

INTERNATIONAL MONETARY FUND

Liberalizing Capital Flows and Managing Outflows

Prepared by the Monetary and Capital Markets Department; the Strategy, Policy, and Review Department; and the Research Department, in consultation with the Legal Department

Approved by Jan Brockmeijer, David Marston, and Jonathan D. Ostry

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Motivation: This is the fourth in a series of Board papers developing a comprehensive Fund view on capital flows and the policies that affect them. A first paper in December 2010 dealt with the Fund's overall role in this area, both historically and prospectively. The second paper in March 2011 developed a framework for policy advice on managing capital inflows broadly endorsed by the Board, which constitutes a first round articulation of the Fund's institutional views on managing capital inflows. The third paper in November 2011 examined the multilateral aspects of policies affecting capital flows, and focused mainly on source country policies. This paper covers liberalizing capital flows and the management of outflows.

Objective and coverage: The objective of the present paper is to equip the Fund with an up-to-date and operational framework for policy advice on liberalizing capital flows and on the management of capital outflows. First, it proposes an "integrated approach" to the liberalization of capital flows. Second, in this context, it discusses the implications of liberalization by systemically important emerging market economies (EMEs) that extensively control capital flows (China and India). Third, it considers the use of capital flow management measures (CFMs) on outflows in preventing and managing crises. In addressing these questions, the paper takes account of lessons from the ongoing crisis. The frameworks as set forth in this paper are intended to inform policy discussions with and advice to Fund members, but are not intended to provide guidance on members' obligations under the Articles of Agreement.

Main messages: While the understanding of the issues discussed in the paper has advanced over the past decade, it remains far from complete. What is now known is consistent with the following conclusions. First, the appropriate degree of liberalization for a country would depend on its specific circumstances, notably on whether it has reached certain thresholds with respect to financial development. The crisis has underscored the financial stability risks associated with capital flows. Managing these risks requires stronger policies and cooperation across countries. CFMs may need to be temporarily reimposed under certain conditions without compromising the overall process of liberalization. Second, in China and India, further liberalization would be beneficial based on implementation of the authorities' liberalization plans and more rapid progress on supporting reforms, particularly in the financial sector. Liberalization needs to be well planned and sequenced, as it could have potentially significant domestic and multilateral effects. Third, the reimposition of CFMs on outflows can be useful mainly in crisis or near crisis conditions, but only as a supplement to more fundamental policy adjustment.

Next steps: A subsequent paper, responding to the call by the International Monetary and Financial Committee (IMFC), will integrate all of the elements covered in the series of papers thus far into a comprehensive, flexible, and balanced, approach for the management of capital flows, drawing on country experiences.

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GLOSSARY

AREAER	Annual Report on Exchange Arrangements and Exchange Restrictions
BIS	Bank for International Settlements
CEE	Central and Eastern European
CFM	Capital Flow Management Measure
EMDC	Emerging Markets and Developing Countries
EME	Emerging Market Economy
EU	European Union
FDI	Foreign Direct Investment
FII	Foreign Institutional Investor
IEO	Independent Evaluation Office
IMFC	International Monetary and Financial Committee
NRI	Nonresident Indian
OECD	Organization for Economic Cooperation and Development
QDII	Qualified Domestic Institutional Investor
QFII	Qualified Foreign Institutional Investor

I. INTRODUCTION¹

1. **The IMFC and the G-20 have called for work by the Fund on the management of capital flows, in connection with ongoing efforts to improve the functioning of the international monetary system.**² A series of papers since late 2010 has aimed at developing a “comprehensive, flexible, and balanced approach for the management of capital flows, drawing on country experiences.”³

2. **As requested by the IMFC, this paper covers two further topics—liberalization of capital flows and the management of capital outflows.**⁴ Building on earlier work by staff and drawing on experience and research over the last decade, it proposes the adoption of a policy framework for the liberalization of capital flows and for the use of measures to manage capital outflows.

3. **In contrast with trade and current account issues, the theoretical and practical understanding of capital flows remains incomplete.** Capital flows are a financial phenomenon, and many of the unresolved analytical and policy questions related to the financial sector carry over to capital flows. There has over the past decade been considerable new research on the economics of capital flows and of policies for managing them. The conclusions advanced in this paper draw on this new work to provide the Fund with an up-to-date and operational framework for policy advice on liberalizing capital flows and on the management of capital outflows. Nonetheless, any such framework will need to be revised periodically as the understanding of the underlying issues advances.

¹ This paper was prepared by a team led by A. Kokenyne (MCM) and H. Weisfeld (SPR) comprising G. Gasha, T. Saadi-Sedik, T. Sun, S. Townsend, B. Wang, E. Yehoue (all MCM); M. Chivakul, R. Llaudes, J.-B. Le Hen, Y. Miao, N. Raman, C. Saborowski, and S. Sanya (all SPR); under the guidance of K. Habermeier (MCM) and V. Arora and R. Salgado (SPR); a LEG team comprising K. Christopherson, K. Kwak, N. Rendak, and G. Rosenberg, under the guidance of R. Weeks-Brown; and A. Ghosh and M. Qureshi from RES, under the guidance of J. Ostry. J. Yenez of Indiana University and J. Vadasz (MCM) also provided valuable input. A Background Paper provides additional analysis.

² Communiqué of the 24th Meeting of the IMFC, September 24, 2011.

³ [“The IMF’s Role Regarding Cross-Border Capital Flows; Recent Experiences in Managing Capital Inflows—Cross-Cutting Themes and Possible Policy Framework;”](#) and Supplement 1; and [The Multilateral Aspects of Policies Affecting Capital Flows](#).

⁴ Previously, the Independent Evaluation Office (IEO) observed that the lack of a Board endorsed policy framework contributed to inconsistencies in staff advice on the liberalization of capital flows in the Fund’s country work. The IEO recommended that the IMF adopt a framework for sequencing that is based on the consensus in the literature, while stressing that staff advice needs to be based on the analysis of each individual case. See IMF, IEO Report: [The IMF’s Approach to Capital Account Liberalization, 2005](#).

4. **Against this background, the main messages of this paper are as follows:**
- First, the appropriate degree of liberalization for a country would depend on its specific circumstances, notably on whether it has reached certain thresholds with respect to financial development. There is no expectation that full liberalization is an appropriate goal for all countries at all times. Nonetheless, countries with extensive restrictions on capital flows are likely to benefit from further liberalization, in an orderly manner. Meanwhile, as the global crisis has made clear, managing the financial stability risks associated with capital flows requires stronger policies and cooperation across countries. CFMs may be temporarily reintroduced in accordance with the relevant policy frameworks, without compromising the overall process of liberalization. A stronger global safety net would facilitate further liberalization of capital flows.
 - Second, in systemically important EMEs such as China and India, which have extensive capital controls, liberalization should be carefully planned and sequenced as it could have potentially significant domestic and multilateral effects. Further liberalization would be beneficial for these countries based on implementation of the authorities' liberalization plans and more rapid progress on supporting reforms, particularly in the financial sector.
 - Third, while capital outflows should be managed primarily by macroeconomic and financial sector policies, the temporary reimposition of CFMs on capital outflows can be useful mainly in crisis or near crisis conditions but only as a supplement to other policies in response to large outflows typically associated with crises. The objective of such CFMs is to prevent a free fall of the exchange rate and depletion of international reserves. CFMs can, in particular, buy time for adjusting fiscal and other policies and stabilizing the financial sector. However, the effectiveness of CFMs on outflows depends on a number of factors, notably macroeconomic policies, initial conditions, the design of the CFMs, and implementation capacity. Even where CFMs are initially effective, their effectiveness may erode quickly. As CFMs can give rise to significant distortions, they should be lifted when the risks they were designed to address recede.
5. **The paper is organized as follows.** Section II provides an overview of recent trends in the liberalization of capital flows and the Fund's role in respect of capital flows, examines the pros and cons of liberalizing cross-border capital flows through a review of the relevant literature, proposes an IMF policy framework for liberalization, examines how the experiences in various countries can be interpreted in light of this framework, and finally considers the implications for liberalization in systemically important EMEs (China and India). Section III examines the use of CFMs on outflows and proposes an IMF policy framework for managing capital outflows. Section IV raises issues for discussion.

II. LIBERALIZATION OF CAPITAL FLOWS

6. **The interpretation of “liberalization” of capital flows has varied.**⁵ In its broadest sense, it means the elimination of measures that could hamper international capital flows. Full convertibility with respect to capital flows is often understood as the absence of any limitation on capital flows, including both the transaction and the related payments and transfers. The European Union (EU) applies this broad interpretation, as it generally prohibits all restrictions on the movement of capital, even if the restrictions do not discriminate based on residency. The Organization for Economic Development and Cooperation (OECD) uses a somewhat narrower concept focused on the elimination of residency-based measures on cross border capital movements (as did the Fund in the context of the 1990s discussions on a proposed capital flows related amendment of the Articles of Agreement). Box 1 and Section IV of the Background Paper provide further information.

7. **The concept of liberalization as used for Fund purposes has also evolved over the years.** Restrictions on cross border capital movements traditionally were understood primarily to refer to residency-based measures (capital controls). However, the Fund has more recently embraced the concept of a broader set of restrictions on inflows (CFMs), which include both capital controls and other measures (including some prudential measures) that by design affect capital inflows.⁶ To ensure consistency with the existing IMF policy framework on capital inflows broadly endorsed by the Executive Board ([Recent Experiences in Managing Capital Inflows—Cross-Cutting Themes and Possible Policy Framework](#)), the definition of CFMs will be extended to include measures designed to influence capital outflows.⁷

8. **Capital movements are an important part of the Fund’s mandate despite the dichotomy in the Articles of Agreement between current and capital transactions.** Under Article VI, Section 3, members are free to “exercise such controls as are necessary to regulate international capital movements.”⁸ That freedom is not unlimited, however, with one

⁵ Liberalization of capital flows is used in this paper instead of capital account liberalization to describe the process to eliminate impediments on international capital flows. Although most of the capital flows affected are registered in the financial account of the balance of payments, and thus their liberalization should be called financial account liberalization, the literature generally refers to it using the traditional term, that is, capital account liberalization.

⁶ CFMs comprise (i) residency-based CFMs, which are often referred to as “capital controls,” and (ii) other CFMs, which do not discriminate on the basis of residency but are nonetheless designed to influence capital inflows. The latter category may include measures imposed for prudential purposes.

⁷ When prudential CFMs are removed, it will often be necessary to replace them with other prudential measures in order to maintain financial stability.

⁸ In contrast, Article VIII, Section 2(a) imposes an obligation on members to refrain from imposing restrictions on the making of payments and transfers for current international transactions without the Fund’s prior approval.

such limitation being that members cannot exercise their right to regulate international capital movements in a manner that would be inconsistent with their obligations under Article IV.⁹ More generally, the Fund focuses on capital flow issues both as an integral part of bilateral surveillance and in the context of its responsibility to oversee the international monetary system (that is, multilateral surveillance).

9. **The frameworks proposed in this paper are intended to inform policy discussions with and advice to Fund members.** Similarly to the capital inflows framework broadly endorsed earlier by the Board, the frameworks as set forth in this paper are not intended to provide guidance on the scope of members' obligations under Article IV.

10. **Other provisions of the Articles further qualify members' right to regulate capital flows.** These include Article VI, Section 1 which prohibits members' use of the Fund's general resources to meet a large or sustained outflow of capital and allows the Fund to require that a member impose controls on capital movements in order to prevent such use. In addition, as Article VIII, Section 2(a) requires members to refrain from imposing restrictions on current payments and transfers without the Fund's prior approval, members cannot impose controls under Article VI that would constitute exchange restrictions under Article VIII, Section 2(a) unless with Fund approval.

⁹ See [The Fund's Mandate—the Legal Framework](#), and [The IMF's Role Regarding Cross-Border Capital Flows](#) for a more detailed discussion of legal and institutional issues related to the Fund's role in capital flows.

Box 1. The Concept of Full Liberalization of Capital Flows

There is no uniform definition of the full liberalization of capital flows. In its broadest sense, it is understood as the absence of any regulatory or other measure that would impede cross-border movements of capital. The concept includes both the underlying capital transaction (e.g., lending) and the related payment or transfer (the transfer of the loan to the borrower and the transfer of the principal payments to the lender). In the academic literature, capital account convertibility is generally referred to as unrestricted convertibility of local currency for capital transactions. Similarly, the Tarapore Report on Fuller Capital Account Convertibility for India defined capital account convertibility as the freedom to convert local financial assets into foreign financial assets and vice versa. Other concepts include the unrestricted use of domestic currency in international trade and financial transactions.

The OECD concept of liberalization is based on the elimination of measures that restrict capital movements. The Code of Liberalization of Capital Movements (the “Capital Code”) and the Code of Liberalization of Current Invisible Operations (to the extent that it covers the operation of branches of financial institutions) provide a comprehensive framework for the liberalization of capital flows for OECD member countries (most advanced economies and some EMEs). The two Codes are considered to cover almost all current and capital international transactions and the related payments and transfers (including, in the case of the Capital Code, both inward and outward transactions and payments). The liberalization obligation, however, applies only to measures that discriminate between residents and nonresidents. The OECD concept of liberalization heavily influenced the analytical methodology that was developed by the Fund in the 1990s to define a “restriction” for purposes of the Fund’s proposed jurisdiction over international capital flows.

The reintroduction of restrictions on a specific set of transactions is not considered a breach of the OECD obligation to liberalize capital transactions. The Capital Code establishes 16 groups of transactions arranged by their economic nature and included in two lists: A and B. List A includes those transactions, which are of longer maturity, generally considered less volatile and essential to create a liberal environment for capital movements and for which, accordingly, stronger liberalization obligations apply, subject to the general standstill principles of the Codes (that is, no new restrictions may be introduced on these operations). List B includes a more limited list of transactions where financial innovation can lead to the emergence of new operations which initially may need to be controlled. Restrictions can be reintroduced at any time on these transactions since they are generally short term and potentially more volatile. While the Code does not contain any general carve-out for prudential measures, invocation of prudential considerations for the justification of a particular measure is judged on a case-by-case basis.

The liberalization of capital flows in the EU implies a more extensive liberalization than in the OECD framework. The Treaty on the Functioning of the EU (the “Treaty”) generally prohibits all restrictions on the movement of capital, both between EU member states and between members and third countries. Restrictions are not allowed even if they do not discriminate based on residency. Recognized prudential measures or measures justified on grounds of public policy or public security, however, are not considered restrictions on capital movements, provided these measures do not constitute a means of arbitrary discrimination or a disguised restriction on the free movement of capital. EU members outside of the euro area may additionally resort to restrictions on capital movements when faced with balance of payments difficulties under certain circumstances.

Other international frameworks often include obligations on the liberalization of capital movements, to varying degrees. Such frameworks include bilateral and multilateral agreements, in particular Bilateral Investment Treaties and Preferential Trade Agreements; (see also Section IV of the Background Paper). Negotiations on the Multilateral Agreement on Investment in the mid-1990s aimed at establishing a framework that would have required extensive liberalization obligations on capital flows, far exceeding the commitments under previously existing international agreements and frameworks, and covering a broad range of structural and regulatory policies that might impede capital flows. While the agreement was never completed, it has become obvious that its extensive liberalization obligations would have required wide-ranging exceptions and derogations to safeguard domestic policies which are not subject to liberalization obligations under other agreements.

The limited flexibility afforded by some bilateral and regional agreements in respect to liberalization obligations may create challenges for the management of capital flows. These challenges should be weighed against the agreements’ potential benefits. In particular, such agreements could be a step toward broader liberalization. However, these agreements in many cases do not provide appropriate safeguards or proper sequencing of liberalization, and could thus benefit from reform to include these protections. In this regard, broader international coordination, including with the Fund, would contribute to a more consistent framework for liberalization globally. See also [The IMF’s Role Regarding Cross-Border Capital Flows](#), pp. 23–24.

A. Recent Trends in the Liberalization of Capital Flows

11. **During the past decade, gross capital flows increased substantially on a global basis, mainly among advanced economies, but also for some EMEs.** This reflected growing real and financial interconnectedness; structural factors, such as financial innovation, better access to information, declining home bias, differential expectations of growth between advanced and emerging economies, aging populations in advanced economies; global liquidity conditions, which at times led to a “search for yield;” and global recycling of resource earnings and foreign reserves, along with some reduction in regulatory barriers.¹⁰ Flows, however, were volatile, increasing during 2003–07 before contracting sharply in the aftermath of the global financial crisis.

12. **Liberalization played a role in increased flows, although perhaps a modest one.** De facto measures of openness indicate significant liberalization only for advanced economies and emerging Europe (Figure 1). By contrast, de facto openness declined for emerging markets and developing countries (EMDCs) in Africa and the Middle East (for the latter, especially after 2007), while remaining broadly unchanged for EMDCs in Asia and the Western Hemisphere.

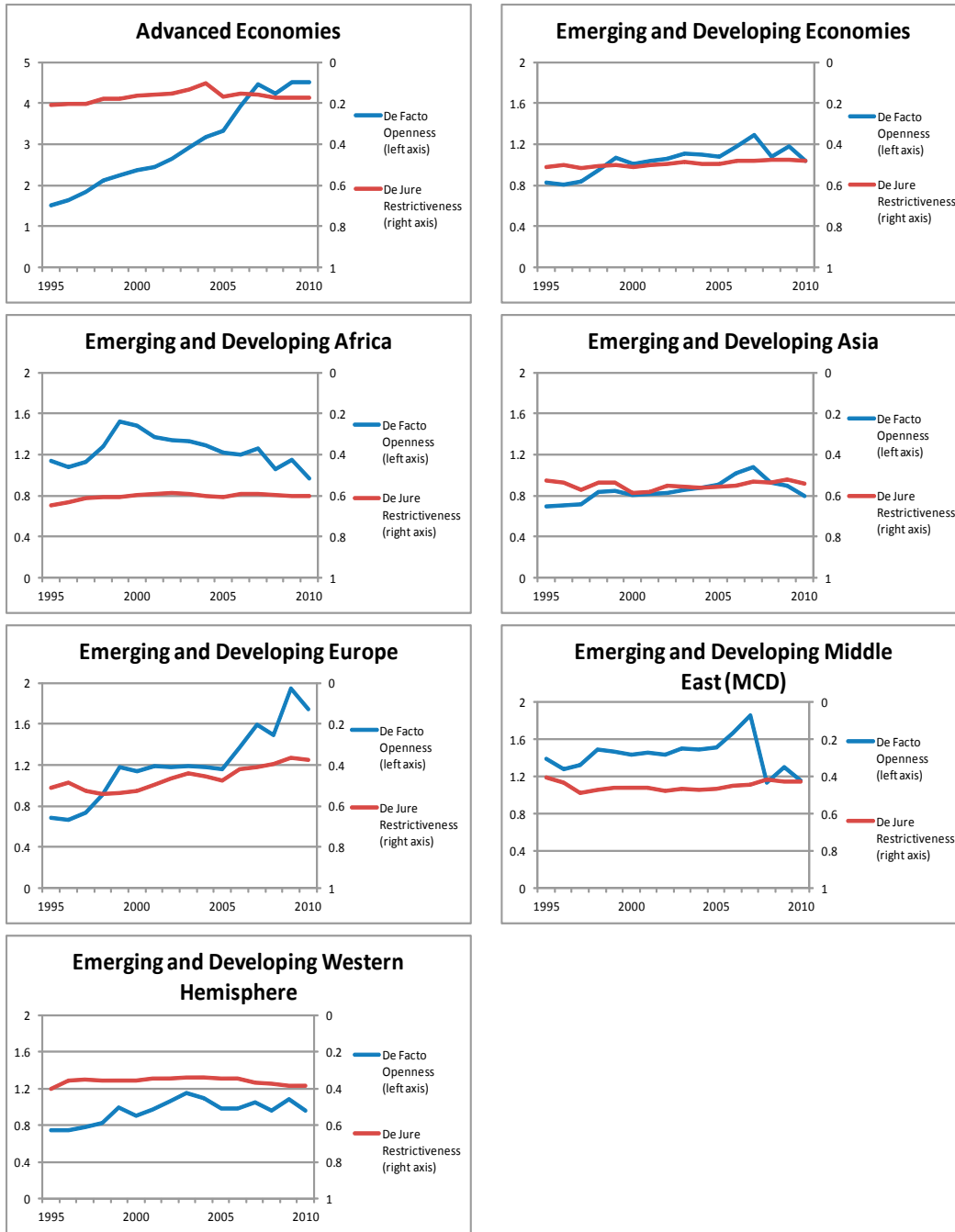
13. **De jure measures of restrictiveness indicate only modest liberalization globally over the past decade.**¹¹ For example, on a de jure basis, 93 out of 185 countries were largely open, and 62 were largely closed in 2010 (Figure 2).¹² By comparison, in the mid-1990s, 78 out of 184 countries were largely open, and 65 were largely closed. Among country-income groups, there was some modest liberalization across all income groups until the mid-2000s, with low and middle income countries liberalizing the most, but this has been partially reversed following the onset of the global crisis (Figure 3). Some upper middle and high income EMEs introduced controls on financial instruments and credit operations. An increasing number of countries have also begun to regulate foreign investment by institutional investors. By region, de jure openness only increased significantly for EMDCs in Europe.

¹⁰ See [The Fund’s Role Regarding Cross-Border Capital Flows](#) for a more extensive discussion.

¹¹ One de jure measure of capital account openness used in this paper is an index of restrictions on capital movements as reported in the IMF’s *Annual Report of Exchange Arrangements and Exchange Restrictions* (AREAER). The index converts qualitative information on these restrictions into a quantitative measure (see Section X of the Background Paper).

¹² “Largely open” means a de jure restrictiveness index smaller than or equal to 0.33, and “largely closed” an index greater than or equal to 0.67 based on staff’s narrow restrictiveness index.

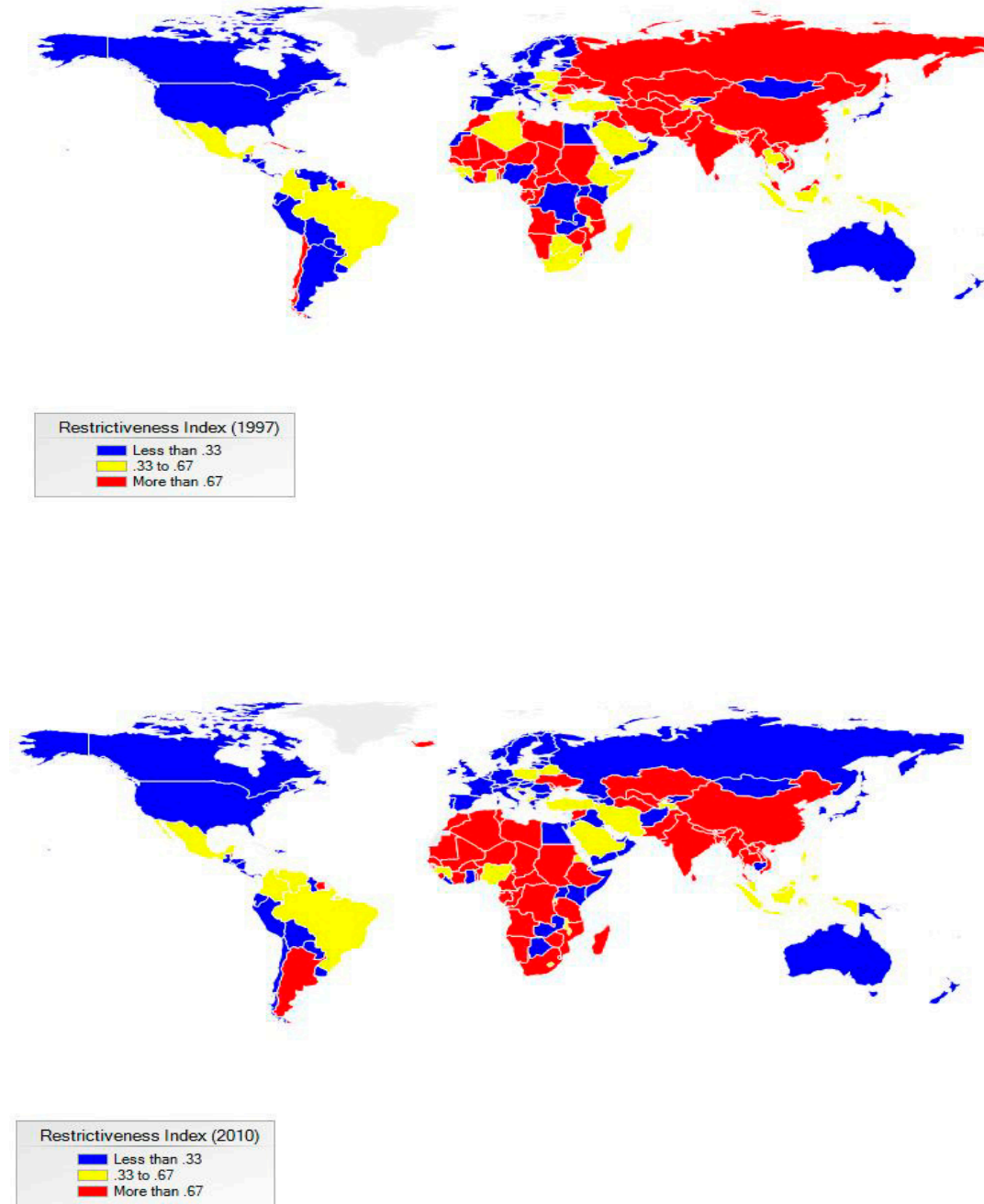
Figure 1. De Jure Restrictiveness and De Facto Openness to Capital Flows



Sources: Annual Report on Exchange Arrangements and Exchange Restrictions; World Economic Outlook.

Note: Based on staff's broad restrictiveness index, and staff-updated Milesi-Ferretti de facto openness index. Data for 2005 onward are affected by methodological changes implemented in 2005 that harmonized the AREAER capital control entries and the OECD Code of Liberalization of Capital Movements. Income definitions are based on the World Bank analytical classifications and the World Trade Organization as of 2008. Group averages of controlled transactions. After 2007, the Milesi-Ferretti index is not adjusted for valuation, and may thus overstate the decline in openness following the crisis.

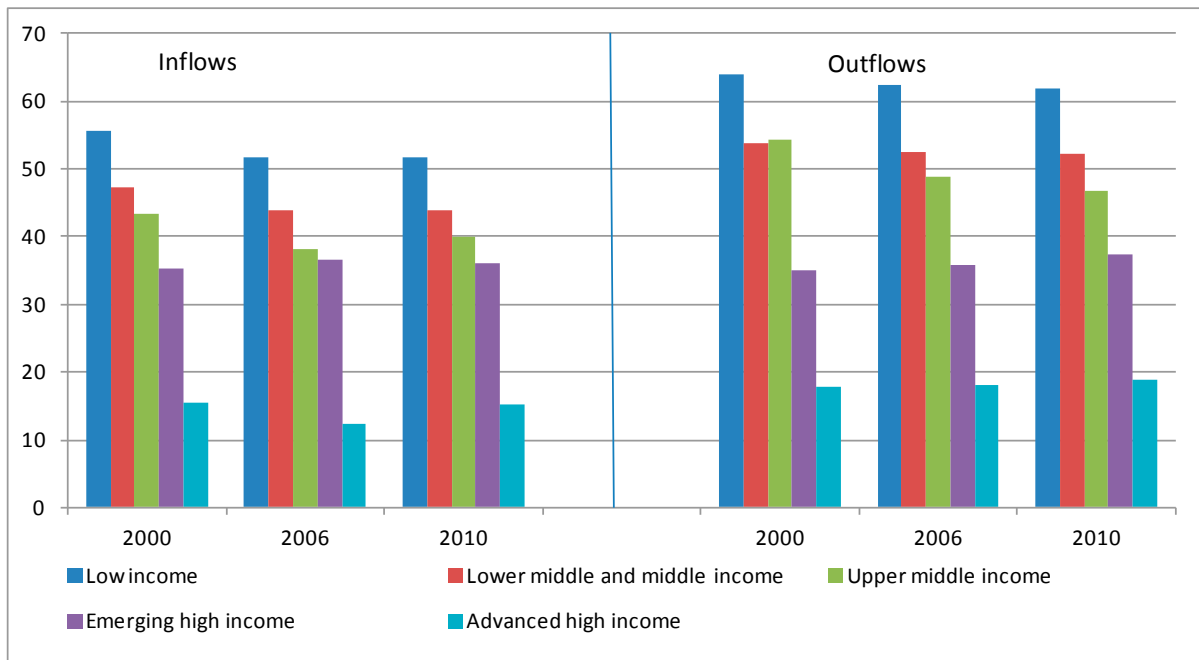
Figure 2. Liberalization of Capital Flows, 1997 and 2010



Sources: Annual Report on Exchange Arrangements and Exchange Restrictions, and staff calculations.

Note: Based on staff's broad de jure restrictiveness index (see Section X of the Background Paper for details). Data from 2005 onward are affected by methodological changes implemented in 2005 that harmonized the AREAER capital control entries and the OECD Code of Liberalization of Capital Movements.

Figure 3. Evolution of Controls on Capital Inflows and Outflows, 2000–2010
(Share of capital flow transactions subject to controls)

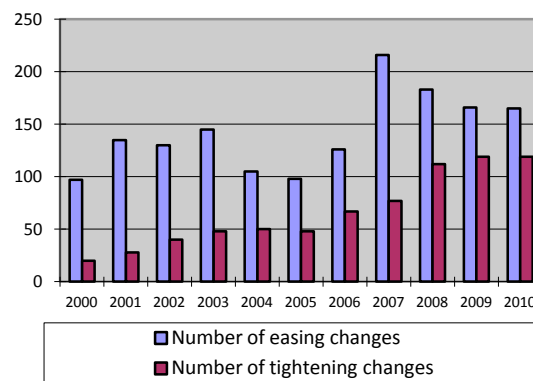


Source: Annual Report on Exchange Arrangements and Exchange Restrictions database.

Note: Based on staff's broad restrictiveness index. Data for 2005 onward are affected by methodological changes implemented in 2005 that harmonized the AREAER capital control entries and the OECD Code of Liberalization of Capital Movements. Income definitions are based on the World Bank analytical classifications and the World Trade Organization as of 2008. Group averages of controlled transactions.

14. **With the onset of the global crisis, the pace of both tightening and easing measures has picked up (Figure 4).**¹³ Over the entire period since 2000, tightening measures were concentrated in emerging middle-income countries, primarily reflecting concerns about the effect of more volatile capital flows on financial stability. Some countries imposed broad based controls that affected all portfolio investment and financial credit (Brazil, Colombia), while others implemented more selective

Figure 4. Changes in Capital Controls, 2000–2010



Source: Annual Report on Exchange Arrangements and Exchange Restrictions.

Note: Data from 2005 onward are affected by methodological changes implemented in 2005 that harmonized the AREAER capital control entries and the OECD Code of Liberalization of Capital Movements.

¹³ The tightening and easing measure is different from the restrictiveness index, as it shows the number of regulatory changes countries introduced to ease or tighten restrictions on capital transactions in a year.

controls (Croatia, Indonesia, Thailand). Easing measures (Croatia, India, Malaysia) were taken to help ease domestic liquidity conditions, mainly by reducing controls on cross border credit.

B. Benefits and Costs of Liberalizing Capital Flows

15. **In perfect markets with full information and no externalities, liberalization of capital flows can benefit both source and recipient countries by improving resource allocation.** The more efficient global allocation of savings can facilitate investment in capital-scarce countries. In addition, liberalization of capital flows can promote risk diversification, reduce financing costs, generate competitive gains from entry of foreign investors, and accelerate the development of domestic financial systems.

16. **The empirical evidence, however, is mixed on the benefits of the liberalization of capital flows, and it suggests that countries benefit most when they meet certain thresholds in terms of characteristics like financial development.** A number of studies examine the growth enhancing effects of capital flow liberalization by including a liberalization measure in the standard growth regression. About an equal number of studies find a significant effect on growth as find no such effect (see the Background Paper, Section I for a literature review, and Section II for a staff study on the growth effects of liberalization).¹⁴ A new strand of the literature on the welfare theory of capital controls argues that under certain circumstances, full capital mobility may not be desirable.¹⁵ The lack of consensus in the literature reflects a variety of differences, ranging from sample coverage (advanced countries, developing countries, or both; cross-sectional, time series, or panel) to the estimation methodology (ordinary least squares; instrumental variables; or generalized method of moments).¹⁶ Different country characteristics may help to explain why some countries benefit more from capital flows than others. For example, capital inflows may be more conducive to economic growth in countries that are more financially developed (Alfaro and others, 2004), have greater human capital (Borensztein and others, 1998), or have greater absorption capacity (Prasad and others, 2003; Dell’Ariccia and others, 2008; and Kose and others, 2009).

17. **Over the longer term, more open EMEs have tended to grow relatively faster, although the evidence is not conclusive.** Staff use measures of both de facto and de jure

¹⁴ Edison, Klein, Ricci, and Slok, 2002 and Kose, Prasad, Rogoff, and Wei, 2009 provide surveys of these studies.

¹⁵ See for example Korinek, 2010a and 2010b; Jeanne and Korinek, 2010a and 2010b; Jeanne, Subramanian, and Williamson (forthcoming). The latter, using a meta-analysis, do not find a robust positive relationship between financial globalization and growth, except possibly for equity market liberalization.

¹⁶ See for example, Prasad and others, 2003; Kose and others, 2009; Prasad and Rajan, 2008; and Eichengreen, 2001.

openness to distinguish the growth experience of more open economies from those that are comparatively closed to capital flows.¹⁷ When China and India are excluded, on average open economies have grown faster over the last two decades, regardless of which index of openness to capital flows is used (Figure 5).¹⁸ When China and India are included, however, average growth rates are not higher for more open economies, although median growth rates remain higher.

18. The principal cost of capital account openness stems from the vulnerability to financial crises triggered by sudden stops in capital flows, and from currency and maturity mismatches. Systemic risk-taking can increase investment, leading to higher growth but also to a greater incidence of crises (Ranciere and Tornell, 2008). Many empirical studies have established the strong association between surges in capital inflows (and their composition) and the likelihood of debt, banking, and currency crises in emerging market countries (Reinhart and Reinhart, 2008; Mendoza and Terrones, 2008; Furceri, Guichard and Rusticelli, 2011). Other studies, however, do not find a systematic association between crises and capital account openness, but find that the relationship hinges on the level of financial sector development, institutional quality, macroeconomic policy, and trade openness (Dell’Ariccia and others, 2008).¹⁹ Some studies find, using a *de jure* measure of capital account openness, that openness reduces susceptibility to currency crisis (Glick and others, 2006).

19. During the global financial crisis, EMEs with significant cross-border bank flows and pre-crisis inflow surges suffered larger output losses.²⁰ The growth experience of 48 EMEs since the onset of the crisis suggests that *de facto* measures of openness (primarily bank-intermediated flows) were significant predictors of growth declines, as were banks’ pre-crisis leverage and credit growth.²¹ EMEs with greater restrictions on capital

¹⁷ *De facto* openness is measured as Bank for International Settlements (BIS) foreign claims over GDP and assets plus liabilities over GDP; *de jure* openness is measured using the Chinn-Ito index (similar results were obtained using staff’s narrow restrictiveness index, which comprises controls on 21 types of capital transactions).

¹⁸ China and India were excluded because their growth experience over the past two decades was driven by specific factors such as a gradual transition away from central planning (China) and gradual but cumulatively substantial structural reform, including trade liberalization (India).

¹⁹ For a survey, see for example Kose and others, 2009; and Dell’Ariccia and others, 2008. Edwards, 2007 finds no evidence that higher capital account openness leads to increased crisis susceptibility but concludes that crises reduce growth more in such countries. Regardless of whether capital account openness results in greater crisis susceptibility, however, capital inflows can lead to costly reallocations from tradable to nontradable production (Blanchard, 2007).

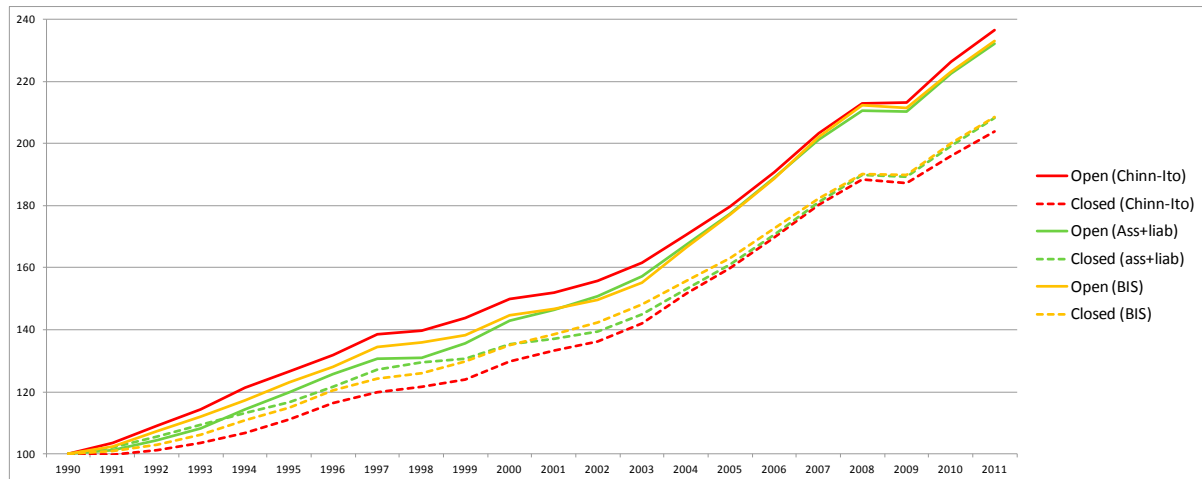
²⁰ See Section III in the Background Paper on the staff study analyzing the growth experience of EMEs during the crisis.

²¹ Measures of countries’ openness to bank-intermediated flows and of surges in pre-crisis bank-intermediated inflows are BIS foreign claims (stocks and changes) and net bank inflows (flows and changes in flows).

inflows (especially on debt liabilities) fared better during the recent global crisis (Ostry and others, 2010; Ostry and others, 2011); and among the EMEs that experienced crises in earlier years, those with higher economy-wide capital inflow restrictions in pre-crisis years experienced smaller growth declines when the crises occurred (Ostry and others, 2011). However, further work is needed to assess how differences in prudential policies would affect these results.

20. **In low-income countries, the benefits of capital flows arise mainly from foreign direct investment (FDI).** In many countries, FDI has helped to boost investment, employment, and growth.²² Low-income countries generally need to strengthen their institutions and markets in order to safely absorb most other types of capital flows, which carry substantial risks until such thresholds are met.

Figure 5. Real GDP in Emerging Market Countries Excluding
China and India, 1990–2011
(1990=100)



Sources: Annual Report on Exchange Arrangements and Exchange Restrictions and staff calculations.

Note: The chart shows un-weighted real GDP averaged across the included countries, with real GDP normalized to 100 in 1990. The sample excludes countries for which real GDP was not available for the base year. The sample is divided into open and closed economies according to whether a given country lies above or below the median according to the respective openness measures (Chinn-Ito, BIS, assets and liabilities; see Section X in the Background Paper).

²² See Sachs, 2006 and Dabla-Norris and others, 2010.

C. Proposed IMF Policy Framework for Liberalization

21. **The Fund does not currently have a Board-endorsed framework for the liberalization of capital flows.** Staff advice has tended to rely to a large extent on the so-called “integrated approach” to liberalization, which received considerable support at an informal Board seminar in 2001, but was never formally adopted as the Fund’s policy framework.²³

22. **This paper proposes the endorsement of an updated version of the integrated approach as the basis for Fund policy advice on the liberalization of capital flows (Box 2).** The integrated approach remains appropriate for countries liberalizing international capital flows, for the following reasons:

- It sets the liberalization of capital flows within the broader context of macroeconomic and financial system stability.²⁴ Indeed, the approach is mindful throughout of the broad linkage between domestic and cross-border financial liberalization. Importantly, the extent and pace of capital flow liberalization should be such that the economy and financial sector can handle the resulting flows without undue risk.
- It entails the removal of controls on cross-border capital movements only in a manner that is properly timed and sequenced with other policies, notably with macroeconomic and financial sector prudential policies. In this context, it views capital flow liberalization and financial sector development as mutually supportive.
- It explicitly requires that the path toward and the extent of liberalization for each country be tailored to the country’s particular circumstances and interests. Some countries can liberalize quickly if the necessary conditions are already in place (the “big bang” approach in the United Kingdom and New Zealand), while many countries would need to liberalize more slowly because they are not yet ready to do so safely. The approach has been applied in the staff-level technical cooperation with member countries, and in this context, staff have suggested thresholds and conditions for moving from one stage of liberalization to the next (Iceland, Kazakhstan, Korea, Moldova, Philippines, Serbia, Tanzania, Tunisia, Ukraine).
- In particular, the approach does not set a timetable for the achievement of full liberalization, and recognizes that the appropriate degree of liberalization can differ

²³ Ishii, S., K. Habermeier, J. I. Canales-Kriljenko, B. Laurens, J. Leimone, and J. Vadasz, 2002, *Capital Account Liberalization and Financial Sector Stability*, IMF Occasional Paper No. 211 (Washington: International Monetary Fund).

²⁴ This approach follows a long-standing literature on the relationship between domestic financial and economic liberalization and the liberalization of cross-border transactions, which are often two sides of the same coin. See, for example, McKinnon, R., *The Order of Economic Liberalization*, 1993.

across countries, based on country specific conditions including the level of financial sector and institutional development.

23. **While the principles at the core of the integrated approach remain valid, global developments and the new research reviewed above suggest that some modifications are needed in how they are applied.** In particular, recent research suggests that there is no certainty that full liberalization is an appropriate objective for all countries at all times, and that a more cautious approach to liberalization is warranted. Box 2 sets out the main elements of the proposed policy framework. The proposed modifications to the integrated approach are discussed in more detail below.

24. **A cautious approach to liberalization is warranted.** Increased financial linkages across countries and larger and more volatile capital flows have heightened financial stability and macroeconomic risks. Policy and economic developments in other countries can significantly exacerbate the volatility of capital flows in any given country. Large, internationally active, complex financial groups have become increasingly important sources of capital flows, and they contribute to the rapid transmission of external and sector-specific shocks to the wider financial system (such as Swedish and Austrian bank affiliates operating in the Baltics and Central and Eastern European (CEE) countries).²⁵ The pace of liberalization needs to pay careful attention to the capacity of the economy and the financial system to safely handle capital flows. Structural policies to develop the financial system, along with macroprudential policies to strengthen its ability to deal with capital flow volatility, can contribute to financial stability in the face of higher cross-border flows. For example, low income economies, which for the most part still maintain extensive restrictions on capital flows, should initially liberalize FDI flows. The liberalization of other flows would come later, based on institutional and market development (as was done in Moldova).

²⁵ For further examples, see [The Multilateral Aspects of Policies Affecting Capital Flows](#).

Box 2. Suggested Policy Framework for Liberalizing Capital Flows

General principles

1. The appropriate degree of liberalization for a country would depend on its specific circumstances, notably on whether it has reached certain thresholds with respect to financial and institutional development.
2. There is no expectation that full liberalization is an appropriate goal for all countries at all times. Nonetheless, countries with extensive restrictions on capital movements are likely to benefit from further liberalization, in an orderly manner.
3. Liberalization should proceed in accordance with the staff's integrated approach, modified to take account of recent research and experience:
 - A cautious approach to liberalization is warranted in view of the lessons learned from the global crisis:
 - Under certain circumstances, CFMs (including capital controls) may need to be reimposed as part of an overall process of liberalization.
 - Liberalization needs to consider CFMs more broadly, and not just capital controls.
 - Greater attention needs to be paid to the multilateral effects of policies, including liberalization of capital flows and changes in prudential measures.
 - Experience also suggests that a number of technical modifications are warranted to the sequence in which certain transactions are liberalized.

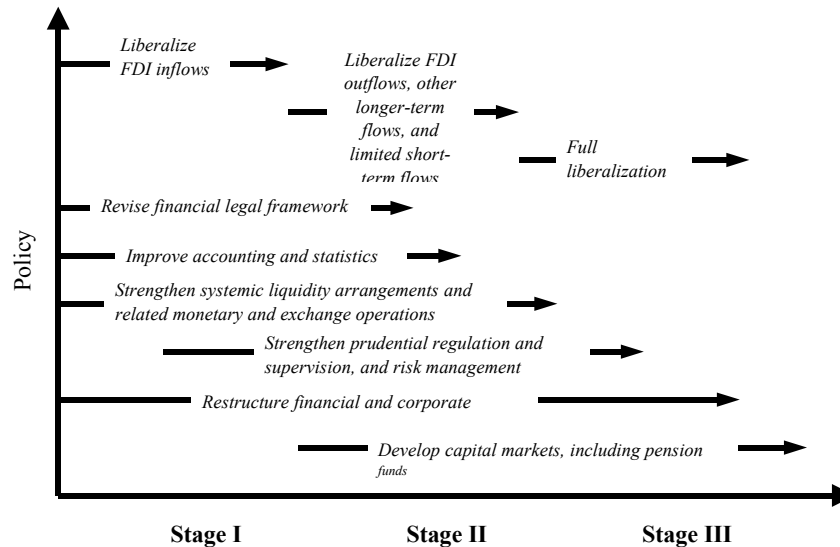
Outline of the integrated approach

The integrated approach establishes the following 10 principles to guide the liberalization process: (1) lifting controls on international capital flows (and financial liberalization more generally) is best undertaken against a background of sound and sustainable macroeconomic policies; (2) financial sector reforms that support and reinforce macroeconomic stabilization should be given priority; (3) financial sector reforms that are operationally linked and mutually reinforcing should be implemented together; (4) prudential regulation and supervision and financial restructuring policies should be implemented to complement other financial reforms aimed at enhancing competitive efficiency and market development; (5) the liberalization of capital flows by instruments or sectors should be sequenced to take into account the concomitant risks; (6) the pace of reforms should take into account the conditions relating to the financial structure of nonfinancial corporations and other entities (for example, debt-equity ratios and foreign currency exposure) and their effects on the quality of the loan portfolios and capital base of financial institutions; (7) reforms that require substantial lead time for technical preparations and capacity building should be started early; (8) reforms need to take account of the effectiveness of existing capital controls; (9) the pace, timing, and sequencing of liberalization need to take account of political and regional considerations; and (10) the operational and institutional arrangements for policy transparency and data disclosure—including monetary and financial policy transparency—need to be adapted to support capital account opening.

Sequencing needs to be based on individual country circumstances. Such circumstances include macroeconomic and financial sector vulnerabilities, the degree of development of institutions and markets, the design and effectiveness of existing controls, and the ability of the financial and nonfinancial sector to deal with large and volatile capital flows and to manage the risks related to international capital flows and increased exchange rate flexibility. It also needs to consider the authorities' capacity to efficiently administer and enforce controls.

The integrated approach provides for three stages of the liberalization of capital flows. Figure 6 replicates the stylized representation of a broad liberalization plan, which needs to be adapted to the specific conditions in the country. The first stage suggests liberalizing FDI inflows, as such flows are considered to be more stable than other flows and also more likely to contribute to growth. The first stage also lays the groundwork for further liberalization by introducing international accounting standards and improving national statistics. The monetary framework and financial sector regulation also need to be strengthened at this stage. The second stage introduces FDI outflow and long-term portfolio flow liberalization. Some short-term flows can also be liberalized at this stage. The last stage eliminates all remaining controls after developing the financial markets and further strengthening the financial sector by implementing adequate prudential regulations and supervision to ensure proper risk management of international capital flows.

Figure 6. Stylized Representation of a Broad Liberalization Plan



25. **Under certain circumstances, CFMs (including capital controls) may need to be reimposed as part of an overall process of liberalization.** When a country faces a capital inflow surge, it may be appropriate to temporarily reimpose or tighten CFMs on inflows under certain conditions (as Brazil has done in recent years).²⁶ Similarly, countries may also need to temporarily resort to CFMs on outflows in a crisis (as discussed below). In addition, if liberalization has proceeded too quickly in some respects and outstripped the capacity of the economy to safely handle the resulting flows, a limited and temporary reversal of liberalization may be warranted.

26. **However, it would be preferable for countries to liberalize cautiously rather than be obliged to reverse the process.** One reason is that an “on-off” policy in liberalization could give rise to moral hazard and undermine market discipline, if financial market participants take decisions in the expectation that the authorities will use CFMs to protect them from the consequences. In addition, the reimposition of CFMs can adversely affect investor confidence for a considerable time (as was the experience in Russia in the late 1990s). More broadly, liberalization should not be seen as a “two-way street.” Rather, in order to reap the benefits of capital flows, countries should continue to aim to progressively and steadily establish the conditions allowing for liberalization.

27. **Liberalization needs to consider CFMs more broadly, and not just capital controls.** As discussed above, liberalization of capital flows is generally understood as easing restrictions that discriminate based on residency (Box 1 provides further details). However,

²⁶For further discussion, see [Recent Experiences in Managing Capital Inflows—Cross-Cutting Themes and Possible Policy Framework](#) and Supplement 1.

nondiscriminatory measures that are designed to affect capital flows can often substitute for capital controls, and these also need to be considered in liberalization:

- The delineation of CFMs from other policies and measures affecting capital flows can be difficult in some cases. Many policies and measures may affect international capital flows, even if inadvertently. For example, financial sector, monetary or taxation policies, and policies implemented for public health or security reasons may directly or indirectly inhibit cross-border capital flows. The assessment of whether a particular measure is a CFM requires judgment as to whether the measure was designed to influence capital flows, and would need to take into account the overall context and circumstances in which it was adopted.²⁷ While these assessments can be difficult to make, the application of the CFM concept will result over time in clearer and more predictable rules.²⁸
- Regardless of the degree of liberalization that may be appropriate for a given country at any given time, it may often be desirable to use more transparent, rules-based, and market-oriented controls or nondiscriminatory CFMs in lieu of administrative controls.²⁹ Depending on how distortionary the initial system is, the efficiency gains from streamlining CFMs could be sizable, assuming that these measures are equally effective in achieving the objective of the administrative controls they replace. For example, certain residency based measures on capital inflows through the banking system could be replaced with measures that treat domestic and foreign currency transactions differently. The latter measures would generally still qualify as CFMs, and not entail an effective liberalization of the specific transaction. However, by avoiding residency-based limitations, they would more closely adhere to the standards of fairness that parties to a multilateral framework like the Fund would expect for their nationals. Given the Fund's multilateral framework and the approach used in respect of current payments and transfers, it would also be important to avoid measures that discriminate among Fund members.

²⁷ For example, it is necessary to assess whether a policy or measure has been introduced for reasons other than to affect capital flows, whether it can be justified by its stated objective, and whether other measures that interfere less with capital flows could have achieved the same objective. Non-CFMs would also tend to be of a more permanent nature, instead of being deployed temporarily in response to capital movements. See [Recent Experiences in Managing Capital Inflows—Cross-Cutting Themes and Possible Policy Framework](#), paragraphs 7 and 43–44 for a more detailed discussion of CFM definitional issues.

²⁸ In this context, uniformity of treatment principles would help to ensure that the same assessment reached on CFMs in one case would be applied in future similarly situated cases.

²⁹ Administrative measures (mandatory approval requirements, or ceilings, or outright bans for certain capital transactions) are usually less transparent and more intrusive than market-oriented, price-based measures (such as taxes) that do not prohibit transactions but only discourage them by increasing their cost.

28. **Greater attention needs to be paid to the multilateral effects of policies, including liberalization of capital flows and changes in prudential measures.** Capital flow policies could have substantial multilateral effects, although the direction and size of such effects is difficult to predict. In particular, the relaxation of restrictions by large EMEs could be expected to result in a substantial increase in gross capital flows as domestic and foreign investors adjust their portfolios. Also, as discussed in [The Multilateral Aspects of Policies Affecting Capital Flows](#), prudential frameworks (and the interaction among different countries' prudential frameworks) can have large effects on capital flows (the CEE and Baltic countries are well-studied examples). The national and international regulatory and supervisory reforms now underway should be urgently completed and fully implemented, and new prudential frameworks developed to mitigate cross-border risks.

29. **Experience also suggests that a number of technical modifications are warranted to the sequence in which certain transactions are liberalized.** In particular:

- While CFMs affecting long-term transactions should normally be removed earlier in the process, some short-term transactions may need to be liberalized ahead of long-term transactions. For example, some short-term trade-related bank transactions would need to be liberalized at an early stage. Banks need to be able to maintain correspondent accounts abroad, and have short-term deposit or overdraft facilities to efficiently finance international trade transactions. About two-third of the countries that restrict FDI inflows liberalized transactions related to banks' accounts abroad. For example, China and India allow their banks to maintain correspondent accounts abroad, while several other capital transactions remain controlled.
- Removing CFMs in particular sectors should be considered in light of the effects on other sectors or on the broader economy. Cross-border banking transactions need to be liberalized at the latest when the nonfinancial sector is allowed to borrow abroad, in order to avoid disintermediation. Also, deposit interest rates should be liberalized before the corresponding outflow controls.
- Liberalization of capital outflows can help in dealing with capital inflow surges. Korea, the Philippines, and Thailand, among others, relaxed controls on outflows to help deal with inflow pressures. However, CFMs on capital outflows should be removed only if the conditions for their removal, such as adequate prudential regulation and supervision, are present.
- Transactions with similar economic content and maturity should be liberalized together. To avoid regulatory arbitrage, and minimize distortions in economic decisions, CFMs on investments in similar financial instruments such as bonds or loans with the same maturity should generally be removed simultaneously once the relevant securities regulations have been developed (Chile, Malta, Slovak Republic).

D. Applying the Integrated Approach—Country Experiences with Liberalization

Overview

30. **Most countries only partly followed the integrated approach, which contributed to adverse outcomes in some cases.** Most countries that liberalized over the past decade did sequence the lifting of capital controls in an appropriate manner. However, such sequencing by itself is not sufficient, as the integrated approach also requires that the lifting of controls be fully and durably supported by financial sector and macroeconomic policies.

31. **Countries whose liberalization strategies in key respects mirrored the integrated approach generally avoided a financial crisis during or following liberalization.** These countries liberalized capital flows against the background of sustained sound macroeconomic policies and a stable financial system. Korea (discussed in more detail below) provides an example of a mostly successful liberalization over the past decade or so. In other countries, controls were removed gradually, taking account of the capacity of the financial, corporate, and household sectors to manage risks (Austria). Others liberalized rapidly while continuously upgrading prudential policies in a strong financial system (United Kingdom). South Africa removed controls on inflows before outflows; and it lifted restrictions on residents' investments relatively gradually to safeguard reserves and maintain banking stability.

32. **By contrast, some countries experienced financial crises during or after capital flow liberalization owing to inconsistent macroeconomic or financial sector policies.** The experience of the CEE countries is informative in this regard, and is discussed further below. In Mexico, growing macroeconomic imbalances in the context of a tightly managed exchange rate, rapid credit growth fueled by short-term external borrowing, and gaps in financial supervision led to a crisis in 1994, notwithstanding remaining capital controls. In Turkey, excessive risk taking by a financial sector dominated by large state-owned banks, in combination with inconsistent macroeconomic and exchange rate policies, set the stage for crises in 1994 and 2000–01.

Sequencing of Liberalization

33. **Countries by and large sequenced the liberalization of capital flows in a manner that was broadly consistent with the integrated approach:**

- The liberalization of short-term transactions has typically followed or accompanied that on long-term transactions (Russia, Slovenia).
- Countries have often liberalized all types of portfolio transactions (equities, bonds, money market instruments, and collective investment securities) simultaneously, possibly in recognition of the high degree of interchangeability of these financial

instruments (Chile, Cyprus). For similar reasons, short term financial instruments have been generally liberalized together with derivatives transactions.

- Country practices vary with respect to the sequence of lifting controls on FDI and portfolio investments. About half of the countries liberalized FDI earlier than portfolio investments, while the other half did the opposite.³⁰ Moreover, countries have usually not lifted controls on FDI outflows before FDI inflows.
- Controls on inward real estate transactions are often maintained after all other transactions have been liberalized suggesting that these controls are likely motivated by considerations other than capital flows (Mexico, Switzerland, United States).
- Liberalization has often entailed gradually increasing ceilings on investments (India, Kazakhstan, Philippines, South Africa), reducing the administrative burden on transactions, for example by changing prior approval requirements to registration or notification requirements (Cyprus, Korea, Moldova), and expanding the scope of the instruments or the sectors open for investments (India).
- Countries often liberalized by type of investor, removing controls on legal entities' transactions earlier than on other investors (Moldova, Thailand) or on specific categories of investors (China, India).
- Capital outflows usually remain controlled for longer than inflows, possibly to avoid capital flight.

Korea

34. **Capital flow liberalization in Korea over the past decade or so corresponds in key respects with the integrated approach (Box 3).** Korea had in place sound and stable macroeconomic policies and set in train an appropriate set of financial sector reforms in a well-considered sequence to support capital flow liberalization. Korea achieved a high degree of financial integration in a relatively smooth manner despite bouts of capital inflow and outflow surges. Notwithstanding the general success of Korea's approach, during the run-up to the global financial crisis Korean banks took on substantial foreign-currency-denominated short-term debt and, when the crisis broke, they experienced rollover difficulties. To avoid a repeat of this experience, the authorities in 2010–11 introduced a number of measures to limit excessive risk taking in the banking sector.

³⁰ Advanced economies typically maintain less control on portfolio investments than on FDI inflows suggesting that sectoral limitations on nonresidents' FDI are often maintained even after a significant openness of the capital account has been reached.

Box 3. Capital Flow Liberalization in Korea

Over the past decade or so, the Korean authorities have significantly liberalized capital flows. Their approach corresponded to the integrated approach in several respects. The authorities recently introduced measures to reduce vulnerabilities in the banking sector.

Starting in the early 1990s, the Korean authorities gradually eliminated many controls on capital transactions with a view to achieving a degree of openness associated with upper middle income OECD countries.

The liberalization corresponded in key respects to the integrated approach. Notable aspects included the following:

- Liberalization proceeded generally against a background of broadly sound, sustainable, and consistent macroeconomic policies (principle 1). These included a generally prudent fiscal policy; the introduction of a flexible exchange rate regime; and monetary policy that delivered stable prices.
- The authorities gave priority to financial sector reforms that supported and reinforced macroeconomic stabilization (principle 2). For example, they promoted the development of domestic currency funding sources, resulting in a deep and active corporate bond market.
- The authorities developed financial markets by implementing together financial sector reforms that were operationally linked and mutually reinforcing (principle 3). For example, they enhanced transparency of the foreign exchange market by strengthening disclosure requirements, while also strengthening accounting standards.
- Financial sector regulation was strengthened in preparation for, and during, capital flow liberalization (principle 4). For example, the authorities put into place strict liquidity requirements in the context of implementing Basel II rules.
- Less risky flows were liberalized before more risky ones (principle 5). For example, in a gradual process of easing controls, the authorities generally liberalized longer-term transactions such as FDI (except for certain sectors) or certain portfolio investments first.

This approach allowed Korea to achieve a smooth overall transition to increased financial integration, despite occasional capital inflow and outflow surges. Nevertheless, in the years leading up to the recent global financial crisis, the banking system accumulated substantial foreign exchange forward positions and short-term external debt in the wholesale market and became highly leveraged. When the crisis hit, Korea experienced a sharp “sudden stop” as access to short-term external debt financing abruptly ended and banks experienced difficulty rolling over debt.

Having learned from this experience, starting in 2010 the authorities introduced measures to avoid a renewed buildup of financial sector vulnerabilities and limit the associated potential for the macroeconomic volatility (see Section V of the Background Paper for detail).

Central and Eastern Europe

35. **The experience of many CEE countries shows that liberalization of capital flows needs to be fully and durably supported by financial stability policies (Box 4).** By and large, these countries sequenced liberalization with financial sector reform and macroeconomic stabilization, and many had lifted controls by the middle of the past decade. Nonetheless, despite sound macroeconomic policies in most countries, many subsequently experienced rapid credit growth fueled by large capital inflows, culminating in financial sector instability during the global crisis. This financial instability fundamentally stemmed from the fact that prudential regulation and supervision in these recipient countries had not kept up with the challenges posed by growing inflows. In addition, it reflected liquidity and financial regulatory conditions in countries at the source of capital flows. The prospect of EU

accession and euro adoption may also have led to an unwarranted reduction in risk perceptions. Moreover, in some CEE countries, it also reflected a deterioration in macroeconomic management following the completion of liberalization.

Box 4. Liberalization and its Aftermath in Central and Eastern European Countries

CEE countries liberalized capital flows within a relatively short time. Liberalization and greater financial openness were driven to a considerable extent by EU accession. Countries tended to liberalize FDI before financial flows, inflows before outflows, and long-term flows before short-term flows. Opening up the government securities market to nonresidents was an important step toward liberalization, as this market proved to be a major channel for interest-rate-sensitive inflows in countries with more developed financial markets.

Following liberalization, despite mostly sound macroeconomic policies, many CEE countries experienced rapid credit growth fueled by large capital inflows through the banking systems. Banks' easy access to foreign exchange loans provided by their foreign parents, and the perceived lack of exchange rate risk (notably in countries with fixed exchange rates) contributed to significant credit growth against the backdrop of high global liquidity and investors' search for yield. In some countries, financial regulation and supervision were not prepared to deal with these developments, and did not adapt sufficiently in response to the new challenges. For example, households were permitted to borrow in foreign exchange, and provisioning requirements were weak (Sorsa and others, 2007). Although the credit boom was to a considerable extent driven by global financial conditions, less expansionary fiscal policies and stronger financial sector policies would have mitigated the problems (Bakker and Gulde, 2010).

Increased inflows and rapid credit growth led countries to implement different policies, including CFMs. Monetary and exchange rate policies were used to counteract excessive interest-rate-sensitive inflows. Fiscal tightening was seldom used to reduce capital inflows. Debt management measures (Hungary, Poland, Slovenia) and stronger banking regulation such as higher required reserves (Bulgaria, Latvia, Romania), and capital requirements (Bulgaria, Romania) were also used. A few countries (Bulgaria, Croatia) introduced credit ceilings to slow domestic credit growth, leading to regulatory arbitrage in the form of direct lending from parent banks to domestic debtors. Only two countries (Croatia, Slovenia) implemented CFMs. Many countries were constrained by the requirements of EU accession from using capital controls.

Following the onset of the global financial crisis, capital inflows slowed and brought an end to the boom in CEE countries. Credit, consumption, and investment declined sharply as bank inflows contracted (Mitra, 2011). It appears that countries with fixed exchange rates, which had built up the largest pre-crisis imbalances, experienced the greatest difficulties owing to constraints on their ability to actively use interest rate policy. Among these countries, those with larger international reserves had lower risk premia, which somewhat dampened the downturn. On the whole, countries with more prudent pre-crisis fiscal and financial regulatory policies, and those with flexible exchange rate regimes, were best able to withstand the crisis.

E. Liberalization in Systemically Important Emerging Market Economies— China and India

36. **This section discusses the liberalization of capital flows in China and India, which are of particular interest as large and systemically important EMEs with relatively strong restrictions on capital movements.** Their combined GDP is around twice the size of other countries that restrict capital movements at least as much as China and India

(Figure 7).³¹ Authorities in both countries recognize the need for further liberalization, along with financial sector and other reforms, to sustain strong economic performance (Box 5). In China, such measures would help to rebalance growth toward a more sustainable pattern that relies less on exports and investment and more on consumption, while in India they would help to ease constraints on growth. Over the longer term, these countries' financial systems and capital movement regimes will need to evolve to support their increasingly important roles in the global economy. Given their extensive capital controls and large size, even a gradual liberalization could have significant implications for the rest of the world.³² For these reasons, it is appropriate to focus on capital flow liberalization developments and plans in these countries.

Multilateral Considerations

37. A gradual liberalization by China and India could have substantial multilateral effects that could operate through several channels, including the following:

- *Diversion of capital flows.* The removal of capital inflow (or outflow) restrictions by a country may cause capital flows to be re-routed from (or to) other destinations. However, [People's Republic of China: Spillover Report for the 2011 Article IV Consultation and Selected Issues](#) examined inflows in a sample of emerging countries and found no conclusive evidence of such an effect from capital flow liberalization.³³
- *Domestic financial volatility and instability.* Larger gross flows, combined with exchange rate risk to the financial sector, could give rise to financial stability risks that also have multilateral repercussions.
- *Exchange rate.* Greater exchange rate flexibility that may accompany the liberalization of capital flows as part of the reform package could have significant spillover effects. This factor may be particularly relevant for China, although the staff's analysis suggests that an appreciation on its own would not have a significant impact on imbalances.³⁴

³¹ Openness is measured by the Chinn-Ito index and the Milesi-Ferretti index.

³² Spillovers to the rest of the world could be particularly significant in the case of China. As Maziad and others, 2011 suggest, the effects of developments in China on global financial stability are potentially larger than those of developments in other individual EMEs.

³³ See also Section II of the Background Paper.

³⁴ See also Section IV of [People's Republic of China: Spillover Report for the 2011 Article IV Consultation and Selected Issues, IMF Country Report No. 11/193](#).

38. **The impact of capital flow liberalization by China and India on the direction and size of net capital flows is difficult to assess because it would depend on the particular measures and sequencing.** The impact on net flows would depend upon, among other factors, the extent and pace of liberalization of inflows compared with outflows. In China, capital outflows may pick up if the approach follows the February 2012 People’s Bank of China report that emphasizes outflow liberalization, although currency appreciation expectations and high domestic growth would continue to pose a significant attraction for inflows over the medium term. In India, meanwhile, inflows into equities have been largely liberalized, and controls on outflows by corporations and individuals have been eased. The multilateral effects of further liberalization would depend on the specific outflow and inflow measures.

Box 5. The Liberalization of Capital Flows in China and India—The Authorities’ View

The Chinese authorities have repeatedly voiced an aspiration to achieve full capital account convertibility and currency internationalization in the long term, starting with their Tenth Five-Year Development Plan, covering the period 2001–05. While recognizing the importance of adequate sequencing of the reforms, the authorities have noted that increased liberalization could support broader economic and developmental goals. Indeed, they consider that foreign investment has made a significant contribution to China’s economic development by meeting financing requirements, introducing into China advanced technology and management know-how from abroad. Conscious of the macroeconomic and financial stability risks of short term capital flows, the authorities intend to continue their cautious approach to liberalizing capital flows and will lift capital controls gradually, giving precedence to long term flows and (given the appreciation pressures on the renminbi) to outflows, while tightly monitoring short term inflows. In February 2012, a People’s Bank of China report proposed a phased reform process that envisaged greater Chinese investment abroad; acceleration of overseas lending in renminbi, particularly to support trade transactions; and greater scope for foreigners to invest in Chinese equities, bonds, and property. The final step, to be taken at an unspecified time, would be free convertibility of the renminbi, although restrictions would remain on speculative capital flows and short-term foreign borrowing.

In India, the benefits and the prerequisites of the full liberalization of capital flows have been discussed in several reports commissioned by the authorities.^{1/} The Report of the Committee on Fuller Capital Account Convertibility (“Tarapore II report”), recognizing the benefits and risks of the full liberalization of capital flows, recommends a cautious, sequenced progress in removing capital controls. It notes that foreign capital inflows in the form of FDI or portfolio inflows would be necessary to complement the investment needs of the country, mentions additional benefits of the liberalization of capital flows such as the growth-enhancing effect of foreign investments, the increased efficiency of the financial sector, and the diversification of residents’ investment portfolio. The Report of the Committee on Financial Sector Reforms (“Rajan report”) concluded that the potential collateral benefits of financial integration argue for liberalizing capital flows, while maintaining controls would impose costs and distortions on the economy. This report focused in particular on allowing greater participation of foreign investors in domestic debt markets, and highlighted a clear monetary policy framework and fiscal discipline as preconditions. The report of the Working Group on Foreign Investments aimed at rationalizing existing arrangements to control cross border capital flows, establishing a level playing field for different forms of foreign investment.

^{1/} Committee on Fuller Capital Account Convertibility—The Tarapore Committee, 2006, Committee on Financial Sector Reforms, A Hundred Small Steps—The Raghuram Rajan Committee, 2009, the High Powered Expert Committee on Making Mumbai an International Financial Centre—the Percy Mistry Committee 2007, Working Group on Foreign Investment, 2010. See also Virmani, 2007.

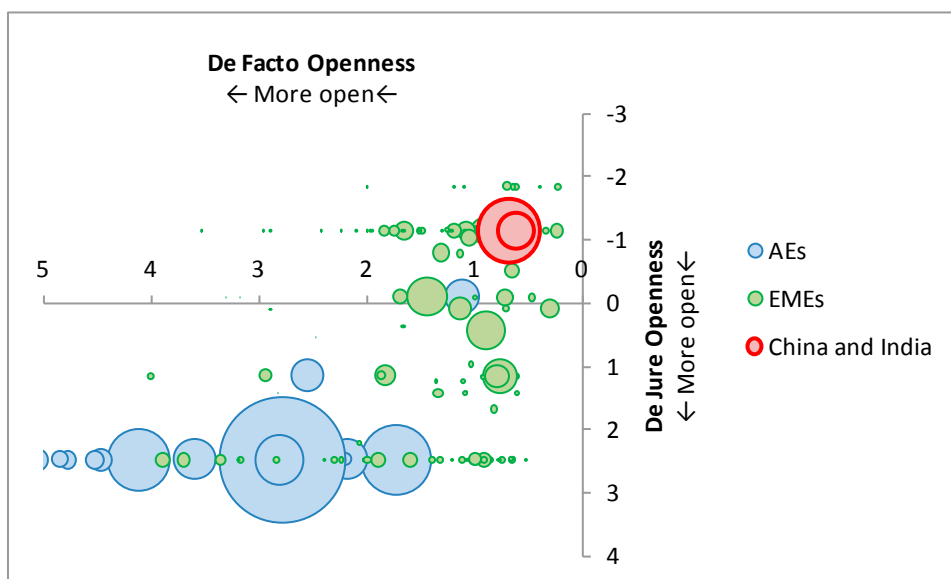
39. **Liberalization would, however, likely have a substantial impact on gross capital flows.** The impact may be particularly large in China, given its size and already significant share in global capital flows. China is projected to contribute around one-third of global net wealth accumulation over the medium term ([People's Republic of China: Spillover Report for the 2011 Article IV Consultation and Selected Issues](#)). With relatively strong restrictions on capital flows, the rise in wealth would significantly raise domestic asset valuations relative to the rest of the world, exacerbating risks of domestic asset bubbles.³⁵ Purchases of foreign assets to stem domestic asset price inflation could result in noticeable asset price increases in other countries, particularly if outward investment is encouraged as an alternative to reserve accumulation. A gradual liberalization of capital flows would have an ambiguous impact on domestic and global financial markets, as it would depend on the net direction of capital flows. Separately, Laurenceson and Tang, 2007, suggest that if China were to fully liberalize capital inflow controls, then its inflows would rise by about 7 percent of GDP. [People's Republic of China: Spillover Report for the 2011 Article IV Consultation and Selected Issues](#), suggests that portfolio investment in Chinese equities would be about 30 percent higher than the current levels if capital flows in China were as liberalized as in Brazil.

Liberalization in China and India

40. **Liberalization of capital flows is a long-term objective of the authorities in both China and India.** At the same time, these economies' size, unique features of their capital flow regimes, and different starting points relative to many emerging economies make it difficult to generalize from their reform experience to other countries. Both countries have extensive controls, although with substantial differences between them (Annex 1). Recognizing the potential benefits as well as the risks of more liberalized capital flows, the authorities in both countries have called for a gradual liberalization based on the establishment of certain preconditions that can support the orderly liberalization of capital flows.

³⁵ Should the authorities alleviate asset price inflation by selling Chinese bonds and sterilizing the impact through net foreign asset purchases, then the analysis in [People's Republic of China: Spillover Report for the 2011 Article IV Consultation and Selected Issues](#), suggests that a further accumulation of US\$600 billion in reserves would be needed over the medium term, in addition to the staff's baseline accumulation of US\$2 trillion, in order to keep real asset price inflation in line with that in the United States.

Figure 7. Financial Openness of IMF Members, 2010



Sources: Annual Report on Exchange Arrangements and Exchange Restrictions and staff calculations.

Note: The horizontal axis shows de facto openness. The vertical axis shows the Chinn-Ito index of de jure openness. The size of bubble is the GDP of the countries.

41. **The broad direction suggested by the integrated approach is in line with the authorities' priorities in several respects.** The authorities in both countries consider the removal of capital controls as part of a broad set of reforms encompassing financial sector development, improvements in monetary policy, strengthening regulation and supervision, developing alternatives to bank finance, and, in the case of China, interest rate and exchange rate regime reform, and in the case of India a stronger fiscal position. Macroeconomic stability and progress on financial reforms are seen as key pre-requisites for successful liberalization. In China, several aspects of this program—notably interest rate liberalization and financial market development—are cornerstones of the Twelfth Five-Year Plan.³⁶ In India, the authorities have recently completed the liberalization of interest rates and taken other measures to improve systemic soundness, including counter-cyclical capital and provisioning requirements, stronger macro-prudential oversight, especially over the housing market, and further development of the bond market.³⁷

China

³⁶ [People's Republic of China: 2011 Article IV Consultations; IMF Country Report No. 11/192](#)

³⁷ See [India: 2010 Article IV Consultation; IMF Country Report No. 11/50](#).

42. **In China, the authorities' strategy acknowledges the potential benefits of capital flow liberalization.** The reforms that support liberalization, including financial sector and exchange rate reforms, would help to rebalance growth away from an excessive reliance on exports and investment to a more balanced growth model with stronger private consumption. The benefits of liberalization also include a better allocation of capital and risk diversification; and liberalization would widen the use of the renminbi as an international currency.³⁸ Moreover, it is well recognized that capital controls may become less effective over time in the face of expanding and more liberalized trade and increasing sophistication of domestic and international investors.

43. **Capital flow liberalization could also facilitate financial sector reform and development (see Prasad and Ye, 2012).** In many emerging economies, capital flow liberalization (particularly with respect to portfolio inflows) has helped to improve liquidity in domestic equity markets. Greater liquidity, together with the entry of foreign banks, can help to increase competition in the banking sector and benefit both savers and borrowers. Other segments of the financial sector, such as insurance companies, which rely on capital controls and other entry restrictions to stay competitive, would face greater competition with greater openness to capital flows.

44. **At the same time, an increased exposure to capital flows carries substantial risks for China, particularly in view of the prevailing exchange regime and financial system.** Capital flow liberalization needs to move hand in hand with measures to address gaps in financial sector supervision and domestic capital market distortions that exacerbate the risks from capital flows. Such risks include asset bubbles, capital flight, and currency and maturity mismatches in bank and corporate balance sheets. In addition, in several countries, liberalizing capital flows while maintaining a relatively fixed exchange rate regime has been a key contributor to crises, such as the Mexican crisis of 1994–95 and the Asian, Brazilian, and Russian crises of 1997–98. By contrast, emerging economies with more flexible exchange regimes have generally fared better when faced with external pressures (Chile, Peru, South Africa).

45. **China would do well to move forward with capital flow liberalization in a manner that harnesses the benefits of more open capital flows while mitigating the risks.** The liberalization strategy would need to remain flexible, and capital flow liberalization should be carefully planned and sequenced in a manner that reinforces domestic financial liberalization and allows for institutional capacity building. Such an approach would include moving to a monetary policy that is more independent and more reliant on interest rates than administrative measures, stronger supervisory and regulatory frameworks, a broader range of financing and saving vehicles, deeper and more liquid

³⁸ Since July 2009, China has moved in small but steady steps to internationalize the renminbi, including a decision in December 2011 to allow investors to invest a greater proportion of their offshore renminbi holdings in the onshore equity market.

financial markets, liberalized loan and deposit interest rates, and greater exchange rate flexibility. Exchange rate flexibility would facilitate capital flow liberalization by better preparing the economy to deal with the impact of increased capital flows, help to improve macroeconomic control by reducing the ongoing liquidity injections associated with its capital and current account surpluses, reduce China's vulnerabilities to shocks, and help address external imbalances. It would also create stronger incentives for developing the foreign exchange market and for currency risk management by banks and corporates.³⁹

46. **With supporting reforms in place, China could proceed to liberalize capital flows, fully internationalize the renminbi, and move the currency toward being “freely usable.”** The early stages of capital flow liberalization should focus on removing remaining restrictions on more stable, long-term sources of financing such as direct investment flows (both inward and outward). The existing Qualified Foreign- and Qualified Domestic Institutional Investor (QFII and QDII) initiatives, for inward and outward investment respectively, could provide a useful means to open up capital flows, with the quotas steadily expanded and judiciously targeted at particular asset classes. Eventually, these quotas themselves would become nonbinding and could be removed, and other investors could also be authorized.

India

47. **The main benefits of capital flow liberalization for India would arise from greater access to foreign capital, including specialized financing for substantial infrastructure investment needs, as well as improved risk diversification.** An acknowledgment of these benefits is embedded in the country's liberalization strategy outlined in the Tarapore II and Rajan reports. The beneficial impact of liberalization on growth would initially likely occur through its positive effects on infrastructure investment. Foreign investment in fixed income instruments would help develop the government and corporate bond market and provide an additional source of long term financing for infrastructure. Greater foreign funding and specialized financing, such as take-out financing and credit enhancements, could facilitate the financing of large projects and reduce the reliance on domestic banks, thereby reducing asset/liability mismatches and concentration risks on banks' balance sheets. In addition, if large projects rely more on capital markets for financing, banks' focus would shift toward small and medium enterprise and household lending that, in turn, would enhance access to credit and financial inclusion.

48. **Capital flow liberalization also carries risks, exacerbated by India's high fiscal deficits and economic distortions.** Increased foreign participation in the government bond

³⁹ Staff recommendations on China's financial sector reforms, capital flow liberalization, and sequencing are more fully described in the 2011 Article IV Staff Report for China ([People's Republic of China: 2011 Article IV Consultations, IMF Country Report No. 11/192](#)) and accompanying Financial Sector Assessment Program report ([People's Republic of China: Financial System Stability Assessment, IMF Country Report No. 11/321](#)).

market would provide an additional source of financing for the budget, but could also raise the risk of pro-cyclical fiscal policy and increase the volatility of bond yields. In addition, a faster opening up to debt flows could lead to greater transmission of financial volatility from international markets.

49. **In view of the risks, the authorities' strategy calls for a careful sequencing of liberalization measures.** The strategy calls for first liberalizing FDI flows (with no major distinction between inflows and outflows) then equity and, finally, debt flows. Long-term flows are being liberalized ahead of short-term flows. In practice, FDI has been liberalized over time, but significant restrictions remain.⁴⁰ With respect to debt, while long-term flows have been liberalized before short-term debt (with the exception, appropriately, of trade finance), external commercial borrowing, which is in foreign currencies, is subject to a more liberal regime than foreign inflows into the rupee debt market. Several restrictions remain on outflows by domestic institutional investors.

50. **A gradual approach to liberalization remains appropriate, particularly in view of the weak fiscal position and the extent of financial repression.** Nevertheless, it is appropriate to continue to increase foreign institutional investors (FIIs) debt limits to encourage foreign holdings of domestic debt (as shifting exchange rate risk to lenders is less risky for the country than external commercial borrowing).⁴¹ In addition, foreign participation in the domestic debt markets would contribute to greater liquidity and price discovery. As fiscal consolidation advances, FII debt limits can increase faster. The liberalization process needs to weigh the benefits to investment and market development against the possible increase in asset price and interest rate volatility as well as the impact on the incentives of the fiscal authorities.⁴²

51. **Liberalization should also occur in tandem with policies to further bolster the banking system and financial markets.** The authorities are taking important steps to develop markets, including recent measures to liberalize deposit rates and introduce new financial instruments, and have allowed the exchange rate to act as a buffer to external shocks. Exchange rate flexibility has also allowed market participants to make increased use of foreign exchange hedging instruments by market participants and contributed to a more robust and transparent monetary policy framework, which are important preconditions for

⁴⁰ Although only 10 sectors are prohibited, these include such important sectors as multi-brand retail, and some caps, such as the one on insurance, are low and in need of being increased. The government is considering allowing FDI in multi-brand retail, while a long-standing proposal is in place to increase the FDI cap on insurance, but these have yet to be implemented.

⁴¹ Although FII debt limits on corporate and infrastructure bonds have been increased substantially in recent years (to US\$45 billion in total), these limits have had low utilization owing to such factors as the low liquidity of these bonds. The smaller FII limit on government bonds (US\$15 billion) is, however, more fully utilized.

⁴² See S. Peiris, 2010, "Foreign Participation in Emerging Markets' Local Currency Bond Markets," IMF Working Paper No. 10/88.

capital flow liberalization. Strengthened fiscal discipline would be important for minimizing the risks associated with fuller capital flow liberalization and for promoting capital market development. Fiscal consolidation would also allow the relaxation of financial restrictions on domestic institutional investors and facilitate their contribution to capital market development, as well as greater liberalization of their foreign asset holdings.

III. MANAGING CAPITAL OUTFLOWS

52. **Many EMEs are concerned about the potential negative effects on growth and welfare of large capital outflows.** Such outflow surges can lead to financial system stress and large output losses. While outflow surges can be caused by domestic developments, they can also be driven by global factors and contagion effects, which are outside individual countries' control. Global factors can include changes in global risk perception, liquidity, interest rates, and the outlook for global growth, while contagion can spread through trade and financial linkages.⁴³

53. **This section examines the effectiveness of CFMs on capital outflows in a crisis and proposes an approach that can guide their use.** It focuses on the use of CFMs on outflows in countries that have already liberalized capital flows fully or to a considerable extent, and that decide to reimpose them for crisis prevention or management. However, the proposed policy framework for managing outflows can also apply to countries that still maintain a high degree of restrictions on capital flows.

A. Use and Effectiveness of Capital Outflow Controls

54. **Over the past decade, only a few countries tightened controls significantly to address capital outflow surges.**⁴⁴ These countries include both EMEs and advanced economies: Argentina (2001–02), Iceland (2008), and Ukraine (2008). The main causes for outflow surges in these countries were as follows: unsustainable macroeconomic policies that triggered a currency crisis in Argentina; the collapse of the overgrown banking sector in the early stages of the global financial crisis in Iceland; and a full-fledged banking and currency crisis deepened by weak macroeconomic management in Ukraine.⁴⁵ In contrast, although

⁴³ Capital outflows include residents' investments and transfers abroad as well as the alienation and repatriation of nonresidents' foreign currency investments in the country. See Forbes and Warnock, 2011 for a characterization of outflow cases.

⁴⁴ At present, data cover mainly capital controls and not CFMs more broadly. Accordingly, the focus in the discussion here is on capital controls. However, many of the observations would apply as well to CFMs.

⁴⁵ In addition, the partial deposit withdrawal restriction on Parex Banka introduced in Latvia to address a potential banking crisis—as well as some of the measures introduced in Ukraine (mandatory delays in certain current payments) and Iceland (restrictions on the transferability of certain interest payments)—also gave rise to exchange restrictions subject to Fund jurisdiction under Article VIII of the IMF's Articles of Agreement.

Russia experienced large capital outflows at the beginning of the global crisis, it did not tighten its capital controls. Table 1 provides details on the measures taken, while the Background Paper provides discussions of the experiences of Iceland, Russia and Ukraine. Among the countries implementing broad based measures, only Iceland's controls appear to have been effective.

55. **The relatively little academic research that exists on the effectiveness of outflow controls consists mainly of case studies.**⁴⁶ A recent survey (Magud, Reinhart, and Rogoff, 2011) finds only weak evidence for the effectiveness of outflow controls, except possibly in the case of Malaysia in 1998.⁴⁷ Quantitative research also finds only limited evidence for the effectiveness of outflow controls. Binici and others, 2010 conclude that outflow controls are somewhat effective, and more effective in advanced economies than in other countries, which the authors attribute in part to advanced countries' generally higher institutional and regulatory quality.

56. **A recent staff analysis found some evidence for the effectiveness of outflow controls in countries with favorable macroeconomic conditions.** The staff analyzed effectiveness of outflow controls in a sample of 31 EMEs during 1995–2010 (see Section IX of the Background Paper for details). In the subset of countries with better-than-median macroeconomic conditions, a tightening of outflow controls increased net inflows for one year and allowed policymakers to reduce interest rates somewhat without having to accept exchange rate depreciation. However, the full effect of outflow controls takes time to materialize and, in the full sample of 31 countries, the effectiveness of outflow controls could not be confirmed.⁴⁸

57. **Taken together, it appears that for controls on outflows to have a chance at being effective, they need to be supported by coherent macroeconomic policies.** In cases where macroeconomic policies and conditions are not supportive, such as in Argentina during 2001–02 or Ukraine in 2008 (in both cases, there was an inconsistency between fiscal policy and the exchange rate regime), outflow controls will not make a lasting difference. But outflow controls can be effective for longer periods if they are well designed and enforced (and reinforced as needed), and part of a comprehensive macroeconomic policy adjustment,

⁴⁶ Academic research has not yet focused on the effectiveness of CFMs on outflows as comprehensive information on CFMs in long time series has not been available.

⁴⁷ The studies reviewed in Magud, Reinhart, and Rogoff, 2011, do not cover the recent experiences of Iceland.

⁴⁸ Two different underlying mechanisms may explain why outflow controls appear to be more effective in countries with strong fundamentals. First, sound fundamentals could be correlated with strong institutions and the authorities' ability to impose sufficiently strong controls. This channel was tested but could not be confirmed. Second, the additional cost that controls impose on investors (directly or as the cost of circumvention) may offset investors' incentive to transfer funds abroad when macroeconomic conditions in the country are strong (and the return on domestic investment can therefore be expected to be reasonable) but fail to do so when fundamentals are weak (and the return on investment can therefore be expected to be low).

such as in Iceland in 2008.⁴⁹ In some instances, macroeconomic policies by themselves will not be sufficient in the short run, and the use of CFMs may be necessary.

B. Proposed IMF Policy Framework for Managing Capital Outflows

58. **Once a country has substantially liberalized capital flows, a certain degree of capital outflow volatility is normal, and does not in and of itself call for the use of CFMs.** Outflows should primarily be managed using appropriate macroeconomic, structural, and financial sector policies. When capital outflows are large but there is no immediate threat of a crisis, there would usually be scope to adjust macroeconomic and financial sector policies, as Korea, Russia, and South Africa did during 2009–11 (Box 6 discusses the principal causes of capital outflows and potential policy responses). Countries could also use CFMs on inflows as a crisis prevention measure during inflow surges, in a manner consistent with the Fund’s framework for capital inflows broadly endorsed by the Executive Board ([Recent Experiences in Managing Capital Inflows—Cross-Cutting Themes and Possible Policy Framework](#)). Other structural and macroprudential measures taken in advance can also improve a country’s resilience to crisis (Box 7).

⁴⁹ The unusual effectiveness of the controls in Iceland may also reflect the small size of the country and its financial system (which allows the authorities to monitor each transaction), and the highly restrictive nature of the measures.

Table 1. Selected Country Cases with Significant Capital Outflows

Country	Reason Leading to the Crisis	Measures
Argentina 2001–02	Concerns about external competitiveness and growing public debt undermined confidence in the sustainability of the currency board regime in 2001.	The authorities responded with tightened controls to the massive deposit run. In late 2001, Argentina established the Corralito, which limited bank withdrawals, and imposed restrictions on transfers and loans in foreign currency. Argentina suspended external payments. In early 2002, the peso was devalued by 40 percent, and a dual exchange rate regime was introduced (one for trade operations, another for other transactions). At the same time, foreign currency deposits were converted into domestic currency deposits at a specific exchange rate, while foreign currency debt was converted at market exchange rate. In 2002, the government imposed a freeze on bank deposits. At end-2002, the “Corralito” was rescinded.
Iceland 2008	The demise of Icelandic commercial banks, and the existence of very large short-term liabilities to foreign investors (600 percent of GDP), posed a significant threat of disorderly exit of foreign creditors, exchange rate overshooting, and also a risk of irreversible damages to Icelandic's public sector access to finance. The krona depreciated about 30 percent between December 2007 and March 2008. The net foreign asset position deteriorated sharply, from -112 percent of GDP in 2007, to -629 percent in 2010.	In the wake of the financial crisis and in the absence of sufficient international reserves, Iceland introduced measures to manage currency outflows. Most capital transactions were controlled both for residents and nonresidents, their ability to shift between krona and foreign currency was restricted. Krona assets, including krona-denominated bonds and other instruments could not be converted to foreign currency upon maturity. About ISK 600 billion krona (initially) have been kept in Iceland by the controls—these were presumably nonresident owned assets on foreign bank accounts and in krona instruments. Controls are still in place.
Latvia 2008–09	After several years of rapid growth, by 2006 the economy was overheating and inflation accelerated. Financial sector risks accumulated during the boom years, in particular the banking system reliance on foreign funding. The global financial crisis had significant effects in Latvia, with increasing concerns over the sustainability of the peg, and contingent financial sector liabilities (output declined almost 25 percent cumulatively between 2008 and 2009). The financial system experienced significant strains, culminating in a run on Parex Banka (the second largest bank, with a market share of about 20 percent).	In view of the systemic importance of Parex Banka, in October 2008, the government took a 51 percent stake in the bank (later increased to 85 percent) and imposed partial deposit withdrawal restrictions. The Bank of Latvia also lowered reserve requirements and the policy rate in an effort to provide liquidity to the financial system. Latvia kept its peg to the euro. Parex Banka was split in 2010, with performing assets moved to a new bank, and orderly resolution is continuing. The deposit withdrawal restrictions expired at end-2011.

Table 1. Selected Country Cases with Significant Capital Outflows (continued)

Country	Reason Leading to the Crisis	Measures
Malaysia 1998	During the Asian crisis, in 1997, amid concerns about the fragility of the financial sector, the ringgit came under significant speculative attacks. Speculators, craving for ringgit funds drove up the offshore exchange rate relative to the onshore rate, which in turn caused massive capital outflows.	The authorities first tried to stop outflows with monetary tightening. Interest rates were hiked contributing to the contraction of economic activity followed by capital controls aimed at isolating the offshore ringgit market from the onshore market. In September 1998, the government implemented a number of measures: controls limiting offshore swap operations, a ban on short-selling; repatriation of ringgit held offshore; strict regulation on offshore operations, a requirement that most international operations be settled in ringgit with exports and imports allowed in foreign currency only, 12-month waiting period for nonresidents to sell profits from Malaysian securities; approval requirement to invest abroad. The measures were rescinded gradually with a tax replacing the holding period, which then was phased out within a year.
Russia 1998	Starting in 1997, Russia experienced increasing foreign exchange pressures, reflecting growing concerns about the fiscal situation. In September 1998, the exchange rate band was abolished, the exchange rate depreciated by about 50 percent, and inflation rose to 40 percent. In the second half of 1998, capital outflows reached about US\$17 billion.	Russia introduced a series of emergency measures, including capital controls (freezing the trading of short term treasury bills, lengthening the maturity of domestic debt, practical restrictions on transfers abroad by nonresidents) and the announcement of a selective debt moratorium. Despite their comprehensiveness, controls do not appear to have achieved their objective of moderating outflows. Stability was achieved when policies to tackle underlying causes were implemented (new revenue measures to close fiscal imbalances, unification of the currency markets, bank restructuring).
Russia 2008	Capital flows—which increased significantly after the liberalization in 2004—reversed sharply with outflows reaching US\$130 billion (or 8 percent of annual GDP) in the fourth quarter of 2008 on account of large portfolio withdrawals, a flight into foreign currency cash holdings, rising bank net asset positions, and net loan repayments by the corporate sector. The massive capital outflows put severe pressure on the ruble, which depreciated by about 30 percent against the euro-dollar currency basket (and 15 percent in real effective terms) during December 2008–January 2009.	The authorities did not resort to capital controls. A full-fledged banking crisis was avoided, owing, in particular, to large-scale foreign exchange interventions and massive liquidity support to banks by the central bank. In 2011, Russia reintroduced differentiated reserve requirements on liabilities to residents and nonresidents to discourage potential renewed capital inflows into Russia.

Table 1. Selected Country Cases with Significant Capital Outflows (concluded)

Country	Reason Leading to the Crisis	Measures
Turkey 2001	By 2001, Turkey had been experiencing high chronic inflation (70 percent in 2001), the fiscal deficit reached 17 percent of GDP, public debt had increased in excess of 90 percent, financial stability was weakening (high foreign exchange exposure, nonperforming loans, insolvent institutions), and financial regulation and supervision needed significant strengthening. In this context, pressures on the currency accumulated, capital outflows amounted to about US\$70 billion, and the peg was abandoned. The Turkish economy slowed significantly.	No capital controls were introduced. The exchange rate was allowed to float, and depreciated by as much as 50 percent. A stabilization program backed by the IMF was put in place, and called for prudent macroeconomic policies, significant reforms in the financial sector and privatizations.
Ukraine 2008	The 2008 crisis hit Ukraine through a sharp deterioration in the terms of trade, a collapse of exports, and a reversal of capital flows. Capital flows turned sharply negative from the third quarter of 2008. Inflows that averaged 7 percent of GDP in the four quarters leading up to the peak of the boom gave way to outflows of 13 percent of GDP in the following four quarters. In late-2008, the exchange rate peg collapsed under the combined pressures in the capital and trade accounts, with the hryvnia depreciating by some 35 percent.	During the peak of the crisis, the National Bank of Ukraine introduced a number of regulatory measures-including exchange controls-to help stem outflows and defend the exchange rate: (i) revision of the methodology for calculating banks' open foreign exchange position (it removed off-balance sheet items and foreign exchange provisions against bad foreign exchange loans from banks' net open position calculations and required that these positions were calculated for each currency separately); (ii) restrictions on banking activities included limits on early withdrawal of time deposits, introduction of a ban of early repayment of foreign exchange loans, limits on hryvnia transactions by nonresident banks, restrictions on the timing of payment order execution, and ceilings between bid and ask exchange rates to at most 5 percent; (iii) ban on foreign exchange forward transactions; (iv) currency controls on foreign investments included an introduction of the mandatory five-day waiting period before local currency can be converted to foreign exchange for investment transactions. The experience with controls was mixed. While it might have helped alleviate currency pressures at the peak of the crisis, they failed to alleviate the need for massive central bank intervention, and might have exacerbated balance sheet risks.
Uruguay 2002	The measures taken by Argentina in 2001 affected the financial system in Uruguay, as two of the largest banks owned by Argentinean groups faced a run on deposits from nonresidents. The Central Bank of Uruguay was forced to suspend the operations of a large bank, and by mid-2002, about 35 percent of deposits had been withdrawn.	No capital controls were introduced. In 2002, the peg was abandoned and the Uruguayan peso depreciated by about 25 percent. The government declared a five-day bank holiday at the end of July. Some banks were nationalized. The government designed a re-profiling and swap of debt.

59. **Once a country has substantially liberalized its capital account, CFMs on capital outflows can be considered in crisis or near crisis conditions.** In such cases, CFMs may help to prevent the free fall of the exchange rate and the depletion of international reserves. CFMs may in fact be necessary in some cases, for example when countries face domestic or external shocks that cannot be handled by macroeconomic adjustment or financial sector policies alone (or when the size or duration of the shocks are highly uncertain). However, CFMs should always be part of a broader policy package that also includes macroeconomic, financial sector, and structural adjustment to address the fundamental causes of the crisis. As some of these other policies have a considerable lead time, CFMs can be used to provide breathing space while they are put in place.

60. **The effectiveness of CFMs on outflows can erode quickly.** Recent country experiences show that CFMs on outflows lose effectiveness unless they are supported by credible macroeconomic and financial sector policies (see Table 2, as well as Section IX of the Background Paper). In addition, it is often necessary to periodically reinforce CFMs to close loopholes.

61. **In each case, a judgment needs to be made on whether the benefits of the CFMs outweigh the distortions.** Factors to be considered include the longer-term effects on investor expectations, and the amount of time that CFMs will buy before being eroded.

62. **In addition, the widespread adoption of CFMs on outflows may have multilateral effects similar to those of CFMs on inflows, including on the distribution of flows across countries.** There may also be longer-run effects on the global investment climate. However, as in the case of CFMs on inflows, if these measures are used only temporarily, the multilateral effects are not likely to be large.⁵⁰

63. **CFMs on outflows adopted in a crisis will often need to be comprehensive, but they should be temporary and lifted as soon as certain conditions are met.** Successful examples of the implementation of CFMs on outflows, such as Iceland, indicate that the measures need to be wide-ranging. Country circumstances will determine when CFMs on outflows are lifted. In general, CFMs should be lifted when the following conditions have been met: (i) macroeconomic stability (especially with respect to the exchange rate and debt sustainability); (ii) confidence in domestic assets; (iii) access to international capital markets; (iv) financial system stability; and (v) adequate reserves. Furthermore, CFMs should be removed if they become ineffective, and more generally when the distortions they give rise to outweigh the benefits. Box 7 summarizes the proposed policy framework.

⁵⁰ For a discussion of CFMs on inflows, see [The Multilateral Aspects of Policies Affecting Capital Flows](#). While analogous research on outflow CFMs would be desirable, the small number of countries that have used these measures in a crisis over the last decade makes it very difficult to draw valid conclusions.

64. **CFMs on outflows potentially include a wide range of measures.** Residency-based CFMs on capital outflows include measures on (i) residents' investments and transfers abroad, such as limits on residents' investments in financial instruments abroad (Iceland); and (ii) the sale and repatriation of nonresidents' investments in the country in foreign currency, such as waiting periods for nonresidents to transfer proceeds from domestic securities (Ukraine), minimum holding periods (Chile), and taxes on the transfer of proceeds (Malaysia). Non-residency-based CFMs, for example, include prohibitions on the conversion and transfer of domestic currency assets (Iceland) and limits on deposit withdrawals (Argentina). Restrictions on nonresidents' access to funding in local currency can at times be used to make currency speculation more difficult.

Box 6. Capital Outflows—Underlying Factors and Potential Policy Responses

The choice of policies and measures depends on the factors underlying large capital outflows. The following considerations should be taken into account (some of these factors are examined in Forbes and Warnock, 2011):

- *External shock.* If the main reason for the capital outflows is the expected depreciation of the domestic currency due to terms of trade shocks, the exchange rate should be allowed to depreciate to its new equilibrium level. Some intervention to prevent an overshooting of the exchange rate may be necessary. In a credible peg, if the external shock is temporary, and reserves are considered sufficient, there is a case for defending the peg. Otherwise, a discrete devaluation may be desirable.
- *Inconsistent macroeconomic policies.* If the reason for the capital outflows is inconsistent macroeconomic policies, macroeconomic adjustment will be the appropriate policy response. If necessary, CFMs on outflows can be implemented temporarily to provide breathing space to implement the appropriate macroeconomic adjustment.
- *Financial fragility.* If capital outflows reflect a loss of confidence in the financial system, appropriate measures include stepping up prudential regulation and supervision, improving deposit guarantee schemes, and providing liquidity support. Again, if necessary, CFMs on outflows can be used temporarily to provide time for other policies to be implemented.
- *Global conditions.* If capital outflows reflect increased risk aversion or tighter monetary conditions in large advanced economies, and the outflows are considered to be significant but temporary, the macroeconomic policy mix may need to be adjusted (for example, by allowing the exchange rate to depreciate, and increasing policy rates while easing the fiscal stance).

Box 7. Suggested Policy Framework for Managing Capital Outflows

- Manage capital outflows primarily with macroeconomic and financial sector policies. To mitigate possible reversals of capital inflows, use CFMs on inflows as a preventive measure to deal with inflow surges, in a manner consistent with the Fund’s policy framework for capital inflows broadly endorsed by the Executive Board ([Recent Experiences in Managing Capital Inflows—Cross-Cutting Themes and Possible Policy Framework](#)).
- Implement structural policies and macroprudential measures as a crisis prevention measure to increase the ability of the financial, corporate, and household sectors to withstand large capital outflows and exchange rate depreciation.
- CFMs on outflows can be considered (i) in crisis or near crisis conditions; and (ii) to provide breathing space while more fundamental policy adjustment is implemented.
- Give precedence to measures that do not discriminate on the basis of residency, for example measures that discriminate on the basis of currency.
- In designing CFMs, consider country-specific circumstances, such as administrative and regulatory capacity, and the preexisting degree of openness to capital flows. CFMs should be commensurate to the concern at hand. Often tax-like measures may be sufficient.
- CFMs should be temporary and lifted when the conditions for their removal have been met.
- Account should be taken of the multilateral effects of CFMs on outflows.

IV. ISSUES FOR DISCUSSION

- Do Directors agree that the modified integrated approach provides a suitable framework for policy advice on liberalizing capital flows (Box 2 and paragraphs 21-29)?
- Do Directors support extending the definition of CFMs to include measures designed to affect capital outflows?
- Do Directors support the proposed framework for managing capital outflows (Box 7 and paragraphs 58-64)?

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Annex 1. Regulatory Framework for Capital Transactions in China and India

Type of Capital Transaction		China	India
FDI	Inflow	Only foreign investors in good standing ¹⁷ may invest in excess of 10 percent of the company's shares up to the limits determined for the specific sector. A three-year mandatory holding period applies for those foreign strategic investors.	FDI is allowed under two routes: automatic route and government approval route. In several sectors, investment up to 100 percent is allowed, while a few other sectors have sector-specific caps and guidelines. There are 10 sectors in which FDI is prohibited.
	Outflow	Companies may purchase and transfer foreign exchange for outward FDI subject to registration only and they can also use renminbi in countries that accept such settlement.	Indian companies and registered partnerships may invest up to 400 percent of their net worth without approval. The ceiling, however, is not applicable where the investment is made out of balances held in Exchange Earners' Foreign Currency account or out of funds raised through ADRs/GDRs. Lower limits and additional conditions apply to unregistered partnership and proprietorship firms.
Portfolio Equity Investments	Inflow	<p>Only QFIIs²⁷ may invest in "A" shares. Investments are subject to caps on foreign ownership in Chinese listed companies (10 percent of the shares of the company for a single foreign investor 20 percent for all foreign investors). Every QFII has its own quota limit to invest in domestic securities. A mandatory principal lock-in period of 3 months or 1 year applies depending on the type of QFII. Other transfers, such as principal injections, repatriations and remitting revenues, are subject to State Administration of Foreign Exchange approval.</p> <p>Foreign investors, including institutions and individuals, can also invest in "B" shares subject to foreign exchange management requirements.</p>	<p>Registered FIIs, such as pension funds, mutual funds, investment trusts, university funds, endowments, charitable trusts, and charitable societies are allowed to invest in equity. The ceiling for overall investment for FIIs is 24 percent of the paid up capital of the Indian company, which can be raised up to the sectoral cap/statutory ceiling, subject to the approval of the board and the general body of the company passing a special resolution to that effect. The limit is 20 percent of the paid up capital in the case of public sector banks.</p> <p>Nonresident Indians (NRIs), and Persons of Indian Origin (PIOs) are also allowed to invest in equity with a limit of 10 percent of the paid up capital of the Indian company, which can be raised to 24 percent subject to the approval of the general body of the company passing a resolution to that effect. Holders of Overseas Citizenship of India certificates have the same rights to invest in India as NRIs (except to invest in agricultural land or plantations).</p> <p>The ceiling for FIIs is independent of the ceiling for NRIs/PIOs. However, there is no overall limit on such investments.</p>
	Outflow	Only QDIIs, ³⁷ may invest in equities abroad within their respective purchase and foreign exchange quotas and regulatory limits.	The overall limit on residents' investments in companies listed abroad is US\$200,000 a year. Resident corporations may invest up to 50 percent of their net worth in shares of listed companies abroad.

Type of Capital Transaction		China	India
			Indian Mutual Funds are permitted to invest within an overall cap of US\$ 7 billion.
Portfolio Bond Investments	Inflow	Only QFIIs may invest in those bonds and similar securities traded on stock exchanges. Foreign banks engaged in cross-border trade settlements in renminbi, Hong Kong SAR, and Macao SAR renminbi clearing banks, and foreign central banks and monetary authorities may invest in the inter-bank bond market with renminbi subject to limits, but there is no minimum holding period.	Registered FIIs may invest in debt securities issued by Indian corporates with an overall limit of US\$20 billion, with an additional limit of US\$25 billion in infrastructure bonds and a US\$15 billion limit on government securities. Infrastructure bonds are subject to mandatory holding periods. Different limits apply to NRIs.
	Outflow	QDIIs' investments are subject to overall ceilings and regulatory limits on the type of security.	Only resident individuals may invest in debt securities abroad subject to a yearly limit of US\$200,000.
Investments in the money market	Inflow	Only QFIIs' may invest in money market funds subject to their prescribed minimum lock-in periods and limits, depending on the type of QFII (see "Portfolio Equity Investment" above). Additionally, Hong Kong SAR, and Macao SAR renminbi clearing banks, and foreign central banks and monetary authorities may invest with renminbi in the money market subject to limits, but there is no minimum holding period.	Only NRIs may invest in money market mutual funds.
	Outflow	Only QDIIs may invest in money market instruments within their respective foreign exchange quotas and regulatory limits.	Residents may purchase these instruments abroad without Reserve Bank of India approval according to the prescribed norms.
Derivatives	Inflow	These transactions are not allowed.	These transactions are generally subject to limits and approval. Hedging of nonresidents' investments in India is allowed.
	Outflow	These transactions are generally subject to approval and limits.	Commercial banks may purchase such instruments for their own asset and liability management. Resident companies may use derivatives to hedge commodity price and foreign exchange debt exposures.
Loans	Inflow	Short-term borrowing is subject to individual limits. Borrowing for maturities in excess of one year is subject to approval. Loans to enterprises with foreign participation are limited to the difference between total investment and registered capital. All loans must be registered. More generally, rules governing access to external loans vary according to different criteria, including the sectors concerned (e.g., Chinese-funded/foreign-funded institutions, financial institutions/enterprises) and instruments attached to these borrowings. For instance, banks that attach derivatives to these loans (either buying or selling them) that are issued abroad would come under the jurisdiction of the relevant authorities.	External commercial borrowing is allowed through automatic and approval route. External commercial borrowing through automatic route is subject to limits of US\$20 million for a minimum three-year average maturity and US\$750 million for a minimum five-year average maturity. External commercial borrowing through approval route can be higher than US\$750 million. External loans are subject to an all-in-cost ceiling, which is adjusted occasionally, and also end-use restrictions.
	Outflow	Lending abroad is generally subject to approval. Banks may lend abroad in accordance with banking regulations, as well as other relevant	Lending abroad is generally subject to approval, except for certain trade credits and lending to foreign subsidiaries.

Type of Capital Transaction	China	India
	regulations such as compliance with rules governing derivatives transactions.	
Domestic currency accounts of nonresidents	In addition to financial institutions in Hong Kong SAR, nonresident nonbank institutions with renminbi from trade transactions may deposit renminbi in correspondent accounts with Chinese mainland banks. Limited trade financing is also allowed through the correspondent accounts.	Only NRIs and nonresident PIOs may maintain rupee accounts.
Repatriation/surrender requirement	Proceeds must be generally repatriated within 180 days of exportation and may be deposited with in foreign exchange domestic banks or abroad. The conditions for depositing abroad are regulated based on the balance of payments status and foreign exchange management needs.	Proceeds must be repatriated within 12 months of shipment and may be deposited in accounts with domestic banks. These accounts do not earn interest.

^{1/} Foreign investors are required to meet the following requirements to make strategic investments in A shares: (a) be legally incorporated and operating foreign legal persons or other organizations that are financially sound and have good credit and mature management experience; (b) have actual offshore assets totaling no less than US\$100 million or actual offshore assets under management totaling no less than US\$500 million, parent company actual offshore assets totaling no less than US\$100 million, or actual offshore assets under management totaling no less than US\$500 million; (c) have a sound governance structure and good internal control systems with standardized operations; and (d) have received no material penalties from domestic or foreign regulatory agencies in the past three years (this includes the parent company). Further, companies wishing to invest in China or abroad must obtain licenses or approvals from the Ministry of Commerce and National Development and Reform Commission.

^{2/} A QFII must have at least (1) five years' experience in the industry for fund managers, insurance companies, and other institutional investors (pension funds, charitable foundations, endowment funds, trust companies, governmental investment management companies, etc.); (2) 30 years for securities firms; and (3) US\$5 billion for fund management firms and insurance companies and US\$10 billion for commercial banks and securities firms in assets under management in the most recent financial year. A QFII must not have been subject to major sanctions by regulatory agencies over the past three years. A QFII that is a bank must have assets that rank it among the top 100 internationally in the most recent financial year.

^{3/} QDIIs are domestic institutions that may, within certain quotas and with the approval of the regulator and through a special account, invest in overseas securities markets.