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Essays on Short Selling and Margin Trading in China

A thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Finance at Massey University, Palmerston North, New Zealand.

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ABSTRACT

This thesis investigates the impact of regulation allowing short selling and margin trading in the Chinese equity market. The first essay examines the impact of the implementation of short selling and margin trading on March 31, 2010 and its impact on stock prices, liquidity, and volatility of pilot programme A-shares. The results suggest that prices of pilot A-shares decline relative to matched Chinese A-shares and cross-listed Hong Kong H-shares, which suggests that the effect of short selling is greater than margin buying. However, inconsistent with developed markets evidence and the perspective of Chinese regulators, this essay finds a significant decline in liquidity following the short selling and margin trading activity. A possible explanation for this result is a reluctance to invest in pilot programme A-shares by less informed investors in the presence of better informed counterparts. The second essay uses an event study approach to examine abnormal stock returns and trading volume surrounding the key short selling and margin trading programme announcement date on February 12, 2010 and its subsequent implementation on March 31, 2010 for the pilot A-shares. Regression analysis is also conducted to investigate which factors are influencing the observed abnormal returns. The event study presents evidence of negative price reaction and lower trading volume following both the announcement and implementation of short selling and margin trading for eligible stocks. The lower abnormal returns are consistent with the overvaluation hypothesis, however, the decline in trading activity is contrary to developed market evidence. Lower trading activity implies higher risk of information asymmetry existing in China. The final essay examines the effect of short selling and margin trading on efficiency, characteristics of stock return distributions, and price clustering for eligible securities during both the initial short selling and
margin trading pilot programme phase on March 31, 2010, as well as, the programme’s extension to a wider group of securities on the December 5, 2011. The main findings are that there is no consistent improvement in pricing efficiency across the different measures after the introduction and subsequent expansion of short selling and margin buying. The positive skewness of abnormal returns is reduced, which is consistent with the prediction of theoretical models. We also find some evidence that price clustering on average declines for the eligible stocks.
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