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ECONOMIC RISK AND RESILIENCE IN EAST ASIA

WHAT'S CHANGED SINCE THE ASIAN FINANCIAL CRISIS?

WHAT MORE CAN BE DONE TO IMPROVE CRISIS PREPAREDNESS?

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CONTENTS

LIST OF BOXES

LIST OF FIGURES

LIST OF TABLES

ECONOMIC RISK AND RESILIENCE IN EAST ASIA

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EXECUTIVE SUMMARY

Twenty years on from the Asian Financial Crisis (AFC) it is timely to assess how the East Asian region is placed to manage and mitigate risks of economic crises. We imagine a scenario where one of the emerging economies of Southeast Asia faces risks of financial crisis from internal and external sources. Given gaps in the global and regional safety net such a scenario would raise difficult choices for the country, its neighbors and key regional donors. This paper is about widening available choices so there can be more confidence that an emerging crisis will be nipped in the bud.

The region's evolving risk profile

There are several developments in economic risk in the East Asian region that are salient for later discussion:

- All countries in the region have improved their economic frameworks significantly since the AFC. Economic and financial risks appear well contained in Southeast Asia. Like all economies with significant financial sectors there are inherent risks in the credit intermediation process, particularly in times of extended growth.

- Regional risks are elevated and concentrated in the core systemic economies of North Asia. The key risk now relates to credit growth and levels in China, though the complex transitions that economy needs to make over the medium term will bring new challenges. Japan also has very limited macroeconomic space to react to new shocks, and geopolitical risks in North Asia also bring macroeconomic risks.

- Economic interlinkages within the region have grown, bringing significant benefits but also co-variant risks.

- The region also faces risks from volatile capital flows particularly related to U.S. dollar financial markets.

- The region as a whole, and China specifically, has become systemic to the global economy. Hence regional risks will have strong implications for

the global economy, and conversely responding to any regional crisis will involve global responses. The lack of macroeconomic space in all systemic economies, both inside and outside the region, throws more policy weight onto financial regulatory and safety net arrangements to manage risk.

This growth in systemic and shared risks in the core of the region is a key difference in context from that of the situation ahead of the AFC where risks were asymmetric and concentrated in small to medium sized economies. This has important implications for the regional policy cooperation structures.

Assessment of regional risk management and crisis response institutions

The paper takes a standard risk management approach to assessing regional arrangements. First, how well are global and regional institutions equipped to reduce these risks and prevent crisis conditions from developing? Second, has the region the resources and tools to mitigate the consequences of a crisis so that economic and social damages are minimized?

Turning to risk reduction and prevention, the region has a good suite of institutions for policy dialogue and surveillance, with growing traction and potential for greater effectiveness.

Global institutions such as the International Monetary Fund (IMF), the G-20 and the Financial Stability Board (FSB) will remain the most important for managing risks both inside and external to the region. These institutions have the greatest capacity to manage both shared external risks along with those in the largest economies of East Asia. They also provide the most effective surveillance and technical assistance, which are important tools for mitigating risk. Moreover, the region is well represented in these institutions, although there is still considerable way to go to ensure their voting influence matches their economic weight. In the realm of ideas, the dominant international policy paradigm and regional policy approaches have converged, due to movement on both sides, making for a more productive dialogue between the region and global institutions. There are some indications of growing traction of IMF advice on regional risk issues. The region can however approach these institutions in a disjointed manner, and therefore not make the most effective use of its common voice to manage shared risks.

Regional institutions for policy dialogue are an important complement to global arrangements. The ASEAN+3 institutions are developing stronger surveillance and peer review capabilities through the ASEAN+3 Macroeconomic Research Office (AMRO) in Singapore. It will understandably take some time before AMRO has both capabilities and a track record in any way comparable the IMF, but it is beginning to publish strong pieces of regional and bilateral surveillance. The regional central bank network, Executive Meeting of East Asia Pacific (EMEAP), includes all systemic regional economies and is an effective vehicle for financial cooperation.

If a crisis were to occur within the region, global, and regional policies need to be coordinated and safety net resources likely deployed. The G-20 will be the key crisis coordination institution, given the region's interlinkages and systemic importance. The region is well represented in the G-20 with five members. Again though, the region can sometimes approach this institution in a disjointed manner which could undermine achievement of shared interests, especially in an emerging regional crisis situation.

The region has access to significant crisis resources, theoretically amounting to well over half a trillion U.S. dollars. The key elements of this are IMF lending power and the ASEAN+3's $240 billion Chiang Mai Initiative Mutualization (CMIM) swap arrangements. Bilateral arrangements within the region, including currency swaps, are also similar in magnitude to CMIM. However, the scale of resources should be kept in perspective: the AFC response package would be over $300 billion in today's dollars given the size of the affected economies today.

The regional safety net is assessed against four objectives: whether it encourages *strong* policies both before and during crisis resolution; whether it can be delivered with sufficient and reliable *speed* to staunch a fast-moving crisis; whether there is *synergy* between the different layers of the safety net so they will work effectively together; and whether the *size* of resources is adequate given the region's potential needs.

The safety net as a whole appears to encourage strong policies and sound sovereign lending with little evidence of moral hazard, though it is important that as regional and bilateral approaches proliferate they continue to support this outcome.

The key immediate gap in current arrangements is that there is low confidence global and regional resources will be accessed quickly and reliably. This is in part due to remaining stigma in approaching the IMF for crisis support but also uncertainties over whether the CMIM is fully operational. In addition, the lack of take-up, and reliable availability, of precautionary instruments that provide liquidity means that resources will not be delivered rapidly in a fast moving capital account or banking crisis. A related gap is that the region cannot be confident the different layers of the safety net will work together effectively in a live crisis situation.

A more medium—term issue is the potential halving in the IMF's $1 trillion lending power around and just after 2020, with borrowing arrangements expiring and a difficult quota discussion underway. This could dangerously reduce the size of resources available to the region and the coherence of the regional safety net.

Policy recommendations

There are a range of actions that can be taken to better manage risks and improve regional resilience.

- While detailed examination of national policies are not the focus of the paper, country domestic and external policy settings are clearly the first line of defence. Managing risk down in China and Japan will be critical. Elevated risks suggest small and medium-sized economies should build and maintain strong macroeconomic and financial buffers, and employ macro-prudential and capital flow measures when appropriate.

- The region should take a more deliberate and coordinated approach to its participation in global institutions, including the IMF, G-20, and FSB to ensure surveillance technical assistance is well directed at regional risks. It should caucus on key external risks, and coordinate actions when pursuing shared interests to the extent possible. International standards are an important risk reduction tool, and the region should use its collective voice to argue for the retention of strong international standards. Over time the economic weight of the region, and significant shared economic interests, suggest it should increasingly exercise a leadership role in these global institutions.

- Turning to regional policy dialogue and surveillance, the task here is to continue to strengthen institutions such as AMRO. There is necessarily duplication in subject matter with the IMF, given the role in supporting the CMIM arrangements, which will link to IMF support in many situations. However, AMRO should focus research and surveillance on areas of comparative advantage—such as regional linkages—and where there are potential differences between regional and global policy approaches and experiences—e.g., around capital flows and growth/stability tradeoffs.

- Regional policy dialogue should be broadened geographically beyond the ASEAN+3 grouping given regional links, particularly if the CMIM arrangements evolve and broaden (which I recommend below). As a transitional step there is scope for AMRO to build connections with other regionally-linked economies outside ASEAN+3, including Australia, New Zealand, and over time India.

- In the event of an emerging crisis regional members will need to make maximum and coordinated use of the G-20 forum to: ensure appropriate macroeconomic coordination; provide consistent and authoritative messaging; and marshal crisis-response resources.

- The presence of systemic risks in the region puts a premium on ensuring that the IMF is an early rather than last resort in many crisis scenarios. This involves continuing to improve the relationship from both sides: The IMF needs to enhance its reputation as a trusted partner, including its governance, while the region should reinforce to its own citizens some of the improvements over the last two decades. The location of the IMF/World Bank annual meeting in Bali in 2018 offers an important opportunity to build on recent progress.

- Access to precautionary IMF tools providing at-call liquidity would increase the speed with which safety net resources are drawn on. Besides signaling strength and bringing IMF resources onto the table early, this would catalyze and coordinate other resources, both in and outside the region. The region would be a prime beneficiary of new instruments that provide liquidity to well-performing economies that meet strong policy benchmarks ex ante.

- The region also needs to work together and with others to at least maintain the IMF's $1 trillion lending capacity in the medium term. This will also be an opportunity to further improve IMF voting arrangements to better reflect the economic weight of the emerging economies in the region. The region will need to ensure that somewhat divergent national interests on voting shares (in particular between Japan and China) do not impede shared interests in maintaining safety net resources available to the region.

- The CMIM needs to be made fully is operational and able to link effectively with the IMF, which will need to be involved in crises involving economies in the region. This means defining a clear path to address the two gaps raised in recent test runs with the IMF simulating a regional crisis: (a) aligning the timeframes for CMI and IMF lending instruments; and (b) developing a robust mechanism for collaborating with the IMF in a crisis. Increased transparency in lending criteria and operating procedures would increase the credibility of the mechanism with markets and other crisis response partners, which would help prevent crisis and promote cooperation.

- The CMIM should build links with other potential providers both in the region and outside, given the potential size of financing packages, the benefits of wider risk pooling, and risks around IMF lending capacity in the medium term. The obvious regional candidates for widening engagement are Australia and New Zealand given their shared interests, and their track record of cooperation in previous crises. At first, the focus should be on promoting practical cooperation rather than expanding membership, given the different ways their support is likely to be delivered, and the complexities in renegotiating established arrangements. India will be another natural regional partner as economic links increase over time.

- At some point in the future the region should consider a separately funded and empowered Asian Monetary Fund with wider membership than the current CMIM, including capacity for members outside the region. This would become more pressing if the IMF balance sheet were to decline and/or the current CMIM arrangements were difficult to activate because of institutional weaknesses. But this is a long-term goal. The short-term priorities should be on practical cooperation.

- More work is needed to ensure that the proliferating bilateral arrangements support the objectives of the overall safety net. Greater clarity is needed about the conditions under which they will be provided and how they link with IMF and other safety net support. To this end, agreement to common principles at the G-20 level could support strong regional arrangements. As CMIM-IMF test runs continue, consideration should be given to extending these to include major bilateral providers. The U.S. Fed may offer temporary swaps in crises involving U.S. financial markets, but those will not be relevant for many other crisis situations.

- Likely regional providers outside of the ASEAN+3 arrangements, and particularly Australia and New Zealand, should engage with CMIM and other regional players in "peacetime" to ensure assistance can link in a crisis. Arrangements that draw on central government balance sheets, rather than standing swaps of central bank foreign reserves, are likely to better suit their approaches to economic management. Capacity to operate in regional arrangements, independently or ahead of IMF involvement, would facilitate cooperation.

A better set of choices

With the risk of common and systemic shocks to the region more prominent, the region faces a very different circumstance than it did in the AFC 20 years ago. This suggests the region should take a more deliberate, coordinated approach to managing regional risks, including strategic use of its networks to maximize its impact in international forums. It should prepare to present a strong common front in the G-20 in a crisis. The region should also seek to close gaps in financial safety net arrangements, including: (a) taking action to ensure the IMF is an early resort in a crisis, given the likely importance of access to global resources in a regional crisis; (b) improving the speed with which resources can be delivered in a liquidity crisis; (c) enhancing links between the IMF and CMIM, and between both of these and proliferating bilateral arrangements; and (d) over the medium term, assuring the quantum of crisis resources available particularly in the IMF.

The paper concludes by returning to the scenario outlined at the beginning. The recommended approaches will improve the region's ability to manage the risks it confronts. And if a crisis were to loom on the horizon, the range of responses described would provide greater confidence that the region could avoid significant crisis disruption and contagion.

INTRODUCTION

A hypothetical scenario

It is a Friday night sometime in a few years from now. Pressure has been building in currency and bond markets for several Southeast Asian economies. One large ASEAN country has contacted other capitals in the region, concerned that it will face a serious market disruption when markets open early the next week. The economy has been well-performing and policies are sound; but, markets have been reacting to tighter financial conditions in the U.S., producing a "risk-off" event. Also, capital inflows have stopped abruptly, and the tide is going out. This has come at a time when financial instability and falling demand from China has put pressure on macroeconomic settings. Talk of another Asian financial crisis has contributed to early signs of a run on a couple of the country's financial institutions.

The country has been meeting with IMF staff but is nervous about the domestic political consequences of approaching the Fund for support. The authorities are seeking bilateral support from several regional partners, including China, Japan, and Australia. But China is facing capital-account pressures of its own, Japan has very little macroeconomic room to maneuver, and commodity price falls are posing challenges for Australia's macroeconomic management.

Parallel discussions are occurring about whether to trigger the regional foreign currency swap agreement known as the Chiang Mai Initiative Mutualization (CMIM), but uncertainty about whether this mechanism is ready for use is causing hesitation. Other ASEAN participants are carefully watching for signs of contagion, and nervous that they may need to use their foreign reserves to manage their own circumstances.

There is a hard weekend of decisionmaking ahead for ministers and officials in many capitals. It involves hurried calls across time zones, decisionmaking under a fog of uncertainty, and consideration of economic, budgetary and foreign policy choices. Regional swap arrangements will be put to the test and doubts about IMF involvement may constrain the amounts available under these arrangements. Risks of contagion could reduce some participants' contributions.

Regional donors may well agree to provide support, although under uncomfortable circumstances. For example, there might not be IMF "cover" for bilateral financing. Also, assessments being made on the run with other donors, each with various interests and perspectives, could delay a financing package. And the scale of support might not be enough, or delivered too late to prevent a panic, resulting in economic and social disruption—that could be avoided.

Creating better policy options

The scenario above is not a given under a business as usual trajectory. Policymakers in the country may well see the danger signs in time and proactively manage the combined external and financial shocks. The test runs undertaken by regional currency swap arrangements may ensure that these operate smoothly and link well with the IMF support, which could then be brought in early. Bilateral support might supplement the more familiar framework of multilateral cooperation.

But the scenario is not fanciful, either. While the region is likely to continue driving global economic growth for some time, there are several risks that could severely stress regional economies in the medium term. Moreover, there are gaps and inadequacies in the early warning systems and international financial safety nets that may cause them to not function well under stress, leading to serious economic consequences.

This paper is about designing a better set of policy choices for the East Asian region[1] on that difficult hypothetical weekend. In other words, what can the region do to reduce the risk of such an event and mitigate the impact if it were to occur? The 20 year anniversary of the onset of the Asian financial crisis (AFC) seems like a timely moment to assess these issues (see Box 1).

The paper first reviews the regional economic risk situation, both in the short and medium term. It then assesses the international policy mechanisms that can reduce risks and mitigate crises, should they occur.

[1] For the purposes of this paper, I define this region to include China, Japan, South Korea, ASEAN, Australia, and New Zealand. These economies are closely linked by trade and investment flows, a range of institutional links, and intersecting economic and political interests. South Asia, and particularly India, is not included in this regional conception. At present, India has lower trade and financial integration with the region, and fewer institutional links. This is changing rapidly however, and any crisis in either India or large ASEAN economies could have spillover impacts on the other. Hence, while the paper limits the scope, I will give some attention to the implications of growing links with India in the latter part of the paper.

Box 1. The Asian Financial Crisis

The AFC had profound economic and political implications for the region and global economy. It demonstrated the risks surrounding international capital flows, particularly where domestic financial systems were weak, and the potential for contagion dynamics as the panic spread among economies in the region. Also, it showed the importance of speed in providing regional and international crisis resources. Real and perceived mistakes in the IMF response had a lasting impact on regional approaches.

In the years before 1997, the fast-growing East Asian economies experienced strong capital inflows. Foreign investors were motivated by strong financial returns, with the widespread prevalence of exchange rates *pegged* to the U.S. dollar generating incentives for *one-way bets*. These capital inflows fueled growth in under-supervised and rapidly developing financial systems, and led to rapid asset price growth in some countries. A rising U.S. dollar contributed to the mix of vulnerabilities.

In mid-1997, the Thai baht came under strong speculative pressure and a rapid rundown in reserves caused authorities to break the peg against the U.S. dollar, which then caused a sharp fall in the currency. Capital flows reversed, and domestic financial institutions came under pressure due to un-hedged currency mismatches on their balance sheets (typically borrowing in U.S. dollars and lending in local currency).

The baht's sharp drop soon developed into full blown crises in Thailand, which spread to Indonesia, and eventually the much larger South Korean economy. Domestic financial institutions failed and foreign exchange sources dried up. Other countries, such as Malaysia and the Philippines, were also strongly affected. Growth plunged from positive seven percent in the years before the crisis to a negative seven percent, with Indonesian GDP declining 13 percent. This created significant hardship and political instability, for example, leading to an unstable transition to democracy in Indonesia.

Support was organized to help Thailand, Indonesia, and South Korea respond to the severe balance-of-payments crises that erupted, including significant early pledged resources from Japan and Australia. But the support could not be delivered quickly enough to prevent significant disruption. IMF adjustment packages were developed along with lending, bilateral pledges, and development bank finance totaling over $100 billion in 1997 dollars. The conditions on the IMF packages were controversial, with concerns that its policy responses, under U.S. pressure, imposed the wrong prescription—too much austerity, a focus on structural reforms that appeared to go beyond the immediate requirements for macroeconomic stabilization—and insufficient stabilization of the financial sector. Much of this package was not drawn upon, somewhat due to South Korea's re-negotiating the terms of its sovereign debt in early 1998.

ECONOMIC RISK IN THE REGION

Asia continues to contribute the lion's share of global growth, and regional growth is occurring against a backdrop of a strengthening world economy and some reduction in global risk.[2] The Chinese economy has recently stabilized and continues to post strong growth. The U.S. recovery seems well underway, and markets appear to be taking the prospect for monetary normalization in their stride. The Eurozone and Japanese economies have also shown a welcome strengthening. Memories of the global financial crisis (GFC) are still fresh in the financial sector, and among regulators and policymakers. Regulations and monitoring have been strengthened.

Nevertheless, risks remain, chiefly relating to the resolution of China's credit boom, potential tightening in international credit conditions, and reduced space in all key economies for macroeconomic policy to respond to new developments. These risks are likely to remain elevated in the medium term. And the inherent risks of modern financial systems and international capital mobility may emerge as growth continues and memories of crisis conditions fade.

The next section will review the domestic risk profile of individual economies in the region. Next, the paper will examine the main sources of external shocks that could put regional economies under pressure.

Strengthened frameworks in the emerging economies, but risks remain

One of the most marked changes in the region since the Asian financial crisis has been the strengthening of macroeconomic and financial frameworks in the large emerging economies of Southeast Asia.[3] Monetary policy frameworks and institutions have been strengthened[4] and budgets have been placed on a solid footing (see Figure 1, Panels A and B), although fiscal risks are rising in China.

Over the past two decades, exchange rates have become more flexible, offering added options to absorb economic shocks. Foreign exchange reserve levels are generally robust across all key economies, and external positions look healthy (see Figure 2, Panels A and B). Indeed, the strength in some countries' current account surpluses, besides being a drag on national welfare, is a source of risk given the attention of the new U.S. administration to bilateral and overall external balances.

Financial stability frameworks have also been improved, and risks appear to be managed. In key ASEAN countries, the banking sectors are well capitalized (see Figure 2, Panel C), supervisory frameworks are strong, and the economies appear robust to a range of shocks including those emanating from sharp exchange-rate movements.[5]

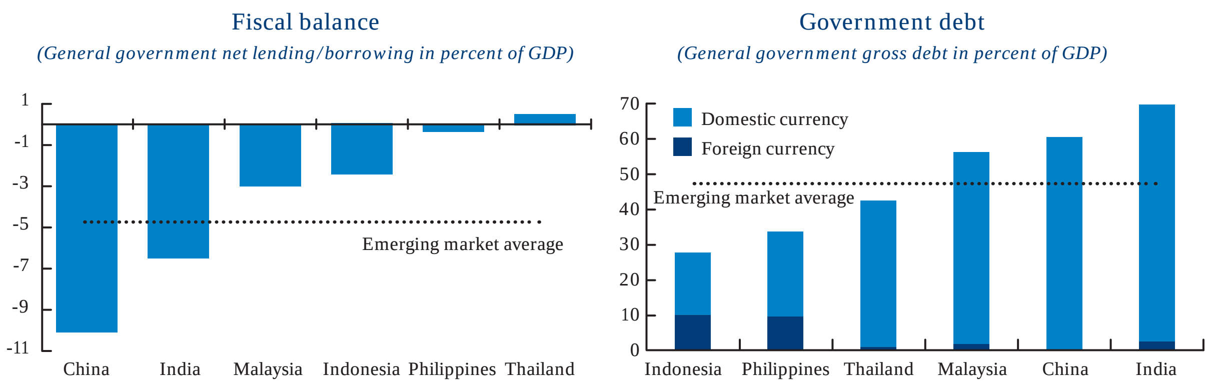
2 IMF, "Global Prospects and Policy Challenges," July 2017, a note prepared by IMF Staff for the Hamburg G-20 Leaders' Summit

3 AMRO (2017) ASEAN +3 *Regional Economic Outlook 2017*, "ASEAN +3 Region: 20 years after the crisis"

4 See Maurice Obstfeldt, "Two Trilemmas for Monetary Policy," speech on July 24, 2017 at Bank Negara Malaysia Conference on Monetary Policy 2.0.

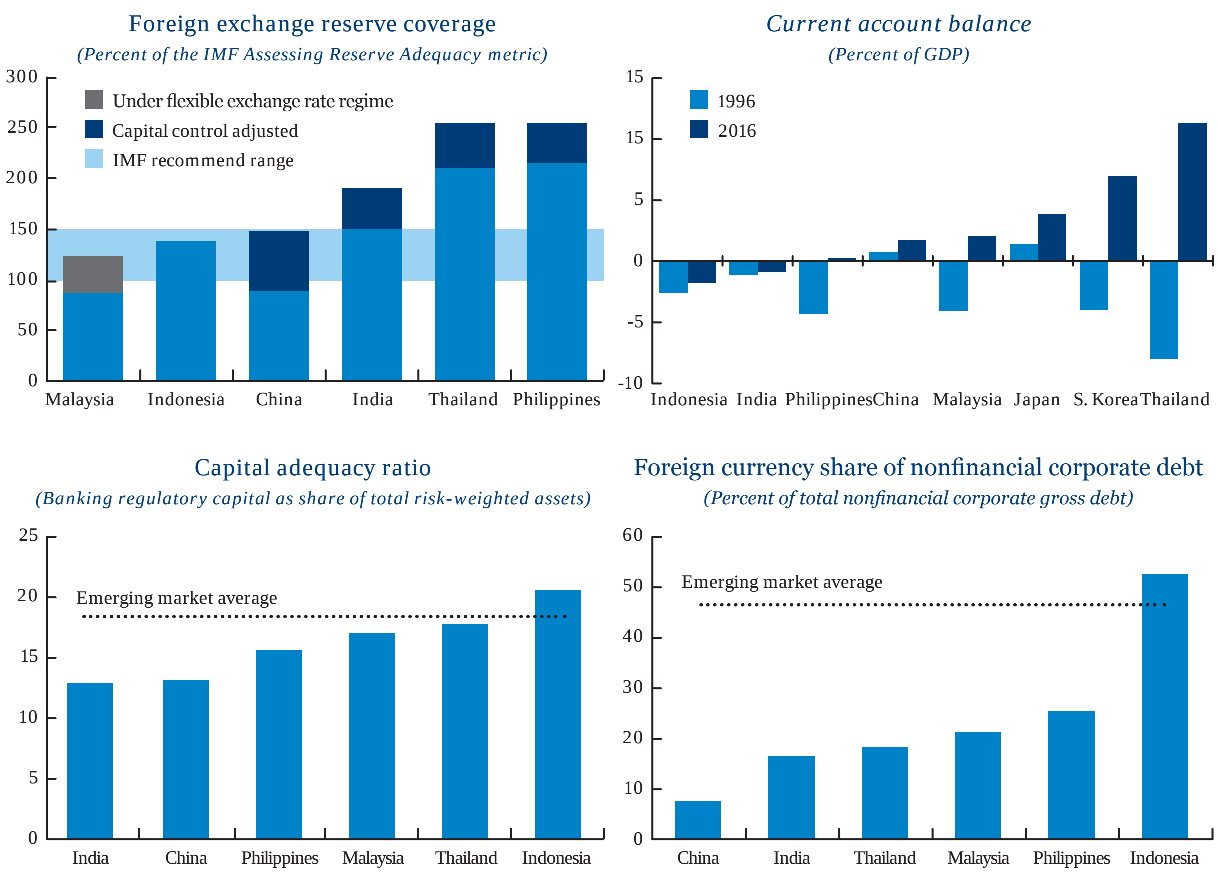
5 See various IMF 2016 and 2017 Article IV reports and supporting materials on Indonesia, Malaysia, Thailand, and the Philippines.

Figure 1. Public finances



Note: The figures for China correspond to the augmented fiscal balance and debt level, compiled by the IMF, which expand the perimeter of government to include local government financing vehicles and other off-budget activity.
Source: International Monetary Fund.

Figure 2. Risk indicators



Source: International Monetary Fund.

There are some points to watch among emerging economies in the region and I will return to China (the biggest), in the next section. However, when focusing on the ASEAN economies for the moment, Indonesia has a relatively high share of foreign currency corporate debt (see Figure 3, Panel D) and Malaysia has lower levels of foreign exchange reserves and higher financing requirements than others in the region. In each case, though, there is policy focus on the issue and/or mitigating factors.[6] Unlike the period leading to the AFC, there is not a preponderance of overlapping and reinforcing risk factors—e.g., domestic financial weakness coinciding with large external financing requirements and vulnerable exchange rates (see Box 2).

In terms of the small and medium-sized advanced economies of Australia, South Korea, New Zealand, and Singapore, the picture is one of overall soundness, with some areas at risk. All are grappling in some way with financial stability issues associated with extended accommodative monetary policies in the face of low inflation, and particularly with managing private sector debt; some are also facing strong asset price growth. Each country has a strong policy focus on these issues and financial systems appear to be resilient to significant shocks. South Korea and Singapore have extremely strong external positions, while Australia and New Zealand are operating external deficits within historic norms. Overall, these countries have macroeconomic policy space to react to negative shocks, and are better placed than most OECD economies in this respect.

Nevertheless, the current strength displayed by countries should not lead to complacency that emerging risks will always be successfully contained. As recent events have made clear, risks are inherent to the credit intermediation process in all countries, where institutions generally borrow *at call* deposits and loans, and lend for long-term purposes, taking on both credit and maturity mismatch risks. In this situation, liquidity and solvency issues can arise, and panics can threaten even safe institutions. Emerging economies (and some small advanced economies) face analogous risks from volatile international financial flows, which can cause sudden stops and capital flow reversals, and contagion among economies with apparent similarities. As the AFC and other crises have demonstrated, these domestic and external sources of financial risk can combine in a very nasty fashion.[7]

In summary, for most medium-size emerging and advanced economies in the region and particularly Southeast Asia, domestic risks seem reasonably contained. The inherent risks arising from volatile capital flows for emerging economies warrant some more attention, and I will return to that point below. These economies each have some macroeconomic space to manage internal or external shocks, although all in their own ways face constraints that could be sharpened in a widespread shock (e.g., as external borrowing arrangements tighten). But the most salient risks in the region—arising from the largest economies (particularly China)—are also risks for each of these countries.

[6] For example, much of the FX debt in Indonesia is between related entities, and regulations have been adjusted to allow financial oversight and prudential action in response. Malaysia operates a flexible exchange rate regime which makes its reserves broadly adequate, and has fiscal reforms underway.

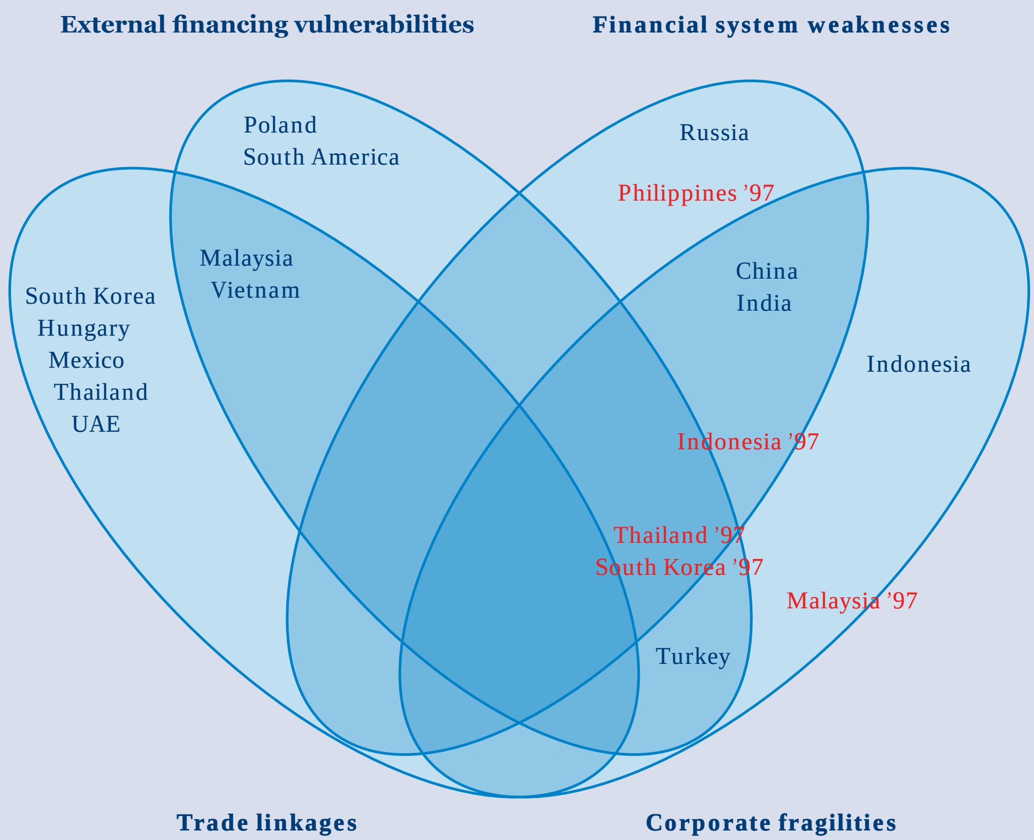
[7] See Timothy Geithner, "Are we safe yet? How to manage financial crises," *Foreign Policy* January/February 2017 edition, for a discussion of the risks around intermediation, and Stephen Grenville "How the Asian financial crisis exposed neoliberalism's limits" *Nikkei Asian Review*, July 6, 2017, for a discussion of specific issues around international capital flows.

Box 2. Vulnerabilities then and now

The different risk features in the region between the period leading up to the AFC and now can be illustrated building on a recent IMF assessment of EME vulnerabilities. The chart below shows the various interactions between financial stability risk factors, with the positioning of countries in early 2017 denoted in blue font. The position of East Asian economies in the lead up to the 1997-1998 crisis is shown in red, based on the author's assessment.

In the countries most affected there were multiple overlapping vulnerabilities, including attempt to peg the exchange rate without adequate foreign resources. There vulnerabilities were then intensified by volatile capital flows, contagion and loss of confidence. Others like Malaysia and the Philippines were still affected, but started from less vulnerable positions and therefore had more policy response options.

AFC versus current vulnerabilities in emerging markets



Source: IMF GFSR October 2017 and author (for '97 assessments and current Korean assessment). In addition "Financial system weakness" is changed from original IMF title of "banking system" reflecting the more general weaknesses in both banks and non-bank institutions that were contributors to the AFC.

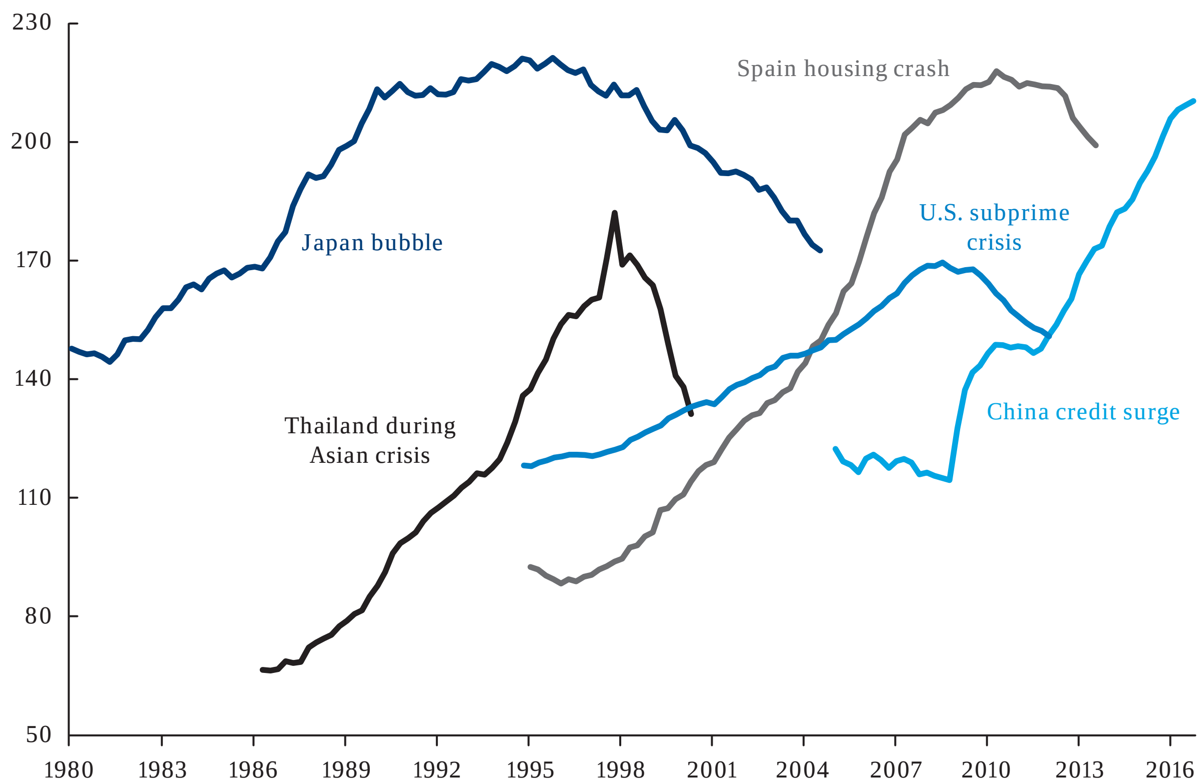
Risks concentrated in the large systemic economies in North Asia

China's strong growth and generally adaptive policy management have brought enormous strengths to the world economy and to the region's economic performance. At the same time, its economy is a major source of risk to the world and regional economies because of its sheer size and the inherent complexity involved in navigating the many structural challenges it faces. This will remain true for some time.

Financial stability risks in the region are currently concentrated in China. Credit growth and levels are similar to those during episodes of financial crises in other countries (see Figure 3). Corporate debt is high, and risky debt is rising.[8] However, there are substantial buffers in China's financial system against adverse scenarios, e.g., the major banks are state-owned and reasonably capitalized, and much of the debt is held by other state-owned enterprises. Still, the complexity of China's financial system means there is a risk of unpredictable and disorderly outcomes.[9]

The priority for China over the next few years will be to accept some temporary slowing of growth as it introduces greater market and regulatory discipline into its financial system. Authorities have been intensifying

Figure 3. Fast credit growth and past major crises (percent of GDP)



Source: International Monetary Fund.

[8] IMF, "Staff Report for the 2016 Article IV consultation on the Peoples Republic of China"

[9] See IMF, "People's Republic of China, Selected Issues: Credit Booms—Is China Different," published as part of the 2017 Article IV consultations.

moves to strengthen supervision, and this is slowing the growth of risky lending, although the size of outstanding debt will mean risks around financial stability remain for some time.

China has some policy space to react to financial or economic instability though this is diminishing (Figure 1). It has seen significant increases in public debt in recent years, although Beijing retains some fiscal flexibility at the central government level to respond to a shock (e.g., to stabilize financial institutions). Pro-growth structural and fiscal reforms are available that would unlock new private investment and consumption opportunities, and help manage the economic impacts of slowing credit.[10] The country may also have some space to use monetary policy, although this depends somewhat on the ongoing credibility of its exchange rate framework and the effectiveness of its capital control regime.

Japan, the second-largest economy in the region, is also a source of risk. While a firming in growth has reduced immediate risks, Japan's macroeconomic policies are still fully extended and it has little ammunition to respond to new shocks. By itself, a demand shock from Japan is not nearly as significant as the spillovers that would arise from China,[11] and its financial sector is generally sound. However, Japan's public debt is now well above that for any advanced economy other than during war time. As Japan is a key capital market in the region, instability in its sovereign bond market would have unpredictable ripple effects throughout Asian and global financial markets. Geopolitical risks in North Asia, including on the Korean peninsula, also add economic risk.

Regional connectedness adds opportunity and risk co-variance

Risks to China are also risks to the region (see Figure 4). Since East Asian economies are more integrated than ever, economic shocks in one place will spill over in the region. Complex supply chains, commodity supplies and trade in services have increased intra-regional trade. Capital flows are both growing and increasingly coming from within the region.

Financial instability in China would have a regional economic impact mainly through demand and confidence channels, with direct financial disruption being somewhat muted by China's external position and capital controls.[12] A Chinese financial shock is therefore likely to be different from a *Lehman* event. Nevertheless, financial distress among Chinese corporations could amplify vulnerabilities in companies and financial institutions in other countries in the region through reduced demand.[13] In addition, China has seen strong capital outflows in times of domestic instability in the past two years and pressure on the exchange rate, which has led authorities to draw on reserves to help maintain broad stability in the exchange rate. Domestic financial disruption could thus significantly impact international financial markets. As China continues to open its capital account, direct financial links and flows with the region will increase over time, raising both opportunity and risks.[14]

[10] See IMF, "Staff Report for the 2017 Article IV consultation on the Peoples Republic of China."

[11] See, for example, the very limited impacts arising from economic disturbances in Japan relative to China in AMRO (2017) op cit.

[12] China's domestic risks are not associated with external funding, high amounts of external debt, or strong counterparty links to international capital markets.

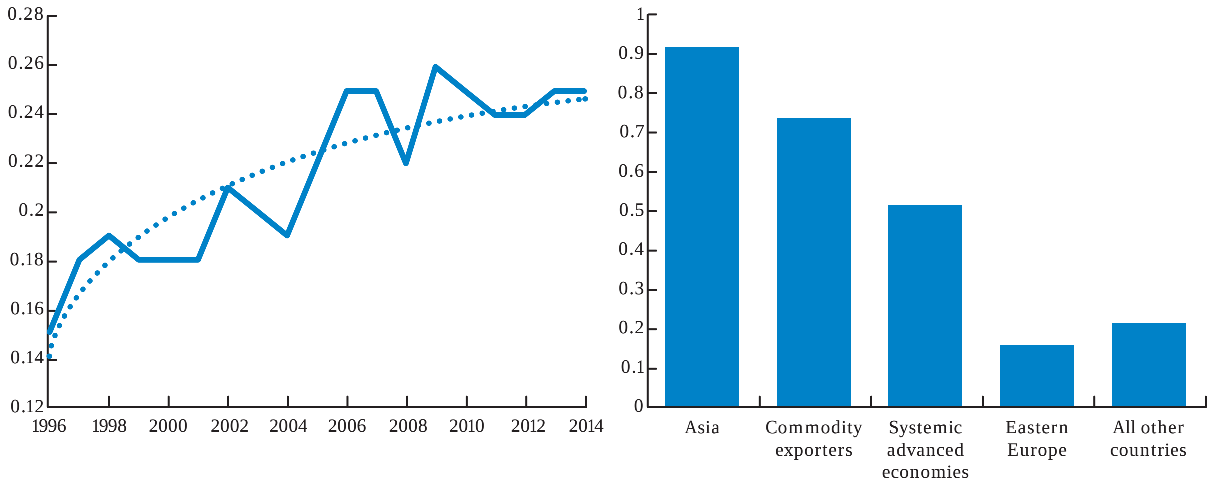
[13] See AMRO op cit, Box A.

[14] Peter Drysdale, Adam Triggs and Jiao Wang, "China's New Role in the International Financial Architecture," Asian Economic Policy Review (2017) 12.

Figure 4. Linkages to China

Panel A. Spillovers from China over time
(%, average GDP response to a 1 p.p. shock to growth in China)

Panel B. Impact on exports of 1 percent shock to China's demand
(%, GDP-weighted average after one year)



Source: International Monetary Fund.

Risks external to the region

While common risks from within the region are certainly salient, risks from outside the region are also important.

In the U.S., monetary policy is turning more decisively into a tightening cycle. This will bring net benefits to the region if rising U.S. demand is accompanied by smooth and well-calibrated increases in interest rates. However, term and risk premia can move unpredictably, increasing the risks of sharper rises in long rates and tightening of international financial conditions. On top of the uncertainties associated with monetary policy normalization, the Trump administration's policies introduce new risks, both upside and downside. In particular, different tax and fiscal policy approaches will have quite different impacts on U.S. growth, interest rates, and exchange rates.[15] Possible actions by the U.S. that contribute to global protectionist pressures carry clear risks for the region given its dependence on trade. Thus, the interaction of U.S. and China risks warrant close attention—e.g., the impact of protectionist action in the U.S. on credit vulnerabilities in China.[16]

Further, it is important to note key differences between now and the pre-GFC period in the risk preparedness of the U.S. economy. On the one hand, macroeconomic policy is more constrained due to higher public debt and structurally lower interest rates.[17] This means that

[15] See IMF (2017) *World Economic Outlook*, April, Scenario Box 1.

[16] See discussion and modeling in IMF, *Global Financial Stability Report*, April 2017, of interactions between U.S. economic risks and financial stability in emerging economies including China.

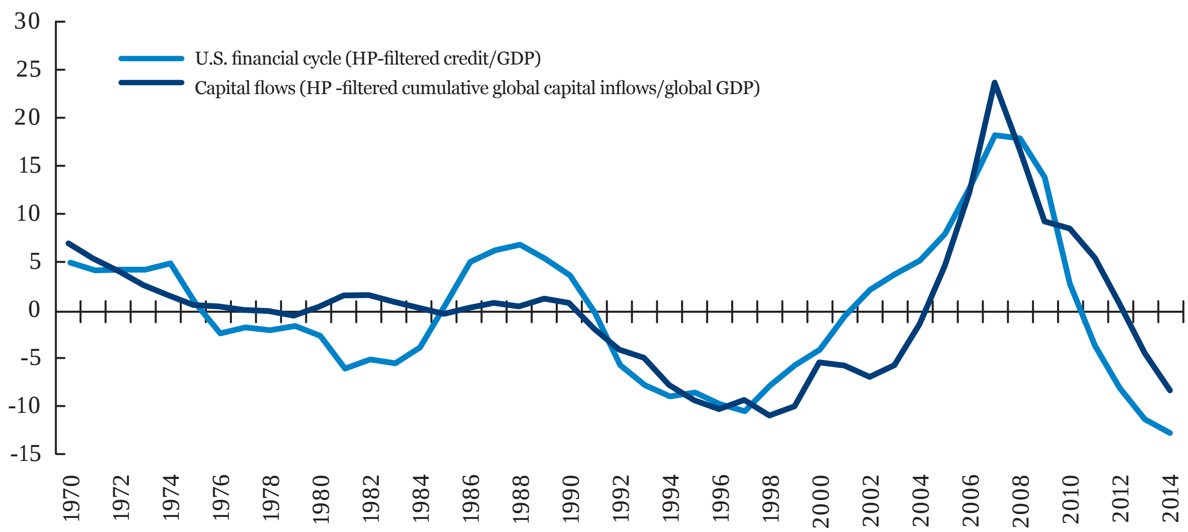
[17] See Geithner (2017) op cit. and Sterland (2017), "Global financial resilience in a time of uncertainty" parts 1, 2 and 3, Brookings blog, Feb 14

even conventional recessions may have greater global impact due to limited opportunities for the authorities to support demand. At the same time, improved financial regulations have increased the oversight of, and buffers within, the financial system, which will reduce the risk of crisis if they are maintained.[18] Some steps have been taken to ease financial regulations, focused initially on areas where costs may exceed financial stability benefits; but, there have been calls for more substantial changes in financial regulatory frameworks which, if translated to action, would pose dangers for U.S. and global financial stability.[19]

Risks from the U.S. matter due to its size as an export market, but more importantly because of the dominance of U.S. dollar funding in global and regional finance and the impact of the U.S. financial cycle on the growing volatility of international capital flows (see Figure 5). Hence, in the scenario outlined at the start of this article, I deliberately gave prominence to a crisis brought on by volatile capital flows. Unlike a shock from China, volatile capital flows may have a more asymmetric impact on the region, with some established capital markets like Japan and Australia sometimes experiencing inflows in a *risk off* event, while the region's emerging economies are often negatively affected.

Other prominent external risks include the ongoing fragility of parts of the European banking system, which is unlikely to be resolved quickly by stronger growth. The Brexit process also introduces some risks

Figure 5. U.S. financial cycle vs. capital flows (percent)



Source: International Monetary Fund.

[18] See Geithner (2017) op cit, and FSB (2017) "Annual Report to the G-20," for an assessment of the impacts of financial regulation.

[19] See Nellie Liang "What Treasury's financial regulation report gets right—and where it goes too far," Brookings blog, June 13, 2017, for a good review of Administration proposals to revise financial regulation. Ben Bernanke's blog of February 28, 2017, "Why Dodd-Frank's orderly liquidation authority should be preserved," responds to another prominent proposal in Congress that would weaken U.S. financial stability.

for the East Asian region, although given the U.K.'s relatively limited direct trade relationships, these are only likely to be significant if they exacerbate risks in the much larger EU market.

A final source of external risk is that posed by heightened financial and policy vulnerabilities in some large emerging market economies outside the region, e.g., Turkey (see Box 2). This is not due to direct economic channels into the region, which are limited, but rather to contagion channels which can operate due to apparent similarities with economies in difficulty.[20] Still, the general and common strength across several indicators in ASEAN economies may limit contagion into the region. India matters due to its proximity and growing two-way economic links with the East Asian region. It has important external strengths including a strong reserve and current account position, although it also has several emerging vulnerabilities, particularly weakness in the state-owned banking sector and a stretched fiscal position, which could weaken its crisis resilience if they are not addressed.[21]

[20] This played a role in the crises of the late 1990s where the risks sometimes jumped across regions—for example the AFC also affected Brazil.

[21] Strong reserves and a reasonably strong external position limit the international implications of these risks, as does the relatively closed nature of the Indian economy. However, over time, banking and fiscal vulnerabilities could reduce India's resilience to external shocks by constraining response options.

MANAGING AND MITIGATING REGIONAL ECONOMIC RISK

There is a good chance that the region will continue to benefit from favorable growth in the coming years. However, several easily imagined risks remain which are increasingly concentrated in the large economies of Northeast Asia, particularly China and Japan. In addition, the region faces the ever-present risk associated with volatile capital flows and the inherent risks associated with financial intermediation. And there is little by way of macroeconomic policy space in the region's largest economies or trading partners to buffer a demand shock.

While the short-term outlook is reasonably benign, there is a reasonable risk of a disruptive crisis somewhere in the region over the next decade. This could be in the form of idiosyncratic crises in one or two regional economies due to policy mistakes or unrecognized vulnerabilities. Also, some external shocks could have widespread though asymmetric impacts on the region. However, given the way the region has evolved since the AFC, risks of a simultaneous systemic nature, including from within the region, must be at the front and center of its risk planning. This suggests the importance of various risk management and crisis strategies, operating on national, regional, and especially global dimensions.

East Asian countries should first manage the risks they can most influence, particularly their own national policy settings; and, the existence of several prominent risks suggests ongoing priority to building resilience in the face of economic and financial shocks. This involves ensuring the maintenance of strong macroeconomic policy and external buffers, strong oversight of, and buffers within financial institutions, and structural flexibility. Maintaining exchange rate flexibility is important, and macro-prudential capital flow management policies may also play an important role.

This paper focuses on the international dimensions of risk management and this section examines how the region can make the most use of global and regional mechanisms to reduce or contain risks. Later, I look at the tools available to the region to mitigate crises when they occur, e.g., the elements of the financial safety net that can help countries manage the impacts of financial volatility and stress.

The region can manage risk through information sharing, capacity building, and surveillance, as well as contributing to the development of, and adopting, international financial and other standards (see Box 3). It is well represented in the most important international institutions, and also has several regional fora (see Table 1). How can the region make best use of these institutions to pursue common interests and address risks?

Global institutions for surveillance dialogue and capacity building

International mechanisms are inherently limited in influencing domestic policy, though they undoubtedly have an impact in some circumstances. This impact is most obvious in the area of regulatory standards (more on this below). Surveillance and peer review processes can also be effective when outside and cross-country analyses convincingly highlight clear opportunities or risks in domestic policy settings, and when countries receive common messages from various institutions and country partners. Capacity building technical assistance can address risks very directly, for example, by improving domestic financial oversight.

International dialogue and surveillance appears to be most effective when domestic authorities work closely with international bodies to collaborate on reforms.

Box 3. International mechanisms to manage risk

International institutions provide several avenues to monitor, manage, and reduce risk.

1) The lightest forms of cooperation involve sharing information about unfolding developments and best practices. This increases the opportunity that domestic policies will be set in light of best international practices and a good understanding of international risks. This is supplemented by technical capacity-building assistance from international sources. Countries choose to adopt policies when they align with their domestic objectives. While enforcement is light, this mechanism has been a major impetus to reduce risk. This is a common part of cooperation in various institutions including the G-20, IMF, AMRO, the OECD, and central bank networks such as EMEAP and BIS.

2) The next level of cooperation involves economic surveillance and peer review, where countries invite external institutions to assess their economic outlook and policies, recommend policies based on international standards and best practice, and receive the input and views of peer countries. This can alter policies over time through both the information exchange and pressure from international sources. This is central to the IMF, G-20 discussions, and AMRO, the surveillance arm of the ASEAN+3.

3) Harder cooperation can take the form of political agreement to abide by international norms, standards and commitments that mitigate cross-border risk and overcome first mover/free rider issues. Prime examples in crisis mitigation are standards for financial regulations, which have developed greatly in the last decade through the G-20 and FSB. In specific instances, countries can agree to coordinate macroeconomic policies to achieve common goals, e.g., G-20 agreements on currency management. These often involve a political commitment to voluntarily pursue internationally agreed policies, which can affect domestic policy processes.

4) The strongest cooperation involves treaty obligations and sanctions, and is generally reserved for where it produces strong spillovers. In the area of multilateral macroeconomic cooperation, examples include obligations flowing from the IMF Articles of Agreement to produce data to international standards, to avoid certain exchange rate practices, and to undertake surveillance. The various mechanisms between countries within the Euro area stand as the strongest example of this type of cooperation.

This occurred in the 1980s and 1990s in Australia in relation to the OECD, where the government actively sought international input to develop its reform agenda.[22] Something like this seems to be occurring in China in relation to IMF advice, which seems to be getting increased traction.

[22] See Stephen Grenville (2004), "Policy Dialogue in East Asia: principles for success," in *Financial Governance in East Asia*, Gordon de Brouwer and Yunjong Wang.

The region has good and growing representation in the key international economic institutions and groups such as the G-20, the Financial Stability Board (FSB), the IMF, and the central bank network and committees around the Bank of International Settlements (BIS). At the level of ideas, there is also greater common ground between international institutions and regional policy approaches: e.g., The so-called *Washington consensus* has evolved to incorporate many elements familiar in regional policymaking, such as management of capital flows in some circumstances, and more active regulation of the financial sector. At the same time, the region has adopted many aspects of the international consensus—i.e., strong macroeconomic frameworks including independent central banks, prudent fiscal policy, improved corporate governance, and acceptance of the advantages of free trade and domestic flexibility (although, as in other regions, these have not always translated into practice).

The region should build on its emerging advantages and make more use of its collective voice to influence its external risk environment. It needs to use the institutions (such as those listed above) more deliberately to ensure consistent messages are delivered on key common interests and risks. Surveillance and policy dialogue are far more powerful when common messages are reinforced by a range of countries. This sort of cooperation is instinctive in other regions, particularly in Europe, where the institutional architecture supports it. However, the Asian economies tend to underutilize their own network of relationships in surveillance, policy dialogue and standard setting.

Indeed, the region's economic weight and trajectory means it will play an increasingly leading role in global institutions. As such, it should increasingly shape both the day-to-day discussion and broader economic policy thinking of these bodies. This will involve a significant attitude shift in countries in the region both individually and collectively, to ensure that the many political differences are managed so they do not prevent cooperation on shared economic interests.

Global institutions are also important in managing risks within the region. This is especially true for the large economies of North Asia, and other G-20 members like Indonesia and Australia, where the global organizations' analytical weight and governance can assist in the frankness of advice. But the analytic capacity and cross-country reach of institutions such as the IMF means they will also remain the primary source of policy dialogue and capacity building for other economies in the region. While regional economies have many similarities in structure and development models—e.g., in their financial sectors and the role of the state—there are many areas where individual countries have more common features with those outside the region—e.g., in the level of development and sectoral trade exposure. International institutions can bring all perspectives to bear in their engagement with countries.

Standard-setting bodies

One area of particular importance in managing risks globally and within the region is that of setting standards for financial regulations. This can be a powerful risk reduction agent, influencing policy settings through both peer and market pressure. On the other hand, the GFC shows how poor financial regulation and monitoring can carry negative spillovers for the global and regional economies.

Table 1. Institutions for macro-financial surveillance and policy dialogue in Asia

Institution	Membership	Functions
International Monetary Fund (IMF)	Near universal.	Bilateral and multilateral policy surveillance; Early warning on macro-financial and economic vulnerabilities; Data standards and provision of data; Crisis support lending.
Group of Twenty (G-20)	Group of the largest 20 economies. Regional membership: Australia, China, Indonesia, Japan, and South Korea as full members; ASEAN as invited observer.	Peer review; Policy cooperation; Support for standard-setting.
Financial Stability Board (FSB)	G-20 members plus some other countries with significant financial sectors. Regional membership: Australia, China, Hong Kong SAR, India, Indonesia, Japan, South Korea, and Singapore, plus regional forum.	Financial regulatory standards development; Peer review on implementation; Early warning on financial vulnerabilities.
ASEAN+3 Macroeconomic Research Office AMRO	ASEAN, China, Hong Kong SAR, South Korea, and Japan.	Peer review at regular ASEAN+3 finance meetings; AMRO conducts bilateral and regional policy monitoring and surveillance; Advisory and Secretariat role on CMIM.
Bank of International Settlement	Owned by 60 central banks. Regional membership: Australia, China, Hong Kong SAR, Indonesia, Japan, South Korea, Malaysia, New Zealand, Philippines, Singapore, and Thailand.	Policy dialogue between central banks; Standard setting for international banking; Financial counterparty for central bank transactions.
Executive's Meeting of East Asia and Pacific Central Banks (EMEAP)	Australia, China, Hong Kong SAR, Indonesia, Japan, South Korea, Malaysia, New Zealand, Philippines, Singapore, and Thailand.	Policy dialogue between central banks.
Organisation for Economic Co-operation and Development (OECD)	35 advanced economies. Regional membership: Australia, Japan, South Korea, and New Zealand as full members; China, India, and Indonesia as key partners invited to cooperate through enhanced engagement programmes.	Surveillance and peer review on economic policy; Standard setting (e.g., taxation, macroprudential policy).

Until recently, the region was significantly under-represented in the key BIS related forums, and was largely a *taker* of standards developed elsewhere.[23] This has changed, particularly with the central role now played by the FSB in the full range of financial standard setting. At the same time, much of the regulatory agenda has been driven by the post-GFC agenda, and thus is dominated by North Atlantic regulatory cultures. This has been understandable and indeed appropriate, given the magnitude of regulatory failures they uncover. Nevertheless, as this response matures, it will be important that other regions, including Asia, play more of a driving role.

The region has many shared interests to pursue in international standard-setting. For example, most economies in the region have bank-based financial systems, are generally conservative in terms of the capital buffers

[23] Ibid.

they require of financial institutions, and retain greater flexibility in their domestic resolution regimes.[24] The region has the full spectrum with respect to the level of sophistication of its financial systems; thus, global standards must be sensitive to development needs and not just the most advanced economies. As a result, the region has a keen interest in ensuring that the characteristics of its financial systems are considered when setting global standards, and indeed these have been addressed in many debates.[25]

At the same time, the region has a strong interest in guarding against any dangerous dilution in international standards. As noted earlier, some voices in the U.S. advocate weakening some aspects of financial regulations that could increase international financial risk; also, there is pressure from some European sources in the face of ongoing poor profitability in the banking sector. Further, strong competing commercial influences across key financial centers can add to pressures to relax important regulatory requirements. On the other hand, there are important voices on the other side of this debate, drawing on the still-fresh memories of the GFC.[26]

The region should monitor this debate carefully and use its collective voice to advocate for strong global standards to be maintained. If there was a dilution in global standards, there would likely be a case for the region maintaining higher standards, and considering protective actions (e.g., to limit dangerous counterparty risks). But the best solution is to maintain a globally consistent set of standards that help manage the key sources of financial risk both within and beyond the region.

Regional surveillance dialogue

There are important regional institutions including the ASEAN+3 Macroeconomic Research Office (AMRO), the network of central banks known as the Executives' Meeting of East Asia Pacific Central Banks (EMEAP), and the regional forum for the FSB. These largely complement the international institutions listed above and cover similar functions. They have advantages in addressing policy issues specific to the region, drawing on common regional experiences and relationships, and can focus particularly on regional links.

The EMEAP and regional FSB forums largely involve a voluntary exchange of information and best practices, and are highly valued by participants. Both have recently had intensive discussions on crisis preparation. The EMEAP includes central banks from all significant countries in the region.

AMRO is the macroeconomic surveillance arm of the ASEAN+3 countries which was created in 2011 to provide independent assessment of the risks,

[24] The regimes determining how to wind up failing institutions generally provide capacity for bailing in investors and creditors, but are less restrictive than the regimes in North America and Europe with regard to the discretion of authorities in situations where bail-in could spread financial panic, and other forms of intervention such as organizing or funding bail-outs may be appropriate (New Zealand has traditionally been somewhat of an exception to this). This flexibility can have significant downsides when not applied appropriately—e.g., Japan in the 1990s, arguably China now.

[25] For example, under the Australian G-20 in 2014, a number of agendas were advanced including better representation and structures for incorporating emerging economy views, and structured review of the economic costs and benefits of regulations implemented to date. Regional partners such as Japan, Singapore, South Korea, and Indonesia were important in working with the presidency to push these agendas forward.

[26] See Janet L. Yellen, "Financial Stability a Decade after the Onset of the Crisis," Speech at Jackson Hole Conference, August 24, 2017.

vulnerabilities and spillovers in the region, and to devise policy recommendations to mitigate those risks. It also provides secretariat and analytic support to the Chiang Mai Initiative Multilateralization (CMIM—discussed below) in the event of a request for drawing on its facilities. AMRO was transformed into an international organization in 2015 following the ratification of the AMRO agreement by member country parliaments. The ASEAN+3 group has also developed other initiatives that improve regional resilience, such as the Asian Bond Market Initiative, which encourages local currency bond markets and recycling of high regional savings within the region.

It is probably too early to evaluate these structures' impacts, and there will necessarily be considerable duplication of the work of global institutions. Since AMRO was only recently established, it is understandable that its analytical capacity will take time to be in any way comparable with established global institutions such as the IMF. AMRO has recently begun publishing the results of its bilateral and regional surveillance. Its priorities would appear to be straightforward—to continue developing the capacity for surveillance, including through cooperation with the IMF, where appropriate. Given the links between the CMIM and IMF funding, there will need to be considerable overlap with IMF areas of competence, to provide the members with the capacity to reach independent judgments in developing crisis response. Even with regional spillovers, which may be an area of AMRO comparative advantage, the IMF will necessarily also devote considerable resources and probably retain an absolute advantage.

However, it would be productive to focus AMRO surveillance efforts and research on areas where there is some difference between Washington and regional policy prescriptions. These areas are relatively few, and it is difficult to see major differences in, say, the outlook and policy recommendations in AMRO's inaugural regional economic outlook and those of the IMF.[27] Nevertheless, it is possible to detect a greater prioritization of financial stability over growth in AMRO surveillance, which is also a common sentiment in authorities' reactions to IMF country surveillance. These tradeoffs could be examined to constructively further this debate. Also, while the IMF has developed an institutional view on capital flow management, there may be some differences in nuance between that and regional views. These slight differences are of more than academic interest, as they are precisely the issues that could involve difficult judgments and negotiations in developing a crisis response package. Thus, it would be good to examine these issues in peacetime' so differences are fully appreciated and even perhaps narrowed. Overall, though, the alignment between AMRO and IMF surveillance augers well for policy cooperation in a crisis.

There has been some debate and discussion over the years of what is the best or optimal grouping in a region for monitoring and surveillance of risk. Earlier models have included the Manila Framework Group (MFG) which included China, Japan, South Korea, and large ASEAN economies, along with the U.S., Canada, Australia, and New Zealand, and played an important role following the AFC until 2004, when it was disbanded. Asia Pacific Economic Cooperation (APEC) is largely focused on trade and other forms of integration, and is less important as a forum for macroeconomic cooperation. The East Asia Summit, which includes APEC members and India, has involved some efforts to initiate a finance ministers' group, although this has not developed. The creation of the ASEAN+3 surveillance

[27] AMRO (2017) *ASEAN +3 Regional Economic Outlook* 2017, and IMF (2017) A*sia Pacific Regional Economic Outlook: preparing for choppy seas.*

and policy dialogue demonstrates the importance of this link between surveillance and practical risk reduction and mitigation tools: The former is sharpened by the fact that participants have a stake in its effectiveness, while the latter gives the members opportunities to respond to surveillance outcomes with practical actions.

In any case, this debate is now somewhat moot: The development of ASEAN+3 institutions means they will be central regional institutions for crisis prevention and response, and there is little space or need for overlapping institutions. To the extent this group does not capture all relevant regional perspectives, the best approach is to expand involvement rather than create new structures.

Any future widening of institutions for surveillance will be related to cooperation over safety net arrangements. As argued below, Australia, New Zealand, and, in time, India, are natural partners in crisis response. The best approach initially is to improve cooperation and trust-building rather than focus on membership. Thus, the initial priority is for ASEAN+3 finance institutions to build practical engagement with interested regional third parties. Over time, greater cooperation on crisis-response mechanisms, as proposed below, could promote wider regional economic surveillance processes.

For now, the emphasis should be on the substance of cooperation on policy dialogue and surveillance, rather than the architecture. Given the history of cooperation in institutions such as EMEAP and APEC, and strong bilateral links, incremental steps would not appear to be too difficult.

Bilateral policy dialogue in the region can also be an important channel for addressing risk. These discussions can often be more frank in their examination of risk, and are a key vehicle for sharing best practice and country experience, and providing technical assistance. In addition, the growth in bilateral crisis arrangements within the region and the likelihood that they may be important in future crisis response, places greater weight on the discussions between those involved in these arrangements (this is discussed further below).

Conclusion on institutions for managing risks

In summary, the region needs to make more deliberate use of international institutions for surveillance, capacity building and standard setting, both as individual countries and collectively. These are likely to be the most powerful tools for reducing economic and financial risks. Regional institutions can be important complements to these international perspectives, and they should be progressively deepened and broadened geographically over time.

CRISIS MITIGATION MECHANISMS IN THE REGION

Even with the most effective surveillance and policy dialogue, risks of crisis remain. Policy mistakes can be made, particularly in extended periods of growth. And there is a risk that external shocks coalesce to produce tail risk events even for *innocent bystanders*.

Depending on the nature of the crisis, a country may seek to ride it out with unilateral responses—adjusting macroeconomic and exchange rates, drawing on foreign reserves, and imposing capital controls. A country may also seek to re-negotiate the terms of its foreign sovereign debt obligations. In this way, creditors can contribute to emerging funding gaps and resolve the crisis. However, despite some improvements in international debt resolution frameworks, significant barriers remain to market solutions, and re-negotiation of debt is unlikely to be a complete solution to the most significant crises.[28]

For these and other reasons, there is a role for international institutions to mitigate crises. There will always be tail risks that are difficult for individual countries to foresee, and it is inefficient for them to self-insure.

There are two key aspects to crisis mitigation. The first, particularly important in systemic crises affecting several countries, is to coordinate macroeconomic, financial and crisis response policies so as to ameliorate the crisis. The second is to ensure that strong financial safety nets are available to mobilize resources to help countries in crisis, and to reduce adjustment and contagion costs. I will deal with both of these in turn.

Institutions to coordinate crisis responses

Crisis cooperation is the G-20's raison d'etre. It was originally created as a forum for finance ministers and central bank governors in the wake of the Asian and other emerging economy crises of the late 1990s, and elevated to a leaders' forum in the midst of the 2008-2009 crisis to coordinate policy in response to that global event. The G-20 has a wider work program, largely connected to issues of economic prosperity and governance. It can make useful progress on these in *peacetime*, although this is always easier in areas where interests most align.[29] In a crisis with global impacts, interests align more sharply and the G-20 can draw on those *habits of cooperation* to coordinate responses.

The region is well represented in the G-20 with five of the permanent members, ASEAN as a permanent guest, and regional countries often participating as invited guests. Thus, it will be the principal organization to coordinate the broader policy response to a crisis,

[28] Improvements over recent years have included: (a) the increasing adoption of standard clauses that facilitate more rapid agreement between creditors as part of a renegotiation; (b) changes to IMF policies that provide greater bargaining power on the part of sovereign debtors (e.g., more willingness to lend into arrears or provide exceptional access in situations where good faith debt-rescheduling negotiations are taking place); and (c) the broadening of the membership of international groups involving sovereign creditors to assist in the coordinated renegotiation of public debt obligations. Efforts to introduce more streamlined sovereign debt resolution mechanisms have foundered for lack of consensus. Further, there have been times when concerns about potential contagion to other markets have led the international community to avoid the immediate re-negotiation of creditor obligations (e.g., the early European packages involving Greece and Ireland).

[29] For example, progress has been very significant on financial regulation reform. See Sterland, "G-20: An essential element in Australia's international economic diplomacy, The Interpreter," Lowy Institute, August 19, 2016.

although central bank networks will also be important for dealing with some of the immediate financial and monetary actions.[30]

Several layers of response would be pursued through these networks. These include all key economic decisionmakers (a) sharing information and analyses, (b) coordinating macroeconomic policies and potential regulatory responses to ensure that spillovers among systemic economies is taken into account, (c) marshalling resources to respond to the crisis, including from international institutions and other large economies, and (d) projecting authoritative and consistent messages to bolster confidence. All these responses are likely to be important in any future crisis, including one whose epicenter is in the Asian region.

The region will need to work together effectively to make the most use of the G-20 and ensure its interests are advanced. Any crisis in the Asian region matters globally given its size and importance to global growth, so it would be clearly on any G-20 agenda. Nevertheless, such a crisis would have uneven global impacts that could work against building a coordinated response. Thus, the region will need to emphasize the risks around central outcomes along with the need for the G-20 to demonstrate its effectiveness in various crisis situations to underpin its ongoing legitimacy. Hence, the region will need to present a strong combined voice, and political and policy differences will need to be managed so as to present a united front on issues of shared economic interest. This may involve setting up ad hoc cooperation and caucusing mechanisms during the crisis.

The G-20 also provides a forum to assist in overcoming differences within the region in coordinating a response to a crisis. While there are likely to be significant common interests, there are also likely to be divergent ones, including those flowing from spheres of geopolitical competition and domestic political pressures. In these situations, there can be benefits from common pressure brought to bear on regional partners to cooperate. Something like this occurred in the Eurozone crisis where pressures from outside Europe forced policy progress within the region despite strong intra-regional differences that held it up (e.g., in banking union and fiscal policy). The G-20 may be particularly useful for the medium-sized G-20 regional members to pursue their common interests, and indeed has some advantages over purely regional groups.

A functioning G-20 going into a new crisis could be a significant advantage in coordinating responses relative to the AFC and the GFC. It captures all of the macro-economically significant economies, and with the FSB members, all significant financial centers. Its wider membership will be critical in organizing responses to shocks that encompass both advanced and emerging economies, where the latter now make up a far greater proportion of aggregate global activity.

Nevertheless, there are also reasons to think that macroeconomic coordination to ameliorate a crisis may prove more difficult in the future. As noted above, all the most systemic global and regional economies have relatively constrained macroeconomic space; and the legacy of the GFC has meant that all countries have higher sovereign debt, with some like Japan and Italy

[30] The main network for any significant shock is based around the regular cycle of BIS meetings. The region also has EMEAP which includes all key players, and would be important in sharing information and coordinating action and approaches in broader fora. The central bank networks have the advantage of enjoying relatively high trust between independent institutions, and therefore able to move rapidly in areas within their mandates.

running up against very strong limits. Further, real neutral or structural interest rates in all key economies appear to have fallen to low levels, suggesting less space for monetary policy action before running into the constraints around the zero-lower bound for interest rates.[31] As a result, there is less macroeconomic firepower to respond to more moderate demand or financial shocks, and the latter may thus have a greater flow through to activity. Second, while any shock emanating from the region would have global impacts, the results are likely to be more asymmetric than those risks posed by the GFC. Moreover, geopolitical competition—e.g., between the U.S., China, and Japan—could make macroeconomic and financial cooperation more difficult.

This suggests that relatively greater weight may be placed on the safety net in response to future economic or financial shocks. The G-20 will remain a critical group for marshalling safety net responses, including ad hoc resources, but swift crisis response and damage minimization will also depend on effective standing resources at the global and regional levels.

[31] See Sterland (2017), "Global financial resilience in a time of uncertainty: where is the 'dry tinder' internationally?" Brookings blog, February 24, 2017.

FINANCIAL SAFETY NET RESOURCES FOR THE ASIAN REGION

This section will first describe the elements that make up the regional safety net, then assess them against various criteria, and finally provide proposals to strengthen its effectiveness and adequacy.

Elements of the current regional safety net

There are three elements of the financial safety net as it relates to the Asian region: (a) global resources in the form of IMF lending, (b) regional resources largely in the form of the CMIM swap arrangement available between the ASEAN+3 group,[32] and (c) bilateral resources committed between countries in the form of foreign exchange swaps and loans.

Country reserves are sometimes regarded as a fourth element of the global safety net, as they are the first line of defense in a crisis. I prefer to think of these reserves as part of the set of domestic response options available to a country, along with macroeconomic policy reactions, and focus on the international elements of the safety net available to supplement these options. As noted earlier (see Figure 2, Panel A), all countries in the region have relatively strong reserve positions with a couple running above levels recommended by the IMF, implying they are absorbing costs by keeping low-return international reserve assets above what is prudent. One of the arguments for ensuring the other elements of the safety net are adequate and effective is to reduce incentives for inefficient self-insurance.

Regarding these international elements, substantial resources are available from global, regional and bilateral sources, at least on paper, with scope for expansion in a situation of significant need. Table 2 below shows one measure of crisis resources available to key regional economies[33] from global and regional sources, while Table 3 shows bilateral financial arrangements (which, as noted below, can't be easily aggregated).

IMF lending remains the largest crisis resource, and is backed by an independently funded balance sheet. The normal levels of IMF access listed in Table 2 can be exceeded in two distinct situations. These include serious crises, where a country meets the IMF *exceptional access* criteria, or where a strongly-performing but vulnerable country has access to precautionary flexible credit lines (FCL).[34] Provision of such high levels of access is subject to additional scrutiny, partly be-

[32] China also participates in the $100 billion BRICS swap arrangements, though the arrangement is designed for China to be a donor rather than participant (similar to the contributions from Japan and China in CMIM). I focus on CMIM as it is the largest and most developed arrangement, and most relevant to a range of emerging economies in the region.

[33] I have not included China in the table as it is clear that even *normal* levels of support (over $300 billion) would likely require emergency supplementation of the IMF balance sheet. I also have not included Japan, Australia and New Zealand because a crisis severe enough to require support for these advanced economies with deep financial markets and fully convertible currencies would involve a global event well beyond the capacity of current arrangements. The same is likely true of South Korea, although this is included for comparison given its prominent role in the 1997 crisis. If a crisis is disrupting advanced economy financial markets to that extent, this is likely to involve concerted involvement of the Fed and other major central banks outside the region.

[34] The extent of exceptional access or precautionary lending will be limited by the IMF's own balance sheet in a multi-country crisis involving several large emerging economies. This operates on both the asset and liability side, both as countries have resources committed to them, and their at-call contributions to the Fund cease to contribute lending resources. Exceptional access cases involve additional process and substantive safeguards, while precautionary lines also require detailed case-by-case consideration of a country's vulnerabilities.

cause of the large calls on the IMF balance sheet. High access is therefore likely to be only relevant to one or two economies in the region at a time (at least without ad hoc supplementation of the IMF balance sheet, i.e., in a very serious crisis).

The Fund has a range of instruments that bring its finances and expertise to bear in crises. Conventional lending programs provide funding in situations requiring policy adjustment, where assistance is provided in tranches in return for meeting policy benchmarks (*conditionality*). The Fund has adopted some new instruments aimed at increasing the speed and scale with which support can be provided in situations where capital flows are volatile. The FCL, introduced in 2009, can provide significant precautionary resources to countries with strong policy frameworks and good track records. Countries are required to meet a set of demanding ex ante conditions upfront, and as a result, the resources can be released without further approval processes. As noted, amounts can be higher than those listed in Table 2. No country in the region has accessed an FCL to date, and there have only been a few conventional programs for smaller developing countries in the Asia-Pacific region in the last two decades, and none in East Asia. The Fund has also recently developed a non-lending Policy Coordination Instrument designed for a situation where a country seeks Fund endorsement of, and assistance in implementing a policy reform program, but does not need IMF financing.

The CMIM arrangements consist of $240 billion in linked (*multilateralized*) bilateral swaps of members' foreign exchange reserves. A portion of CMIM resources, currently 30 percent, can be provided outside the context of an IMF program, with the remainder contingent on IMF involvement. The CMIM agreement is designed to provide support for the ASEAN economies and possibly South Korea, with China and Japan being the main sources of funding. CMIM facilities have characteristics similar to the IMF lending facilities—a stability mechanism that would be used if a crisis erupted with conditions attached to this lending, as required, and a precautionary facility like the FCL. Again, neither facility has been accessed by CMIM members to date.

Table 2. Crisis resources available to some key East Asian economies (billions of US$)

	CMIM (full access)	IMF (normal access)	Total
South Korea	38.4	52.2	90.6
Indonesia	22.8	28.3	51.1
Singapore	22.8	23.7	46.5
Malaysia	22.8	22.1	44.9
Thailand	22.8	19.5	42.3
Philippines	22.8	12.4	35.2
Vietnam	10.0	7.0	17.0

Sources: International Monetary Fund and AMRO.

Significant bilateral resources are also available to the region. One headline figure puts currency swaps within the ASEAN+3 area at $160 billion,[35] and significant bilateral swap arrangements also exist with other players in the region (see Table 3).

However, bilateral arrangements are often not interchangeable or fully comparable to the IMF and CMI support outlined above, and indeed have objectives which make them difficult to compare with each other. For example, many swaps involve only local currencies, and are primarily aimed at supporting development

[35] Statement of ASEAN+3 Finance meeting, Yokohama, May 5, 2017. Currency swaps involve one central bank swapping their own currency or foreign currency reserves for the currency of another central bank for a specified period of time, usually relatively short term, to address temporary liquidity pressures.

of day-to-day trade settlements between those currency pairs, rather than dealing with macroeconomic issues surrounding balance-of-payments adjustments or capital flow volatility. This was the case for the Reserve Bank of Australia (RBA) swaps with China, South Korea, and Indonesia. Those swaps, undertaken by the Bank of Japan, appear to have slightly broader financial stability objectives (which may go beyond trade settlements, since the yen has some reserve currency characteristics), though are still short of being fully comparable with IMF assistance.[36] I refer to these as *liquidity* swaps and they are in plain font in Table 3, although they potentially address different liquidity situations. People's Bank of China (PBOC) swaps have been mainly directed at increasing the internationalization of the renminbi (RMB) by assuring its liquidity against other currencies for both trade and financial transactions; in practice, they have been used for other crisis purposes.

At the time of the GFC, the U.S. Fed provided swaps to several advanced economies in the region (Table 3), though these were also not comparable to the safety net resources of the IMF and CMIM listed above, and

Box 4. U.S. Federal Reserve swaps

The U.S. Fed provided significant U.S. dollar swap lines in 2008-2009 to 14 central banks in Europe, Latin America, and the region (including Japan, Australia, South Korea, Singapore, and New Zealand). This was part of a global effort to address generalized U.S. dollar funding liquidity shortages in U.S. and global financial markets, and was regarded as critical to preventing the crisis from deepening.[i] Many of the swap lines expired in 2010, although unlimited standing swap arrangements exist with the major advanced central banks (including the Bank of Japan).

These swaps played an important part in stabilizing markets in the GFC and at various points since. However, as with some local currency swaps in the region, they should not be viewed as a substitute or fully comparable to other more standard parts of the global financial safety net. Fed swaps are provided for specific financial stability purposes consistent with its domestic mandate—to promote U.S. financial stability by providing access to U.S. dollar liquidity to market participants. To the Fed, the swaps are analogous to providing domestic liquidity through its auctions using its conventional liquidity windows. In effect, it is extending its liquidity provision through other central banks to offshore financial institutions demanding U.S. dollars (on the rationale that these central banks are best placed to assess and manage full-shore participants' credit risk).

Temporary Fed swap lines may be available in some types of crises, but will depend on Fed decisions in those circumstances. Without very significant changes to its mandate, these will be determined by its judgment that swaps will help maintain U.S. financial stability and will not expose the Fed to credit risk. Still, the success of these swaps in the GFC, and relative lack of controversy in the U.S., suggest they could

[36] For example, they are provided to countries alongside separate swaps from the Japanese Ministry of Finance, which use the BOJ as an agent. The MOF swaps are more comparable to IMF and CMIM support—see later discussion.

be available to some of the strongest economies in the region in a generalized crisis that involved the U.S. financial system; but, they will likely not be available in some of the regional scenarios described in this paper which, as noted, do not stem from a general shock in the U.S. financial system (the capital flow volatility hypothesized may partly be related to pressures from the U.S. financial cycle, though in many cases this will not be associated with widespread dysfunction in U.S. funding markets).

There have been calls for liquidity from key reserve-issuing central banks, and particularly the Fed, to become a more institutionalized part of the international financial architecture.[ii] Ted Truman, Randall Henning, and others suggest that Central Bank swaps from reserve currency issuers be provided more or less automatically to countries that qualify based on the rigorous IMF criteria that determine access to its precautionary facilities.[iii]

While these proposals go some way to dealing with the *credit risk* aspects of the swaps, they do not deal with the issues surrounding their *policy* purposes. As noted above and in the text, the Fed's and many others' swaps aim at a narrower set of circumstances and policy objectives than IMF facilities. Where Fed swaps aim to ensure the U.S. financial system remains liquid, IMF lending can support the access of the government to sovereign credit markets and central banks to hard currency resources in a balance of payment crisis, as well as providing dollar liquidity to its financial system. The Fed and many other central banks regard bilateral support for broader crises, even those involving purely liquidity events for sovereign *innocent bystanders* as more within the IMF mandate or those of their own fiscal authorities. Interestingly, the swaps in Asia which have the wider set of potential policy goals, more congruent with IMF lending modalities, draw on foreign exchange reserves that are controlled by ministries of finance (in the case of Japan and South Korea) or central banks with less tightly defined mandates and independence (such as the PBOC).

Still, as argued below, wider adoption of IMF programs with ex ante conditionality, such as the FCL or new liquidity instruments, could help unlock a wide range of swap and other bilateral arrangements.

Note: i) See Randall Henning (2016), "The Global Liquidity Safety Net: Precautionary Facilities and Central Bank Swaps," in Henning and Walter eds, Global Financial Governance Confronts the Rising Powers.

ii) See Raghuram Rajan (2014), "Competitive Monetary Easing: Is it Yesterday Once More?" Speech presented at the Brookings Institution, Washington DC. Also see Henning (2016) op cit.

iii) See: Randall Henning op cit and (2015), "The Global Liquidity Safety Net: Institutional Cooperation on Precautionary Facilities and Central Bank Swaps," Centre for International Governance Innovation, Working Paper No.5; Edward Truman (2017), "International Financial Cooperation Benefits the United States," Peterson Institute for International Economics Policy Brief, March; Weder di Mauro, Beatrice, and Jeromin Zettelmeyer, (2017) "The New Global Financial Safety Net: Struggling for Coherent Governance in a Multipolar System." Essays on International Finance 4 (January). Waterloo, Canada: Centre for International Governance Innovation.

Table 3. Bilateral liquidity and crisis arrangements in the Asia-Pacific region (billions of US$)

	Select counterparts				
Country	BoJ/ Japanese MoF	PBoC	RBA	BoK	Fed
China			32	54	
Hong Kong		**60**			
Japan			16		Unlimited
South Korea		**54**	8		30[b]
Philippines	**12**[a]				
Singapore	11 + **3**	**45**			30[b]
Thailand	**3**	**11**			
Malaysia	**3**	**27**		5	
Indonesia	**23**[a]	**20**	8	10	
ASEAN (proposed)	**40**[a]				
Australia	16	32		8	30[b]
New Zealand		4			15[b]
Liquidity total	27	253	64	77	n.a.
Policy total	84		n.a.	n.a.	

Note: Figures reported are in U.S. dollar equivalent, using the exchange rate on August 23, 2017. The figures include bilateral swap lines that are separate from but under the framework of the CMIM. Figures in plain font are for liquidity purposes—referred to as policy swaps—and in exchange for their domestic currency. Figures in bold font are for general crisis response purposes and exchanged for U.S. dollars. PBoC's swap lines may in practice cover both purposes so same are bolded.

(a) Only a proportion can be accessed independent of an IMF programme.

(b) Not currently available. These swaps were provided between 2009 and early 2010 for liquidity purposes

Sources: National central banks.

cannot be relied on in the full range of crisis events. These swaps were provided to address generalized U.S. dollar liquidity pressures that arose in the U.S. and global economy in that crisis, and the Bank of Japan has a permanent, unlimited swap line, to handle large liquidity events. Fed swap lines may again be relevant for some global crisis events originating in, or strongly affecting, U.S. capital markets. In this respect, they are more comparable to *liquidity swaps* in the region and would not be available for the full range of crisis situations covered by other parts of the regional safety net (see Box 4 for further discussion).

Nevertheless, some bilateral arrangements are aimed at supporting countries facing a full range of macroeconomic or financial crisis events, and some swap arrangements with narrower objectives have some flexibility built into them. The CMIM builds on a network of foreign currency swaps with the explicit objective of providing an alternative and complement to IMF funding. Similarly, the Japanese Ministry of Finance has several swaps with individual ASEAN countries and announced its intention in May 2017 to create a $40 billion swap with ASEAN countries as a group. These *policy swaps* have explicit crisis mitigation goals and are linked, beyond a certain level, to an IMF program being in place. Other examples of standing bilateral crisis assistance include a $5 billion contingent loan arrangement with Indonesia following the GFC and then continued until 2015, with Japan and Australia contributing, along with the Asian Development Bank (ADB) and World Bank.[37] Moreover, the PBOC swaps have been used to address balance of payment pressures, generally but not always as part of IMF-led programs.[38] More broadly, the distinction between different facilities is not clear cut, with the local currency

[37] This could be drawn by Indonesia if borrowing margins crossed a certain threshold, e.g., due to a risk premium being placed on Indonesian sovereign borrowings (as would be common in the lead-up to a crisis).

[38] The PBOC contributed currency swap resources in the case of the recent Mongolian IMF package, although the swap line was activated before IMF involvement in response to balance-of-payment pressures. It also provided contingent resources as part of the Ukraine and Egyptian IMF adjustment packages in recent years.

[39] See RBA press releases of February 8, 2017, and February 15, 2017, on the Korean and Indonesian local currency swaps of AU$10 billion each.

swaps between other countries in the region sometimes including clauses allowing their use for other *mutually agreed purposes*.[39]

In a severe crisis, substantial added resources generally come onto the table, sometimes coalescing around an IMF lending package. Significant World Bank and regional development bank loans are typically provided, and regional and global partners also make bilateral commitments. Up front bilateral commitments in the AFC (including from countries in the region such as Japan and Australia) were larger than even the exceptional amounts available from the IMF, although many were not eventually drawn upon.[40]

In total, and bearing in mind these caveats, bilateral resources of similar magnitude to those of the IMF and CMI, are likely to be available in a regional crisis, with actual amounts depending on the specific nature of the shock.

Assessing the safety net in East Asia

The analysis of regional risk noted earlier in the paper suggests that the regional safety net should be assessed against the following criteria:

- Strong policies: To avoid moral hazard, the safety net needs to (a) provide strong incentives for the region's economies to maintain strong policy frameworks to avoid crisis vulnerabilities, and (b) require adjustment actions where policies have contributed to crisis. The safety net must also be provided in a way that private lenders bear risks associated with their lending—to avoid moral hazard on both the borrowing and lending sides.
- Speed: Given the nature of possible crisis events, and particularly the central problems of domestic financial panics or international capital market volatility, speed is of the essence in minimizing the cost of, or even avoiding, a crisis.
- Synergy: The different layers of safety net need to link smoothly in crises.
- Scale: The growing size of the region's economies and capital flows suggest the need to mobilize significant crisis resources.

In the following sections, I briefly assess the safety net against these goals.

Strong policies: Does the safety net give sufficient incentives for good macroeconomic policies and sound lending?

Existing arrangements incorporate several elements that will continue to provide good incentives for strong policies with CMIM arrangements largely mirroring IMF approaches. That is, precautionary liquidity support is only envisaged for countries with strong track records and which meet demanding criteria; and, crisis response resources involving ex post policy adjustments come with conditions that address macroeconomic imbalances (at least beyond a certain threshold). Bilateral support is generally tied to IMF assistance beyond a certain magnitude, though a proliferation of

[40] This is common and indeed an intended outcome during crisis responses—the up-front commitment can provide market confidence allowing market access to return more quickly (e.g., the case of South Korea in 1997-1998), or worst case scenarios do not come to pass and actual financing shortfalls turn out to be less than expected/feared. See Parkinson, Garton, and Dickson (2004), "The role of regional financial arrangements in international financial architecture," in De Brouwer and Wang op cit. for a brief summary of regional involvement in the AFC.

arrangements with less well-defined goals could potentially provide some weakening add in policy discipline.

There seems little evidence of *moral hazard* in borrowing arrangements—indeed, the region arguably has the opposite problem, where countries are excessively self-insuring by maintaining high current account surpluses and, in some, reserves. One of the broader reasons for ensuring an effective safety net is to reduce incentives for these responses. On the lending side, there is little evidence of moral hazard (e.g., compressed premiums for risky sovereign lending).

Thus, the regional safety net appears to provide appropriate incentives for good policies. Still, risks of moral hazard may emerge from the lax implementation of arrangements, e.g., if lenders believe providing crisis assistance removes downside risks. This may require some policy clarification, particularly at the regional and bilateral levels of the safety net.

Speed: Will crisis resources be delivered fast enough?

On paper, the region has access to good instruments and procedures to deliver assistance rapidly in various crises. However, actual take-up is focused on bilateral assistance rather than Fund or CMI instruments, and there are concerns that, even in a crisis, there may be delays in accessing resources. Because much bilateral and regional support is formally or informally linked to Fund involvement, delays in accessing the Fund would limit access to other levels of the safety net.

Potential delays from the two major sources of support could matter in a crisis. IMF research has examined various issues surrounding the interaction of different layers in the safety net,[41] finding that in systemic global and regional shocks, delays in accessing Fund resources can greatly increase the cost of a shock. Best results are achieved when there is prompt access to both Fund and regional resources. This suggests that actions to increase the timeliness of access to both IMF and CMIM resources are central to strengthening East Asian regional crisis readiness.

The potential for delay on the IMF side comes largely from countries' hesitating to approach the Fund. The region has bad memories of IMF involvement in the AFC: It believed the IMF approach was based on incorrect macroeconomic diagnoses and was overly intrusive regarding sovereign decisions. This was a significant motivation for developing the CMIM arrangements and progressively *de-linking* from IMF assistance.

There are some grounds for optimism, although there is still work to do. The region's relationship with the IMF has improved in recent years, including as a result of the IMF's own reflection on the AFC experience[42] and the more inclusive policy consensus referred to in the section above on surveillance. The Fund has streamlined conditionality for its conventional lending programs, to focus on only those elements that are critical to achieving macroeconomic stability. As indicated, new instruments have been introduced that can greatly increase the speed with which support can be provided in liquidity events, potentially catalyzing significant quantities of resources from other parts of the safety net. Since such instruments are based on meeting rigorous conditions ex ante, this should reduce the stigma attached to IMF involvement as they can be

[41] See IMF (2017), *Collaboration between Regional Financing Arrangements and the IMF*, and the Background Paper.
[42] See for example Mitsuhiro Furusawa (2017), "What we have seen and learned 20 years after the Asian Financial Crisis," IMFblog at www.imf.org.

negotiated in *good* times and be seen as recognizing good performance. Nevertheless, no countries in the region have sought access in the periods of heightened risk experienced since (e.g., the *taper tantrum* of 2013, or instability in Chinese financial markets in 2015), although most of the large ASEAN economies face good prospects for qualifying.[43] Thus, there still appears to be a stigma in developing a formal program relationship with the IMF.

The potential for delay in accessing CMIM resources comes more from doubts about whether the facilities are operational.[44] This goes to issues such as decision processes, assessment criteria and capability, and the distributed nature of swap resources.[45] There appears to have been steady improvement throughout the period in readiness. AMRO was made a full international organization in early 2016 and new operational guidelines have been developed, at least behind the scenes. Still, CMIM remains untested, and it is difficult for markets and independent analysts to judge behind-the-scenes progress given the relatively low transparency of CMIM arrangements.

In contrast, there has been wider implementation of precautionary *at call* bilateral arrangements, which appear to carry less stigma, or are even seen as having a positive signaling effect. Nevertheless, questions still remain about how the range of swap facilities will be activated in a crisis, and particularly how these arrangements would work together and with other elements of the safety net. Delays in the IMF and CMIM assistance could also hold up the release of bilateral swap resources, given the formal and informal links between them.

Synergy: Will elements of the safety net work smoothly together?

Most significant crises in the region will require all elements of the safety net to work together smoothly. Cooperation is key to making best use of the relative strengths of the different levels, and to guard against their individual weaknesses (see Box 5). Moreover, the predominance of common risks in the region suggests the need for an emphasis on accessing sufficient global resources both through the IMF and potentially non-regional bilateral contributors. The scale of possible responses suggests all layers will be needed to handle both symmetric or common shocks and even asymmetric ones affecting a large ASEAN economy. Finally, political economy factors are likely to mean that complexity is here to stay, reinforcing the economic case for cooperation between layers (Box 6).

[43] See Henning (2015), "The Global Liquidity Safety Net: Institutional Cooperation and Precautionary Facilities and Central Bank Swaps," Centre for International Governance Innovation, Paper no.5. Henning suggests that in 2013, South Korea, Malaysia, and Philippines would meet FCL criteria and Thailand would be close. Based on the framework outlined, and with a more nuanced Asia focused lens, in this author's judgment, Singapore would also easily qualify (Henning's analysis was directed at making a broad point about the safety net rather than a fine-grained assessment of eligibility such as the IMF Staff Board would undertake). In my judgment, based on 2016 data, Thailand would now qualify, and given the recent macroeconomic and reform record, Indonesia would also be getting close to qualifying.

[44] See Changyong Rhee, Lea Sumulong, and Shahin Vallee (2013), "Global and Regional Financial Safety Nets: Lessons from Europe and Asia," in Adam Posen and Rhee, *Responding to Financial Crisis*, ADB and Peterson Institute for International Economics, and Jayant Menon and Hal Hill (2014), "Does East Asia have a Working Financial Safety Net?" Asian Economic Journal, Vol 28, No.1.

[45] The nature of swap facilities means that resources need to be released by all members in every operation, in contrast to the IMF and European arrangements which have independent balance sheets, managed by a resourced staff. The CMIM agreement outlines very limited situations where countries can withhold their reserves.

Box 5. Pros and cons of different layers of the safety net

It is now an accepted part of international policy that different layers of the global safety net have different strengths. As a global institution, the IMF can (a) draw on the widest range of public balance sheets, and achieve scale and global risk-sharing, (b) potentially reduce the moral hazard inherent in assistance by bringing *distance* to lending decisions, and (c) bring greater capability due to its depth of experience. Regional financial arrangements (RFAs) can pool asymmetric risks across a region, be more sensitive to country conditions, and potentially be employed more quickly because of stronger local relationships. Bilateral assistance can draw on strong bilateral political and economic relationships to bring added resources to the table, and be employed quickly in situations of high trust.

The advantages of one layer of the safety net are often counterbalanced by disadvantages, and in many cases, other layers have a different set of pros and cons: e.g., Due to the close relationships involved, regional and bilateral assistance can be pressured to avoid making tough decisions about necessary macroeconomic adjustment, potentially extending the crisis and creating moral hazard issues. At the same time, while the *distance* of the IMF can assist in objective analysis, the use of frameworks with general applicability can also gloss over important nuances in the country situation. Also, longstanding governance issues with the IMF can lead to concerns that its approach may overly reflect the interests of the outsized vote and influence of North Atlantic shareholders. Regional and bilateral arrangements generally have the advantage of speed, flexibility, and local understanding, although the case of Europe shows that intra-regional tension can complicate decisionmaking—in some cases, the more *detached* IMF helped bring issues to resolution.[i]

This suggests that CMI and regional bilateral support will be most important in situations involving idiosyncratic shocks to one or two countries, reasonably limited amounts of resources, and a fairly straightforward set of issues (that regional institutions have the capability to diagnose and devise responses)—e.g., with regard to macroeconomic adjustment involving some of the smaller developing ASEAN members, or the early stages of a liquidity crisis with a larger ASEAN economy, when rapid demonstration of international support could stem the panic even with relatively limited resources.

The IMF (and other sources outside the region) will be most relevant in situations where there is a common shock to the region, particularly from a large systemic regional economy or generalized global capital volatility, where large resources are required and where adjustment issues have significant complexity or global implications (e.g., experienced by a range of economies globally).

The above suggests that in a significant East Asia crisis, there will be advantages in having all layers of the safety net involved, both for scale and to ensure the benefits of each layer are drawn upon.

Note: i) See case studies in IMF (2017), '"Collaboration between Regional Financing Arrangements and the IMF, and the Background paper. See also Henning (2017), Tangled Governance: International Regime Complexity, the Troika, and the Euro Crisis," Oxford University Press.

Improving cooperation between the IMF and CMIM has been a high priority for both organizations, supported by the G-20. Live *test runs* identified several gaps which could complicate or delay cooperation in a crisis, including technical differences in lending instrument terms, and the lack of a framework for developing shared views in a crisis. Resolving these will be critical (see below). Moreover, there has been little consideration to date about how bilateral arrangements will link with the other safety net layers.

More generally, the potential for delay in approaching the IMF, for the reasons listed above, could prevent different layers of the safety net from working together smoothly, given the formal links between layers.

Scale: Are available resources sufficient?

The section above suggests that safety net resources in the region total well over $700 billion, providing what looks like considerable standing crisis resources. There is a reasonable likelihood that added resources could be brought onto the table in a crisis.

As indicated in the previous sections, the most pressing issue is ensuring the resources are rapidly available in practice, which will also involve the different levels working together. At the same time, the region needs to stay focused on ensuring available resources are adequate to needs.

To get a sense of the possible scale, it is worth looking back at the size of the packages in the AFC, which were well over $100 billion and considered enormous at the time (see Box 1). Just scaling the 1997-1998 support packages for South Korea, Indonesia, and Thailand by growth in nominal GDP would bring the figure to well over $300 billion in today's terms. In fact, scaling these packages for the growth in the size of capital flows, arguably more relevant, would give a much larger figure, as would growth in domestic financial sectors in the region. Stronger foreign reserve positions and flexible exchange rates could reduce the need for crisis resources. Nevertheless, it is clear that potential requirements could be very large.

More formal analysis of crisis resource requirements involves running multiple scenarios of potential global and regional crises of varying severity. Given the sensitivity of results, little is published on this, although IMF analysis suggests that several shock scenarios would strain existing safety net resources.[46] Also, research at the Bank of England suggests the Asian region is reasonably well placed for many scenarios (unlike some other regions), but only if all current resources are in place and drawn on.[47]

This suggests the region needs to focus on ensuring standing resources remain adequate for the range of potential shocks. Given the predominance of shared regional risks, it also suggests an emphasis on ensuring good access to resources from outside the region.

Conclusion on the strengths and weaknesses of the regional safety net

In summary, the key areas for immediate strengthening involve improving the speed of delivery, and ensuring that the different elements integrate effectively in a fast-moving crisis like that outlined in the scenario at the beginning of this paper. These two priorities are

[46] See discussion in IMF (2016), "The adequacy of the Global Financial Safety Net," para. 28.

[47] See Edd Denbee, Carsten Jung, and Francesco Paterno, "Stitching together the global safety net," Bank of England Financial Stability Paper No.36 – February 2016.

Box 6. Political economy of the global financial safety nets

Political economy factors suggest that complex and overlapping arrangements are here to stay. Randall Henning[i] analyzed the Eurozone crises which in many ways were ideally structured so as to be handled at the regional level: The shock was asymmetric, the countries involved were small relative to available European resources, and Europe had capable regional institutions. Against this, of course, the situation faced very significant potential spillovers into the core European and global capital markets. Nevertheless, Henning found that large European stakeholders, particularly Germany, saw advantage in involving external players like the IMF to help it get outcomes closer to its preferences, and this attitude has continued even as the systemic aspects of the crisis have receded. This suggests some large players may see advantages in retaining institutional complexity to maximize their influence and interests as key creditors.

Asia, however, is not the Eurozone. In particular, as suggested earlier in this paper, the risk profile of the region is quite different, with risks concentrated at the core. First principles in this case suggest a need for overlapping institutions to make the greatest use of both global and regional risk sharing, and draw maximum benefits from the relative strengths of each layer of the safety net. Nevertheless, one or both of the large contributors in CMIM will likely see added political economy advantages from IMF involvement to strengthen their creditor interests. This suggests overlapping institutions will be a permanent part of regional arrangements, putting a premium on ensuring each layer links well.

More broadly, international political economy forces, uniquely it seems in this area, do not yet seem to be driving dangerous *competitive* fragmentation. Regional and bilateral elements are developing in response to regional integration in a somewhat ad hoc way which is leaving gaps (particularly outside East Asia and Europe), and a potential for inconsistency. However, unlike trade or even development lending, there seems to be a strong consensus among existing and emerging powers on the global public good value of an integrated safety net, and this seems particularly true with China in the East Asian region.[ii]

Over time, major shareholders may resist supporting international public goods—the U.S. due to longstanding domestic resistance to international bailouts and costs, and Europe due to the development of its own regional arrangements. Such loss of support will manifest first in further building of regional institutions and bilateral arrangements that are complements or supplements for the IMF, rather than as alternative mechanisms with different policy standards. Over time, though, there would be growing risks that approaches will diverge, producing fragmentation and risks around forum shopping.

Regarding regional arrangements, geopolitical forces in Asia, particularly relations between China and Japan, may make it difficult to further deepen cooperation on the CMIM. These same geopolitical forces could over time produce pressures for bilateral arrangements to be used to gain regional influence. This could lead to some fraying in standards, potentially adding to a weakening of policy discipline and moral hazard, although this is likely to be confined to smaller rather than systemically significant emerging economies (the sums involved in supporting the latter in situations of balance-of-payments problems without strong requirements for adjustment would seem too large for even major countries to risk). Still, the international community and large countries in the region have an incentive to avoid these outcomes, and this may be bolstered by internationally-agreed principles that provide some added protection against harmful fragmentation of the safety net.

Political economy factors therefore reinforce the emphasis in current international policy discussions on effectively linking different aspects of the safety net.

Note: i) See C. Randall Henning, Tangled Governance: International Regime Complexity, the Troika, and the Euro Crisis, 2017, OUP

ii) See for example Eric Helleiner and Bessma Momani, 'The hidden history of China and the IMF', in The Great Wall of Money, Eric Helleiner and Jonathan Kirshner eds, 2014, Cornell University Press

closely related. In the medium term, there remains an overarching need to ensure that safety net resources available to the region as a whole are adequate for a range of scenarios. And, while the regional safety net performs generally well in avoiding moral hazard, care needs to be taken that the implementation of CMIM and bilateral arrangements do not undermine incentives for strong policies and sound lending in the region. The next sections of the paper trace these priorities through to the different layers of the safety net.

As mentioned earlier, the approach in this paper is to build on existing arrangements. While there is value in thinking broadly about ideal international financial architecture, current political circumstances globally and within the region are not likely to be conducive to major reform, and indeed effort will be required to preserve global and regional public goods (see Box 6). Moreover, well-based incremental steps could substantially improve the region's risk preparedness, and more radical reform proposals could well distract from achieving this goal.

ENSURING THE IMF IS AN EARLY RESORT, MAINTAINING STRONG LENDING CAPACITY

The preponderance of systemic risks facing the region means that an accessible and well-resourced IMF should be a central goal of its strategy to mitigate crisis risk. Common risks mean that global risk-sharing comes to the fore, and the IMF balance sheet represents the most effective way to draw global public resources to the region if needed. Also, as noted above, IMF lending plays an important coordination and catalyzing role for many of the resources located in the region. A well-resourced IMF also contributes to the region's wider objectives to promote a stable global economy, given the risks from international contagion of financial panics.

Increasing the speed with which IMF support is sought (and provided) involves action on a range of fronts, both in the IMF and region. The overall goal should be to ensure that the IMF is an early resort rather than a last resort in a serious crisis. This requires action at a broad level to ensure it is regarded as a trusted partner, and actions to ensure IMF assistance can be delivered rapidly in a fast-moving liquidity event.

In terms of building trust in the institution, ongoing institutional reform will be required to underpin the region's confidence in the IMF. This means continuing governance reforms to ensure that quota and voting power is brought closer to the region's economic weight. At the moment, the emerging Asian quota allocations are most *out of line* with those suggested by the internationally-agreed standards reflected in the quota formula (which itself is regarded by most in the region as being stacked in favor of many existing large shareholders, particularly those in Europe). Key players in the region have some divergent interests, and those between China and Japan will particularly need to be managed to achieve progress and ensure they continue to maintain a strong stake in the institution. Continued efforts to ensure the IMF's policy agenda resonates in the Asian region will also help achieve this goal, including ensuring that policy approaches and lending are even-handed.

At the same time, the region's authorities have a key role to play in reducing any stigma associated with approaching the IMF. The improvements that have undoubtedly occurred since the AFC (on governance, lending and policy) should be recognized and highlighted. The location of the 2018 IMF/World Bank Annual Meetings in Indonesia, the first in emerging Asia since the crisis, will offer an important opportunity to address these issues from both directions.

Rapid provision of safety net resources will involve a streamlined delivery of conventional IMF lending and greater willingness in the region to adopt precautionary liquidity facilities. For conventional lending, past lessons should be applied about the importance of focusing conditionality on areas that are critical to ensuring countries can adjust through the crisis and return to market access. This can minimize protracted negotiations over the program, and increase country willingness to enter into IMF stand-by or financing arrangements.

There are also policies that could be adopted to increase the speed with which IMF assistance can be delivered. The G-20 has supported the development of new liquidity instruments with ex ante conditionality, somewhat like the FCL, although with more widespread applicability (typically smaller, revolving amounts of liquidity). Instruments such as these could include features that further reduce stigma in approaching the Fund, e.g., lower levels of funding, modalities that reduce the political sensitivity of drawing on Fund resources, and the capacity for several countries in a region to enter into arrangements at the same time.[48] This discussion has not produced concrete outcomes yet, although the above analysis suggests the region would have the most to gain from such a development given the potential for many regional emerging economies to qualify. In any case, the region has access to the existing FCL tool, and individual economies should give this active consideration and other regional partners their potential support, particularly if the region's risk profile increases. There could also be a case for looking at whether the FCL ex ante conditions are too demanding, and overly restrict wider use by essentially well-managed economies, although this is likely to be more relevant for economies outside of East Asia.[49]

The IMF has recently agreed to various principles and operational approaches which improve its ability to link and exploit *synergies* with the CMIM and other regional financing arrangements.[50] This important development improves the prospects for the elements of the safety net to work smoothly together in a future crisis. The key action from the IMF will be continued priority given to regional test runs to stress arrangements and identify potential obstacles so they can be addressed in *peacetime*. Until now, test runs have raised specific issues, particularly for the CMIM, to work through (see below), and further testing is needed to focus on these responses. Given the importance of bilateral sources of funding, one area for further development would be to progressively incorporate other countries in the test run arrangements so as to ensure the region is well prepared to bring all resources to the table in a crisis (this links with the recommendations below).

As noted, development and adoption of instruments with ex-ante conditionality could also help improve the IMF's ability to link with regional elements of the safety net for all the reasons noted above. The recently adopted Policy Coordination Instrument provides another mechanism for achieving integration between different safety net levels, although, given the need to meet normal program requirements, this is likely to take time to negotiate. It is therefore likely to be more relevant in situations requiring policy adjustments.

Regarding the issue of scale, the region needs to be working to ensure that IMF lending power remains strong. The IMF balance sheet is sound for the next few years due to the finalization of the 14th IMF quota review and various borrowing arrangements in 2016, which together maintain its lending capacity at around $1 trillion. The borrowing arrangements are agreed until around or just after 2020.

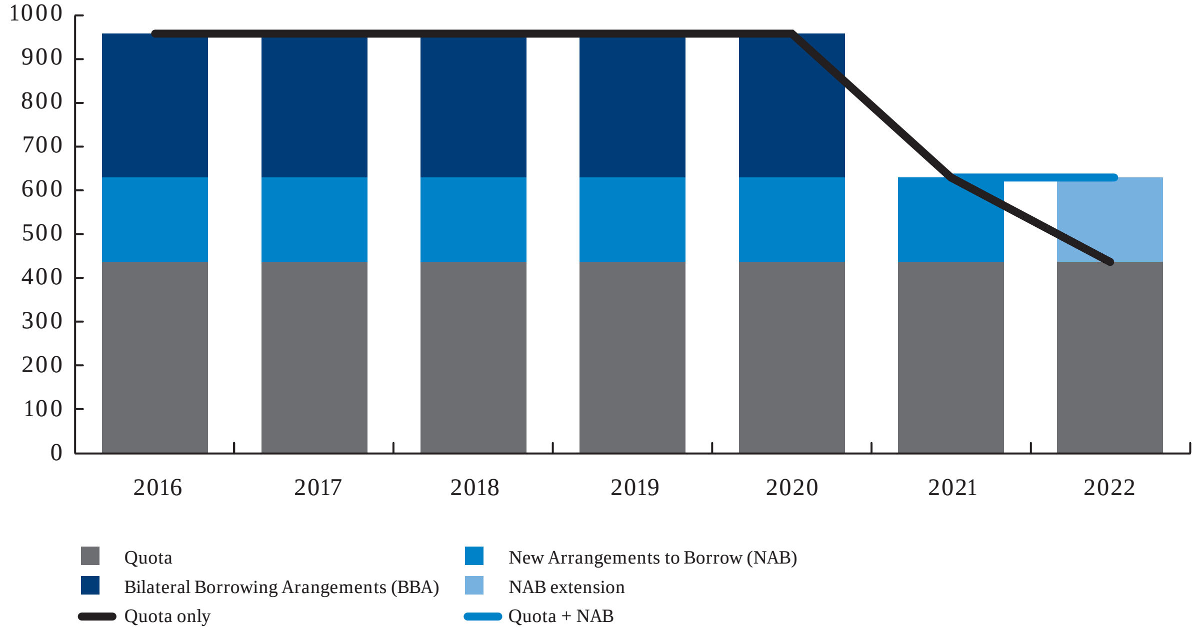
After 2020, the IMF balance sheet faces significant risks (see Figure 6). The upcoming IMF 15th review of the adequacy and distribution quota (equity) resources, due to be finalized in 2019, will be very contentious and increases in quotas are typically hard to achieve. The willingness of the U.S. and other large shareholders to continue to support higher levels of commitment to the IMF will be key, and this is uncertain given past views expressed by the U.S. Congress and the current

48 Rhee et al, op cit.

49 Most of the larger ASEAN EMEs would meet current criteria. Relatively tough criteria is also required to maintain shareholder support, and a significant widening of country take-up of even smaller liquidity lines would necessarily require a much larger IMF balance sheet to support. However, current criteria could potentially exclude credit-worthy countries—see Henning (2015) for a listing that, on the basis of several metrics would appear to exclude the regions small to medium-sized advanced economies. As a greater track record increases confidence with ex ante qualification, there may be a role for revisiting these criteria.

50 IMF (2017) Collaboration between RFAs and the IMF.

Figure 6. IMF lending resources to 2022 *(billions of US$)*



Note: Converted to U.S. dollars from Special Drawing Rights (SDR) at the exchange rate posted on April 3, 2017.
Source: International Monetary Fund.

political climate. The members are likely to resist ongoing reliance on borrowed resources. And divergent interests over the distribution of quota and voting power, including within the region between Japan and emerging economies such as China, may also stymie agreements to increase quotas to replace expiring borrowings. As a result, there will be uncertainty about the size of the IMF lending pool available in the medium term.

The region should work to ensure that the current available resources to the IMF do not contract, and there are arguments to support carefully considered increases.

This possible looming gap between potential need and the willingness of large shareholders to contribute resources is a key risk for global economic arrangements and for the region. Maintaining the IMF balance sheet at least at current levels will involve regional cooperation to ensure the U.S. and others understand the benefits for all of a well-resourced IMF at the center of the global safety net. It will also mean working within the region to ensure divergent interests (e.g., over voting shares) are carefully managed to achieve an outcome that is in the region's interests.

At the same time, these efforts may not be successful, given the many political hurdles. Thus, the region needs to have various options to maintain an effective regional safety net in the absence of an adequately resourced IMF. This puts even more weight on ensuring that other parts of that safety net are well-resourced and operational, and finding structures that provide alternative ways of accessing crisis resources from outside the region.

REGIONAL FINANCING ARRANGEMENTS: CMIM AND BEYOND

As noted, the CMIM has several advantages over the IMF instruments in that it can deliver resources quickly in a fast-moving crisis. It has explicit swap instruments that allow for countries meeting ex ante conditions for sound policy to have immediate access to liquidity resources, and it would face lower *stigma* costs given the closer regional relationships. These advantages have not been drawn on to date.

The immediate priority is to increase confidence that CMIM resources will be delivered rapidly in a crisis. This involves continued work on increasing the operational readiness to build greater clarity on lending criteria and certainty on decision procedures.[51] Along with deepening actual readiness, transparency around these arrangements should also be increased to build confidence. Further, transparency can signal the participants' commitment to trigger the arrangements. This can add directly to the preventive benefits of safety net arrangements by clearly indicating to financial markets and economic agents that resources will come on the table.

As part of this demonstration of greater operational readiness, there needs to be a clear path to address the outcomes of the recent test runs with the IMF—which indicated two key gaps. The first relates to policy—mainly that the duration of CMIM lending assistance and approval processes for extensions does not match well with the duration of IMF financing programs. While this is a relatively technical policy issue, it is critical to resolve in *peacetime*. Addressing them as part of a general push around greater clarification of lending criteria and procedures would go a long way to improving the general readiness of the regional safety net and ensuring it supports other policy goals such as avoiding moral hazard.[52]

The second issue was the need to establish clear frameworks and mechanisms for lending cooperation with the IMF. The experience with European programs shows the importance of procedures for developing shared views on key aspects of lending arrangements such as the macroeconomic outlook, policy adjustment paths, financing needs, and associated conditionality. Any mechanism will need to consider the different institutional arrangements between the IMF and CMIM (and its differences with the European arrangement). In particular, the IMF has a relatively influential and capable staff to develop a detailed program, while the CMIM has more member-driven decision processes, with AMRO playing a secretariat role. The latter approach means the CMIM will find it harder to develop a coherent policy position in a crisis and to negotiate this with IMF staff. The sometimes-difficult relationship between China and Japan—the main providers of resources—could further complicate this. This issue appears to be more than technical and goes to the heart of a weakness in current CMIM arrangements—which is the lack of an empowered and capable staff to develop a coherent program in a fast moving situation that can then be the basis of decisionmaking. Nevertheless, it is

[51] See Rhee et al (2013) and C. Randall Henning (2017), "Avoiding Fragmentation of Global Financial Governance," in *Global Policy*, Volume 8, Issue 1.

[52] Elaboration of policies around debt sustainability requirements for CMIM stability programs will reinforce strong policies, while details on how creditors will contribute to financing balance-of-payment adjustment could also ensure the safety net retains strong safeguards against moral hazard in lending. On the latter, for example, the CMIM could explicitly adopt some of the IMF policies outlined in a previous footnote that assist country bargaining power to achieve re-negotiation of foreign debt obligations to contribute financing to balance-of-payment adjustment.

critical that an approach for dealing with these central coordination issues is developed and promulgated to provide confidence that the two key resource pools are available and will link well in a crisis.

Another issue that has been much debated in the region has been the extent to which CMIM swaps should be *de-linked* from the IMF, although this seems less critical than the linking issues described above. At the moment, 30 percent of a country's allocation are available without an IMF program and there has been debate about whether to lift this to 40 percent. Given the scale of likely programs, this issue probably matters less than the linking issues raised above; in many scenarios, particularly involving larger countries, the CMIM will need to act as if IMF support will be required, and therefore work closely from the start with the Fund in thinking about program design. Thus, issues raised in the test run will still likely need to be resolved regardless of whether the linked portion is activated. The existing de-linked levels seem consistent with both the region's risk profile (particularly the dominance of shared, systemic risks) and the remaining issues that need to be resolved to support CMIM's operational readiness.

Regarding the issue of scale, CMIM's resources seem broadly adequate and proportionate, and expanding them further is not a priority in the short term, given both the risk outlook and readiness issues discussed above.

However, another way to achieve greater scale would be to expand the regional arrangement to draw on a wider set of resources both within the region and outside. As with all such arrangements, the wider the risk-pooling the better; it expands the ability to accommodate more shocks as it increases the chances that these will have different impacts on members.[53]

In the case of CMIM, the obvious next partners in the region are Australia and New Zealand, given their economic weight and stability, and overlapping economic and political interests. The two countries share some of the region's risks, e.g., through exposure to Chinese demand, although they may experience a different risk profile in relation to some capital flow shocks. Moreover a regional crisis is likely to closely engage the interests of Australia and New Zealand leading to their involvement in crisis response packages (as has happened in the past).[54] This would suggest mutual interests in cooperation. India is also another potential partner over time, bringing a different set of interests, risks and issues to the table.

Moreover, ASEAN+3 countries, Australia and New Zealand work closely in regional crisis prevention through common membership at regional crisis-prevention institutions such as EMEAP and the regional FSB forum, and through shared constituency arrangements with South Korea at the IMF and World Bank. Australia is also a G-20 member and likely to be engaged with other Asian members in any crisis coordination.

There have been calls from within the region for CMIM membership to be expanded to include this wider set of partners.[55] Whatever the merit of this over the longer term, for pragmatic reasons the short-term priority for both CMIM and other regional partners such as Australia should be to improve practical engagement and cooperation. On a political level, membership in institutions is very difficult to negotiate, and the cur-

[53] Menon and Hill (2014) op cit.
[54] See Barry Sterland, "Managing Economic Risk in Asia: A strategy for Australia," Lowy Policy Analysis, September 15, 2017.
[55] See, for example, Masahiro Kawai (2015), From the Chiang Mai Initiative to an Asian Monetary Fund, ADBI working paper and Menon and Hill (2014) op cit.

rent CMIM agreement already represents a very finely balanced set of negotiated outcomes.[56] A second, more technical, reason would complicate this negotiation at least for Australia and New Zealand: The structure of CMIM suits countries which accumulate significant reserves for their own purposes, and then pool a portion of them. But Australia and New Zealand maintain low foreign exchange reserves (by international standards) due to the combination of free-floating exchange rates and deep capital markets. Hence, support may need to be delivered in a different way that relies more on the central government balance sheets. This would complicate decisions on burden-sharing and the like.[57]

Hence, efforts could focus initially on building effective working arrangements so that, in a crisis, other regional countries would be well placed to work effectively alongside the CMIM. This may involve some engagement between AMRO and these countries. It would also involve building confidence and understanding of how lending decisions will be made before IMF links are invoked, and perhaps developing frameworks for engagement. For Australia it would involve introducing greater flexibility into its crisis support framework to allow sources to be provided as part of a regional response, ahead of IMF involvement.[58]

Over time, there may be a case for further developing regional arrangements to address several of the issues raised above in a more fundamental way. Key changes that would improve reliability and speed would be to move from a system of mutualized swaps to a regional institution with an independent balance sheet and a permanent staff with delegated responsibilities for surveillance and developing lending programs.[59] Such a structure would also provide the basis for a more inclusive membership that is independent of exchange rate regimes (which could suit ASEAN+3 countries as they develop their exchange rate approaches and deepen financial markets over time).

Essentially this means developing a fully-fledged Asian Monetary Fund. Clearly this is a significant undertaking, and would only likely be countenanced if the benefits outweighed the costs, and key members were prepared to develop the governance and sponsor the institution-building needed for such an arrangement to work. Historically, steps in the development of CMI arrangements have arisen from external pressures exposing the inadequacy of existing arrangements. Further increases in AMRO capacity may increase the confidence of members, and particularly the largest contributors, to take further steps. Constructive engagement with other regional partners such as Australia, New Zealand and India could increase confidence that broadening membership would bring benefits in terms of risk-sharing and capability. Early *live* crisis experience could suggest that the current arrangements impose material costs or delays that require institutional reform.

The arguments for a stronger regional arrangement would grow if the resources of global institutions such as the IMF were not maintained at adequate levels over the medium term. In this situation, a stronger institutional framework would make it easier to incorporate other members from outside the region, which would allow for elements of global risk sharing.

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[56] For an account of the CMIM negotiation process, see Kaewkamol Karen Pitakdumrongkit, *Negotiating Financial Agreement in East Asia: Surviving the Turbulence* (London and New York: Routledge, 2016).

[57] I have argued elsewhere (see Sterland "Managing Economic Risk in Asia: A strategy for Australia," Lowy Policy Analysis, September 15, 2017) that Australia may want to use a variety of mechanisms to deliver assistance, including guarantees on lending.

[58] See Sterland 2017, ibid.

[59] See Rhee et al (2013).

BILATERAL ENGAGEMENT BETWEEN REGIONAL DONORS

Bilateral support may well be the *first responders* in some crisis situations, given the political and operational constraints on activating other aspects of the safety net.

Bilateral arrangements are by their nature specific to the relationship between the two countries or even the institutions involved, and there are therefore limits to how much standardization or cooperation is desirable. As was noted earlier, they will inherently involve objectives and features that meet the needs and respect the mandates of the various participants.

However, these arrangements should be broadly consistent with (or at least not work at cross purposes to) the objectives of the broader safety net. This cooperation should be built around avoiding two potential problems: These include too easy provision of assistance in cases where adjustment is needed, reducing incentives for strong policies, or coordination problems which could cause excessive delays in responding to a liquidity event.

While moral hazard does not seem to be an issue elsewhere in regional safety net arrangements, there are risks that fragmentation in the region could introduce some elements of this; geopolitical competition could reinforce such a perception (see Box 6). Some standardization in the way key donors approach this issue could therefore be valuable.

To ensure consistency with global and regional arrangements, bilateral assistance needs to be provided in a way that is consistent with the need to support adjustment and minimize moral hazard. One way to achieve this is to tie resources beyond a certain level to IMF involvement, or alternately to limit the amounts provided for clearly short-term liquidity. For example, Japan's swaps with ASEAN countries explicitly include provisions that IMF support is required beyond a certain level of foreign exchange provision. The PBOC has increasingly tied extended use of its swap arrangements to situations involving a full IMF program, although it has activated swaps in response to balance of payments issues in the past, ahead of IMF involvement (e.g., Mongolia). Other arrangements, e.g., the Japan/Australia/ADB/WB initiative, did not contain policy conditionality but were capped at relatively limited levels, and aimed at alleviating international liquidity pressures.[60]

The opposite and arguably greater issue is that safety net resources may not be deployed rapidly enough, and at scale, in a large liquidity event. This could arise because of coordination issues, e.g., donors not having a common view on the nature of the crisis (liquidity versus adjustment, or the balance between them). Delays in securing IMF support could hold up resources due to formal links (e.g., Japan's policy swaps), legislative constraints (Australian legislation that essentially ties bilateral support to IMF involvement) or concerns about creditworthiness. This last issue could be more important for bilateral arrangements from outside the region, which could be sources of resources in some circumstances. In this situation, standing support from

[60] See Australian Treasury, "National Interest Statement: Loan agreement between the Commonwealth of Australia and the Republic of Indonesia." http://www.treasury.gov.au/PublicationsAndMedia/Publications/2015/National-Interest-Statement-Indonesia

IMF facilities would help to rapidly mobilize bilateral assistance. The new Policy Coordination Instrument provides one option for a reforming economy to seek multilateral endorsement and support for its domestic program, but would take a similar amount of time to negotiate as a conventional IMF lending program.[61] Liquidity instruments, such as the FCL or similar new ones, would provide a stronger basis for assessing a shock as a liquidity event, and mobilizing bilateral resources.

These challenges suggest a few avenues for action to strengthen the contribution of bilateral arrangements to the regional safety net.

Given the possible early role of bilateral support, and its potential importance in scaling up a response, potential donors should engage during *peacetime* and *test runs* between CMIM, and IMF could potentially be broadened over time to consider including bilateral donors. This could help the players understand how they see the different elements of bilateral responses triggered by different scenarios (e.g., how different types of swap lines would be affected, how arrangements will interact with CMIM or IMF support, and how decision processes operate in each country). Such understanding could help later coordination in a real crisis.

There may be a case for pursuing agreement to principles to guide the use of bilateral crisis arrangements. These could be broad enough to encapsulate the various types but could include provisions that they do not work at cross-purposes to the rest of the safety net (e.g., in allowing countries to avoid balance-of-payment adjustment). These would better be pursued internationally, through a forum such as the G-20, since both regional and external bilateral assistance is likely to be important in many scenarios. Any principles would need to be broad to ensure that the advantages of speed and flexibility in bilateral arrangements are preserved, and their various goals respected. Nevertheless, even broad principles can provide impetus towards the right type of consistency, and the discussion around them can be useful in helping policymakers to understand different perspectives. The G-20 agreement in 2011 on principles for cooperation between the IMF and RFAs is one model for such an approach.[62]

The final implication is to underscore the importance for the region to support ongoing efforts to develop and then adopt new instruments that recognize the generally strong economic performance and reliability of most East Asian emerging economies. This could significantly increase the speed with which bilateral resources are triggered in a crisis, leveraging off limited IMF liquidity resources to provide significant rapid response capability along with a fully operational CMIM.

[61] As a matter of policy, the PCI needs to meet the same degree of rigor as other IMF programs.

[62] See "G-20 Principles for Cooperation between the IMF and Regional Financing Arrangements," as endorsed by G-20 Finance Ministers and Central Bank Governors, October 15, 2011.

CONCLUSION

With the risk of common and systemic shocks to the region more prominent, the region faces a very different circumstance than it did in the AFC 20 years ago. This suggests the region should take a more deliberate, coordinated approach to managing regional risks, including strategic use of its networks to maximize its impact in international forums. It should prepare to present a strong common front in the G-20 in a crisis. The region should also seek to close gaps in financial safety net arrangements, including: (a) taking action to ensure the IMF is an early resort in a crisis, given the likely importance of global resources; (b) improving the speed with which resources can be delivered in a liquidity crisis; (c) enhancing links between the IMF and CMIM, and between both of these and proliferating bilateral arrangements; and (d) over the medium term, assuring the quantum of crisis resources available particularly in the IMF.

I will conclude by returning to the scenario outlined at the start of the paper to demonstrate the value of the approaches outlined.

International institutions, with the support of regional partners, would have identified growing risks and encouraged national efforts to increase firewalls for its domestic financial institutions. At the same time, the country would have been in early discussions with the IMF, including potential access to IMF liquidity facilities. Credible and sizable global, regional and bilateral crisis arrangements would have also increased market confidence in the crisis country's capacity to weather international shocks.

All of this may have helped prevent a crisis in the first place. But what if the call still came on this hypothetical Friday evening? The weekend is still going to be difficult but there are some new advantages.

Regional partners would have worked through crisis response options in advance, and have confidence they can move quickly to activate the CMIM and other regional resources if circumstances demand. There would have been broad agreement among regional partners to operate using similar criteria for triggering support (which are aligned to those of the IMF). Working relationships built during prior discussions would facilitate rapid agreement to an up-front package, with appropriate burden sharing, while IMF discussions were ongoing. A better relationship with the IMF, and perhaps precautionary lending arrangements, would have allowed faster access to global resources, and for a response package involving CMIM and bilateral partners to be coordinated and scaled up quickly.

The G-20 members in the region would ensure that the upcoming G-20 finance meeting had the crisis squarely on the agenda, and would present a strong common front. Through the G-20, the region would have also secured more external bilateral commitments to a package, including by coordinating with the IMF. Policymakers would have a clear shared sense of the risks for the global economy and implications for their own policy settings.

The combination of these actions would bring confidence to markets and households and reduce capital outflow, stabilizing the situation. Only a portion of the pledged support would be required, and quickly wound up as the situation is stabilized and the country has confidence it would have access for future events.

As at the start of the paper, the above outcomes were not pre-ordained even with the most effective set of surveillance and crisis arrangements. *Black swan* events still occur that confound even the most well-attuned early warning systems, and overwhelm even well-resourced safety nets. But further enhancements to regional arrangements, and links to global institutions, could give greater confidence about better outcomes, contributing to the resilience and continued development and growth of the region.

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