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Research Summaries

Revisiting Capital Controls

Marcos Chamon

With the world economy recovering from the global financial crisis, capital is flowing back to emerging market economies (EMEs). Although capital flows to developing and emerging market countries are generally welcome—providing lower-cost financing and indicating market confidence in the fundamentals of the economy—sudden surges can complicate macroeconomic management and create financial stability risks. This article reviews recent IMF research on managing capital inflows, including the potential role for capital controls.

While capital flows to EMEs should be generally welcomed, those flows put upward pressure on currencies, which, if not sustained, can create costly dislocations when exchange rates come down, given the erosion in competitiveness and possible exposure to foreign-currency-denominated borrowing on domestic balance sheets. The global crisis has also heightened financial stability concerns that some of the flows may end up fueling credit and asset price booms that may not be sustainable, amplifying financial fragilities down the road. Such concerns

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Capital Flows and Financial Stability: Monetary Policy and Macroprudential Responses

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The resumption of capital flows to emerging market economies since mid-2009 has posed two interrelated challenges for policymakers: (i) preventing the flows from exacerbating overheating pressures and thereby undermining macroeconomic stability and (ii) minimizing the risk that prolonged periods of easy financing conditions will undermine financial stability. To address these challenges, policymakers have begun using macroprudential measures in addition to monetary policy. This article summarizes recent research on the interaction between monetary policy and macroprudential regulations in managing large capital inflows.

Experience has shown that macroeconomic stability is not a sufficient condition for financial stability. Before the onset of the global financial crisis, relatively stable growth and low inflation in advanced economies had created a deceptive picture behind which financial imbalances had built up. Moreover, microprudential regulation, with its focus on individual financial institutions, was not adequate to avoid system-wide risks. Hence, macroprudential supervision has gained popularity in a number of emerging market economies (IMF, 2011a).

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Revisiting Capital Controls *(continued from page 1)*

have led to renewed interest in the design and effectiveness of macroprudential policies, including capital controls.

The large literature on capital controls has mostly focused on their macroeconomic implications. Magud, Reinhart, and Rogoff (2007) provide a comprehensive survey and meta-analysis of that literature. On average, the studies they review find that capital controls have limited effectiveness in altering the overall volume of capital inflows and hence the level of the exchange rate. Some papers show controls can increase monetary policy autonomy. The evidence on the composition of flows is stronger, with a few studies finding that capital controls have managed to lengthen the maturity of debt inflows and tilt the composition away from portfolio flows toward foreign direct investment (FDI).

Ostry and others (2010) explore the "natural experiment" provided by the global financial crisis—where the shock originated in global financial markets—to test how the external liability structure and the controls aimed at making it safer attenuated the decline in growth during the crisis. As expected, portfolio debt is found to be much riskier than equity and FDI, but with the important qualification that financial sector FDI can be as risky as debt flows. Empirically, there appears to be a negative association between capital controls that were in place before the global financial crisis (as measured by the index in Schindler, 2009) and the output declines suffered during the crisis.

As mentioned above, the literature on capital controls has focused on macroeconomic aspects, with little emphasis on prudential aspects, and on the nexus between capital controls and other prudential policies. Part of the reason for this disconnect is that controls are typically covered in the international finance literature, whereas prudential policies by the banking one. Another key factor is the lack of suitable indices. Chamon and others (2011) seek to bridge that gap by developing new indices for financial-sector-specific capital controls, for the prudential regulation of foreign exchange (FX) in the domestic banking sector, and for domestic prudential policies. With those new indices, they analyze 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 (which do not discriminate by either residency or currency).

The results indicate that both FX regulations and capital controls tend to reduce the proportion of foreign-currency-denominated loans by the domestic banking sector and shift the country's external liability structure away from portfolio debt. Capital controls can have a direct effect on debt flows. FX regulations limit banks' ability to lend domestically in foreign currency and so discourage bank funding in external debt markets (assuming they cannot have open FX positions) and hence reduce portfolio debt. Both FX regulations and capital controls can discourage FX lending in the domestic banking system. FX regulations can have a direct impact on the prevalence of FX loans. Capital controls can have an indirect effect—by restricting the bank's ability to fund themselves abroad, the controls reduce the extent to which they lend domestically in foreign currency. Despite the effect on the composition of flows, neither capital controls nor FX regulations seem to affect the prevalence of credit booms in general. From a strictly prudential perspective, altering the composition without affecting the overall volume is an ideal outcome. This substitutability between controls and FX regulations suggests that, from a prudential perspective, capital controls are necessary only under particular circumstances (discussed below). Domestic prudential regulations seem more effective than capital controls or FX regulations in restraining credit growth. Experience from the global financial crisis suggests that countries that had capital controls and other prudential policies in place prior to the crisis fared better in terms of the output decline during the crisis, consistent with the findings in Ostry and others (2010).

The surge in inflows to EMEs prior to the global financial crisis, their sudden collapse at the height of the crisis, and their rapid recovery afterward has renewed interest in managing inflows and in the potential role of controls. There has been a series of recent IMF Staff Position and Discussion Notes on this topic.

Ostry and others (2010 and forthcoming) analyze, from a policy perspective, the conditions under which capital controls should be deployed. As a response to the macroeconomic risks from inflow surges, before resorting to controls one should first allow the exchange rate to reach a level that is consistent, on a multilateral basis, with medium-run fundamentals; build reserves to a level that is consistent with country-insurance metrics; to lower policy rates (if inflationary pressures are contained), and make sure that the domestic policy mix (monetary and fiscal policies) is consistent with internal balance and a sustainable path for public debt. Capital controls are a legitimate part of the policy toolkit for responding to flows, but only after the necessary adjustments in macro policy have been made.

Ostry and others (2011) focus on the policy response to prudential risks from inflow surges. They argue that multilateral considerations require macroeconomic policy to be

adjusted before contemplating controls even for prudential reasons. They call for a pragmatic approach to the different options, as both capital controls and prudential policies can create distortions. Capital controls will increase financing costs, and so will tighter prudential regulations (for firms that rely on bank financing). The measures should be targeted to the particular risks at hand. When the flows are intermediated by the regulated financial sector, a wide range of options is available, and different tools can be deployed at different points of the financial intermediation chain. For example, the risks of foreign currency mortgages can be addressed by tightening loan-to-value limits (domestic prudential), by placing additional restrictions on foreign currency lending (FX regulation), or by imposing capital controls to attenuate the flows that are fueling that lending. If, however, inflows bypass the regulated financial sector, then, by definition, prudential policies will have no effect, and the only remaining tools that may be relevant are economy-wide capital controls. The insights from these notes have helped shape the Fund's policy advice on how to manage inflows (IMF, 2011).

Ostry and others (2011) also provide insights into the design of capital controls, showing that much of the specifics can hinge on the underlying motivation for imposing them. Controls need to be broad in scope when imposed for macroeconomic reasons (since the concern is the overall level of inflows) but should be targeted to particular risks when imposed for financial stability concerns, as described above (although the scope for circumvention can limit the feasibility of narrow targets). Price-based controls are considered less distortionary than quantity-based ones (for the same reasons that trade economists prefer tariffs to quotas) and are more appropriate when the motivation is macroeconomic. However, from a financial stability perspective, quantitative controls may be more appropriate (although they should be transparent and rules-based). In fact, prudential-type controls are often quantitative in nature. From a macroeconomic perspective, controls should be deployed only against temporary surges; if flows are persistent, the economy should adjust to the new real exchange rate equilibrium). But from a financial-stability perspective, they could be deployed against more persistent inflows (which may allow for even more fragilities to be built-up).

While some of the factors "pushing" capital to EMEs may be temporary, there is a growing perception that we are living in a "new normal" where changes in fundamentals in EMEs and AEs have made the former a relatively more attractive destinations for capital. WEO projections indicate large flows to EMEs over the medium term. Many countries have adjusted their macroeconomic and prudential policies in response to these flows, although the use of capital controls has remained relatively limited so far (see Eyzaguirre and others, 2011, for a review of the policy response in Latin America; and Pradhan and others, 2011, for a review with a focus on Asia).

The question of how to reap the benefits of capital flows while minimizing the risks should remain an important policy topic.

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