

## Making capital structure support strategy

A company's ratio of debt to equity should support its business strategy, not help it pursue tax breaks. Here's how to get the balance right.

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CFOs invariably ask themselves two related questions when managing their balance sheets: should they return excess cash to shareholders or invest it and should they finance new projects by adding debt or drawing on equity? Indeed, achieving the right capital structure—the composition of debt and equity that a company uses to finance its operations and strategic investments—has long vexed academics and practitioners alike.<sup>1</sup> Some focus on the theoretical tax benefit of debt, since interest expenses are often tax deductible. More recently, executives of public companies have wondered if they, like some private equity firms, should use debt to increase their returns. Meanwhile, many companies are holding substantial amounts of cash and deliberating on what to do with it.

The issue is more nuanced than some pundits suggest. In theory, it may be possible to reduce capital structure to a financial calculation—to get the most tax benefits by favoring debt, for example, or to boost earnings per share superficially through share buybacks. The result, however, may not be consistent with a company's business strategy, particularly if executives add too much debt.<sup>2</sup> In the 1990s, for example, many telecommunications companies financed the acquisition of third-generation (3G) licenses entirely with debt, instead of with equity or some combination of debt

and equity, and they found their strategic options constrained when the market fell.

Indeed, the potential harm to a company's operations and business strategy from a bad capital structure is greater than the potential benefits from tax and financial leverage. Instead of relying on capital structure to create value on its own, companies should try to make it work hand in hand with their business strategy, by striking a balance between the discipline and tax savings that debt can deliver and the greater flexibility of equity. In the end, most industrial companies can create more value by making their operations more efficient than they can with clever financing.<sup>3</sup>

### Capital structure's long-term impact

Capital structure affects a company's overall value through its impact on operating cash flows and the cost of capital. Since the interest expense on debt is tax deductible in most countries, a company can reduce its after-tax cost of capital by increasing debt relative to equity, thereby directly increasing its intrinsic value. While finance textbooks often show how the tax benefits of debt have a wide-ranging impact on value, they often use too low a discount rate for those benefits. In practice, the impact is much less significant for large investment-grade companies (which have a small relevant range of capital structures). Overall, the value of tax benefits is quite small over the relevant levels of interest coverage (Exhibit 1). For a typical investment-grade company, the change in value over the range of interest coverage is less than 5 percent.

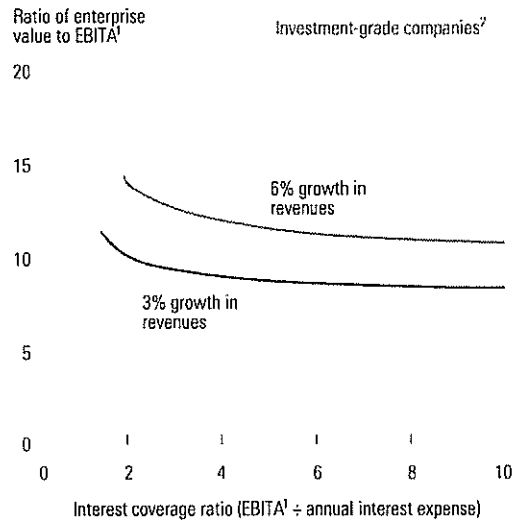
The effect of debt on cash flow is less direct but more significant. Carrying some debt increases a company's intrinsic value because debt imposes discipline; a company must make regular interest and principal payments, so it is less likely to pursue

<sup>1</sup>Franco Modigliani and Merton Miller, "The cost of capital, corporate finance, and the theory of investment," *American Economic Review*, June 1958, Number 48, pp. 261-97.

<sup>2</sup>There is also some potential for too little debt, though the consequences aren't as dire.

<sup>3</sup>Richard Dobbs and Werner Rehm, "The value of share buybacks," *McKinsey on Finance*, Number 16, Summer 2005, pp. 16-20 ([www.mckinseyquarterly.com/links/19864](http://www.mckinseyquarterly.com/links/19864)).

EXHIBIT I  
Beneficial debt?



<sup>1</sup>Earnings before interest, taxes, and amortization.  
<sup>2</sup>Companies with -A to BBB rating.

frivolous investments or acquisitions that don't create value. Having too much debt, however, can reduce a company's intrinsic value by limiting its flexibility to make value-creating investments of all kinds, including capital expenditures, acquisitions, and, just as important, investments in intangibles such as business building, R&D, and sales and marketing.

Managing capital structure thus becomes a balancing act. In our view, the trade-off a company makes between financial flexibility and fiscal discipline is the most important consideration in determining its capital structure and far outweighs any tax benefits, which are negligible for most large companies unless they have extremely low debt.<sup>4</sup>

investment opportunities should include more debt in their capital structure, since the discipline that debt often brings outweighs the need for flexibility. Companies that face high uncertainty because of vigorous growth or the cyclical nature of their industries should carry less debt, so that they have enough flexibility to take advantage of investment opportunities or to deal with negative events.

Not that a company's underlying capital structure never creates intrinsic value; sometimes it does. When executives have good reason to believe that a company's shares are under- or overvalued, for example, they might change the company's underlying capital structure to create value—either by buying back undervalued shares or by using overvalued shares instead of cash to pay for acquisitions. Other examples can be found in cyclical industries, such as commodity

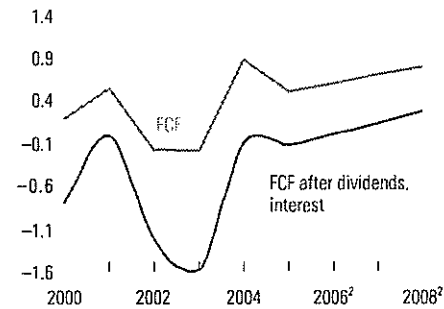
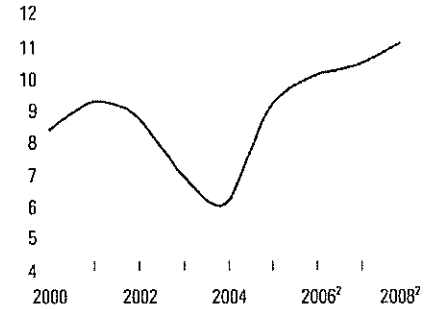
<sup>4</sup>At extremely low levels of debt, companies can create greater value by increasing debt to more typical levels.

Mature companies with stable and predictable cash flows as well as limited

## EXHIBIT 2

## Looking into the future

Disguised global consumer product company

Free cash flow (FCF),  
€ billionInterest coverage ratio (EBITA<sup>1</sup> ÷ annual  
interest expense)

	Base case scenario <sup>3</sup>	Downside scenario <sup>3</sup>
Projected 2008 EBITA, <sup>1</sup> € billion	1.9	1.4
Target interest coverage ratio	4.5x	4.5x
Target 2008 interest expense, € billion	0.4	0.3
Interest rate on debt	5%	5%
2008 debt at target coverage, € billion	8.3	6.2
Extra cushion, € billion	-0.5	-0.5
<b>Target 2008 debt level, € billion</b>	<b>7.8</b>	<b>5.7</b>

<sup>1</sup>Earnings before interest, taxes, and amortization.<sup>2</sup>Projected.<sup>3</sup>Assumes organic revenue growth of 5% at profit margins of around 14% and no acquisitions over next 4 years.

Source: Analysts' reports; Standard &amp; Poor's; McKinsey analysis

chemicals, where investment spending typically follows profits. Companies invest in new manufacturing capacity when their profits are high and they have cash.<sup>5</sup> Unfortunately, the chemical industry's historical pattern has been that all players invest at the same time, which leads to excess capacity when all of the plants come on line simultaneously. Over the cycle, a company could earn substantially more than its competitors if it developed a

countercyclical strategic capital structure and maintained less debt than might otherwise be optimal. During bad times, it would then have the ability to make investments when its competitors couldn't.

### A practical framework for developing capital structure

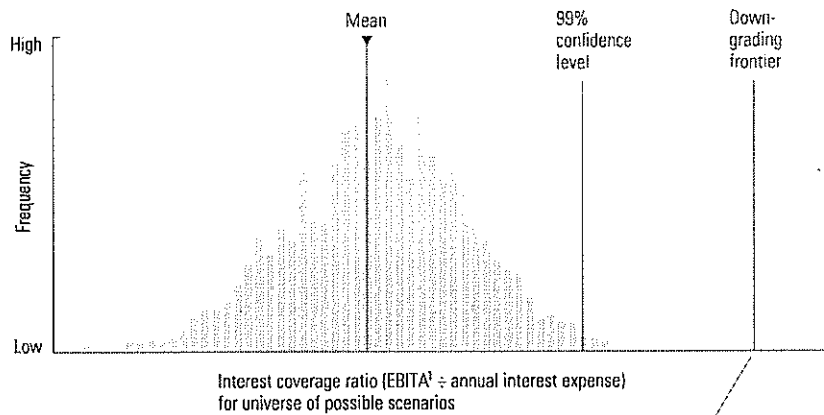
A company can't develop its capital structure without understanding its future revenues and investment requirements. Once

<sup>5</sup>Thomas Augat, Eric Bartels, and Florian Budde, "Multiple choice for the chemical industry," *The McKinsey Quarterly*, 2003 Number 3, pp. 126-36 ([www.mckinseyquarterly.com/links/19865](http://www.mckinseyquarterly.com/links/19865)).

EXHIBIT 3

**Forecasting with stochastic simulation**

Illustrative stochastic simulation: frequency distribution of interest coverage 3 years out



Based on current and projected levels of debt, a company can assess the likelihood that a given level of future performance will shift its interest coverage ratio toward the cutoff for a debt-rating downgrade

<sup>1</sup>Earnings before interest, taxes, and amortization.

those prerequisites are in place, it can begin to consider changing its capital structure in ways that support the broader strategy. A systematic approach can pull together steps that many companies already take, along with some more novel ones.

The case of one global consumer product business is illustrative. Growth at this company—we'll call it Consumerco—has been modest. Excluding the effect of acquisitions and currency movements, its revenues have grown by about 5 percent a year over the past five years. Acquisitions added a further 7 percent annually, and the operating profit margin has been stable at around 14 percent. Traditionally, Consumerco held little debt: until 2001, its debt to enterprise value was less than 10 percent. In recent years, however, the company increased its debt levels to around

25 percent of its total enterprise value in order to pay for acquisitions. Once they were complete, management had to decide whether to use the company's cash flows, over the next several years, to restore its previous low levels of debt or to return cash to its shareholders and hold debt stable at the higher level. The company's decision-making process included the following steps.

1. Estimate the financing deficit or surplus. First, Consumerco's executives forecast the financing deficit or surplus from its operations and strategic investments over the course of the industry's business cycle—in this case, three to five years.

In the base case forecasts, Consumerco's executives projected organic revenue growth of 5 percent at profit margins of around 14 percent. They did not plan for

any acquisitions over the next four years, since no large target companies remain in Consumerco's relevant product segments. As Exhibit 2 shows, the company's cash flow after dividends and interest will be positive in 2006 and then grow steadily until 2008. You can see on the right-hand side of Exhibit 2 that EBITA (earnings before interest, taxes, and amortization) interest coverage will quickly return to historically high levels—even exceeding ten times interest expenses.

2. Set a target credit rating. Next, Consumerco set a target credit rating and estimated the corresponding capital structure ratios. Consumerco's operating performance is normally stable. Executives targeted the high end of a BBB credit rating because the company, as an exporter, is periodically exposed to significant currency risk (otherwise they might have gone further, to a low BBB rating). They then translated the target credit rating to a target interest coverage ratio (EBITA to interest expense) of 4.5. Empirical analysis shows that credit ratings can be modeled well with three factors: industry, size, and interest coverage. By analyzing other large consumer product companies, it is possible to estimate the likely credit rating at different levels of coverage.

3. Develop a target debt level over the business cycle. Finally, executives set a target debt level of €5.7 billion for 2008. For the base case scenario in the left-hand column at the bottom half of Exhibit 2, they projected €1.9 billion of EBITA in 2008. The target coverage ratio of 4.5 results in a debt level of €8.3 billion. A financing cushion of spare debt capacity for contingencies and unforeseen events adds €0.5 billion, for a target 2008 debt level of €7.8 billion.

Executives then tested this forecast against a downside scenario, in which EBITA would reach only €1.4 billion in 2008. Following the same logic, they arrived at a target debt level of €5.7 billion in order to maintain an investment-grade rating under the downside scenario.

In the example of Consumerco, executives used a simple downside scenario relative to the base case to adjust for the uncertainty of future cash flows. A more sophisticated approach might be useful in some industries such as commodities, where future cash flows could be modeled using stochastic-simulation techniques to estimate the probability of financial distress at the various debt levels illustrated in Exhibit 3.

The final step in this approach is to determine how the company should move to the target capital structure. This transition involves deciding on the appropriate mix of new borrowing, debt repayment, dividends, share repurchases, and share issuances over the ensuing years.


A company with a surplus of funds, such as Consumerco, would return cash to shareholders either as dividends or share repurchases. Even in the downside scenario, Consumerco will generate €1.7 billion of cash above its target EBITA-to-interest-expense ratio.

For one approach to distributing those funds to shareholders, consider the dividend policy of Consumerco. Given its modest growth and strong cash flow, its dividend payout ratio is currently low. The company could easily raise that ratio to 45 percent of earnings, from 30 percent. Increasing the regular dividend sends the stock market a strong signal that Consumerco thinks it can pay the higher dividend comfortably. The

remaining €1.3 billion would then typically be returned to shareholders through share repurchases over the next several years. Because of liquidity issues in the stock market, Consumerco might be able to repurchase only about €1 billion, but it could consider issuing a one-time dividend for the remainder.

The signaling effect<sup>6</sup> is probably the most important consideration in deciding between dividends and share repurchases. Companies should also consider differences in the taxation of dividends and share buybacks, as well as the fact that shareholders have the option of not participating in a repurchase, since the cash they receive must be reinvested.

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While these tax and signaling effects are real, they mainly affect tactical choices about how to move toward a defined long-term target capital structure, which should ultimately support a company's business strategies by balancing the flexibility of lower debt with the discipline (and tax savings) of higher debt. 

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<sup>6</sup>The market's perception that a buyback shows how confident management is that the company's shares are undervalued, for example, or that it doesn't need the cash to cover future commitments, such as interest payments and capital expenditures.