INTERNATIONAL MONETARY FUND

THE LIBERALIZATION AND MANAGEMENT OF CAPITAL FLOWS: AN INSTITUTIONAL VIEW

November 14, 2012

EXECUTIVE SUMMARY

Capital flows have increased significantly in recent years and are a key aspect of the global monetary system. They offer potential benefits to countries, but their size and volatility can also pose policy challenges. The Fund needs to be in a position to provide clear and consistent advice with respect to capital flows and policies related to them. In 2011, the International Monetary and Financial Committee (IMFC) called for "further work on a comprehensive, flexible, and balanced approach for the management of capital flows." This paper proposes an institutional view to underpin this approach, drawing on earlier Fund policy papers, analytical work, and Board discussions on capital flows. The main points are as follows:

- Capital flows can have substantial benefits for countries, including by enhancing efficiency, promoting financial sector competitiveness, and facilitating greater productive investment and consumption smoothing.

- At the same time, capital flows also carry risks, which can be magnified by gaps in countries' financial and institutional infrastructure.

- Capital flow liberalization is generally more beneficial and less risky if countries have reached certain levels or "thresholds" of financial and institutional development. In turn, liberalization can spur financial and institutional development.

- Liberalization needs to be well planned, timed, and sequenced in order to ensure that its benefits outweigh the costs, as it could have significant domestic and multilateral effects. Countries with extensive and long-standing measures to limit capital flows are likely to benefit from further liberalization in an orderly manner. There is, however, no presumption that full liberalization is an appropriate goal for all countries at all times.

- Rapid capital inflow surges or disruptive outflows can create policy challenges. Appropriate policy responses comprise a range of measures, and involve both countries that are recipients of capital flows and those from which flows originate. For countries that have to manage the macroeconomic and financial stability risks associated with inflow surges or disruptive outflows, a key role needs to be played by macroeconomic policies, including monetary, fiscal, and exchange rate

management, as well as by sound financial supervision and regulation and strong institutions. In certain circumstances, capital flow management measures can be useful. They should not, however, substitute for warranted macroeconomic adjustment.

- Policymakers in all countries, including countries that generate large capital flows, should take into account how their policies may affect global economic and financial stability. Cross-border coordination of policies would help to mitigate the riskiness of capital flows.

- The Fund is well-placed to provide relevant advice and assessments to its members in close cooperation with country authorities and other international organizations. This paper clarifies the trade-offs between policy options for dealing with capital flows, harnessing the benefits of capital mobility, and addressing the implications of capital flow management for global economic and financial stability.

- The proposed view will guide Fund advice to members and, where relevant, Fund assessments in the context of surveillance. It does not, however, alter members' rights and obligations as this would require an amendment of the Articles of Agreement. Members' rights and obligations under other international agreements also remain unaffected.

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Glossary

AEs	Advanced Economies
BPM6	Sixth edition of the Fund's *Balance of Payments and International Investment Position Manual*
CEE	Central and Eastern Europe
CFMs	Capital Flow Management Measures
EMPI	Exchange Market Pressure Index
EU	European Union
FDI	Foreign Direct Investment
FSB	Financial Stability Board
FSI	Financial Stress Index
IEO	Independent Evaluation Office
IMFC	International Monetary and Finance Committee
IMS	International Monetary System
ISD	Integrated Surveillance Decision
MPMs	Macro-Prudential Measures
OECD	Organisation for Economic Co-operation and Development

I. INTRODUCTION

1. **Cross-border capital flows are an increasingly important aspect of the global economy**. Closer global integration in recent decades has comprised growing trade as well as capital flow linkages across countries. Global capital flows have historically comprised mainly flows among advanced economies (AEs), but flows to and from emerging and developing economies have increased in recent years (Box 1). Capital flow liberalization has been part of the development strategy in several countries, in recognition of the benefits that such flows can bring. At the same time, capital flows carry risks, as they can be volatile and their size can be large relative to domestic markets. Because capital flows have a bearing on economic and financial stability in both individual economies and globally, an important challenge for policymakers is to develop a coherent approach to capital flows and the policies that affect them.

2. **The International Monetary and Financial Committee (IMFC) called for "further work on a comprehensive, flexible, and balanced approach for the management of capital flows, drawing on country experiences."**[1] The proposed institutional view is intended to underpin this approach. The IMF's Independent Evaluation Office (IEO) has also seen a need for a comprehensive and consistent Fund view on capital flows in order to ensure that policy advice is even-handed and appropriate for country circumstances.[2]

3. **This paper proposes an institutional view that builds on countries' experience in recent years, previous Fund policy papers and Board discussions on capital flows, and recent analytical research**.[3] The proposed institutional view laid out in this paper encompasses the liberalization and the management of capital flows, taking into account policy considerations for countries both when they receive and when they generate capital flows. The paper largely synthesizes the conclusions of previous policy papers, research, and Board discussions, and strengthens the consideration of issues in a few areas such as the role of source countries and the relationship between policies related to capital flows and macro-prudential measures. The proposed view aims to provide a consistent basis for Fund input to all members, while taking into account their specific circumstances and policy objectives. It would not, however, give rise to any new obligations for Fund members. The view would be flexible and seek to incorporate new experience, analysis, and empirical evidence going forward, in recognition of the fact that important policy lessons remain to be learned from countries' ongoing

[1] See Communiqué of the 24th Meeting of the IMFC, 9/24/2011, and IMF, 2010a. Unless otherwise specified, capital flows for the purposes of this paper refer to foreign direct investment, other investment (mainly bank-related flows), and portfolio flows. The Fund's Articles define as current certain transactions involving investment-related flows and other items that from an economic perspective may be considered as capital. The proposed institutional view would not alter the Fund's current account jurisdiction.

[2] IEO, 2005.

[3] These Fund policy papers addressed: the role of the Fund (November 2010), managing capital inflows (April 2011) and outflows (April 2012), multilateral aspects (November 2011), and capital flow liberalization (April 2012). Analytical background for these papers includes Dell'Ariccia et al., 2008, Ghosh et al., 2012, Habermeier et al., 2011, and Ostry et al., 2010, 2011, 2012a, and 2012b.

experience with capital flows. In coming months, the staff would prepare a guidance note on the liberalization and management of capital flows on the basis of the proposed institutional view.

4. The proposed institutional view on capital flows is informed by discussions among policymakers, the Fund, and other international institutions with the objective of strengthening the international monetary system.[4] In light of the externalities and spillovers of national policies, international policy coordination can help to mitigate risks, improve the effectiveness of policy responses, strengthen welfare and stability, and enhance the effective operation of the international monetary system.[5] The proposed institutional view also takes into account the relationship between policies that affect capital flows and macro-prudential policies that aim to address systemic financial risk.

5. The institutional view seeks to find common ground among the diverse views found in the international community with respect to capital flows and related policies. To many observers, free capital mobility is beneficial and a worthwhile goal, provided that institutions and financial systems are strong, and, once achieved, should only be restricted in exceptional circumstances if at all.[6] In some cases, moreover, measures to limit capital flows could facilitate distortive policies such as undervalued exchange rates and have adverse global implications.[7] Others, meanwhile, are more skeptical about the benefits of free capital mobility and they view measures to impede capital flows, both in the long term and to manage cyclical volatility, as having benefits for growth and stability.[8]

6. At the same time, some authorities are concerned about how their policy choices with respect to capital flows may be evaluated by the international community. For example, they are concerned whether policies in response to capital flow volatility would give rise to punitive reactions by investors and be seen as unsound economic strategy.[9] In responding to these concerns, assessments after the fact are less useful than guidance ahead of time. But no comprehensive global approach currently exists for such guidance.

7. Some progress toward developing such a framework has been made in recent years. Notably, the G20's "*Coherent Conclusions for the Management of Capital Flows*" adopted in November 2011 represent a hard-won consensus on broad principles. Although these conclusions were agreed

[4] The Fund has been working with members in this regard, including through the Mutual Assessment Process of the G20, the spillovers reports, the Article IV process, and in other contexts.

[5] Ostry et al., 2012b.

[6] Yellen, 2011 provides a summary of official views in favor of open capital accounts, and Forbes, 2005, and Henry, 2007, discuss the microeconomic costs and distortions imposed by capital controls. OECD, 2012, notes that some restrictions, especially on short-term and volatile flows, can at times lower the risk of crises but that others, particularly on longer-term and FDI flows, can lower growth potential and raise crisis risks.

[7] Ostry et al., 2012b discuss this issue.

[8] See, for example, Chowla, 2011, and Gallagher et al., 2012.

[9] Subramanian, 2012 develops this view as part of an argument for codifying an international regime for capital account transactions.

among G20 members and not the whole Fund membership, and are general conclusions rather than a detailed proposal for developing an operational approach to managing capital flows, they do cover areas of major policy concern that apply across countries and provide a useful reference point for building an institutional view (Annex I). In order to make them operational for policy purposes, it would be important to reflect on additional considerations, such as the appropriate policy mix and conditions for capital flow measures, cross-country spillovers, and reforms to manage the risks associated with capital flows. The proposed institutional view takes into account and builds upon the G20's conclusions with respect to the liberalization and management of capital flows.

8. A large number of bilateral and multilateral international agreements have established norms and rules applicable to their signatories with respect to capital flows.[10] For example, the Organisation for Economic Co-operation and Development (OECD) Code of Liberalization of Capital Movements establishes obligations for high levels of openness.[11] Similarly, the Treaty on the Functioning of the European Union (EU) has established free capital movements as a binding obligation among EU members and between EU members and third countries. In addition, numerous bilateral and regional trade agreements and investment treaties also include provisions that give rise to obligations on capital flows.

9. A broad range of policies in both recipient and source countries influence capital flows. Such policies include macroeconomic and structural policies, supervisory and regulatory frameworks, and measures that are specifically designed to limit capital flows. The latter measures are referred to as capital flow management measures (CFMs) for the purposes of the institutional view proposed in this paper. The assessment of whether a measure is designed to limit capital flows would need to take into account country-specific circumstances, including the overall context in which the measure was introduced. (Annex II provides a further discussion of terminology and some examples of recent CFMs implemented by members.) Measures that are designed to limit capital flows can potentially be used to substitute for warranted macroeconomic, structural, and other policies and they can have multilateral effects. The proposed institutional view therefore considers their appropriate role in the overall economic policy framework.

10. The paper is organized as follows. Section II discusses capital flow liberalization, Section III the policy challenges involved in managing surges of inflows and disruptive outflows, Section IV the role of the Fund with regard to capital flows and related policies, and Section V raises issues for discussion. The institutional view is applicable to all members. In practice, the discussion in Section II is mainly relevant for the removal of long-standing CFMs (in other words, CFMs on portions of the capital account that have been restricted for a long period) and the discussion in Section III for newly-adopted measures (in other words, CFMs introduced to previously open portions of the capital account). The guidance on managing capital flows is in any case consistent across the two areas.

[10] Such agreements are discussed in IMF, 2010a.

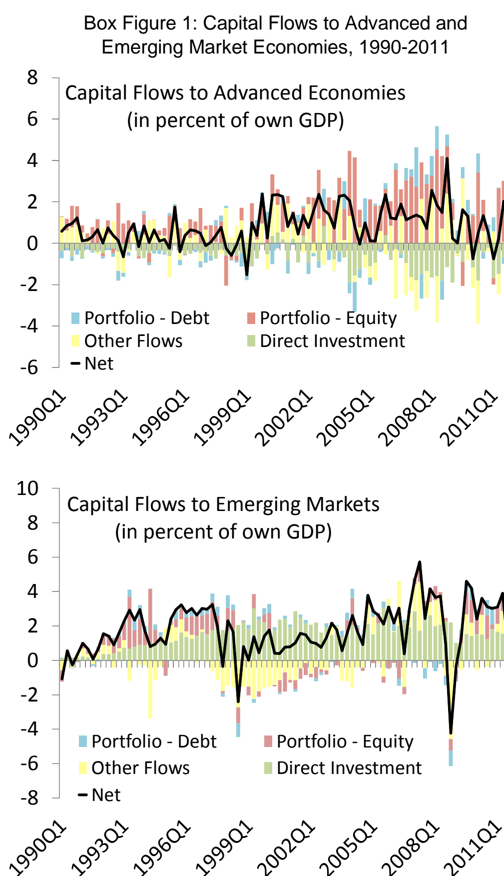
[11] The Code is the only legally binding instrument that focuses comprehensively and exclusively on international capital movements. It stipulates progressive, non-discriminatory liberalization of capital movements and the right of establishment. See OECD, 2011 for details.

Box 1. Capital Flows: Trends and Composition

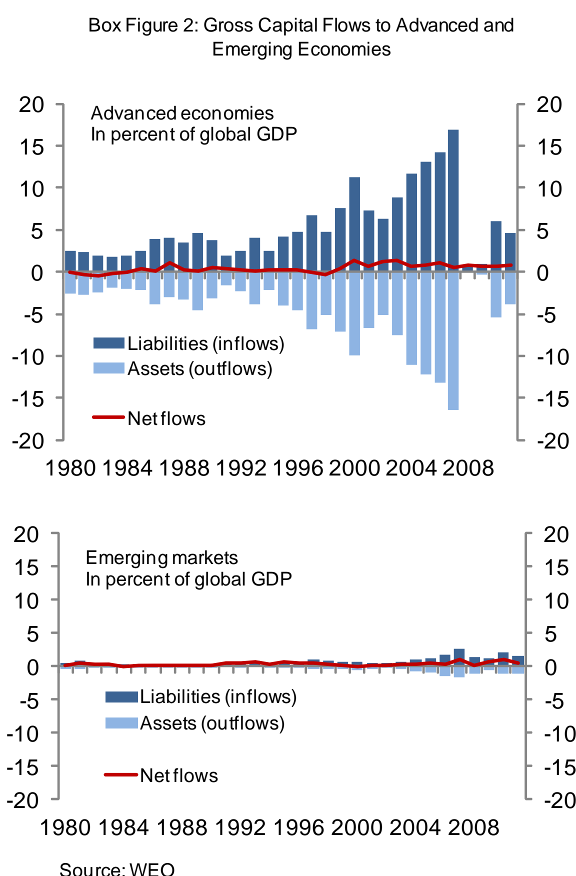
Capital flows have grown significantly over the last two decades in both size and volatility. Gross capital flows have occurred predominantly among AEs, although net capital flows have been significant among both advanced and emerging economies.[1] In particular, net flows to emerging economies are larger as a proportion of each economy's GDP than those to AEs. Global gross flows have increased dramatically, from an average of less than 5 percent of global GDP during 1980–99 to a peak of about 20 percent by 2007. Volatility has also grown, as flows dropped sharply in the aftermath of the global crisis, followed by a moderate recovery.

Capital flows to emerging economies have historically mainly comprised foreign direct investment (FDI), although portfolio and "other investment" (mainly bank-related) have increased substantially since 2003. Indeed, the bulk of the increase in global capital flows during 2003-2007 comprised short-term inflows, including both portfolio and other investment. Debt flows have historically proven more volatile and risky for the financial system than have FDI and portfolio equity flows.[2]

Box Figure 1: Capital Flows to Advanced and Emerging Market Economies, 1990-2011



Box Figure 2: Gross Capital Flows to Advanced and Emerging Economies



1/ "Emerging economies" are defined here as all emerging market and developing countries (WEO group 200) but excluding countries eligible for concessional financing from the Fund (WEO group 30).
2/ IMF, 2011a and Ostry et al., 2012.

II. CAPITAL FLOW LIBERALIZATION

11. "Capital flow liberalization" in this paper refers to the removal of measures that are designed to limit capital flows (that is, CFMs).[12] The concept includes the underlying capital transaction as well as the related payment or transfer, and it implies unrestricted convertibility of local currency in international financial transactions. Liberalization does not rule out the temporary re-imposition of such measures under certain circumstances. It also does not rule out the maintenance of prudential measures that, while CFMs, are needed for financial system stability or measures that members may maintain for reasons of national security.

A. Benefits and Risks of Liberalization

12. In recent decades, there has been a gradual trend toward liberalization of capital flows, both inward and outward, among member countries (Figure 1). The trend has been particularly pronounced in emerging Europe, although systemically important emerging economies (including, for example, China and India) have also announced plans for further liberalization.[13] The pace of liberalization moderated slightly in the wake of the global crisis, but the general trend across the world remains one of increasing openness to cross-border capital flows. Where authorities have intervened to influence capital flows, they have generally done so not by re-regulating permanently significant parts of the capital account but by targeting temporarily specific types of flows.[14]

13. It is recognized that CFMs can impose costs on the economy. They can reduce discipline in financial markets and public finances, tighten financing constraints by restricting the availability of foreign capital, and limit residents' options for diversifying their assets.[15] They can also be costly to monitor and enforce, promote rent-seeking behavior and corruption, and facilitate repression of the financial sector, impeding financial development and distorting the allocation of capital.

14. The move toward liberalization reflects countries' recognition of the benefits of capital flows under the right conditions. At a microeconomic level, capital flows can enhance the efficiency of resource allocation and the competitiveness of the domestic financial sector. Moreover, as countries develop they require more advanced financial systems, which often go hand in hand with greater cross-border capital flows.[16] In addition, capital flows can facilitate the transfer of

[12] The concept of "capital flow liberalization" is used in this paper interchangeably with "capital account liberalization" and "financial account liberalization" that are used traditionally in the literature. In addition, the literature generally refers not to CFMs but to "capital controls", which is focused on residency-based measures.

[13] See IMF, 2012a for a summary of recent reform plans and measures in China and India.

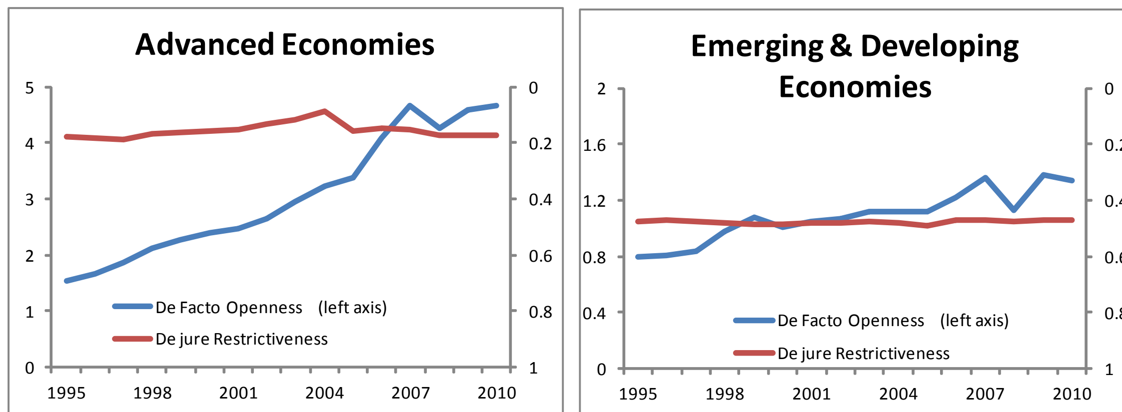
[14] For instance, they have attempted to redirect flows into longer maturity instruments (Brazil, Indonesia, Thailand, Uruguay).

[15] See Aizenman and Glick, 2008, Forbes, 2005, 2007a, and 2007b, and Greenwood, 2008.

[16] Levine, 2005 presents empirical evidence of the relationship between financial development and growth. Obstfeld, 2009 argues that a plausible explanation for the general trend toward capital flow liberalization notwithstanding the uncertain empirical relationship between liberalization and growth is that financial development is a concomitant of growth, and a growing financial sector in an economy open to trade cannot long be insulated from cross-border financial flows.

technology and management practices, particularly through foreign direct investment (FDI). Capital flow liberalization can have indirect or "collateral" benefits for intermediate objectives, such as financial sector development, macroeconomic policy discipline, trade, and economic efficiency.[17] At a macroeconomic level, capital flows enable countries to fund welfare-enhancing current account imbalances (for example, for productive investment or consumption smoothing). Moreover, they can enable beneficial portfolio diversification.[18] The empirical relationship between capital flows and growth is well documented for FDI and other non-debt flows, including for low-income countries, but it is less clear cut for debt-creating flows.[19]

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



Sources: Annual Report on Exchange Arrangements and Exchange Restrictions; World Economic Outlook.
Note: The de jure index is based on staff estimates of the average ratio of the number of restricted transaction categories in the capital account to the total number of transaction categories for which information is available in the AREAER. Thus, the index ranges from 0 to 1, and a decrease in the index indicates greater openness. The de facto index is based on the staff-updated Milesi-Ferretti de facto openness index. It is the sum of gross stocks of foreign assets and liabilities for each country in the group as a ratio of the group's total GDP. An increase in the de facto index thus indicates greater openness. 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.

15. **Well-designed capital flow liberalization can help countries realize the benefits of capital flows, forgo the costs of CFMs, and support key economic objectives**. At the same time, some countries have sustained rapid growth rates notwithstanding relatively closed capital accounts, with China and India being notable examples. Capital flows have, nonetheless, played a role in

[17] See, for example, Kose et al., 2009, and Prasad et al., 2003.

[18] See Chen et al., 2009, Dell'Arricia et al., 2008, Henry, 2007, Kose and Prasad, 2004, Ishii et al., 2002, and IMF, 2012a.

[19] See Aizenman and Sushko, 2011, Dabla-Norris et al., 2011, Edwards, 2007, Henry, 2007, and Kose et al., 2008 on the former point and Jeanne et al., 2012 on the latter point. The lack of a positive relationship between liberalization and growth in empirical studies could, however, stem from incorrect hypothesis specification (Henry 2007), lack of recognition of the indirect collateral benefits of financial openness on growth, such as through greater macroeconomic discipline and financial development (Kose et al., 2009), and lags in the effects of capital flow liberalization on growth.

growth in some cases; in China, for example, large inward FDI flows over several decades have contributed to capital, technology, and managerial expertise. In any event, building on their progress with respect to reforms (such as financial sector reform) that support liberalization, several large emerging economies are now moving in the direction of further capital flow liberalization.

16. The benefits of capital flow liberalization are largest when countries have achieved certain levels of financial and institutional development.[20] In particular, in order to strengthen countries' capacity to absorb and manage inflows and outflows, their financial systems need to be able to mediate flows safely, allow firms to access capital to finance productive investment, and give households and firms the ability to diversify their portfolios while managing the risks. Their institutions need to bolster the resilience of financial, corporate, and household balance sheets. Country experiences suggest that capital flow liberalization is more likely to be successful if it is supported by sound fiscal, monetary, and exchange rate policies, and exchange rate flexibility can help cushion the real economy against the effects of capital flow volatility. Greater trade openness can support capital flow liberalization by raising countries' ability to attract foreign capital and by supplementing domestic demand with external demand, which can mitigate the growth and financial effects of crises.

17. At the same time, capital flow liberalization carries risks, which are magnified when countries have yet to attain sufficient levels of financial and institutional development. The risks include heightened macroeconomic volatility and vulnerability to crises. In the absence of adequate financial regulation and supervision, financial openness can create incentives for financial institutions to take excessive risks, leading to more volatile flows that are prone to sudden reversal. Historically, capital flow liberalization has often been followed by financial crises, and, during the recent crisis, financially open economies experienced larger output losses.[21] While causality is difficult to ascertain owing to econometric concerns in estimation, these experiences highlight the risks associated with liberalization in advance of basic prerequisites being met. At the same time, countries where CFMs were already in place, or were re-imposed, have also experienced contagion.[22] Moreover, macroeconomic and financial policies could play a key role in precipitating crises.

[20] See Dell'Arricia et al., 2008, IMF, 2012a, Prasad and Rajan, 2008, Kose et al., 2009, and Ishii et al., 2002, who discuss how factors such as macroeconomic stability and financial development, institutional quality, and trade openness serve as preconditions for successful capital flow liberalization. While the specific thresholds for these factors vary across studies, a general conclusion remains that countries that are advanced relative to the thresholds benefit relatively more from liberalization.

[21] Experiences include Mexico (1994-95 crisis), Turkey (1994 and 2000 crisis), Korea (1997 twin crisis), Russia (1998 crisis), the Asian crisis of 1997-1998, and Estonia, Iceland, Ireland, Latvia, Lithuania, and others during the recent global financial crisis. These experiences are discussed in IMF, 2011i, 2012a, Ishii et al., 2002, Demirgüç-Kunt and Detragiache, 1998, Kaminsky and Reinhart, 1999, Kose et al., 2009, Dell'Arricia et al., 2008, Edwards, 2007, and Pinto and Ulatov, 2010.

[22] See Henry, 2007, and Ishii et al., 2002 for a more general discussion.

18. Against this background, there is no presumption that full liberalization is an appropriate goal for all countries at all times. The degree of liberalization appropriate for a country at a given time depends on its specific circumstances, notably its financial and institutional development. At the same time, careful liberalization of capital flows can provide significant benefits, which countries could usefully work toward realizing over the long run. Moreover, a country could make progress toward greater capital flow liberalization before reaching all of the necessary thresholds for financial and institutional development, and indeed doing so may itself spur progress in these dimensions.[23] At the same time, liberalization needs to be managed particularly cautiously if the threshold conditions are not yet met, as the risks are higher.[24] Nevertheless, exceeding key thresholds for financial and institutional development does not eliminate the risks associated with capital flows.

19. Indeed, as the recent global financial crisis has shown, large and volatile capital flows can pose risks even for countries that have long been open and drawn benefits from capital flows and that have highly developed financial markets. For example, in several advanced economies, financial supervision and regulation failed to prevent unsustainable asset bubbles and booms in domestic demand from developing that were partly fueled by cheap external financing. Rather than favoring closed capital accounts, these experiences highlight the need for policymakers to remain vigilant to the risks. In particular, there is a constant need for sound prudential frameworks to manage the risks that capital inflows can give rise to, which may be exacerbated by financial innovation.[25]

20. Several countries with long-standing and extensive CFMs would, however, likely benefit from careful further liberalization. Among emerging economies, for example, significant progress has been made with respect to the pre-conditions for liberalization. Macroeconomic cushions are ample with strong growth, low inflation, and high foreign reserves; the composition of external flows includes a relatively large share of FDI and equity flows; financial development is reflected in growing financial market depth and enhanced regulation and supervision; institutional quality and governance are deemed by investors to be improving; and trade openness has increased over time.[26] Liberalization by larger economies could substantially affect gross global capital flows, just as limited liberalization or new CFMs in some economies could divert flows toward those with more open markets.[27] Evidence on the magnitude of these multilateral effects is, however, unclear.[28]

[23] Several countries with less developed financial markets have safely benefited from liberalization (such as Kenya). Mishkin, 2009 argues that financial globalization indirectly fosters financial development by reducing the incentives for financial repression, enhancing financial sector efficiency owing to competition from foreign banks, and encouraging institutional reforms such as better accounting standards and disclosure requirements. Some support for this conjecture is also provided in the studies of the Czech Republic, Estonia, and Lithuania by Dell' Ariccia et al., 2008.

[24] Kose et al., 2009.

[25] Aspachs-Bracons et. al, 2009, IMF, 2009, IMF, 2012b.

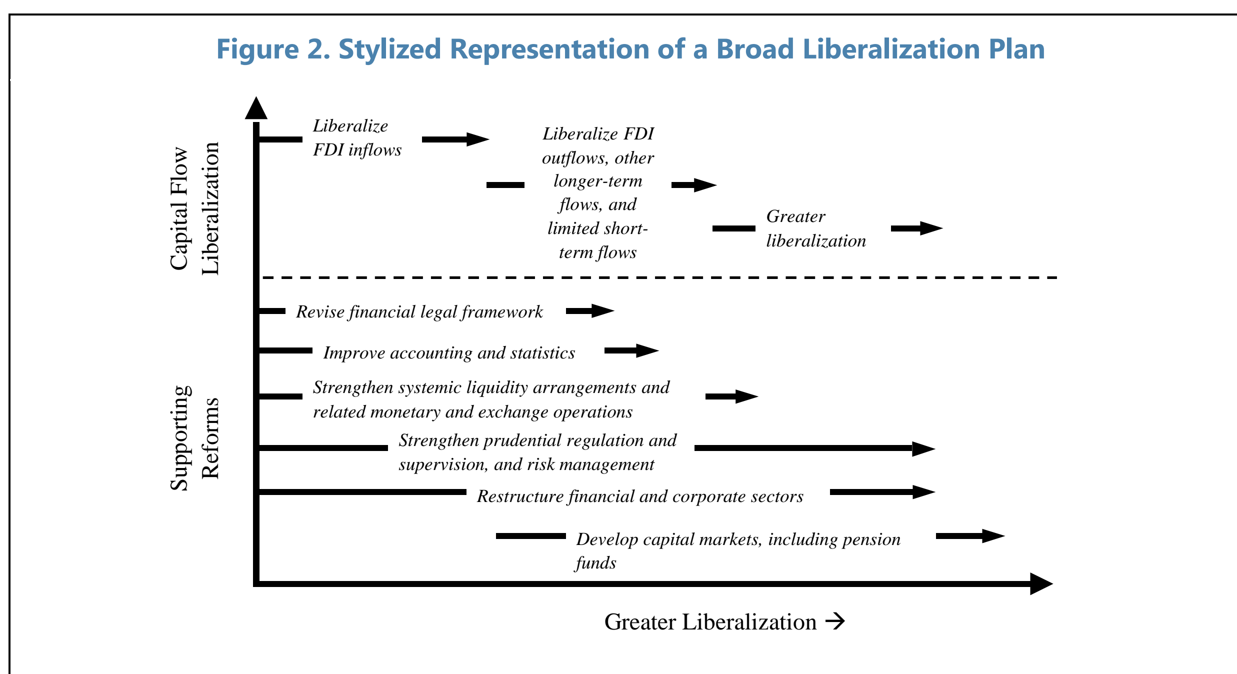
[26] See, for example, IMF, 2012b, IMF 2011b, and IMF 2012c for discussions of macroeconomic conditions, financial development, and external buffers in emerging economies, and World Bank and IFC (2012) for a discussion of their institutional development.

[27] See IMF, 2012b, paragraph 19.

B. The Integrated Approach to Capital Flow Liberalization

21. In order to harness the benefits of liberalization while managing the risks, a systematic process and pace of liberalization is needed that is also consistent with each country's institutional and financial development. The "integrated approach" as discussed in previous papers seeks to outline such a process and pace (Figure 2). It suggests the removal of CFMs in a manner that is properly timed and sequenced taking into account other policies and conditions, notably macroeconomic and financial sector prudential policies.[29] The path toward and extent of liberalization needs to be tailored to countries' particular circumstances and objectives. For example, liberalization could take advantage of periods of lower external vulnerability.

Figure 2. Stylized Representation of a Broad Liberalization Plan



22. For countries that seek to liberalize capital flows, the integrated approach envisions proceeding through successive, and often overlapping, phases. The phases comprise: first, the liberalization of FDI inflows, which are more stable than other flows and more closely correlated with growth; second, the liberalization of FDI outflows and long-term portfolio flows; and, finally, the liberalization of short-term portfolio flows. The phases require a range of progressively deeper and broader supporting reforms to the legal, accounting, financial, and corporate frameworks.

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[28] See IMF, 2011a for further discussion. While capital flow liberalization would affect the volume of gross capital flows, the impact on net flows is ambiguous because outflows of savings from countries with few domestic investment choices could exceed the presumed body of capital waiting to pour in. Also, controls themselves create some opacity about how much capital is dammed up behind the wall of capital controls.

[29] Sequencing should be based on individual country circumstances, such as macroeconomic and financial sector vulnerabilities, institutional and market development, design and effectiveness of existing controls, ability of the financial and nonfinancial sectors to deal with large and volatile capital flows and manage the risks related to international capital flows and exchange rate flexibility, and authorities' capacity to efficiently administer and enforce controls.

It is important continually to strengthen financial markets to bolster their ability to deal with capital flows, improve prudential regulations and supervision to ensure adequate risk management, and assess the role that existing CFMs play in the financial system and the potential effects of relaxing them.[30]

23. The temporary re-imposition of CFMs under certain circumstances is consistent with an overall strategy of capital flow liberalization.[31] In particular, when a country faces an inflow surge or an outflow crisis introducing CFMs may be appropriate under certain circumstances (discussed in Section III below) in order to manage the risks associated with such volatility. As also discussed in Section III, in most circumstances such use of CFMs should be limited and temporary; in the liberalization context, this is important so as to not give rise to moral hazard, undermine market discipline by weakening financial institutions' incentives to develop proper risk management because they expect to be shielded by CFMs, and adversely affect investor confidence.[32] In addition, however, if liberalization has outpaced the capacity of the economy to safely handle the resulting flows, the re-imposition of CFMs may be warranted until sufficient progress has been made with respect to the macroeconomic, financial, and governance policies that the integrated approach recommends.

24. Countries whose liberalization strategies mirrored the integrated approach generally were able to withstand external shocks better during and after liberalization. Capital flow liberalization in Korea over the past decade or so corresponds in key respects to the integrated approach, with a well-considered sequence of financial reforms being set in train against the background of sound and stable macroeconomic policies. Korea achieved a high degree of financial integration, even though it did experience bouts of capital flow volatility and Korean banks experienced rollover difficulties during the global financial crisis owing to substantial foreign-currency short-term debt accumulation. Among Nordic countries, strong legal institutions, bankruptcy procedures, and macroeconomic policy transparency helped restore growth relatively quickly after those countries experienced a financial crisis during the 1990s.[33] Most countries, however, have only partly followed the integrated approach, which contributed to adverse outcomes in some cases. Although countries that liberalized over the past decade sequenced the lifting of CFMs by and large in an appropriate manner, liberalization was not always supported by financial sector and macroeconomic policies.[34]

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[30] The sequence is sometimes loosely summarized as "long term before short term, FDI (and non-debt) before debt, and inflows before outflows."

[31] The experiences of Spain and Indonesia, as well as Brazil and Korea during the global crisis, highlight how regulations or re-imposition of restrictions on certain transactions can mitigate the build-up of vulnerabilities. (See Dell'Arricia et al., 2008, for a discussion of the experience in Spain and Indonesia.)

[32] IMF, 2012a. Damage to investor confidence is not inevitable, particularly if the basis for the policy is well communicated and widely understood. The imposition of the IOF tax in Brazil, for example, did not cause capital outflows because investors remained confident of the authorities' general commitment to openness (Forbes et al., 2012).

[33] Vastrup, 2009, and Jonung, 2010.

[34] See IMF, 2012a for further discussion of country cases.

III. MANAGING CAPITAL FLOWS

25. A range of policies is needed to reap the benefits of more open capital flows while managing the risks. Strengthening and deepening financial markets, and improving countries' institutional capacity, would help improve their ability to handle capital flows. Capital flows, both inward and outward, generally warrant adjustments in macroeconomic variables, including the real exchange rate, and policies need to facilitate these adjustments. Volatile capital flows can give rise to macroeconomic and financial stability risks. The appropriate combination of policies for addressing these risks would depend upon country circumstances, and the toolkit would include macroeconomic and financial policies. Capital flow measures are a part of the toolkit and their use is appropriate under certain conditions, but they should not substitute for warranted macroeconomic adjustment. When capital flows contribute to systemic financial risks, CFMs in combination with macro-prudential measures more broadly can help to safeguard financial stability, although their costs need also to be taken into account.

26. Policies of countries from which capital flows originate are also relevant, since flows are influenced by both push and pull factors.[35] Push factors include monetary and prudential policies in systemically large economies and global risk appetite; while pull factors include institutions, policies, and macroeconomic fundamentals, including growth prospects, in recipient countries. Empirically, push factors seem to influence whether inflow surges occur and the riskiness of flows, while pull factors determine the direction and magnitude of such surges.[36]

A. Inflows

27. A key challenge for many economies is to have in place the policies and institutional setup to effectively absorb inflows and channel them toward productive investment. Inflows can help supplement domestic saving to finance domestic investment, entail technological spillovers (particularly through green-field FDI), and expand trade finance. Structural reforms that can help economies to better absorb capital inflows include steps to deepen domestic bond and equity markets, develop financial products in a safe manner, and strengthen financial regulation and supervision while streamlining rigidities.[37] Infrastructure investment, for example, requires long-term and large scale funds that non-resident investment can help to supplement. Local bond markets that are well developed and integrated can facilitate the raising and intermediation of such resources.[38]

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[35] IMF, 2011a and 2012b. See, for example, Arora and Cerisola, 2001, Cardarelli et al., 2009, Ghosh et al, 2012, and Reinhart and Reinhart, 2008, for empirical evidence on the impact of U.S. monetary policy on capital flows to emerging economies.

[36] Ghosh et al., 2012.

[37] See IMF, 2010b and 2011c.

[38] Developing local bond markets in turn requires the development of a benchmark yield curve, and reforms would also be useful to introduce or strengthen third-party credit monitoring (such as bond insurance and credit bureaus), hedging tools for investors, and effective systems for new debt offerings.

More generally deeper capital markets would also increase the absorptive capacity of capital-recipient countries when faced with inflow surges, reducing the volatility caused by such surges.[39]

28. Surges of inflows can pose problems for policymakers.[40] Surges can lead to financial and macroeconomic volatility by overwhelming domestic financial markets and stretching the capacity of macroeconomic policies to adjust.[41] They can lead to asset price volatility and bubbles, rapid exchange rate appreciation, credit booms and unsustainable drops in risk premia, distortions in money markets, and disruptions in monetary policy transmission. Over time, these problems can lead to a build-up in balance sheet and other vulnerabilities (as seen during the recent crisis, for example, as discussed above). Surges can also be followed by sudden stops or reversals of capital inflows.

Policy Options for Responding to Capital Inflow Surges

29. Countries have responded in a variety of ways to rapid large inflows. Some have relied almost exclusively on macroeconomic policies, such as the maintenance of a low policy rate in Turkey, foreign exchange market intervention in Japan and Switzerland, and currency appreciation in South Africa. In other cases, macroeconomic policies have been accompanied by CFMs and prudential measures, such as Brazil's tax on certain types of inflows, Indonesia's holding period on central bank bond purchases, and Korea's leverage caps on banks' derivatives positions.

30. The appropriate policy mix for addressing the macroeconomic and financial stability risks to which inflow surges can give rise depends on a variety of country-specific considerations. Appropriate macroeconomic policies to respond to inflow surges would include rebalancing the monetary and fiscal policy mix consistent with inflation and growth objectives, allowing the currency to strengthen if it is not overvalued, and building foreign reserves if these are not more than adequate. Building on the analysis in IMF 2011d, Ostry et al. (2010, 2011, 2012a), and BIS 2008, such policies would include:

- *Lowering interest rates in the absence of overheating or asset price inflation*. Lower policy rates or, if the scope for monetary easing is limited owing to say inflation pressures, fiscal tightening would reduce the interest differential between domestic and foreign assets (a pull factor).

- *Allowing the currency to strengthen if it is not overvalued relative to fundamentals*. Currency appreciation would facilitate external adjustment. It would also help to counter inflation pressures by tightening monetary conditions. Some temporary overshooting relative to fundamentals may even be warranted to reflect the fact that foreign exchange markets typically adjust faster than

[39] For example, Burger and Warnock, 2006 provide evidence that deeper bond markets are associated with lower volatility.

[40] See IMF, 2011d, and BIS, 2008.

[41] For the purpose of the analysis in this paper, a "surge" is broadly defined as rapid capital inflows beyond historical trends. A precise definition is not warranted here but, for example, Ghosh et al., 2012 define a surge as an episode where net capital inflows to a country exceed the 30th percentile of the historical trend in the country as well as in a cross-country sample. In IMF, 2011d, a surge is identified a period when net inflows exceed the historical trend by one standard deviation and are larger than 1½ percent of GDP.

goods markets and to help prevent destabilizing one-way bets for future appreciation. If capital inflows are likely to be sustained over the medium term, currency appreciation is needed to keep the exchange rate in line with evolving fundamentals.

- *Intervening in the foreign exchange market to accumulate international reserves if reserves are not more than adequate*. Inflow surges provide an opportunity to build reserves for countries whose reserves are lower than levels required for precautionary purposes. Reserve accumulation can also help to limit excess exchange rate volatility in the short term and smooth the impact on balance sheets.[42] However, when reserves are already relatively high, intervention costs such as sterilization costs and valuation losses on foreign assets can outweigh the benefits. Moreover, heavy intervention during sustained inflows can exacerbate the inflows by fueling expectations of further appreciation.

31. In certain circumstances, introducing CFMs can be useful for supporting macroeconomic policy adjustment and safeguarding financial system stability.[43] It may be difficult at times to assess quickly the appropriate macroeconomic stance owing to rapidly changing underlying economic conditions, and CFMs can help gain time to make such assessments. CFMs can also have a role in circumstances such as the following:

- *When the room for adjusting macroeconomic policies is limited* (as illustrated in Figure 3). For example, if the economy is overheating or showing signs of asset bubbles, the exchange rate is overvalued, and further reserve accumulation would be inappropriate or unduly costly.

- *When the needed policy steps require time, or when the macroeconomic adjustments require time to take effect*. For example, fiscal policy changes often take relatively long to approve, implement, and finally affect the real economy. Monetary policy effectiveness may be delayed if monetary transmission channels are weak or inflation expectations have inertia. In such cases, CFMs can be temporarily useful while the necessary policies are being implemented and their effects have yet to be realized.

- *When an inflow surge raises risks of financial system instability*. Systemic financial risks that are unrelated to capital flows are better addressed by macro-prudential measures (MPMs), which are targeted specifically to deal with such challenges.[44] However, if an inflow surge contributes to systemic financial instability risks, then MPMs designed to limit these inflows (and therefore considered also to be CFMs) may be useful provided that they accompany needed macroeconomic policy adjustment and financial sector regulations, and do not divert flows in such a way as to exacerbate vulnerabilities in particular segments of the economy.

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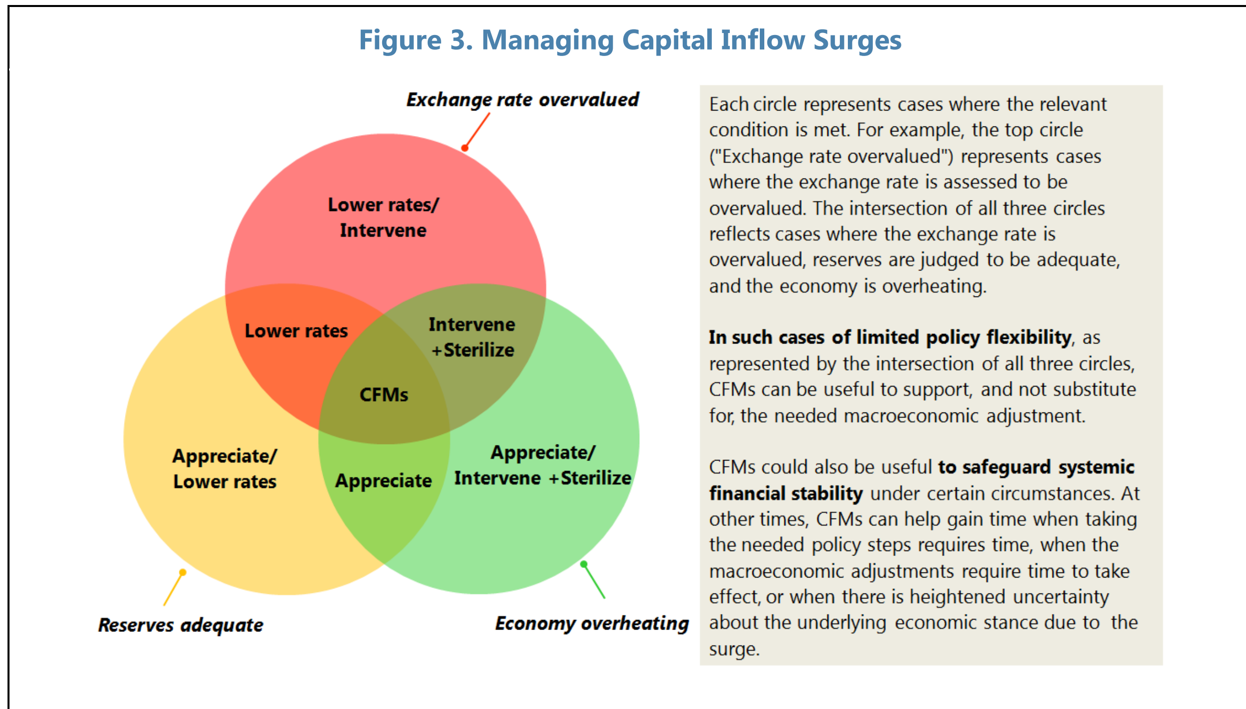
[42] Neely, 2008 and IMF, 2011f.

[43] BIS, 2008 discusses experience with the use of CFMs in a number of advanced and emerging economies. IMF, 2011d reviews measures implemented in key emerging economies during 2010-2011. Ostry et al., 2010 and Habermeier et al., 2011 survey the effectiveness of CFMs.

[44] Brockmeijer et al., 2011 provide a discussion of such policies, and Nier et al., 2011 discuss some of the institutional considerations in determining country-specific policy choices.

Figure 3. Managing Capital Inflow Surges



Each circle represents cases where the relevant condition is met. For example, the top circle ("Exchange rate overvalued") represents cases where the exchange rate is assessed to be overvalued. The intersection of all three circles reflects cases where the exchange rate is overvalued, reserves are judged to be adequate, and the economy is overheating.

In such cases of limited policy flexibility, as represented by the intersection of all three circles, CFMs can be useful to support, and not substitute for, the needed macroeconomic adjustment.

CFMs could also be useful **to safeguard systemic financial stability** under certain circumstances. At other times, CFMs can help gain time when taking the needed policy steps requires time, when the macroeconomic adjustments require time to take effect, or when there is heightened uncertainty about the underlying economic stance due to the surge.

32. In several circumstances, however, the use of CFMs is not recommended. In particular:

- *CFMs should not substitute for macroeconomic policies* that are needed for warranted external adjustment, domestic macroeconomic stability, and effective operation of the international monetary system. For example, using CFMs to influence exchange rates in order to gain unfair competitive advantage would not be appropriate; it could also be inconsistent with countries' exchange rate obligations under Article IV.[45]

- *From a practical standpoint, experience suggests that in most cases there will be a need (as well as room) to adjust macroeconomic and structural policies*. Only rarely would CFMs be the sole warranted policy response to an inflow surge. Surges are usually driven by a variety of pull and push factors that indicate a need for adjustment in a range of policies on the part of both recipient and source countries.

- *Even when CFMs are desirable, their likely effectiveness remains a key consideration*. CFMs' effectiveness may be limited, especially if they are not accompanied by the needed macroeconomic adjustment. In some countries, measures in response to the 2009-2010 surge episode helped to reduce external vulnerabilities in the financial system, but they were insufficient to achieve external

[45] See IMF, 2012b Box 2. This principle also applies to conventional policies to deal with inflows, such as foreign exchange market intervention. Ostry et al., 2012b, discuss the "equivalence" between CFMs and foreign exchange intervention policies.

adjustment or significantly influence capital flows, in part owing to insufficient exchange rate adjustment.[46] In addition, the efficacy of measures has sometimes eroded over time owing to incentives for circumvention that can persist despite efforts to close loopholes.[47]

33. While the choice of which CFM to use would depend on the expected effectiveness and efficiency, the design and implementation of CFMs should be transparent, targeted, temporary, and preferably non-discriminatory.[48] More specifically:

- *Transparent and targeted*: transparent communication of the policy objectives and specific CFM being used would help to avoid unduly disrupting market and public expectations. CFMs that address the sources of instability as directly as possible may be least costly and most effective for dealing with specific risks. Broader measures are more suitable for addressing overall macroeconomic concerns. The balance among the scope, cost, and effectiveness of measures needs to be evaluated in a country-specific context, as measures that are too broad may be unnecessarily costly while those that are too narrow may be easy to circumvent and therefore ineffective.

- *Temporary*: If CFMs are adopted, they should be scaled back when capital inflow pressures abate in order to minimize their distortions (although certain special considerations apply to overlapping CFMs/MPMs, as discussed in paragraph 34 below). Certain CFMs, including residency- or nationality-based measures, may be maintained over the longer term, provided that they are imposed for reasons other than balance of payments purposes (such as financial stability risks)—and, therefore, by design, could not substitute for macroeconomic adjustment—and that no less discriminatory measure is available that is effective. [49]

- *Non-discriminatory*: It is generally preferable that CFMs not discriminate between residents and non-residents, and that the least discriminatory measure that is effective be preferred. However, when failure to discriminate between residents and non-residents would render the policy ineffective, this may provide a justification for using residency-based measures. The preference for non-discriminatory measures mainly reflects a regard for the general standard of fairness and equal treatment that Fund members expect their nationals will enjoy as a result of members' participation in a multilateral framework like the Fund.[50]

[46] See IMF, 2011f for the case of Korea.

[47] Ostry et al., 2010.

[48] IMF, 2011d and Ostry et al., 2011. The choice between price and quantity based measures, or a combination of measures, is influenced by a host of factors (Korinek, 2011). Habermeier et al., 2011 find, however, that the form of inflow controls does not affect their effectiveness.

[49] Similarly, measures put in place for national security purposes, while they may be designed to limit capital flows, may remain warranted for a longer period, given their inherently non-balance of payments purposes.

[50] For example, where currency-based measures are available and would be effective, they should be preferred to residency-based measures. The avoidance of discrimination *among* Fund members would also parallel with the Fund's approach with respect to payments and transfers for current international transactions. See also IMF, 2011d, paragraph 53, and IMF, 2012a, paragraph 27 for an elaboration of these points. In addition, the focus on residency (rather than, for example, citizenship) is particularly appropriate given the Fund's mandate to promote the effective

(continued)

34. When capital inflow surges contribute to both macroeconomic and systemic financial sector risks, the policy approach would draw on both the proposed institutional view on capital flows and the policy toolkit for MPMs.[51] In such circumstances, a particular measure that is designed to limit capital inflows in order to address these risks could be seen as being both an MPM and a CFM (Box 2). The key principles, which are consistent between the institutional view and the MPM policy toolkit, are to: (i) avoid using CFMs/MPMs as a substitute for necessary macroeconomic adjustment; (ii) subject to the above, use the policy instruments that are the most effective, efficient, and direct, and the least distortive, in addressing the policy objective; and (iii) seek to treat residents and nonresidents in an even-handed manner.

35. An important consideration is how and when to exit from CFM/MPMs. When inflows are no longer unduly large or volatile, CFMs could impose unnecessary costs on the economy or at best be ineffective. Some prudential measures, on the other hand, may continue to be useful for managing systemic financial risks after the surge is over, and their usefulness relative to their costs needs to be evaluated on an ongoing basis. A key part of the assessment would be whether there is an alternative way to address the prudential concern that is not designed to limit capital flows.[52] Moreover, if the previous surge reveals that liberalization has outpaced the capacity of the economy to safely handle the resulting flows, further reforms to improve institutional and financial development may need to be implemented before CFMs can safely be lifted.

Box 2. Capital Flow Management and Macroprudential Measures

CFMs and MPMs are often perceived as similar, but their primary objectives do not necessarily overlap. CFMs are measures (often price-based or administrative) that are designed to limit capital flows, while MPMs are prudential tools that are primarily designed to limit systemic financial risk and maintain financial system stability. While CFMs aim to contain the scale or influence the composition of capital flows, MPMs seek to contain the buildup of systemic financial risks, irrespective of whether the origin of the risk is domestic or cross-border. For example, a tax on specific cross-border inflows is a CFM and may only indirectly affect financial stability. On the other hand, a capital surcharge on systemically important financial institutions or counter-cyclical provisioning is an MPM that has only an indirect impact on capital flows.

There are situations, however, when CFMs and MPMs overlap. To the extent that capital flows are the source of systemic financial sector risks, the tools used to address those risks can be seen as both CFMs and MPMs. An example could be when capital inflows into the banking sector contribute to a boom in domestic credit and asset prices. A restriction on banks' foreign borrowing, for example through a levy on bank foreign exchange inflows or required reserves on banks' foreign exchange liabilities would aim to limit capital inflows, slow down domestic credit and asset price increases, and reduce banks' liquidity and exchange rate risks. In such cases, the measures are designed to limit capital inflows as well as reduce systemic financial risk and would be considered both CFMs and MPMs.

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operation of the international monetary system, which comprises the official arrangements governing transactions between residents and non-residents.

[51] See IMF, 2011d and 2011g.

[52] In Brazil, for example, the IOF tax rate on inflows was adjusted after the inflows slowed in 2011. In Korea, on the other hand, the measures that were introduced in response to the surge in 2010 were kept in place on macro-prudential grounds even after inflows abated. There is some evidence that countercyclical macro-prudential policies can help to lower the risks of macroeconomic and financial instability (N'Diaye, 2009).

36. In general, policy options for managing inflow surges depend upon country-specific factors, which determine what options are feasible and effective. For example, larger economies with more developed financial markets may find that foreign exchange intervention or administrative controls that are effective in other settings are ineffective for them. Countries' international obligations would also limit the available options; for instance, within the EU full capital mobility is generally required.

37. All policy options involve costs and trade-offs. Macroeconomic policies, structural policies, and CFMs can help to deal with capital inflow surges, but they can entail both short and long term costs. If exchange market intervention and CFMs "over-smooth" volatility, they can create incentives for one way bets and stifle market development. Keeping interest rates too low for too long can create overheating pressures or asset bubbles, while sustained intervention can add to sterilization costs that weaken central bank capital. CFMs can generate negative market reactions if they are costly for investors or are misconstrued, affecting future willingness to invest. CFMs can also lead to distortions and divert flows to particular segments of the economy, creating new vulnerabilities, and can entail administrative costs. Overall, therefore, while each of these policies may have a role to play, each should only be used to the extent that the benefits outweigh the costs.

Policy Options for Countries from which Flows Originate

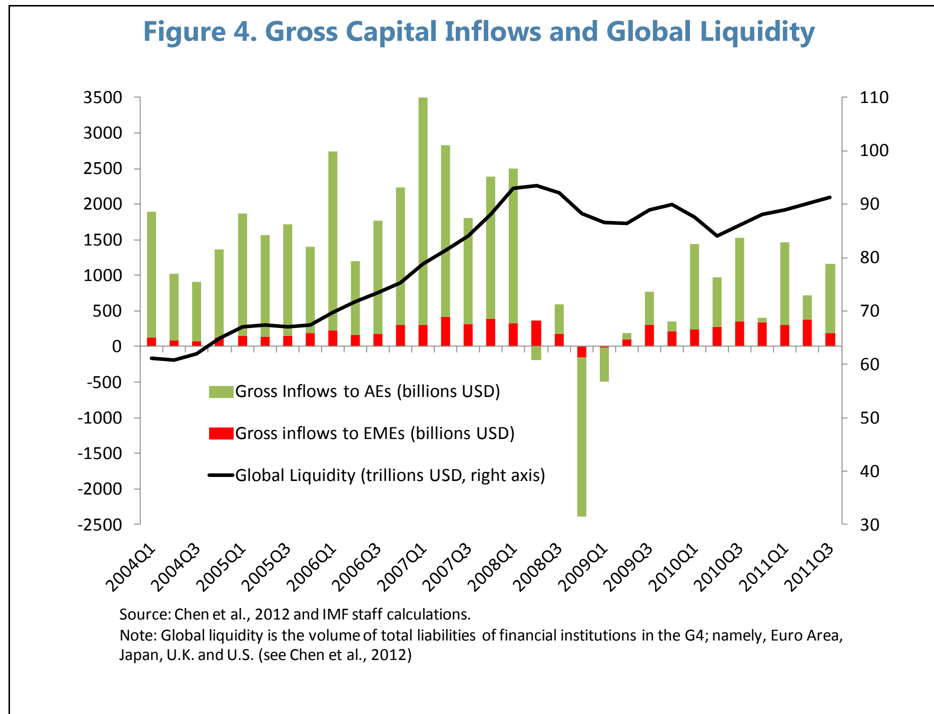
38. Push factors have been well documented to contribute to capital flows.[53] Funds originating in advanced economies dominate capital flows to large emerging economies.[54] These flows are influenced by advanced economy policies, including monetary policy as well as financial supervision and regulation. These policies can contribute to both the volume of cross-border capital flows and their riskiness. Moreover, developments in financial markets over the last two decades have expanded the role of large cross border financial intermediaries and liquidity-creating instruments in global capital flows. The increasing resort by internationally active financial institutions to collateralized capital market funding has changed the relationship between monetary policy and market liquidity, and in the run-up to the crisis it contributed to an endogenous expansion in global liquidity, which comprises flows generated by both the official and the private sector. Since the onset of the crisis, advanced country central banks have injected substantial official liquidity as market-generated liquidity has declined. These developments in official and private liquidity have likely affected the volume and volatility of capital flows to both advanced and emerging market economies (Figure 4).[55]

[53] Committee on the Global Financial System, 2009, IMF, 2010a, 2010f, 2011d. In these analyses, it is recognized that expansionary monetary policy in advanced economies', which has been necessary for fighting the risks of a prolonged global slump, played a role in pushing net capital flows to emerging economies.

[54] IMF, 2011a and 2012b, and BIS, 2008.

[55] Chen et al., 2012.

Figure 4. Gross Capital Inflows and Global Liquidity



Source: Chen et al., 2012 and IMF staff calculations.
Note: Global liquidity is the volume of total liabilities of financial institutions in the G4; namely, Euro Area, Japan, U.K. and U.S. (see Chen et al., 2012)

39. While capital flows largely reflect private transactions, official flows related to reserve accumulation by central banks and foreign asset purchases by governments, including sovereign wealth funds, have become increasingly important (Figure 5). At the same time, a majority of emerging economies still have negative net international investment positions and remain net debtors.[56] These official flows, including reserve-related flows, may partly reflect intervention policies that limit adjustment to global imbalances and contribute to an inefficient global allocation of saving and investment. Furthermore, since reserve holdings largely comprise government securities issued by a small number of reserve currency issuers, the increase in reserves can unduly influence prices in these securities markets.[57]

40. Countries should consider measures to address the macroeconomic and financial stability risks associated with cross-border activities of markets and institutions in their jurisdictions. National and international financial regulatory and supervisory reforms are underway, and completion of key aspects of the agenda is important for mitigating cross-border risks.[58]

[56] IMF 2011h.

[57] See IMF, 2010c and 2010d.

[58] The focus of these improvements has been on enhancing capital and liquidity quality and standards, adopting additional capital requirements for global systemically important banks, strengthening the infrastructure of OTC derivatives markets, expanding the regulatory perimeter to shadow banks, improving the intensiveness and effectiveness of supervision and functioning of supervisory colleges, and strengthening adherence to international standards by members of global standard setting bodies like the Basel Committee on Banking Supervision and Financial Stability Board (FSB).

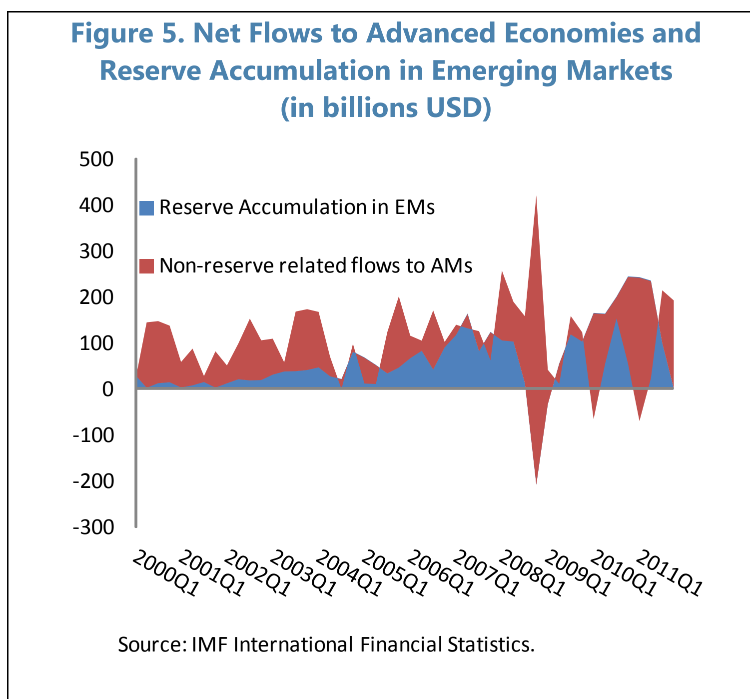


Figure 5. Net Flows to Advanced Economies and Reserve Accumulation in Emerging Markets (in billions USD)

Source: IMF International Financial Statistics.

Progress has been made on reforming international standards for minimum bank capital and liquidity, but progress in other areas has been uneven. As of end-May 2012, 20 of 27 members of the Basel Committee on Banking Supervision had implemented Basel rules related to strengthening capital charges and issued drafts or final Basel III regulations.[59]

41. Refining and completing the reform agenda can have a direct impact on the riskiness of global capital flows. Financial institutions and markets are still extremely complex, with strong interbank linkages, and some institutions remain highly concentrated and "too-important-to-fail."[60] The latter concerns relate, for example, to the global systemically important financial institutions whose business models contributed to the increase in global liquidity that coincided with the rise in capital flows, as discussed above.[61] The robustness of the infrastructure for intermediating capital flows would benefit from further progress on the ongoing reforms of capital, liquidity, and supervisory standards; a consideration of the benefits of restrictions on business models; careful monitoring of systemic nonbank financial institutions within the so-called shadow banking sector; and further progress on recovery and resolution planning for large institutions, including cross-border resolution. Members with global systemically important financial institutions and systemic nonbank financial institutions in their jurisdictions would play an important role in this effort.

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[59] Financial Stability Board, 2012.

[60] IMF, 2012c.

[61] IMF, 2011a.

B. Outflows

42. Capital outflows that are large, sustained, or sudden can pose significant policy challenges. Some capital outflows are a natural consequence of openness, as foreign investors recoup their investments and domestic investors diversify their portfolios and expand business operations abroad. Outflows can, however, become disruptive in some circumstances, which are usually associated with economic crises. Such disruptive outflows can be driven by domestic factors but they can also be driven by international factors such as global risk appetite, liquidity, interest rates, and global growth, and by contagion effects through trade and financial linkages and investor confidence.[62] Disruptive outflows can lead to reserve depletion, currency collapse, financial system stress, and output losses. Even short of crisis, large or sustained outflows can pose challenges through their effects on exchange rates, availability of financing, and interest rates.[63]

43. Building economic and financial resilience is important for withstanding and managing capital outflows safely. Macroeconomic and structural policies and MPMs should aim to increase countries' resilience to capital flow volatility. Experience with crises highlights the importance of sound macroeconomic policy to avoid large flow imbalances and heavy dependence on foreign financing. At the same time, large stock imbalances can exacerbate balance sheet vulnerabilities and raise crisis risks, as evidenced for example by the sharp deterioration of international investment positions in several CEE and southern European countries during the build-up to the global crisis.

44. Outflows should usually be handled primarily with macroeconomic, structural, and financial policies. When there are capital outflows but there is no immediate threat of a crisis, there would usually be scope to adjust macroeconomic and financial sector policies to address the implications, as Korea, Russia, and South Africa did during 2009-2011.[64] Such policies are needed in order to facilitate external adjustment and, moreover, they forgo the potential domestic and multilateral costs of CFMs and avoid damaging market perceptions.

45. In crisis situations, or when a crisis may be imminent, there could be a temporary role for the introduction of CFMs on outflows.[65] For example, when countries face domestic or external shocks that are large relative to the ability of macroeconomic adjustment or financial sector policies alone to handle, or when the size or duration of the shocks are highly uncertain, CFMs may help to prevent a free fall of the exchange rate and depletion of international reserves. When a crisis is considered imminent, CFMs may be desirable if they can help to prevent a full-blown crisis.

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[62] Claessens and Forbes, 2004, Fratzscher, 2002, and Kaminsky and Reinhart, 1999 analyze such effects during the Asian and Russian crises of the 1990s; Ishii et al., 2002 and IMF, 2012a and 2012d do so for subsequent experience; and IMF, 2011d analyzes sudden stops in inflow surges owing to global events.

[63] Magud et al., 2011.

[64] See IMF, 2012a.

[65] See IMF, 2012a.

46. Introducing outflow 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. They should not be used as a substitute for policy adjustment. In a classic balance of payments crisis, for example, fiscal and exchange rate adjustment are an essential part of the policy solution. As some of these other policies could take time to implement or have an impact, CFMs can be used to provide breathing space. CFMs should avoid leading to external payment arrears or default, particularly on sovereign debt, which can undermine relations with creditors and damage the international trade and payments system. Fairness and international monetary system considerations would suggest that members should give precedence to outflow CFMs that do not discriminate on the basis of residency, and, as in the case for inflows, that the least discriminatory measure that is effective should be preferred. It is recognized, however, that residency-based measures may be hard to avoid in crisis-type situations. CFMs should be implemented in a transparent manner.

47. It is difficult to define precisely crisis or imminent crisis conditions, although country experiences and the literature provide a guide. Disruptive capital outflows are usually associated with currency, sovereign debt, and banking and financial crises, and are characterized by corporate and financial distress, depressed asset prices, sharply higher interest rates, significant exchange rate depreciation, and lower output. The Fund's efforts to monitor crisis risks and vulnerabilities include an array of models and indicators, supplemented by market intelligence and staff judgment. These efforts are amalgamated into the Fund's early warning and vulnerability exercises.[66] For example, a global financial and economic stress indicator identifies periods of severe stress and contagion across countries (Figure 6).[67] The index maps historical and periods of systemic stress relatively well.

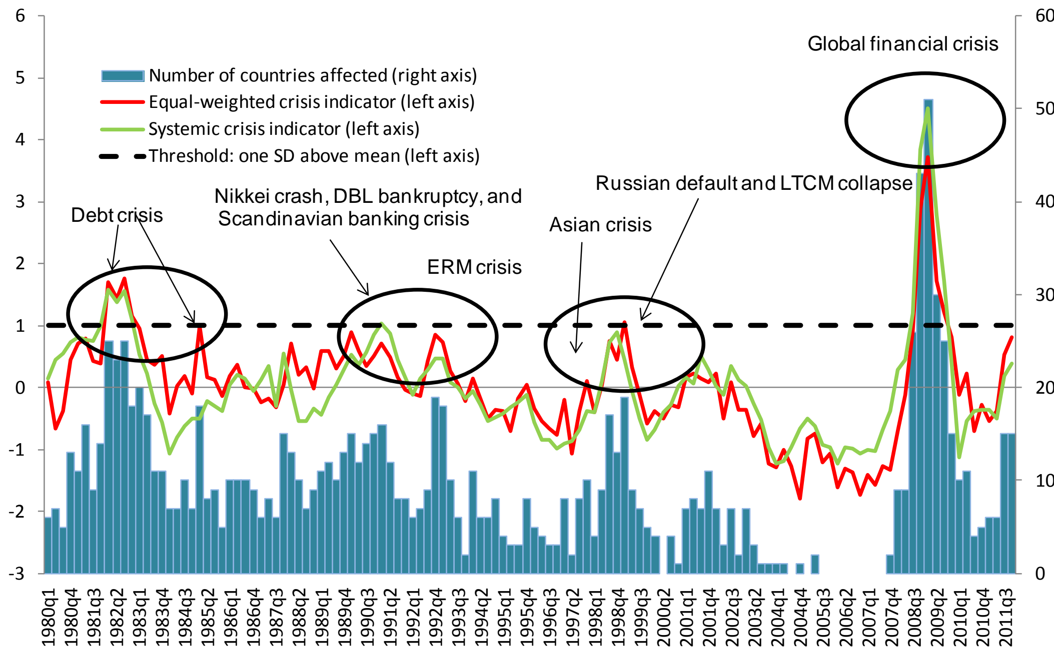
48. Over the past decade, only a few countries have tightened CFMs on outflows to address large or sudden capital outflows as part of crisis responses. These countries, comprising mainly Argentina (2001-2002 and since 2011), Iceland (2008), and Ukraine (2008), include both emerging and AEs. Large outflows in these cases were driven mainly by unsustainable macroeconomic policies that triggered a currency crisis (Argentina), the collapse of the banking sector in the early stages of the global financial crisis (Iceland), and a banking and currency crisis deepened by insufficient macroeconomic adjustment (Ukraine). In contrast, Russia experienced large capital outflows at the beginning of the recent global financial crisis but did not tighten its CFMs.[68]

[66] The early warning and vulnerability exercises generate weighted measures of vulnerabilities based on certain thresholds, followed by crisis risk ratings for countries over the next twelve months (low, medium, and high) that take into account the WEO/GFSR baseline, country-specific risk factors, market indicators and perspectives, and staff judgment.

[67] The indicator incorporates a financial stress index introduced in the World Economic Outlook, an exchange market pressure index built upon a construct by Frankel and Rose, 1996, and a global economic stress index that is a PPP-weighted average of country-level quarterly real GDP growth over a 30-year period.

[68] IMF, 2012a, Table 1, provides details on the measures taken and its background paper discusses the experiences of Iceland, Russia and Ukraine. Among the countries implementing broad based measures, only Iceland's controls appear to have been effective.

Figure 6. Global Financial and Economic Stress Indicators



Source: IMF 2011i.

1/ A country is considered "affected" if its country-level crisis indicator (a simple average of FSI/EMPI and real GDP growth, both normalized) is above one standard deviation from its mean. Global systemic crisis indicators are constructed as a simple average of normalized global real and financial stress indices, which aggregate country-level indicators using either "systemic importance" as weights (systemic-weighted) or equal weights. Both global crisis indicators are normalized for easy presentation and comparison.

49. CFMs on outflows have included a wide range of measures.[69] 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 in the 1990s), and taxes on the transfer of proceeds (Malaysia). Non-residency-based CFMs, for their part, have included 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 make currency speculation more difficult.[70]

[69] Some of these measures would also be classified as payments and transfers for "current" international transactions under the Articles, and would therefore be subject to the Fund's jurisdiction on current account transactions.

[70] While originally a blanket prohibition, Iceland's ban on the conversion and transfer of domestic currency assets no longer applies to assets that were acquired post-November 2009, financed with foreign currency that was exchanged into domestic currency in the onshore market, and registered as new investment with the Central Bank.

50. The effectiveness of outflow CFMs is likely to be greater if they are part of a broad policy framework and supported by a sound institutional and regulatory system.[71] Outflow CFMs appear more likely to be effective if they accompany sound macroeconomic policies, are well designed and enforced, and are part of a comprehensive policy package, as they were in Iceland and in some other countries with strong fundamentals.[72] In order to avoid circumvention and remain effective, CFMs also need to be comprehensive and to be adjusted on an ongoing basis.

51. CFMs in response to disruptive outflows, while they need to be comprehensive, should be temporary. The right time to lift outflow CFMs will depend on specific country circumstances. In general, outflow CFMs should be lifted when macroeconomic stability, particularly with respect to the exchange rate, debt sustainability, and financial stability are restored, confidence is regained in domestic assets, access is resumed to international capital markets, and foreign reserves climb above critical levels.

C. International Coordination

52. Cross-border policy coordination among recipient countries, and between source and recipient countries, would help to mitigate undesired spillover effects of policies and achieve globally efficient outcomes.[73] If CFMs or other policies amplify macroeconomic or financial stability risks in other countries, and it is costly for those other countries to take counter-measures to manage those risks, coordination may be desirable whereby countries partially internalize the spillovers from their policies. This may require source countries to better internalize the spillovers from their monetary and prudential policies, as well as recipient countries to moderate their use of CFMs if these lead to costly spillovers (such as deflection of flows) to other recipient countries.

53. Much further work remains to be done to improve policy coordination in the financial sector. As discussed above, further progress on reforms in financial regulation and supervision would contribute to the robustness of the infrastructure for intermediating capital flows; in particular, cross-border cooperation on resolution plans and on the treatment of global systemically important financial institutions is at an early stage and many jurisdictions still need to address weaknesses in supervision. The European Coordination "Vienna Initiative" is an important effort at multilateral and public-private sector coordination to guard against disorderly deleveraging in Central and Eastern Europe (CEE) that could provide lessons on cross-border collaboration and coordination.[74]

[71] Binici et al., 2010.

[72] The high effectiveness of the controls in Iceland may also reflect the small size of the country and highly restrictive nature of its measures. See Section V of the background paper to IMF, 2012a for an empirical discussion of the effectiveness of outflow controls.

[73] These issues are discussed in more detail in Ostry et al., 2012b.

[74] The first effort in 2009 led to commitments by multilateral banks to maintain their cross-border exposure to five CEE countries that received macro-financial support programs from the IMF and EU. The second effort, called "Vienna 2.0," in 2012 seeks to encourage home-host authority cooperation, avoid disorderly deleveraging, resolve potential cross-border financial stability issues, and take policy actions (mainly in the supervisory area) that are in the best interest of both home and host countries. See De Haas et al., 2012 and Vienna Initiative, 2012.

54. The design and implementation of new MPM frameworks in member countries will also be important in managing the multilateral aspects of capital flows. A macroprudential perspective would help authorities better assess and address cross border risks, including systemic risks posed by capital flows. Coordination is important among domestic policymakers as well as between domestic policymakers and foreign macroprudential authorities and international bodies. Such collaboration could help to narrow the data gaps in systemic risk monitoring and improve the awareness of multilateral effects of country policies that may have systemic consequences. Cross-border coordination of macroprudential measures may take time as national frameworks are in many cases still in early stages of development.

55. International policy coordination and collaboration is needed in order to mitigate the multilateral risks associated with capital outflows. Outflows from a country in crisis or near-crisis could have spillover effects to countries that are perceived or treated by investors as similar. Contagion could spread if outflows lead to financial instability in large interconnected institutions, such as globally systemic financial institutions, or if they are perceived to have global stability implications. The imposition of outflow CFMs by a country may lead other countries to take similar actions or have contagion effects by fueling such expectations among market participants. Stronger global and regional financial safety nets could reduce the need for CFMs by providing temporary liquidity, reducing contagion concerns, and bolstering market confidence. In the course of the global crises since mid-2007, such actions have been taken by groups of central banks, international and regional institutions, and various coordinated efforts.[75]

IV. ROLE OF THE FUND

A. Relationship to the Fund's Mandate

56. The Fund's mandate with respect to international capital movements is more limited than its mandate on payments and transfers for current international transactions. The latter is based on Article VIII, Section 2(a), which generally prohibits members from imposing restrictions on the making of payments and transfers for current international transactions unless they are authorized by the Fund.[76] In contrast, Article VI, Section 3, recognizes the right of members to "exercise such controls as are necessary to regulate international capital movements." This asymmetry reflects a number of historical factors, including the overriding emphasis on international

[75] For example, in October 2008, the U.S. Federal Reserve approved bilateral currency swap arrangements with 14 foreign central banks. Under these swap arrangements, in exchange for their own currencies, foreign central banks obtained dollars from the Federal Reserve to lend to financial institutions in their jurisdictions. In May 2012, the regional safety net among several Asian countries was strengthened by multi-lateralization of the Chiang Mai initiative among ASEAN+3 economies.

[76] Article VIII, Section 2(a) is in turn grounded in the purposes of the Fund, one of which is "to assist in the establishment of a multilateral system of payments in respect of current transactions between members and in the elimination of foreign exchange restrictions which hamper the growth of world trade."

trade in goods and services that existed when the Fund was established and, conversely, the negative perception of capital flows that prevailed at that time, based on the belief that speculative capital movements had contributed to the instability of the prewar system and needed to be controlled.

57. Notwithstanding this asymmetry, and as discussed in the earlier papers, members' right to regulate international capital movements is not unlimited.[77] In particular, with the introduction of Article IV at the time of the Second Amendment, the Fund adopted policies recognizing that the right to regulate capital flows under Article VI was now qualified by members' newly established obligations under Article IV, Section 1 relating to the stability of the system of exchange rates.[78] Further, it has always been recognized that the arrangements in place regarding international capital flows comprise an important element of the international monetary system.

58. Indeed, the Fund's legal framework for surveillance has long recognized the importance of capital flows and policies to manage them. The recently adopted Integrated Surveillance Decision (ISD)[79] reaffirms the importance of capital flows for individual countries' and global stability:

- With respect to ***bilateral surveillance***, the ISD maintained the requirement set forth under previous surveillance decisions that the Fund should include capital flows in its analysis while evaluating members' economic policies. For example, in its assessments and advice in bilateral surveillance, the Fund must evaluate developments in the member's balance of payments, including the size and sustainability of capital flows. Also, the introduction or substantial modification by a member for balance of payments purposes of restrictions on, or incentives for, the inflow or outflow of capital is included in the list of indicators that could trigger the need for discussion with a member about the observance of the guiding principles for economic, financial and exchange rate policies.[80]

- With respect to ***multilateral surveillance***, the ISD has introduced a detailed framework for the Fund's multilateral surveillance. It reaffirms that arrangements respecting the regulation of international capital movements are an element of the international monetary system (IMS), and that volatile capital flows may be a symptom of its malfunction. The ISD further provides that in its multilateral surveillance the Fund will focus on issues that may affect the operation of the IMS, including spillovers arising from policies of individual members that may significantly influence the effective operation of the system, which in turn includes policies related to capital flows.[81] While

[77] See, for example, IMF, 2010a, 2010e, and 2012a.

[78] For example, the 1977 Surveillance Decision recognized that members' use of capital controls could give rise to a breach of their obligations under Article IV, Section 1(iii) to avoid manipulating exchange rates in order to prevent effective balance of payments adjustment or to gain an unfair comparative advantage. Other provisions of the Articles that further qualify members' right to regulate capital movements include Article VI, Section 1 and Article VIII, Section 2(a). See IMF, 2012a, page 7.

[79] See Decision No. 15203-(12/72), 07/18/12 and IMF, 2012d.

[80] IMF, 2012d, paragraphs 18 and 22.

[81] IMF, 2012d, paragraphs 9-11.

members have an obligation to consult with the Fund with respect to these spillovers, multilateral surveillance imposes no substantive obligations with respect to those policies that cause such spillovers – including policies regarding capital flows. However, recognizing the potential impact of spillovers from member's policies on other members and on global stability, the ISD encourages members, beyond their obligations under Article IV, Section 1, to implement exchange rate and domestic economic and financial policies that, in themselves or in combination with the policies of other members, are conducive to the effective operation of the IMS (ISD paragraph 23).

59. Separately, the Fund is increasingly being called on to provide policy advice on policies related to capital flows, including by member countries. First, in the context of bilateral engagement, member authorities have turned to the Fund for policy advice in this area, and continue to do so.[82] Second, the growth in global financial flows has direct implications for economic stability at the country and global level and needs to be a part of the Fund's overall surveillance framework. As countries wrestle with the design and implementation of policies in this area, the Fund is being requested to provide an objective and informed assessment of their aims, trade-offs, and multilateral implications. In particular, it is helpful to identify policy actions taken in the face of imminent risks to financial and macroeconomic stability that are welfare-enhancing from a global perspective, which can help de-stigmatize these actions.

60. Taking into account these considerations, the proposed institutional view discussed above and summarized in Box 3 would be used in the following contexts:

- *Policy Advice*. When requested by a member, the Fund would rely upon the proposed institutional view as a basis for its policy advice to that member. While this advice is often sought and provided during the Article IV consultation process, it is legally distinct from the Fund's surveillance function, and does not impose an obligation on members to accept it. The benefit of an institutional view in this context is that it ensures that policy advice provided to members in this important area is consistent, even-handed, flexible, and takes into account country circumstances.

- *Bilateral Surveillance*. The proposed institutional view would not be systematically used to assess member's compliance with their obligations under Article IV, Section 1. Accordingly, there would no expectation that all Article IV consultations would include an analysis of whether member's policies are consistent with this institutional view. However, in circumstances where a judgment is made that capital flow management policies are having a significant impact on a member's domestic or balance of payments stability, the Fund is required to assess those policies under the ISD (paragraph 6). More specifically, as explicitly recognized in the indicators set forth in the ISD, capital flow policies may trigger an indicator that is relevant to a member's observance of the Principles for the Guidance of Member's Policies (ISD paragraph 22(iii)(b), 22(iv), 22 (vii)). When making an assessment in these circumstances, the Fund would take into account the proposed institutional view.

[82] IEO, 2005.

- *Multilateral Surveillance*. Under the ISD, if spillovers from a member's policies are considered to significantly influence the effective operation of the international monetary system, for example by undermining global economic and financial stability, these policies would also be required to be discussed with that member during the Article IV consultation. In that context, the Fund could also recommend alternative adjustments to members' policies that would be more conductive to the IMS stability. It is envisaged that, in these circumstances, the Fund's recommendations would be informed by the proposed institutional view. As noted above, however, there is no obligation for a member to follow recommendations made in that context.[83]

61. Looking beyond surveillance and policy advice, the institutional view would have no mandatory implications for the Fund's financing role. For example, CFMs maintained consistently with the proposed institutional view would not on this basis be considered measures "requested" by the Fund pursuant to Article VI, Section 1. Nor would CFMs maintained outside of the proposed institutional view be considered measures that the Fund could require members to eliminate as a condition for the use of Fund resources.[84] As in the surveillance context, however, an analysis under the institutional view could, where relevant, be taken into account as input for the assessment in a UFR context of whether a member's policies are appropriate to help the member resolve its balance of payments difficulties and regain external viability.

62. Similarly, the institutional view would not alter the Fund's jurisdiction or policies under Article VIII, Section 2(a) and 3. This includes the Fund's jurisdiction over restrictions on the making of payments and transfers for current international transactions, and regarding multiple currency practices. For example, as the Articles define "payments for current transactions" to include certain items that, from an economic perspective, are capital in nature,[85] CFMs on outflows that restricted the making of payments and transfers for any of these transactions would continue to be subject to the Fund's Article VIII jurisdiction and prior approval as they are at present.[86] They would also be approved under Article VIII, Section 2 (a) only if this were warranted under the Fund's policies on approval of exchange restrictions.[87]

[83] IMF, 2012d, paragraphs 9 and 12, and IMF, 2012d, paragraph 4.

[84] The right of members to control capital movements under Article VI, Section 3 has been interpreted as generally precluding the Fund from requiring the removal of capital controls as a condition for access to the Fund's resources. A limited exception to this principle is the Fund's policy on non-accumulation, reduction or elimination of external payments arrears, including arrears evidencing capital restrictions. See Annex 3 of IMF, 2010a.

[85] Specifically, "payments for current transactions" is defined in Article XXX(d) to include (i) payments of moderate amounts for amortization of loans or for depreciation of direct investments, (ii) moderate remittances for family living expenses, and (iii) normal short-term banking and credit facilities.

[86] CFMs that give rise to exchange restrictions could also give rise to the non-observance of the standard performance criterion under Fund arrangements that call for the avoidance of new/intensified exchange restrictions.

[87] CFMs giving rise to multiple currency practices (MCPs) would similarly be subject to the Fund's policies on approval of MCPs, except for MCPs relating solely to capital transactions which would not be subject to Fund approval as the Fund has declined to assert jurisdiction over these measures.

63. Progress in ongoing data initiatives will support the Fund's bilateral and multilateral surveillance activities. Progress in addressing data gaps is partly being addressed through existing data initiatives, such as the joint IMF-Financial Stability Board (FSB) work requested by the G-20 on identifying data gaps that masked key vulnerabilities in the run-up to the financial crisis. New standards, including the implementation of the Balance of Payments and International Investment Position Manual (sixth edition, BPM6), entail significant new reporting of cross-border activities of nonbank financial institutions, the currency composition of assets and liabilities, and, on an encouraged basis, the remaining maturity of debt. Nevertheless, gaps remain, including with respect to timeliness of data, analytical coverage (such as gross balance sheet positions), and country coverage.[88]

B. Scope for Enhanced Multilateral Coordination

64. The Fund's institutional view would not (and legally could not) alter members' rights and obligations under other international agreements. Rather conformity with obligations under other agreements would continue to be determined solely by the existing provisions of those agreements (see Annex III for more detail).

65. The proposed institutional view could, however, play a vital role in promoting a more consistent approach towards the treatment of CFMs under other international agreements. As discussed in previous papers,[89] most of the current bilateral and regional agreements addressing capital flow liberalization do not take into account macroeconomic and financial stability. The patchwork they form for the regulation of international capital movements is thus generally less conducive to supporting IMS stability or a multilateral approach than a consistent approach would be.[90] As the institutional view is intended to be broadly accepted by the membership, it could be used to foster a global dialogue on the management of capital flows to promote macroeconomic and financial system stability. This dialogue could eventually contribute to reducing the potential volatility and distortions that could result from the current complex patchwork of bilateral, regional and multilateral agreements.

66. In particular, the proposed institutional view could help foster a more consistent approach to the design of policy space for CFMs under bilateral and regional agreements.[91] Recognizing the macroeconomic, IMS, and global stability goals that underpin the institutional view, members drafting such agreements in the future, as well as the various international bodies that promote these agreements, could take into account this view in designing the circumstances under

[88] The G-20 Data Gaps Initiative (Progress Report on the G-20 Data Gaps Initiative: Status, Action Plans, and Timetables) has underpinned the 2011 Triennial Surveillance Review and the strengthening of the Fund's Data Standards Initiative. It entails enhancements to the frequency, timeliness, and scope of the Fund's Coordinated Portfolio Investment Survey (CPIS), as well as the reporting of quarterly international investment position data based on BPM6.

[89] See IMF, 2010a.

[90] See IMF, 2010a, paragraph 33.

[91] This policy space is created under the so-called "safeguard clauses" in these agreements. Others have also argued along these lines (Gallagher et al., 2012). The issue was also raised in IMF, 2010a.

which both inflows and outflows CFMs may be imposed within the scope of their agreements. Similarly—and depending on the stages of development of the relevant signatories—the sequenced approach to liberalization under the integrated approach could be taken into account to guide the pace and sequencing of liberalization obligations, and the re-imposition of CFMs due to institutional considerations.[92]

67. The Fund could also strengthen collaboration with other institutions involved in the design and promotion of international frameworks in this area. Different forms of multilateral coordination of policies affecting capital flows could be envisaged, including:

- *The Fund could work together with the OECD and other relevant international organizations to coordinate their positions on capital flows*.

- *Enhanced collaboration with the FSB could be particularly useful given the overlaps between prudential and capital account policies*, as could multilateral consultations or "working groups" organized by the Fund, which could include country representatives.

- *More generally, previous papers have noted areas for collaboration*,[93] including sharing experiences, assessment of externalities, the measurement and monitoring of global liquidity, multilateral dialogue and policy coordination, and structural reforms. In some of these areas, the Fund, in collaboration with the G20, has been instrumental in supporting the discussions.

V. ISSUES FOR DISCUSSION

68. Do Directors (i) endorse the proposed institutional view on capital flows and policies related to them, whose key elements are summarized in Box 3, and (ii) agree that this institutional view should be the basis for Fund advice and, where relevant, assessments on issues of liberalization and management of capital flows?

[92] A more formal variant of this approach exists under some agreements that specifically defer to Fund members' rights and obligations under the Fund's Articles. For example, both the GATS and the ASEAN Comprehensive Investment Agreement specify that nothing in these agreements will "affect the rights and obligations" of Fund members under the Fund's Articles, including the use of exchange actions that are in conformity with the Fund's Articles]. Accordingly, under these two agreements, exchange restrictions maintained by a signatory that have been approved by the Fund under Article VIII or that are protected under the transitional provisions of Article XIV cannot give rise to a violation of the signatory's obligations; conversely, under these agreements, signatories are precluded from imposing exchange restrictions that are not consistent with the Fund's Articles.

[93] See IMF, 2010a.

Box 3. Institutional View on Liberalization and Management of Capital Flows: Key Elements

This box summarizes the main elements of the proposed institutional view on capital flow liberalization and management. The institutional view will remain flexible and evolve over time to incorporate new country experience, empirical evidence, and analytical insights. It will guide Fund advice to members and, where relevant under the Integrated Surveillance Decision, Fund assessments in the context of surveillance; it would not, however, alter members' rights and obligations as this would require an amendment of the Articles of Agreement. Capital flows can have important benefits for individual countries across the Fund membership and the global economy. They can facilitate the achievement of important objectives, such as enhancing efficiency and financial sector competitiveness, facilitating productive investment and consumption smoothing, and portfolio diversification. And, globally, they can help achieve a better allocation of capital and facilitate the adjustment of imbalances. Capital flows also carry risks, however, as they can be volatile and large relative to the size of domestic markets. The recent global crisis highlights the need for policymakers to be vigilant to those risks.

Capital flow liberalization

- Capital flow management measures (CFMs) are measures that are specifically designed to limit capital flows (as explained in Annex II). Capital flow liberalization refers to the removal of CFMs. Liberalization does not rule out the maintenance of prudential measures nor the temporary re-imposition of CFMs under certain circumstances, if capital flows pose risks to macroeconomic or financial system stability.
- Countries are better placed to benefit from capital flow liberalization if they have achieved certain thresholds of financial and institutional development. Risks can be magnified by gaps in countries' financial and institutional development. Even at high levels of financial and institutional development, risks need to be managed carefully.
- The degree of liberalization that is appropriate for a country at a given time depends on it specific circumstances, notably its financial and institutional development. Countries with extensive and long-standing CFMs would likely benefit from careful further liberalization in an orderly manner. There is, however, no presumption that full liberalization of capital flows is an appropriate goal for all countries at all times. There is some scope for the long-term maintenance of CFMs provided they are not adopted for balance of payments purposes and that there are no less distortive measures available that are effective.
- Capital flow liberalization needs to be well planned, timed, and sequenced, especially in order to ensure that its benefits outweigh the costs, as it could have significant domestic and multilateral effects. The "integrated approach" proposes a systematic approach to liberalization that is consistent with each country's institutional and financial development.

Managing capital flows

- Countries can better absorb capital flows and reap their benefits by implementing sound macroeconomic policies, deepening financial markets, strengthening financial regulation and supervision, and improving institutional capacity.
- Inflow surges or disruptive outflows can give rise to macroeconomic and financial stability risks. In order to manage these risks, a key role needs to be played by macroeconomic policies, including monetary, fiscal, and exchange rate management, as well as by sound financial supervision and regulation and strong institutions.
- CFMs should not be used to substitute for or avoid warranted macroeconomic adjustment. In certain circumstances, introducing CFMs can be useful for supporting macroeconomic policy

adjustment and safeguarding financial system stability. CFMs should seek to avoid discrimination based on residency, and the least discriminatory measure that is effective should be preferred.

- In practice, policy advice on CFMs in response to managing capital inflow surges or disruptive outflows would mainly apply to CFMs introduced to previously open portions of the capital account.
- Policymakers in all countries, including those that generate capital flows, should take into account how their policies affect others. Source countries should better internalize the spillovers from their monetary and prudential policies, because push factors, including changes in global liquidity conditions, also contribute importantly to capital flows, in addition to pull factors.
- Spillovers from prudential policies in source countries include the global economic and financial stability risks associated with cross-border activities of institutions in their jurisdictions. Progress with global financial regulatory and supervisory reform will help in this respect, as will reform and implementation of new macroprudential frameworks in member countries. Members with global systemically important financial institutions and systemic nonbank financial institutions in their jurisdictions would play an important role in this effort.
- Cross-border coordination of policies would help to better harness the benefits of capital flows, mitigate the multilateral risks, and encourage the implementation of policies that are conducive to the effective operation of the international monetary system.

For managing inflow surges:

- The appropriate policy mix depends on a variety of country-specific conditions, including macroeconomic and financial stability, financial development, and institutional capacity.
- In certain circumstances, introducing CFMs can be useful, particularly when underlying macroeconomic conditions are highly uncertain, the room for macroeconomic policy adjustment is limited, or appropriate policies take undue time to be effective.
- CFMs could also be appropriate to safeguard financial stability when inflow surges contribute to systemic risks in the financial sector. Systemic financial risks that are unrelated to capital flows may be better addressed by macro-prudential measures that are targeted specifically to deal with such challenges.
- CFMs should be targeted, transparent, and generally temporary—being lifted once the surge abates, in light of their costs.
- When capital inflow surges contribute to both macroeconomic and systemic financial sector risks, a measure that is designed to limit capital inflows in order to address such risks can be both a CFM and an MPM. Some prudential measures can continue to be useful after a surge abates for managing systemic risks. Their usefulness relative to their costs needs to be evaluated on an ongoing basis, including by assessing whether there are alternative ways to address the prudential concerns that are not designed to limit capital flows.

For responding to disruptive outflows:

- When responding to disruptive outflows, CFMs should generally be used only in crisis situations or when a crisis is considered to be imminent. CFMs are more effective when they are implemented as part of a broad policy package that includes sound macroeconomic policies as well as financial regulation. They should be temporary, being lifted once crisis conditions abate, and may need to be adjusted on an ongoing basis in order to remain effective.

ANNEX I. G20 Coherent Conclusions for the Management of Capital Flows Drawing on Country Experiences[1]

November 3-4, 2011

Capital flows are a central feature of the international monetary system. A key challenge facing policy makers worldwide, and especially among G20 countries, is how to reap the benefits from financial globalization, while preventing and managing risks that could undermine financial stability and sustainable growth at the national and global level. In order to help address the challenges posed by large and volatile capital flows, G20 members, drawing on countries' experiences, have come to the following conclusions, which should be seen as a non-binding contribution to their decision making process regarding capital flow management measures, and not as a limitation of national policy choices.

1. Precise classifications of different policy measures are hard to draw in some instances; in particular there is an overlap between capital flow management measures and macro-prudential policies. For the purposes of these conclusions, capital flow management measures are those designed to influence capital flows and comprise residency-based capital flow management measures, often referred to as capital controls, and other capital flow management measures that do not discriminate on the base of residency but are nonetheless designed to influence flows. The latter category would typically include (a) measures that differentiate transactions on the basis of currency, including a subset of prudential measures, and (b) other measures (e.g. taxes on certain investments) that are typically applied in the non-financial sector.[2]

2. Capital flow management measures may constitute part of a broader approach to protect economies from shocks. In circumstances of high and volatile capital flows, capital flow management measures can complement and be employed alongside, rather than substitute for, appropriate monetary, exchange rate, foreign reserve management and prudential policies.

3. The decision about whether and how to use capital flow management measures should be approached from a practical economic and financial risk management perspective, taking into account that the coordinated use of different policy tools is key for an effective and coherent approach. Sound macroeconomic policies bear the prime responsibility for ensuring overall economic health, and an appropriate structural environment, including effective financial regulation and supervision, is important for financial stability.

[1] Source G20 Cannes Summit: declarations and reports.

[2] Based on this nomenclature, if a measure is not designed to influence capital flows it would not fall under the capital flow management umbrella. These non-capital flow management measures do not discriminate by residency or by currency. Relevant examples are prudential measures to ensure the resilience of financial institutions.

4. Capital flow management measures should not be used to avoid or unduly delay necessary adjustments in the economy. In particular, we will move towards more market-determined exchange rate systems, enhancing exchange rate flexibility to reflect underlying economic fundamentals and refraining from competitive devaluation of currencies.

5. There is no one-size-fits-all approach or rigid definition of conditions for the use of capital flow management measures. Country-specific circumstances have to be taken into account when choosing the overall policy approach to deal with capital flows.

6. The size, depth, and level of development of the local financial sector, as well as the institutional and regulatory strength of a country, play a key role in assessing the appropriateness and relative strengths and drawbacks of different policy measures.

7. Recognizing that sudden stops and reversals can undermine financial stability, capital flow management measures should operate in a countercyclical fashion, according to the specific global and domestic macroeconomic and financial stability situation. Capital flow management measures should be transparent, properly communicated, and be targeted to specific risks identified. In order to respond properly to the specific risks identified, capital flow management measures should be regularly reviewed by national or regional authorities as appropriate. In particular, capital controls should be adapted or reversed as destabilizing pressures abate. Capital flow management frameworks need to maintain sufficient flexibility in order to be effective under varying circumstances and challenges, including in order to help prevent circumvention efforts.

8. It is important to further strengthen domestic financial sectors. The development and deepening of local capital and bond markets can help absorb capital flows and deal with their volatility, direct them to productive activities in the real sector, promote growth and development of the local economy, and maintain a financing base in case of international financial turmoil. As a more sophisticated financial market tends to attract capital flows and, thus, can give rise to sudden outflows, it is important that adequate regulation and prudential practices are set up commensurate with financial sector development and a prudent balance with the real sector economy is maintained. An appropriate macro-prudential framework should also be considered.

9. Both push and pull factors, such as global liquidity conditions, long-term growth prospects, and global risk perception, play a role in determining size and composition of capital flows. Any country that has the potential to affect others through its national policy decisions (including, in this particular context, exchange rate management policies, monetary policy in reserve currency issuing countries and regions, regulatory and supervisory policies, and capital flow management measures) should take the potential impact of such spillovers into account when weighing different policy options consistent with national macroeconomic frameworks. These policies should be the object of regular, credible and even-handed multilateral surveillance to assess both their individual impact and aggregate spillover effects.

10. The macroeconomic policies of reserve currency issuers can have a central impact on global liquidity and, therefore, on capital flows. Those countries bear a special responsibility in keeping a sound and sustainable macroeconomic policy with a view to avoid excessive imbalances and sharp reversals of policy.

11. There is no obligation to capital account liberalization under the IMF's legal framework. However, there is agreement that the flow of capital may entail important benefits for the country concerned as well as the global economy, provided that important preconditions for successful capital account openness, including in particular a robust regulatory and supervisory framework, are sufficiently met. An important long-term goal for G20 countries should be to put in place, domestically and internationally, through enhanced cooperation, the conditions that allow members to reap the benefits from free capital movements, while preventing and managing risks that could undermine financial stability and sustainable growth, and avoiding financial protectionism

ANNEX II. Capital Flow Management Measures: Terminology

1. **For the purposes of the institutional view, the term capital flow management measures (CFMs) is used to refer to measures that are designed to limit capital flows.**[1] CFMs comprise:

- *Residency-based CFMs*, which encompass a variety of measures (including taxes and regulations) affecting cross-border financial activity that discriminate on the basis of residency. These measures are also generally referred to as *capital controls*;[2] and

- *Other CFMs*, which do not discriminate on the basis of residency, but are nonetheless designed to limit capital flows. *These other CFMs* typically include measures, such as some prudential measures, that differentiate transactions on the basis of currency as well as other measures (for example, minimum holding periods) that typically are applied to the non-financial sector.

2. Based on this definition, if a measure is not designed to limit capital flows it would not fall under the CFM nomenclature. These measures that are not designed to influence capital flows are neutral in their application in that they do not discriminate according to residency and do not, typically, differentiate by currency. Prudential measures such as capital-adequacy requirements, loan-to-value ratios, and limits on net open foreign exchange positions, that are not designed to limit capital flows but rather to ensure the resilience and soundness of the financial system are not CFMs. Macroeconomic policies, similarly, would not normally be CFMs and nor would structural and other policies that, while they may directly or indirectly inhibit capital flows, are not designed to limit capital flows. In practice, the classification of a particular measure as a CFM would require judgment as to whether the measure is, in fact, designed to limit capital flows. This assessment in turn needs to be based on country-specific circumstances, such as whether the measure was introduced or intensified in response to an inflow surge or disruptive outflows.

3. In the proposed institutional view, "capital flow liberalization" is understood as the removal of CFMs, while in other international frameworks the understanding differs in some respects. For example, the OECD concept of liberalization applies only to the elimination of measures that discriminate between residents and nonresidents, while the obligations with respect to capital flow liberalization in the Treaty on the Functioning of the European Union generally prohibit all restrictions on capital flows even if they do not discriminate based on residency (both among EU members and between members and third countries).[3]

[1] The CFM nomenclature follows closely the terminology laid out in IMF, 2011d, paragraphs 7 and 43, and IMF, 2012a, paragraph 7.

[2] The term *capital controls* is used interchangeably with the term *restrictions*.

[3] The OECD framework does, however, include coverage of ""equivalent" measures, which could bring within the OECD's ambit measures that do not expressly differentiate on the basis of residency, but nonetheless have effects equivalent to residency-based limits.

Selected Capital Flow Management Measures[1]	
	Measures designed to limit inflows
Brazil	2009 - Introduction of a 2 percent tax on portfolio equity and debt inflows.
Indonesia	2011 - Imposition of a six-month holding period on central bank bonds and of a limit on short-term foreign borrowing by banks to 30 percent of capital.
Korea	2011 - Restoring withholding taxes on interest income and transfer gains from foreigners' treasury and monetary stabilization bond investment, leading to equal treatment for both foreign and domestic investors.
Peru	2010 - Increase of fee on nonresident purchases of central bank paper to 400 basis points (from 10 basis points).
Thailand	2010 - Imposition of a 15 percent witholding tax on nonresidents' interest earnings and capital gains on new purchases of state bonds.
	Measures designed to limit outflows
Argentina	2001 - Establishment of *Corralito*, which limited bank withdrawals and imposed restrictions on transfers and loans in foreign currency.
Iceland	2008 - Stop of convertibility of domestic currency accounts for capital transactions.
Malaysia	1998 - Imposition of 12-month waiting period for nonresidents to convert proceeds from the sale of Malaysian securities
Ukraine	2008 - Introduction of a 5-day waiting period for nonresidents to convert local currency proceeds from investment transaction to foreign currency.
Thailand	1997 - Imposition of limits on forward transactions and introduction of export surrender requirements.

[1]This table provides illustrative examples of adopted measures that are assessed to be CFMs. It is not comprehensive and does not assess appropriateness or effectiveness.

ANNEX III. Implications of the Fund's Proposed Institutional View for Members' Other International Obligations

1. Capital flows are already the subject of many other international agreements. In particular, many Fund members have assumed legal obligations to liberalize capital movements under a broad range of international agreements with varying objectives and scope. As the nature and scope of the Fund's proposed institutional view may differ from those of other agreements, there may be circumstances where differences arise. For example, there are likely to be cases in which other (particularly bilateral and regional) agreements establish liberalization obligations that are broader and more accelerated than recommended under the integrated approach, or where obligations to avoid CFMs are unqualified in a manner that is not compatible with the policy space for both inflow and outflow CFMs that is recommended under the proposed institutional view.[1] Similarly, the proposed view recognizes that there are circumstances in which residency-based CFMs, although generally much less preferred than non-residency based measures, could nonetheless be maintained, but such maintenance could be at odds with the national treatment provisions under many international agreements.[2]

2. As noted, the Fund's proposed institutional view would not (and legally could not) alter members' rights and obligations under other international agreements. Rather, conformity with obligations under other agreements would continue to be determined solely by the existing provisions of those agreements. Thus, for example, even where the proposed Fund institutional view recognizes the use of inflow or outflow CFMs as an appropriate policy response, these measures could still violate a member's obligations under other international agreements if those agreements do not have temporary safeguard provisions compatible with the Fund's approach.

[1] For example, most bilateral and regional agreements do not allow for the introduction of restrictions on capital outflows in the event of a balance of payments crisis and also effectively limit the ability of signatories to impose controls on inflows.

[2] These provisions generally mandate that residents of the agreement's other counterparties should be allowed to carry out transactions in the territory of a signatory under terms that are no less favorable than those applying to that signatory's own residents.

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