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## Capital Inflows, Exchange Rate Management, and Capital Controls

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A discussion of the interaction between capital inflows, exchange rate management, and capital controls is quite timely. However, it is by no means a new discussion. The interactions between and among these three items have been extensively analyzed, in particular at the IMF. What makes such interactions a recurrent topic of discussion is that the prevailing situation and perspectives in the global economy and financial markets at different times might modify how countries should adjust their exchange rate management and their position with regard to the use of capital controls in the face of the capital inflows or outflows they might be confronting.

What makes the discussion interesting and relevant now is that we are facing an “abnormal situation” in the global economy. Let me elaborate. Under “normal conditions,” most advanced economies have the capacity to reach an adequate combination of growth and financial stability, without implementing unconventional fiscal or monetary policies. Basically, we can define an unconventional policy stance as one that goes beyond its traditional reach to address an unusual circumstance, owing to insufficient space or lack of suitable instruments to address such a circumstance in a given span of time. So, in normal circumstances, for small open economies, whether emerging or advanced, a combination of a freely floating exchange rate regime and no capital controls allows monetary policy independence, which has traditionally contributed to the simultaneous attainment of economic growth with financial stability.

But under a regime of unconventional monetary policies (UMPs) in the main advanced economies (the ones that issue the reserve currencies around the world), major externalities are generated that can make it undesirable for emerging market economies (EMEs) to sustain a position

of freely floating exchange rates with free capital mobility. As an additional unintended consequence of UMPs, in their presence the adequate monetary policy stance in EMEs is heavily influenced by the monetary policy stance of advanced economies, that is, by the UMPs implemented by advanced economies. I will illustrate this in what follows.

The starting point of my argument is that in 2008, a financial crisis erupted in the United States, spread rapidly to most of the rest of the advanced economies, and eventually affected the world as a whole.

Even though the most critical aspects of the global financial crisis have been overcome or averted—in particular the possibility of extreme tail-risk events that would have been disastrous had they materialized—the process of recovery has been extremely slow, and is still vulnerable to setbacks. World economic growth continues to be sluggish, and a huge deficit in job creation persists.

Most worrisome about the process of recovery of the world economy is that it still depends heavily on the monetary policy stances in the main advanced economies that are not sustainable over the medium and long term. Let me explain.

Relatively soon after the start of the crisis, it became clear that the feasibility in most advanced economies of stimulating growth through fiscal policy came to an end, as debt-to-GDP ratios grew very fast. Thus, the only stabilization policy instrument left was monetary policy, and therefore the main advanced economies' central banks adopted, at different times and speeds and with varied modalities, unprecedented expansionary monetary policies. The Federal Reserve System led the way, followed by the Bank of England, the Bank of Japan, and the European Central Bank, the last two motivated also by the growing risk of deflation. These policies have engineered sharp declines in interest rates across the yield curve. The zero lower bound in the policy reference rates became binding in all the above-mentioned cases. In addition, forward guidance for the policy rates and quantitative easing (QE) were adopted. As a result, the balance sheets of advanced economies' central banks increased sharply.

The overall objective of implementing UMPs in these advanced economies was to stimulate growth and employment, while inducing the convergence of inflation to each country's objective. Inflation in most advanced economies has fallen below their objective, mostly as a result of

widespread unemployment, large output gaps, a reduction in commodities prices (in particular of oil), and, most recently in the United States, as a result of the sharp effective appreciation of the US dollar.

I believe that given the magnitude of the global financial crisis and the policy options available, UMPs were essential, and have worked well so far. Economic recovery has taken hold in the United States and the UK, and to a lesser extent in Japan, while recent figures coming out of the euro zone have been promising. Inflation expectations and core inflation have been moving toward the respective central banks' objectives.

Nonetheless, my perception is that it is too early to declare victory. To begin with, we still have to see whether the unwinding of those policies can proceed in an orderly fashion once their immediate objectives are met. Once we reach that state of affairs, the unwinding of UMPs will be unavoidable, as otherwise they would feed into inflation and induce higher than warranted interest rates and financial instability. This is why I consider that UMPs are not sustainable over the medium and long term. To assess the risks associated with the unwinding of those policies, we have to identify their unintended consequences.

The transmission of extraordinary monetary stimulus to higher economic growth was meant to work primarily by enticing more risk taking by economic agents. In the case of consumers, and in particular as a response to QE (asset-purchase programs by central banks), lower interest rates and wealth effects would stimulate their expenditure. Another important channel that would operate was that the lower interest rates, term spreads, and credit spreads that would result from QE would stimulate *real* risk taking by firms; that is, QE would induce higher corporate investment. But investment has only partially recovered from the sharp fall in the recession of 2009—the median decline from a group of advanced and EM economies has been around 2½ percentage points of GDP. Meanwhile, there have been massive investments in financial instruments of all sorts, both in local and external markets, in what has been called the search for yield, which has created considerable spillover effects of UMPs. The crux of the matter is that it seems that financial risk taking has been far more responsive to UMP than has real risk taking.

Several consequences or externalities have resulted from the above. Initially resources were directed to bonds and stock markets in advanced economies, but as the search for yield led to stretched valuations,

investments in high-yield corporate bonds and EMEs' sovereign and corporate debt exploded. These responses led in turn to wider credit and term spread compressions, record high-yield debt issuance, and deteriorating underwriting standards. Most of these investments have been intermediated by nonbank financial institutions, such as asset management companies, hedge funds, and pension and insurance companies.

A novel feature of this episode of capital inflows to EMEs was that a large portion of them took place as purchases of government bonds denominated in the domestic currency by nonresident investors. This is an important feature, since it eliminates the "original sin syndrome" that haunted EMEs for several decades.<sup>1</sup>

Massive capital inflows into EMEs persisted for a while, fueled primarily by carry trades explained by *ex ante* uncovered interest rate arbitrage opportunities. The flows promoted by the excess global liquidity created a sense of exuberance, which in turn generated mispricing in some assets in many EMEs and meaningful real exchange rate appreciations, and opened the door for potential sudden capital flow reversals. These factors caused concern among many countries, in particular over the potential of capital flows to (1) induce a sharp decline in exports, given the resulting real exchange rate appreciation; (2) produce asset-price bubbles created by rapid credit expansion, which in turn could result in financial instability; and (3) eventually revert to capital outflows from EMEs, which could also be a source of financial instability. Most EMEs resorted to at least one of the following defensive policy measures: (1) the accumulation of international reserves, deviating usually from a freely floating exchange rate regime, or (2) the adoption of macroprudential policies.

The accumulation of international reserves by EMEs is a phenomenon interesting to analyze in detail. Because of the sheer size of QE in the United States, coupled with the QE implemented so far in Japan, it is not surprising that EMEs' domestic currencies underwent a sharp appreciation in response. This is the main reason why some analysts and policymakers have labeled QE "competitive easing." In a way, the aggressive accumulation of international reserves by EMEs all the way to late 2013 is at least partially the other side of the coin of "competitive easing." In fact, we might call it "competitive reserve accumulation." In most cases I would agree with this practice, given the blunt distorting effects that QE had on EMEs. The size of capital flows to this subset of countries was

much larger per unit of time than the capacity of such countries to absorb them without suffering substantial distortions.

Therefore, for most EMEs it has been appropriate to “throw some gravel under the wheels” through international reserves accumulation to mitigate some of the negative externalities that could take place as a result of the sharp real exchange rate appreciation. Even the contained appreciation has had real effects, starting with a deterioration in the trade balance and going all the way to substantially handicapping some sectors in a number of countries, such as manufacturing in Brazil. There are several other recent examples of sector handicapping among EMEs.

Another important reason to accumulate reserves in the face of QE is that it might avoid financial instability in the future. As QE will be temporary, EM countries should prepare themselves for the reversals of capital, and one way to do so is by accumulating reserves and building other backstops. In addition, rapid capital inflows could be used in the recipient economy in such a way that asset-price bubbles or rich valuations could result; this is of particular concern if such flows are intermediated by the banking system of the recipient country and lead to a real estate bubble, which usually kicks off a major crisis. Avoiding this scenario through reserves accumulation has been an effective prudential instrument.

Of course, in some cases macroprudential measures applied through the banking system (e.g., loan-to-value or income-to-debt limits, the imposition of higher reserve requirements) could deliver the same results, and several EMEs have followed this path. Nevertheless, macroprudential policies are far less effective when capital flows are not channeled through the banking system, as was the case with recent cross-border flows to many EMEs, where market-based financing has been the norm. I would say that the same applies to the imposition of capital controls.

As time passed, a gradual deterioration in some EMEs' macrofundamentals, in combination with some major events in advanced economies that periodically switched the risk on to risk off, and vice versa (e.g., the problems with Greece and other countries on the periphery of the euro zone, the possibility of a fiscal cliff in the United States, the “whatever it takes” statement by Mario Draghi)<sup>2</sup> have made capital flows to EMEs increasingly volatile.

In April and May 2013 the first serious reality check for EMEs arrived. At that time, the global financial cycle was more clearly transmitted to

EMEs, triggered mostly by the start of the discussion of monetary policy normalization in the United States, that is, the “taper talk.” This, together with the correction in commodity prices that followed the economic slowdown in China and in most advanced economies, invited a reevaluation of EMEs’ prospects.

The turbulence in EM financial markets that followed was not homogeneous. The most severe turbulence occurred in countries with the weakest fundamentals, mostly judged by the size of their current account and fiscal deficits. In these cases, sharp depreciations in local currencies took place, together with disproportionate increases in interest rates and plummeting stock markets. National authorities reacted by intervening in the foreign exchange markets, facilitating the reduction of duration in investors’ portfolios, and, more important, by tightening fiscal and monetary policies. In contrast, many other EMEs managed to sail through this episode by reinforcing their policy stance and allowing the exchange and interest rates to adjust without any market interventions. We could say that many EMEs came out strengthened from this period of volatility.

Financial markets were surprisingly calm in late 2013 and the first half of 2014. The tapering of securities purchases by the Federal Reserve started in January 2014 and proceeded without unforeseen consequences. At the same time, the Federal Open Market Committee enhanced the clarity of its forward guidance, creating the expectations of policy rate adjustments until 2015. In the euro area, major concerns became evident about sluggish economic growth and massive unemployment, together with inflation rates substantially below the ECB target. This generated the expectation of significant additional monetary policy easing by the ECB. Owing to these events, together with the reactivation of the search for yield, credit spreads compressed and their dispersion fell to unusually low levels, volatility in all asset classes was suppressed, and capital flows seemed to recover.

But market conditions started to change considerably for the worse at the beginning of the second half of 2014. Again, events in the United States and the euro zone were important triggers. As the QE tapering was coming to an end in the United States, widespread speculation about potential dates and modalities of the policy rate lift-off from the zero lower bound became destabilizing, leading to higher US rates. At the same

time, both the BoJ and the ECB took sequential steps toward additional monetary easing. Worth noting was that in January 2015, the ECB initiated a full-fledged QE program. The combination of the expectation of the normalization of US monetary policy and additional easing in the euro zone and Japan established conditions for euro and yen carry trades, as the United States offers higher yields and an appreciating currency, while low rates make the euro and the yen attractive funding currencies. This process feeds into itself, as the flows that it triggers have reinforced the appreciation of the US dollar. Thus it is not surprising that the US dollar effective appreciation in the nine-month span from July 2014 to April 2015 was the largest since 1973.

When the United States implemented QE, cross-border flows to many EMEs increased. But now, with the euro-zone and Japanese QE, together with the expectation of an imminent Fed tightening and stronger economic growth in the United States, even with respect to many EMEs, flows are going toward the United States, implying tighter external financial conditions for EMEs.

In addition, since mid-2014 we have also witnessed a sharp decrease in commodity prices, especially for oil, which reflects protracted low growth in the world economy, appreciation of the US dollar, and particular circumstances in specific markets. What we have seen recently in EMEs, then, are capital outflows and continued exchange rate depreciation, caused to a large extent by the strengthening of the dollar and the sharp collapse in commodity prices.

From the above, it should be clear that the start of the unwinding of the UMP in the United States, though certainly not the sole contributor, has induced a noticeable increase in volatility in financial markets, in particular those of EMEs. In a way this could be surprising, since the fact that the Fed is contemplating the full normalization of its monetary policy stance signals that the economic recovery has almost been consolidated in the context of price stability. This is good news for the United States, EMEs, and the world as a whole. But my fear is that during this transition period the overextension of financial risk taking is overwhelming the usual market responses. Let me illustrate this with a simple example. In the precrisis period, good figures for the US nonfarm payroll data generated an appreciation in EME currencies, for a strong US economy meant a positive impulse for their exports. In the postcrisis

period, and more markedly in recent times, a positive surprise in US payroll data has generated depreciation in EME currencies, for such surprises make market participants anticipate an earlier lift-off in the US policy reference rate.

Looking ahead, and given the imminent normalization of monetary conditions in the United States, it could be expected that central banks in EMEs will increase their policy rates as the Federal Reserve adjusts the federal funds rate upward. This might happen even if the domestic economic conditions do not justify a policy rate increase. Although the baseline scenario is one of a gradual and orderly normalization of US monetary conditions, episodes of financial turbulence cannot be dismissed. Under these circumstances, authorities might not only need to increase their policy rate but also might be forced to intervene in key financial markets, namely, the forex and money markets, performing as market-makers of last resort, in the latter case to facilitate the adjustment of duration in portfolios of domestic sovereign securities. These unorthodox market interventions by central banks would be pertinent if, as is likely, market liquidity dries up during episodes of stress. Precisely for this reason, I have mentioned the need for EMEs to have additional backstops, for example the IMF's Flexible Credit Line.

The fact that EMEs would have to adjust their monetary policy rate because of external conditions (i.e., Federal Reserve policy adjustments) overwhelming domestic ones (inflation and growth gaps) makes it obvious that they cannot depend solely on monetary policy in the context of a freely floating exchange rate regime with full capital mobility to achieve the ultimate policy goal, which is to reach faster and sustainable growth and simultaneously consolidate financial stability. In this sense, macro-relevant structural reforms, together with strong fundamentals, become of the essence. This is the path Mexico has followed.

Let me conclude with a brief commentary on the international monetary system (IMS). It is fair to say that the IMS is in transition, and much remains to be done to make it more stable and to adapt it to the challenges of the twenty-first century.

The global economy is becoming more multipolar and interconnected, underpinned by rapid structural growth in large EMEs. Dynamic EMEs generally exhibit lower levels of financial development and global integration than advanced economies, suggesting scope for catchup. This transition raises challenges and provides opportunities, and how it will

take place has important implications for financial stability and growth, and for the architecture of the IMS and its efficacy.

Despite some reforms after the global financial crisis, questions remain about the resilience of the IMS. Incremental steps have been taken to strengthen policy collaboration, monitor and manage capital flows, and broaden the financial safety net. However, more fundamental IMS reforms to address sources of instability have remained on the back burner. A key concern, one developed in this chapter, is that monetary policy decisions by advanced economies can create large spillover effects, especially for EMEs, so some form of coordination is urgently needed.

The international community has an opportunity to facilitate and shape a virtuous further integration of major EMEs into the global economy, while in the process addressing some long-standing weaknesses of the IMS. These goals can be achieved through the following measures:

First, by providing incentives and support for EMEs to join existing governance structures. Important measures include adapting those structures to the needs of EMEs and ensuring their fair representation, which would help prevent fragmentation and duplication and promote a deeper, more substantive global policy dialogue.

Second, by an orderly, well-sequenced financial deepening and opening in key EMEs, which could deliver substantial welfare gains for these countries, along with positive global spillovers and stability gains for the IMS. Deeper domestic financial markets would be expected to promote domestic demand, facilitate greater reliance on exchange rates to achieve external adjustment and thereby help reduce global imbalances, and improve EMEs' ability to cope with capital flow volatility. Increased opportunities for asset diversification, both domestically and at the global level, would provide additional welfare gains.

Third, by undertaking broad efforts to strengthen and close gaps in the global financial safety net, and avoid the need for costly and distortionary reserves accumulation. Certainly, this implies reaching the point of full implementation of the 2010 governance reforms at the IMF, which would increase its lending capacity based on quotas and enhance the voice and representation of EMEs. This would enrich the IMF's credibility, efficiency, and legitimacy, placing the institution in a stronger position to improve the functioning of the IMS.

## Notes

1. The term “original sin syndrome” was coined by Barry Eichengreen and Ricardo Hausmann (1999) and refers to the propensity of Latin American countries to borrow in a foreign currency when foreign interest rates are lower than domestic ones but to disregard the potential additional cost that could be generated by local currency depreciation, which happened often in the 1980s and 1990s in the region.
2. See Mario Draghi, “Remarks at the Global Investment Conference,” London, 2012.

## References

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