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# CAPITAL FLOWS TO EMERGING MARKET ECONOMIES FEAST OR FAMINE FOREVER?

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### ABOUT THE GLOBAL ECONOMY PROGRAM

Addressing limitations in the ways nations tackle shared economic challenges, the Global Economy Program at CIGI strives to inform and guide policy debates through world-leading research and sustained stakeholder engagement.

With experts from academia, national agencies, international institutions and the private sector, the Global Economy Program supports research in the following areas: management of severe sovereign debt crises; central banking and international financial regulation; China's role in the global economy; governance and policies of the Bretton Woods institutions; the Group of Twenty; global, plurilateral and regional trade agreements; and financing sustainable development. Each year, the Global Economy Program hosts, co-hosts and participates in many events worldwide, working with trusted international partners, which allows the program to disseminate policy recommendations to an international audience of policy makers.

Through its research, collaboration and publications, the Global Economy Program informs decision makers, fosters dialogue and debate on policy-relevant ideas and strengthens multilateral responses to the most pressing international governance issues.

#### **ABOUT THE AUTHOR**

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Malcolm is also deputy chair of the board of directors of the Canadian Payments Association, visiting professor of finance at the London School of Economics, a director of the Global Risk Institute in Financial Services and a member of the board of trustees of the International Valuation Standards Council.

From 2008 to 2012, Malcolm was vice chairman of Deutsche Bank (DB) Group, responsible for developing a globally coherent strategy and coordinating DB Group-wide work on regulatory reform and international financial stability. During 1999–2003 he served as senior deputy governor of the Bank of Canada, where he was the bank's chief operating officer and a member of the board of directors. From 1975 to 1999 he was with the International Monetary Fund, where he held senior positions in both research and operations. From 1971 to 1975 he taught at the University of Toronto and the London School of Economics.

Malcolm holds an honours B.A. in political science and economics from the University of Toronto, and M.Sc. and Ph.D. degrees in economics from the London School of Economics. He has published widely in the fields of macroeconomics, international finance and banking, and financial regulation.

Malcolm served as a director of Swiss Re Ltd. (2010–2014), a trustee of the International Accounting Standards Committee Foundation (2003–2008) and a member of the Financial Stability Forum (now the Financial Stability Board) during 2003–2008. He is a trustee of the Per Jacobsson Foundation, a member of the North American Advisory Board of the London School of Economics and the International Advisory Council of the Risk Management Institute of the National University of Singapore, and an honorary senator of the Lindau Nobel Prizewinners Foundation. In 2006 he was awarded an honorary doctorate by Trinity College, University of Toronto.

### **EXECUTIVE SUMMARY**

The past 20 years have witnessed a profound change in the types of non-resident investors who provide funding to emerging market economies (EMEs) and the financial instruments through which emerging market (EM) corporations borrow from abroad. Until the beginning of the new millennium, private capital flows to EMEs were mainly intermediated by large global banks, and EMEs were subjected to massive volatility in their external payments balances, exchange rates and domestic financial systems. But since the early 2000s the role of bankintermediated credit has declined, as the base of investors willing to take on exposure to EM corporate debt has become much larger and more diverse. These structural changes have encouraged a vast growth in flows of funds, not only from the mature economies to EMEs as a group, but also among EMEs themselves.

The key features of these new channels of international financial flows are explored in this paper, as well as the actions EME governments can take to encourage wider access by their corporations to sources of non-resident funding. The paper recommends longer-term structural measures that EMEs could employ to mitigate the disruptive cycles of "feast and famine" in capital flows that have caused unpredictable fluctuations in their capital accounts and growth prospects in the past.

EMEs require steady access to global funding to accumulate capital over the long run to finance investment in industry and to grow their economies. However, even with effective structural policies in place, the feast and famine cycles in capital flows are likely to continue for the foreseeable future, as global investors swing between bouts of optimism and pessimism about the economic prospects of EMEs. Indeed, the fact that the past two years have seen large private capital outflows from EMEs confronts their governments with difficult conditions and policy challenges. The paper outlines the macroeconomic, macroprudential and financial policy measures that EME governments could implement in these current challenging global conditions in order to reduce their vulnerability to fluctuations in capital flows while at the same time assuring global investors of their commitment to ensuring that their financial systems remain open continuously to private sector investment funding.

### INTRODUCTION

This paper describes how the increased integration of EM corporate debt into the global financial system over the past two decades has impacted the cycles in net capital flows to EMEs, and addresses the major policy issue of how EME governments can manage the challenges posed by recurring bouts of feast and famine in international capital flows.

EMEs need net inflows of funds to finance investment in industrial plants and equipment that can employ their growing populations and raise their living standards over the long term. However, since the period when the influx of petrodollars surged in the wake of the first large jump in global oil prices in 1973-1974, private sector capital flows to EMEs have seen alternating bouts of severe feast and famine. For four decades, EMEs have had to confront multi-year periods of surging capital inflows that have often been too large for them to manage, punctuated by "sudden stops" when international investors would abruptly withdraw their funds, leaving EME governments and corporations hard pressed to obtain external financing at any price.

Until the beginning of the 2000s, private capital flows were mainly intermediated by large globally active banks that displayed a marked tendency to alternate between overoptimism about the higher financial returns to be earned in EMs than in mature markets (MMs) and fears of loan defaults, currency devaluations and capital controls in the recipient countries. From the mid-1970s to the late 1990s these conditions subjected EMEs to huge volatility in their external payments balances, exchange rates and domestic financial systems. The surges and sudden stops often required EME governments to reverse course in their macroeconomic and financial policies, from "laying out the welcome mat" for foreign funding to abruptly taking draconian measures to stem outflows.

This paper focuses on non-resident purchases and sales of the debt issued by private sector corporations headquartered in EMEs. It highlights the changes that have taken place since the Asian financial crisis of the late 1990s in the types of non-resident investors who provide funding to corporations in EMEs and the financial instruments that they buy and sell.

In particular, since the turn of the millennium the base of investors who want to have exposure to EM corporate debt and equity has become much larger and more diverse, the role of bank-intermediated credit has declined and flows of non-resident capital to EMEs have grown secularly as "real money" investors have increased their holdings. This profound structural change has encouraged growth in flows of funds not only from the mature economies to EMEs as a group, but also among EMEs, particularly in Southeast Asia.

In its September 2015 World Economic Outlook, the International Monetary Fund (IMF) noted that "corporate debt of nonfinancial firms across major emerging market economies quadrupled between 2004 and 2014," while the composition of corporate debt shifted strongly away from loans and toward bonds.<sup>1</sup> These developments

<sup>1</sup> For a discussion, see IMF (2015b, 83–114) and Ayala, Nedeljkovic and Saborowski (2015).

confront EME policy makers with new opportunities and challenges as they seek to enhance the benefits and mitigate the risks associated with non-resident financial investment in their economies. They also fundamentally alter the structure of the global financial system, creating new types of financial risks that need to be managed effectively by EM corporations and governments, as well as by global investors.

This paper describes the key features of the new channels for these financial flows, before considering the measures EME governments can take to foster open access of their corporations to sources of non-resident funding. It ends with recommendations on the policy instruments that EMEs could use to attenuate the disruptive cycles of feast and famine in capital flows that, in the past, have caused their exchange rates, capital accounts and growth prospects to fluctuate unpredictably.

# PRIVATE CAPITAL FLOWS TO EMERGING ECONOMIES — A HISTORICAL PERSPECTIVE

From the 1970s to the 1990s, EMEs as a group typically experienced aggregate external current account deficits financed by net capital inflows. These were mainly intermediated by the large globally active banks, but also by the domestic banking systems in EMEs, which borrowed abroad to extend loans (often in foreign currency) to firms and governments in their own countries.

For example, the vastly increased revenues of oil exporting countries following the 1973-1974 jump in oil prices unleashed massive financing flows of petrodollars, which were intermediated by syndicates of large internationally active banks that lent mainly to governments, focusing on Latin America and Southeast Asia. By the 1980s, overborrowing and a weakening of macroeconomic policy discipline, particularly in Latin America, led to rising fiscal deficits, monetary expansion and inflation, and severe external debt problems. These rising risks and vulnerabilities, in turn, led to sudden stops of net capital inflows that required major changes in the broad direction of EME macroeconomic policies, as well as extended debt rescheduling negotiations during the 1980s. A similar large "peso crisis" struck the Mexican economy in 1994-1995.

The Asian financial crisis of 1997–1999 followed a long period — from 1991 to 1997 — of (by the standards of the time) huge capital inflows to EMEs in Asia.<sup>2</sup> The debt owed by these EMEs to international banks ballooned rapidly as the financial discipline of both domestic banks and non-financial corporations weakened and fiscal policies were relaxed amid the surge in low-cost foreign funding. Then,

the region experienced a devastating sudden stop that began with investor doubts about the solvency of a group of fringe banks in Thailand in the summer of 1997 and also exposed severe banking system-wide weaknesses in Indonesia and South Korea later that year.

Just as the peso crisis of 1994 had throttled output growth in Mexico, the Asian financial crisis did the same in Asia and required comprehensive banking system restructurings and painful fiscal adjustments for a number of those countries under the tutelage of IMF macroeconomic stabilization programs. These bitter experiences caused key EMEs to adopt prudent multi-year fiscal and monetary policies geared to maintaining low, stable inflation, increased exchange rate flexibility and more open external capital accounts.

An important additional consequence of this experience was that EMEs in Asia and Latin America began to build much larger war chests of official foreign exchange reserve holdings to "self-insure" against the risk of another sudden stop of foreign capital inflows, and a number of EMEs in other regions did the same. The late 1990s and early 2000s saw a general move by EME governments to put in place orthodox fiscal and monetary policies, more flexible exchange rate regimes, less restriction of international financial transactions and more open capital accounts, and a more welcoming climate for long-term foreign investment in their economies.

In sum, these painful experiences of surges and sudden stops in net capital inflows taught a number of EME governments — not only in Asia but also in Latin America — that they must vastly strengthen their macroeconomic policy frameworks. By the late 1990s many of them were implementing restrained macroeconomic policies designed to convince international investors that their fiscal and balance-of-payments positions would be sustainable over the long run, their monetary policies would achieve low and stable inflation, and they would permit much greater flexibility of their exchange rates. Most relevant to the subject of this paper, the new commitment to pursue prudent policy frameworks gave a number of EMEs particularly those that achieved an investment-grade rating for their sovereign debt — much more open and consistent access to funding for their corporate sectors in international financial markets.

### THE RISE OF GLOBAL MARKETS FOR EM CORPORATE DEBT

It did not take long for international investors to incorporate the implications of this major shift in the direction of EME economic and financial policies into their global portfolio allocation decisions. In just a few years, determined implementation of prudent macroeconomic policy frameworks by many EME governments convinced global investors that they could count on sustained, rules-

<sup>2</sup> For a detailed discussion of the surge in capital flows to EMEs that preceded the Asian financial crisis of 1997–1999, see Knight (1998).

based access to EM financial systems for both purchases and sales of corporate debt and equity. These "good policies" allowed non-financial corporations in a large number of EMEs to borrow not only from their own domestic banking systems, but also directly from global investors

By the early 2000s, EM corporate bonds and equities were beginning to be seen as legitimate asset classes to be held in international asset portfolios, because their returns were expected to be attractive and not highly correlated with those on securities issued by corporations headquartered in mature economies. EM debt and equity quickly came to be regarded by global investors as a needed component of a well-diversified international asset portfolio.

These years also witnessed the huge rise in China's capital investment, output and exports. And although its capital account remained largely closed to purchases of foreign debt instruments by its own residents, China quickly became an important destination for large capital inflows from abroad to finance domestic investments.

These developments inverted the earlier pattern of EME external current account deficits financed by bank-intermediated capital inflows that had prevailed from the 1970s to the 1990s. For more than a decade, from 2003 to 2014, the EMEs as a group experienced both an aggregate current account surplus and net private capital inflows.

In the early years of the millennium, prior to the international financial crisis of 2007-2009, the main drivers of EME current account surpluses were strong output expansion in the global economy that fostered buoyant export growth in the EMEs in particular. In turn, this fundamental change from a pattern of current account deficits and capital account surpluses in the 1980s and 1990s to a combination of current account surpluses and rising non-resident investor demand to hold financial assets in EMEs, put upward pressure on EM exchange rates, causing a number of EME governments to attempt to moderate the appreciations of their currencies via official purchases of foreign exchange (Knight and Ortiz 2014). The net outcome, of course, was that over this latter period EMEs as a group accumulated massive amounts of official foreign exchange reserves, with China leading the pack.

The financial crisis of 2007–2009 had its epicentre in the United States and several other mature economies. It was caused by a sudden collapse of investor confidence in the credit quality of the massive amounts of mortgages and other loans that were being pooled and tranched to create complex and opaque structured credit products such as collateralized debt and loan obligations — known as CDOs and CLOs. As a result, although EMEs suffered from the spillover effects of the near-meltdown of mature economy financial markets in 2008, they were not severely affected by international investors' withdrawal from risk and the

associated fall in activity and import demand in the mature economies. Indeed, the demand for their exports was underpinned by continued strong investment and import demand growth from other EMEs, particularly China's ongoing economic development and transformation.

After a year-long interruption of non-resident capital inflows around the climax of the crisis in late 2008, net capital flows into EMEs resumed strongly, as did the pressure for appreciation of their currencies. These pressures were further reinforced by unprecedented monetary accommodation by the US Federal Reserve and the central banks of other key reserve centres. From 2008 onward, these unconventional monetary policies kept market interest rates low in global financial markets, inducing an increase in risk appetite by global investors and a strong "reach for yield" in global financial markets.

Unconventional monetary policies in the mature economies also led to a renewed strengthening of demand for the exports of EMEs, particularly primary commodity producers. The Institute of International Finance (IIF) notes that "between mid-2009 and mid-2014 world central banks collectively added an average of some \$400 billion of liquidity to global markets *per quarter* [italics added] via asset purchases," and further that, as a result, "from 2009 to 2014, risk assets — especially equities — rallied substantially worldwide (IIF 2015a). The resulting surge in asset prices was supported both by buoyant risk appetite and by a persistent search for yield. In particular, the S&P 500 index rose over 250 percent with the Nikkei close behind.

The surge of strong net capital inflows to EMEs that followed the financial crisis was not only the result of global "real-money" investors increasing their exposure to emerging economies that had generally weathered the crisis well. To an even greater extent it reflected the effects of ultra-accommodative monetary policies in the United States and other advanced countries. The resulting "rock-bottom" mature-economy interest rates created the large distortion of leveraged currency "carry trades." These were transactions in which leveraged investors borrowed in the low-interest-rate currencies of advanced countries to lend on a massive scale to EM corporates and sovereigns in EME currencies.

During the years 2009 to 2013, these carry trades provided risk-seeking investors with attractive returns that came both from the interest-rate differential favouring lending in EME currencies and the appreciations of those currencies' exchange rates that were caused by the momentum of the carry trade surge itself. In this "feast" phase of the capital flow cycle, the risks to leveraged carry trade lenders came from exchange rate volatility, particularly the possibility of a sharp appreciation in the value of the US dollar. From the perspective of EM borrowers, the main risk stemmed from the fact that low global interest rates created strong

new inducements for EM corporates and sovereigns to issue too much debt and take on excessive leverage. These factors tended to increase the pressure for exchange rate appreciation even more.

# THE RESPONSE OF EM CORPORATIONS TO FREER ACCESS TO GLOBAL FINANCIAL MARKETS

From a long-term perspective, the fact that non-financial corporations in EMEs can issue debt and equity to investors throughout the world offers them great advantages. In particular, it means that they are no longer constrained to borrow exclusively from their domestic banking systems. Of course, one main advantage is that large EM corporates can borrow large sums in international markets, often at significantly lower interest rates than they could obtain from domestic banks. It also means that their borrowing activities are less subject to domestic credit restraint. The IMF (2015a) notes that "greater emerging market corporate leverage can confer important benefits, such as facilitating productive investment, and thereby faster growth." Evidence from a study published in the October 2015 issue of the IMF's Global Financial Stability Report also suggests that domestic bank lending in EMEs has a strong positive correlation with net non-resident purchases of EM bonds and that this appears to be an important factor in strengthening the flow of credit to small and mediumsized enterprises (SMEs) in emerging economies (ibid.).3 To summarize, the growth of non-resident investor holdings of EM corporate debt and equity has the important side benefit of improving the access of SMEs to credit from their domestic banks. However, as already noted, capital inflows to EMEs have often surged to heights that disrupted their economies, causing excessive financial volatility and exchange rate overvaluations. The IMF study concludes that the upward trend of corporate leverage in recent years "raises concerns because many emerging market financial crises have been preceded by rapid leverage growth" (ibid.)

These developments over the period to 2014 proved to be very significant. According to IMF data, the total corporate debt of non-financial firms in the major EMEs rose strongly from around \$4 trillion<sup>4</sup> in 2004 to over \$18 trillion in 2014.<sup>5</sup> But it is important to understand that while the size of the non-resident net purchases of EM private sector equity

and debt from the early 2000s to late 2014 loomed large in the financing of EMEs, outstanding stocks of EM corporate equity and debt remain a relatively small share of global investors' financial asset portfolios. To take just a few examples, US flow-of-funds data show that the total stock of domestic non-financial debt outstanding in the United States alone was \$44 trillion at the end of the second quarter of 2015. Of this total, over \$12 trillion was debt of US non-financial businesses while another \$17 trillion was debt of federal, state and local governments (US Federal Reserve 2015). On another comparison, Statista.com (2015) has estimated that the total stock of assets held by all financial institutions around the globe was around \$300 trillion in 2013.6

The net outcome of the sustained surge in capital flows to EMEs up to 2014, at a time when the emerging economies as a group also had external current account surpluses, was a massive increase in EMEs' holdings of official exchange reserves. Furthermore, since they could not fully sterilize the effects of these reserve purchases on their domestic money supplies they also experienced large appreciations of their real exchange rates that made their manufacturing sectors less competitive in world markets than they would have been if strong private non-resident capital inflows had not occurred.

### STRUCTURAL MEASURES THAT EME GOVERNMENTS CAN TAKE TO FOSTER MORE STABLE CAPITAL FLOWS OVER THE LONG TERM

Over the long term, government policies that build an appropriate regulatory framework for issuing and trading corporate debt, and that establish a safe and efficient infrastructure for domestic financial markets, are crucial to fostering permanent access of the EM corporate sector to funding on reasonable terms from both domestic and foreign investors.

V. Acharya et al. (2015) provide useful case studies of how governments in several large EMEs have attempted to implement both structural and macroprudential policies to moderate excessively volatile flows of non-resident financial capital to and from their economies in conditions of globalized investment portfolios, seven years of highly accommodative monetary policies in the international reserve-centre countries, and the prospect of further increases in policy interest rates in the United States.

However, the case studies of corporate external borrowing in India and Turkey discussed in Acharya et al. (ibid.) suggest that these and other EMEs have not yet done as

<sup>3</sup> IMF (2015a, 84) also notes that although loans are still the largest component of EM corporate debt, the share of bonds grew rapidly from nine percent of total debt in 2004 to 17 percent in 2014, with most of the increase materializing after 2008.

<sup>4</sup> All nominal amounts given in this paper are in US dollars.

<sup>5</sup> See IMF (2015a, 84). Indeed, the Fund notes that "the average emerging market corporate debt-to-GDP ratio has also grown by 26 percentage points in the same period," although this ratio varies considerably across major EMEs.

The total global assets of insurance companies and pension funds alone were estimated by Statista.com (2015) to be approximately \$55 trillion in 2013.

much as they could to improve the functioning of markets for their corporate debt. In particular, while large well-known corporations in India and Turkey are able to borrow directly in international markets, so far the instruments available to these countries' SMEs to borrow abroad are not fully developed — they still reflect the vestiges of the comprehensive capital controls that existed in EMEs in the past. As a result, the policy instruments the authorities are trying to use to influence capital flows are still relatively cumbersome and limited in their effectiveness.

There are many actions governments of EMEs can take to foster these long-term structural enhancements. First, equitable treatment of all investors, whether domestic or foreign, is an important element of such policies, since it gives global asset holders confidence that their investments will be treated consistently with domestic investors in the host country markets. Just as important, EME structural enhancements should ensure full adherence by corporations in their jurisdictions to International Financial Reporting Standards, International Organization of Security Commissions best-practice recommendations, and other internationally consistent financial regulations and best practices that help potential investors assess the relative financial performance of firms in different jurisdictions.

EMEs should work to improve corporate financial accounting practices, national credit registers and cadastral records that can help to support investor due diligence. They may also want to cooperate to establish regional credit rating agencies to provide more comprehensive and up-to-date estimates of the credit quality of debt issued by corporations in their region. These are the sorts of actions that, over the longer term, will serve to foster the growth of well-functioning and liquid corporate debt and equity markets in EMEs. In addition, by giving large EM corporations better market access to non-resident funding sources, these actions may gradually free up the flow of domestic credit to SMEs, which are still heavily reliant on domestic banks to meet their funding needs.

# 2014 — THE RETURN OF THE "DOWN CYCLE" OF SUDDEN STOPS IN NET CAPITAL INFLOWS TO EMES

The pattern of EME current account surpluses and strong capital inflows that had prevailed since 2003 began to weaken in 2013, with the US Federal Reserve's first public indications that it might begin to taper its ultra-accommodative quantitative easing (QE) policy. This projected shift in the US monetary stance caused a strong negative reaction from EMEs — the "taper tantrum" — as their policy makers expressed alarm at the prospect that monetary tightening in the United States and other mature economies would reverse the comfortable inflow of capital that they had been experiencing for so long.

This change indeed proved to be a harbinger of a major reversal of net capital flows. For nearly two years now policy makers in EMEs have been coping with large net capital *outflows*, as global investors have been reducing their exposure to EM corporate debt and equity at the same time as EME domestic investors have been making much larger net purchases of assets in the MMs.

In late 2015, the IIF estimated that net non-resident inflows of portfolio debt and equity capital to EMEs, which had averaged \$22 billion a month over 2010–2014, weakened sharply after September 2014 and were negative in the three months to end-August 2015 (IIF 2015b, chart 1). The final months of 2015 witnessed a further deterioration. In late August, inept attempts by the Chinese authorities to prop up valuations in their domestic equity markets led to a severe downdraft in international financial markets, with particularly adverse contagion in the form of non-resident capital outflows from EMEs.

In its September 2015 update on international financing flows, the IIF (2015b, 1) noted that "global investors are estimated to have sold \$40 billion worth of EM assets in 2015 Q3, which would make it the worst quarter since 2008 Q4," and observed that this was "the largest reversal since 2008 Q4 at the height of the global financial crisis, when EMs saw outflows to the tune of \$105 billion." Given these disquieting developments, the IIF (2015a, 1) raised the question whether global investors' abrupt withdrawal from EME corporate debt and equity constitutes a "crisis" in the global financial system — strong words indeed.

It is arguable that the latest "famine" interval in capital flows to EMEs began with the reversal of the carry trade that had been taking place over the past four or five years. As usually happens, the "get-rich-quick" strategies of leveraged currency carry trades became less profitable and much more risky as the US Federal Reserve began to taper its QE and ruminate about initiating a rising path in its monetary policy interest rate from the near-zero level it had maintained since late 2008. This caused the US dollar to begin to appreciate. Capital flows to EMEs became much more volatile from 2013 onward, as the "crowded" carry trade positions began to make losses and were rapidly unwound. The risks from the earlier huge surge in capital flows to EMEs then rebounded during the "famine" phase of the capital flow cycle that began in 2014, as international investors withdrew from exposure to EM debt and equity, and EME residents increased their net purchases of financial assets in MMs.

In the event, the situation has turned out to be even worse than the IIF had expected for the full year of 2015. The IIF's latest estimates are that total net capital outflows from EMEs as a group (including the unrecorded flows in "errors and omissions") for all of 2015 were \$735 billion, a huge increase from the outflow of \$111 billion recorded

for 2014.<sup>7</sup> As a result, even against the recent weakening of equity indexes and corporate bond prices in the MMs, EM equity and bond indexes have been trading at large discounts relative to MMs.

### MANAGING THE CAPITAL FLOW RISKS THAT EMES FACE TODAY

The current external funding difficulties of EMEs may not be a crisis — at least not yet — but they certainly confront EMEs with difficult and challenging policy choices. Nevertheless, it is instructive to see their current difficulties in the light of the much more abrupt and damaging sudden stops of capital inflows that EMEs experienced in the past: particularly the Latin American debt crises in the 1980s, Mexico in the mid-1990s and the countries struck by the Asian financial crisis of 1997–1999. Those earlier sudden stops in capital flows caused financial system crises in the EMs concerned, mainly because domestic financial institutions, non-financial corporations and even governments were largely unable to obtain financing at any price.

In contrast, the present capital outflows from EMs, although very uncomfortable, reflect a more normal rotation by global investors out of the financial assets issued by corporations and governments in EMEs that were experiencing overvalued exchange rates and a loss of competitiveness in their manufacturing exports, as well as stagnant global demand for primary commodities. They also reflect the marked relaxation of fiscal and monetary discipline in EMEs that took place as a result of the good times of the capital surge, and a sharp weakening of commodity prices, partly reflecting the slowing of the remarkably high investment levels and frenetic growth that China had been experiencing for over a decade. To the extent that the rotation by international investors out of EME financial assets continues to be relatively orderly this period of net capital outflows is likely to exhibit less volatility than in the past, and to be more amenable to macroeconomic and other policies that help to stabilize EME capital account flows further.

The structural policies that can help to mitigate cycles of feast and famine in international capital flows to EMEs have already been discussed. But while institution-building and framework policies can help to enhance the benefits of EME access to global financial markets over the long run, the immediate challenge for EME policy makers

is to address the risks in today's conditions of massive net outflows of non-resident funds from EM corporate debt and equity. This environment creates new risks that were not an issue when EM financial systems were less open to global financial markets. The fact that total outstanding EM corporate debt is still a small proportion of the stock of debt issued globally by non-financial corporations and governments suggests that the job of implementing macroeconomic and macroprudential policies that encourage long-term growth in the EME share of total financial assets held by global investors will continue to rest with EME governments themselves.

Empirical studies by the Bank for International Settlements (BIS) and the IMF<sup>8</sup> indicate that EM non-financial corporates have very significantly increased their leverage in recent years, and that higher leverage has often been associated with higher currency mismatches between assets and liabilities on the balance sheets of non-financial corporates in EMEs.9 These increased leverage and currency mismatch risks require EM corporations that issue debt denominated in foreign currencies to ensure that they are either naturally hedged — for example, because their export receipts in US dollars or other vehicle currencies are sufficient to service their foreign currency obligations — or that they can otherwise effectively manage the risks of sharp fluctuations in their home country exchange rate relative to the vehicle currencies in which they borrow. Excessive leverage on the balance sheets of corporations in EMEs is potentially a dangerous problem that can exacerbate cycles in capital flows and may need to be addressed by policy action.

As already noted, a consistent feature of the aggregate balance of payments of emerging economies in most years from 2003 to 2014 was that, as a group, they experienced *both* an aggregate surplus on current account *and* an aggregate surplus on private capital account. Over the five years to mid-2014, huge net inflows of non-resident financial capital<sup>10</sup> caused increasing *overvaluation* of the real exchange rates of commodity-producing EMEs.

In the face of these exchange rate overvaluation pressures, EME governments bought large amounts of foreign exchange reserves to moderate the loss of competitiveness in their non-commodity-producing sectors. But the surge in non-resident capital inflows was so large and

<sup>7</sup> The IIF notes that a large proportion of the total reflects net outflows from China (some \$460 billion excluding the \$216 billion that the IIF estimates to be net capital outflows in the errors and omissions line of China's balance-of-payments accounts), reflecting large debt repayments. But the IIF notes that the overall figure of \$735 billion also means that many other EMEs experienced both a sharp reversal of non-resident inflows and a substantial increase in net EME resident purchases of assets in MMs. See IIF (2016).

<sup>8</sup> See BIS (2014), Adjiev, Chui and Shin (2014), Chui, Fender and Sushko (2014) and IMF (2015b).

<sup>9</sup> These incentives to excessive risk-taking in EM corporate borrowing have been exacerbated by the ultra-accommodative monetary policies of the key reserve-currency central banks since the last quarter of 2008

<sup>10</sup> These inflows were caused, among other factors, by the large rise in commodity prices related to China's huge infrastructure investments in the broader context of the continuing ultra-accommodative monetary policies of the global reserve centre central banks — the US Federal Reserve, the European Central Bank and the Bank of Japan.

sustained up to 2014, that in many EMEs the monetary effects of official purchases of foreign exchange could not be fully sterilized. Their domestic money supplies also rose, putting further upward pressure on domestic prices and worsening the overvaluation of their real exchange rates. This "Dutch Disease" problem<sup>11</sup> of overvaluation — in which high commodity prices, huge capital inflows and rising money supplies combined to undermine the recipient country's international competitiveness, "hollowed out" their manufacturing sectors at precisely the time when both corporate financial discipline and government fiscal and monetary restraint were beginning to weaken. The precipitous decline of the manufacturing export sector in Brazil in recent years is just one of the most visible examples of this problem.

However, since late 2014 when capital inflows to EMEs began to weaken markedly, their balance-of-payments outlook has changed dramatically. In fact, emerging economies as a group experienced net capital *outflows* during the third quarter of 2015. This reversal reflected a shift in global investors' expectations to a new scenario in which the projected anemic growth of global output over the next several years is seen as likely to cause a deceleration of EME exports, persistent weakness in primary commodity prices and a rising cost of debt funding for EMEs, as the United States and other advanced countries begin to tighten monetary policies that have remained highly accommodative since 2008.

As a result, the medium-term balance-of-payments outlook for EMEs over the next few years has become quite negative. The latest IMF *World Economic Outlook* (IMF 2015b) projections are that the aggregate current account position of the emerging economies shifted from a surplus to a deficit in 2015, and will continue to be in deficit in 2016 and beyond. Large projected net private capital outflows from EMEs as a group — when combined with the fact that their aggregate current account position is also projected to shift to a deficit — will doubtless continue to put downward pressure on their real exchange rates for some time.

Clearly this is a very uncomfortable time for EMEs. And, although global investors' reallocation of their portfolios out of EM corporate equity and debt has been relatively orderly up to now, the problem is that this asset rotation looks likely to continue through 2016 and beyond.

The downside of these Dutch Disease dynamics, particularly for commodity exporters, is that although recent sharp declines in commodity prices have led to large real exchange rate depreciations for many EMEs, these declines have been from significantly overvalued levels. These developments have exacerbated external debt servicing problems for EM corporates and sovereigns, particularly those that have relied excessively on issuing bonds denominated in US dollars and other vehicle currencies.

### RECOMMENDATIONS ON EME ECONOMIC POLICIES IN THE FACE OF CAPITAL OUTFLOWS

This paper has emphasized the substantial long-term benefits that come from encouraging the development of mature and liquid markets for EM corporate debt and equity, since this vastly increases their access to global funding to finance fixed capital formation. Provided supportive institutional actions are taken and appropriate legal and regulatory framework policies are put in place, the long-term benefits of maintaining open capital accounts greatly outweigh their disadvantages.

In addition, the advantages of this international capital market integration can be reinforced and the disadvantages mitigated, if EMEs implement macroeconomic and financial policies that address the challenges posed by the feast or famine cycle of non-resident capital flows. Thus, having outlined the institution-building and framework policies for maintaining open markets over the long run, this paper now turns to one the most pressing economic policy questions confronting emerging economies at this juncture. What macroeconomic and financial policies should EME governments implement in the current "uncomfortable" conditions of heavy net capital outflows by both global investors and EME residents?

### The EME Macroeconomic Policy Stance at the Present Juncture

Not surprisingly, the recommendations of this paper concerning the macroeconomic policies that EMEs should implement are in accord with the standard analysis, which concludes that in current conditions a necessary prerequisite for mitigating the problem of feast or famine in capital inflows to EMEs is to implement prudent,

<sup>11</sup> The term "Dutch Disease" derives from the problem that the Netherlands government faced in the 1970s when the discovery and exploitation of large natural gas reserves in its territorial waters caused the Dutch guilder to appreciate to levels that seriously undermined the competitiveness of manufacturing industries in the Netherlands. This development adversely affected domestic production and employment, creating a major macroeconomic policy challenge for the Dutch authorities.

<sup>12</sup> The phenomenon of a boom and bust in commodity prices causing a substantial exchange rate appreciation followed by a subsequent large depreciation is not confined to EMEs. Canada is a mature economy that has a high proportion of primary commodities in its production and export mix. Like many EMEs, since 2009 Canada has seen first a large appreciation of its currency and more recently an even larger depreciation associated with the rise and fall in the prices of the primary commodities it produces and exports, leading to significant losses of output and employment in Canada's manufacturing sector.

sustainable fiscal and monetary policies. It is obvious that EME governments, particularly in those countries where fiscal and monetary discipline have recently weakened, need to continue to focus on the two fundamental elements of the macroeconomic policy framework that can help to foster stability and capital flows:

- EME policy makers should first concentrate on maintaining or restoring the fiscal discipline that won them open access to international financial markets in the early 2000s and gave them a strong macroeconomic and financial position to weather the international financial crisis that struck the United States and other advanced economies during 2007–2009. This means returning fiscal positions to levels that are seen to be sustainable over the medium term.
- To support this recommended fiscal policy stance, EME governments should consistently pursue disciplined monetary policies that target low, stable and predictable inflation of domestic consumer prices and permit a high degree of exchange rate flexibility to respond to different inflation rates abroad and to cushion the domestic economy from real and financial shocks. Now that EMEs are more open to the world on both current and capital accounts, reinforcing investors' confidence that domestic price stability will be maintained is crucial to reducing exchange rate uncertainty and volatility.

### Additional Policies to Support the Macroeconomic Framework and Moderate Capital Flow Volatility

The two macroeconomic policy recommendations are, of course, familiar and relatively uncontroversial — over time they should tend to reduce the excessive feast and famine cycle of private capital flows. What is important to recognize, however, is that these standard policy recommendations, while necessary, are unlikely to be sufficient on their own to reduce volatility of capital flows and exchange rates. In current circumstances what other policy areas would help? There are two discussed below.

### Macroprudential Policies to Control Corporate Leverage

First, given the present conjuncture in which many EM corporations have taken on a great deal of leverage, a crucial element of policies to reduce the volatility of capital flows must be to limit the possibility of serious debt-servicing difficulties in their corporate sectors. To address this problem, EME governments may have to avail themselves of new macroprudential policy instruments that they have not used extensively in the past. First, they need to institute close and effective real-time monitoring of the leverage and foreign exchange exposures of financial and non-financial corporations that are systemically important domestically

and have borrowed heavily, whether from abroad or from domestic banks.<sup>13</sup> Regulators will then need to use these data proactively to implement macroprudential policies that appropriately control the leverage of their most systemically important corporations.

As we have seen, direct issues of EM corporate bonds to domestic and foreign investors have risen very strongly since the turn of the millennium, but EM corporate borrowing from banks is still estimated to be the larger component of total EM corporate debt (IMF 2015b). Thus, in order for EM regulators to gain control over corporate leverage it is essential to control both the leverage in their borrowing from banks as well as that resulting from their direct issues of corporate bonds. This will require new macroprudential policy instruments in which the authorities obtain more detailed financial data on the non-financial corporations that are systemically important domestically, and implement measures to ensure that the changes in corporations' leverage do not imperil their solvency or destabilize the broader macro-economy.

As regards corporate lending by domestic banks and other financial intermediaries, the traditional regulatory rules that control open foreign currency positions, maturity mismatches and rollover risk are already in place in many EMEs. The leverage resulting from domestic banks' lending to domestic corporates can be controlled by imposing higher risk-weighted solvency requirements on bank loans to more highly leveraged corporations. Similarly, macroprudential regulators could impose a higher capital "buffer" — above the standard Basel III minimum — on domestic banks' foreign-currency denominated loans to domestic corporates than they require for banks' domestic currency-denominated corporate loans. In order to prevent these macroprudential restraints on bank lending from causing a ballooning of corporate bond issuance or corporate borrowing from foreign banks, the authorities would likely also need to impose limits on the total leverage resulting from the bond issuance of systemically important domestic non-financial corporations.

Such measures may be controversial, but are likely to be necessary, in current circumstances, to limit financial system-wide risks in EMEs, particularly if weak capital inflows and low commodity prices persist into the future. Developing these macroprudential solvency and leverage rules for borrowing by domestic non-financial corporations should be urgently addressed in a number of EMEs. This will be difficult, since many countries currently lack the

<sup>13</sup> The IMF (2015a) observes that "A key risk for the emerging market corporate sector is a reversal of post-crisis accommodative global financial conditions. Firms that are most leveraged stand to endure the sharpest rise in their debt-service costs once monetary policy rates in some key advanced economies begin to rise. Furthermore, interest rate risk can be aggravated by rollover and currency risks."

real-time data to do so even for their largest firms. But this area of macroprudential regulation is likely to be of considerable importance in mitigating the recurring bouts of feast and famine in private sector capital flows.

### Policies on Official Intervention in the Foreign Exchange Market

Second is the issue of how actively the authorities in each EME should intervene in the foreign exchange market to optimize their adjustment to the new pattern of net international capital flows. Intervention policy is not normally considered a crucial element of macroeconomic policy framework, but in this case it may be. Many EMEs have committed themselves to allowing a certain amount of flexibility in their exchange rates. During the period of strong capital inflows, their exchange rates often rose to overvalued levels that caused serious macroeconomic dislocation, such as the loss of productive capacity in their manufactured-export-producing sectors and overinvestment in primary commodity-producing industries. What elements of intervention policy can help to buffer the shocks that this overvaluation created? More generally, what intervention policies should EMEs implement to support the macroeconomic and macroprudential policies that are recommended in this paper? In current conditions this question boils down to whether, and to what degree, the authorities of EMEs should intervene by selling foreign exchange reserves to moderate a depreciation of their currencies during the famine phase of the capital flows

This is, of course, a question that can only be answered in the circumstances of each individual country. Nevertheless, it seems clear that during the years of heavy net capital inflows from 2009 to 2013, the real exchange rates of a number of EMEs, particularly primary commodity exporters, were pushed by carry trade inflows and high commodity export receipts to such high levels that they were well above what could be sustained in the long run. Those EMEs that had the most overvalued exchange rates at the time the new downward cycle of net international capital outflows began in 2014 are the ones that will likely have to pay the most attention to exactly what needs to be done in their exchange market intervention policies.

It is also important to note that in cases where an EME has experienced an extended period of exchange rate overvaluation, loss of international competitiveness and Dutch Disease problems, the needed exchange rate adjustment process is likely to be asymmetric. This is because it is much more costly and time consuming to rebuild the manufacturing sector after a country's exchange rate has been pushed to an uncompetitive level for a number of years and manufacturing export capacity has been hollowed out, than it is to avoid such damage in the first place. Policy makers in EMEs that have suffered a long period of overvaluation should address this

asymmetry by avoiding policies that retard the needed downward exchange rate adjustment after it has begun to take place, and by favouring actions that bring domestic unit labour costs back to their internationally competitive level as soon as feasible.

Furthermore, to the extent that manufacturing export capacity has been lost and primary commodity prices are likely to remain low, at least for the medium term, it may be that the sustainable real exchange rate is now lower than it was before the capital flow surge that caused the loss of competitiveness. The message for EME policy makers is that even if exchange rates fall to a level that was formerly sustainable, they should remain cautious about intervening unless there is a really clear sign that the real exchange rate has overshot its sustainable level on the downside. These considerations suggest that instead of wasting reserves in an attempt to forestall depreciations, EMEs should allow their exchange rates to adjust flexibly to the new situation by avoiding official sales of foreign exchange to moderate depreciations.

From this perspective, a striking feature of the latest IMF balance-of-payments estimates (IMF 2016) for the emerging economies is that in 2015 EME central banks used relatively large amounts of their foreign exchange reserves to slow down the depreciations of their exchange rates that had been taking place since the capital flow cycle turned from feast to famine. The IMF projections also suggest that the official foreign exchange reserve levels of the EMEs as a group will remain roughly unchanged in 2016. Since the Fund's projections are based on the assumption that IMF member countries will implement "good policies" during the projection period, this may be seen as an implicit recommendation by the IMF that emerging economies should no longer use substantial sales of official reserves to slow down further depreciation of their currencies.

It is often argued that EME central banks should at least intervene to smooth out the volatility of their exchange rates and maintain orderly markets for their currencies. But in current circumstances, where there is considerable uncertainty about the appropriate level of these rates, even such a simple "exchange rate smoothing" strategy raises difficult questions. What are the bounds around which authorities should intervene? How can they avoid leading the market to interpret their intervention as signalling that they have a desired exchange rate level? Even if the authorities just intervene to limit excessive volatility of the market-determined exchange rate, they may inadvertently limit the profit incentives for market participants to perform this function on their own.

The evidence adduced by the IMF that some large EME corporations have become substantially over-leveraged raises a further serious dilemma. To the extent that the authorities try to maintain a particular exchange rate or even to slow its rate of depreciation, they are in effect

providing an implicit subsidy for the debt service of their most heavily leveraged corporations, creating a significant moral hazard problem for policy makers. From this perspective, it is crucial for the authorities to avoid falling into the trap of maintaining an overvalued exchange rate simply because large over-leveraged corporations in their countries happen to be vocal and politically influential. All in all, given the uncertainties involved in estimating the "right" exchange rate, it is arguable that the authorities should refrain from actively intervening at the current juncture unless the exchange rate falls to a level where they are virtually certain that the market is "getting it wrong," and that official intervention can put a floor under the rate.

If emerging economies do not attempt to prop up their exchange rates, their external current account and private capital account deficits are likely to be smaller in 2016 and beyond than the IMF and private sector forecasters are currently projecting. Of course, the counterpart of this outcome would be a larger depreciation of these countries' real exchange rates than is implicitly assumed in the IMF's projections. But if EME exchange rates have been overvalued because of the capital inflow surge of preceding years, it is crucial to allow markets to move them as quickly as feasible to levels that are sustainable in the long run.

#### CONCLUSION

The immediate future is likely to continue to be a challenging time for EMEs in global markets. But they must stay the course — maintain their macroeconomic and financial policy discipline — to ensure the continued access of their borrowers to international financial markets.

Feast and famine in capital flows to emerging economies are likely to continue for the foreseeable future as the "animal instincts" of global investors shift between excessive bouts of optimism and pessimism about the EMEs' economic prospects. Nevertheless, to accumulate productive capital over the long run, EMEs need consistent access to global funding, which is huge relative to their investment needs. To do so, they need to convince global investors that they are committed to pursuing macroeconomic policies that will help to ensure that their financial systems remain open to the free flow of private sector investment funding, and that in future they will be less vulnerable to Dutch Disease problems. Only in this way can feast and famine in capital flows be attenuated to the advantage of EMEs.

#### **Author's Note**

My work on this issue has benefited from a stimulating informal discussion with a number of IMF executive directors and senior Fund staff at a luncheon hosted by Executive Director Serge Dupont.

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