



ISSUES IN BRIEF

Capital Account Regulations for Stability and Development: A New Approach



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Since the revival of global capital markets in the 1960s, cross-border capital flows have increased by orders of magnitude, so much so that international asset positions now

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outstrip global economic output. Most cross-border capital flows occur among industrialized nations, but emerging markets are increasing participants in the globalization of capital flows. While it is widely recognized that investment is an important ingredient for economic growth, and that capital flows may under certain conditions be a valuable supplement to domestic savings for financing such investment, there is a growing concern that certain capital flows (such as short-term debt) can have de-stabilizing effects in developing countries.

During the recent financial and currency crises a number of emerging market and developing countries experimented with a variety of measures that have traditionally been referred to as "capital controls"—defined as regulations on capital flows. Given that capital controls have been highly stigmatized, in this policy brief we will refer to them as capital account regulations (CARs). Those nations that deployed CARs in the years leading to the financial crisis were among the least hard hit when the global financial crisis wracked the world economy (Ostry et al. 2011).

The 2008 global financial crisis has opened a new chapter in the debate over the proper policy responses to pro-cyclical capital flows. Until very recently certain strands of the economics profession as well as industrialized country national governments and international financial institutions have remained either hostile or silent to regulating capital movements. Regardless, a number of emerging economies, including Brazil, Taiwan, and South Korea, have been

This paper stems from a recent meeting of the Pardee Center Task Force on Managing Capital Flows for Long-Run Development convened in collaboration with the Initiative for Policy Dialogue at Columbia University, and the Global Development and Environment Institute at Tufts University. For full list of Task Force members and other details, see www.bu.edu/pardee/2011/09/16/capital-flows-task-force/

successfully experimenting with CARs to manage volatile capital flows (Gallagher 2011; IMF 2011b). The IMF has come to partially recognize the appropriateness of capital account regulations and has gone so far as to recommend (and officially approve) a set of guidelines regarding the appropriate use of CARs.

In September 2011, the Global Economic Governance Initiative at Boston University's Pardee Center for the Study of the Longer-Range Future — along with Columbia University's Initiative for Policy Dialogue and Tufts University's Global Development and Environment Institute — convened a Task Force on Managing Capital Flows for Long-Run Development. Based on discussions among members, we argue that there is a clear rationale for capital account regulations in the post-crisis world, that the design and monitoring of such regulations is essential for their effectiveness, and that a limited amount of global and regional cooperation would be useful to ensure that CARs can form an effective part of the macroeconomic policy toolkit. This policy brief addresses these issues and provides a protocol for the use of CARs — one that stands in stark contrast to a set of guidelines for the use of capital controls approved by the board of the International Monetary Fund (IMF) in March 2011 (see IMF 2011b).

Capital Flows and the Two-speed Recovery

A long line of prominent economists throughout history have argued that financial markets can be inherently unstable (see Ocampo, Spiegel, and Stiglitz 2008). Different authors use different terms but there is a consistent concern that during periods of growth, expectations can become extremely optimistic, leading to a reduction in risk aversion, a rapid expansion in credit, and a rise in asset prices. Imbalances associated with excessive risk taking build up, and if there are changes in expectations, possibly unleashed by facts that lead to a loss in asset values, the unwinding of positions may lead to instability, panics, and crises. Boom is then followed by bust.

Cross-border capital flows to emerging and developing countries tend to follow a similar pattern. Between 2002 and 2007 there were massive flows of capital into emerging markets and other developing economies. After the collapse of Lehman Brothers, there was capital flight to the “safety” of the U.S. market, which spread the North Atlantic financial crisis to emerging markets. As interest rates were lowered for expansionary purposes in the industrialized world between 2008 and 2011, capital flows again returned to emerging markets, where interest rates and growth were relatively higher. The carry trade was one of the key mechanisms that triggered these flows. Increased liquidity induced

investors to go short on the dollar and long on currencies in nations with higher interest rates and expectations of strengthening exchange rates. With significant leverage factors, investors gained on both the interest rate differential and the exchange rate movements.

These sudden surges in capital flows can be de-stabilizing for four reasons. First, if capital flows are large enough, such speculation can cause undue appreciation and volatility of exchange rates and lead to a boom in asset prices in developing economies. Second, relatively small interest rate or currency changes can trigger an unwinding of (highly leveraged) positions which can cause a sudden stop of external financing and capital flight. Third, a sudden unwinding of positions where the investment entity is highly interconnected with

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other parts of the financial system might cause systemic risk. Fourth, in an environment where nations have open capital accounts, short-term capital movements reduce the space for independent monetary policies. The dominant tool to stem inflation is the interest rate. However, raising interest rates would actually attract more capital flows, in effect generating expansionary pressures.

Private capital flows to Asia and Latin America have returned to their pre-Lehman Brothers highs. This is the case in nations like Brazil, which saw an appreciation of its currency of over 40 percent between the third quarter of 2009 and 2011, and rising concern over asset bubbles and inflation. Indeed it will come as no surprise that it was Brazil's finance minister who declared the surge in capital flows, the subsequent appreciations, and the myriad reactions to the surges as the beginning of a "currency war." In the midst of these capital flows, individual nations have responded in various ways. In Brazil's case, it has taken the form of a tax on foreign purchases of Brazilian securities and later with a reserve requirement and taxes for firms going short on the nation's currency and holding some derivative positions in foreign currency. Box 1 outlines the various types of capital account regulations that have been deployed by nations in the run up to and during the crisis.

Capital account regulations are often deployed to manage exchange rate volatility, avoid currency mismatches, limit speculative activity in an economy, and provide the policy-space for independent monetary policy. Measures often come in two varieties, price or quantity-based. Price-based measures alter the price of foreign capital such as with a tax on inflows or outflows, and unremunerated reserve requirements (URRs) that have been deployed by such nations as Chile, Colombia, and Thailand. Quantity-based measures include prohibitions or caps on certain types of transactions (for example, on foreign borrowing below certain maturities, or for purposes other than investment or international trade), or minimum stay periods for capital that comes into the country.

Rules of Thumb for Deploying CARs

With respect to CARs, in February of 2010 the IMF published a staff position note which found that capital controls on the inflows of capital that were deployed over the past 15 years have been fairly effective. It also found that those nations that used capital controls were among the least hard hit during the world financial crisis (Ostry et al. 2010). A comprehensive review of the literature on this topic published by the National Bureau of Economic Research in the United States found, in turn, that capital regulation on inflows can make monetary policy more independent, alter the composition of capital flows towards longer-term flows and reduce real exchange rate pressures, and that regulations on outflows can be effective as well (Magud et al. 2011).

The IMF now recognizes that CARs should be part of the policy toolkit for financial stability. Moreover, the IMF also recognizes that the very use of the term "capital controls" can bring a stigma to some nations that may impact the way investors perceive the investment climate in a nation. Indeed, in the 1990s credit rating agencies would downgrade the credit of nations

Box 1: An Illustrative List of Capital Account Regulations

Inflows

- Unremunerated reserve requirements (a proportion of new inflows are kept as reserve requirements in the central bank)
- Taxes on new debt inflows, or on foreign exchange derivatives
- Limits or taxes on net liability position in foreign currency of financial intermediaries
- Restrictions on currency mismatches
- End use limitations: Borrowing abroad only allowed for investment and foreign trade
- Limits on domestic agents that can borrow abroad (e.g., only firms with net revenues in foreign currency)
- Mandatory approvals for all or some capital transactions
- Minimum stay requirements

Outflows

- Mandatory approval for domestic agents to invest abroad or hold bank accounts in foreign currency
- Mandatory requirement for domestic agents to report on foreign investments and transactions done with their foreign account
- Prohibition or limits on sectors in which foreigners can invest
- Limits or approval on how much non-residents can invest (e.g., on portfolio investments)
- Restrictions on amounts of principal or capital income that foreign investors can send abroad
- Limits on how much non-residents can borrow in the domestic market
- Taxes on capital outflows

BOX 2: Guidelines for the Use of Capital Account Regulations in Developing Countries

- Capital Account Regulations (CARs) should be seen as an essential part of the macroeconomic policy toolkit and not seen as measures of last resort.
- CARs should be considered differently in nations where the capital account is still largely closed versus those nations where CARs are prudential regulations to manage an open capital account.
- Price-based CARs have the advantage of being more market neutral, but quantity-based CARs may be more effective, especially in nations with relatively closed capital accounts, weaker central banks, or when incentives to bring in capital are very large.
- CARs should not only be relegated to regulations on capital inflows. Capital outflow restrictions may be among the most significant deterrents of undesirable inflows and can serve other uses as well.
- CARs can be seen as alternatives to foreign exchange reserve accumulation, particularly to reduce the costs of reserve accumulation.
- CARs should not be seen as solely temporary measures, but should be thought of as permanent mechanisms to be used in a counter-cyclical way to smooth booms and busts. Their permanence will strengthen institutional capacity to implement them effectively.
- Investors can increasingly circumvent CARs through mis-invoicing trade flows, derivative operations, or foreign direct investments that are in fact debt flows.
- Therefore, CARs should be seen as dynamic, requiring a significant degree of market monitoring and ‘fine tuning’ as investors adapt and circumvent regulation.
- It may be useful for effective CARs to distinguish between residents and non-residents.
- The full burden of managing capital flows should not be on emerging market and developing countries, but the ‘source’ countries of capital flows should also play a role in capital flow management, including supporting the effectiveness of those regulations put in place by recipient countries.
- Neither industrialized nations nor international institutions should limit the ability of nations to deploy CARs whether through trade and investment treaties or through loan conditionality.
- Industrialized nations should examine more fully the global spillover effects of their own monetary policies and evaluate measures to reduce excessive outflows of short-term capital that can be undesirable both for them and emerging countries.
- The stigma attached to CARs should be removed, so nations have ample confidence that they will not be rebuked for taking action. The IMF could play a valuable role in taking away the stigma of CARs, as well as doing comparative analysis of which CARs are most effective.

Source: Pardee Task Force on Managing Capital Flows for Long-Run Development

that deployed controls (Abdelal 2007). Therefore, the IMF proposed a new nomenclature for capital controls, suggesting they be referred to as capital flow management measures (CFMs). Others have previously suggested the term “capital management techniques” to the same end (see Epstein et al. 2003; Ocampo et al. 2008). As we have indicated, we prefer to use the term “capital account regulations,” to underscore the fact they belong to the broader family of financial regulations.

The IMF formulated and approved at the board level a set of guidelines pertaining to when a nation should and should not deploy CARs. In a nutshell, the official report recommends that CARs be used as a last resort and as a temporary measure, and only after a nation has

accumulated sufficient reserves, adjusted interest rates, and let its currency appreciate, among other measures. When capital account regulations are used, the IMF suggests that controls be price-based and that they not discriminate against the residence of the investor that makes the flow.

Though the IMF should be applauded for recognizing that CARs are useful, its prescriptions fall short of being sound advice for developing countries on a number of fronts. Without the advice of the IMF many nations have deployed CARs, alongside a host of other macroeconomic and macro-prudential policies as they have seen appropriate. And, according to the IMF's own research, CARs have been a success even though they have sometimes not met those guidelines. We outline an alternative set of guidelines in Box 2. In no way do we think these should be binding protocols at the global level. Rather, we hope they can serve as useful rules of thumb for national policy-makers.

First and foremost, CARs should be seen as an essential part of the macroeconomic policy toolkit and not as mere measures of last resort. In the econometric work that recognizes the utility of CARs, such regulations were part of a battery of approaches taken in tandem to manage the capital account. CARs should thus be seen as part of the arsenal that needs to be used to prevent and mitigate crises. In turn, they should not be seen as solely temporary measures, but rather as permanent tools that can be used in a counter-cyclical way to smooth booms and busts.

“Capital outflow restrictions may be among the most significant deterrents of undesirable inflows and can serve other uses as well.”

Secondly, CARs should be considered differently in nations where capital accounts remain largely closed — and in which they may be used as part of a strategy to gradually open the capital account — versus those nations where CARs are prudential regulations to manage an already open capital account. The IMF report acts as if the set of nations it was talking to were nations with open capital accounts and floating exchange rates, but many developing countries deploy capital account regulations as a regular macro-prudential management technique and intervene heavily in foreign exchange markets.

Third, quantity-based CARs may be more effective than price-based CARs, especially in those nations with relatively closed capital accounts, weaker central banks or when incentives to bring in capital are very large (large interest rate differentials or strong expectations of exchange rate appreciation). This is consistent with economic theory and some IMF staff work. Because of uncertainties and asymmetric information about the private sector's response, price-based measures may be difficult to calibrate correctly and therefore a quantity-based measure may be more appropriate. Indeed, IMF research has shown that quantity-based CARs have proven to be more effective under several conditions (Ariyoshi et al. 2000).

In addition, while there has been a sea change in thinking regarding CARs on capital inflows, regulations on capital outflows have largely been shunned. CARs should not only be relegated to regulations on capital inflows. Capital outflow restrictions may be among the most significant deterrents of undesirable inflows and can serve other uses as well. Moreover, in times of acute crisis capital controls on outflows may be necessary to help stop the precipitous slide of a currency and a run on banks. Indeed, the IMF sanctioned controls on outflows in Iceland as part of its rescue package with that nation during the financial crisis. Finally, some members of our task force argued that regulating outflows can help channel credit and investment into the “real economy”.

CARs should also be seen as alternatives to foreign exchange reserve accumulation. Recent work has shown that the social costs of foreign reserve accumulation in developing countries

can reach two to three percent of GDP (Aizenman 2009; Rodrik 2006). CARs are an instrument to reduce excessive reserve accumulation.

The Need for Monitoring and Fine Tuning

The IMF guidelines give scant attention to the policy design issues related to CARs. Though IMF econometric work shows that CARs have been effective, there is to date a lack of research regarding how nations administratively have designed and fine-tuned such regulations to make them successful. Much of the literature shows that, without the proper fine-tuning, capital regulations may lose their effectiveness due to the ability of foreign investors to evade and circumvent such regulations. This can be done by ‘misinvoicing’ trade flows, disguising debt flows as foreign direct investment, and by using derivatives.

Box 3: Capital Account Regulations and the Crisis

Brazil

DATE	MEASURE
19-Oct-09	Inflows tax (2 percent)
18-Nov-09	ADR tax (1.5 percent)
3-Oct-10	Inflows tax (4 percent)
17-Oct-10	Inflows tax (6 percent)
5-Jan-11	Reserve requirement
26-Jul-11	Tax on derivatives

South Korea

DATE	MEASURE
30-Jun-10	Currency controls
30-Jun-10	End use limitations
18-Dec-10	Outflows tax

Source: Gallagher 2011

Nations such as Brazil and South Korea have increasingly “fine-tuned” their regulations with an attempt to keep up with the various levels of circumvention. Fine-tuning of CARs is essential for their effectiveness – and may be far simpler than some may argue, especially if they target the large actors. When regulations are price-based and administered by the tax system, violators could see criminal penalty – creating a strong incentive to comply. Box 3 illustrates examples of the use of CARs in the wake of the crisis and shows how Brazil and Korea have been constantly strengthening and changing the composition of their capital account regulations in response to new market conditions.

The Need for International Cooperation

Rather than a globally enforceable code of conduct that could lead to the requirement to open capital accounts across the globe, the IMF, G-20, the Financial Stability Board (FSB) and other bodies should make a stronger effort to reduce the stigma attached to CARs and protect the ability of nations to deploy CARs to prevent and mitigate crises. Moreover, these bodies can be part of a global dialogue about the extent to which nation states should coordinate CARs.

In the original design of the IMF, it was charged with both permitting and helping to enforce CARs. Both John Maynard Keynes and Harry Dexter White saw them as a core component of the Bretton Woods system. In those deliberations Keynes said that, “control of capital movements, both inward and outward, should be a permanent feature of the post-war system.” Indeed, the IMF was not given jurisdiction over liberalization of the capital account at all under its articles of agreement. Article VI of those articles goes further to say that members may “exercise such controls as are necessary to regulate international capital movements” (see Helleiner 1994).

The IMF, G-20, the FSB, and their respective members could clarify the new thinking on CARs in communiqués, speeches and other venues such as in official reports such as the World Economic Outlook. Such continued attention to CARs would help continue to remove the stigma associated with their use. Not only would it calm both national governments and market participants, it may also trickle into the legal discourse and help broaden the way the global community legally interprets macro-prudential regulations.

This is important because the policy space provided for under the IMF articles of agreement is being eroded by trade and investment agreements. Increasingly, these agreements prohibit the use of CARs and those treaties that have exceptions for measures to manage balance of payments crises only allow CARs to be temporary in nature. In Asia, where CARs on both

inflows and outflows are the most prevalent, ASEAN will require nations to eliminate most CARs by 2015, with relatively narrow exceptions. Trade and investment agreements with the United States provide the least flexibility. In January of 2011, some 250 economists from across the globe called on the United States to recognize the recent consensus on CARs and to permit nations the flexibility to deploy controls to prevent and mitigate crises. The letter was rebuked by prominent business associations and the U.S. government. In response to the letter, U.S. Treasury Secretary Timothy Geithner replied that U.S. policy would go unchanged. Secretary Geithner wrote:

“In general, we believe that those risks are best managed through a mix of fiscal and monetary policy measures, exchange rate adjustment, and carefully designed non-discriminatory prudential measures, such as bank reserve or capital requirements and limitations on exposure to exchange rate risk.”

This is ironic given that the U.S. approved the guidelines for CARs at the IMF.

Finally, the global community should start a conversation regarding the extent to which there should be coordination among national governments regarding CARs — especially between inflow and outflow nations. In the meetings leading up to the establishment of the IMF both Harry Dexter White and John Maynard Keynes agreed that capital controls be targeted at “both ends” of a capital flow (Helleiner 1994). Furthermore, the industrialized nations are more often the source of such flows but generally ignore the negative spillover effects of their actions. The expansionary monetary policy by the U.S. — which is quite justified in order to generate employment and recovery in that country — leads to the harmful carry trade effects discussed earlier. However, despite this fact, thus far the entire burden of managing capital flows has fallen on those countries that are the recipients of those inflows.

There may be an alignment of interests to coordinate on capital flows. Industrialized nations are aiming to recover from the crisis and hope that credit and capital stays in their nations. Meanwhile the developing world has little interest in having to receive those flows. There is therefore some alignment of interests that could form the means for industrialized nations to adjust their tax codes and deploy other types of regulation to keep capital in their countries, as emerging markets deploy CARs to change the composition and reduce the level of those capital flows that may destabilize their economies. ●

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