 Facing the Flood
 How Asia Is Coping With Volatile Capital Flows
Summary

• As the dollar is the dominant international currency and reserve currency, the supply of global liquidity has fluctuated in accordance with monetary and financial conditions in the United States.

• Small but completely open Asian markets have been exposed to sharp upward pressures on domestic exchange rates, to credit and asset bubbles and to other financial market risks. These economies have coped with shifting capital flows between safe assets in major reserve currencies and risk assets in the currencies of emerging markets to achieve exchange rate, monetary and financial market stability.

• As the scale and speed of cross-border flows become more intense, Asian authorities have been more ready to deploy a full suite of market intervention instruments to effectively restrict fund flow or credit growth. These include currency intervention, targeted capital controls and macro-prudential tools such as caps on the loan-to-value ratio.

• Asian economies have also been building up foreign reserves through currency intervention, though this is costly and inefficient, to ensure that they have a cushion when capital leaves the economy.

• It is undesirable that each market is left to its own devices to counter the prevailing ultra-loose global liquidity, or that markets feel the need to form their own regional blocs for mutual liquidity assistance. Such a strategy demonstrates a lack of coordination and collaboration between advanced economies and emerging economies at the global level.

• The preservation of global financial stability amid volatile capital flows is the joint responsibility of those on the receiving end of the flows, e.g. Asia, and their suppliers, i.e. the major reserve currencies.

• Both global and regional safety nets should be strengthened. Having identified the provision of dollar liquidity by the US Federal Reserve as the most important stabilizing factor in times of crisis, a permanent arrangement whereby the Fed has extended currency swap lines to five major central banks should be broadened to cover other markets globally.

• In the longer term, there should be a move to a multipolar global monetary system and to encourage the supply of safe assets, including those denominated in renminbi.

Introduction

This paper examines how Asian economies are coping with shifting capital flows between safe and emerging market risk assets under the prevailing ultra-loose monetary conditions. Since the US dollar is the dominant international currency and reserve currency, the supply of global liquidity has fluctuated along with the monetary and financial conditions of the United States. The near financial meltdown in the US in September 2008 triggered chronic shortages of dollar liquidity globally. When the US Federal Reserve (Fed) lowered interest rates to zero and embarked on quantitative easing, a tsunami of money flowed to emerging markets as investors sought high-yielding assets. The ultra-loose monetary conditions have fuelled credit and asset bubbles in emerging markets. But during periods of market stress such as that in May 2013, when the Fed first signalled the start of its asset purchase reduction, investors became risk-averse and hot money exited emerging markets to the ‘safe haven’ of dollar reserve assets with a speed and on a scale that were destabilizing to the underdeveloped financial markets of emerging economies.
This paper demonstrates how the small but completely open Asian markets have struggled to achieve exchange rate, monetary and financial market stability in an increasingly interconnected global market. The challenges posed to Asia and its policy responses provide important lessons to emerging markets in terms of the optimum pace and sequence of capital market opening and the measures needed to reduce the risks of capital flows. The paper also argues that the stability of cross-border flows is the joint responsibility of the recipients of flows and their suppliers, i.e. countries with major reserve currencies, and requires close collaboration and coordination in areas ranging from monetary policy and cross-border regulation to crisis prevention.

The paper identifies the provision of dollar liquidity by the Fed as the most important stabilizing factor in times of crisis. It urges that the permanent arrangement whereby the Fed has extended currency swap lines to five major central banks be broadened to cover Asia and other markets. This paper also supports the long-term move towards a multipolar global monetary system that includes the renminbi (RMB) as an international reserve currency. As a preliminary gesture of endorsement of such a system, the International Monetary Fund could include the RMB in the special drawing rights (SDR)1 basket of currencies.

The paper is arranged in three sections. The first section illustrates how the sharply changing monetary and financial conditions in the US following the collapse of Lehman Brothers impacted on Asia's financial and monetary stability. The second section discusses the policy responses or crisis resolution measures, including the accumulation of foreign reserves and the use of targeted capital controls, that have been taken in Asia to cope with capital flows. The final section sets out recommendations on crisis prevention, including measures to improve global liquidity provision in times of crisis, increase the supply of safe reserve assets and make the global monetary system multipolar and consequently more stable.

Impact of spillovers from US monetary and financial market turbulence

From the Asian financial crisis2 between 1997 and 1998 to the global financial crisis a decade later, the commonly held view in the West on the nature and role of free capital flows is changing. There was a tendency in the West to blame bad policies, bad institutions and crony capitalism for the crisis in Thailand, Indonesia, South Korea and Malaysia. While these factors undisputedly had a role to play, discussion at the time overlooked or downplayed the unstable nature of private capital flows, which had wreaked havoc in small but liberalizing financial markets. The interest rate differentials between domestic and international markets had prompted surges of cheap but short-term foreign currency lending to the newly liberalized markets in the region to finance long-term investment in domestic currency. This exposed the region's banking and corporate sectors to huge risks in the event of a reversal of capital flows. When foreign investors pulled their capital from the region indiscriminately in 1997, domestic banks that ran currency and maturity mismatches were squeezed for liquidity, touching off a widespread banking crisis.

In the 1990s and early 2000s, the dominant view of officials in the US, and of many others in the West, including the IMF, was in favour of the efficient markets hypothesis and free capital flows. It was not until the eruption of the global financial crisis in 2007–08 that the spotlight was put on the inherently unstable nature of capital flows, which have affected the West as much as the East. Like the Asian crisis,

---

1 An explanation of SDRs is given on page 14 below.

2 The Asian crisis erupted in July 1997 when the Thai authorities abandoned the defence of the baht and allowed the overvalued currency to devalue. In a matter of months, the other Asian currencies – the Indonesian rupiah, the Malaysian ringgit and the South Korean won – fell like dominos, as foreign capital fled the region at a speed and on a scale previously unseen.
the global financial crisis was preceded by strong surges in capital flows to the US. This time, as then, the implosion came when depositors and investors, whose confidence was shaken by a large amount of sub-prime assets held by banks, had pulled their ‘runnable’ assets from the banks en masse.

Asia went into the global financial crisis with a defence system fortified by measures adopted in the aftermath of the Asian financial crisis. Asia’s economies rebounded from the Asian crisis rapidly, adopted a floating exchange rate regime and maintained current account surpluses that resulted in healthy levels of foreign reserves. The Asian economies made the policy choice of keeping their markets open to foreign capital, and indeed, even in the period preceding the near financial meltdown in the US, received a huge volume of private flows. Despite the fact that the Asian economies are well managed, however, macroeconomic stability does not guarantee financial stability. This section explains how severely they were hit first by the dollar liquidity crisis and then by the tsunami of capital triggered by the unconventional monetary policy of the West.

The main channel through which the global crisis was spread to Asia was global banking. In the US and Europe, the banking sector was tainted by sub-prime mortgages or their securitized products. When the liquidity in these products dried up, the interbank market froze, starting in August 2007. To relieve the liquidity crunch in the US and Europe, global banks withdrew credits in the market with the best credit and liquidity – Asia.

Figure 1: Net foreign currency due from overseas offices of foreign bank branches in Hong Kong and Libor-OIS spreads

Source: HKMA (2014).³

---

Liquidity crunch

The liquidity crunch in Asia was exogenous and was triggered by a colossal reversal of capital flows. According to a study by the Hong Kong Monetary Authority (HKMA), foreign bank branches and subsidiaries in Hong Kong, faced with a liquidity squeeze at their head offices, withdrew credit lines to customers in Hong Kong and the rest of Asia and transferred those funds through internal transfers to buffer their parents’ liquidity in the home markets. By the peak of the withdrawal in October 2007, the total amount of cross-border banking funds taken out of the Hong Kong banking sector to relieve cash-strapped foreign bank parents had reached $222 billion (Figure 1). The transfers slowed significantly from December 2007, when US banks were able to tap into the Term Auction Facility (TAF) introduced by the Fed. Because only the Fed can create dollar liquidity, it also signed currency swap agreements with the European Central Bank (ECB) and with 11 other central banks, which were then able to provide dollar liquidity to their own banks. To put into perspective the extent of the deleveraging of global banks in Asia, the withdrawal of $222 billion (Figure 2) from Asia’s banking hub amounted to 40% of the peak amount of liquidity assistance extended by the Fed to global banks under the TAF. The capital flow reversal prompted Asia-Pacific equity indices to fall by 40% in two months and regional currencies such as the Indonesian rupiah, the South Korean won and the Australian dollar to depreciate by more than 20%.

Some of the worst aspects of the liquidity squeeze in Asia are illustrated by South Korea’s dollar liquidity crisis following the collapse of Lehman Brothers in September 2008. In the last quarter of 2008, $60 billion in capital exited South Korea, equivalent to 40% of the total amount of inflows to the country during the two-year period prior to Lehman’s collapse. The won fell sharply and credit default swaps for South Korea shot up 700 basis points amid the doom-and-gloom reports by foreign media. Ministerial officials worried that market rumours would be self-fulfilling.

Figure 2: Flows to Asia (percentage of aggregate GDP, four-quarter moving average)

How did the South Korean banks get to this situation? In anticipation of the appreciation of the won, shipbuilders and exporters in South Korea sold dollars forward to banks. The banks hedged their overbought position with foreign currency borrowing, mostly at short maturity. The consequence

---


was a surge in banks’ short-term US dollar external debt, which was used to finance longer-term won lending, exposing the banks to a mismatch in both maturity and currency. When the crisis hit, foreign banks deleveraged sharply to repatriate liquidity and left South Korea’s banks stranded for US dollar liquidity. Roughly 60% of South Korean banks’ short-term external debts had difficulty rolling over. The Bank of Korea estimated that the currency and maturity mismatches peaked at $68 billion and $85 billion respectively.

**Hot money inflow and sharp reversals**

While the sudden withdrawal of these credit lines from Asia was disruptive, it was short-lived. Asia was hit by a tsunami of money starting in the second quarter (Q2) of 2009, its scale and intensity bigger even than the withdrawal. Amplified by the fact that the dollar was an international currency, the ultra-loose monetary policy of the advanced economies spread to Asia, fuelling booms in credit, the financial markets and real estate. Hong Kong and Singapore provide prime examples of how prolonged periods of low interest rates spurred sharp rises in property prices. In Hong Kong, property prices in Q4 2013 were more than double those of Q2 2009, while in Singapore, prices rose by more than 50% from their trough in 2009 to 2013. A reversal in the course of global interest rates may trigger a collapse of housing prices and mortgage loan defaults unless this risk is being properly managed.

The case of Indonesia illustrates the impact of surges of capital inflows on emerging market economies from 2009 onwards. With a completely open capital market and structurally high inflation, Indonesia fits perfectly the definition of a high-yielding emerging market for risk-taking foreign funds. Indonesia’s market of government bonds, which yielded 8–9%, could easily be overwhelmed by a relatively small allocation from several global asset managers. Net foreign portfolio inflows rose to $10.3 billion in 2009, double their size in 2007. At the peak of the inflows, as much as 35% of Indonesian government bonds were held by foreign investors. Such a level of inflow was sufficient to drive the value of the rupiah up 35% in March 2009, more than recovering the ground it had lost in the last quarter of 2008. The equity index rose by more than 100%.

This hot money flow was typically parked with the more liquid short end of the bond market, and retreats to the ‘safe haven’ of US dollar assets at the slightest hint of trouble during the ‘risk-off’ period. This phase was epitomized by the Eurodebt crisis in 2011–12 and the announcement of the Fed’s reduction of its monthly asset purchase programme in mid-2013. The latter action touched off a sharp sell-off of US treasuries and emerging market bonds, wreaking havoc in exchange rate and credit markets, in what is widely known as the ‘tapering tantrum’. During that period, the Indonesian bond market was so badly battered that confidence in the domestic mutual fund market was seriously undermined. The worst fears of the Indonesian authorities were that the capital flight would be translated into a domestic flight of capital from the mutual fund market.

In times of economic crisis, agents retreat to safe haven currency assets, most notably US Treasury bills, causing their prices to rise and the dollar to appreciate. This underscores the value of US Treasury bonds as the reserve assets that offer protection against system risk. Markets perceive them as safe because of the liquidity stemming from the size of the market and its credible fiscal and institutional backing. As the markets are held spellbound by every word from Fed officials on when to taper the asset

---


7 Farhi, Emmanuel, Gourinchas, Pierre-Olivier and Rey, Hélène (2011), Reforming the International Monetary System, Centre for Economic Policy Research.
purchase programme and to raise interest rates, the volatility of these capital flows has increased as capital have shifted back and forth between safe and risk assets.

This safe haven effect is an important driver for the strengthening of the yen during ‘risk-off’ periods. The IMF noted that, given Japan’s strong net foreign asset position and liquid financial markets, the yen has ranked with the Swiss franc as one of investors’ preferred safe haven currencies during risk-off periods. In the same paper, the IMF noted that the global crisis was associated with a real exchange rate appreciation of the yen by over 20% to hit a peak of 77 yen to the dollar in 2011. The IMF found that yen appreciation was related neither to portfolio inflows (as no inflows were detected) nor to interest rate differentials with the US. The yen’s value had risen as traders, mostly hedge funds, put on net long yen positions in the derivatives market. Real appreciation of the yen had not only slowed its export recovery but had also fuelled deflation risks and created a drag on the economy.

Policy responses

In the wake of the global financial crisis, there is increasing recognition that capital flows can have a debilitating impact on markets, distorting exchange rate values and complicating monetary policy, particularly in small and open economies. This represents a shift from the free and unfettered capital flow mantra that has dominated debate on the measures for crisis resolution and prevention in the last two decades. As the scale and intensity of the flows during the recent crisis have increased, this has necessarily justified strong policy responses in Asia to preserve financial stability. These included heavy currency intervention, capital controls and macro-prudential tools, as described below.

Liquidity assistance during the global financial crisis

Central banks and governments aggressively and effectively deployed a standard suite of policy measures to cope with the liquidity crunch during the initial stage of the global crisis. These included aggressive monetary easing, the provision of liquidity assistance in US dollars, the expansion of guarantees on bank deposits and even non-deposit liabilities, and the introduction of fiscal stimuli to counteract the shortfall in external demand. In the case of South Korea, the single most important tool, which proved to mark a turning point in the country’s liquidity crisis, was the announcement of the dollar currency swap facility in October 2008. Even though the amount was only $30 billion, much lower than South Korea’s own foreign reserves of more than $250 billion, the announcement had an immediate tranquilizing effect on its market, which was reassured by the fact that the facility was backed by the Fed, which has limitless authority to print the greenback.

At the start of the crisis in 2008, South Korea also had bilateral currency swap lines with China and Japan, worth $30 billion each. Neither of these lines had the same reassuring effect as that with the Fed, however, even though both lines were subsequently expanded to roughly $60 billion. While bilateral currency swap arrangements between South Korea, China and Japan sent messages of mutual support, it was felt that that support might not be enduring. Amid political tensions, Japan and South

---

8 Botman, Dennis, de Carvalho Filho, Irineu and Lam, W. Raphael (2013), ‘The Curious Case of the Yen as a Safe Haven Currency: A Forensic Analysis’, IMF Working Paper WP/13/228, November. This paper argued that such large movements in yen during risk-off periods occur without any detectable movements in net capital in- or outflows. Changes in market participants’ risk perceptions trigger derivatives trading, which in turn leads to changes in the spot exchange rate without capital flows. Specifically, the IMF finds that risk-off periods coincide with forward hedging and reduced net short positions or a build-up of net long positions in yen.
Korea allowed their bilateral currency swap line to lapse in October 2013, while China and South Korea renewed theirs for another three years in October 2014, with amounts maintained at 64 trillion won or RMB36 billion.

Currency intervention and competitive non-appreciation policy

Even though most Asian currencies have adopted a floating rate regime since the Asian crisis (1997–98), the scale, speed and inherent volatility of capital flows have distorted the foreign exchange market, and the swings in the value of a currency are so extreme that, if unchecked, they would seriously undermine financial market stability. One of the biggest currency intervention exercises was conducted by the Bank of Japan (BoJ), which intervened in the forex market four times between September 2010 and October 2011, contributing substantially to the $185 billion in the country’s foreign exchange reserves in 2011 alone. Japan is not unique in this regard: the Swiss National Bank (SNB) has been equally aggressive in buying up foreign currencies to keep its currency from appreciating against the euro.9

When currency intervention failed to stop or slow the rise of yen in 2010 and 2011, Japan embarked on its version of competitive quantitative easing. In December 2012 Prime Minister Shinzo Abe formally ushered in a three-pronged approach (the ‘three arrows of Abenomics’) to revive the economy: through flexible fiscal policy, aggressive monetary easing and bold structural reforms to raise long-term growth. Under the second arrow, a bold programme of quantitative and qualitative monetary easing (QQME) was launched, whereby the BoJ’s current account balance would increase fourfold to 200 trillion yen, and Japan’s monetary base would double to 300 trillion yen, or 55% of GDP, by the end of 2014. Between November 2012 and January 2013, the yen depreciated by 30% in real terms. QQME, which counters the monetary easing measures of other major reserve currencies, is widely regarded as having been effective in changing expectations of deflation and buying time for structural reform that would lift the country out of the so-called Lost Decades.10

Building up foreign reserves as self-insurance

Central banks are well aware that holding US dollar reserves is costly and inefficient, as dollar assets yield less than domestic assets. But that self-insurance policy was pursued in earnest in the aftermath of the global financial crisis. Even though Indonesia had around $60 billion in official reserves in September 2008 (Figure 3), the pool was drawn down in a currency intervention operation to prevent an excessive downward impact on the domestic currency. It has become clear that central banks should start with a substantial cushion of foreign reserves for drawing down when the capital inflow reverses course. Therefore, in intervening in the currency market on its way up, the central bank is building up foreign reserves to absorb part of the downward pressure of the currency when the flow reverses. The rupiah appreciated by 15% in 2009, 4% in 2010 and 5.4% in 2011. By June 2011, Indonesia’s foreign reserves had doubled to $120 billion.

---

9 In the context of the Eurodebt crisis, investors turned to a neighbouring safe haven currency, the Swiss franc. The SNB tried unsuccessfully to lower the interest rate to keep its currency value down. In September 2011 the SNB announced that the value of the Swiss franc would be capped at SFr1.20 to the euro. Before and after the announcement, the SNB kept intervening in the market. Between January 2009 and the end of 2012 Swiss foreign reserves rose from SFr90 billion to SFr500 billion.

10 The term describes the condition of the Japanese economy in the 1990s and 2000s. It refers to the sluggish economic performance and stagnating growth that arose from the bursting of the country’s massive real estate bubble in the 1990s.
In the case of Thailand, its foreign reserves had almost doubled, to $190 billion, from $100 billion in August 2008; Malaysia lost most of its reserves, almost $40 billion, between June 2008 and March 2009, but its foreign reserves have since more than recovered the lost ground.

Figure 3: Foreign reserves of Malaysia, Indonesia and Thailand, December 2003–June 2014

Source: IMF.

Use of capital controls and market intervention to deal with destabilizing capital flows

The use of capital control measures in response to the Asian financial crisis was controversial. The control measures adopted by Malaysia in 1998\(^\text{12}\) to curb capital outflows attracted fierce criticism from officials at the IMF and in the US government, as well as from others in the West, who argued that Malaysia was undermining investor confidence in its commitment to market opening. It was not until many years later that academics began to credit these extraordinary intervention measures for stabilizing Malaysia’s markets at a time of crisis and for buying time to undertake structural reforms, which paved the way for Malaysia’s economic recovery.

The targeted use of capital control measures has become part of a central bank’s toolkit for coping with excessive capital flows. Bank Indonesia (BI) identified speculators trading in and out of the short end of the bond market as a significant source of volatility, and in May 2011 it imposed a minimum holding period on BI certificates of six months. It also reinstated limits on short-term offshore borrowing by banks, to a maximum of 30% of capital starting in 2011. In addition, it mounted a counter-attack by intervening in both the currency market and the bond market to stabilize prices. Hedge funds trade on volatility, and the reduction in volatility in both markets would reduce their attractiveness and increase the cost of speculation.

There are also market intervention measures that are somewhere between capital flow management measures and macro-prudential measures. Having experienced the liquidity squeeze, the South Korean authorities introduced a leverage cap on banks’ forex derivatives positions in October 2010.\(^\text{13}\)


\(^{12}\) In September 1998 Bank Negara Malaysia, the country’s central bank, announced that any ringgit outside the country would no longer be legal tender in one month’s time. The measure, in effect, killed the offshore market by forcing ringgit holders overseas to repatriate them onshore. Malaysia also fixed the external value of the ringgit at RM3.8 to the dollar, a regime that was kept until 2005. In addition, Malaysia imposed a 12-month waiting period for non-residents to convert proceeds from the sale of Malaysian securities, measures that were revoked when the situation stabilized.

\(^{13}\) The caps were initially set at 250% of capital for foreign bank branches and 50% for domestic banks, and were tightened to 200% and 40%, respectively, in July 2011, and further to 150% and 30% in January 2013. These caps have been effective in reducing short-term foreign currency borrowing.
Outside Asia, Iceland and Ukraine adopted drastic measures in 2008 to stem massive outflows. Not until November 2012 did the IMF formulate its official stance on capital controls. It pronounced that there is 'no presumption that full liberalization is an appropriate goal for all countries at all times ... and that rapid capital inflow surges or disruptive outflows can create policy challenges'. Capital control measures were renamed capital flow management measures (CFMs), which could be justified on financial stability grounds but could not be a substitute for good macroeconomic policy. CFMs had to be ‘transparent’, ‘temporary’ and ‘targeted’. This was a belated but welcome public acknowledgment of a shift from the free market mantra that had guided the Fund’s advice to Asia for the previous two decades.

Use of macro-prudential tools to cope with surges of inflows

In the face of virulent and vicious capital flows, regulators in Asia have focused their precious regulator resources on the single most important risk that could wipe out the system – liquidity risk. The HKMA, for example, has since late 2013 adopted a two-pronged approach. First, it ensures that on a macro, systemic level, there are sufficient liquid assets in the entire banking system to meet any sudden fund withdrawal. But even if there is sufficient liquidity overall, there might be a problem at the micro level. That is why the second prong in this approach is the so-called Stable Funding Requirement (SFR), under which banks are required to keep a considerable portion of their funding (including net borrowing from head offices) in tenure of six months or more to reduce the risk of a liquidity squeeze.

In addition, regulators across Asia, led by the HKMA and the Monetary Authority of Singapore, have adopted macro-prudential tools for many years, such as prudential requirements for banks to observe a combination of loan-to-value (LTV) ratios and debt service ratios, in an attempt to cool the overheated property market. The measures provide lenders with a bigger cushion of collateral in case of a drop in property prices, and borrowers with a bigger incentive to continue to service the debt even if interest rates rise. These ratios in Hong Kong and Singapore have been tightened further since 2010 amid rising property prices, and were deemed by the financial community to be effective in curbing excessive build-up of leverage in the banking system.

Recommendations on international cooperation

The foregoing has highlighted Asia's challenges in maintaining financial and monetary stability in the face of a sharply fluctuating supply of global liquidity, which in turn is dependent on monetary and financial conditions in the US. The global monetary and financial system is integrated, interconnected and dollar-centric. But Fed policy understandably serves only the interests of the US. Massive capital inflows distort exchange rate value and fuel credit and asset booms. Their sharp reversals can destabilize financial markets, particularly those with weak macroeconomic fundamentals. In recent years, emerging markets have see-sawed between ‘hot’ and ‘cold’ during risk-on and risk-off scenarios, as markets react to every word uttered by the Fed.

---

14 In 2008, faced with huge capital outflows, Iceland eliminated the convertibility of domestic currency accounts for capital account transactions. Ukraine introduced a five-day waiting period for the conversion of local currency proceeds from investment transactions to foreign currency.
16 In Hong Kong the maximum LTV ratio is set at 50% for residential properties with a value of HK$10 million or more, 40% for commercial and industrial properties, 60% for those between HK$7 million and HK$10 million, and 70% below HK$7 million. The LTV is reduced by another 10 percentage points for cash buyers. A companion measure is the tightening of the debt services income ratio. The average LTV for new loans fell to 55% in 2014 from its peak of 66% in 2009, affording the banks a bigger cushion in the event of a decline in the property market. The set of macro-prudential measures is complemented by a new stamp duty, which is as much as 20% for a holding period of six months or less to deter speculators.
There have been calls for coordination and cooperation in monetary policy, notably led by Raghuram Rajan, India’s central bank governor. It is well understood that national central banks are accountable to their own country, and will consider impacts on other markets only if there is a feedback loop into their own market. Since Q4 2008, when major central banks successfully coordinated a cut in interest rate, there has been a regrettable absence of meaningful coordination on monetary policy. Every market is therefore left to its own devices to fortify its defence mechanisms or even restrict outflows and inflows, as well as to engage in competitive monetary easing or a non-appreciation policy. This is not desirable, as the result will be a global market awash with liquidity, which risks breeding even bigger asset bubbles.

The picture is equally confusing in the field of international cooperation. As the experience in Asia shows, there is a need for countries to access dollar liquidity in times of crisis. To this end, Asian countries have relied on the accumulation of foreign reserves, even though it is inefficient and costly. The adoption of such self-insurance policies is a clear sign that the existing global and regional safety nets and bilateral arrangements are far from adequate. Testifying to the general feeling of dissatisfaction, there is an increasing momentum towards the establishment of alternative financing platforms, such as the BRICS Bank and the Asian Infrastructure Investment Bank (AIIB). While these regional developments may supplement the role of the World Bank and the IMF in the provision of liquidity assistance or financing for the future, there is also a risk of fragmentation in response to the next crisis, unless there is coordination among the established and new initiatives. Below we set out specific proposals for addressing the issue of liquidity provision in the medium to long run.

**Beef up the global safety net**

The IMF is ideally positioned to provide liquidity assistance in times of crisis. Indeed, at its April 2009 London meeting, G20 leaders decided to triple IMF lending capacity from $250 billion to $750 billion, and to restructure its toolkit. Specifically, the Flexible Credit Line (FCL) was created after the global crisis to provide insurance to countries and boost market confidence during a period of heightened risks. The FCL, which imposes no conditionality, was designed to reduce the stigma associated with IMF bailout loans. This was a step in the right direction, but there are still few takers for this offer because of the implicit stigma that might trigger adverse market action. So far, only Colombia, Mexico and Poland have applied for and been awarded the line, but even they have not drawn down on the facility. The Asian countries are among the many still lacking trust in the IMF and sceptical of borrowing from it.

A major reform of the IMF’s governance structure, which was agreed by its board in 2010, was to double IMF quotas and to shift 6% of quota shares to dynamic emerging markets and developing countries. If implemented, the reform could go a long way towards restoring trust among Asian and emerging market economies, but the plan is being stalled by the US Congress. Unless the IMF’s governance structure is able to reflect and reckon with shifts in economic power, this global safety net will not be fully effective or legitimate.

---

17 Formally the New Development Bank, the BRICS Bank comprises China, Brazil, Russia, India and South Africa. China would have the biggest voting power at the BRICS Bank, accounting for 39.95%; Brazil, Russia and India would each hold 18.10%; and South Africa 5.75%. The AIIB is an international financial institution proposed by China for the first time in October 2013. The multilateral development bank’s purpose is to provide finance to infrastructure projects in the Asia-Pacific region.

18 Following the governance reform, China’s voting share would increase to 6.39% from 3.996%, making it the second largest holder of IMF quotas after the US.
Institutionalize the regional safety net

The regional safety net is an alternative platform to provide emergency liquidity. The Chiang Mai Initiative (CMI), Asia's own safety net, represented an attempt at collaborative financing, as an alternative to the IMF, after the Asian financial crisis. This, like the BRICS Bank, was supposed to supplement the function of the IMF without replacing it.

The CMI began as a series of bilateral swap arrangements among the members of the Association of Southeast Asian Nations (ASEAN) – Indonesia, Malaysia, the Philippines, Singapore and Thailand – and the Plus Three countries – Japan, South Korea and China. In December 2009 the Chiang Mai Initiative Multilateralization (CMIM) Agreement became binding. In response to the global financial crisis, ASEAN+3 agreed that the pool of resources available to be drawn on should be doubled to $240 billion, and that the portion delinked from the IMF should rise from 20% to 30%.

The Eurodebt crisis and the so-called tapering tantrum in 2013 spurred the development of CMIM, and trial runs on transfers in accounts have been conducted. But the facility is still untested, and the portion delinked from the IMF is considered by many participants in CMIM as being too small. If Indonesia was to draw on the unlinked portion, it would have access to resources of about $21 billion, which is not adequate. There is a need for CMIM to be institutionalized further, and to beef up the surveillance unit, known as ASEAN+3 Macroeconomic Research Office (AMRO), à la IMF.

Extend Fed's liquidity swap agreements to Asia

Bilateral currency swap lines extended by the Fed have proved to be highly effective in stabilizing markets. As the US dollar is the dominant reserve and international currency, the Fed has de facto played the role of ‘lender of last resort’ to the counterparts of the swap lines. Under such agreements, the Fed agrees to accept another country's currency in return for a loan in dollars. The first such lines were extended to the ECB in December 2007, enabling it to provide liquidity to European banks in order to relieve their acute shortage of dollar liquidity in the market. As the crisis deepened globally, the scope and the volume of the swap lines expanded dramatically. At its peak in December 2008, they were worth in excess of $600 billion.

But the Fed does not throw a lifeline to just anyone. As the crisis deepened, temporary lines were set up with selected central banks in Asia and Latin America, including those of South Korea, Brazil, Mexico and Singapore. A number of central banks in emerging markets applied for lines but were turned down. It is not clear whether the Fed's refusals were based on political considerations or creditworthiness or both.

The group of central banks benefiting from the safety net of the US has become even more select. In October 2013, the Bank of Canada, the Bank of England, the BoJ, the ECB, the Fed and the SNB announced that their existing temporary bilateral liquidity swap arrangements were being converted to standing arrangements. These will constitute a network of bilateral swap lines among the six participating central banks, and will allow the provision of liquidity to each jurisdiction in any of the five currencies foreign to that jurisdiction, should the two central banks in a particular bilateral swap arrangement judge that market conditions warrant such action.10

---

10 In other words, the Bank of Canada, for example, could provide Canadian dollars to the other central banks and provide liquidity in UK pounds sterling, Japanese yen, euros, Swiss francs and US dollars to financial institutions in Canada, should the need arise. This network of swaps was greatly enhanced by the removal of the caps on the amounts drawn down.
Given the important role of the dollar in the international monetary system, there is merit in considering how to extend the dollar line to Asia. One option is for the Fed to extend the liquidity line through CMIM, but how that can be done needs to be explored further.

It is unlikely that China, its huge foreign reserves notwithstanding, will be able to take the place of the US in the provision of liquidity assistance. In the past few years China has signed 26 bilateral currency swap agreements, with a total value equivalent to $470 billion. Given that the RMB is still a long way from a reserve currency that can be readily exchangeable with the dollar for intervention purposes, the value of these swap agreements is limited in times of crisis. None the less, they serve an important strategic goal of smoothing liquidity shortages in RMB during the process of developing the offshore RMB markets.

Move towards a multipolar international monetary system in the longer term

If a country other than the US had had a near financial meltdown followed by a massive asset purchase programme to print money, that country’s currency would have collapsed. Yet paradoxically, following the failure of Lehman Brothers, a wave of money flooded into the US, the epicentre of the crisis, from US investors pulling their capital from abroad and foreign investors in search of a safe haven for their money.20 As seen above, Asian countries habitually accumulate foreign reserves, and these are ploughed back into US dollar safe assets because the dollar is the principal intervention currency. Where the dollar’s dominance in global finance should have been under siege, its role as a store of value or a safe haven has been greatly enhanced.

The world has come to rely on the US for its supply of safe and liquid assets because of a shortage of alternatives. The US has a deep and liquid Treasury bond market and solid public institutions, which is why it accounts for about 60% of the world’s reserves. But this dominant status means that the rest of the world is subject to the vagaries of US financial and monetary conditions. To the extent that diversification begets stability, the world monetary system should be more stable if the supply of global liquidity is more diversified and dependent on other monetary areas.

A Chatham House report21 published in 2010 argues for the development of a multi-currency monetary system, alongside the still pre-eminent dollar, that is appropriate for a world of regional trading blocs – i.e. Europe, Asia and the Americas. Experience has shown that two or more reserve currencies can operate simultaneously. Other academics argue that it is only a matter of time before the international system becomes multipolar.22 Global liquidity demand grows with the global economy. The world economy’s strong growth boosts the demand for dollar-denominated assets, as clearly seen in the growth in official reserve demand from Asia. It is argued that there is a need to increase the supply of safe assets denominated in other currencies. Farhi et al.,23 for example, have argued for the issue of mutually guaranteed European bonds. Though desirable, this would meet with immense political obstacles because the EU is not a fiscal union.

Does the RMB, which is backed by a single sovereign state, stand a chance of being the next dominant reserve currency? The domestic currency of China, the world’s second largest economy

---

23 Farhi et al. (2011), Reforming the International Monetary System.
and biggest trading nation, has all the trappings of an international currency that could rival the

dollar one day. Since 2009, the RMB has enjoyed a spectacular rise as an international currency
and as a trade settlement currency, with about 15% of China’s merchandise trade settled in RMB
– compared with a negligible amount only five years ago. According to the Society for Worldwide
Interbank Financial Telecommunication (SWIFT), in October 2013 the RMB overtook the euro to
become the second most frequently used currency in trade finance in the world. However, because
China’s capital account is largely closed to portfolio flows, its progress to becoming a reserve
currency depends critically on the accessibility to foreigners of the stock of Chinese Ministry of
Finance bonds, the deepening of its own debt market and the extent of its structural reform (e.g.
interest rate reform). That progress has been slow because of the risks to financial stability associated
with reform. Nevertheless, many foreign central banks, particularly those in Asia and emerging
markets, have diversified their official foreign reserve holdings to include RMB.

Given that a multipolar international monetary system should be encouraged for reasons of diversification
and stability, this paper recommends that the G20 should support the inclusion of the RMB in the basket of
SDR currencies. SDRs are created by the IMF as reserve assets, and are distributed among IMF members
according to their voting rights at the institution. These allocations are counted towards the international
reserves of the holder, and can be exchanged for any other SDR currency through the IMF. There has
already been a lot of debate over whether – and, if so, when – to include the RMB in the SDR basket, and
what impact the move would have on the representativeness, value and attraction of holding SDRs. This
paper considers that the most important argument in support of inclusion is that it would send a signal
affirming the IMF’s support for a multi-currency monetary system, as well as endorsing the progressive
reforms being undertaken in China to make its currency regime more flexible and more international. A
review of the composition of the basket, currently comprising the dollar, the euro, the yen and the pound
sterling, is scheduled for 2015, and inclusion of the RMB would encourage its move towards acquiring the
key characteristics of a reserve asset currency and better reflect the present world of global finance.

Conclusion

In Asia, there is widespread recognition that, with the tidal wave of easy money leaving the region,
and with China’s growth slowing, it is time to embark on structural reforms and move to a growth
model that is less debt-driven. While the Asian authorities have recognized that keeping the region’s
macroeconomic house in order is their primary responsibility, there is a prevalent view that no
amount of good housekeeping is sufficient to preserve monetary and financial stability in the face
of these extraordinary global liquidity conditions, but that it has to be accompanied by a full suite of
market intervention measures, including currency intervention, capital controls and macro-prudential
measures, to curb the volatility of capital flows and prevent the excessive build-up of leverage, which
could cause further asset bubbles. Their success on those fronts is throwing light on the kind of trade-
offs and tools that are required for emerging markets debating how rapidly, and according to what
programme, they should liberalize their capital markets and open them to foreign flows.

24 The market share of RMB usage in trade finance, or Letters of Credit and Collection, grew from 1.89% in January 2012 to 8.66% in October
2013. The RMB overtook the euro, which dropped from 7.87% in January 2012 to 6.64% in October 2013. The RMB now ranks behind the dollar,
which remains the leading currency with a share of 81.08%.

25 The SDR is an international reserve asset created by the IMF in 1969 to supplement its member countries’ official reserves. SDRs exist only
on the books of the IMF, but can be exchanged for freely usable currencies. In November 2011, the IMF released a document recommending that
the reserve asset criterion for inclusion should be based on three key characteristics: liquidity in foreign exchange markets, hedgeability and the
availability of appropriate interest rate instruments. Four indicators are proposed to assess these characteristics: currency composition of foreign
exchange reserves, spot and derivatives market turnover, and an appropriate market-based interest rate instrument.
However, in the absence of international coordination, every market is left to its own devices to counter the prevailing ultra-loose global liquidity, restrict capital flows, build up foreign reserves for self-insurance or form its own regional bloc for liquidity assistance. This is undesirable because the next time a major financial crisis strikes, efforts to coordinate rescues might be Balkanized.

The preservation of global financial stability in an era of volatile capital flows is the joint responsibility of those on the receiving end of the flows, such as Asia, and their suppliers. It is important that the central banks of major reserve currencies understand the impact of their monetary actions on the rest of the world, lest there be a boomerang effect on their own jurisdictions. The Financial Stability Board, the IMF and the Bank for International Settlements are well placed for the monitoring of spillover effects and discussion of appropriate actions. It is important that these platforms, and the IMF in particular, are representative of the shifting economic balances of today’s world.

This paper has identified the provision of dollar liquidity by the US Federal Reserve as the most important stabilizing factor in times of crisis. It urges that the permanent arrangement whereby the Fed has extended currency swap lines to five major central banks be broadened to cover other markets globally. How that can be effected in Asia, and whether it can be done via CMIM, should be a matter for urgent discussion. At the same time, CMIM should proceed with institutionalization to strengthen its surveillance capacity and preparedness for liquidity provision. In the longer term, there should be a move to a multipolar global monetary system and the supply of safe assets, including those denominated in RMB, should be encouraged. As a preliminary gesture of endorsement, the IMF could include the RMB in the SDR basket of currencies.

About the author

Julia Leung is Julius Fellow in the International Economics Department at Chatham House. She was previously Under Secretary for Financial Services and the Treasury of the Government of Hong Kong SAR (2008–13) and Executive Director of Hong Kong Monetary Authority (2000–08).

Acknowledgments

The author would like to thank Ida Liu and Helena Huang for the their research assistance, and Paola Subacchi and two anonymous reviewers for comments on a draft of this paper.

The Julius Fellowship at Chatham House

The Julius Fellowship, created to honour Dame DeAnne Julius, chairman of Chatham House (2003–12), forms part of the institute’s wider aim to create an expanding network of independent thinkers on international affairs. Julius Fellows will bring new international perspectives and voices to the institute and into Western policy, help drive the debate on new ideas for the global economy and its governance, and contribute to developing solutions to the complex challenges of global economic interdependence.

---

26 Hosted by the Bank for International Settlements, the Financial Stability Board was established to coordinate at the international level the work of national financial authorities and international standard-setting bodies, and to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies.