Financial Innovation and Money Demand in Sub-Saharan Africa

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Understanding the relationship between money demand and its determinants has been an important research focus over the years, mainly because of its importance for monetary policy. Recently, however, evidence has emerged for a number of countries to suggest that the traditional money demand relationships may have changed and a popular explanation for this has been the rapid growth in financial innovation. While the effect of financial innovation on money demand has been widely researched in industrialised countries, few studies have focussed on developing countries, which is rather surprising given the remarkable growth in financial innovation in some developing economies. Sub-Saharan Africa not only saw financial reforms and the liberalization of exchange rates and interest rates in the 1980s and 1990s, but more recently the introduction of ATMs and debit cards and even more recently the phenomena of mobile money, which started in Kenya in 2007 and quickly spread to other countries.

This study investigates the development of financial innovation and its impact on money demand in the Sub-Saharan African region using panel data estimation techniques for 34 countries between 1980 and 2013. The results indicate that financial innovation is an important determinant of money demand and has a negative effect on it in both the long run and the short run. This supports the expectation that the growth in new financial innovation has led individuals to move away from more liquid assets to less liquid ones and that this has lowered the demand for money. Other relevant variables, the opportunity cost of holding money and income, had the expected coefficient signs and significance and this did not change when financial innovation was allowed for, but the coefficient estimates for inflation and income did change. Interestingly, introducing the exchange rate into the model did not suggest it plays a major role in determining money demand in the long run.

These results have important policy implications for future policy design, given new financial innovations such as mobile money in the region. They suggest that excluding financial innovation, may well lead to biased estimates in previous studies. While some Sub-Saharan African countries such as Ghana, Uganda and South Africa have moved towards inflation targeting, others retain monetary targets and monetary aggregates still remain relevant in guiding policy makers. A stable and well specified demand function is an important input into such decision making processes and this can only be achieved if financial innovation is taken into account.