Capital flows and domestic credit growth

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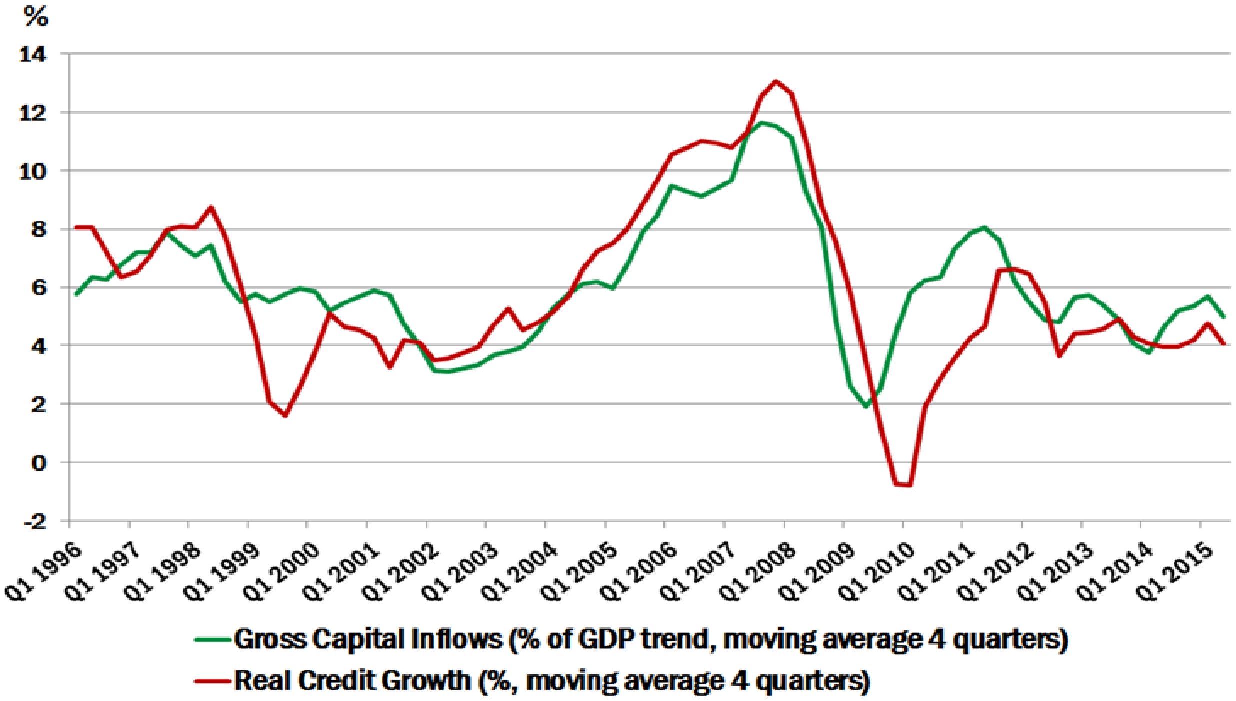
The relationship between the rather volatile capital flows and domestic credit has become a major challenge from a financial stability point of view. It is at the origin of the implementation, in some economies, of capital flow management measures. Domestic credit sensitivity to cross-border inflows is amplified by the fixed exchange rate arrangements and the strong presence of foreign banks. The implications for countercyclical policies are significant.

Figure 1: Capital inflows and domestic credit (31 countries)



Source: International Financial Statistics (IMF), authors' calculations. Our analysis is carried out for a sample of 31 economies (11 advanced and 20 emerging and in development) over the 1995-2015 period. As regards the ratio of gross capital inflows over GDP trend, both variables are measured in US dollars. Real credit is calculated by deflating the nominal domestic credit by a price index, generally the consumer price index. The indicators plotted in this figure represent the aggregate for all the countries in the sample.

Domestic credit growth is positively linked to cross-border capital inflows (see Rue de la Banque no. 38 and Figure 1). This procyclicality entails several key challenges.

In a favourable international environment, credit booms may be fuelled to some extent by cross-border capital inflows, which can subsequently lead to financial crises. This was the case in Thailand in 1997 and in Spain in 2012. The opposite context, such as that prevailing since the announcement of the US monetary policy normalisation in mid-2013, is equally challenging. In the wake of a tightening of global monetary conditions, a sudden stop in capital inflows might have damaging effects in some economies. Non-financial firms could struggle to roll funds over, especially in countries where the credit cycle is strongly linked to the availability of external financing.

This procyclicality suggests that policy measures intended to prevent the build-up of a credit boom have only a limited effect. The tightening of the monetary policy stance (e.g. through an increase in interest rates) needed to contain credit booms may trigger further capital inflows, thereby fuelling credit growth.

The role of exchange rate regimes and global banking

What drives the response of domestic credit to gross capital inflows? We explore this issue for a sample of 31 economies by using a Vector Auto-Regressive (VAR) model (see Rue de la Banque no. 38 for more details). We find that economies with greater sensitivity of domestic credit to capital inflows shocks have, on average, a lower level of economic development in terms of GDP per capita (see Figures 2 and 3). According to our results, three factors that generally distinguish emerging countries from advanced economies play a role in explaining the relationship between domestic credit and capital flows.

Level of country characteristics depending on the average domestic credit response to capital inflows:

Figure 2: Immediate response

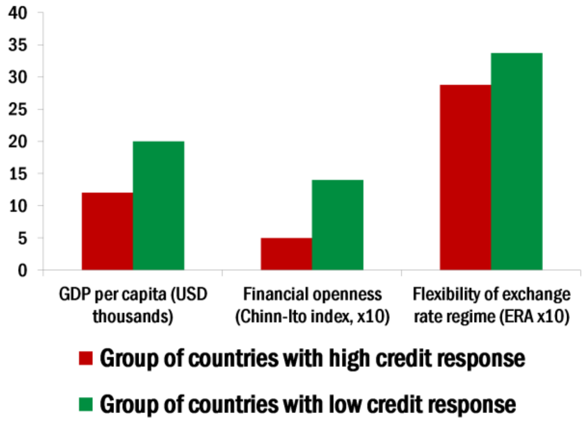
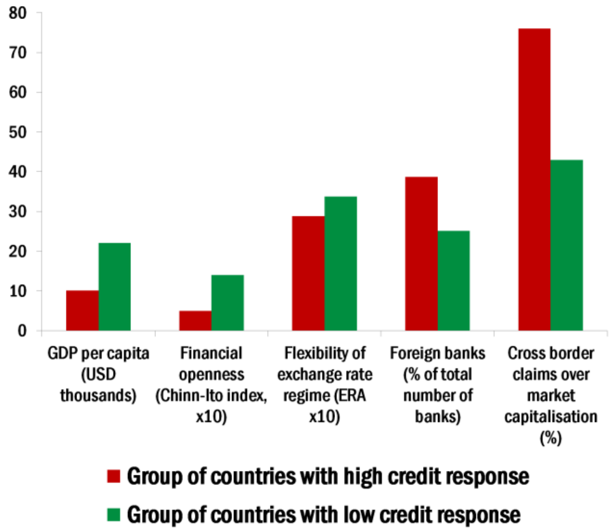


Figure 3: Response after 6 months



Source: World Development Indicators (World Bank), BIS, Chinn & Ito (2006), AREAER (IMF), and authors' calculations using a VAR model. Green (red) bars represent the average level of a given characteristic for the group of countries where the credit response is relatively weaker (stronger). For instance, the average GDP per capita in countries with relatively weaker (stronger) credit response to capital inflows is USD 22,000 (USD 10,000). We only show characteristics for which the average responses are significantly different between the two groups of countries.

First, the impact of gross capital inflows on domestic credit is found to be higher in countries with more closed financial accounts in their balance of payments. Rather than a causal relationship, this finding reflects the fact that capital flow management measures are generally used in countries (usually emerging economies) where the procyclical effect of capital inflows on domestic credit is stronger. Such measures thus seek to mitigate this effect. In other words, the procyclicality could be even higher without the extra room provided by restrictions on financial openness. Through these measures, when financial inflows (outflows) significantly increase, domestic authorities can tighten (ease) monetary policy without fearing further capital inflows (outflows).

Second, domestic credit is found to be more responsive to capital inflows in countries that have adopted less flexible exchange rate regimes. Let us suppose that a country experiences large capital inflows. The more rigid the exchange rate arrangement, the more monetary authorities have to buy foreign currency to prevent excessive appreciation of their domestic currency. Yet, the unsterilised part of the foreign reserves accumulation leads to an increase in domestic liquidity and improves banks' ability to provide credit. This result is thus explained by a reduction in policy autonomy.

Lastly, our findings suggest that a strong presence of foreign banks and high outstanding cross-border claims on the country strengthen the domestic credit response to capital inflows, but after a certain lag (six months). This finding is rather intuitive. Even if monetary policy is tightened in order to prevent the build-up of a credit boom, foreign affiliates of global banks are able to overcome the higher cost of liquidity in the host country, as they can keep on raising credit by getting funds from the head office in the home country.

Two important economic policy implications

First, in line with the classic Mundell's trilemma, *ceteris paribus*, countries with more flexible exchange rate regimes need less countercyclical policies to mitigate the impact of capital inflows.

Second, our findings tend to confirm the emergence of a global financial cycle that influences significantly the developments in domestic financial cycles. This hypothesis is backed up by some recent studies (see Rey, 2013). Owing to the predominance of international credit and risk-taking channels, banks' leverage and credit growth are driven by monetary conditions in core economies such as the United States.

The global financial cycle dampens the ability of domestic authorities in other open economies to set countercyclical monetary policies, even when exchange rates are flexible.