台灣股市之流動性共變現象

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「流動性共變」指眾多個股的流動性呈現同時改善或同時惡化 的傾向,此現象隱含個股流動性受到共同因子的影響,使流動性風 險包含無法分散的系統性成分。本文廣泛觀察台灣股市流動性共變 的程度與型態,使用買賣價差、報價深度、週轉率、價格衝擊等變 數衡量流動性,分析個股流動性對市場和產業流動性的敏感度,並 探討流動性共變的橫斷面與時間序列特性。實證顯示超過七成的股 票和市場流動性顯著相關,在控制產業流動性對個股的影響之 後,個股流動性依然呈現高度的市場共變。研究並發現電子股的 產業內共變強於其他類股,符合主流類股的集群特色;MSCI 成分 股彼此間的流動性共變強烈,顯示以 MSCI 指數為概念的交易活 動頻繁;以報價深度衡量流動性時,大型股共變較強烈,但以買 賣價差衡量流動性時,小型股共變較明顯;流動性系統風險在高 波動市場中有加劇的傾向,而大盤漲跌對共變則未呈現明顯的不 對稱效果。上述流動性共變的實證結果在控制影響個股流動性的變 數之後依然顯著,顯示流動性風險在台灣股市的系統性成分不容忽 視,值得監管機構和實務操作的深度關切。

JEL 分類: G12; G14; G15

關鍵詞:流動性、流動性共變、買賣價差、市場深度、台灣。

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Commonality in Liquidity: Evidence from the Taiwan Stock Exchange

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Commonality in liquidity refers to the tendency that the liquidity of individual stocks co-moves with the general market liquidity. Commonality implies the presence of systematic components in liquidity that can not be easily diversified. This paper provides convincing evidence of liquidity commonality in the Taiwan stock market. Commonality is assessed by the sensitivity of individual stock's liquidity to market liquidity and is computed for a variety of liquidity measures based on spread, depth, turnover and price impact. For over 70% sample stocks, liquidity of individual stocks strongly co-moves with market-wide liquidity. This market-wide commonality remains significant even after accounting for industry-wide commonality. The within-industry commonality is stronger for the major industry sector, the electronic sector, than other sector. Commonality is greater for the MSCI constituent stocks than for non-index stocks, indicating that index-related trading activities contribute to liquidity co-variation. Large stocks show stronger tendency in depth commonality whilst small stocks have greater common movements in spread. In addition, the degree of commonality changes with market condition: commonality is more significant during volatile market than in stable market. Results are robust after controlling for other liquidity determinants such as volume, volatility, and price level. Our analysis suggests that the liquidity risk of holding Taiwan stocks has a systematic component, which ought to be the concern of fund managers and supervisors.

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Keywords: Liquidity, Liquidity commonality, Bid-ask spreads, Depths, Taiwan.