by comparing Kiddy World's return on invested capital to its cost of capital. If the return on investment is higher than the cost of capital, EVA is positive and value was created. If it is lower than the cost of capital, EVA is negative and value was destroyed.

THE RETURN ON INVESTED CAPITAL FOR 1997

The return on invested capital Kiddy World has achieved in 1997 is found by dividing the company's net operating profit after tax or NOPAT in 1997 by the average amount of invested capital.

NOPAT is calculated by taking the EBIT or earnings before interest and taxes of 200 million from the profit and loss account, net of the corporate tax-rate of 40%. If the tax-rate is 40% then what remains is 60% of 200 million or 120 million.

NOPAT
= EBIT x (1 - Tax-rate)
= 200 x (1 - 40%)
= 200 x 60%
= 120 million



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AVERAGE INVESTED CAPITAL

Average invested capital is calculated by taking the average of invested capital in 1996 and 1997, which are found at the bottom of Kiddy World's balance sheets on December 31, 1996 and 1997. It is equal to 1,000 million.

$$\begin{aligned} \text{AIC} &= (\text{Invested Capital (96)} + \text{Invested Capital (97)}) : 2 \\ &= (900 + 1,100) : 2 \\ &= 1,000 \text{ million} \end{aligned}$$

Dividing a NOPAT of 120 million by an average invested capital of 1,000 million we get a return on invested capital or ROIC of 12% for 1997. As we have seen, the weighted average cost of capital or WACC is equal to the percentage of debt financing multiplied by the cost of debt after tax, plus the percentage of equity financing multiplied by the estimated cost of equity financing. For Kiddy World, the cost of debt after tax is 60% of the pretax cost of debt of 10%, that is 6%.

$$\begin{aligned} \text{WEIGHTED AVERAGE COST OF CAPITAL OR WACC} &= (\text{Percentage Of Debt Financing}) \times (\text{Cost Of Debt After Tax}) \\ &+ (\text{Percentage Of Equity Financing}) \times (\text{Cost Of Equity}) \end{aligned}$$

$$\begin{aligned} \text{COST OF DEBT AFTER TAX} &= 10\% \times (1 - 40\%) \\ &= 10\% \times 60\% \\ &= 6\% \end{aligned}$$

The cost of equity is the 20% expected by Mr. Thomas on an equity investment in the toy distribution business.

$$\begin{aligned} \text{COST OF EQUITY} &= \text{Return Expected By Mr. Thomas} \\ &= 20\% \end{aligned}$$

The 50% proportions of debt and equity capital are found in Kiddy World's balance sheets.

$$\text{PERCENTAGE DEBT AND EQUITY FINANCING} = 50\%$$

Thus, Kiddy World's WACC is equal to one half of 6%, plus one half of 20%, that is 13%.

$$\begin{aligned}\text{WACC} &= (50\% \times 6\%) + (50\% \times 20\%) \\ &= 3\% + 10\% \\ &= 13\%\end{aligned}$$

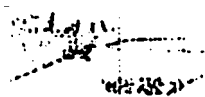
The implication is clear. Mr. Bobson has not created value in 1997 because the company's 12% return on invested capital or ROIC does not cover its estimated cost of capital of 13%.

Let me summarize the story so far. Mr. Bobson was successful in increasing sales and profits but failed to control the growth of the company's balance sheet. Investment in inventories and receivables, which are part of working capital, grew much faster than sales and profits. We can say that Mr. Bobson is a great manager of his firm's profit and loss account, but a lousy manager of its balance sheet. Yes, sales and profits are up, but the problem is that the amount, as well as the cost, of the capital required to achieve those goals were too large, offsetting the benefit of higher profits.

Why is Mr. Bobson pushing sales and profits, while neglecting the management of his balance sheet? Perhaps we should look at the way his remuneration package was designed. Recall that Mr. Bobson's compensation includes a bonus related to profits. Not surprisingly, profits are up. The fellow behaves rationally. He doesn't pay attention to his balance sheet because it does not affect his bonus. For him capital is free of charge. And what happens when a resource is free? You don't use it efficiently, you waste it, and you overuse it by letting your balance sheet grow too fast to achieve your sales and profits objectives. This unfortunate but rational behavior could have been prevented if Mr. Bobson had been penalized for his overconsumption of capital.

One way to achieve this would have been to deduct from Mr. Bobson's net operating profit after tax or NOPAT a charge for all the capital he consumed to achieve these profits

NOPAT – Charge for Capital



This capital charge is determined by multiplying the firm's weighted average cost of capital or WACC by the average amount of invested capital utilized to generate NOPAT.

$$\text{NOPAT} - (\text{WACC} \times \text{Invested Capital})$$

This is in fact *EVA or economic value added. *EVA equals NOPAT minus WACC multiplied by invested capital.

$$\begin{aligned} \bullet \text{EVA} \\ = \text{NOPAT} - (\text{WACC} \times \text{Invested Capital}) \end{aligned}$$

KIDDY WORLD'S *EVA FOR 1997

We have already calculated Kiddy World's NOPAT in 1997. It is equal to 120 million. We should now deduct the firm's WACC of 13% multiplied by the average amount of invested capital, which is 1,000 million, or 130. Thus, *EVA is a negative 10 million in 1997, meaning that value was destroyed that year.

$$\begin{aligned} \bullet \text{EVA (1997)} \\ = (\text{NOPAT Of 120}) - (\text{WACC Of 13\%}) \\ \quad \times (\text{Average Invested Capital Of 1,000}) \end{aligned}$$

$$\begin{aligned} \bullet \text{EVA (1997)} \\ = 120 - 13\% \times 1,000 \\ = 120 - 130 \\ = -10 \end{aligned}$$

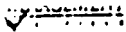
Earlier we presented an alternative formula to calculate *EVA. It is equal to the spread between the firm's return on invested capital and WACC, multiplied by the amount of invested capital.

$$\begin{aligned} \bullet \text{EVA} \\ = (\text{ROIC} - \text{WACC}) \times \text{Average Invested Capital} \end{aligned}$$

KIDDY WORLD'S *EVA FOR 1997

Kiddy World's ROIC is 12% in 1997 and its WACC is 13%. The return spread is thus minus one percent, multiplied by the average amount of invested capital of 1,000 million. As with the other *EVA formula, we end up with a negative 10 million in 1997.

*EVA is a registered trademark of Stern Stewart & Co



$$\begin{aligned} & \bullet \text{EVA (1997)} \\ & = (\text{ROIC Of 12\%} - \text{WACC Of 13\%}) \\ & \quad \times (\text{Average Invested Capital Of 1,000}) \end{aligned}$$

$$\begin{aligned} & \bullet \text{EVA (1997)} \\ & = (12\% - 13\%) \times 1,000 \\ & = -10 \end{aligned}$$

What can we conclude from this? Kiddy World was a value destroyer despite Mr. Bobson's ability to grow the company and increase its profits. Again, profits and growth are irrelevant if they cannot be translated into increases in the value of the company. Ultimately what matters is not growth in earnings but whether the return on investment exceeds the cost of capital, that is, whether economic value added is positive. Had Mr. Bobson's performance and bonus been linked to \bullet EVA rather than profits, he would have been induced to pay more attention to the growth of the firm's balance sheet and the capital required to finance it. One more time: higher profits and faster growth are only relevant if they can be translated into higher value for the firm. Creating shareholder value should be management's ultimate objective, not profits or growth. But the story of Kiddy World shows that managers do not always behave according to this guiding principle.

The challenge, then, is to create a compensation plan that induces managers to make value creating decisions rather than following other objectives. One obvious solution is to turn managers into owners and to remunerate them with equity ownership as opposed to a share of profits.

But owners do not always wish to transfer a portion of their equity investment to managers. One possible alternative is to partly remunerate managers with a bonus linked to their ability to increase economic value added. We know that higher \bullet EVA is the key to the creation of value. Rewarding managers for their ability to improve \bullet EVA should motivate them to take actions consistent with the value creation objective. But, for this type of compensation system to be effective, a number of conditions must be met.



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CONDITIONS FOR A SUCCESSFUL REMUNERATION SYSTEM

BASIS IS *EVA FOR A PERIOD OF SEVERAL YEARS

*Certain managerial decisions made today, like capital expenditure decisions, will most likely affect *EVA for a number of subsequent years. Thus, the bonus should be related to the manager's ability to generate higher *EVA for a period of several years, for example, three to five years, not just a single year.*

CREATION OF AN *EVA DEPOSIT

*Second, after the compensation plan has been established and accepted, it should not be modified and the reward should not be capped. Exceptional performance should be handsomely rewarded. But, poor performance should be penalized. One way to do this is to allow managers to cash in only a fraction of their *EVA bonus in a given year, say 25 percent, with the balance remaining on "deposit" with the company. If *EVA declines in subsequent years, the "deposit" will be reduced by an amount that is related to the magnitude of the decline in *EVA. After three to five years, managers can withdraw the balance in their *EVA deposit.*

***EVA BONUS IS LARGE**

*Third, to have a significant motivational effect on the behavior of managers, the reward related to superior *EVA performance must represent a relatively large portion of their total remuneration. For example, a remuneration plan in which *EVA-related bonuses consist of 5 percent of total compensation, with the remaining 95 percent in the form of a guaranteed salary, is unlikely to be as effective as one in which *EVA-related bonuses represent up to 50 percent of the total.*

FOCUS OF ENTIRE ORGANIZATION ON VALUE CREATION

*Fourth, as many managers as possible should be on the *EVA-related bonus plan. The point is to focus the entire organization on generating positive *EVAs and value. This is difficult to achieve if only a few senior managers are on this type of plan, and the rest of the organization is on another type, such as a profit- or sales-related bonus plan, or on no bonus plan at all.*

CONCLUSION

In short, managing for shareholder value will be best accomplished if managers are rewarded for taking actions that are consistent with value creation. Let's conclude with perhaps a last quote from one of the strongest supporters of shareholder value, the late Roberto Goizueta, former CEO of Coca-Cola. He once stated his mission as follows:

"We raise capital to make concentrate and sell it at an operating profit. Then we pay that cost of capital. And shareholders pocket the difference."

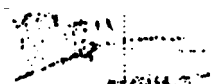
He makes it very clear that he is competing in the first place for capital. Good people, good marketing and all the rest will flow from there. I will leave you here with what I think is the point of the myth surrounding Mr. Goizueta:

As Coca-Cola was first in Fortune's ranking of companies by value creation, you can understand why journalists asked him:

"But Mr. Goizueta, you must be a very happy manager!"

To which he presumably replied:

"I am, I sleep like a baby. I wake up every fifteen minutes ... and cry for capital."



8 GLOSSARY

Accounts payable

Cash owed by a firm to its suppliers for purchases made on credit and not yet paid; reported in the firm's balance sheet as a current liability. Same as payables and trade creditors.

Accounts receivable

Cash owed to a firm by its customers for sales made on credit and not yet paid; reported in the firm's balance sheet as a current asset. Same as receivables and trade debtors.

Asset

An economic resource that is expected to generate a profit in the future.

Assets (of a firm)

What a firm's shareholders collectively own on the date of the balance sheet.

Balance sheet

Financial statement reporting, at a given date, the total amount of assets held by a firm and the liabilities and owners' equity that finance these assets.

Bond

A debt security acknowledging a creditor relationship with the issuing firm and stipulating the conditions and terms under which the money is borrowed and repaid.

Capital employed

The sum of owners' equity and all borrowed funds (short- and long-term). Equal to invested capital.

Capital expenditure (capex)

New investment in fixed assets.

Capital expenditure decision

The decision to spend cash now in order to acquire long-lived assets that will be a source of cash flows in the future.

Cash and cash-equivalent

Cash in hand, cash on deposit with banks, and short-term liquid investments with less than a year's maturity (marketable securities).

Common stock

Certificate issued by a firm to raise equity capital that represents a specified share of total equity funds.

Corporate bonds

Debt securities issued by firms that usually have a maturity between one and ten years.

Cost of capital

The return expected by investors for the capital they supply to firms. Also, the highest return on an alternative investment with the same risk as the investment under consideration.

Cost of debt

The cost of borrowing new funds.

Cost of equity

Rate of return required by the firm's owners on their equity capital used to finance the firm's assets or a particular project.

Cost of goods sold (COGS)

The cost of the goods the firm has sold during the accounting period; reported in the income statement as expenses.

Creditors

Parties to whom a firm owes money, including lenders and suppliers.

Current assets

Assets that are expected to be turned into cash within one year. Same as short-term assets.

Debt holders

Holders of loans, leasing agreements, corporate bonds and similar liabilities issued by firms to raise debt capital.

Dividend

The portion of a firm's net profit paid out to its owners in cash. Same as cash dividend.

Earnings before interest and tax (EBIT)

Difference between the firm's operating profit and any extraordinary items reported in its income statement.

Economic value added (EVA)

Net operating profit after tax (NOPAT) minus a charge for the capital consumed to achieve that profit. Same as economic profit.

Equity capital

Funds contributed by shareholders that are equal to the difference, at a particular date, between what a firm's shareholders collectively own, called assets, and what they owe, called liabilities. Same as equity funds, owners' equity, shareholders' equity or funds, or net asset value.

Expenses

A firm's activities that result in decreases in the value of owners' equity.

Financial intermediaries

Institutions that act as 'middlemen' between the ultimate recipients of capital and the ultimate suppliers of capital.

Financial statements

Formal documents issued by firms to provide financial information about their business and financial transactions.

Firm's cost of capital

The return expected by investors for the capital they supply to fund all the assets acquired and managed by the firm.

Fixed assets

Long-lived assets that are not expected to be turned into cash within a year.

Fundamental finance principle

States that a business proposal will raise the firm's value only if the present value of the future stream of net cash benefits the proposal is expected to generate exceeds the initial cash outlay required to undertake the proposal. Same as the net present value rule.

Income statement

Financial statement reporting information about the firm's activities that resulted in changes in the value of owners' equity during a period of time - obtained by deducting from revenues the corresponding expenses incurred during that period of time.

Inventories

Raw materials, work in process and finished goods not yet sold, reported in the balance sheet as current assets.

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Invested capital

The sum of cash and marketable securities, working capital requirements and net fixed assets. Same as net assets. Equal to capital employed.

Liabilities

What a firm's shareholders collectively owe on the date of the balance sheet.

Long-term debt

Debt due after a period longer than one year.

Market capitalization

Market value of a firm's equity. Equal to its quoted price per share multiplied by the total number of shares the company has issued. Also referred to as market cap.

Market value added (MVA) of a firm

The difference between the market value of a firm's capital (equity and debt) and the amount of capital that shareholders and debtholders have invested in the firm.

Market value of a firm's capital

The market value of the firm's total capital, that is, the sum of its market capitalization and the market value of its debt capital.

Marketable securities

Short-term, liquid assets investments with less than a year's maturity held by a firm as a cash-equivalent asset.

Net assets

Cash plus working capital requirements plus net fixed assets. Also, total assets less operating liabilities. Same as invested capital.

Net book value

The value at which a fixed asset is reported in the balance sheet.

Net cash flow

The difference between the firm's cash inflows and outflows during an accounting period.

Net fixed assets

Long-term assets, such as equipment, machinery and buildings, from which accumulated depreciation expenses have been deducted.

Net operating profit

Net sales less operating expenses.

Net operating profit after tax (NOPAT)

Earnings before interest and tax (EBIT) multiplied by $(1 - \text{tax-rate})$.

Net profit

Revenues minus all expenses, including interest and tax expenses. Same as net income, earnings after tax (EAT) and bottom line.

Operating activities

The activities related to the management of a firm's existing investments in order to generate sales, profit, and cash.

Operating expenses

Expenses related to operating activities, that is, cost of goods sold, selling, general and administrative expenses, and depreciation expenses. Operating expenses exclude interest expenses, which are related to financing activities.

Operating liabilities

Liabilities related to a firm's operating cycle, that is, accounts payable and the portion of accrued expenses associated with operating activities.

Operating profit

Net sales less operating expenses.

Outstanding securities

Securities that have been already issued.

Owners' equity

The difference, at a particular date, between what a firm's shareholders collectively owe, called liabilities. Same as net asset value, net worth, shareholders' equity and shareholders' funds.

Primary markets

Financial markets in which newly issued securities are sold to the public.

Profit and loss statement (P&L)

See income statement.

Return on invested capital (ROIC)

Net operating profit after tax (NOPAT or $EBIT \times (1 - \text{tax-rate})$) divided by invested capital (cash plus working capital required plus net fixed assets). Same as return on net assets (RONA). Equal to return on capital employed (ROCE). Can also be measured before tax by replacing $EBIT \times (1 - \text{tax-rate})$ with EBIT. A measure of operating profitability.

Return spread

The difference between a firm's, or a project's, aftertax return on invested capital (ROIC) and its weighted average cost of capital (WACC).

Revenues

A firm's activities that result in increases in the value of owners' equity.

Risk

A term used to describe a situation in which a firm makes an investment that requires a known cash outlay without knowing the exact future cash flow the decision will generate.

Secondary market

Financial market in which outstanding securities are traded.

Security

Certificate (or a book entry in the securityholder's account) issued by a firm that specifies the conditions under which the firm has received the money.

Shareholders

Investors who have bought common stocks issued by a firm to raise equity capital. Shareholders are the owners of the firm.

Short-term debt/borrowing

Short-term interest-bearing debt that includes bank overdrafts, drawings on lines of credit, short-term promissory notes and the portion of any long-term debt due within a year.

Stock exchange

An organized market in which shares of companies are traded.

Total assets

All the assets listed in a firm's balance sheet.

Weighted average cost of capital (WACC)

The weighted average of the aftertax cost of debt and cost of equity. The minimum rate of return a project must generate in order to meet the return expectations of its suppliers of capital (lenders and shareholders).

Working capital requirement (WCR)

The difference between operating assets (accounts receivable, inventories and prepaid expenses) and operating liabilities (accounts payable and accrued expenses). WCR measures the firm's net investment in its operating cycle.