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Breadth of Ownership and Stock Returns

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The authors test Miller's 1977 theory on the effects of short-sale constraints on stock prices and returns by developing a proxy for short-sale constraints. They observe that breadth of ownership—the number of investors with long positions in a particular stock—is a reliable proxy for how tightly short-sale constraints bind. When breadth of ownership in a particular stock is low, short-sale constraints are tightly binding and the stock's price is high relative to its fundamentals; reductions in a stock's breadth should, therefore, forecast a lower return for the stock.

The authors bring new evidence to bear on Edward Miller's asset-pricing hypothesis (*Journal of Finance*, 1977). Miller argues that in the presence of short-sale constraints, a stock price will reflect the valuations that optimists attach to it but will not reflect the valuations of pessimists. One implication of Miller's logic is that the greater the divergence in the valuations of optimists and pessimists, the higher the price of a stock in equilibrium and, hence, the lower the subsequent returns.

The authors find Miller's theory remarkable for its simplicity and empirically reasonable premises. Yet, despite its surface plausibility and intuitive appeal, the evidence for Miller's theory remains sparse. The authors' goal is to devise a sharper and more powerful test of Miller's theory. They determine that a reliable proxy for how tightly short-sale constraints bind (and, hence, for the amount of negative information withheld from the market) can be constructed by looking

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at data on breadth of ownership, in which breadth is defined roughly as the number of investors with long positions in a particular stock. Specifically, when breadth for a stock is low, investors are sitting on the sidelines; their pessimistic valuations are not registered in the stock's price. Thus, the authors' insight is that breadth of ownership is a valuation indicator.

This insight yields two hypotheses. First, breadth should, by itself, be useful for forecasting returns. Specifically, reductions in breadth should forecast lower subsequent returns and, conversely, increases in breadth should forecast higher returns. Second, breadth should be positively correlated with other valuation indicators, such as book to market, earnings to price, and momentum.

Using quarterly data on mutual fund holdings for the 1979–98 period and a variety of different tests, the authors find evidence to support both hypotheses. With respect to the first hypothesis, they find that those stocks whose change in breadth in the prior quarter places them in the lowest decile of the sample underperform those in the top change-in-breadth decile. Regarding the second hypothesis, they determine that breadth in any given quarter responds in a positive fashion to both earnings to price and recent price momentum (measured by returns over the prior year).

The authors conclude by noting that mutual fund data are useful for their purposes because mutual funds represent comprehensive coverage of the stockholdings of a large, well-defined segment of the investor population. They caution, however, that their results might differ if the whole investing universe was used.

Keywords: Equity Investments: fundamental analysis and valuation models; Equity Investments: research sources; Portfolio Management: equity strategies

The authors acknowledge that Miller's theory is contrary to that of some efficient market theorists who have researched the implications of short-sale constraints on stock prices. These theorists have nothing to say about expected stock returns because they assume that rational investors adjust their expectations to incorporate the effects of short-sale constraints.