



EQUITIES

Price Efficiency and Short Selling

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Using a unique dataset with weekly stock-lending transactions across 26 countries, this paper estimates the impact of short-sale constraints on measures of price efficiency. We find strong evidence to support the hypotheses implied by Diamond and Verrecchia (1987), Duffie, Gârleanu and Pedersen (2002) and Bai, Chang and Wang (2006) that short-sale constraints are associated with less price efficiency.

We use two measures of short-sale constraints: the supply of shares available for lending and the borrowing fee. The availability of stock-level information on short-sale constraints enables us to control for any effects on price efficiency that come from country differences such as differences in the regulatory environment, stages of financial development or income levels. We also provide a comprehensive overview of stock lending markets across the world and show how lending supply and borrowing fees are related to firm characteristics.

To the best of our knowledge, these have not been done before in the literature for such a wide range of securities and countries. We estimate panel regressions to explain cross-sectional differences in price efficiency. Stocks with limited lending supply and high borrowing fees have longer delays in responding to market-wide shocks. Relaxing shorting restrictions is associated with an increase in the speed by which information is incorporated into prices. Large and more liquid firms also tend to have more efficient prices, while those with higher leverage or low book-to-market ratios tend to be less efficient.

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