Do Short Selling Restrictions Destabilize Stock Markets? Lessons from Taiwan

Martin T. Bohl
Westfälische Wilhelms-University Münster

and

Badye Essid
Centre for International Governance Innovation

and

Pierre L. Siklos
Wilfrid Laurier University
Hong Kong Institute for Monetary Research

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Summary

During the global financial crisis 2007/2009, and the Greek and Irish crises of 2009/2010, governments in many countries imposed limitations on short selling activities to displace short sellers and prevent further declines in stock prices. While governments, regulators, and the media blame short sellers for reinforcing stock market downturns, the finance literature mostly concludes that short selling restrictions distort market efficiency and liquidity. Surprisingly little is known about the impact of short selling restrictions on stock returns volatility. We expect an increase in volatility when short selling restrictions are in place because they limit the ability of investors to find the fundamental price. Consequently, short selling bans contribute to a destabilization of stock prices during periods of market downturns and may even exacerbate stock price declines. Hence, short selling bans are counterproductive.

Given the brief periods short selling bans are in place the methodologies usually employed in these circumstances are understandable. The experience of Taiwan, however, provides an interesting case study that permits time series testing of some of the theoretical predictions of various models aimed at understanding the potential impact of short selling bans on stock returns and their volatility. A ban on short selling was imposed in Taiwan from late 1998 until the middle of 2005, and then again in 2008 for a much shorter period until the beginning of 2009, in the wake of the financial crisis of 2007/2009. Importantly, unlike almost all other known experiences with a short selling ban, the length of time the restrictions were in place provides an opportunity for estimating time series models.

To the best of our knowledge, we are the first to specify and estimate asymmetric GARCH models to test hypotheses surrounding the effects of restrictions on short sales for the data under investigation. As a result, and unlike the available literature, we are also able to control for spill over effects from other stock markets. Finally, to investigate the robustness of the empirical results we consider several subsamples. In addition, we resort to Markov switching GARCH models to provide additional tests of the hypotheses considered.

We find robust evidence that supports the view that a ban on this kind of stock trading activity raises the conditional volatility of stock returns. Perhaps just as importantly, we also conclude that the impact of the ban on short sales is also dependent on whether the economy is in recession or not. While short selling restrictions are often imposed in crisis environments these need not be coincident with recessionary periods. The latter are frequently a casualty of such crises. We find strong evidence that the impact of these bans is asymmetric in nature with no statistically significant impact during recessions but a higher conditional is found when the restrictions are imposed in the expansionary phase of a business cycle.