COMMONALITY IN LIQUIDITY-M.L. KUNTONRAT DAVIVONGS

Abstract

Academic studies have shown that including emerging market stocks in an investment portfolio helps improve risk-adjusted portfolio performance. However, the only risk factor considered in these studies was market risk, which is the correlation between stock and market return. Other risk factors were ignored such as illiquidity, one serious problem of investing in emerging market stocks. It affects trading costs. Illiquid stocks should sell at discount, while liquid stocks should sell at premium. However, liquidity not only varies cross-sectionally but also varies across time. According to modern portfolio theory (MPT), time-variation of stock liquidity should be priced only if it is systematic or if it correlates with time-variation of market liquidity.

This study comprehensively examined the co-movement of a change in stock liquidity across times—a commonality in liquidity of stocks—in three parts. First, it examined the existence of commonality in liquidity within and across exchanges, using daily price and trading data of 8,382 firms listed in 24 emerging markets across the world from January 1, 1990, to December 31, 2008. Running firm-by-firm time series regression yearly, as in Chordia, Roll and Subrahmanyam (2000), findings showed supporting evidence of commonality in liquidity effect, which was stronger and more pervasive for within exchange than for across exchange. The results indicated that these markets remained segregated, and the opportunity to diversify across exchanges was still open. Second, this study examined the possible patterns of variation in liquidity commonality across specific characteristic of firms, i.e., size, industry, country and region. By aggregating the estimated concurrent beta coefficient for each defined group each year, a consistent pattern was found only for withinexchange liquidity commonality. Hence, investment strategies for controlling liquidity risk based on these characteristics were possible for within-exchange investment. Third, this study investigated the importance as an asset-pricing factor of systematic liquidity risk relative to traditional market risk. Following the framework of Acharya and Pederson (2005), the results estimated using Fama and MacBeth (1973) methodology for 1,355 sample firms listed in China and Taiwan stock market from 1996 to 2008 indicated that systematic liquidity risk seems to have stronger significance in explaining cross-sectional variations in return than market risk. Overall, the study revealed that systematic liquidity seems to be best captured in time series but does not explain cross-sectional differences in returns quite well.