

# An Empirical Analysis of Money Demand Function Taking Uncertainty into Consideration\*

The growth of a narrow money index (M1) has remained significantly higher than the growth of broad money indices (M2, Lf) since the outbreak of the global financial crisis. This paper conducts an analysis on this phenomenon based on the demand for money. It introduces the motives giving rise to uncertainties in the real economy from Keynes' liquidity preference theory, divides the demand for money into three motives (transactions, speculative and precautionary motives), and examines the relation between money demand by motive and prices.

The estimation results of a money demand function with uncertainties in the real economy factored in have revealed that the signs of coefficients live up to theoretic expectations. The analysis of money demand by motive shows that a precautionary motive precedes a transactions motive. The analysis of the relation between the demand for money by motive and that by prices shows that transactions demand for money mainly has an impact on prices.

In light of these analysis results, the recent high rate of growth in the narrow money aggregate may be attributable to an increase in precautionary demand for money in accordance with growing uncertainties in the real economy. Given the relationship between the transactions and precautionary demands for money – precautionary motives leading transactional ones – and the correlation between the transactions demand for money and prices, a high rate of growth in the narrow money index may exert a source of inflation pressure after a certain time-lag. In other words, attention needs to be paid to the possibility that, when uncertainties in the real economy are decreasing, precautionary money demand may turn into transactions demand and may exert an inflation pressure.

\* The contents of this article represent the personal opinions of the author and do not necessarily reflect the official view of the Bank of Korea.