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Illiquidity, Systemic Risk, and Macroprudential Regulation: The Case of Taiwan's Capital Market

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Abstract

The guidance formulated by G20 to assess the systemic importance of financial institutions, markets and instruments (IMF, BIS, and FSB, 2009 [19]) analyzes that the effective control of systemic risk is one of the most important things in the macroprudential regulation at current stage. Although the current banking regulation focuses on funding liquidity risk such as LCR and NSFR of Basel III, financial institutions would actually have highly procyclical effects between funding and market liquidity at the same time, leading to liquidity spirals and threatening to financial stability. We therefore propose a market liquidity, systemic risk and macroregulation analysis framework in Taiwan's capital market to fill this gap.

Comparison with the Drehmann and Juselius' empirical study (2013b), we find that illiquidity options by using 6-month historical volatility and forecasting short-term stock declines are effective early warning indicators (EWIs) having most stable policy structures and minimal regulation costs. Applying AUC macroregulation criteria, we show this illiquidity measure is also maintained fairly robustness in different intervals, e.g. during three sub-samples and serious crisis periods. If financial institutions can diversify the concentration of portfolios varieties, industries, and counterparty before crises by using EWIs, the passive risk taking can be converted into the active risk management. It is necessary to prepare the market liquidity and macroregulation framework in advance.

JEL classification numbers: C40, G01
Keywords: EWIs, macroprudential regulation, market liquidity, illiquidity option

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