## Managing Capital Inflows: The Role of Capital Controls and Prudential Policies

Mahvash S. Qureshi, Jonathan D. Ostry, Atish R. Ghosh, and Marcos Chamon

The strong recovery in capital inflows to emerging market economies (EMEs) following the sudden stop in late 2008-to-early 2009 is giving rise to (at least) two sets of concerns. The first relates to macroeconomic challenges, especially the intense pressure on a number of emerging-market currencies, which, if not sustained, may create costly dislocations when exchange rates come down, given the erosion in competitiveness and possible exposure to foreign-currency denominated debt on domestic balance sheets. The second relates to financial-stability risks, especially the possibility that some of the flows may not be channeled towards productive uses, and may thus end up fueling credit and asset price booms that may not be sustainable, amplifying financial fragilities down the road. Such concerns have led to renewed interest in the effectiveness and design of macro-prudential policies and the possible use of capital controls—that is, measures that treat transactions between residents and nonresidents less favorably than those amongst residents—in helping to manage financial-stability risks associated with inflows.

There is a large literature on capital controls, but it has mostly focused on their macroeconomic implications, for example whether they affect the aggregate volume of flows and the exchange rate. By and large, the evidence remains mixed. The evidence that controls can affect the composition of inflows (for example, lengthen their maturity) tends to be stronger. But systematic investigations of the impact of macro-prudential

policies and capital controls on the financial-stability risks associated with inflows have nevertheless been lacking.

Qureshi, Ostry, Ghosh, and Chamon aim to fill a gap in the existing literature by examining the nexus between various macro- prudential policies, controls on capital inflows, and economic and financial stability. To do so, they develop new indices for financial-sector capital controls, prudential regulation of foreign exchange (FX) transactions in the domestic banking sector, and domestic prudential policies. With these new indices, they can estimate the impact on financial stability of three distinct segments of the prudential toolkit: capital controls (which discriminate by residency of the flows); FX regulations (which discriminate by currency); and other prudential regulations (which do not discriminate by either residency or currency).

Their results suggest that FX-related prudential measures as well as capital controls are associated with a lower proportion of FX loans in domestic bank lending. Capital controls and FX-related prudential measures are also associated with a shift away from portfolio debt flows towards portfolio equity and FDI flows within the country's overall external liability structure. This pattern suggests some substitutability across these two different types of policies, which may stem from the role of banks in intermediating capital flows.

Capital controls can have a direct effect on debt flows. FX regulations can have an indirect effect: by limiting banks' ability to lend domestically in foreign currency, they may discourage funding in external debt markets (assuming banks cannot have open FX positions). FX regulations can have a direct impact on the prevalence of FX loans.

Capital controls can have an indirect effect on FX loans: by restricting banks' ability to fund themselves abroad, controls may reduce the extent to which banks lend domestically in FX. Note however, that substitutability between the two policy instruments hinges on flows being intermediated by banks. If flows bypass the regulated financial sector, prudential policies will not have traction against the risks and only economy-wide capital controls may be able to slow the inflows.

Consistent with these results, the researchers find reasonably strong (both economically and statistically-significant) associations between pre-crisis prudential and capital control policies and the extent of economic resilience during the period of sudden stop. This suggests that capital controls and prudential measures can indeed reduce financial fragilities. The estimates here suggest that moving from the twenty-fifth to the seventy-fifth percentile of capital control restrictiveness or FX-related prudential measures reduces the growth decline in the crisis by 2.5–3.5 percentage points.

One of the contributions of this work is to highlight the distinction between macroeconomic and financial-stability motives for implementing capital controls. While capital controls may be of limited (or only temporary) use in affecting the aggregate volume of flows, inflow controls (together with FX-related and other prudential measures) can form an important part of the policy toolkit to reduce the financial-stability risks associated with inflow surges.