



# Credit Availability Affects Business Valuation

by Mark D. Working

The credit debacle in August brought the large, syndicated leveraged-loan market to a standstill. While we are still assessing the full impact of these events on the middle market, it is clear that credit spreads have widened and the leverage allowed to borrowers has declined. Knowledgeable commentators in the field, including Zachary Scott, have predicted that a restriction on the availability of credit would dampen the prices paid for businesses. This is perplexing, as it flies in the face of accepted corporate finance theory.

The chart below shows the relationship between allowed leverage, as measured by debt-to-cash flow covenants required by leveraged lenders, and the prices paid for middle-market businesses, as measured by the ratio of enterprise value-to-cash flow. The data appear to be highly correlated and our experiences in recent years support that conclusion. However, accepted corporate finance theory says that the availability of credit should not influence valuation conclusions, so what is going on?

## THE "THEORY"

There are two corporate finance principles that tell us that the availability of high levels of leverage should not affect value.

1. The first principle is that the risk of an asset, as measured by the variability of the cash flow generated by it, corresponds to a specific expected rate of return appropriate for that level of risk. In other words, each business has its own distinct discount rate that reflects the operating risks of the underlying business, exclusive of its capitalization. The value of any business is the present value of its expected future after-tax cash flow stream, discounted by the rate that reflects the risk of that business.

2. The second principle is that, as a result of taxes (and the tax deductibility of interest expense), a modest amount of debt in the capital structure enhances the returns to the equity holder. As leverage increases, the risk of insolvency and the costs of bankruptcy correspondingly outweigh the advantage of the tax deductibility of interest.

Without trivializing the nuances of these principles, our observation is that real world

practices differ from accepted theory.

## IS THERE AN EXPLANATION?

There may be factors at work that are not fully contemplated by the academic theories.

The first explanation is that in the course of an economic cycle, the prospects for businesses change. In a rising cycle, the prospects for growth in sales and profits are good, and both lenders and investors recognize that economic

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reality. A higher level of borrowing is allowed because the firm has better prospects to service debt and a higher valuation multiple can be justified due to expectations of future performance. As the economy crests and then slips into a down cycle, expectations are lowered and the allowed leverage and price that can be justified decline.

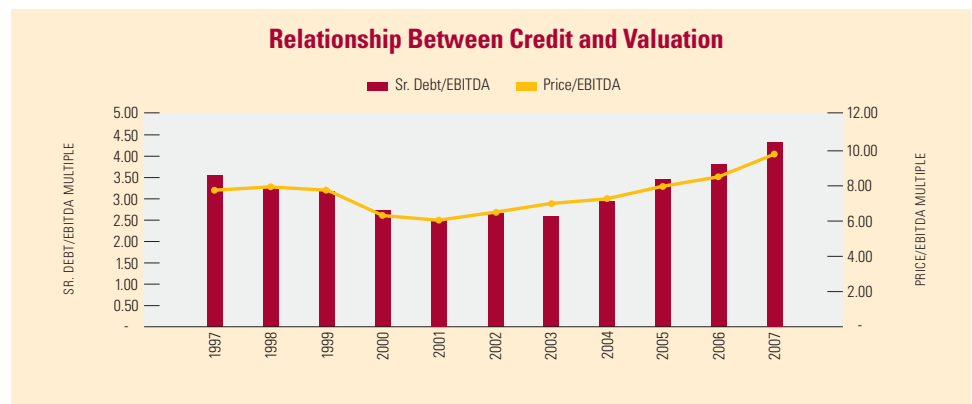
An alternative and more sinister view of the private equity arena suggests that the prin-

cipals of private equity firms view their economic reward as consisting of a management fee plus a participating interest in, or "option" on, the increased value of the equity invested. Since there is no downside to the option, high-risk gambles are justified as beneficial to the firm.

A third explanation is that the structural relationship between private equity firms and their investors creates a bias toward high levels of financial risk that are supported by the availability of credit. This emanates from the thesis that investors in private equity funds view all such investments as being in a single category of risk, and thereby demand a corresponding single target level of return. The "promise" made by a private equity firm to its investors is to attempt to obtain that target level of return or more. There are two approaches to achieving the target return,

- take on high levels of financial risk through leverage, or
- use less leverage, but pay lower prices for acquisitions.

In credit-friendly periods, private equity firms strive to achieve target returns through the maximization of debt and, in credit tight environments, by lowering purchase price multiples. The table on the following page presents a simple mathematical example of the effect on price of different levels of leverage, with the intent of obtaining the same return on equity. In this case, the business is assumed to be sold after three years at a price



	PURCHASE	YEAR 1	YEAR 2	YEAR 3	SALE
<b>OPERATING ASSUMPTIONS</b>					
Revenue		200,000	206,171	212,532	
Operating Profit		36,000	37,491	38,669	
Interest Rate	8.5%				
Tax Rate	35.0%				
<b>HIGH LEVERAGE</b>					
Interest Expense		13,770	12,542	11,163	
Net Income		14,450	16,217	17,879	
Debt	162,000	147,551	131,333	113,455	113,455
Equity	54,000				118,559
Enterprise Value	216,000				232,013
Leverage	4.50				
EBITDA Multiple	6.00				6.00
ROE					30.0%
<b>LOW LEVERAGE</b>					
Interest Expense		10,710	9,313	7,756	
Net Income		16,439	18,316	20,093	
Debt	126,000	109,562	91,245	71,152	71,152
Equity	73,203				160,862
Enterprise Value	199,203				232,013
Leverage	3.50				
EBITDA Multiple	5.53				6.00
ROE					30.0%

equal to 6x operating profit, less the debt outstanding at that time. To illustrate the point, we assume two borrowing environments for the purchase. In one case, the buyer can finance an amount equal to 4.5x operating profit, and in the other, only 3.5x operating profit. In both cases, equity is used to finance the remainder of the purchase price. The conclusion is that the constraint of earning a target rate of return (30% in this example) makes a

difference (6.0x vs. 5.5x operating profit in this example) in the price that could be paid for the business.

Finance theory aside, in the real world, credit availability does affect the prices paid by buyers. The reasons are complex. Certainly, the timing of when a sale occurs during an economic cycle can be a factor. For many years we have advised owners to sell when business prospects are good. Bankers and buyers are not

immune to swings between economic optimism and pessimism. Our observation is that corporate buyers tend not to consider credit market conditions in making valuation decisions, while private equity firms do. The structure of the relationship between private equity firms and their limited partners does appear to

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create a bias towards high leverage. Because their investors do not appear to distinguish the difference, most private equity firms would rather take on a higher level of risk to achieve a target level of return than take on lesser risk and miss achieving the target. With private equity accounting for upwards of 30% of all merger and acquisition transactions, this bias does affect valuations in the overall market.

There is an economic reason that the values of businesses vary as conditions and expectations change. Regardless of the economic or credit conditions, the best way to obtain the highest sale price is to organize competition for that business. When buyers compete for a prized opportunity, a fair price can be obtained under any set of conditions. ♦



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