Financial Statement Analysis of Leverage and How It Informs About Profitability and Price-to-Book Ratios

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Abstract

This paper presents a financial statement analysis that distinguishes leverage that arises in financing activities from leverage that arises in operations. The analysis yields two leveraging equations, one for borrowing to finance operations and one for borrowing in the course of operations. These leveraging equations describe how the two types of leverage affect book rates of return on equity. An empirical analysis shows that the financial statement analysis explains cross-sectional differences in current and future rates of return as well as price-to-book ratios, which are based on expected rates of return on equity. The paper therefore concludes that balance sheet line items for operating liabilities are priced differently than those dealing with financing liabilities. Accordingly, financial

statement analysis that distinguishes the two types of liabilities informs on future profitability and aids in the evaluation of appropriate price-to-book ratios.

References

Biais, B. and C. Gollier. (1997). “Trade Credit and Credit Rationing.” *The Review of Financial Studies* 10, 903-937.

Google Scholar

Fama, E. and K. French. (1998). “Taxes, Financing Decisions, and Firm Value.” *Journal of Finance* 53, 819-843.

Google Scholar

Fama, E. and J. MacBeth. (1973). “Risk, Return and Equilibrium: Empirical Tests.” *Journal of Political Economy* 81, 607-636.

Google Scholar

Feltham, J. and J. Ohlson. (1995). “Valuation and Clean Surplus Accounting for Operating and Financing Activities.” *Contemporary Accounting Research* 11, 689-731.

Google Scholar

Ferris, J. (1981). “A Transactions Theory of Trade Credit Use.” *Quarterly Journal of Economics* 94, 243- 270.

Google Scholar

Harris, M. and A. Raviv. (1991). “The Theory of Capital Structure.” *Journal of Finance* 46, 297-355.

Google Scholar

Kemsley, D. and D. Nissim. (2002). “Valuation of the Debt-tax Shield.” *Journal of Finance* 57, 2045-2074.

Google Scholar

Masulis, R. (1988). *The Debt/Equity Choice*. Cambridge, MA: Ballinger Publishing Co.

Google Scholar

Mian, S. and C. Smith, Jr. (1992). “Accounts Receivable Management Policy: Theory and Evidence.” *Journal of Finance* 47, 169-200.

Google Scholar

Modigliani, F. and M. Miller. (1958). “The Cost of Capital, Corporation Finance, and the Theory of Investment.” *American Economic Review* 46, 261-297.

Google Scholar

Modigliani, F. and M. Miller. (1963). “Corporation Income Taxes and the Cost of Capital: A Correction.” *American Economic Review* 53, 433-443.

Google Scholar

Nissim, D. and S. Penman. (2001). “Ratio Analysis and Equity Valuation: From Research to Practice.” *Review of Accounting Studies* 6, 109-154.

Google Scholar

Penman, S. (2004). *Financial Statement Analysis and Security Valuation* 2nd ed. New York: Irwin/ McGraw-Hill.

Google Scholar

Petersen, M. and R. Rajan. (1997). “Trade Credit: Theories and Evidence.” *The Review of Financial Studies* 10, 661-691.

Google Scholar

Rajan, R. and L. Zingales. (1995). “What Do We Know about Capital Structure Choice? Some Evidence from International Data.” *Journal of Finance* 50, 1421-1460.

Google Scholar

Richardson, S., R. Sloan, M. Soliman and I. Tuna. (2002). “Information in Accruals about Earnings Persistence and Future Stock Returns.” Working paper, University of Michigan.

Ross. S. (1977). “The Determination of Financial Structure: The Incentive-Signaling Approach.” *Bell Journal of Economics* 8, 23-40.

Google Scholar

Schwartz, R. (1974). “An Economic Model of Trade Credit.” *Journal of Financial and Quantitative Analysis* 9, 643-657.

Google Scholar

Sloan, R. G. (1996). “Do Stock Prices Fully Reflect Information in Accruals and Cash Flows about Future Earnings?” *The Accounting Review* 71, 289-315.

Google Scholar

Smith, J. (1987). “Trade Credit and Information Asymmetry.” *Journal of Finance* 42, 863-872.

Google Scholar

Titman, S. and R. Wessels. (1988). “The Determinants of Capital Structure Choice.” *Journal of Finance* 43, 1-19.

Google Scholar

Zhang, X. (2000). “Conservative Accounting and Equity Valuation.” *Journal of Accounting and Economics* 29, 125-149.

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