

Measuring Macroeconomic Uncertainty

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With economic uncertainty being cited as a major root cause of the delayed economic recovery in major advanced economies since the financial crisis, an assessment is made that Korea also saw a weakening of private consumption and investment due to heightened uncertainty since then. There have recently been growing concerns that economic uncertainty is increasing due mainly to the U.S. Federal Reserve's monetary policy normalization, to financial and foreign exchange market unrest resulting from a slowdown in China's economic growth, and to the deteriorating fiscal positions of resource-exporting countries caused by a decline in commodity prices. However, despite the macroeconomic importance of this economic uncertainty, it is unobservable and thus has not been the subject of much domestic research.

This paper calculates the level of uncertainty in the Korean economy since 2003. To reflect the actual conditions of our economy, which has a high dependence on external trade, this paper selects uncertainty-related indicators in three areas -- economic outlook, financial markets, and the external sector -- and extracts common factors from them. According to the calculation results, uncertainty in Korea was at its lowest level in the first half of 2007, but rose significantly during the global financial crisis and the euro area sovereign debt crisis. The economic uncertainty index is analyzed to have increased since the second half of 2014 due to external factors, such as U.S. interest rate normalization and to the economic slowdown in China.

According to the results of an empirical analysis using this uncertainty index, heightened uncertainty is found to bring about significant declines in GDP growth and inflation. This seems to be because heightened uncertainty in the macroeconomy negatively affects economic agents' consumption and investment decisions through channels such as real options, precautionary saving, and financial friction.

Meanwhile, with Korea's macroeconomic uncertainty having heightened since the global financial crisis, the recent mounting uncertainty is found to be mainly attributable to external factors. Although it is difficult to directly control overseas factors, we must focus our efforts on lowering the overall level of uncertainty surrounding our economy by working to reduce uncertainty in the domestic sector, including policy-related uncertainty.

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III. Results of Measuring Uncertainty

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