KIEP

Opinions

July 3, 2015

Global Investor Base Diversity and Portfolio Capital Flows

LIM Tae-Hoon

Ph.D., Research Fellow, International Finance Team
Korea Institute for International Economic Policy

Instability in financial markets is often caused by mutually reinforcing strategic actions among investors. When an action by one player incentivizes the other player to follow suit, namely reinforcing each other's decision, the players' strategic responses are called strategic complements in economics and game theory. This concept often plays a central role in influential theories on financial market fragility such as bank runs, currency attacks, and the building and bursting of asset price bubbles.[1] In all of the listed examples of financial fragility, the presence of strategic complementarities ensue sensitive reactions to expected

[1] See Diamond and Dybvig (1983), Morris and Shin (1998), Abreu and Brunnermeier (2003), and others.

changes in fundamentals, oftentimes leading to instability in financial systems.

The degree of strategic complementarities can be closely related to the diversity of an investor base. If the investor base of an asset is concentrated in a small number of investor types, the payoff structure and motivating triggers can be very similar among investors that share the same type. The similarity of investors can aggravate the effects of strategic complementarities, since anticipation of similar actions by similar investors is quick to form and the similar payoff structure encourages investors to take action before others.

Another important aspect of a financial market with regard to strategic complementarities is the liquidity of traded assets. When an asset's liquidity is poor, prices are more likely to swing in the direction of trades, and this further emboldens investor decision to take similar action. For example, if selling a stock is likely to push its price down, an investor in the stock is better off by selling it before other investors do. Therefore the decision of an investor to sell is reinforced by the decisions of other investors to sell. On the contrary, one can expect the complementarities to be weaker when trading by itself does not necessarily affect its price.

Taking these ideas and investigating whether they apply to international capital flows, we studied the effect of a diversified investor base on the volatility of international portfolio capital flows.[2] In line with our conjecture, we found a less diversified investor base was associated with the higher volatility of international capital flows. Measures of investor base diversity were based on the Herfindahl index, using micro-level institutional equity ownership data from FactSet Ownership. Several dimensions of investor types such as domicile country and types of institution were considered when measuring investor base diversity, in order to investigate which aspect of the diversity had the most noticeable impact on capital flow volatility. Among them, we found that diversity of domicile countries of investors had the most significant effect on the volatility of capital flow.

Further investigating the effect of investor base diversity in markets with different liquidity levels, we found the effect is significant in less liquid markets, but not in liquid markets. When we divided our sample into advanced and non-advanced markets, we found investor base diversity was negatively associated with capital flow volatility in non-advanced markets, but the same relationship did not hold in advanced markets. This finding points towards the importance of liquid asset markets in the presence of complementarities.

[2] See Chapter 4 of Lim, Pyun, and Rhee (2014).

Our findings provide several interesting implications for international capital flows. First, the risk of an under-diversified investor base must be acknowledged, especially for markets that are considered illiquid. Data from the wake of the global financial crisis shows that markets with a higher investor base concentration attracted more international capital inflows. Since higher investor base concentration is shown to be associated with high capital flow volatility, reversal of capital flows may be volatile if this were to take place. Therefore, close monitoring is warranted to capture such risk. Second, measures to expand and diversify the investor base can be beneficial, especially if they can increase the level of liquidity in the market. Increasing the size of the market and expanding the investor base can increase the overall liquidity of the assets in the market and as a result reduce the instability that may result from strategic complementarities. Moreover, certain policy action can be undertaken to help diversify the investor base. MSCI currently classifies Korea as an emerging market, but Korea has, until recently, been the subject of review for inclusion in the ranks of advanced markets. An advanced market classification for Korea in widely used benchmark indices can be favorable, as it may help broaden and diversify the investor base of Korean assets. KIEP