Impacts of Changes in External Position on Foreign Exchange and Stock Market Volatility

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Despite the slowdown in current account transactions since the global financial crisis, the external positions of individual countries have steadily expanded, influenced for instance by the ultra-low interest rates and quantitative easing policies in major countries. This expansion in external transactions appears to have had significant impacts on the spillover mechanism of external shocks and on market volatility. However, there has been little systematic research on this subject. Taking this into account, this paper analyzes the impacts of changes in external positions on foreign exchange (FX) and stock market volatility using a panel smooth transition model based on country panel data.

The results of the analysis show that the impacts of external assets on FX rate and stock price volatility vary significantly depending on asset type. When official foreign reserves and outward foreign direct investment assets accumulate beyond a certain level, they have significant effects in mitigating FX and stock market volatility. In contrast, portfolio and other overseas investment assets held by Korean residents do not have such clear impacts. Meanwhile, we find that external debt, particularly foreign portfolio investment, heightens FX and stock market volatility.

External positions are determined not only by changes in the economic structures of individual countries and in international financial markets, but also by FX and financial policies. In this regard, the results have useful implications for the development of mid- to long-term FX policies.

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