

By the book: The key to accuracy in valuation

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A firm's amount of debt plays an increasingly important role in competitiveness. But opinion varies on the optimal target level for debt.

Opinion is divided over how best to set debt levels in order to achieve an optimal capital structure. One model, Modigliani-Miller, maintains a fixed dollar value of debt, while the Miles-Ezzell method calls for maintaining a fixed market value debt ratio. Both have clear strengths.

The Modigliani-Miller approach is particularly well suited for situations when a firm is constrained to maintain a fixed amount of debt. The Miles-Ezzell formula is useful when a firm's debt level is tied to a multiple of the equity market value. Though each deals with different debt scenarios, both are similar in that neither allows much flexibility in debt management. The question arises whether either method is ideal for broad application across a range of company situations and market scenarios.

In his research paper, "[A more realistic valuation: APV and WACC with constant book leverage ratio](#)," [IESE Prof. Pablo Fernández](#) proposes a third approach: setting capital structure using book value. The logic behind this method is grounded in a question of relevance: while the other two methods have their merits, are the results they give realistic?

Consider motivations

To assess different approaches to debt management, one must first consider the motivations

behind any decision to increase or decrease a firm's level of debt. Furthermore, one must understand the characteristics of an ideal system to accurately determine an optimal level of debt.

The primary requirement, from a CFO perspective, would be to maintain financial flexibility in response to market conditions and situational need.

However, a close second would involve considering a firm's credit rating, which plays a significant role in governing debt-related decisions. Focusing on credit ratings may provide an important clue as to the best method for setting a target debt level.

Based on the metrics commonly used by ratings agencies, the two key determinants of a firm's credit rating are interest coverage and leverage.

These fundamentals are grounded in book value, rather than more volatile market ratios. By focusing on these, capital structure can be kept in closer alignment with the expectations of ratings agencies. One can apply a similar logic to achieving optimal balance.

Testing this theory with market data provides strong support for this hypothesis. Valuations correlate much stronger with what is predicted by debt ratios led by book value, than with the capital structure recommended by either of the two leading theoretical methods.

Advantages of using book value

A second major component meriting serious consideration is how these theories treat the value of tax shields. Tax savings from interest payments are an important component of valuation and a major implication of debt level. Yet there is a remarkable lack of consensus on the correct way to calculate this figure. Modigliani-Miller calls for discounting tax savings at the risk-free rate. Miles-Ezzell proposes discounting at the cost of debt.

Setting debt policy using a fixed book value leverage ratio has a number of advantages, according to Fernández.

First, the results give guidance that will be far more consistent with assessments made by rating agencies. Since ratings agencies employ a similar approach, it better equips firms to understand how their own debt decisions will ultimately impact their credit rating.

Another benefit of using a book value based method is that target debt levels will be more stable, and not as prone to fluctuate with stock market movements. This benefit becomes

especially important when markets exhibit above-average levels of volatility. During times of equity market crisis, firms would otherwise be forced to respond in less than ideal ways, either in terms of strategy or in seeking to protect their basic financial health.

Using book value also helps to avoid inherent problems faced by private firms. It provides a direct basis for analysis instead of using artificial figures as proxies for market value, where they do not naturally occur.

Finally, Fernández's book value results tend to give valuations that fall between the ones given by the Modigliani-Miller and Miles-Ezzell. While their methods are computationally elegant, and have been demonstrated to be effective during specific situations, in most cases they represent extreme cases that are not valid for most companies, says Fernández. The results based on book value are less extreme and provide far more realistic guidance for financial managers to base their debt policy decisions upon, he adds.

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