

The International Monetary System: An Assessment and Avenue for Reform

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- *The international monetary system comprises the policies and official arrangements related to the international balance of payments, in particular, exchange rate arrangements.*
- *The current system is in need of reform. It has not facilitated the timely and symmetric adjustment in the real exchange rate necessary to accommodate the integration of China and other emerging-market economies into the global economy. This lack of adjustment contributed to the global financial crisis and recession, and is hindering the global recovery because it is forestalling the required rotation of global demand.*
- *The G-20 countries should co-operate to promote the system's transition to one in which all systemically important countries and currency areas have market-determined flexible exchange rates supported by coherent macroeconomic and financial sector policy frameworks to ensure that global growth is strong, sustainable and balanced.*

The current international monetary system (IMS) has been described as a “non-system” or “hybrid,” owing to the lack of a coherent set of exchange rate policies among systemically important economies. In practice, the system has not been able to adjust efficiently to large shocks, such as the integration of China into the global economy, thus allowing the occurrence of large and unsustainable current account imbalances. Indeed, many observers attribute the 2007–09 financial crisis and the current weak recovery of the global economy, in part, to the system’s inherent instability—in particular, to the lack of timely and symmetric adjustment of real exchange rates to these imbalances.¹ The authorities in many emerging-market economies (EMEs), in particular, have acted to constrain capital flows and exchange rate movements, thereby preventing a necessary rotation of global demand.

These failings have not gone unnoticed—the Group of 20 (G-20) has identified the need to reform the IMS (G-20 2010). Many proposals have been put forward to address the current system’s ubiquitous flow and stock imbalances, including an expanded role for Special Drawing Rights (Williamson 2009) and the promotion of alternative reserve currencies to the U.S. dollar (Zhou 2009). But such proposals are simply coping mechanisms, designed to maintain the status quo, rather than effective solutions for the system’s inherent problems (Carney 2009). Broader proposals, such as moving to a single world reserve currency—with the International Monetary Fund (IMF) as lender of last resort—are patently impractical. Missing from the current debate is a well-articulated vision for an efficient and resilient IMS—one consistent with both the individual and collective best interests of all countries. Also absent

¹ See Fischer (2009), Carney (2009), Rajan (2010), Obstfeld and Rogoff (2009) and Banque de France (2011).

are the strategies needed to move toward such a vision from the current predicament.

This article begins with an assessment of the existing IMS, noting its strengths, but also highlighting its ongoing weaknesses. We then propose an avenue for the reform of the IMS, in which all systemically important countries and currency areas adopt market-based and convertible floating exchange rates supported by appropriate monetary, fiscal and financial sector policies.^{2, 3} We also explore the roles of the G-20 countries and major international financial institutions in facilitating this transition.

An IMS in which flexible exchange rates predominate would be much more resilient and stable since it would allow more timely and symmetric, and thus more efficient, adjustment to shocks, thereby precluding persistent external imbalances and large accumulations of reserves.⁴ These changes would facilitate the transformation of the IMS into a more market-based and decentralized system that would better accommodate the emerging multi-polar global economy.

Characterizing the International Monetary System

The IMS comprises the policies and official arrangements related to the international balance of payments (Carney 2009; Lipsky 2010). Specifically, the IMS consists of arrangements for (i) exchange rates, (ii) current payments and capital flows, and (iii) international reserves. It is also (iv) a collection of institutions, rules, standards and conventions that govern its operation.

Exchange rates

The current IMS has been characterized as a hybrid or non-system, because the systemically important

- 2 Fiscal policy must be sustainable and therefore coherent with monetary and exchange rate policies. Indeed, the overall coherence of medium-term frameworks for exchange rate and monetary, fiscal and financial sector policies is critical for maintaining internal and external stability.
- 3 In this vision, small economies, for which the advantages of an independent monetary policy are outweighed by transactions costs in both trade and finance, would have a permanent fixed exchange rate, either a hard peg or a common currency.
- 4 Historically, there are several examples of large and persistent current account imbalances being driven by market forces and having a positive welfare impact; for example, large flows of foreign direct investment into Australia's resource sector and into Canada's infrastructure at the end of the nineteenth century. It is important to note, however, that these imbalances were accompanied by significant appreciations in the real exchange rate.

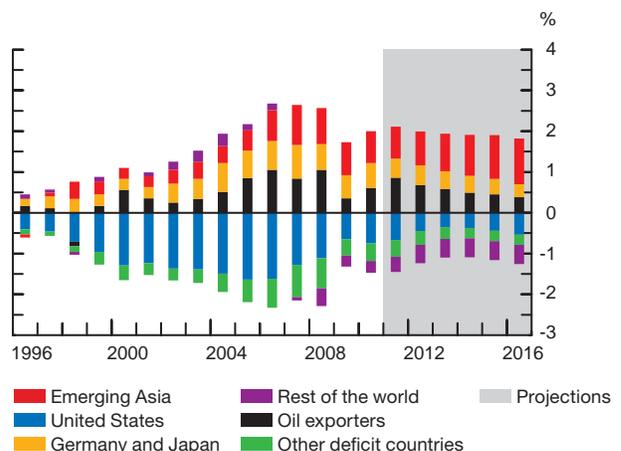
countries do not share the same exchange rate regime or nominal anchor. Roughly two-thirds of the 40 largest countries in the world (measured by market-based GDP) have floating exchange rates, and one-third have exchange rates that are managed or fixed, representing roughly three-quarters and one-quarter of global GDP, respectively. Until recently, the number of countries with floating exchange rates had been increasing, but this trend has stopped, if not reversed.

Current payments and capital flows

Most advanced countries have convertible currencies and open capital accounts. Practices among EMEs differ, but until the 2007–09 crisis, the trend had been to remove controls and liberalize these payments and capital flows.

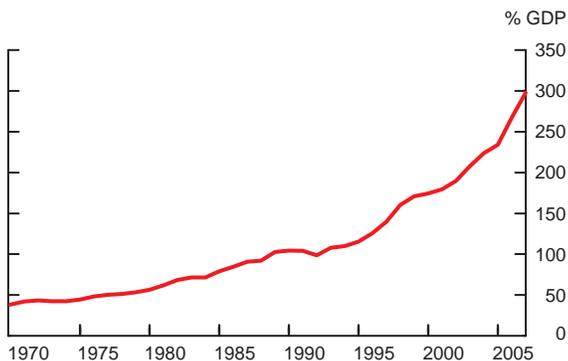
Since 2000, these arrangements have contributed to the buildup of persistent and large current account surpluses and deficits, as a percentage of both global and national GDP (**Chart 1**). For example, the U.S. current account deficit peaked at almost 6 per cent of GDP in 2006, and Chinese surpluses at 10.1 per cent of GDP in 2007. While the financial crisis led to a reduction in these imbalances, this was largely the result of the cyclical downturn in advanced economies, which depressed their demand for imported goods and services. Current account imbalances are therefore expected to persist over the coming years as these economies recover. Even more striking is the rapid increase in capital flows

Chart 1: Global imbalances
Current account as a percentage of global GDP



Sources: Board of Governors of the U.S. Federal Reserve and IMF staff estimates

Chart 2: Total G-20 gross foreign assets and liabilities



Note: Excludes Saudi Arabia from calculation of the G-20 total
Sources: IMF *International Financial Statistics*, Lane and Milesi-Ferretti (2007) and authors' calculations

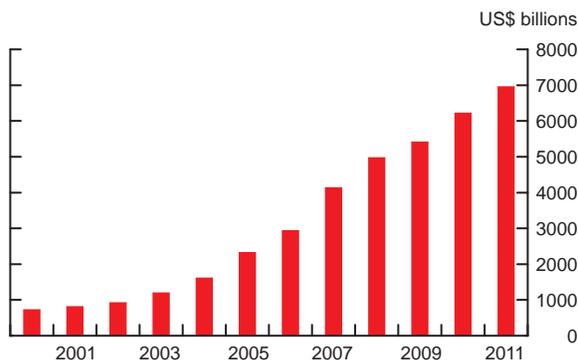
Last observation: 2007

and gross holdings of foreign assets and liabilities. From 1970 to 2007, gross foreign assets and liabilities increased from 40 per cent of GDP to nearly 300 per cent of GDP for G-20 countries (**Chart 2**). Moreover, changes in gross foreign assets and liabilities have swamped movements in the current account. This dramatic rise in gross flows, which reflects the increase in financial globalization, is one of main structural changes in the IMS in recent years. These closer financial links among countries facilitated the transmission and magnified the impact of the financial crisis.

International reserves

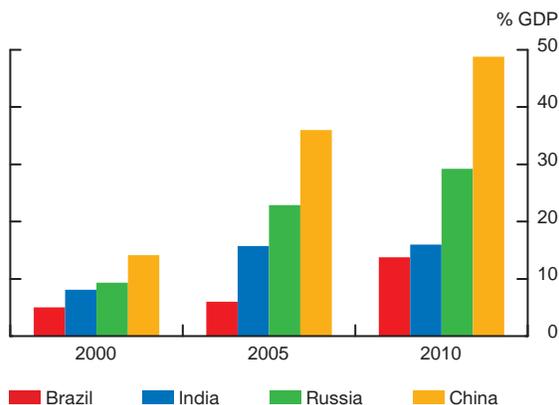
Many advanced economies with a flexible exchange rate have reduced their holdings of reserves as a percentage of GDP over the post-Bretton Woods era. In contrast, a notable feature of the IMS over the past decade has been the rapid accumulation of reserves in emerging economies, concurrent with the increase in current account imbalances. From 2000 onward, these reserves have risen from less than US\$1 trillion to almost US\$7 trillion (**Chart 3**), much of which is invested in U.S. government debt. By most metrics, this buildup far exceeds that needed for precautionary purposes. For example, reserves have increased significantly as a percentage of GDP for the BRIC economies (Brazil, Russia, India and China) (**Chart 4**). Substantial and persistent current account imbalances and the resulting extraordinary accumulation of reserves speak directly to the lack of timely and symmetric adjustment of real exchange rates in the IMS.

Chart 3: Reserves in emerging and developing economies



Source: IMF *International Financial Statistics* Last observation: June 2011

Chart 4: BRIC reserves



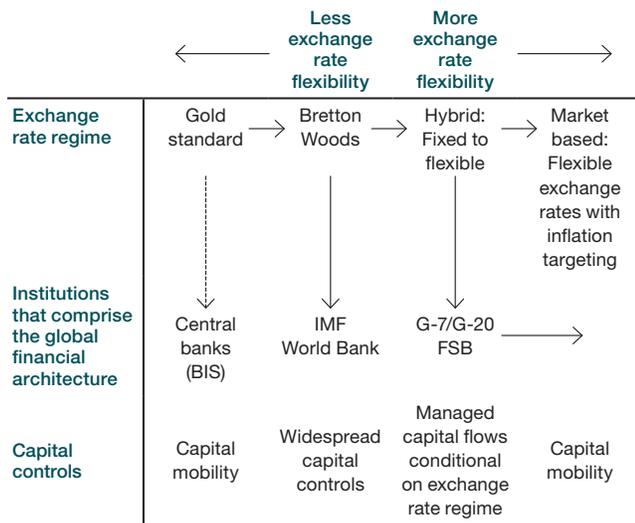
Source: IMF *International Financial Statistics*

Institutions

The IMS is overseen by a complex and evolving set of institutions that seek to establish and promote compliance with a wide variety of rules, standards and conventions in terms of both macroeconomic and financial sector policies (**Figure 1**).⁵ The overarching goal of this global financial architecture is to preserve global financial and monetary stability. The key institutions that monitor and oversee the system—the IMF, the Bank for International Settlements (BIS), the Financial Stability Board (FSB) and the G-20—identified many of the risks that subsequently materialized during the 2007–09 crisis. But they failed to appreciate the true magnitude of

⁵ The choice of an exchange rate regime is a sovereign decision of the individual country. The IMF and other institutions can only exercise surveillance over a country's policies and make non-binding policy recommendations.

Figure 1: Historical overview of the international monetary system



the risks and their consequences if realized, or to gain the political traction necessary to reform members' policies and allow adjustment to external imbalances. They were thus ineffective in preventing the buildup of the macroeconomic and financial vulnerabilities that contributed to the crisis.⁶

Assessing the System: Some Strengths, but Many Weaknesses

Strengths

The current IMS has facilitated an enormous expansion of global growth, trade and financial integration: since the 1970s, annual growth in global GDP has averaged more than 3 per cent, global trade has increased by nearly double the rate of GDP, and gross foreign assets and liabilities by more than three times. Most importantly, this expansion has included the integration of China and India—nearly one-third of the world's population—into the global economy. Between 1980 and 2010, China's economy rose from the world's twelfth largest to the second largest, as its size increased more than twelvefold. Globalization, particularly in the form of trade and foreign direct investment, has allowed China not only to benefit from access to markets, technology transfer and increased specialization, but also to realize its comparative advantage in producing labour-intensive manufactured goods. Despite the

⁶ The IMF's Independent Evaluation Office (2011) notes many of the shortcomings in Fund surveillance during the lead-up to the crisis.

banking, sovereign debt and currency crises that the IMS has experienced since the breakdown of the Bretton Woods system, it has generally functioned well in supporting increased trade and capital flows.

Weaknesses

In theory, the fact that countries have different nominal anchors for their monetary policy frameworks (price stability versus exchange rate stability) is not necessarily a problem for the stability of the IMS, as long as market-based adjustment of real exchange rates can take place in response to shocks, either via movements in the nominal exchange rate or through changes in domestic wages and prices. Without a commitment to allow real exchange rate adjustment, the current IMS is plagued by two fundamental and pervasive asymmetries.

Under fixed exchange rates, surplus countries can thwart the conventional adjustment mechanism with sterilization

First, there is no effective channel through which market pressures can, in a timely manner, force countries with managed or fixed exchange rates and with balance of payments surpluses to permit equilibrating adjustment in their real exchange rates. In particular, under fixed exchange rates, surplus countries can thwart the conventional adjustment mechanism by sterilizing the impact of the balance of payments surplus on the money supply. Sterilization involves central bank sales of government bonds or central bank bond issuance to the private sector (or to a state-owned or -controlled banking sector). This is typically done in the presence of capital controls, which essentially prevent the private sector from undoing the central bank's sterilized foreign exchange intervention.⁷

Second, a unilateral depreciation of the real exchange rate is very difficult to achieve under a fixed exchange rate regime, because domestic prices and wages are generally less flexible downward than upward. Depreciation consequently requires large and painful gaps in output and employment, as have been experienced in Greece and Spain in the aftermath of the crisis.

⁷ In a similar vein, the reserve ratio for banks can be increased to absorb the excess liquidity resulting from exchange rate interventions. For instance, China has increased its reserve ratio from 17 per cent to 21.5 per cent over the past year.

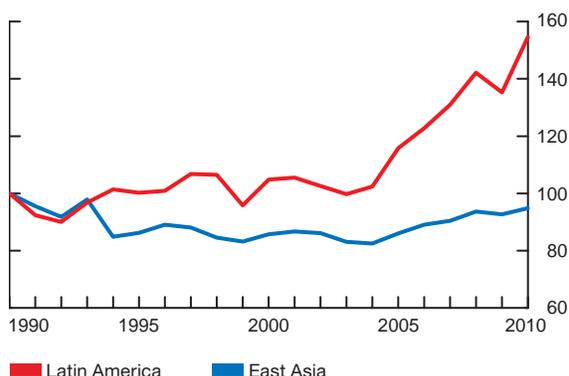
These two effects contribute to one of the major weaknesses of the IMS—the lack of symmetric adjustment. Simply, surplus countries can thwart adjustment far longer than deficit countries, and thus adjustment is often borne disproportionately by the latter, with harsh consequences. When it occurs on a global scale, the lack of symmetric adjustment can lead to deficient global demand.

The increasing proportion of the global GDP in the hands of countries that have managed or fixed exchange rate regimes and capital controls, and that are accumulating and sterilizing reserves, represents an unprecedented threat to the stability of the IMS and the global economy. In fact, countries whose currencies comprise more than 50 per cent of the U.S. real effective exchange rate (REER) are actively thwarting adjustment. To gauge the effect of these interventionist policies, it is useful to compare their impact on real exchange rates by comparing the movements in the REER of East Asian EMEs that have largely maintained this set of policies with those of Latin American EMEs that have largely embraced flexible exchange rates, open capital accounts and inflation targeting. While the Latin American EMEs have experienced a significant appreciation in their real exchange rates, as the Balassa-Samuelson hypothesis would predict, the real exchange rates of the Asian EMEs have remained relatively unchanged (**Chart 5**). As countries thwart adjustment in their exchange rates, that adjustment can be displaced onto countries with open capital markets and floating exchange rates (**Chart 6**).⁸

This lack of symmetric adjustment has caused large and persistent imbalances in trade and in current accounts, as well as unbalanced economic growth. For example, China, as well as other EMEs that compete with China in third markets, has tried to forestall REER adjustment to its current account and balance of payments surpluses. China has resisted growing international pressure to increase the flexibility of its heavily managed exchange rate, which has allowed it to maintain an undervalued exchange rate and to promote export-led employment and output growth. China and other countries in similar circumstances are frustrating adjustment in their real exchange rates by accumulating reserves and sterilizing the impact on the domestic money supply. In China, the resultant financial repression and disintermediation, caused by the banking sector's absorption of central bank

Chart 5: Real effective exchange rates

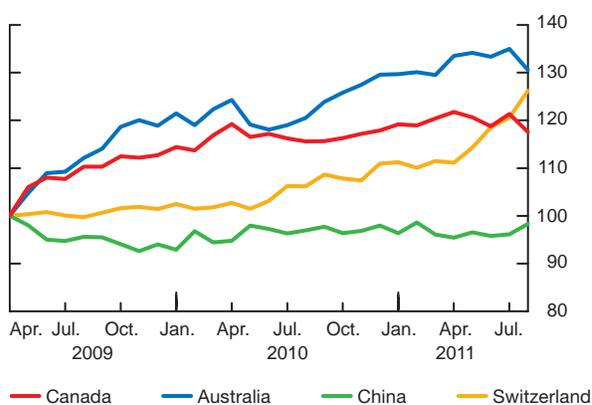
Index: 1990=100



Sources: JP Morgan, IMF *World Economic Outlook* and authors' calculations
Last observation: 2010

Chart 6: Displaced adjustment in real effective exchange rates

Index: April 2009=100



Source: BIS

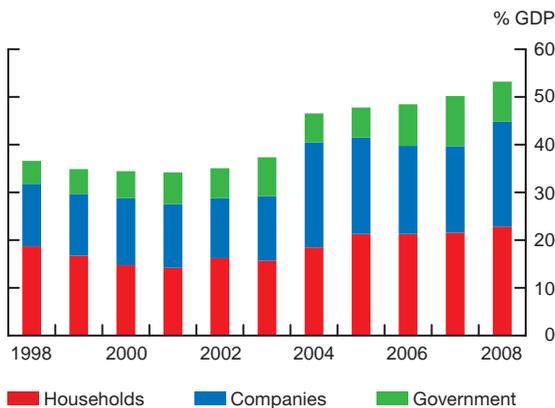
Last observation: August 2011

sterilization bonds, precludes efficient intermediation, leading many Chinese, especially the owners of small and medium-sized enterprises, to boost their savings to self-finance their investments (**Chart 7**).

These structural imbalances contributed to the financial crisis by channelling excess global savings into the U.S. capital market and exposing regulatory and supervisory gaps in the U.S. financial system. These flows set off a search for yield and created undue pressure to generate highly rated assets (Bernanke 2011), partly by creating incentives to exploit cracks in the regulatory framework and undertake destabilizing regulatory arbitrage across domestic and international regulatory jurisdictions (Rajan 2010; Obstfeld and Rogoff 2009).

⁸ Although the displaced adjustment seen in Chart 6 was not the sole factor behind the appreciation of the Canadian, Australian and Swiss currencies, it had an impact.

Chart 7: Excess Chinese savings



Note: Companies include non-financial corporations and financial institutions
Source: National Bureau of Statistics of China Last observation: 2008

There is evidence that these flow imbalances are now re-emerging because real exchange rates have remained relatively unchanged. These flow imbalances are causing an ever-increasing stock imbalance. EME reserves, which are enormous, are largely invested in U.S.-dollar assets. Consequently, they represent a substantial source of vulnerability in the global economy because of their sheer size and lack of diversification. Reserve holders would incur significant capital losses if the U.S. dollar were to depreciate.⁹

To address the flow and stock imbalances that threaten the global economy, the IMS needs to be reformed. In the next section, we outline our vision for the IMS and make the case for its adoption.

Renewing the International Monetary System

Given the pervasive imbalances, currency tensions and vulnerabilities, there is a strong need to reform the international monetary system to permit more symmetric and timely exchange rate adjustment, especially among systemically important countries. Such an adjustment would facilitate the equilibration of trade and capital flows and prevent the re-emergence of large external imbalances.

⁹ In addition, this enormous reserve accumulation is creating a modern version of the Triffin dilemma, as countries accumulate more and more assets of lower and lower quality, thus reducing the probability that they will be paid back in full. This accumulation also increases the likelihood that their currency will eventually appreciate, causing capital losses on their holdings of foreign-currency assets. See Gourinchas, Rey and Truempfer (2011) for a fuller discussion.

The various configurations of the IMS over the past 140 years have not managed to produce a system that is resilient to large shocks over the long run.

Figure 1 depicts the evolution of the IMS since 1870, from the gold standard and gold-exchange standard, to the Bretton Woods system (fixed, but adjustable, exchange rates, based on the U.S. dollar as the international reserve currency), and to the current “hybrid” system. The IMS is not static: the current system represents an evolution along a continuum of possible systems.

The respective configurations of the IMS have one common feature: in each case, fixed exchange rate regimes were unable to withstand large shocks. Since surplus countries can thwart exchange rate adjustment far more easily than deficit countries, the latter often bear a disproportionate share of the adjustment. The history of the IMS also shows that the system functions only if systemically important countries follow policies that are consistent with the system. For example, in principle, the gold-exchange standard should have allowed for symmetric adjustment; however, throughout the 1920s, France and the United States, as surplus countries, prevented adjustment through sterilized intervention (pushing deflation onto the United Kingdom, the main deficit country). Similarly, symmetric adjustment failed to occur in the 1960s during the Bretton Woods era and over the past decade. The main lesson from history is that it is not the choice of reserve asset that matters, but whether countries follow policies that permit real exchange rate adjustment.

A new vision is therefore required, one that embodies the following characteristics:

- promotes timely and symmetric adjustment to shocks,
- prevents large external imbalances and crises,
- provides sufficient global liquidity, and
- maintains confidence in the system.

The last two characteristics are critical for achieving global economic stability in the context of increasing financial globalization. The IMS also needs to be supported by an appropriately constituted set of international institutions, which comprise the global financial architecture that can effectively promote the desirable characteristics listed above.

To achieve an IMS in which timely and symmetric exchange rate adjustment is market based and thus inherent to the system, all systemically important countries and currency areas should have flexible exchange rates in conjunction with a monetary policy

framework consistent with achieving price stability—normally defined as low, stable and predictable inflation. Such a monetary policy framework must itself be underpinned by a fiscal policy that ensures sustainable public finances and therefore preserves the central bank’s ability to achieve price stability, and by a financial sector policy that promotes financial system stability via resilient financial institutions and markets to ensure the efficient intermediation of savings and the effective transmission of monetary policy.

Evidence from a number of countries has shown that a flexible, market-determined exchange rate adjusts quickly in response to economic shocks, thereby acting as a “shock absorber” by mitigating the impact of the shock on real economic activity and welfare.¹⁰ It is important to note that this adjustment is symmetric: it occurs for both negative and positive shocks, and it occurs for shocks to both assets and goods markets. A flexible exchange rate thus increases the resilience of the domestic economy to both external and internal shocks.

*Flexible exchange rates,
by themselves,
are not a panacea*

Flexible exchange rates, by themselves, are not a panacea, however. Indeed, the experience from the period immediately after the collapse of the Bretton Woods system clearly indicates that, in the absence of a domestic nominal anchor for inflation expectations supported by a coherent framework for macro-economic and financial sector policy, flexible exchange rates can be volatile and display overshooting behaviour.¹¹

Although it took almost 20 years after the collapse of the Bretton Woods system, public authorities eventually recognized that a well-functioning, flexible exchange rate regime must be supported by central banks with a mandate of price stability and by fiscal authorities that allow central banks the operational independence to pursue this goal. As a consequence, the volatility and dramatic misalignments

of exchange rates among Western economies that occurred in the 1970s and 1980s declined.

The adoption of formal inflation targets by New Zealand and Canada in 1990 and 1991, respectively, has led to broader acceptance of this monetary policy framework by an expanding set of countries that includes the United Kingdom, Sweden and Norway, as well as South Africa, Israel, the Czech Republic and most countries in Latin America.¹² Indeed, the widespread adoption of monetary policy frameworks consisting of a flexible exchange rate with a price-stability mandate ushered in the era of the “Great Moderation,” as the combination of shock-absorbing flexible exchange rates and well-anchored inflation expectations provided a solid basis for strong economic performance in many of these countries.

Rose (2007) and Mihov and Rose (2008) obtain three important results concerning the monetary policy framework of a formal inflation target and a flexible exchange rate that support our proposed vision for the IMS. First, they find that such a framework reduces exchange rate volatility because it provides a credible anchor for inflation expectations. Second, and of particular importance for EMEs, they find that countries with this framework experience fewer “sudden stops” or reversals in capital flows. A flexible exchange rate adjusts to mitigate the volatility of capital flows by appreciating (depreciating) when net inflows are positive (negative). It also provides two-way risk to domestic borrowers and foreign investors, thus reducing moral hazard. Unlike a pegged exchange rate, a flexible rate does not offer a promise, either explicit or implicit, to maintain the exchange rate unchanged. The exchange rate risk must therefore be borne by the parties involved, providing them with an incentive to manage their foreign exchange exposures prudently or hedge their exposures. This provides an impetus for the development of hedging markets and eliminates the need for capital controls. Third, they find that the durability of this monetary policy framework is historically unprecedented: it has been in place for almost 20 years, and no country has abandoned an inflation-targeting framework.

The currency crises of the 1990s in Europe, Mexico, Russia and East Asia spurred the wider adoption of this monetary policy framework. These crises demonstrated the difficulty of maintaining pegged

¹⁰ See, for example, Murray, Schembri and St-Amant (2003), for a recent study of Canada, and Broda (2004) for a study of a set of developing countries.

¹¹ The most notable example occurred during the Reagan-Volcker era in the early to mid-1980s, when the U.S. dollar appreciated almost 40 per cent on a real effective basis and then depreciated by almost the same absolute amount.

¹² In addition, while some countries or regions, such as the United States, Japan and the euro area, do not have explicit inflation targets, their central banks are independent and have a price-stability mandate.

exchange rate regimes in the absence of widespread capital controls. Such “soft” pegs proved to be subject to self-fulfilling speculative attacks because they offered attractive one-way bets to speculators who knew that politicians were not willing to sacrifice domestic economic goals to preserve the pegged rate.

From this negative experience with soft-pegged exchange rates and the contrasting positive experience with flexible exchange rates came the bipolar view of exchange rate regimes (Obstfeld and Rogoff 1995; Fischer 2001). The bipolar view maintained that countries had two choices when it came to exchange rate regimes: adopt either a hard, fixed exchange rate regime (such as a common currency, as among euro-area countries; the use of a foreign currency, such as the dollar or euro, as with Ecuador or Bosnia; or a currency board, as in Bulgaria) or a flexible exchange rate regime with a monetary policy goal of price stability.¹³

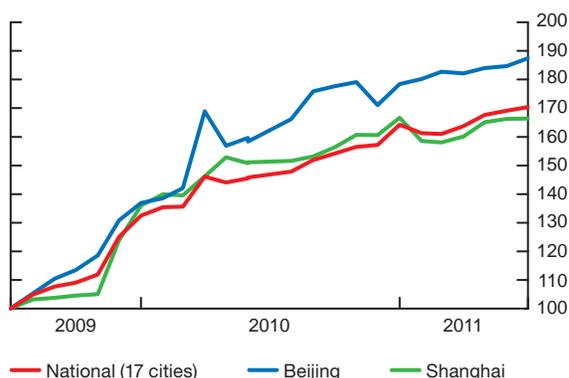
While the bipolar view provided a coherent vision for the IMS, it did not address transitional issues, especially with respect to financial market development. Many countries were not prepared to jump to this vision immediately, and the lack of articulation and consensus surrounding the evolution of the policy frameworks proved to be a serious obstacle. Moreover, in the face of instability in the IMS, many EMEs felt compelled to maintain the status quo. However, moving toward a more flexible market-based exchange rate can help alleviate the distortions created by a heavily managed, undervalued exchange rate.¹⁴ In particular, if the exchange rate were allowed to appreciate gradually, it would boost domestic purchasing power, which would increase domestic consumption, and raise imports, since they would become relatively less expensive. Concerns that such a move would have a large negative impact on export competitiveness are often overstated, because the increase in purchasing power would mitigate wage demands. Furthermore, domestic prices and wages would adjust to reduce the impact of any appreciation. Finally, increased exchange rate flexibility would increase monetary policy autonomy, allowing domestic authorities more scope to control rising inflation without resorting to altering reserve ratios

¹³ Note that a hard, fixed exchange rate effectively defines the domestic monetary policy framework in the context of capital mobility because maintaining the fixed rate essentially becomes the goal of monetary policy.

¹⁴ Chinese Premier Wen Jiabao stated, “In the case of China, there is a lack of balance, coordination and sustainability in the economic development” (Wen 2010).

Chart 8: House prices in China

Soufun Index, July 2009 = 100



Sources: Soufun, Bank of Canada and authors' calculations

Last observation: June 2011

and other types of credit controls, which are generally less effective. In the absence of nominal exchange rate flexibility, adjustment of the real exchange rate would tend to occur through rising prices and increasing inflationary pressures as market forces eventually assert themselves, as is the case in China. Higher inflation could, however, undermine financial stability, because asset prices would also increase. For example, housing prices in China have risen more than 60 per cent since July 2009 (**Chart 8**).

In asset markets, increased exchange rate flexibility would reduce the need for the rapid accumulation of reserves and sterilization. Thus, banks, in turn, could redirect deposits away from purchases of sterilization bonds and toward loans to households and firms, thereby reducing the pressure on them to self-finance with excess savings. Greater exchange rate flexibility would also create an incentive for the development of financial markets: first to hedge exchange rate risk, and second to create a short-term money market or government securities market to serve as a basis for broader capital-market activities. Such a market would allow the central bank to eventually adopt a short-term interest rate instrument for monetary policy—a more efficient way of influencing monetary conditions than the existing quantitative instruments or controls, namely, the reserve ratio.

As financial markets and banking activities develop, capital controls can be loosened, but again, the flexible exchange rate would help stabilize capital flows since it would tend to appreciate (depreciate) when there are net inflows (outflows), reducing the incentives for such flows. Many Latin American countries

have experienced an expansion and deepening of their financial markets, including the development of local-currency bond markets, following the adoption of a more flexible market-based exchange rate. This policy has been underpinned by strong fiscal and monetary policy frameworks, as well as robust financial sector regulation and supervision. This gradual path to liberalization and financial market development would also have substantial benefits for China.

Given China's leadership position in East Asia, among EMEs and in the G-20, the movement toward a flexible exchange rate regime would help to promote widespread adoption of this regime and would have important positive effects on the global economy. Reform of the global financial architecture would also help countries pursue this avenue of policy reform.

Renewing the Global Financial Architecture

As a result of the crisis, comprehensive plans are being put in place to overhaul domestic and international financial structures. Although this reform process is ongoing, much has been accomplished. The G-20 succeeded the G-7 as the premier economic forum. With its broader representation, which includes the major EMEs, and the regular participation of leaders, the G-20 can provide the leadership and legitimacy to increase the political traction of economic reform.

The G-20 can provide the leadership and legitimacy to increase the political traction of economic reform

The FSB superseded the Financial Stability Forum. In addition to the name change, its membership has expanded from the G-10 to beyond the G-20 to include other countries with significant financial sectors, such as the Netherlands and Singapore. The FSB has been given a clear mandate to take the lead on financial sector reform in several areas, including Basel III standards for bank capital and liquidity, shadow banking, financial market infrastructure and systemically important financial institutions. The representation of the IMF has also been renewed to better reflect the composition of global economic activity and thus give EMEs a larger voice and a greater stake in preserving global economic

and financial stability. The IMF has also been given more resources and has expanded its precautionary facilities to allow countries access to contingent funding should an adverse event occur. In general, all of the key global institutions have been strengthened and have become more representative of the global economy, with the intention that EMEs will take more responsibility for maintaining the stability of the IMS.

The global financial architecture that is emerging from the crisis has, now more than ever, the capacity to promote and support the transition of the current IMS to one with greater exchange rate flexibility, more timely and symmetric adjustment to external imbalances, and greater global financial stability. Broadly speaking, the G-20 leaders can provide direction, the IMF can offer significant analytic capacity, and the FSB can coordinate financial sector reforms with all of the key players at the table. The BIS, which provides a useful forum for co-operation between central banks, could also play an expanded role.

Because the international financial institutions cannot impose economic policies on sovereign countries, the G-20 has established the Framework for Strong, Sustainable and Balanced Growth to encourage its systemically important member countries to co-operate and move toward greater exchange rate flexibility and more sustainable macroeconomic and financial policy frameworks for their individual and collective benefit. To this end, the Framework incorporates a mutual assessment process of macroeconomic and financial sector policies to increase the global coherence of medium-term policy frameworks. Balanced growth implies that current account and fiscal positions should shrink to ensure that global growth is also sustainable. An important outcome of this process is a G-20 Action Plan to identify and coordinate the needed macroeconomic and financial reforms.

Concluding Remarks

The international monetary system is not working and needs reform. The lack of exchange rate adjustment not only led to the emergence of the substantial external imbalances in the United States and China, which contributed to the financial crisis of 2007–09, but is also forestalling the rotation of global demand needed to strengthen the global economic recovery. Indeed, the very weak and protracted recovery in the United States and Europe is aggravating their fiscal and financial problems.

Although the IMS has been plagued throughout its history with serious adjustment problems after major shocks, the precarious status quo is not an option. The G-20 countries and the major international financial institutions must take steps to achieve an IMS founded on coherent medium-term macroeconomic and financial policy frameworks that are consistent with strong, sustainable and balanced global growth. These frameworks would include increasingly flexible and more market-determined nominal and real exchange rates for all systemically important countries. To help the IMS advance to this desired end state, the institutions overseeing the global financial architecture will also need to become better governed, more coordinated and more effective.

Over the long term, as the global economy evolves into a multi-polar one with several regions of significant economic activity, flexible exchange rates embedded within strong macroeconomic and financial policy frameworks will help to ensure a smooth transition to a more resilient IMS—one that is better able to cope with the implications of increased financial globalization. In addition, having currencies that are convertible and market determined will facilitate welfare-enhancing competition among currencies to determine those that will have reserve-currency status, based, in part, on the strength of their policy frameworks.

Literature Cited

- Banque de France. 2011. *Financial Stability Review: Global Imbalances and Financial Stability*. Report No. 15 (February).
- Bernanke, B. 2011. “International Capital Flows and the Returns to Safe Assets in the United States, 2003–2007.” *Financial Stability Review: Global Imbalances and Financial Stability* 15 (February): 13–26.
- Broda, C. 2004. “Terms of Trade and Exchange Rate Regimes in Developing Countries.” *Journal of International Economics* 63 (1): 31–58.
- Carney, M. 2009. “The Evolution of the International Monetary System.” Speech to the Foreign Policy Association, New York City, 19 November.
- Fischer, S. 2001. “Exchange Rate Regimes: Is the Bipolar View Correct?” *Journal of Economic Perspectives* 15 (2): 3–24.
- . 2009. “Preparing for Future Crises.” In *Financial Stability & Macroeconomic Policy*. Proceedings of the annual symposium held by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, 21 August.
- Gourinchas, P.-O., H. Rey and K. Truempler. 2011. “The Financial Crisis and the Geography of Wealth Transfers.” National Bureau of Economic Research Working Paper No. W17353. Available at <<http://ssrn.com/abstract=1918682>>.
- Group of Twenty (G-20). 2010. “The G-20 Toronto Summit Declaration.” June 26–27.
- Independent Evaluation Office of the International Monetary Fund. 2011. *IMF Performance in the Run-Up to the Financial and Economic Crisis: IMF Surveillance in 2004–07*. Washington, D.C.: International Monetary Fund.
- Lane, P. and G. M. Milesi-Ferretti. 2007. “The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970–2004.” *Journal of International Economics* 73 (November): 223–50. Available at <<http://www.philiplane.org/EWN.html>>.
- Lipsky, J. 2010. “Reconsidering the International Monetary System.” In *Macroeconomic Challenges: The Decade Ahead*. Proceedings of the annual symposium held by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, 28 August.
- Mihov, I. and A. Rose. 2008. “Is Old Money Better than New? Duration and Monetary Regimes.” *Economics* 2 (Special Issue): 1–24. Available at <<http://www.economics-ejournal.org>>.
- Murray, J., L. Schembri and P. St-Amant. 2003. “Revisiting the Case for Flexible Exchange Rates in North America.” *The North American Journal of Economics and Finance* 14 (2): 207–40.

Literature Cited (cont'd)

- Obstfeld, M. and K. Rogoff. 1995. "The Mirage of Fixed Exchange Rates." *Journal of Economic Perspectives* 9 (4): 73–96.
- . 2009. "Global Imbalances and the Financial Crisis: Products of Common Causes." In *Asia and the Global Financial Crisis*, 131–72. Proceedings of a conference held by the Federal Reserve Bank of San Francisco, 19–20 October.
- Rajan, R. 2010. *Fault Lines: How Hidden Fractures Still Threaten the World Economy*. Princeton: Princeton University Press.
- Rose, A. 2007. "A Stable International Monetary System Emerges: Inflation Targeting Is Bretton Woods, Reversed." *Journal of International Money and Finance* 26 (5): 663–81.
- Wen, J. 2010. "Consolidate the Upward Momentum and Promote Sustained Growth." Speech to the World Economic Forum Annual Meeting of the New Champions 2010, Tianjin, China, 13 September.
- Williamson, J. 2009. "Understanding Special Drawing Rights (SDRs)." Peterson Institute for International Economics Policy Brief No. 09-11.
- Zhou, X. 2009. "Reform the International Monetary System." People's Bank of China.