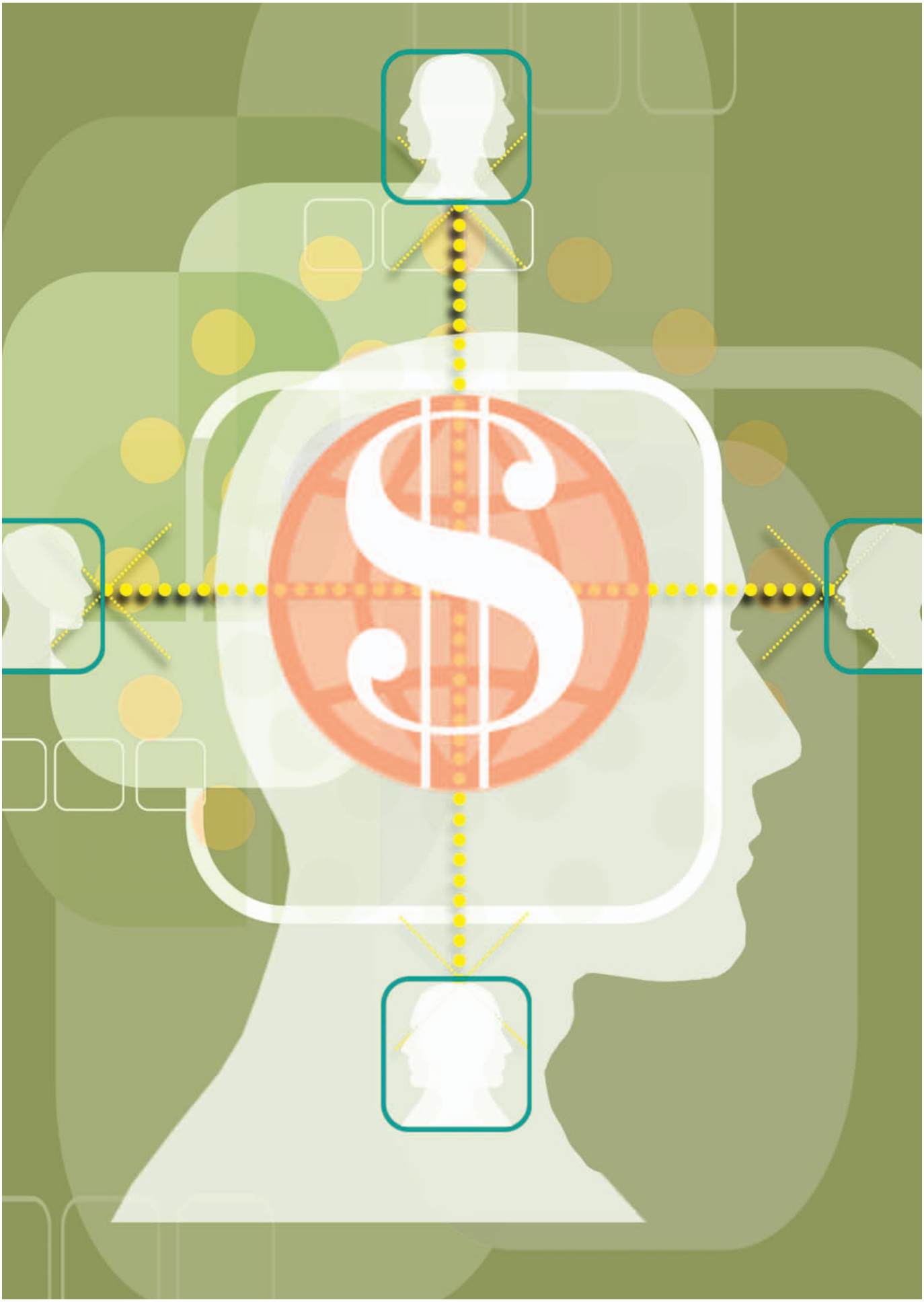


Strategies for shareholder value enhancement

By taking an integrated approach to the examination of key underlying variables that affect organizational growth, management accountants can play an important role in value creation

By Howard Johnson, CMA, FCMA

Management accountants are well suited for the role of champions of value creation, because of the quality of the CMA program and its emphasis on the essential business skills of leadership, decision making, communication, and professionalism. It's useful to review what supports that function, however — the key underlying variables that ultimately impact shareholder value within an organization, whether public or private, large or small. Using an integrated approach to these variables, the management accountant can effectively support shareholder value enhancement.

Value measurement

The first step in the quest for enhancing shareholder value lies in understanding how it is measured. The preferred approach for measuring shareholder value is the discounted cash flow (DCF) methodology. Using the DCF method, a forecast is made of the discretionary cash flow that a business is expected to generate over the next several years (generally three to seven years). Discretionary cash flow represents the cash that can be readily withdrawn by the providers of capital in a business, without impairing ongoing operations or growth prospects. In a somewhat simplified form, discretionary cash flow can be determined as follows:

Projected earnings before interest and taxes (EBIT)
Less: income taxes
Equals: after-tax income
Add back: depreciation and amortization expense
Deduct: capital expenditure requirements
Deduct: incremental working capital requirements
Equals: discretionary cash flow (before financing costs)

Discretionary cash flow is discounted by a discount rate to determine the present value of the future cash flow stream. The discount rate reflects the company's weighted average cost of capital, based on its perceived risk level and using what is believed to be an appropriate capital structure (i.e. the mix of debt and equity) for the business. An estimate is then made of the discretionary cash flow that will be generated each year beyond the forecast period, which is divided by a capitalization rate to derive the "terminal value" of the company. The capitalization rate reflects the risks of maintaining discretionary cash flow at that forecasted level over the long term, net of the company's expected long-term growth rate. The terminal value is discounted to its present value using the discount rate.

The present value of the forecast cash flows plus the present value of the terminal value generates the "enterprise value" of the company — the total value of the business, including its debt and equity. Interest bearing debt and equivalent liabilities are deducted to determine the equity value of the business. Further adjustments may be necessary when there are excess or deficient assets in the business.

As an example, assume that Company A generates EBIT of $5 million on revenues of $50 million, and that both of these amounts are expected to grow by 10% annually over the next three years. Further, assume that annual depreciation expense is $1 million, but that to achieve and sustain its growth plans, Company A requires annual capital expenditures of $1.2 million. Also assume that Company A's working capital requirements are 10% of revenues, and that it is subject to a tax rate of 35%. Finally, assume that Company A has $10 million of interest bearing debt outstanding (at an 8% interest rate), but that no other asset or liability adjustments are necessary.

For rates of return, assume that a weighted average cost of capital discount rate of 15% is considered appropriate, given the nature of Company A's business and the risks underlying its cash flow projections. Assume also that a long term growth rate

Figure 1: Company A value estimate ($000)

			Forecast			
		Current	Year 1	Year 2	Year 3	Thereafter
Revenue		50,000	55,000	60,500	66,550	68,547
Growth rate			10%	10%	10%	3%
EBIT		5,000	5,500	6,050	6,655	6,855
Deduct income taxes	35%		(1,925)	(2,118)	(2,329)	(2,399)
Equals: after-tax income			3,575	3,933	4,326	4,456
Add back: depreciation			1,000	1,000	1,000	1,000
Deduct: capital expenditures			(1,200)	(1,200)	(1,200)	(1,200)
Deduct: incremental working capital	10%		(500)	(550)	(605)	(200)
Equals: discretionary cash flow			2,875	3,183	3,521	4,056
Capitalization rate						12%
Terminal value						33,799
Discounted at	15%		2,500	2,406	2,315	22,223
Enterprise value		29,445				
Deduct: debt outstanding		(10,000)				
Other adjustments		nil				
Equals: equity value		19,445				

of 3% is expected beyond the forecast period, which implies a capitalization rate of 12% in the terminal value calculation.

Given these assumptions, Company A's equity value is estimated at approximately $19.4 million, as illustrated in Figure 1.

It follows that there are four underlying variables that ultimately affect shareholder value in a company:

- The amount of after-tax income that a business can generate;
- The level of risk in a business, which affects the rates of return applied to its forecast cash flows;
- The amount and nature of assets (capital expenditures and working capital) required to sustain the operations of the business and support growth; and
- The ability of a company to use debt (instead of equity) to finance its operations.

After tax income

Increasing the level of after-tax income is an obvious challenge for most organizations. However, the financial results of any company are merely a derivative of its operating activity. Therefore, rather than just managing the numbers, the champions of value creation within an organization must manage and influence the activities and business decisions that underlie those numbers. In the first instance, this requires a sound understanding of how business activities affect financial results. Implementing programs such as activity-based costing can help in this regard. The ability to increase income, not just revenue, drives business value. For example, a 1% increase in the near-term and long-term growth rates for Company A would increase its equity value by about 13% from $19.4 million to $22.0 million, all other variables remaining the same.

Opportunities for increasing income can sometimes be identified by understanding the capacity use and capacity constraints within an organization. Incremental income can be generated when businesses find ways to secure incremental revenues within existing capacity constraints, and when the costs associated with realizing that incremental revenue are reduced. As a practical matter, companies often experience a marked increase in their value by achieving "critical mass" in their operations in terms of revenue, market share, capacity use, and other metrics.

However, while marginal cost-benefit analysis can prove profitable, excessive reliance on that approach can result in short-term thinking and long-term opportunity costs. Accordingly, incremental analysis should be conducted within the parameters of a long-term strategic plan.

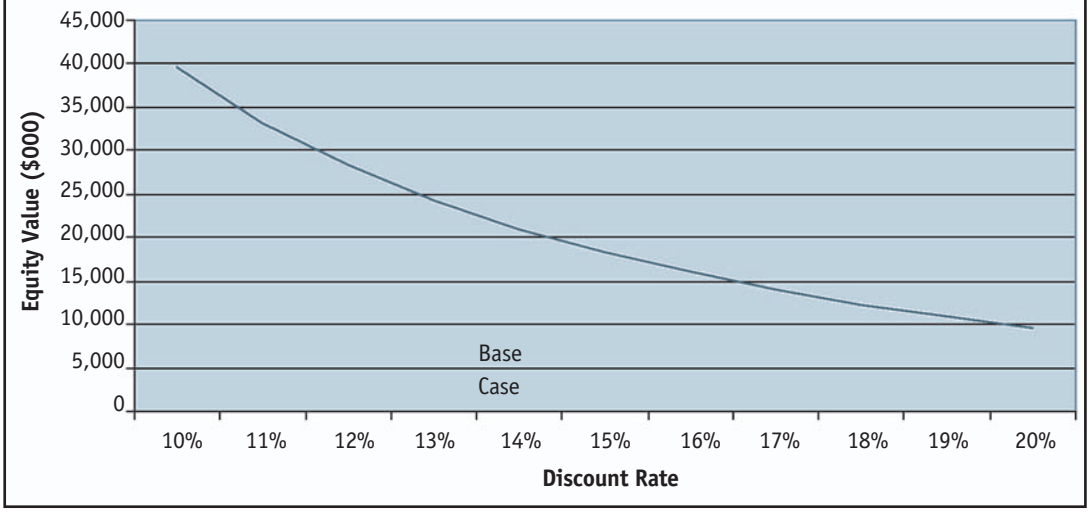
Risk levels

Reducing the risk levels inherent in an organization can lead to value accretion because it reduces an organization's cost of capital. While discount rates and capitalization rates are inherently subjective, they should represent a plausible synthesis of the

return required by investors given the strengths and weaknesses of the company, and the opportunities and threats that it faces.

Risk management is a powerful value creation tool, given that, as the discount rate declines, company valuations increase geometrically. This is illustrated for Company A in Figure 2, whereby a 1% decrease in the discount rate (and corresponding capitalization rate) increases the equity value of Company A by 14%, from $19.4 million to $22.2 million.

Figure 2: Impact of changing discount rates on Company A's equity value



A key area of risk management in any organization lies in the level of customer stability and concentration. Companies with a diversified base of repeat clients tend to be less affected by risk than companies that must continuously replace their customer base (such as in many contract bid type businesses) or those in which a handful of customers represent a large percentage of the company's revenue base. An in-depth analysis of an organization's past, current and prospective customer base is essential in understanding how customer risk can be reduced. This includes understanding why customers purchase products and services from the company (and why they ceased doing so, where applicable), their purchase criteria and their purchasing decision process. By understanding these variables, companies are better able to determine how to devise "barriers to exit" that help secure repeat business and reduce the risk of losing key customers over relatively minor issues. Furthermore, by understanding its historical and current client base, a company is better able to attract new customers and reduce its reliance on a handful of key accounts.

Asset management

While considerable emphasis is often placed on revenues and profitability, many companies don't adequately consider the underlying assets required to generate those returns. Companies can significantly increase their value by proactively managing capital expenditures and working capital. By way of illustration, if Company A were able to reduce its incremental working capital requirements as a percentage of revenues from 10% to 5%, its equity value would increase by 6%, from $19.4 million to $20.6 million.

Working capital and capital expenditure requirements should be taken into account particularly when a company is evaluating growth opportunities such as product line extension, geographic expansion or a corporate acquisition. Too often, the requirement for such costs isn't adequately factored into the financial analysis. Capital expenditure and working capital costs normally are incurred at the outset of a growth plan, and hence require placing capital at risk before returns are realized. Furthermore, it's important to remember that working capital represents after-tax dollars. Therefore, incurring incremental (tax-deductible) costs, such as additional personnel, to improve the management of accounts receivable, inventories and accounts payable, often proves to be advantageous from a value perspective.

Debt use

A company's enterprise value is determined independent of how much debt it actually employs in its capital structure. Companies that do use debt must satisfy those obligations before their shareholders realize a return. Shareholder value can be increased when companies increase their debt capacity and use debt, rather than equity, to finance their operations.

By way of example, assume that Company A's current debt capacity is estimated at 30% of its capital structure. This level of debt would be reflected in the discount rate of 15%. If Company A could increase its debt capacity to 40%, its cost of capital would decline to 14.5%. (The calculations for cost of capital can be found in most finance texts.) This would cause Company A's equity value to increase by 7%, from $19.4 million to $20.8 million.

A company's debt capacity is influenced by factors such as the amount and quality of its underlying asset base, the level and stability of its cash flows and its borrowing covenants. Therefore, managing these variables can increase debt capacity and consequently shareholder value.

Another way of examining the benefits of debt use is to consider two scenarios. Currently, Company A generates EBIT of $5 million and finances its operations with $10 million of debt (at an interest rate of 8%). If Company A only used equity financing, its shareholder returns would decline, as illustrated in Figure 3.

It's important to remember, however, that while debt use can deliver superior returns, the use of debt within an organization

Figure 3: Company A debt use analysis ($000)

	With debt	No debt
EBIT	5,000	5,000
Interest expense	(800)	0
Pretax income	4,200	5,000
Income taxes	(1,470)	(1,750)
Net income	2,730	3,250
Debt invested	10,000	0
Equity invested	18,274	28,274
Return on equity	15%	11%

increases its financial risk. Therefore, the incremental returns available to shareholders must be sufficient to more than offset the added risks.

An integrated approach

As illustrated here, each of the key variables of after-tax income, risk reduction, asset management and debt use influences shareholder value, as illustrated in Figure 4.

Figure 4: Key variables for shareholder value

Variable	Base case scenario	Value enhancement	Equity value	% change
Base Case			$19.4 million	
After-tax income	10% near-term growth, 3% long-term growth	Increase near-term and long-term growth rate by 1%	$22.0 million	13%
Risk level	5% discount rate, 12% capitalization rate	Decrease discount rate and capitalization rate by 1%	$22.2 million	14%
Asset management	Working capital at 10% of revenues	Working capital at 5% of revenues	$20.6 million	6%
Debt capacity	30% of capital structure = 15% discount rate	40% of capital structure = 14.5% discount rate	$20.8 million	7%

However, it's important to recognize that each of these variables is interrelated. As such, a holistic approach must be adopted to ensure that the value created in one area isn't offset by value erosion in another area. For example, the implementation of a strategy for generating incremental after-tax income often requires an investment in working capital and capital expenditures. Depending on the circumstances, it may also negatively affect the risk profile of the business, and hence the applicable rates of return.

As an example, assume that Company A was considering investing an additional $3 million (after consideration of the incremental tax shield) into an expansion opportunity that would cause its revenue and EBIT to grow by 20% per annum over the next three years (instead of 10%). However, the risks involved in that program would result in an increase in Company A's cost of capital by 2% (i.e. a discount rate of 17% and a capitalization rate of 14%). Despite the higher rate of growth anticipated, Company A's equity value would decline by 8%, from $19.4 million to $17.9 million. Therefore, all of the variables that impact shareholder value cannot be considered in isolation.

Summary

Shareholder value is best measured using a DCF methodology due to the rigor and discipline that approach commands. In this regard, a realistic, internally consistent financial projection is essential to developing a meaningful value conclusion. The key underlying variables of the DCF methodology — after-tax income, risk levels (which influence discount rates and capitalization rates), asset requirements (both capital expenditures and working capital) and debt use, are also the key variables that should be managed to enhance shareholder value. These variables must be considered as a whole, rather than in isolation.

With their training in strategic management accounting, CMAs are well positioned to be the champions of value creation within their organization. To do so, they must understand the business drivers that underlie the numbers, recognize the interrelationship between the variables and develop sound strategies for shareholder value enhancement that can be implemented and managed effectively. ■

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