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PRESS RELEASE

Can excess liquidity signal an asset price boom? by Annick Bruggeman

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The large swings in asset prices (equity as well as real estate) over the past decade and their impact on the real economy have attracted the attention of researchers and policymakers alike. Previous research at the BIS and the ECB has found a strong association between the prevailing liquidity conditions (such as measures of money and credit) and asset price booms that lead to costly recessions or financial instability when they burst. The finding that most high-cost booms (in terms of the subsequent drop in real GDP) have been preceded by high money growth or strong credit expansion does not necessarily imply that all periods of excess liquidity signal an imminent asset price boom. This paper therefore analyses the relationship between excess liquidity and asset prices from a different perspective, in that it tries to derive the conditions under which periods of sustained excess liquidity are more likely to be followed by an asset price boom.

The empirical analysis is based on a quarterly dataset for 18 industrial countries over the period 1970-2005. Periods of excess liquidity and asset price booms are identified as periods during which the cumulative imbalances (in the money-to-GDP ratio and an aggregate asset price index respectively) compared to an HP-filtered trend exceed a specified cut-off level. As a first step, the paper describes the developments in a number of macroeconomic and financial variables before, during and after the identified periods of sustained excess liquidity. It seems that excess liquidity periods are typically driven by low opportunity costs, rather than by strong real GDP growth, and followed by higher inflation. The link with asset price developments is less clear-cut, however, as a large proportion of the identified excess liquidity periods have not been followed by higher asset price inflation.

In a second step, the paper analyses, again in a purely descriptive way, whether some macroeconomic and financial variables could help to distinguish between those periods of sustained excess liquidity that have been followed by an asset price boom and those that have not. It turns out that a period of excess liquidity is more likely to be followed by an asset price boom when the strong money growth is mainly related to low interest rates and high economic growth and when at the same time credit growth is strong and inflation is low. While those periods have been typically longer and characterised by a larger money gap as well, these differences were statistically not significant at the 10% significance level. Conversely, when strong money growth mainly results from portfolio shifts in a context of low asset price inflation and low economic growth, this should not be seen as signalling an imminent asset price boom.

Having identified which variables seem to behave differently across the two types of excess liquidity periods, the final step consists in estimating logit models that enable a formal quantification of the relationship between these variables and the probability that the excess liquidity period will be followed by an asset price boom. The preferred logit model - which correctly predicts whether or not an asset price boom occurs in 92% of the cases - includes as explanatory variables the average long-term interest rate gap during the excess liquidity period and the average real asset price inflation rate in the four quarters before the start of the excess liquidity period.

All in all, the findings in this paper indicate that there is no simple link between money and asset prices and thus warn against a 'naive' type of monetary analysis. However, if one takes account of the likely non-linearities in the relationship and if one combines the information from broad monetary aggregates with that from other variables, some indication can be gained on the probability of the excess liquidity period being followed by an asset price boom. At the same time, it should be stressed that this analysis does not aim to measure the marginal predictive power of excess liquidity, nor does it imply causality between excess liquidity and asset prices.