Liquidity Management of U.S. Global Banks: Internal Capital Markets in the Great Recession

Nicola Cetorelli and Linda S. Goldberg

The Great Recession clearly focused attention on the importance and international interconnectedness of global banks. Individual banks experienced unprecedented balance sheet disruptions and pursued various strategies for dealing with these shocks. Those banks with networks of foreign affiliates had, as one margin of adjustment, a possibility of reallocating liquidity across the organization. Using detailed, and so far unexplored, confidential regulatory data on all U.S. banks with foreign branches and subsidiaries, **Cetorelli** and **Goldberg** explore how global banks activated these "internal capital markets" during the recession.

They demonstrate that bank business models and country and institutional features play clear roles in international transmission and contagion through internal capital markets of banks. Some foreign markets are, for particular parent banks, "core investment markets" that remain destinations for funding. Other foreign locations serve as "core funding markets" that would send even larger net flows to parent banks in times of parent balance sheet disturbances. In general, a range of policy and institutional "distance" measures also influence the magnitudes of these flows, but to a lesser degree. In the early stage of the crisis, the degree to which U.S. parent banks drew liquidity support from their affiliates, or reduced the funding provided to affiliates, was clearly related to the magnitude of the initial funding shock they experienced through asset backed commercial paper exposures, and to the status of their affiliates

as core funding or investment markets. After the Federal Reserve implemented special liquidity facilities, the reversal of these funding adjustments with affiliates was related to the same set of factors, plus additional differentiation across banks according to other features of their aggregate balance sheets.

Issues relating to global liquidity management by banking institutions are one theme at the forefront of policy discourse. Indeed, the need for global banks to enhance internal practices for the management of liquidity risk is one of the pillars enunciated by the Basel Committee on Banking Supervision. Our analysis is part of an ongoing effort to understand these practices.

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,

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.