Retesting the Miller hypothesis: Evidence from the 1985-2013 U.S. equity market

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Abstract

Miller (1977) hypothesizes that stocks subject to high differences of opinion and tightly binding short-sales constraints are prone to be overvalued. However, earnings announcements can narrow divergence of opinion in the market, and, as a result, reduce overpricing.

The Miller hypothesis has drawn huge attention and the overvaluation effect has been widely tested. Berkman et al (2009) use daily market data and a much large pool of proxies for differences of opinion and short-sales constraints to investigate the Miller effect. Strong evidences are found in support of the Miller hypothesis: periodic earnings announcements reduce differences of opinion among investors. Optimistic investors will sell on the disappointing news, causing stock prices to revert to their fundamental values.

Nevertheless, Berkman et al (2009) do not examine the financial crisis, when financial institutions were subject to tightened regulation and short-selling constraints. The policies during the turmoil might have certain impacts on stock valuation. Therefore, it is worthwhile to investigate the recession period.

In this paper, I use earnings announcement as the event, and U.S. market data from 1985 to 2011, and discover evidences in favor of the findings of Berkman et al (2009) and the Miller theory. However, there exist some minor evidences against the Miller hypothesis. I provide some explanations for these differences and conduct a test using the financial crisis (2008-2010) sub-sample.