BRETTON WOODS: THE NEXT 70 YEARS

# BRETTON WOODS

*The Next 70 Years*

PRUDENTIAL INVESTMENT MANAGEMENT is pleased to have supported this unique effort to present this authoritative collection of recent essays on the international monetary system. The impressive range of authors and their thoughts and ideas is testament that the system offers important scope for adjustment and innovation. As we commemorate the seminal events that led to the establishment of the International Monetary Fund seven decades ago, we have the unique opportunity to think about the role of and potential for the international monetary system over the next seventy years.

The performance and balanced development of international financial transactions depends on a well-functioning international monetary system. Persistent large external imbalances and repeated bouts of sharp financial flow reversals and exchange rate volatility seem to suggest that more can be done to strengthen the system.

At Prudential, we share an immediate interest in a robust system to support orderly financial intermediation and help channel credit and investments efficiently. In particular, we share the view that the increasing financial integration of emerging markets and the residual challenges for overcoming the global economic and financial crisis require a fresh approach to assessing the changes needed to restore greater stability and resilience in the international economy and help foster growth and employment opportunities at home and abroad.

We would like to thank deeply the Reinventing Bretton Woods Committee for this exceptional initiative and are equally most indebted to all the authors for their outstanding contributions to this project.

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CEO Prudential Investment Management

Prudential

TABLE OF CONTENTS

CHRISTINE LAGARDE, MANAGING DIRECTOR
INTERNATIONAL MONETARY FUND

# FOREWORD

When delegates met at Bretton Woods in July 1944 to devise a post-World War II economic system, the war was still far from over: just one month had passed since D-Day, and hostilities were set to continue for another ten months in Europe and for over a year in the Pacific. Yet, recalling the missed opportunities that had followed the previous World War, the IMF's founders understood that the focus was now shifting from ending the war to securing the peace.

In support of this cause, the Bretton Woods delegates agreed on no less than a new global financial system. That system was to be supported by the International Monetary Fund, a new institution focused on macroeconomic stability which, combined with economic growth, was seen as one of the best guarantors of peace.

From the beginning, the IMF was infused with the ability to adapt to a changing world, while remaining true to its founders' vision. This capacity for reinvention would prove indispensable as the IMF dealt with many different challenges in the years that followed, from post-World War II recovery to the collapse of the original Bretton

Woods system, regional crises in Latin America and East Asia, the fall of the Berlin Wall, and the global financial and European crises in recent years.

The IMF will continue to adjust its policies in the coming years, as new experience is gathered and gets absorbed into policy making. Important challenges to economic and financial stability may no longer be restricted to specific country issues, but come from global cross-currents that affect economies around the world in different manifestations. This includes excessive income inequality, the risks posed by climate change, and the vast under-representation of women in the global workforce, all of which could prevent economies from reaching their full potential.

While it is doubtful that any of these factors was envisaged at Bretton Woods, it is clear that each is central to the IMF's goal of promoting global economic stability. Seventy years ago, multilateralism was the only way to prevent another Great Depression and world war; today, it is the only means to successfully confront problems whose causes and effects have no respect for international borders. And for the IMF to remain effective in fostering multilateralism, its governance structure must continue to adapt to the world it serves.

I encourage you to read this collection of thought-provoking articles, which provide an excellent contribution to develop this question further: how can the IMF adapt while remaining faithful to the mandate envisioned in 1944?

MARC UZAN, EXECUTIVE DIRECTOR
REINVENTING BRETTON WOODS COMMITTEE

## REINVENTING BRETTON WOODS AT 20

When, in February 1994, I decided to organize a conference in New York City to celebrate the 50th anniversary of the Bretton Woods System, I had no idea that this impulse was to be a first step in a twenty-year adventure that would lead to the creation of an institution I would head for two decades and a raison d'être.

I write these brief reflections at a time when we face the paradoxical tendency "for the world to grow further apart, even as it draws closer together,"[1] making international economic cooperation more fragile than it has been since the end of the Second World War.

Indeed, the period following World War II was an era of hegemonic stability during which the US as the dominant power had the capacity to act unilaterally to stabilize the European and Japanese economies and more generally to manage the international financial system. The fourth quarter of the 20th century was an era of hegemonic cooperation during which the US could no longer act unilaterally but could still take the lead role in organizing collective action. The first quarter of the 21st century is proving

1. Christine Lagarde, Managing Director of the IMF, "A new multilateralism for the 21st century," The Richard Dimbleby Lecture, London (February 3, 2014), available at: http://www.imf.org/external/np/speeches/2014/020314.htm (last accessed February 13, 2015).

to be an era of "non-hegemonic cooperation"[2] during which preventing fragmentation, divergence, and a return to national lines is becoming increasingly challenging.

At a time fraught with worry that the international financial architecture and all the underpinning institutions established after World War II risk becoming obsolete, the Reinventing Bretton Woods Committee (RBWC) is needed more than ever. It is an imperative, a necessity, that we mobilize stakeholders from both emerging and major economies to examine the need for new forms of multilateral cooperation that will help prevent fragmentation and stagnation of the global economy. It is equally important that we discuss how best to diffuse the growing tensions between incumbents and rising powers. And, yes, we must strive to create the foundations for a more stable international monetary system and sustainable growth. The RBWC is determined to labor in these directions, which represent an evolving agenda for us, but not a change in our mission.

When we hosted our first conference in 1994, our discussions were centered on the international monetary system, on exchange rate instability, and on what Europe as a whole needed to do to reduce the frequency of exchange rate crises, so common back then. At the time we also contemplated the idea that, moving forward, a mechanism was needed to deal with sovereign debt crises. Ironically, we had not anticipated the financial crisis that would hit Mexico only two months later. We also did not fully comprehend the role to be played by the rise of China and other emerging economies, but we were nevertheless aware that the challenge of a new Bretton Woods would be to reintegrate billions of people in the global market place. We also realized from early on that the network of influence of emerging economies was not yet sufficiently developed and that it was important to hear from experts from these countries at our seminars.

As I reflect on the past twenty years, I am struck by the fact that structural change has always been accompanied by a major financial crisis. This was the case, with Mexico in 1995 and also after the Asian financial crises. I also remember how at the time the international financial community did not perceive the creation of the G20 and the Financial Stability Forum at the Finance Ministers' level as a major development. It was only when we found ourselves in the midst of the Great Recession that the G20 was elevated to the status of major forum.

However, from the beginning we felt that the G20 was an interesting group worth paying attention to and we started organizing seminars around the G20 as early as 1999. The G20 was important for the mission of the Reinventing Bretton Woods Committee because this group was all about the international financial architecture and most particularly about preventing and resolving financial crises. The close to thirty seminars we have organized around the G20, and with the close involvement of succeeding G20 chairs, have resulted in our having an important network of influence with numerous policy makers. We have seen many G20 deputies of the 1990s and early 21st century become Ministers and Governors.



We also quickly discovered that other countries that were not members of any groupings also had an interest in engaging with the international financial community. A case in point was when Professor Bob Mundell suggested that we connect with a group of experts from Kazakhstan who had established the Astana Economic Forum and were keen to be part of discussions on international monetary reform. One thing led to the next and we began to work with the Eurasia Club of Economic Scientists to co-organize an annual conference on the international financial architecture and as a result we were able to engage more deeply with Central Asia.

At a time of rising tensions, we have come to realize how important stability of the global economy is for global peace. Fragmentation and divergence is exactly what Europe decided to fight against by its major undertaking of creating a common currency that would protect Europe from currency instability. This is a project that we also followed closely through holding many meetings in both Europe and beyond. And now, Europe is at a crossroads with the eurozone and the euro being called into question and the need for good governance emerging as critical. What is at stake in Europe is not only the future of the currency but the capacity to establish and accept the pan-European institutions needed for a common currency to flourish.

What I have also learned over the course of the past twenty years is to understand China better. More than a decade ago I started traveling to China regularly and organizing seminars on the international financial architecture. I have been invited to participate in many meetings in China where the discussions have centered on the reform of the international monetary system. From Beijing to Shanghai, Harbin, Hangzhou, Chongying, Qingdao, so many trips were needed to firmly believe that China will not only shape the post Bretton Woods System but that it will also become the agent of change.

I have so often tried to understand why there has been so little progress. Why so few real reforms? What will it take to modernize the global financial architecture? Perhaps Bretton

Woods was unique and cannot be repeated? Calls for a new Bretton Woods abound with peaks after each crisis and most notably after the great financial recession of 2009. I do not know the answer to these questions but hope that perhaps some clues lie within this book.

Although 2014 marked the seventy-year anniversary of the Bretton Woods Conference, unlike past hallmark dates, no major commemoration was organized. Perhaps failure to reform the governance of the IMF cast a shadow on a generation of policy makers' desire to celebrate? Are we at a turning point that signals a loss of interest?

Maybe, but this is not my view. In the course of this anniversary year we organized ten seminars that spanned the globe from east to west and north to south. The response to this work was tremendous. We had Jacques de Larosiere, Michel Camdessus, close to a half a dozen Bretton Woods historians of great import, numerous finance ministers, governors, renowned experts and the list goes on. Later, in the course of the year when we decided to launch this commemorative but also forward looking publication, the response was equally strong. From Joe Stiglitz, to Justin Yifu Lin, from Ministers Babacan and Padoan, and so many others, all wanted to express their personal views on how to face the challenges that lie ahead for the global economy. This book clearly reflects the commitment of so many leaders and experts to preserve and adapt the international financial architecture in order to prevent future conflicts and instability. There is a will that needs to be garnered to complete "the work not done at Bretton Woods" (see the essay by Joe Stiglitz). This is a vision for the future that we need to hold on to. All that is missing is an agent for change.

## THE NEXT TWENTY YEARS

In light of the road that we have traveled and the ideas that we have heard in the past twenty years, what should be our agenda moving forward? The character of financial globalization has changed, just as capitalism changed over the course of the 19th and 20th centuries. While the United States will remain a major player, the international financial architecture needs to accommodate China's increased importance. The international financial system is in profound flux, which may overwhelm the institutions charged with managing global problems.

No doubt more debate is needed to understand the role of China in the global economy. As was the case after World War II when the US played a leading role in establishing



the international financial architecture of the 20th century, we need to embrace the emergence of a multipolar world where China, the US, and Europe can become anchors for stability and can provide the foundations for a global economic order based on prosperity.

Over the past six months, China has pushed forward the creation of three international institutions dedicated to development finance: the Shanghai-based New Development Bank, along with Brazil, Russia, India and South Africa; the Asian Infrastructure Investment Bank; and the Silk Road Fund. The importance of these different initiatives can be judged by their centrality to Chinese President Xi Jinping's aim to achieve the "Chinese dream" of recapturing the status the country enjoyed during the most powerful passages in its history. Indeed, "cherish obscurity, hide your brightness" seems to no longer be the panacea in China. Certainly, the establishments of a BRICS development bank and a contingency reserve arrangement seem to indicate new momentum for change in intergovernmental finance and cooperation. These developments may also mark a rebuttal of the existing framework dominated by the main multilateral institutions but also increasing confidence that China and leading emerging markets can move forward on their own. This is still only a modest start but the motion is undeniable.

Although the euro lost (and the US dollar gained) some ground during the six years between 2007 and 2013, the US dollar and the euro maintained their first and second ranks respectively. However the renminbi (RMB) climbed from the twentieth to the ninth slot. We might see emerging in the not too distant future a tri-polar system between the dollar, the euro, and the RMB. China will have achieved capital account liberalization and RMB convertibility for all practical purposes within two to three years. The RMB already represents an important anchor for Asian currencies. What will happen when the RMB becomes another international reserve currency? It will be imperative to avoid political tensions, to accommodate rising powers, and to embrace the need for new forms of multilateralism. What will be at stake is the future of the Bretton Woods System as we know it. But, if there is indeed consensus for the need to adapt, what is missing? Another crisis?

In 2016 China will have the leadership of the G20. This will represent a unique window of opportunity for China to partner with other nations to help forge and shape the governance of the international financial system for the years to come. The credibility and the legitimacy of the IMF will also be at stake. Can the IMF become an arbiter of the international monetary system without adapting its governance structure to the new realities?

We are seeing most countries engage in currency depreciation and move toward to quantitative easing to fight deflation and revive growth. The exit from all these policies and its consequences calls for an impartial arbiter to help navigate these uncharted waters. How legitimate will the advice of the IMF be if this global governance reform is not adopted?

In light of all these developments RBWC will face a unique moment in its history as a neutral agent to help shape and direct debate. We look forward to the challenges that lie ahead, which we will continue to face with the attitude that has guided us throughout the years: to remain sincere and forthcoming; to maintain a focus on ideas, thinking, and the sharing of different perspectives; and to find the means to travel to the four corners of the world to organize a seminar if we deem it important.

### ON A PERSONAL NOTE

In closing I would like to express my deep gratitude to all those who have participated in the close to 100 seminars that RBWC has organized. The list is too long to name individuals but this anonymity by no means diminishes my immense gratitude. Everything that RBWC has accomplished and stands for stems from the generosity of the individuals who have agreed to accompany us in our endeavors. I am particularly grateful to the many central bank governors, ministers of finance and other high-ranking officials who have taken time out of from their busy schedules to travel to the far corners of the world to participate in our seminars.

I also want to thank Barry Eichengreen with whom I was studying at Berkeley when I decided to launch RBWC. He was supportive back then and his continued guidance and insights all these years have been invaluable to me and to RBWC.

I also would like to express my heartfelt gratitude to Robert Mundell for his friendship, advice and support. He opened the door to China and to Eurasia for me, and his ideas and perspectives have provided rich and challenging stimuli for my thinking. I will always recall with great fondness vigorously debating global imbalances and the future of the international monetary system with Robert over meals in China, Havana, Sienna, Washington, Astana and so many other places we have journeyed to together.

OUSMÈNE MANDENG, SENIOR FELLOW AND
MARC UZAN, EXECUTIVE DIRECTOR,
REINVENTING BRETTON WOODS COMMITTEE

# INTRODUCTION

THE INTERNATIONAL MONETARY SYSTEM may well be one of the most important topics in international policies. It affects daily lives through the importance of international transactions in goods, financial, and other services and hence economic growth, income, and employment. Yet, public and policy interests in the "system" remain rare, despite the fact that they are constantly confronted with issues related to the system – including the recent sharp depreciations of the euro and the yen against the US dollar, the euro area crisis, the rise of China and renminbi internationalization, Federal Reserve tapering and the impact on capital flows on emerging markets, Greece's sovereign debt restructuring, Germany's large current account surpluses, governance reforms at the International Monetary Fund (IMF), etc. The system does not operate as intended and needs change. The aim of this book is to help stimulate public policy debate and reignite economic policy interest to help advance needed reforms of the international monetary system.

The international monetary system comprises the rules that govern exchange rate arrangements and international liquidity. Its purpose is to establish adequate conditions to conduct international transactions and prevent the build-up of large and sustained external imbalances, that is, sizable external deficits and surpluses between a country and the rest of the world. Large imbalances, if conditions supporting the imbalances change due to internal or external factors, may force a country to undertake sudden adjustments in, for example, monetary, exchange rate, and fiscal policies that may be disruptive to the country and the international economy as a whole. The adequate availability of international liquidity, that is, currencies usable to conduct international monetary transactions to meet external obligations, is the critical component, the fuel of the international economy. The system's main actors are the central banks and the IMF.

The international economy has changed significantly over the past few decades. The rise of China and emerging markets has shifted economic power as manifested in the increasing share in world GDP and international trade of China and emerging markets. However, this has so far had little impact on financial and, in particular, international monetary transactions. The integration of China and emerging markets into the international monetary system represents one of the major challenges for the international economy over the short to medium term.

The international monetary system rests on international economic governance arrangements. Its orderly functioning depends on cooperation and, at times, coordination of economic policies. Undue economic policy divergences and beggar-thy-neighbor policies may cause unwanted imbalances and tensions in the international economy that often form the basis of economic and financial crises. Governance effectiveness in turn is based in large part on actual and perceived ownership in needed policy decisions and responses. This refers in particular to the representation of governments and their relative influences at international financial institutions, especially at the IMF. For a while, the IMF has been criticized for not providing appropriate country representations and it has embarked on a series of reforms to shift more say or voting power toward China and emerging markets. Progress of such reforms is seen with considerable apprehensions amid important setbacks in its implementation. The credibility and legitimacy of the IMF has been tied in large part to a successful implementation of such reforms.

The present commemorative book has been inspired by the seventy-year anniversary of the Bretton Woods Conference. The conference that took place at Bretton Woods, New Hampshire, in July 1944 agreed on the establishment of, among other things, the IMF.



The IMF was meant to "promote international monetary cooperation [...] to facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income."[1] The aim was to establish a new international monetary order seen as essential to facilitate reconstruction and foster international economic integration. The remnants of those aims are still in place and define key aspects of the functioning of the international economy today. Seventy years on, it seems a good time to take stock of how the thinking about the system has changed and how it is likely to evolve in the future.

The seventy-year anniversary matters in particular as it coincides with the 100-year anniversary of the outbreak of World War I and the subsequent monetary disorder the war produced and that in many respects laid the foundations for the ideas implemented at the Bretton Woods Conference.[2] The book's publication concurs with important pending changes at the IMF amid key deadlines for concluding governance reforms and reviewing the valuation of the Special Drawing Rights (SDR) basket by end-2015.[3]

The book has invited leading commentators on international monetary and economic affairs. The articles offer a unique range of views on and around the international monetary system. The authors have been given complete freedom to respond to any or part of the following questions:

> *What does the future hold for the world's major currencies, the international monetary system, and the institutions that underpin the international financial architecture? What can be done to help steer a course toward financial stability? What challenges lie ahead?*

The main themes put forward by the authors can be broadly grouped as follows.

### INTERNATIONAL MONETARY SYSTEM

Most authors concur that the system does not function well and is in need of reform. Several articles point out that the system has not adapted to the significant changes in the international economy. Views about the deficiencies of the system are varied with several articles pointing to failure to prevent the build-up of significant external imbalances, systemic financial risks, and sharp exchange rate volatility, but broadly attest that the case for reform is strong. Some authors point out that the current system has shown resilience and adaptability.

Several authors affirm that the increasingly economically multi-polar world requires a more multi-polar international monetary system. The increasing economic weight of emerging markets has, to date, not led to a corresponding proliferation of emerging markets currencies in international transactions. A large number of authors seem to indicate that the integration of emerging market's currencies represents one of the key challenges for the international economy. Some authors see political opposition as the main obstacle for reform. Several authors underline the need for a framework to facilitate an orderly transition toward a multi-currency system and indicate concerns about the stability conditions of a multi-currency system.

### INTERNATIONAL MONETARY FUND

A large number of authors underline the need to reform IMF governance to achieve more balanced representation in order for it to remain a relevant, legitimate, and effective entity, with some authors calling for a more dynamic mechanism to allocate representation. Some authors call for more accountability at the IMF and greater transparency on access of IMF facilities. Several authors stress the importance of the IMF working to strengthen international economic surveillance and crisis prevention, update surveillance mechanisms, fully integrate multilateral surveillance, and to extend its mandate to financial account transactions. At the same time, a large number of authors express favorable opinions of the IMF, reflecting on its different roles over time and how it adjusted to new challenges. Several authors continue to see the IMF as best placed to pursue international economic policy cooperation.

The lack of effectiveness and traction of IMF surveillance, particularly in large member countries, and the IMF's failure to detect the global economic and financial crisis are mentioned by several authors. Several authors confirm the persistent adverse stigma of IMF assistance, in particular in Asia, that may deter countries from seeking early support. Some authors propose greater automaticity and transparency for qualifying for IMF arrangements.



### INTERNATIONAL ECONOMY

Authors generally attest that the international economy has been becoming more multi-polar amid the rising economic weight of China and emerging markets. Authors express different views regarding the state of and, likely trajectory of, the international economy with some concerned over whether financial globalization can be sustained and some fearing the possibility of increasing fragmentation and deglobalization. Some authors stress that deficiencies in the international monetary system may have led to a deflationary bias in economic policies. A large number of authors view the changes in the international economy as a critical trigger and catalyst for rethinking the international order.

Persistent imbalances are mentioned by some authors as a source of continued instability, together with mounting levels of sovereign indebtedness and possible needs for debt restructuring amid continuing concerns about debt sustainability in some countries. The importance of addressing imbalances simultaneously with economic growth is being mentioned to achieve more symmetric adjustment. Rising income inequality and the challenges related to the middle income trap for emerging markets are stressed as critical challenges by some authors. Some authors see the prospects of an increase in US interest rates as a possible trigger of a new crisis.

### INTERNATIONAL ECONOMIC GOVERNANCE AND POLICY COORDINATION

The challenges and difficulties of international policy coordination are affirmed due to a risk of increasing political decentralization, diverging policy concerns, and disquiets about coordination effectiveness and gains. The importance of adverse policy spillovers in an increasingly integrated international economy and the possible adverse impacts on domestic policy effectiveness are emphasized, while the need to establish fairer burden sharing in adjustment is mentioned.

The Bretton Woods Conference is evoked to emphasize its unique policy coordination spirit and to offer guidance for a future agenda while several authors see it mostly as the outcome of US dominance. Some authors see the G20 as the key entity to promote international economy policy cooperation. Several authors are skeptical about whether significant reforms in international governance can be achieved, underscoring the importance of political leadership, with some authors drawing attention to the importance of strong bilateral relations.

### INTERNATIONAL CURRENCIES

The continued dominance of the US dollar, or dollar standard in the international monetary system, is highlighted by many authors. Some authors stress that this may have adverse implications for the adequate supply of safe assets and concentration of reserve assets in particular amid the significant accumulation of international reserves. The risk of a sudden reallocation of reserves to currencies other than the dollar is mentioned by some authors as a potential source of large volatility. The relative decline of the dollar, though still seen as the most important international currency over the medium term amid a lack of substitutes, is seen by a large number of authors. Several authors underscore the proliferation of emerging markets currencies, iterating the increased international role of the renminbi.

Several authors call for a global currency. The Triffin dilemma, that is, the possible conflict of interest of using national currencies to manage international liquidity and sufficient availability of safe assets, is underscored by several authors to guide considerations for changing the system. Several authors advocate greater use of the IMF's SDR as a possible reference reserve asset.

The importance of the development of local currency financial markets, and of adjusting international payments systems to allow more settlements in local currencies, is stressed by several authors to ensure establishment of an adequate infrastructure including currency swaps for the integration of new international currencies. Financial sanctions and actual and prospective controls of international payments systems are seen by some authors as a new set of policy instruments.

### GLOBAL FINANCIAL SAFETY NET

The global financial safety net is generally described to safeguard against international payments distress, comprising central banks' foreign exchange reserves and fiscal space to conduct counter-cyclical interventions, central bank swap lines, regional financing arrangements, the IMF and other international financial institutions, and a set of rules to mitigate financial volatility. Several authors advocate significant changes to the existing structure, calling for more policy coordination between institutions and additional financial resources, though several authors doubt prospects for adoption. The need for an international lender of last resort is reiterated by some authors. Some authors indicate that the IMF's precautionary facilities represent important additions. Several authors emphasize the increasing importance of central bank swap lines and regional external support mechanisms and advocate complementarity and close coordination between the IMF and regional arrangements; some authors call for clarification about the interaction, especially between the IMF and the Chiang Mai initiative. Some authors also underline that self-insurance through reserve accumulation will remain important despite possible adverse costs and distortions in underlying financial markets. Several authors evoke that "keeping ones house in order" remains the most important line of defense.

The importance of agreeing on common standards for effective orderly sovereign debt restructuring is mentioned by a number of authors. Strengthening data availability including registration and contemporaneous monitoring of financial transactions is seen by some authors as critical components for effective financial supervision and stability.



### MONETARY POLICY FRAMEWORKS

The need to overhaul monetary policy frameworks is stressed by several authors. Financial liberalization, capital controls and explicit incorporation into the monetary policy framework of financial stability considerations are mentioned by some authors. Some authors highlight needed adjustments to existing inflation targeting frameworks and the importance of exchange rate flexibility. The adoption of unconventional monetary policy is also referred to as a structural shift in monetary policy. The convergence of inflation targets of the main advanced economies' central banks is advanced as a new nominal anchor for the international economy to foster price and possibly exchange rate stability. The implementation of measured exchange market interventions is seen by some authors as important complements for monetary stability.

### INSTITUTIONAL INNOVATION

The emergence of new international institutions to supersede or replace existing institutions is underlined by several authors. The increasing importance of the shadow banking system and advantages of Islamic finance are highlighted, as is the BRICS Development Bank and Contingency Reserve Arrangement as a response to the deficiencies of existing international financial institutions. The importance of development banks and development finance are underscored by several authors as catalysts for needed reforms of the international monetary system.

# LIVING WITH THE POST BRETTON WOODS VOLATILITY: A WORK IN PROGRESS

JOSHUA AIZENMAN

The 70th anniversary of the Bretton Woods agreement is also the 40th anniversary of its demise. This essay articulates three lessons from the initial success and the ultimate collapse of the Bretton Woods system. The global financial architecture evolves overtime, reflecting with a lag the shifting multi-polarity of economic and political might. While nominal anchors are welfare enhancing, too rigid anchors (fixed exchange rate, rigid inflation targeting, and the like) provide today an elusive stability at a growing cost of future exposure to tail risks, ultimately rupturing the anchors. Coping with these risks calls for cost benefit assessments of policies and balance sheet exposure—prudential supervision, and the provision of private and public buffers to deal with unavoidable turbulences.

## EVOLVING GLOBAL FINANCIAL ARCHITECTURE

The Bretton Woods (BW) agreement of 1944 facilitated the post World War II recovery of Western Europe, Japan and the US. Its design reflected well the post World War II architecture—the market oriented states were dominated by the US, at times when the US was committed to facilitating a recovery without repeating the costly mistakes of post World War I. The BW framework—pegging key currencies to the US dollar, anchoring the dollar to gold, restricting capital mobility mostly to the official sectors, and establishing the twin multilateral institutions (the IMF, the WB)—fitted well the recovery challenges facing the post World War II era.

The successful recovery of Western Europe in the following two decades, supported by the formation of the EU, and the political challenges of the US in the 1960s put growing strains on the viability and durability of the BW agreement. The attitude of the US toward the BW system in the late 1960s was benign neglect—the administration "took no initiative to do anything about the monetary turmoil as long as it did not see its domestic priorities endangered by the market."[1] The growing tensions between the interests of Western Europe and the US, as well as the recovery of Western Europe approaching economic parity to the US, implied that a system which fitted the unipolar post 1945 Western World failed to meet the new distribution of economic might. Consequently, the BW system morphed into an unusable configuration, and its ultimate collapse in the early 1970s induced the birth of a more symmetric system—a flexible exchange rate among the major currencies of the day. With a lag, shifting multi-polarity of economic and political might trumps pre-existing institutions, forcing them to evolve, in search of better congruency with the changing world order.

The post BW flexible exchange rate regime was tested by the major global shocks: the oil shocks of the 1970s and 1980s; an accelerated US inflation in the late 1970s reaching double digit levels, followed by Volcker's remarkable stabilization, reducing inflation at a cost of a sharp rise in real interest rates; and a fast moving but deepUS recession in the early 1980s. On balance, the post BW exchange rate flexibility facilitated a smoother adjustment to these shocks, though it put to the fore the challenge of adjusting to volatility. The post BW system had also been associated with profound deepening of financial integration among the OECD countries, in tandem with deregulation of the banking and the financial systems. Concurrently, emerging markets joined the globalization agenda, reflected in a deepening of global trade, and a gradual increase in their financial integration and exchange rate flexibility.

1. H. Zimmermann, "The fall of Bretton Woods and the emergence of the Werner Plan," in L. Magnusson and B. Stråth (eds), *From the Werner Plan to the EMU: in search of a political economy for Europe* (Brussels: P.I.E.-Peter Lang, 2001), p. 66.



In line with Mundell's trilemma, the combination of greater exchange rate flexibility and greater financial integration allowed OECD countries to exercise their monetary independence.[2] Yet, growing exchange rate flexibility is a double edged sword, as the resultant exchange rate volatility may increase the costs of international trade in goods and assets. While deepening forward markets provide useful hedges, forward contracts rarely eliminate the costs of exchange rate volatility. These considerations, and the wish of most EU members to move toward deeper integration, induced the birth of the euro project—morphing the EU toward a currency union. Following the unification of Germany in the early 1990s, countries that were unhappy with the straight jacket of the BW system, led by Germany and France, joined forces in pushing the eurozone countries into a new "straight jacket" system. Eurozone members gave up their monetary independence in favor of a common currency, aiming for a deeper financial and trade integration.

The short history of the eurozone has been remarkable and unprecedented: the euro project has moved from the planning board to a vibrant currency within less than ten years. Observers viewed the rapid acceptance of the euro as a viable currency and the deeper financial integration of the eurozone during its first decade as stepping stones toward a stable and prosperous Europe. These trends, and the rapid growth of China following its economic takeoff in the 1980s, suggested the emergence of a tri-polar world, dominated by three economic giants approaching parity of their economic size [measured by current prices]: the US, the eurozone, and China, each commanding about one-fifth of the global GDP. The trends prior to the global crisis of 2008–09 suggested the emergence of the euro as a credible competitor to the US dollar, possibly surpassing the US dollar share, and the global convergence down the road towards a tri-polar global financial architecture, where the currencies of each of the three blocks dominate their immediate sphere of economic influence.[3] While a multi-polar configuration is less stable than a unipolar stable configuration, it may be more stable than an unstable unipolar configuration—a multi-polar system should better fit the underlying forces shaping the global redistribution of power.

These trends were shuttered by the watershed events propagated by the Global Financial Crisis (GFC) of 2008–09. The GFC vividly showed that volatility is back—ending the illusive hope that the Great Moderation of the earlier decades reflects enduring gains of better macro policies. The eurozone crisis that followed the GFC

2. J. Aizenman, M. Chinn and H. Ito, "The Emerging Global Financial Architecture: Tracing and Evaluating the New Patterns of the Trilemma's Configurations," *Journal of International Money and Finance*, 29, 4 (2010): 615–41.
3. M. Chinn and J.A. Frankel, "Will the Euro Eventually Surpass the Dollar as Leading International Reserve Currency?" in *G7 Current Account Imbalances: Sustainability and Adjustment* (National Bureau of Economic Research, 2007); World Bank, *Global Development Horizons 2011: Multipolarity: The New Global Economy* (Washington, D.C.: World Bank, 2011).

raised questions regarding the viability of the eurozone and the euro's future as a serious competitor to the US dollar. More fundamentally, the GFC implies that the deepening financial globalization and financial de-regulation of the 1990s and early 2000s overshot desirable levels. Financial deepening, instead of helping to cope with global volatility, became the growing source of instability, threatening the globalization project. The GFC also challenged the earlier views that the "crony capitalism" of emerging markets is the source of their exposure to financial instability and crises, in contrast with the more mature institutions and superior macro policies of the OECD countries. Well, not any more…[4]

### POST BW CHALLENGES

The BW system and the allure of the fixed exchange rate as the preferred choice for developing countries in the BW decades are examples of nominal anchors. While such nominal anchors may be welfare enhancing in the short and intermediate run, reducing exchange rate risk and taming inflation, a too rigid anchor may provide illusive stability today at a growing cost of exposure to tail risks, breaking down the road to the anchor. In the post BW system, the growing use of inflation targeting, aiming for inflation of around 2%, became the preferred nominal anchor of a growing number of countries.[5] Yet, the euro crisis and the post GFC era show that rigid inflation targeting comes also with its risks—at times of heightened volatility, a low inflation target may induce deflationary pressures flirting with liquidity traps, curtailing the potency of monetary policy, and increasing the hazard of debt deflation.[6]

Remarkably, emerging markets (EMs) increased their financial integration in the 1990s, a process that exposed them within less than a decade to deep financial crises, where capital flight induced banking and balance of payment crises. Through a "trial and error" learning process, EMs morphed into the trilemma middle ground—greater exchange rate flexibility, limited financial integration, and controlled monetary independence, buffered by adopting a public finance approach to the application of macro and prudential policies.[7] This approach has been manifested by a precautionary hoardingof international reserves, providing a public buffer aimed at reducing the frequency and the costs of capital flight crises. Yet, self-insurance is not a panacea, and should be supplemented by prudential regulations that induce market participants to internalize the externalities associated with their activities.

4. R. Rajan, "Has Financial Development Made the World Riskier?" *Proceedings of the Jackson Hole Economic Policy Symposium*, Federal Reserve Bank of Kansas City, August 2005: 313–69.
5. A.K. Rose, "A stable international monetary system emerges: Inflation targeting is Bretton Woods, reversed," *Journal of International Money and Finance*, 26, 5 (2007): 663–81.
6. O. Blanchard, G. Dell'Ariccia, and P. Mauro, "Rethinking Macroeconomic Policy," IMF SPN/10/03 (2010).
7. J. Aizenman and B. Pinto, "Managing Financial Integration and capital mobility—Policy lessons from the past two decades," *Review of International Economics*, 21 (2013): 636–53.



The message of the public finance approach applies also to OECD countries. Financial innovations and the desired financial depth should be judged in terms of the benefits provided by these services to the real economy, and the exposure of the taxpayers to destabilizing financial instruments. Macro insurance schemes akin to AIG's pre-GFC insuring mortgages should be regulated and curbed—at times of peril the ability of the private sector to insure against macro risks is limited by its balance sheet and its limited liability. Consequently, the ultimate macro insurance at times of peril has been provided by taxpayers. Indeed, private losses have been socialized during the GFC, raising thorny moral hazard and "too big to fail" concerns. Mitigating the distortions associated with such "*ex post* insurance" schemes requires dynamic application of the policies exercised by the Federal Deposit Insurance Corporation (FDIC): *ex ante* monitoring of the riskiness of financial institutions, buffered by charging the risk premia. In the same vein, as external borrowing in hard currency increases a country's balance sheet exposure to costly crises with negative growth effects, proper taxes on external borrowing that would shift financial flows from external debt to equity and domestic debt instruments may increase welfare.[8] The era of financial globalization suggests that similar challenges confront both industrialized and OECD countries. Yet, the desirable implementation of policies should reflect the maturity of institutions. Industrial countries with elastic access to swap lines in hard currency and the ability to borrow in their currency have limited use of hoarding reserves. In contrast, emerging markets would benefit by maintaining a larger buffer of international reserves, and by imposing prudential regulations aimed at curbing external borrowing in hard currencies and short-term debt.

To conclude, the globalization of finance implies that all countries are exposed to viral tail risks. While there is no magic wand to terminate them, proper dynamic policies curbing excesses associated with overshooting the desirable financial liberalization would reduce exposure to costly financial crises.

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8. B. Eichengreen, R. Hausmann and U. Panizza, "Currency Mismatches, Debt Intolerance, and the Original Sin: Why They Are Not the Same and Why It Matters," in S. Edwards (ed.), *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices and Consequences* (Chicago, IL: University of Chicago Press, 2007).

# FROM WHERE SHOULD WE START REFORMING THE INTERNATIONAL FINANCIAL ARCHITECTURE?

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One of the main objectives behind the current international financial system was to ensure stable and orderly international economic and financial relations among countries in order to promote world economic development and to prevent the economic disruption that characterized the interwar period. The architects of the system developed a framework that included a set of rules and institutions that were to operate in accordance with liberal economic principles, namely a free market economy, and to advance a model of economic development based on private sector led growth, trade, and capital liberalization, and currency convertibility in order to achieve rapid world economic and trade growth.

The establishment of the IMF, the World Bank, GATT (later the WTO), and other institutions constituted important building blocks of the international financial system, since these institutions developed global norms, principles, and codes to which their respective member countries are to adhere and commit.

Of course, the IMF supported the international monetary system by facilitating cooperation on international monetary issues, providing loans, policy advice, and technical assistance to member countries experiencing balance of payments difficulties. The World Bank group also provides project finance and technical assistance, through IBRD, IFC, IDA and MIGA. In conducting their activities, however, these institutions had to deal with a number of issues and challenges that reflected new and changing realities in the world economy, such as regional crises, the expansion of membership, interdependence and globalization, deregulation of financial services, as well as rapid technological changes.

The global economy has also seen the emergence of new economies like China, Brazil, India, Russia, Saudi Arabia, other oil exporting countries (mainly those in the Gulf Cooperation Council, GCC), and East European economies, which moved into a position enabling them to participate in the reform debate.

The global economy has experienced waves of huge mobilization of foreign direct and portfolio investments flows, which reflected positively, in most cases, on the economic performance of many emerging countries. International volume of trade and capital inflows among countries have increased substantially.[1] The world's standard of living improved significantly as reflected in the decline of the population under the poverty line from about 57% in 1960 to almost 36.4% in 1990 and to about 14.5% in 2011 because of growth in per capita GDP.[2]

The so-called Bretton Woods institutions, in particular the IMF and World Bank, managed to provide assistance on a number of international monetary, economic, trade, and financial issues, thus playing an important role over a period of about sixty years, in their respective areas of competence, not least assisting countries to implement standards and codes they developed, as well as maintaining relative stability of the world economic system. For these reasons, and despite the fact that some of the recom-mendations engineered by these institutions were either not entirely satisfactory (the developing countries' debt problem), debatable (policy recommendations to the Asian financial crisis), or insufficient (the level of assistance delivered to the transition countries in the Arab region), it remains though that these institutions are very useful to the world economy, especially their role in delivering technical assistance, improving economic management in many emerging economies and developing countries, conducting surveillance, and setting codes and standards to ensure orderly economic and financial relations between countries. For these reasons, they will continue to be relevant and important players in world economic affairs.

1. UNCTAD, "Statistics," http://unctad.org/en/Pages/Statistics.aspx [last accessed December 2, 2014].
2. The World Bank, "Data," http://data.worldbank.org/ [last accessed December 2, 2014].



Having said that, however, these institutions continue to confront inherent structural and institutional weaknesses that limit their ability to fully achieve their objectives. These weaknesses are reflected in, among other things, the power and influence of developed countries in the decision making organs of these institutions, the diversity of interest and concerns of the memberships, the asymmetry problem between surplus and deficit countries, the commitment and coordination problem, the enforcement and the lack of power to influence developed countries policies, the lack of political well of the developed countries to provide the needed impetus to these institutions, and more importantly the reliance on a voting and a quota system that does not ensure a fair distribution of representation in decision making organs, for both developing and emerging countries.

Despite the recent changes introduced in the governance structure of the IMF, for instance, there is still a profound sense of frustration and grievances of emerging and developing economies toward the current system, and they still request a fair and realistic distribution of voting strength that reflects the change in the economic and financial weight of the countries in the global economy. There is no doubt that taking measures to dispel these grievances and frustrations will go a long way toward making the Bretton Woods institutions more effective in carrying out their respective mandates.

Moreover, as more and more economic and financial issues are becoming more global and systemic, reflecting an increasing economic interdependence, there has been a recognition that the Bretton Woods institutions need support from a high political level to achieve the needed consistency and coherence of policy among the member countries. The need for a global multilateral approach to the issues of the global economy was never in greater evidence than during the recent global financial crisis of 2008, which seriously disrupted global economic activity and incurred high costs on developed and developing economies alike. High level political forums such as the G5, the G8, and lately the G20 are meant to guide and influence global economic and financial activities. The institutional arrangement they provide represents a more comprehensive and cooperative approach to global economic issues, while at the same time it partially addresses some of the grievances of emerging economies and developing countries with respect to representation.

Looking ahead, it is very likely that the present institutional arrangement of international cooperation reflected in high political representation within G20, assisted by the

Bretton Woods institutions, as technical institutions lending advice each in its area of competence to guide multilateral actions, will continue to prevail.

Analyzing the financial crises that the global economy has seen in the 20th and early 21st centuries, in terms of their causes, implications, solutions, and lessons that have been learned in this context, tells us that the essential reform required to the international financial architecture should be cooperative efforts by all regional and international institutions, in order to propose the necessary prudential measures for confronting the potential repercussions of financial crises in appropriately efficient and timely manners.

To this end, we should think together about a framework which enhances the authorities' capacity to identify transmission channels of shocks to the financial sector and deeply comprehend the interrelated relationships between the macroeconomic variables and financial soundness indicators. This framework should enable the authorities to minimize risks and high costs incurred when such crises erupt for out-of-control reasons, and in order to instill confidence in the financial markets. This is in addition to the reconsideration of the rules governing the world financial system, and adopting the best monitoring and financial practices will help strengthen the shock absorbability of the financial systems and contain any contagion that may be transmitted to the real sector.

The crisis has also demonstrated, with particular severity on this occasion, that financial crises are contagious; that under panic conditions markets do not adequately discriminate between countries with strong and weak economic fundamentals; and that crises tendto spread even to countries with sound economic structures and macroeconomic management. In many cases, financial crises spread because highly leveraged investors, faced with losses in one market and ensuing margin calls, sell assets in another country; investment banks and mutual funds may also engage in similar behavior in order to raise liquidity anticipating withdrawals by clients.

On the other hand, all economies, not only developed but also developing and emerging economies, should maintain an ongoing review process of their financial sector structure, policies, and regulations to identify weaknesses that need to be tackled. In addition to that, global consistency of macroeconomic policies, resolutions of outstanding debt issues, and financial regulation are necessarily needed. We must not wait for crises to happen, then start looking for solutions. All of us should be proactive in confronting the outcomes of crisis. The IMF and other similar international and



regional institutions should intensify their efforts to provide technical assistancefor poor countries to enhance their capacity of adopting the required prudential, restructuring and adjustment policies.

In the same context, there is an essential need to enhance the capacity of analyzing the relation between macroeconomic fundamentals and banking soundness indicators and to help decision makers adopt prudential policies in face of such crises to enhance financial and economic stability. A special focus should be placed on macroeconomic variables related to monetary policy and financial soundness indicators, especially the banking ones.

We should also recognize the role of central banks in achieving financial stability, thus their role in the new international financial architecture; for example, the role central banks played during the Asian crises through the macro-prudential analysis units specially established to restore financial stability.

Considering what has been said, and in preparation for the new international financial architecture, it is useful to review the main risks and challenges facing financial systems, including:

- Inadequate level of transparency, high market dynamism, moral hazard, knowledge and technological gaps between regulatory authorities and economic entities dealing with the financial sector.
- Unforeseen risks of financial liberalization in some emerging economies and developing countries, in the aftermath of years of financial repression, are considered one of the causes of financial crises in those countries. It is noted that the common denominator in emerging and developing countries where financial crises were born is their dramatic move toward full financial liberalization being a requirement of economic openness and foreign capital attractions. Such countries have received massive flows of capital from abroad, thus witnessing a considerable credit expansion, and sudden stock markets dynamism that exceeded the capacity of both markets and regulators.
- Undeveloped payments and settlement systems in a large number of countries might increase settlement and systemic risks. Since the payment system is the bedrock for enhancing confidence in all units of the financial sector, and ensuring financial stability, the more unsettled obligations accumulate in the balances of banks participating in the payments system, the greater the opportunity to influence the system

as a whole, particularly with regard to the obligations related to the systematically important financial entities.

Taking into account the above mentioned challenges, we would like to emphasize that all international and regional institutions (i.e. IMF, World Bank, UN, BIS, and others) must devote more efforts in organizing forums to mainly discuss with all groups of countries the challenges they face and the weaknesses of the current international financial system before starting the process of designing a new one.

Finally, here are a set of thoughts that may help policy makers in discussing the new international financial sector architecture:

- The new architecture should shed light on renovating national and international financial stability frameworks, including mechanisms to enable the financial sector in times of crises to deliver its intermediation function. This is in addition to setting enough measures to absorb exogenous financial crises and limiting the possibility of their spillover to other economic sectors.
- Central banks should, on a regular and sustainable basis, adopt prudential and precautionary measures, and reexamine the compliance and accounting practices of banks against internationally recognized standards. The central banks should ensure banks properly match assets and liabilities in terms of maturities and portfolio composition.
- A macro-prudential framework should be adopted to mitigate the implications of the financial crisis for the banking sector. An appropriate methodology should be devised to monitor the banking soundness indicators, and apply stress tests to identify the expected consequences of any financial crisis on the banking sector. This is in addition to adopting appropriate policies necessary to minimize the spillover effects to other economic sectors.
- Non-banking financial entities such as mortgage and securities companies should be subject to the same credit regulations (set by the central banks) that are applied on banking institutions when providing credit.
- Capital flows must be directed through market incentives to appropriate economic sectors. Supervisory and regulatory frameworks related to foreign investments should be strengthened in accordance with international practices in this regard.



- Monetary policy makers should take into account investors' and market expectations, and should study how they build those expectations and create channels of communication to get investors involved in policy making.
- International institutions, in cooperation with countries and regional and subregional institutions, should devote more efforts to enhancing the effectiveness of national policies.

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# SEVEN DECADE-YOUNG BRETTON WOODS SYSTEM AND CHANGING GLOBAL DYNAMICS: FROM THE POST-WORLD WAR ERA TOWARD A MORE POLYPHONIC WORLD

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The foundations of the current global financial system were set up even before the end of the Second World War. In 1944, delegates representing 44 countries came together at the Bretton Woods Conference to restructure the world economic system with a view to reflect the realities of the post-World War II world. Discussions at this gathering led to the creation of a new system through the establishment of new international financial organizations that would also preempt a fragmented structure in global economic governance, safeguard post-war development and prosperity through coordination of policies, and avoid possible conflicts on the financial and commercial matters.

Today's global economy has distinct features and faces challenges that are very different from those experienced in the aftermath of the World War. Global threats of today are more "civilized" in nature, such as the financial crises. Hence, the global system should adapt itself and prioritize cooperation rather than adapting the power-gaming mode of the post-war era.

One can see "global imbalances," "higher interconnectedness," "spillovers," "fragmented global financial safety net," "external shocks," "currency wars," and "volatility in capital flows and commodity prices" among keywords that can be used to describe today's world economy. Mitigating negative impacts of these phenomena and adapting the international financial architecture to the challenges it faces today warrant coherent and coordinated macroeconomic policies at the global level, a sound and well-coordinated global financial safety net, better governance and legitimacy of the international financial institutions, effective surveillance, and a well-regulated financial system. Among these, I attach particular importance to reflecting the shift of economic power to the governance of the international financial institutions.

The basics of international economic dynamics and relations have evolved substantially since 1944. To reflect these changes, some important aspects of the international financial system were revamped a number of times. Nonetheless, the Bretton Woods institutions retained their central positions in the international financial architecture while undergoing some changes accordingly. Yet, these changes could not go hand in hand with the rebalancing of power in the global economic landscape.

Similar to the cases experienced in history, today's world is again on the brink of a major power shift, particularly in the economy field. The dynamics and engines of the global economy are changing and the tilt of the axis converges to the emerging markets that drive growth in the multi-speed global economy and provide approximately half of global output. This change led to a shift in world's economic center of gravity toward the east and the south in a more rapid manner comparedto previous cases in the past. The recent global financial crisis has also further reinforced this pattern.

With that, the prospects of the global economy will increasingly hinge on how well the emerging market economies perform and international efforts will inevitably go down the drain without their involvement. This aspect has been confirmed by the emerging economies' vital contributions to the efforts toward mitigating the ramifications of the Great Recession and resuscitating the global economy. Just as they made vital contributions to the recovery from the Great Recession, emerging market economies should be more vocal in global issues and stand ready to shoulder more responsibility.



Reflecting the more prominent role of emerging market economies, it can be claimed that the key challenge in the current international financial system is the redistribution of power among economies. As in the past, the world is now witnessing a conflict—a soft one this time—between the emerging economies and the developed ones in sharing the voice and responsibility in the global issues.

Economic governance has always been at the center of the global debate since the creation of the Bretton Woods system and has evolved throughout time by revamping some of its hard elements to the possible extent. Yet, upon the system's failure to stay relevant by adapting its hard institutions to changes in global economy, we witnessed creation of soft global governance elements, such as the G20, new institutions, and some other country groupings. It is crucial for these soft and hard governance elements to function effectively and consistently, remain relevant and representative, and complement each other. However, some of the hard institutions' failure in responding to current dynamics led to soft governance arrangements to form new initiatives or step in with an aim to reform these institutions. This is exactly the case when we observed the G20 platform's leadership in moving forward the IMF's 2010 Quota and Governance Reform.

The IMF, an institution which was established on the remnants of the World War II, is an important example that does not reflect these new global realities. An important dimension of the soft conflict is being observed in international financial institutions, particularly in the quota shares of the Fund.

In an increasingly integrated global economy, effective, legitimate, and credible multilateral economic institutions are essential, and the IMF comes at the forefront of those institutions. The relevance, effectiveness, and legitimacy of the Fund depend on the voice and representation of countries adequately reflecting their relative weights in the global economy which have changed substantially over the last decade. It is obvious that the current governance and quota structure of the IMF is far from ensuring that.

An important attempt that the international community came up with to address this gap has been the IMF's 2010 Quota and Governance Reform, a substantial step to ensure the Fund's legitimacy and firepower. A tough four years have passed since the Reform's approval by the Governors, but due to political reasons in its major shareholder, the effectiveness of the Reform yet to be secured.

The current representation gap within the Fund weakens emerging market countries' ownership of the IMF and hinders the Fund's effectiveness in playing its role in promoting global financial stability. It should always be kept in mind that closing this gap through addressing the chronic problem of "underrepresentation" will be a key step to overcome a major soft conflict.

Going through such a challenging economic backdrop, the world needs to ensure that no one is excluded from, and underrepresented within, the global decision making channels. With that, we can reach to the most optimal end-game for the entire system without necessarily going through costly and suboptimal experiences.

For policy makers and technicians, each time period is unique and extraordinary, and indeed it is. For them, the picture always seems bleak and they often get lost in the flow of information and series of events. But in these situations, it is crucial to step back and take a fresh look at the broader picture. This mindset will help us see the course of events and provide us with the right diagnosis. In a world where economic governance definitely warrants a more polyphonic system, the leadership wisdom requires putting the much needed time and effort into building a harmonious orchestra rather than into vicious attempts to row against the tide.

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## HOW CAN THE IMF BENEFIT ASIAN ECONOMIES?

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Financial crises in the last two decades, in particular the Asian Financial Crisis of 1998 and especially the Global Financial Crisis of 2008, have raised important questions regarding the international monetary architecture as well as the relevance of the Bretton Woods Institutions (BWI) for the global economy.

Changes to the global economic structure have also influenced the relevance of the BWI. Today's global economic situation is clearly different than when the BWI were established in 1944. One example can be found in the exchange rate system, where many Asian countries affected by the Asian Financial Crisis have moved from a fixed to a freely floating system. Given these conditions, coordination of the exchange rate has lost its relevance. In addition, the role of the private sector has become significantly more important in debt payments.[1] These changes have impacted the role of the BWI, undermining its formerly central role. Yet, on the other hand, it would not be completely accurate to say that the BWI are now irrelevant. The coordination process is still done through World Bank and IMF meetings as a follow-up to G20 meetings.

1. Parkinson, Martin, "Are the Bretton Woods Institution Still Relevant for the Emerging Market Economies?" Remarks at the Reinventing Bretton Woods Conference (April 11, 2014), available at: http://www.treasury.gov.au/PublicationsAndMedia/Speeches/2014/The-Bretton-Woods-institutions

The IMF plays an important role in restoring confidence and assisting countries in the throes of financial crises. In the case of the World Bank, its role in developing countries, like Indonesia, is also more and more important.

It is premature to declare that the BWI are no longer relevant. Rather, the more important question is: how can BWI become more relevant for their member nations? This essay will discuss the relevance of BWI, especially the IMF, for Asian countries and how these can better benefit these countries, and in particular Indonesia.

### IMF AND ITS STIGMA POST-ASIAN FINANCIAL CRISIS

It is interesting to examine who benefits from IMF loans, as these are mainly developing countries.[2] The IMF data shows that the largest loans prior to August 28, 2014 were given to Greece, Portugal, Ireland, and Ukraine. Meanwhile, the countries with the largest precautionary loans from the IMF were Mexico, Poland, Colombia, and Morocco.[3]

This data shows that the largest users or benefactors from IMF loans are developing countries. This implies that IMF programs should be designed to suit the needs of these countries. Yet, it is interesting to note that post-Asian Financial Crisis, not one Asian country has tapped into the IMF program. Is this because Asian countries have not needed to do so? This seems hard to believe. Let's look at Indonesia's experience as one example.

The biggest issue facing Asian countries when receiving assistance from the IMF remains stigma.[4] Indonesia is an interesting example of this. The 1998 economic crisis in Indonesia is often linked to misdiagnoses by the IMF.[5] But not all of the faultlies with the IMF. Several studies, including those by Soesatro and Basri, Hill, and the Independent Evaluation Office of the IMF,[6] show that Indonesia's economic crisis resulted from a combination of the banking crisis, weak implementation of the programs meant to overcome the crisis, a loss of confidence in the market, a growing political crisis, as well as mistakes made in policy responses. In terms of mistakesmade in the policy response, the Independent Evaluation Office of the IMF (IEO)argues that the IMF policy response and recommendations were inadequate in several aspects.[7] This in

2. See "IMF Lending at a glance," available at http://www.imf.org/external/np/exr/map/lending/ (last accessed January 20, 2015).
3. See "IMF at a Glance," available at: http://www.imf.org/external/np/exr/facts/glance.htm (last accessed January 20, 2015).
4. Ito, Takatoshi, "Can Asia Overcome the IMF Stigma?" *American Economic Review*, 102, 3 (2012): 198–202.
5. Sachs, Jeffrey, "IMF Orthodoxy Isn't What Southeast Asia Needs," *International Herald Tribune* (November 6, 1997); Stiglitz, Joseph, *Globalization and Its Discontent* (New York: Norton and Company, 2002).
6. Soesastro, Hadi and M. Chatib Basri, "Survey of Recent Developments," *Bulletin of Indonesian Economic Studies*, 34, 1 (1998): 3–54; Hill, Hal, *Indonesia: the Strange and the Sudden Death of a Tiger Economy* (Singapore: Institute of South East Asian Studies, 1999); Independent Evaluation Office of the IMF "The IMF and Recent Capital Account Crises: Indonesia, Korea, Brazil," (2003), available at: http://www.ieo-imf.org/ieo/files/completedevaluations/07282003main.pdf (last accessed January 20, 2015).



turn led to stigma and lack of confidence in the IMF in Asian nations, including Indonesia. Further, it became incredibly difficult politically to engage in IMF programs. Ito writes that there is still a stigma surrounding the IMF in Asian countries resulting from policies prescribed during the 1998 Asian Financial Crisis.[8] This impacted Indonesia's response to the Global Financial Crisis in 2008 and the mini-crisis in 2013 resulting from the tapering tantrum.

It is worthwhile to examine Indonesia's experience facing the Global Financial Crisis in 2008 and the mini-crisis resulting from tapering tantrum in 2013. Indonesia's government successfully got through each of these crises without assistance from the IMF. But it is important to note that, in both cases, the government prepared a second line of defense. In 2008's Global Financial Crisis, monetary market pressures led to a significant depreciation of the rupiah. To maintain market confidence and demonstrate that Indonesia was capable of facing the financial market pressures resulting from the Global Financial Crisis, the government undertook efforts to find a second line of defense.[9] In fact, Indonesia was eligible to receive assistance from the IMF in the form of balance of payment support. However, the Indonesian government did not request such assistance. Instead, Indonesia requested bilateral currency swaps from Japan, China, Australia, and several other countries. The same pattern occurred in 2013's mini-crisis. At that time, Indonesia was facing a variety of impacts from the tapering tantrum. Indonesia decided not to access IMF support for its second line of defense, instead opting for aid in the form of currency bilateral swaps from Japan, China, Korea, and Australia and the Deferred Draw Down Option program from the World Bank and Asian Development Bank.

The interesting thing to understand here is that this was not unique to Indonesia. When facing the Global Financial Crisis in 2008, Brazil, Singapore, Korea and Mexico did not borrow from the IMF, opting instead for open swaps from the Fed. This shows that even when these countries needed help with liquidity, they did not borrow from the IMF. There is something wrong here.

7. Independent Evaluation Office of the IMF, "The IMF and Recent Capital Account Crises: Indonesia, Korea, Brazil," op. cit.
8. Ito, Takatoshi, "Can Asia Overcome the IMF Stigma?" op. cit.
9. Basri, M. Chatib and Reza Y. Siregar, "Navigating Policy Responses at the National Level in the Midst of the Global Financial Crisis: The Experience of Indonesia," *Asian Economic Papers*, MIT Press, 8, 3 (October 2009): 1–35.

In addition to the cases above, the data also demonstrates that there has been a tendency for Asian countries like China, Hong Kong, Indonesia, Korea, Malaysia, Singapore, and Thailand to significantly increase their foreign reserves as a precautionary measure to face financial crises, reflecting the real reluctance to borrow from the IMF.

It is a real shame if the IMF cannot be maximally utilized. On the one hand, the IMF has strong resources, with world-class technical capabilities and high-quality staff, but on the other hand, there exists a reluctance, particularly from Asian countries, to take advantage of this extremely resourceful institution. As previously mentioned, the main users of IMF assistance are emerging markets, but the fact remains that not one Asian country accessed IMF support. Support from the IMF in the form of Flexible Credit Line (FCL), Stand-By Arrangement (SBA) and Precautionary and Liquidity Line (PLL) are extremely important. If emerging markets, particularly in Asia, maintain a stigma toward the IMF, these programs cannot be taken advantage of.

Steps must be taken to rectify this situation. This issue is of growing importance, particularly as there is a possibility that the Fed will normalize monetary policy in the United States. This could increase the risk of asset re-pricing, which in turn would lead to capital outflow from emerging economies. If cautious and appropriate steps are not taken to mitigate this, the normalization of monetary policy in the US will impact balance of payment issues, and if this is not well-managed, it could trigger a financial crisis.

If a financial crisis does occur, the problems will not be limited to balance of payment issues, but will also affect the access of emerging economies to development funding from financial markets at a reasonable cost. When a financial crisis occurs, access to funding is limited or even closed due to sharply increasing yields. If access to the market is closed, then support from bilateral and multilateral donors will be vital. If this problem is not managed, the funding to support extremely important development, including infrastructure, by the BWI (be it the World Bank or the IMF), cannot be carried out. As a result, the economic growth of emerging economies will be compromised. If the emerging economy countries cannot grow due to funding constraints, then global growth will be indirectly affected, as the contribution from emerging economies on global growth continues to grow. Thus, the agenda for high global growth can only be achieved if growth from both advanced countries and emerging economies can be increased. Global growth cannot be the burden of only one party (advanced economies or emerging economies).



### ALTERNATIVE SOLUTIONS

There are several possible solutions that should be studied further.

First, we need to acknowledge that the IMF has undergone important reforms. For example, FCLs, in which disbursement is not dependent on specific policy implementations, is a step in the right direction. With this flexibility, the access of emerging markets to loans is much better than before. Learning from the experience of FCLs, similar models which ease access to loans for emerging economies should be considered. Although this has not yet been able to attract Asian countries to borrow, it should be further analyzed to create similar “friendly” models.

Second, a pool of funds, which can be utilized during a financial crisis situation, should be considered. So that this would be effective, it would have to have a rapid disbursement mechanism built in. The exploration of this should be a priority. We cannot wait until a country is already in crisis and finds that it does not have access to financing from the international market. If many countries in Asia stigmatize the IMF, then alternatives should be considered to link IMF loans with regional financial institutions or regional banks which have access to developing countries or emerging economies and do not suffer from such stigmas. In the case of Asia, cooperative efforts can be studied through the Chiang Mai Initiative Multi-lateralization (CMIM). This should be further analyzed as the CMIM is not yet effective, at least in part because of the reluctance to take advantage of greater CMIM funding as this requires IMF approval in the end.

Third, it is vital to demand even-handedness in IMF policy. Another important issue is representation from emerging economies. Keeping in mind that the majority of loans are utilized by emerging economy countries, knowledge and representation of developing nations in the IMF is an important factor. When emerging economies feel that they have more ownership, they will have greater confidence in the IMF. In this aspect, it is important that the IMF provides more space for a variety of voices, votes, and representation. It will be difficult to overcome the stigma issue without fostering strong ownership.

Fourth, we cannot expect that changes only occur on the part of the IMF. It is time for emerging economies in Asia to re-examine and actively collaborate with the IMF to take advantage of its facilities as needed. Asian countries need to acknowledge that the IMF has undertaken reforms and is open to developing assistance schemes which suit Asian countries. In the case of Indonesia, for example, a gradual and deep discussion would help to find a suitable model which would be politically viable. In such a model Indonesia would have the room to determine its terms. Both parties need to make efforts to solve the issue, keeping in mind that sooner or later Asian countries, including Indonesia, will require assistance, and that such assistance should be modeled in such a way that these nations will be receptive to it.

Clearly these alternative solutions are in the early stages, but if Bretton Woods Institutions, particularly the IMF, gave special attention to these issues, I am optimistic that the question of whether the BWI are still relevant will not be a reason for concern. Rather, if we can solve these issues I am confident that the future role of the BWI, and especially the IMF, will be optimized and benefit all of us.

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## INTERNATIONAL MONETARY SYSTEM: CHALLENGES AHEAD

MAREK BELKA

Following the demise of the gold standard system in the wake of the Great Depression of the 1930s, and amidst the absence of sufficient international cooperation, there was a sharp decline in world trade. In an attempt to fend off the crisis, countries resorted to imposing import duties and other trade barriers. A major impetus for these steps were the competitive currency devaluations of that time. At the end of the 1930s, world trade was still half the size it had been before the onset of the Great Depression, despite the fact that global output returned to its previous level. It became evident that due to the lack of international cooperation, global trade had become much less of a growth driver than in the past. Therefore, as the Second World War was still in progress, it was decided to reinstate the international monetary system in a form close to the gold standard system, which for several decades had been successful in ensuring free trade and free capital flows, as well as stable exchange rates.

The international monetary system created at the Bretton Woods conference in 1944, one of whose founders was Poland, generally lived up to the expectations that had been pinned on it. Its creation helped to gradually restore convertibility of currencies, free trade and stable exchange rates. Even though the fixed exchange rate system, only operated until the early 1970s, when inadequate international cooperation and expanding capital flows led to the widespread adoption of floating exchange rate regimes, the key achievements of the Bretton Woods system remained. International cooperation still contributed to greater freedom of trade. Also, capital flows continued to surge, helping to finance the international trade and economic growth of many countries, notwithstanding the debate, particularly in recent years, on how best to limit the—at times destabilizing—impact of short-term capital flows. The IMF's liquidity lines have repeatedly mitigated crisis developments in numerous countries—even if this has been accompanied by controversies concerning the terms on which the loans were extended, as was the case during the currency crises in South-East Asia in the late 1990s.

My brief essay addresses the key challenges that the international monetary system is facing, and the direction of changes that should be introduced to this system, so it can best serve the development of world trade and support international economic cooperation.

### GLOBAL IMBALANCES AND THE SURGE IN DEMAND FOR SAFE RESERVE ASSETS

The last two decades have been a period of mounting global imbalances. These have originated, on the one hand, from unsustainable credit booms in the mortgage markets of a range of developed countries and, on the other hand, from the emergence of large trade balance surpluses in many countries. Trade surpluses have mainly appeared on the accounts of emerging countries, which consequently became exporters of capital to developed countries. Amidst the relatively low development of capital markets in emerging economies, the export of capital from these countries primarily took the form of purchases, conducted by their central banks, of developed-country Treasury bonds (denominated in US dollars and euros). In the future, such a situation may generate risks related to the fact that if foreign exchange reserves continue to build up in emerging countries, then their demand for reserve assets may not be met by sufficiently large supply—should fiscal stability in developed countries be adversely affected by demographic factors and a depressed rate of economic growth.

It is possible that the problem will solve itself as economic growth in emerging countries leads to the expansion of their service sectors and boosts the role of domestic consumption, which will reduce trade surpluses in these economies and hence the pace at which their foreign exchange reserves accumulate. Gradual development and deregulation of capital markets in emerging countries will be another factor behind slower growth of their foreign exchange reserves. With time, the outflow of capital from emerging markets will take the form of purchases of developed-country equities and corporate bonds by investment funds from emerging countries. This would have favorable implications for the emerging countries, raising the yields on their foreign assets.



### THE NEED TO REDUCE THE RISK OF RECURRING FINANCIAL CRISES

After the Bretton Woods system fell apart, several spates of financial crises ensued. At the beginning of the 1980s, a debt crisis broke out, resulting in the disappearance of many developing countries from the financial markets for many years. The development of some countries with an important role in the global economy—for example Mexico and Brazil—was for a long time hampered by the necessity to pay off their net external debts. In 1992–93, speculative attacks were targeted at nearly all the currencies of the European Monetary System then in place. The suddenness and speed of these attacks was one of the reasons why the decision to create the euro area was brought forward. In 1997–98, it was the currencies of South and East Asia that in turn suffered speculative attacks; these also entailed acute banking crises. In the 1990s, currency crises were observed in Mexico and a number of countries in Central and Eastern Europe. Poland was one of the few countries that did not suffer a currency crisis. In the summer of 2007 a global banking crisis erupted unexpectedly, resulting first in a slump and then markedly slower global economic growth.

The period 1970 to 2007 saw all manner of financial crises: 208 currency crises, 124 banking crises, 63 debt crises, 42 twin crises (banking and currency crisis at the same time) and 10 instances of a simultaneous occurrence of a banking, currency and debt crisis.[1] The 1990s were a period of heightened intensity of currency and banking crises. The present global crisis combines all the types of crises listed above and is the longest-lasting one in the post-war period.

The multi-faceted nature of the recent global banking crisis calls for changes to be introduced not only to the economic policies of individual countries, but also to the architecture of the entire international financial system. Changes of this kind were im-

1. L. Laeven and F. Valencia, "Systemic Banking Crises: A New Database," IMF Working Paper, WP/08/224, September 2008.

plemented in the wake of the Asian crisis, yet they were largely restricted to strengthening emerging country banking systems. In developed countries, a conviction prevailed that, thanks to advances in risk management methodology, banks would always adjust the size of their potential losses to the amount of equity they held, which would deter the risk of bank failure and of grave financial crises in developed countries.

This belief was strengthened by the relatively short and shallow recession that ensuedafter the dotcom bubble on the NASDAQ burst in the fall of 2001. In order to mitigate the crisis at that time, it was enough for the banks to lower interest rates and to temporarily increase the supply of liquidity. But the relative ease with which the crisis was handled owed a lot to the fact that purchases of shares in internet companies were not funded with bank credit, but with savings stored in investment funds. This was the reason why no crisis set in after the stock indices collapsed. In the case of the crisis that started in 2007, the situation was quite different. Its main cause was a slump in the prices of homes and mortgage-backed bonds, which had been purchased with bank loans. That is why the decline in house and mortgage-backed bond prices—which was particularly marked in the case of Collateralized Debt Obligations—was accompanied by a banking crisis.

Today we know that one of the causes of the global crisis was the fact that banks in many countries extended long-term mortgage loans that were funded to a great extent with short-term loans obtained from foreign banks. This means that short-term loans between financial institutions are potentially the most damaging form of international short-term capital flows. In order to solve this problem changes need to be made not only in banking regulation and supervision, but also in the general range of instruments affecting international capital flows. The experience of the recent global financial crisis tells us that macroprudential policy is a promising avenue of influence on international short-term capital flows.

While the central banks' interest rate cuts, and vastly expanded liquidity supply under quantitative easing, helped mitigate the banking crisis and the recession, they could not spare the global economy a prolonged recession, now termed the Great Recession. This recession is, in large part, the effect of a debt crisis, and is often dubbed "a balance sheet recession" because the chronic weakness of domestic demand in many developed countries results, to a large extent, from the private sector's need to repay



loans over a long period, as was the case in Japan in the 1990s. In Europe, economic growth is also dampened by the need to contain the growth in public debt, another effect of the recession triggered by the banking crisis.

The response to the turmoil that triggered the recent global banking crisis was to introduce changes to banking regulations and supervision. Basel III will contribute to the strengthening of banks in terms of capital adequacy and to improving the quality of risk management. Analytical work and suggestions articulated by the IMF have been an important factor in increasing the stability of banking systems. The IMF has also played an important role in macroprudential policy becoming, in an ever greater number of countries, a third element of stabilization policy, after monetary and fiscal policy.

However, a question arises as to how the IMF should respond to the current crisis, as an institution whose task is to ensure the smooth functioning of the international financial system, at a time when significance is gained by such issues as better global liquidity management or the stronger role of the Fund as an institution that supports liquidity in financial crises. In this respect, it is important that the IMF continues its work on the selection of the most adequate methods of influencing short-term capital flows and on enhancing its surveillance and crisis-prevention role.

### EXCHANGE RATE POLICY

In the initial period following the disintegration of the Bretton Woods system, exchange rates defied prior expectations of relatively limited volatility after flotation, which would enable individual countries to preserve balance-of-payments equilibrium at the expense of only slightly higher exchange rate volatility. In fact, after the collapse of the Bretton Woods system, exchange rates proved far more volatile than previously expected. The recurring currency crises in many countries paved the way for the conviction that extreme exchange rate regimes, such as currency boards and clean floats, would gradually come to prevail. Yet the evolution of exchange rate policy took a largely different course.

The creation of the euro area was partly a method to eliminate speculative attacks; however, in emerging countries neither currency boards nor clean floats are widely used. The experience of Argentina and the Baltics has shown that currency boards do not prevent financial crises; moreover, they may indirectly contribute to them if they facilitate the emergence of unsustainable credit booms, given the loss of the ability to conduct countercyclical interest rate policy. In turn, the sharp rise in the volatility of short-term capital flows—particularly during the recent global banking crisis—undermined the lure of the clean float exchange rate regime. Countries took advantage of the floating exchange rate regime to absorb the impact of the global crisis and used independent monetary policy to stabilize the economy while, at the same time, intervening in the forex markets to curb excessive volatility of their exchange rates.

The time of the global financial crisis shows a distinct shift toward an active exchange rate policy, both in developing and developed countries.[2] Today an active exchange rate policy involves an array of measures, ranging from the traditional methods of influencing the exchange rate of the domestic currency to auxiliary instruments, such as policies to restrict portfolio capital flows, macroprudential policy and tax policy. Switzerland and the Czech Republic have temporarily changed their monetary policystrategies, adopting, for the time being, the exchange rate as an indirect target. On the other hand, Australia and New Zealand—countries with a long clean float history—have pursued a policy of verbal interventions. The widest spectrum of available instruments to influence the exchange rate is in use in developing countries. A case in point is Brazil, which, faced with heightened capital flow volatility, not only used interest rate policy and currency interventions to limit the changes in the real, but also resorted to a number of other instruments—from fiscal methods limiting the volatility of foreign capital flows to banking regulations.[3]

## INTERNATIONAL CURRENCIES

Another question keeps resurfacing—the question about which currency or currencies should retain or acquire a key role in the operation of the international currency system. There is no doubt that the US dollar will remain a major reserve currency for a relatively long time, as the United States will continue to be home to the biggest and most liquid market for Treasury securities, i.e. a market where the primary reserve assets can be purchased. The global financial crisis, when safe reserve assets were being sought, strengthened, not weakened, the role of the dollar.

The euro will continue to be another important reserve currency. Yet its role will depend on the institutional evolution of the area. Should the euro area countries revisit the idea of issuing joint Treasury securities in the future, today's role of the euro as the reserve currency could be greatly enhanced. A market for Treasury bonds would then emerge in Europe that would be comparable to the US market in terms of size and liquidity, which would probably increase the share of the common currency in the currency reserves of many countries.

In the future, emerging market currencies, including the Chinese yuan, will increasingly play the role of reserve currencies. However, before that happens we could return to enhancing the role of the SDR as a reserve currency. We know from our previous experience in this area that it is not an easy task, as it requires international multilateral agreements. But such an effort should be made because the world in which we all increasingly depend on one another requires that we have the ability to cooperate. Working in various institutions at different places in the world we all jointly manage, to a lesser or greater extent, the international monetary system.

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2. IMF, "Annual Report on Exchange Arrangements and Exchange Restrictions," October 2012.
3. See G. Abarca, C. Ramirez and J.G. Rangel, "Capital Controls and Exchange Rate Expectations in Emerging Markets," Banco de Mèxico, Working Papers, September 2012.

# THE BRETTON WOODS INSTITUTIONS REINVENTING THEMSELVES

ERIK BERGLOF[1]

For the international financial institutions (IFIs) the global financial crisis was a mixed blessing, particularly the global institutions coming directly out of Bretton Woods, but also for the regional institutions. On one hand, the crisis caught them embarrassingly poorly prepared and often weakly equipped to respond but, on the other, the crisis allowed them to demonstrate their potential importance for global and regional financial stability. Their role in the crisis response gave them a new lease on life and in some cases expanded mandates. The crisis has forced the institutions to reinvent themselves—for some this came easier than for others, but they have all changed as a result and some are still reeling from the shockwaves. The international financial institutions have also come much closer to each other and found new ways of cooperating and engaging with other actors.

The question is how to best leverage the reinvented or reinvigorated architecture to prevent and prepare for future crises, but also how to use it to more effectively promote broader development objectives and strengthen resilience. This short note focuses on

1. The author is grateful for helpful comments from Piroska Nagy and Hans-Peter Lankes, and nine years of interesting discussions with other EBRD colleagues, offering valuable "reality checks" to a recovering academic.

the role of the investing IFIs in reducing or mitigating policy risk to crowd in private sector investors, particularly into the extraordinary investment program necessary to mitigate and adapt to climate change, but also to encourage private sector activity more generally, in emerging and developing economies. The focus is on the stagnant global and the increasingly important regional institutions, rather than the mushrooming national development banks. Much of the reasoning also applies to the newcomers, like the new BRICS bank and Asian Infrastructure Investment Bank. All this should be viewed against the backdrop of a transforming global financial system with an expanded role for central banks, increasingly constrained commercial banks and increased shadow banking.

Perhaps the best illustration of policy risks is in the energy and climate sector. The recent drop in the oil price illustrates price risks associated with different fuels—in the short and long term. Technological development is another source of uncertainty. But these risks are well understood, while the risks associated with the inconsistency of policies over time are not. The latter risks emanate from both the revenue and the cost sides. Returns to investment are very sensitive to policy variables, e.g. a carbon price floor, feed-in tariffs, and various capacity mechanisms. Policies respond to political pressures and these, in turn, depend on the fuel price. With systemic risk factors increasing, institutions are pushed away from clean energy. Fossile plants normally set prices and thus have a natural hedge against price movements—other energy sources are price-takers for both fuel and $CO_2$. The current combination of low demand and excess generating capacity lead to weak price signals for investment. These risks have to be allocated between and among consumers and producers, or ultimately absorbed by the government or, possibly, by the IFIs.

But policy risks are also very much present in the financial sector. The global financial crisis triggered policy responses in both home and host countries of cross-border financial institutions. For example, in the initial response to the Lehman collapse many national governments declared that the financial support to their banks could not be allowed to benefit the subsidiaries of these banks in other countries, and many host countries declared that they were ready to respond in kind by "ring-fencing" their banking systems, making it more difficult for banks to transfer funds across subsidiaries and to the parent. In the aftermath of the crisis a tsunami of regulation has swept across



the industry and supervisory arrangements have changed dramatically in many parts of the world, probably most profoundly in Europe.

The policy debate often talks about "de-risking," but risks do not normally disappear, they are just transferred to other parts of the economy. Ideally, we would like for risks to be transferred to those best equipped to manage them, but in practice risks are often borne by those least suited. For example, in many advanced economies, policy risk associated with renewable energy has often been transferred to consumers, but this is only feasible as long as renewables are a small part of the overall energy mix. In emerging economies similar risks are often absorbed by governments, typically with limited risk-carrying capacity. In the financial sector, risks were initially shifted to governments in the crisis, and since then regulatory efforts have aimed to lower risks and shift them away from governments.

Many observers suggest that the IFIs take on more of this risk, but the crisis has shown that their risk-carrying capacity is limited by the fiscal positions of the sovereigns standing behind them. As these positions have weakened, rating agencies have begun to scrutinise IFI portfolios much more carefully for any sign that investment criteria have been relaxed. The business models of these institutions rely on their high ratings, in many cases AAA, relative to the countries where they invest. The mere threat of downgrading has triggered anxious responses and almost all institutions received significant capital increases in the aftermath of the crisis. The African Development Bank is still reeling from a number of downgrades and the European Investment Bank was forced to take drastic measures to maintain its rating in the midst of the eurozone crisis. The World Bank is struggling with the repercussions of its massive investment splurge during the crisis.

Some of the policy risks in projects stem from poor project structuring, often resulting from political pressures and lack of local capacity. The combination of experienced international operators and inexperienced public sector authorities results in asymmetric structures that are frequently renegotiated. IFIs can help structure such projects, supporting the local counterpart in articulating their concerns and ensuring politically more sustainable contractual arrangements. These institutions can also help address a common market failure in the preparation of projects: Many potential investors are not willing to invest in preparing projects because the costs are too high relative to the expected chance of winning the contract and the net returns from the project. IFIs can help finance the preparation of projects through facilities such as the recent EBRD Infrastructure Project Preparation Facility.

IFIs can also help improve the policy environment in particular sectors or more generally in the economy through direct engagement with government authorities. Perhaps most importantly, the recipient country typically is a shareholder of the investing IFI, thus mitigating the risk for adverse policy changes and expropriation. Of course, these arrangements do not provide iron-clad guarantees—there are certainly examples to the contrary—but many private investors derive comfort from this protection. More generally, they provide important risk mitigation for the IFIs in their daily operations.

Yet another risk mitigating role of the IFIs comes through their potential to influence the policy environment through conditionality. Conditions at the level of the government are often double-edged swords as they may undermine local ownership. However, when they relate to an investment with private parties or sub-sovereigns, agreements on conditions are more likely to be embraced and met. IFIs are even more likely to be effective when they take active equity participations and participate ingovernance. Yet another way to achieve development objectives comes through leveraging private financial institutions. By providing credit lines to private banks for on-lending IFIs can target behavioral change in the banks, e.g., by training them to assess energy efficiency investments, and in borrowing firms, e.g., by encouraging individual entrepreneurs to look at their business for opportunities to reduce carbon emissions. IFIs can also assist in lifting financing constraints and help transform countries and companies more generally by encouraging the development of the local financial system and financial integration, thus increasing risk sharing and diversification opportunities. There may be a role for concessional finance in encouraging such transformations, but public finance should generally "crowd in" not "crowd out" private finance.[2]

Yet another way for the IFIs to mitigate policy risks is to use their convening and catalytic powers and step into gaps in global and regional architectures. For example, when the financial crisis struck Europe lacked a meaningful regulatory and supervisory framework supporting cross-border banking. A number of institutions, including the IMF, the World Bank, the EIB, the EBRD, and the European Commission, joined

2. The recently adopted MDB Principles and DFI Guidelines on Concessional Finance set up important criteria to reduce the risk of crowding out.



forces and launched the so-called Vienna Initiative. This public–private coordination mechanism helped bring together the private banks and their home and host authorities to stabilize the banking sectors in emerging Europe at a critical moment. The same model, bringing together key stakeholders affected by the spillovers from policy interventions and measures by individual banks, could be applied by the IFIs to other regional and global issues.

Finally, the IFIs can help attract long-term private institutional capital into their funding structures. IFC has created an asset management company with the capacity to co-invest along with it, and the EBRD is in the process of launching a synthetic fund essentially replicating its equity portfolio. In this way IFIs can intermediate investments in countries and regions where risks are too high for institutional investors to invest directly. Such an intermediation role could be fulfilled for debt as well as equity, but equity is more likely to be impactful—FDI, private equity funds and emerging market corporates all have the potential to transform economies.

In sum, investing IFIs can mitigate policy risk by absorbing some, but very limited, risk on their own balance sheets, help structure projects, manage risk using their unique multilateral governance structure where recipient countries are shareholders, and leverage investments to improve the local policy environment and increase the risk-absorbing capacity of the local financial system. None of this is really new, but the scale and scope of interventions have increased considerably through better cooperation among IFIs. More novel are the mechanisms through which they can mitigate collective action problems in both public and private sectors, leverage their local knowledge and global experience to play an important role in intermediating long-term institutional capital, and facilitate transformational finance in transition and developing economies. In a shifting global political landscape, reinvented IFIs can serve as vibrant incubators and instigators of institutional innovation.

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# REBALANCING THE INTERNATIONAL FINANCIAL SYSTEM, 70 YEARS LATER

LORENZO BINI SMAGHI

The international financial system has substantially changed since the inception of the Bretton Woods agreements, 70 years ago. The last decade has experienced an acceleration, with the emergence of a European currency capable of rivaling the US dollar as a reserve asset and the rise of the Chinese economy to second place, and expected to overtake the US in the next decade. These developments require a transition from the hegemonic monetary system of the past, based on the US dollar, to a multipolar world, with the inclusion of at least two other currencies, the euro and the renminbi. Part of this change has already occurred, as the euro has acquired a relevant share of international capital markets. The pace of renminbi internationalization is more uncertain, and depends on the speed of capital market liberalization desired by the Chinese authorities. The rebalancing of the international financial system will not necessarily be smooth. Several factors may be destabilizing. I will consider a few.

The first is that the process entails a rise in the demand for assets issued by countries or areas, in particular Europe and China, which currently have a high savings ratio because of faster population aging, and a current account surplus. This will create an additional upward pressure on the respective currencies, which may produce deflationary effects.

This has been experienced already in the eurozone, as capital inflows combined with a current account surplus kept the euro exchange rate up over the past few years, in spite of the lower interest rate and the weaker economy. The strong euro has contributed to compress economic growth and bring inflation to very low levels, increasing the risks of deflation. Only when the ECB announced its intention to further expand monetary conditions, in the summer of 2014, through lower interest rates and additional non-standard measures, did capital start to flow out from the eurozone and then the euro weakened slightly.

In China the trend appreciation of the exchange rate has been countered in recent years through massive foreign exchange interventions by the central bank, which has accumulated a large amount of foreign exchange reserves, denominated in US dollars and in euros. Given the restrictions on foreign holdings of renminbi, the capital inflows have *de facto* been re-channeled in the international capital markets, in particular to finance the US capital account deficit.

The Chinese authorities face a dilemma. A liberalization of foreign currency holdings would invite further capital inflows into China, pushing the exchange rate up. This would be consistent with a more balanced growth model in China, but would create short-term costs in the tradable sector of the economy. This effect could be mitigated by a symmetric liberalization of domestic holdings of foreign assets, which could generate an outflow of capital, in search of safe assets. However, the net impact of these measures is uncertain, except for the likely increased volatility of the currency markets.

A change in the currency composition of international investors would also make it more difficult for the US to finance its current account deficit, leading to a higher than otherwise interest rate level. This would further tighten global financial conditions.

In sum, a currency rebalancing away from the deficit country's currency toward surplus countries' currencies could have restrictive effects on the world economy. These effects could be countered by a rebalancing of monetary policies that would accommodate the portfolio shift. This would depend, however, on the awareness of the problems by the various central banks and their ability to cooperate. In particular, monetary policy should be more accommodative in surplus countries than in deficit



countries, to compensate for the increase in the demand for money in the former coming from the rest of the world. This could lead to a very expansionary monetary policy at the global level, with undesired effects in terms of financial stability.

The second challenge for the international financial system is the management of the de-leveraging process after the global crisis. Some de-leveraging has taken place in some parts of the world, but others remain over-indebted. Public and private debt sustainability is not ensured everywhere.

De-leveraging generally takes place through a combination of austerity, inflation, financial repression and debt restructuring. Each of these policies imply a different burden for the debtor and the creditor. Austerity shifts the burden entirely on debtors, but is not sustainable unless it is calibrated in a way consistent with economic growth. Inflation and financial repression shifts the burden to creditors, who try to avoid it by reallocating portfolio investments toward safer assets. Finally, debt restructuring favors debtors but may also be counterproductive if it generates financial contagion which leads to a credit crunch.

A further complication in advanced economies is that any de-leveraging process entails redistributions both within countries and across countries. This is the reason why there is no one-size-fits all solution. The international community is thus faced with contrasting forces, aimed at defending specific interests, while safeguarding the stability of the overall system.

The euro debt crisis, which has pushed the IMF and European institutions to provide financial assistance to some countries—in particular Greece, Portugal, Ireland, and Spain—has shown how difficult it is to draw a balance between the above options. In theory, debt should be primarily reduced through fiscal adjustment, but the latter may produce short-term recessionary effects which can increase the debt, rather than reduce it as desired. This is especially the case if the burden of the debt rises as a result of fears of unsustainability, which translate into higher and spiraling interest rates. Such an effect can be avoided if monetary policy is accommodative and compensates for the restrictive effect of the fiscal adjustment, thus contributing to make the debt sustainable and avoid financial collapse. However, monetary financing of the public debt should be avoided as it would lead over time to inflation and destruction of private wealth. The coordination of monetary and fiscal policies is thus key in a de-leveraging process. This requires that fiscal policy commits in a credible way to medium-term fiscal consolidation, and thus allow monetary policy to be as expansionary as needed to avoid deflation.

Coordination is also required between monetary and supervisory authorities, to ensure that regulatory issues do not interfere with the monetary policy stance. The effects of an expansionary monetary policy can be hampered by weak financial institutions, which aim primarily at strengthening their capital position by reducing the size of their balance sheet.

These problems are relevant not only in Europe but also at the global level. Countries are able to de-leverage gradually only if financial markets provide enough capital flows, at sustainable terms. If market participants lose confidence, and credit risk rises, countries have to resort to an adjustment program negotiated with the IMF, with financial support. The experience of the euro crisis has shown that national policy makers are willing to ask for external assistance only as a last resort. Political authorities thus tend to delay the request for help, until the country is close to losing access to capital markets. At that point, the financing needs of the country have become so high that it is very difficult for the IMF to just play the role of catalyzer of private markets.

The involvement of the private sector is a key challenge for the international financial system. When a country's debt is unsustainable, an early restructuring may be appropriate. However, the effects of such a restructuring are largely unpredictable, especially in advanced economies where a large part of the debt is held by residents, in particular financial institutions. Debt restructuring may lead to a credit crunch and push the adjustment off-track, making a further restructuring necessary. Furthermore, the contagion to other parts of the world is very difficult to anticipate. This is why debt restructuring cannot be organized through automatic rules.

The key priority for the financial system continues to be crisis prevention. This remains the most difficult task for international institutions, for at least two reasons: first, crises are difficult to forecast. They tend to be different from the previous ones. Furthermore, they generally happen after long periods of stability, which create the illusion that low volatility has become the new normal. This reduces the vigilance of market participants and supervisors.



The second problem is that national authorities remain responsible for the conduct of their respective policies, and focus on their domestic short-term objectives. They hardly recognize the international dimension of their decisions until the crisis explodes, and do not want to ask for assistance earlier. In these circumstances it is very difficult for international institutions to induce countries to change track, or to take into consideration the spillover effects of their decisions. Imbalances are not seen as a problem as long as they are financed by international capital markets. Exchange rate misalignments are not seen as problematic as long as they reflect policy intentions which are in line with domestic policy priorities. The low interest rate environment required for a smooth de-leveraging reduces the pressure on policy makers to implement reforms and restructure their economies.

Crisis prevention requires tough surveillance, but national policy makers are not keen to submit themselves to external pressure—by unelected bureaucrats—as long as they are not proven to be on the wrong track, which generally happens too late.

Going forward, the international financial system continues to be affected by the fundamental inconsistency deriving from the need to manage an increasingly integrated world economy with a politically decentralized system, in which policy makers are elected by their respective citizens on the basis of local—often short-term—priorities and programs which, if insufficiently coordinated, are ultimately inadequate to resolve the challenges that each country faces. This might lead to tensions across countries, loss of confidence, and a weakening of international institutions. This is the biggest threat for the international community in the coming years.

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# AVOIDING DOLLAR COLD TURKEY: TOWARD A MULTI-CURRENCY INTERNATIONAL MONETARY SYSTEM

JEROME BOOTH

The Bretton Woods monetary system, with currencies pegged to the US dollar, which was in turn convertible to gold at $35 an ounce came under pressure in the 1960s, not least due to the Triffin dilemma—the conflict between short- term domestic and long-term international balance where a central bank is both a national and international source of liquidity. The growth in US indebtedness, not least due to the Vietnam War, and inadequate fiscal adjustment to secure market confidence, led to dollar weakness being expressed through the London gold market. The "gold pool" cooperation of central banks countered this with European central banks selling gold, but the system faltered and failed in 1971. Nixon suspended convertibility to gold, the dollar weakened (other currencies followed) and briefly reached $194 an ounce in 1974. Inflation then eroded debts over the rest of the decade.

The Triffin dilemma never went away, however. Moreover, the US percentage share of the global economy has shrunk considerably from about 50% after World War II. Using purchasing power parity, emerging countries now represent over half of global GDP.

Yet, even without the exchange rate fixity of the Bretton Woods system in the new fiat system, the dollar has continued to be the dominant reserve currency.

And imbalances built again. After the Asian crisis of 1997–98 emerging markets wished to be less dependent on the IMF for crisis liquidity provision, and started to build large reserves for self-insurance. This created imbalances with similarities to those of the 1960s. Should there be a major currency crisis as in 1971 it is likely that the surplus central banks will precipitate it by withdrawing support for the dollar—we can call this scenario "dollar cold turkey." Emerging market central banks not only own the bulk of foreign holdings of US Treasuries. US TIC data demonstrates that foreign central bank purchases of US Treasuries have been a major component of US capital account flows, and hence a bolster for the dollar.

Moreover, the export of official savings from the emerging world to the US since the Asian crisis pushed down the Treasury yield curve. This, together with inadequate bank regulation/supervision, fueled the bubble leading up to the 2008 crisis. Renewed crisis may be postponed avoiding sudden deleveraging in the developed world, and hence by building more imbalances in the short term, but at some point either gradual unwind or crisis will occur, with inevitable major shifts in currencies in real terms in favor of creditors.

### POST 2008 RESPONSES

Bagehot told us how to regulate banks in the 1870s, but zeal for laissez faire clouded our vision. Likewise, politics obscured the most obvious route back to banking health: seizure of the troubled banks followed by their ordered running down or restructuring back to profitability. In the absence of this, the US Federal Reserve was the only institution standing between the crisis and depression. Quantitative easing (QE) was employed, not to stimulate the economy, but to push up asset prices to enable banks to recapitalize.

From a policy to save the banks, QE subsequently became a policy component of the favored mechanism to reduce government debt: financial repression—the capture of domestic savings to finance the government and to do so at a lower cost than otherwise possible. QE sustains artificially low interest rates, enabling negative real rates to erode the value of government debt over time. Financial repression was effective in Europe and theUS after World War II. And if it fails, inflation is likely to be the preferred alternative, as in the 1970s.



QE has been presented to financial markets as a mechanism to stimulate the economy, when its primary purpose was avoid banking collapse and depression and is now also a tool of financial repression. This presentation is understandable in the context of not wanting to create the very uncertainty which might kill investment and tip the economy into depression. Much of the liquidity pumped into banks has not gone further than bank balance sheets and excess reserves at the central bank, yet QE has been accused of flooding liquidity into emerging markets. This rings hollow. Excess global liquidity caused by QE is a bit like a spot of rain for emerging markets. We expect complaints about the weather but umbrellas can easily be deployed and business can carry on as usual. Emerging markets have bigger domestic problems to focus on, and sufficient tools to deal with the problem.

QE has been a distraction when it comes to global imbalances—buying time, helping the banks, setting the stage for long-term reduction in domestic debts, but not solving the problem of globally misaligned currencies. This is not fully understood by market participants as a result of central bank obfuscation about the purposes of QE.

### EIGHT REASONS TO APPRECIATE/DIVERSIFY FROM THE DOLLAR

It is necessary at some point that emerging market central banks stop buying dollars and allow their currencies to appreciate. Yet the body ostensibly given the task to address global imbalances, the G20, has been a disappointment. Even if coordinated action is difficult, however, there are reasons to be optimistic that uncoordinated adjustment can and will happen. There are reasons for individual central banks to stop buildingreserves, reduce their concentration in dollar reserves, diversify reserves in line with global economic activity and trade flows, and hence move to a multi-currency reserve system.

1. There is a strong desire for some to move from an export-led model of growth to a domestic consumption model of growth. Changing terms of trade through currency incentivizes local entrepreneurs to invest for domestic customers not export. Undervalued exchange rates have created vulnerabilities to external shocks and also, as before the Asian crisis, may lead to financial sector risks if investment is not channeled appropriately.

2. Central bank reserve managers have traditionally focused asset allocation to maximize liquidity, and consequently have put around two-thirds of reserves into US Treasuries—seemingly the most liquid asset market in the world. However, emerging central banks—with over 80% of global reserves—collectively are now the dominant foreign owners of that market. One needs liquidity most in a crisis, and a reasonably likely scenario is one of several central banks selling Treasuries at the same time. In this scenario it is difficult to see who might be buying—liquidity could collapse. The US Federal Reserve could buy US Treasuries but domestic buying to meet emerging central bank sales would be unlikely to stop the dollar from collapsing. Hence the liquidity rationale for such preponderant holding of Treasuries is moot.

The reaction to this unpleasant thought of panic central bank selling of US Treasuries and no liquidity is firstly denial. The second reaction is to consider whether another currency, the euro, offers (or could offer if there was a shift in demand for paper) more liquidity; but the answer is probably not given the EU's current woes. It may only be at the third attempt to think about the problem that it is realized that the liquidity assumed possible at all times and sought by central banks is not achievable anywhere, and hence liquidity ought to be toppled from its prominent position as one of the principle objectives against which reserve management allocation is assessed. Although shifting out of dollars may traditionally be considered only as good as the next alternative, it is perhaps more accurate to say that it is only as good as the next set of alternatives once the dominance of a single currency's liquidity seems no longer assured.

3. Reserves are now so large in many countries they considerably exceed the amount which may be needed for intervention. Hence some of these assets are either being managed with a longer-term endowment-type motive within the central bank, or have been moved to fund separate sovereign wealth funds. Either way the endowment motive of these funds is incompatible with having the majority in Treasuries: they need to be diversified.

4. Related to the previous point, the opportunity cost of holding reserves (in any form) is high, in terms of opportunities foregone from additional consumption or investment.



5. It is to be noted that the effect of sterilization may also redistribute wealth from taxpayers to bondholders, some of whom are not nationals or taxpayers. Holding reserves acts as an insurance policy against external shocks, but one can overdo it.

6. Investing in dollars may be a risky investment. A large proportion of dollar holdings in reserves may not match liabilities, as determined by the relative weights of current and future trade partners. But more than this, addressing the imbalances inherent in global reserves means that currency losses of around 30% are likely in the next few years for surplus emerging central banks holding dollars. In addition, the average yield on the 10-year Treasury bond over the last six decades is around 6.5%. To those who argue that there is a natural demand for the dollar because of its reserve currency status, consider that from its inception as a reserve currency in 1913, when the Federal Reserve system was founded, it only took 11 years (including 1914–18!) for its use in reserves to be greater than that of sterling.

7. There is an optimal level of reserves, and this has arguably been passed for many. Faced with the reality of currency appreciation pressure and of cross-border flows—which can, if allowed, over-shoot—the first best policy is to allow one's currency to adjust in accordance with market forces, but this may be at the cost of excessive volatility and over-shooting. Hence the second-best solution is to build up reserves—in the process resisting currency appreciation. Once this is done however (i.e. sufficiently large reserves have been purchased), rather than resisting further appreciation through capital control efforts, the policy should perhaps be shifted again to allow market forces to determine the exchange rate, but use intervention to reduce extreme volatility and currency overshooting. After 2008 emerging market central banks have been slow to make this re-adjustment of policy.

8. Central banks may need to use exchange rate appreciation to help fight inflation. For example, about half of India's inflation can be attributed to oil import prices, so currency appreciation can reduce this.

There are also reasons, for which we do not have space here, why emerging market central banks have not yet acted decisively (though diversification has started). Many are watching for China's lead. Appreciating before one's export competitors is to risk losing trade, but to move late is to take the most loss on one's existing reserves. So a gradual uncoordinated mass move is possible. We may not design a multi-currency system, but it may happen anyway—and probably for the best.

Jerome Booth, Chairman, New Sparta

## TWENTY YEARS AFTER FIFTY YEARS AFTER BRETTON WOODS

MICHAEL BORDO AND BARRY EICHENGREEN

THE 70TH ANNIVERSARY of the Bretton Woods Agreement might seem like an odd time to celebrate the achievements of the International Monetary Fund (and celebrate might seem like an odd choice of word). But to mark the 50th anniversary we published a book asking what we can learn about the future of the IMF and the international monetary and financial system from its historical past.[1] In the subsequent twenty years there has been much additional monetary and financial water under the bridge. In this essay we therefore revisit the issues and ask: What are the important challenges confronting the IMF and aspiring international monetary reformers? How are we to understand them in light of developments in the now seven decades since governments initialed the Bretton Woods Agreement? To what extent are the issues and challenges today the same as they were on the 50th anniversary, and to what extent do they look different in light of subsequent events?

The Bretton Woods System, recall, was designed as a compromise between the fixed exchange rates of the gold standard, seen as conducive to rebuilding the network of

1. We were not alone; there was also the prominent "Fifty Years is Enough" campaign against the Bretton Woods institutions. To get a jump on the competition we published our book as Michael Bordo and Barry Eichengreen (eds), *A Retrospective on the Bretton Woods Agreement: Lessons for International Monetary Reform* (Chicago: University of Chicago Press, 1993).

global trade and finance, and the greater flexibility to which countries had resorted in the 1930s in the effort to restore and maintain domestic economic and financial stability. It was based on rules for exchange rate management: members were required to declare parities against the dollar or gold and then to maintain them. The Articles of Agreement formally obliged countries to ask the IMF for permission, in advance, before adjusting their parities, as a way of preventing opportunistic, beggar-thy-neighbor exchange rate changes. The agreement further obliged countries to remove restrictions on transactions on current account (to move to Article VIII convertibility within five years) while permitting them to maintain controls on transactions on capital account (so as to limit destabilizing capital flows). Balance of payments deficits were therefore largely synonymous with current account deficits; the latter were seen as reflecting budget deficits (what we would now call the twin-deficits phenomenon), leading to the "it is mostly fiscal" view of external imbalances. In turn, the Fund was endowed with limited resources, which it could lend to countries needing time to balance their budgets and correct their external imbalance problems.

Both this design and the conception on which it was based were almost immediately cast into doubt. Members, starting with the UK in 1949, were reluctant to request approval for exchange rate changes in advance. The gradual recovery of capital mobility progressively eroded the feasibility of fixed-but-adjustable exchange rates. There was the rediscovery of the importance of monetary policy for both domestic economic stability and balance of payments determination, including through the "monetary approach to the balance of payments" pioneered at the IMF. In addition to these forces, the Bretton Woods System itself became threatened. The system became a gold dollar standard by 1960 as US balance of payments deficits provided the dollar reserves the rest of the world needed to finance the growth of international trade. The increase in outstanding dollar liabilities led to the fear of the Triffin dilemma as US gold reserves were perceived to become insufficient to support outstanding dollar liabilities. Matters came to a head in the years after 1965 when the US began inflating to finance growing fiscal needs. The export of inflation to the other advanced countries led to a dollar convertibility crisis in 1971 leading President Nixon to close the gold window. The 1944 par value system collapsed between 1971 and 1973 and was succeeded by the present system of managed floating.



After the collapse of the par value system, it seemed as if the IMF had lost its *raison d'être*. Then, however, unforeseen events allowed the institution and its leaders to redefine its purpose. The oil price shocks of 1973 and 1979 encouraged petrodollar recycling and, in turn, lending by money-center banks to developing countries. This process culminated in the Latin American debt crisis, leading to the IMF's first experience of crisis management in a world of high capital mobility. The volatile exchange rate swings of the 1980s then encouraged the Fund to orchestrate efforts to coordinate policies among the advanced industrial countries. The collapse of the Soviet Union made the IMF the obvious source for temporary balance of payments support for the post-Soviet successor states undergoing the transition to the market, but also led the Fund to become deeply involved in the minutia of structural reform, something that was just getting underway when we took our first look back in 1993. The Tequila crisis in 1994 and Asian financial crisis in 1997–98 marked the Fund's transformation into a full-fledged crisis manager, something that neither we nor other commentators writing at the time of the 50th anniversary had fullyanticipated. And, of course, no one anticipated the 2007–08 global financial crisis and the 2010–12 eurozone crisis, which led the IMF to become involved in rescues for a number of European countries after many years when it had been seen as specializing in the problems of developing countries (advanced countries supposedly having "graduated" from the stage where they were susceptible to crises). The result is the IMF we have today, and its challenges.

A first important challenge is effective surveillance, the heading under which the Fund attempts to anticipate risks to economic and financial stability, and monitor the compliance of members with their commitments. It is worth recalling the history: prior to 1978, IMF surveillance was limited. Countries with restrictions on current account transactions consulted with the Fund mainly about their plans for removing them, while countries that had removed such restrictions engaged in periodic discussions under the auspices of Article VIII on the consistency of their monetary and exchange rate policies with that state of affairs. Only with the adoption of the Second Amendment to the Articles of Agreement in 1978 did there come into being a system of Article IV consultations over exchange rates and macroeconomic policies broadly defined. In the subsequent twenty years the scope of surveillance was then broadened to encompass structural as well as macroeconomic issues (with something of a swing back of the pendulum after the Asian crisis, but then a swing in the other direction, back toward structural conditionality, with the crisis in Greece and other European countries).

Our evaluation of the current state of affairs is: better but not best. The IMF has become more transparent and forthright in its views when undertaking surveillance. Surveillance resources have been targeted more efficiently at countries most in need of them. Financial sector surveillance has been strengthened. Recently-created "spillover reports" are a useful way of alerting policy makers to potential cross-border repercussions of policies that they would otherwise neglect.

But the implications and recommendations of spillover reports and surveillance more generally are regularly ignored by national authorities. It is not clear what intelligence is added by IMF financial sector surveillance that investment banks and other market participants do not already provide. If the IMF is privy to additional information by virtue of its role as trusted advisor to governments, then it is also beholden to those governments and obliged to hold that information in confidence. IMF forecasts are less than reliable: those in the World Economic Outlook have historically tended to be biased in the direction of over-optimism, especially for program countries.[2] Nor is it clear that the IMF has any special capacity to detect likely future risks. Where were IMF warnings, one might ask, to the US and Ireland before the crisis?

After the Asian crisis there appeared to be a consensus on the desirability of moving away from the Christmas Tree Model of conditionality, in which programs were festooned with all manner of ornaments, in favor of conditionality focused on key macroeconomic issues. Recent experience suggests, however, that macroeconomic stability is too intimately connected with financial stability and structural reform for the Fund and its partners to focus narrowly on the monetary, fiscal, and exchange rate policies while leaving structural and regulatory issues to other institutions like the OECD, the World Bank, and the Financial Stability Board. In Greece, restoring macro-economic stability required implementing structural measures to, inter alia, enhance tax compliance and address inefficiencies in the public sector. In Ireland it required measures designed to restructure and downsize the financial sector. Thus, the question of how deeply and under what circumstances the Fund should get into structural conditionality remains fundamentally unresolved.

2. The conclusions of the literature on this subject are somewhat mixed, but this is our overall reading. For a review of the literature, see Shinji Takagi and Halim Kucur, "Testing the Accuracy of IMF Macroeconomic Forecasts 1993–2003," IEO Background Paper BP/06/1 (Washington, D.C.: IMF, 2006).



Another issue that was not really addressed by the founders, given the contemporaneous environment of limited capital mobility, was dealing with sovereign debt. Since debts were largely domestic, countries could be left to deal with them on their own. This, obviously, is no longer the case. Debt management in a world of capital mobility has important cross-border repercussions. Restructuring sovereign debts when they need to be restructured, in a way that appropriately balances the *ex ante* bonding role of debt with the *ex post* efficiency advantages of clearing away unsustainable burdens, remains problematic, and an international bankruptcy court or arbitral tribunal with binding powers is absent. There had been some discussion of these issues in the 1980s, reflecting the severity of the Latin American debt crisis, but this was an issue that was only just coming onto the radar screen of officials at the time of the IMF's 50th anniversary.[3]

The IMF's responsibility for maintaining "adequate safeguards" for the use of members' resources under the Articles of Agreement means lending only to countries with sustainable debts, which creates a presumption that the IMF should insist on restructuring where debts are unsustainable. In 2002 the Executive Board set the bar still higher, with an eye toward addressing problems of moral hazard and the tendency to delay, by prohibiting the institution from providing exceptional access (large amounts of funding) unless it can be determined that a country's debt is sustainable with high probability (and implicitly requiring the member to undertake a restructuring sufficiently deep to rstore sustainability with high probability). Yet the Fund's sustainability analyses are (how to put it politely?) highly malleable. There remains a reluctance within the institution to contemplate debt restructurings—whether for political reasons or due to fears of contagion—and a tendency therefore to adapt debt sustainability analysis to achieve the desired end (to point to a scenario, however unlikely, where debts are shown to be sustainable).

It follows that there is a reluctance to actually apply the 2002 policy and instead to cite "systemic" exceptions (essentially, to invoke the danger of contagion) in order to override the rule (as was done for Greece in 2010). IMF financial assistance is effectively used to bail out (pay off) existing creditors at taxpayers' expense. Restructurings, when they occur, tend to be too late, too limited and hence even more

3. An early contribution to this literature is Christopher Oechsli, "Procedural Guidelines for Renegotiating LDC Debts: An Analogy to Chapter 11 of the U.S. Bankruptcy Reform Act," *Virginia Journal of International Law*, 21 (1981): 305–41. For the mid-1990s literature, see Barry Eichengreen and Richard Portes, *Crisis? What Crisis? Orderly Workouts for Sovereign Debtors* (London: CEPR, 1995).

disruptive than would be the case otherwise. All of these problems are illustrated by the overdue Greek restructuring in 2012.[4]

Now the scope for orderly, market-based restructurings is becoming even more limited as a result of judicial decisions in the United States. The Greek restructuring was possible because the vast majority of Greek sovereign debt, whether held at home or abroad, was subject to Greece's own governing law. Argentina's foreign debt, in contrast, is subject to US law and to the decisions of the US District Court for the Southern District of New York and its creative interpretation of the *pari pasu* clause in the restructured bond covenants. Recent rulings, if allowed to stand, require the Argentine government to pay investors who refused to participate in earlier bond exchanges in full and not just on the same terms as those who accepted the restructuring.[5] Rewarding holdouts, threatening the sovereign with attachment of its assets, and further threatening its trustee, as the court has done, will not make restructuring easy in the future.

The IMF is aware of these problems. But the statutory approach to reforming sovereign debt restructuring—creating an international bankruptcy court or Sovereign Debt Restructuring Mechanism (SDRM) Mark II, whether in the IMF or the United Nations, as sometimes proposed—is a political nonstarter, as was learned from the experience with SDRM Mark I in the early 2000s.[6] Attempting to immunize countries from the *pari pasu* problem by amending the Articles of Agreement to specify stays on litigation and cramdown provisions, as suggested by Haley,[7] is similarly not feasible politically (it is hard to imagine that the US Congress would agree to the relevant amendments). Rewritten bond covenants that clarify the intent of the *pari pasu* clause and add collective action and aggregation provisions can go some way toward solving the problem, but only over time as bonds that lack these provisions are retired and new ones including them are introduced into the market.

IMF officials are aware of the fuzzy nature of the line between illiquidity and insolvency and of the problems with the 2002 policy rule. They have therefore floated a scheme for these intermediate cases where debt is not restructured immediately but, at the same time,

4. One can argue that the other two members of the Troika, namely the European Commission and the European Central Bank, were behind this delay and that the IMF itself would have favored restructuring already in 2010, but the problem is more general. In any case, experience with the Troika only points to another problem, namely the uncomfortable situation in which the IMF finds itself when it partners with other institutions in administering a rescue and adjustment program, especially when it is a "limited partner" that contributes only a minority of total program funding.
5. Moreover, they extend application of the decision to US dollar-denominated restructured bonds that are subject to local Argentine law but not, curiously, peso-denominated bonds.
6. The United Nations approved a resolution to attempt to negotiate a multilateral framework for sovereign debt restructuring at a meeting of its General Assembly last September (Jose Antonio Ocampo, "The UN Takes the First Step to Debt Restructuring," *Financial Times: Beyond Brics*, September 10, 2013, http://blogs.ft.com/beyond-brics/2014/09/10/guest-post-the-un-takes-the-first-step-to-debt-restructuring [last accessed November 10, 2014]), but this doesn't mean that the negotiations will go anywhere.
7. James Haley, "Sovereign Debt Restructuring: Old Debates, New Challenges," CIGI Paper no. 32 (Waterloo, CA: Center for International Governance Innovation, May 2014).



IMF resources are not allowed to simply pay off existing creditors.[8] This would entail extending the maturity of a country's existing obligations when it enters the gray zone where its debts may or may not be sustainable. Existing creditors would not be bailed out, but neither would they be bailed in until it was determined that the debt was, indeed, unsustainable and restructuring was unavoidable.

One can imagine both statutory and contractual approaches to implementing this provision. The former would amend the Articles of Agreement to give the IMF statutory authority to extend maturities, while the latter would amend bond covenants to give bondholders the power to extend maturities by qualified majority vote, following a recommendation by the Fund (or, more to the point, a warning from the Fund that it would only come in with financial assistance if 90 percent of bond-holders first agreed to the maturity extension).[9]

But, again, the first approach would seem to be a political nonstarter, while the second one, if agreed, would take a decade or longer before bonds with the relevant provisions dominated the market. And while a re-profiling or maturity extension might be thought to do less than an upfront restructuring to disturb the markets, there would still be fears of exiting investors. There would still be worries about contagion as questions were raised about the prospects of the bonds of other superficially similar countries and investors in the re-profiled assets engaged in fire sales and rebalanced their portfolios. There would still be an incentive to wait, perhaps excessively. One of us has suggested sovereign contingent convertible bonds, or "cocos," with automatic triggers to address this intrinsic bias.[10] It follows that if we are about to undertake a process of restructuring sovereign bond covenants, as it were, we might as well do so in a systematic way.

This discussion of mechanisms for restructuring and re-profiling presumably would have come as something of a surprise to commentators writing on the occasion of the IMF's 50th anniversary, as noted above. In part it was a reaction against—it promised

8. See IMF, "The Fund's Lending Framework and Sovereign Debt – Preliminary Considerations," Staff Report (Washington, D.C.: IMF, June 2014).
9. IMF staff, in a recent paper for the executive board, have weighed in in favor of the second approach (IMF, "Strengthening the Contractual Framework to Address Collective Action Problems in Sovereign Debt Restructuring," Policy Paper, Washington, D.C.: IMF, September 2014, http://www.imf.org/external/pp/longres.aspx?id=4911 [last accessed November 10, 2014]). The International Capital Markets Association, the organ of leading bond market participants, issued a paper similarly favoring this approach on the eve of the IMF fall 2014 meetings.
10. See Barry Eichengreen, "Coco for Europe," *Project Syndicate* (2011), http://www.project-syndicate.org/commentary/coco-for-europe [last accessed November 10, 2014].

an alternative to—the dramatic expansion of emergency lending in the 1990s. IMF lending programs became more frequent. They became larger. These trends reflected the explosive growth of global financial markets and international capital flows and the amount of liquidity needed to contain financial problems—again, developments that were not yet fully appreciated in the mid-1990s.

The issue of whether the international system needs an "international lender of last resort" to provide emergency liquidity in times of crisis was raised by the IMF's first deputy managing director in 1999—that is, in the immediate aftermath of the Tequila and Asian crises.[11] However laudable the idea is in principle, there remain reasons to be skeptical about feasibility in practice. The IMF lacks the ability to issue unlimited amounts of base money (which is the signature of a true lender of last resort), and governments are reluctant to delegate to it such powers. In practice, the nearest thing we haveto an international lender of last resort is the US Federal Reserve, reflecting the dominance of dollar-denominated claims in the global banking and financial system and the ability of the Fed to create dollar-denominated base money. The Fed extended ad hoc swap lines to the Bank of England, the Bank of Canada, the European Central Bank, the Swiss National Bank, several other advancedcountry central banks and four emerging market economies (Mexico, Brazil, South Korea, and Singapore) during the global financial crisis. It has now moved to make some of those swap lines permanent. But not all of them. And not all emerging markets that requested such liquidity assistance received it.[12] Rajan (2014) suggests that the decision of whether to extend such swaps should be taken out of the hands of the Fed.[13] For example, power over this decision could be transferred to the IMF. There is some precedent for the measure, in the form of the General Arrangements to Borrow and New Arrangements to Borrow, under which the IMF can borrow currencies from up to 25 advanced countries in order to lend to other members.[14] Others have suggested that, insofar as these are operations by central banks rather than national treasuries, they are better organized through the central bankers' bank, the Bank for International Settlements.

11. See Stanley Fischer, "On the Need for an International Lender of Last Resort," Paper prepared for delivery for the joint luncheon of the American Economic Association and American Finance Association (January 3, 1999), http://www.imf.org/external/np/speeches/1999/010399.HTM [last accessed November 10, 2014].
12. Prasad recounts the story of India, which requested a swap line from the Fed but was rebuffed: Eswar Prasad, *The Dollar Trap: How the US Dollar Tightened its Grip on Global Finance* (Princeton: Princeton University Press, 2014).
13. Raghuram G. Rajan, "Competitive Monetary Easing: Is It Yesterday Once More?" Remarks at the Brookings Institution, (Washington, D.C.: Brookings Institution, April 10 2014), http://rbi.org.in/scripts/BS_SpeechesView.aspx?Id=886 [last accessed November 10, 2014].
14. See IMF, "IMF Adopts a Decision on New Arrangements to Borrow," Press Release no. 97/5 (Washington, D.C.: IMF, January 27, 1997), https://www.imf.org/external/np/sec/pr/1997/pr9705.htm [last accessed November 10, 2014].



The IMF can provide at least limited amounts of liquidity through its Flexible Credit Line (for prequalified countries with strong policies) and Precautionary and Liquidity Credit Line (for prequalified countries with "sound policies" willing to subject themselves to "focused conditionality"). But these facilities remain all but entirely unutilized (Mexico, Poland and Colombia are the only countries to apply for prequalification, and none have drawn, not even in the global financial crisis). Meaningful provision would require the IMF to prequalify more countries and to do so preemptively. This in turn would imply more credit risk for the institution, raising again the question of feasibility.

A final alternative is for the IMF to encourage countries to pool their reserves on a regional basis. Reserve pooling makes sense to the extent that different countries experience financial disturbances at different times—meaning that it can be a partial, but only a partial, substitute for reserve accumulation at the national level. The Chiang Mai Initiative Multilateralization (CMIM), with a nominal reserve pool of $240 billion, is the most prominent case in point; it will soon be joined by the BRICS countries' $100 billion Contingency Reserve Arrangement. But the CMIM is not exactly a promising precedent. The members remain reluctant to activate it because they are worried about being paid back (even with a link to IMF conditionality after the first 30 percent of a country's CMIM quota has been disbursed); $100 billion or even $240 billion is not a lot of money. Recall that the Fed provided $160 billion to just four emerging markets in 2008.

More broadly, these initiatives, together with the IMF's involvement in the eurozone crisis, raise questions about how the institution should deal with regional arrangements. This is another issue that was not anticipated by the founders or, for that matter, by commentators writing at the time of the 50th anniversary. (Recall how the IMF was sidelined—essentially prohibited from lending—by the Marshall Plan that helped to set the stage for European economic and financial integration.) Whether the IMF can effectively coordinate the disbursal of funds with the CMIM remains to be tested. The Fund has been tested in Europe, but its experience there as part of the Troika has been less than satisfactory. That the Fund was repeatedly overridden by European authorities in the early stages of the crisis raises the question of whether it should only become involved with regional authorities when it provides the majority of the funds and therefore speaks with the loudest voice.

One issue from the 1980s that has continuously remained on the IMF's plate is international economic policy coordination, although we are no closer now than we were then to resolution of the issues that arise under that rubric. Calls for policy coordination are heard regularly, most recently in the context of "currency wars," "tapering," and "spillovers/spillback." The IMF, with its global mandate, would seem like a logical entity to organize efforts to better take into account the cross-border externalities of national policies. To this end, the Fund has worked with the Group of Twenty, participating in its meetings and providing background papers and briefings to inform its deliberations.

The response was more heartening in 2009, when there was a clear sense of the problem—deficient demand—and all countries were being asked to respond in the same way—by boosting demand. In other circumstances, where more differentiated policies are required, they have proven more difficult to arrange. There is disagreement over the nature of the problem and the appropriate response. Some national policy making institutions (central banks) have restrictive mandates. Others (the parliaments and legislatures responsible for fiscal policy) are highly politicized. Time horizons differ, and commitment is a problem. It appears that coordination works better when it is focused on technical issues, such as financial supervision and regulation, where it has been institutionalized, and where deliberations can be delegated to experts. But this makes other institutions, such as the Basel Committee on Banking Supervisors and the Financial Stability Board, and not the IMF, the locus of policy coordination.

The final issue, inevitably in any discussion of the past, present and future of the IMF, is governance reform. Reform is needed to enhance the representativeness and legitimacy of the institution and for emerging markets to therefore feel comfortable about taking the Fund's advice and approaching it for assistance. But the 2010 agreement to regularize the IMF's funding (by increasing quotas) and to reform executive board representation by redistributing votes and seats to underrepresented emerging markets is hindered by US Congressional opposition, rooted in skepticism of the Fund, and the reluctance of the Obama Administration to press the issue.



It may be possible to delink the increase in quotas (which requires approval from only 70 percent of members) from executive board reform. But this would address only the question of resources, not the equally important issue of governance reform. And without meaningful governance reform, it is hard to imagine the IMF playing a larger global role. The United States needs to decide whether it has the willingness and capacity (not just the financial capacity but also the legitimacy) to act as global crisis manager, or whether it prefers that responsibility to be delegated to the relevant multilateral institution. "Neither of the above" is not an adequate answer.

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# TOWARD AN EMERGING MARKET FUND

GUILLERMO CALVO

The Bretton Woods arrangement (BWA) was motivated by attempting to speed up the reconstruction process after World War II, and to prevent a replay of competitive devaluations. BWA boiled down to a system of fixed but adjustable exchange rate parities, subject to IMF agreement and surveillance. At the start of the BWA, private capital market flows had come down to a trickle. As a result, the system induced countries to accumulate international reserves to smooth out trade flows. When reserves ran out, i.e. a balance-of-payment crises occurred, the IMF supplied international reserves through Stand-By Arrangements and other facilities. For the sake of brevity, I will constrain the focus of the following discussion on the role of the IMF with special reference to emerging market economies (EMs).

BWA broke down in the early 1970s as the US, which already was the kingpin of the international payment system, followed a monetary policy incompatible with the US dollar/ gold parity—which led to jettisoning the system of IMF-determined exchange rate pegs altogether. This decision would have signaled the end of the Fund if, in line with initial expectations, the world economy switched to a system of freely floating exchange rates. But this was not to be. The US dollar replaced gold as the dominant international reserve currency, as a unit of account and a means of exchange. EMs, in particular, pegged their currencies to the US dollar (and more recently also to the euro), a phenomenon labeled "Fear of Floating."[1] Thus, looking at the big picture, the world moved to an exchange rate system which is not vastly different from the one that prevailed under the BWA. Fear of Floating reinstated exchange rate pegging. The mechanism is different from that of the BWA, but economies that exhibit Fear of Floating will occasionally need balance of-payment support, unless they always have a fluid access to the international capital market which, as experience shows, is not the case. This is an important reason why the Fund survived what on paper looked like its death sentence.[2]

The new system, which still holds and I will label BWA2, gives a commanding role to the Fed. The Fed is completely free to manage the supply of the dominant reserve currency without being constrained to maintaining a US dollar/gold parity as under the BWA. This is not a minor detail, because the US dollar is managed taking only US interests into account, as Fed authorities never tire to remind us. This situation elicits bitter political reactions from the rest of the world but, until recently and especially in developed market economies (DMs), the US hegemonic monetary position was tolerated because it was associated with a long stability period known as the "Great Moderation." However, the large recession and instability brought about by the subprime crisis is raising serious doubts about BWA2. Actually, these phenomena raised suspicion that the Great Moderation was the result of some kind of a mirage because it made it obvious facts that were somewhat hidden under the surface. For example:

- the Fed is far from being the sole manager of the US dollar printing machine. Shadow banks have found ways to print sizable quantities of quasi-US dollars by increasing the liquidity of some financial assets;
- the new liquid assets are vulnerable to attacks, as illustrated by the meltdown of asset-backed securities during the Lehman 2008 episode; and, finally,
- the Fed's instruments for controlling effective US dollar liquidity are blunt and give rise to externalities. For example, low US interest rates may send "hot capital" to EMs in search for yield—and cause major disruption in EMs when those rates

1. See Guillermo Calvo and Carmen M. Reinhart, "Fear of Floating," *Quarterly Journal of Economics*, 68 (May 2002): 379–408.
2. Sovereign debt problems are other important issues in which the IMF got involved, but will not be discussed here.



go back to normal. This, of course, exacerbates the worldwide antipathy caused by the Fed's US-centered policymaking.

These conditions send a clarion call for reinventing Bretton Woods, a key issue that this Committee has been campaigning for. The problems are very complex because they involve geopolitical as well as financial topics that economists do not understand that well. Thus, the new system will have to rely on the limited experience we have as a result of recent financial crises.

In the first place, I would like to note that there are many things that individual economies can tackle by themselves, without the help of Bretton Woods institutions. For example, policies aimed at lowering domestic financial vulnerability, like setting limits to banks' non-core bank liabilities (e.g. bank borrowing from external sources other than retail deposits), an example of what is now called *macro-prudential regulation*. But there are other policies that have become popular in EMs and that could benefit from some coordination or external assistance. A prominent example in this respect is accumulation of *international reserves*, an effective but costly policy. These costs could be reduced by "pooling" international reserves. The Fund has already gone in that direction by setting up new facilities, e.g. the Flexible Credit Line. Unfortunately, however, few countries have applied because many EMs fear being stigmatized for the simple act of applying, since investors may infer that it signals that the government thinks the economy is weak and subject to speculative attacks.

I have discussed this issue before and suggested the creation of an Emerging Market Fund (EMF).[3] The EMF would be in charge of preventing large volatility in an EM index like the EMBI+. During the Russian 1998 crisis, for instance, the EMBI+ increased by more than 1000 basis points in a short period of time and it took about five years before it returned to its pre-crisis level. This global shock cannot be attributed only to EM domestic mismanagement. It is well known that the capital market was a major source behind the shock. The episode is not that different from the subprime. However, in the latter case, reserve-currency central banks pumped in enough liquidity to push down DM financial risk indexes (e.g. TED spread) to pre-crisis levels in a short span of time. Without this type of policy there is wide consensus that the Great Recession would have become another Great Deflation.

3. See Guillermo Calvo, "Globalization Hazard and Delayed Reform in Emerging Markets," *Economia* (2002). Reprinted in G. Calvo (ed.) *Emerging Capital Markets in Turmoil: Bad Luck or Bad Policy?* (Cambridge, MA: MIT Press, 2005), Chapter 18.

EMs learned the lesson but, not being able to print reserve currencies, started an active policy of international reserve accumulation accompanied, in regions like Latin America, by current account surpluses. This probably helped the EM's quick recovery after the Lehman episode. But the role of DM monetary expansion cannot be discounted either. Unfortunately, these two positive factors are less widespread now. On the whole, EM current account deficits have deteriorated and it could be claimed that international reserves are lagging behind their optimal levels.[4] On the other hand, it is less likely that the Fed will activate currency swaps as in the Lehman crisis, especially if the next crisis is triggered by a hike in the Federal Funds rate in response to US overheating or inflationary pressures. Hence, this is the right time to reconsider setting up an EMF.

An EMF could initially be funded by a stock of SDRs sufficiently large to prevent sharp falls in an index of targeted bond prices. The objective is not to go against the trend but to prevent excessive volatility that might otherwise generate a "bad" self-fulfilling equilibrium. An EMF has the following advantages over the present IMF facilities:

- It does not cater to individual economies. Therefore, "stigma" should be less of a concern.
- It is aimed at alleviating systemic financial problems, which makes the EMF a natural addendum to the IMF foundational objectives.

Of course, the devil is in the details, and funds like this are subject to at least two types of risks: they can run a substantial loss; and they can be subject to *moral hazard*.

Risk 2 is always present in these kinds of arrangements but it should be relatively minor in the present case because the EMF's central aim is to stabilize a price index involving bonds from many countries, not individual countries. Risk 1 is, of course, very hard to rule out. However, losses can be checked by (a) selecting the set of EM bonds protected by the EMF, and (b) setting the bands within which bonds prices will be kept by the EMF. These points involve technical issues which, however, could be somewhat sorted out on the basis of the available evidence about EM bond prices in the last ten-odd years. Moreover, both points require a deep understanding of the channels through which a meltdown of EM bond prices impinge on the real economy. The knowledge here is quite limited, and there is a wide array of possibilities to choose

4. See Guillermo Calvo, Alejandro Izquierdo and Rudy Loo-Kung "Optimal Holdings of International Reserves: Self-insurance against Sudden Stop," *Monetaria*, Centro de Estudios Monetarios Latinoamericanos, CEMLA (January–June 2013), pp. 1–35, http://www.cemla.org/PDF/monetaria/PUB-MON-I-01-01.pdf [last accessed November 11, 2014].



from. However, it is already clear to me that it will be unlikely that the EMF proposal will go anywhere if the US is not firmly on board. For example, if, say, one-third of all the external debt from developing economies is covered, the fund would have to be around USD1.44 trillion. On the other hand, if only one-third of external short-term debt from the same set of economies are covered, the fund would have to be around USD400 billion.[5] The numbers are large relative to the IMF credit outstanding in July 2014, which amounts to around USD130 billion.[6] But, fortunately, the EM sums quoted above are low relative to, for instance, the US Federal Debt, which exceeds USD17 trillion. Thus, setting up the EMF is, in principle, possible but unthinkable without the active support of the US government.

In my opinion, we are at the verge of new crisis triggered by higher US interest rates and deep financial crisis in China due to a mishandling of shadow-bank fragility there. I am not saying that this scenario is unavoidable but I believe it would be a serious mistake to ignore it. If any of that happens and the US stays on the wayside, this will probably force EMs to take extreme measures that may move the world economy away from trade globalization. This retrenchment may have severe consequences, especially given that the industrial system is highly dependent on value chains.

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5. Data comes from the World Bank 2014 International Debt Statistics; http://datatopics.worldbank.org/debt/ids/region/lmy [last accessed November 11, 2014].
6. The sum reported by the IMF is SDR88 billion, which amounts to USD133 billion if the SDR/USD = 0.66, i.e., the exchange rate quoted for September 2, 2014. See IMF, "Total IMF Credit Outstanding for all members from 1984–2014", http://www.imf.org/external/np/fin/tad/extcred1.aspx [last accessed November 11, 2014].

I am thankful to Sara Calvo and Pablo Ottonello for valuable comments.

# FLAR AS A KEY ORGANIZATION WITHIN THE GLOBAL FINANCIAL SECURITY NETWORK: COORDINATED ACTION CAN MAKE A DIFFERENCE IN THE NEXT CRISIS

ANA MARÍA CARRASQUILLA

The present essay discusses the importance of the Latin American Reserve Fund (*Fondo Latinoamericano de Reservas*), hereafter FLAR, as an organization for Latin American and global financial stability, as well as the importance of regional financial agreements within the global financial security network, in light of the evidence from the recent global crisis. This essay focuses on three main aspects for this purpose: the successful existence of FLAR as an instrument of regional macro-economic stability; the importance of regional financial agreements for crisis response; and the cooperation between FLAR and the International Monetary Fund (IMF).

## THE ROLE OF FLAR WITHIN THE LATIN AMERICAN REGION

FLAR is an organization of central banks that was born as the Andean Reserve Fund (*Fondo Andino de Reservas – FAR*) in 1978, in response to the need to have our own cooperative to face external liquidity problems, which supplemented the global actions of the IMF. FAR was founded by Bolivia, Colombia, Ecuador, Peru, and Venezuela. In

1989, FAR became FLAR, to allow the membership of all Latin America. Subsequently, Costa Rica, Uruguay, and Paraguay became members.

The governance structure of FLAR consists of a Board of Directors, whose members are the Executive President and the Governors of the central banks; and an Assembly of Representatives, comprising the ministers of finance. Each country has a vote, regardless of the paid-in capital in the institution. The current paid-in capital amounts to USD2.4 billion and the total assets to USD6.5 billion.

Throughout its 35 years of existence, FLAR has witnessed and accompanied the evolution of its member countries, from countries having very limited access to external financing, to countries obtaining an investment grade in several cases and with a set of external financing facilities. Throughout this period, the institution has prided itself on its flexibility and speed[1] in financial assistance processes, without this representing impairment in the payment capacity. The institution enjoys the status of a *de facto* preferred creditor and has a zero default history, even during episodes of external debt defaults of its members. This fact is reinforced by the sense of belonging to the organization.[2]

The actions of FLAR were significant in the 1980s during the Latin American foreign debt crisis, as well as during the Asian crisis and, most recently, during specific episodes of the international crisis.

In line with the financial strengthening of its members, the actions of FLAR have also evolved from a pure reserve pool structure, toward a scheme in which it also acts as a financial intermediary and receiver of deposits from central banks, official institutions and multilateral entities from the region, both from member and non-member countries. The shift in the organization's functions has the purpose of reducing the opportunity cost of the holding of the region's sovereign resources. FLAR is currently considered a safe haven for sovereign investors. The institution holds the highest credit rating among any multilateral body or country in the region, which in turn facilitates its role as conduit of countercyclical financial assistance toward member countries, by means of leverage in external markets.

There is a wide consensus that FLAR is an example of a credible and functioning, highly specialized and technical institution, with a verified and successful history, that has contributed to the stability of the region throughout its 35 years of existence.

1. Our approval of financial assistance takes, on average, roughly 30 days and can reach up to 2.5 times the paid-in capital. In the case of Bolivia and Ecuador, it can reach up to 2.6 times the paid-in capital.
2. José Antonio Ocampo, "La arquitectura regional a la luz de la crisis," Papers and Proceedings of VIII FLAR-CAF Economic Studies Conference (2012).



Nevertheless, FLAR is a work-in-progress and requires a continuous dynamism in accordance with the evolution of the global and regional economic conditions and needs of the members. FLAR's goal is to see a region with financial stability, able to resist any source of volatility. The region is currently trading much more, due to the boost of the private sector, and such integration is expected to become much deeper in the coming decades, for which it is crucial to have financially stable neighbors.

An institution like FLAR, to mitigate any temporary instability risk for the entire region, is required to achieve stability. We hope that the region will take advantage of this opportunity and that FLAR will be there to meet this challenge.

The biggest challenge for the current Board and Administration of FLAR is to achieve full regional membership, thus, greater size and relevance for this collective insurance mechanism. The membership of systemic countries such as Brazil and Mexico is crucial to attain this purpose.

## IMPORTANCE OF REGIONAL FINANCIAL AGREEMENTS CRISIS RESPONSE

The provision of international liquidity should be ideally provided by an international lender of last resort. However, in the international financial architecture, composed of the IMF and the central banks, this function takes place in a very limited fashion, to the extent that there are important coordination efforts that have not been materialized.[3] Consequently, it is important to have regional institutions to enhance the actions of the IMF.

During the recent financial crisis, a limited capacity for financial action by the IMF was observed to cover potential credit demand, and therefore, many countries decided to increase levels of international reserves to face strong external shocks. The former is more important in the case of FLAR countries, if we take into account that we do not have a country issuing a reserve currency within our region. It is known that the accumulation of international reserves is very expensive in terms of insurance for individual countries and the existence of a reserve pool contributes to the reduction of said cost. For thisreason, the strengthening of FLAR-type regional schemes is a way of having an insurance against external liquidity events that are less expensive. This proposal is not new, and it gained momentum during the Asian crisis, which ultimately triggered the Chiang Mai Initiative Multilateralization (CMIM), developed by the ASEAN+3[4] countries.

3. Liliana Rojas-Suárez, "Fortaleciendo una muralla financiera Latinoamericana," Papers and Proceedings of VIII FLAR-CAF Economic Studies Conference (2012).
4. ASEAN countries: Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Singapore, and Vietnam. +3 countries: China, Japan, and South Korea.

To the extent that global financial accords have the same purpose than the IMF, but are different institutions, the coordinated action of a global financial security network, in line with the statement of the G20 countries,[5] could make a difference in the response to a new global event. In order to achieve an effective coordination, it is necessary to propose rules on which to advance, especially with respect to the division of tasks.

A way to approach the division of tasks within a region could be to have the global body directly in charge of the systemic countries such as Brazil and Mexico in our region. The regional body could be in charge of dealing with small and medium non-systemic countries, perhaps even with funds derived from agreements with the IMF.

A second way to approach this division could be for the regional body to be in charge of individual crises, while the global body would be in charge of systemic crises. In the case of a systemic crisis, FLAR could only act as a first supplier of liquidity until the country in need can obtain other sources of funding, including the IMF.

A third way to approach the division of tasks could be to establish the support depending on the magnitude of the event. In the case of short-term events, regional financial agreements appear to have a comparative advantage, given the fast response, and the closeness and knowledge of their economies. FLAR has a macroeconomic follow-up program by means of which it presents reports of each country that are discussed within the Board.

To the extent the international financial architecture is a work-in-progress, the strengthening of regional financial agreements requires critical actions to be implemented, such as:

- Strengthening the dialogue among the regional financial agreements about the conditionality policy, macroeconomic follow-up practices and financial mechanisms with the purpose of responding to a crisis in an effective manner.
- Establishing cooperation mechanisms among international bodies to strengthen the financial capacity thereof. In Latin America, there are countries that have specific agreements to face the crisis. However, this does not provide protection for the entire region.

### WHAT IS REQUIRED FROM THE IMF TO COOPERATE WITH REGIONAL FINANCIAL ORGANIZATIONS?

As stated above, the skill and capacity of regional agreements is limited in several aspects, especially in the case of those for which there are no member countries that

5. G20 Leaders tasked Finance Ministers and Central Bank Governors to explore ways to improve collaboration between Regional Financial Arrangements and the IMF across all possible areas. As a consequence, on October 15, 2011, G20 agreed six non-binding broad principles: http://www.g20.utoronto.ca/2011/2011-finance-principles-111015-en.pdf [last accessed November 14, 2014].



issue reserve currencies, such as in the case of FLAR. Therefore, some aspects of cooperation of the IMF with the regional bodies should be discussed and agreed, such as:

- Regional agreements such as FLAR require more funds and a greater diversification f risks, not only by means of the extension of membership, but also through non-regional partners, including the IMF.[6] Can the IMF offer swap lines for the FLAR?
- FLAR's capacity to effectively contain a crisis is improved to the extent its membership increases, both in terms of small countries and large countries. In the case of small countries, the cost of entry to FLAR is affected by the current definition of the international reserves of the IMF, given that the paid-in capital in FLAR does not count as an international reserve for IMF statistical purposes. In other words, the purchase of insurance deteriorates the perspective of a country. Therefore, it would be very crucial for the IMF to assume a more flexible stance on this statistical matter.
- Cooperation would be easier if the roles of the IMF and the regional agreements are clearly defined in order to avoid "facility shopping" of countries among organizations. In order to achieve this, organizations such as FLAR could assist small and medium non-systemic countries with non-recurrent financing needs, while the IMF handles the rest.

I wish to conclude by emphasizing that IMF and FLAR have the same objective in Latin America: a financially stable region. In that sense, a better coordination of actions between the organizations could really make a difference in the next crisis.

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Fondo Latinoamericano de Reservas

6. See Latin American Shadow Financial Regulatory Committee, "Liquidity Needs in Times of Stress: Should Latin America Go Beyond the IMF?" Statement No. 27 (December 11, 2012).

# BUILDING A MORE EFFICIENT AND RESILIENT INTERNATIONAL MONETARY SYSTEM

AGUSTÍN CARSTENS

Overall, the orderly functioning of world financial markets and the prevention of international financial crises can be seen as a global public good. Accordingly, the analysis of those measures and reforms aimed at achieving such goal is an imperative. In this setting, one challenge to preserve global financial stability is the fact that countries usually follow an inward-looking approach when designing and implementing economic policies. Although this approach can be optimal from the perspective of an individual country, in many cases there are externalities. Therefore, the structure of incentives in the international monetary system must address this source of inefficiencies.

This essay analyzes two interrelated issues associated with the stability of the international monetary system: the over-accumulation of international reserves in emerging market economies (EMEs); and the need for a higher degree of exchange rate flexibility around the world. Overall, EMEs are subject to adverse external shocks, such as sudden reversals in capital flows. Thus, these economies have accumulated large holdings of foreign reserves for precautionary reasons. Furthermore, some of these economies have intervened in foreign exchange markets in order to prevent an appreciation of their currencies. In this setting, policies aimed at maintaining an undervalued exchange rate have also contributed to the accumulation of reserves.

From the point of view of an individual economy, these strategies may make sense. However, from the perspective of the global economy, there are inefficiencies related to this process. Although the demand for international reserves by a single economy may not have a considerable effect on global financial markets, the total demand for reserve assets of all EMEs can have an impact. For instance, in the period prior to the global financial crisis, such demand for reserve assets may have contributed to the development of large external imbalances and may have put downward pressure on international interest rates. This may have had effects on global financial stability. Moreover, the lack of fully flexible exchange rate regimes in some of these economies, especially in those with systemic importance, may have also prevented a timely and rapid correction of the external imbalances.

In order to address these inefficiencies, there are some possibilities. It would be convenient to further supporting the IMF's capacity to provide liquidity and financial assistance through backstop facilities, such as the Flexible Credit Line (FCL) and the Precautionary and Liquidity Line (PLL). These instruments are the corner stone for the crises prevention role of the IMF. Additionally, these measures can reduce the incentives for holding large amounts of foreign reserves in EMEs, contributing to build a more stable global financial system. However, this alternative is not without some problems and challenges, which are discussed in this article. In addition, a higher degree of exchange rate flexibility across economies is also necessary. This can facilitate the correction of external imbalances and the adjustment of domestic economies to adverse shocks, reducing to some extent the need for large reserve holdings. Therefore, it may be the case that an international monetary system in which flexible exchange rate arrangements prevail would be more stable.

### THE CASE FOR ACCUMULATION OF INTERNATIONAL RESERVES

The degree of interconnectedness among financial institutions and markets at an international level has increased in recent decades. Accordingly, financial markets in EMEs have become more globalized. In principle, there are benefits related to this process. For instance, it allows a more efficient allocation of resources and risk among countries. Overall, capital flows provide additional financial resources to countries with limited domestic savings. Furthermore, such flows also contribute to the development of domestic financial markets. In particular, they help to make these markets deeper and more liquid.



Nevertheless, to some extent, international financial integration has also contributed to making EMEs more sensitive to external shocks. It has increased the exposure of these economies to large and volatile financial flows. EMEs are subject to abrupt changes in the direction of such flows. Generally speaking, sudden stops are usually related with sharp contractions in economic activity and episodes of financial stress. In the aftermath of the Asian financial crisis a number of EMEs started to accumulate large holdings of international reserves in order to be able to deal with external shocks. These strategies led to a significant increase in the demand for reserve assets, such as T-Bills and US Treasury bonds, since the late 1990s. In addition to this precautionary motive, some of these economies, especially some systemically important economies, followed export-led growth strategies based on heavily-managed exchange rate regimes, which also had an impact on reserve accumulation.

Overall, economies with relatively high levels of international reserves have been less affected by periods of international financial turmoil. Accordingly, the experienceof these economies suggests that massive foreign reserves holdings may reduce economies' vulnerability to adverse external events. Given that EMEs face the risk of suffering negative shocks in the future there are incentives to hold large amounts of reserves in order to mitigate the impact of these shocks. In this scenario, there is a case for the accumulation of international reserves for precautionary purposes. However, there are inefficiencies related to massive reserves holdings and the lack of exchange rate flexibility.

### INEFFICIENCIES RELATED TO RESERVE ACCUMULATION

In order to illustrate the inefficiency related to reserve accumulation it may be useful to consider the case of a small open economy that is subject to external shocks. The nature of these shocks can be real, such as fluctuations in terms of trade, or financial, such as abrupt movements in capital flows. Under these circumstances, accumulating liquid and safe assets denominated in foreign currency (international reserves) may be optimal.

These assets can function as a buffer and help mitigate the impact of external shocks on the domestic economy. This strategy can be regarded as a form of self-insurance against such shocks. Yet, it is an inefficient form of insurance, based on purchasing non-contingent assets whose payments do not depend on the conditions prevailing in the economy. In theory, an insurance contract that stipulates a premium to be paid by the country in good times, as well as those payments that it would receive when the adverse shock occurs would be better.

However, in the absence of international insurance contracts, the accumulation of foreign reserves may be one of the few options available for EMEs. From the perspective of a small open economy the desire to self-insure against external shocks can be optimal. Nevertheless, from the perspective of the whole international financial system such behavior, as mentioned, can lead to an excessive accumulation of international reserves in the global economy, which may exert downward pressure on interest rates in international financial markets. This type of inefficiency is due to a pecuniary externality. Countries do not internalize the effect of their foreign reserves decisions on international interest rates. Although the demand for reserve assets by an individual country may not have a significant effect on global financial markets, the total demand for these assets of all emerging economies can have an impact.

### INEFFICIENCIES RELATED TO THE LACK OF EXCHANGE RATE FLEXIBILITY

In addition, sometimes large holdings of reserve assets are also associated with the adoption of pegged or managed exchange rate regimes. That has been the case for some systemically important economies. This process may have contributed to the development of large and unsustainable external imbalances during the years prior to the global financial crisis, putting downward pressure on interest rates in international financial markets. This, along with other factors, such as inadequate financial regulatory frameworks, may have induced economic agents to take excessive risks and to accumulate large debt levels. As a result, it paved the way to the development of financial imbalances, contributing to greater weaknesses of the whole international financial system.

In principle, real exchange rate adjustments can take place through changes in domestic prices in countries with pegged or managed exchange rate regimes. The traditional adjustment mechanism implies that foreign exchange interventions to manage the value of the domestic currency also affect countries' money supply. The expansion of the money supply in countries with external surpluses causes internal prices to rise. The reduction of the money supply in countries with an external deficit causes domestic prices to fall. Such changes in prices would imply real exchange rate adjustments.

However, in practice there are several factors that prevent a timely and orderly correction of external imbalances in these economies. On the one hand, surplus countries may prevent the aforementioned adjustment by sterilizing the effect of the external surplus on the money supply. On the other hand, given the downward rigidity of some domestic prices, especially wages, the adjustment process may be extremely painful in countries with large external deficits. Severe output contractions may be necessary to achieve a real exchange rate depreciation.



### TACKLING INEFFICIENCIES

In light of these inefficiencies, finding alternatives to self-insurance and promoting a high degree of exchange rate flexibility around the world are an imperative for preserving global financial stability and, accordingly, a key part of the international financial architecture.

*MULTILATERAL ARRANGEMENTS.* In principle, the inefficiencies related to self-insurance can be addressed through reserve pooling arrangements. Overall, the IMF can be seen as an international reserve pooling arrangement. There is a fund consisting of a pool of resources contributed by member countries. However, it should be noted that because of the existence of a stigma problem of entering into a program with the IMF, many countries decide to accumulate international reserves to prevent the need for IMF financial assistance in times of crisis. Thus, a challenge is how to make IMF facilities more attractive to EMEs. There has been progress in this direction. Currently the FCL is available to countries with strong fundamentals. Such a scheme provides timely availability of resources to these countries, without the conditionality, and the corresponding stigma, related to other forms of IMF lending. Additionally, the PLL is available for those members that do not qualify for the FCL but have sound policies.

The fact that the FCL is only available for countries with strong economic fundamentals is extremely important. When the FCL is granted to a country, a strong signal is sent to market participants. The international financial community has given a seal of approval to this country, recognizing the strength of its economic fundamentals and macroeconomic policy framework. As a result, investors' confidence on this economy may significantly increase. Under these circumstances, the need for external financial assistance would be lower.

In principle, IMF facilities, such as the FCL and the PLL, can potentially reduce the incentives for self-insurance. Thus, these facilities seem to substitute international reserves. Nevertheless, only countries with solid fundamentals have access to these facilities, and solid fundamentals typically include large levels of international reserves. Under these circumstances, the referred facilities can complement reserves and support the policy framework of the country.

When assessing the role of the IMF as a potential international lender of last resort, it is convenient to consider some differences between the IMF and monetary authorities. The IMF, unlike central banks, cannot issue its own liabilities in unlimited quantities. It depends on quotas from country members and its capacity to raise funds from its membership (e.g. the New Arrangements to Borrow, NAB, and Bilateral Borrowing Agreements, BAs). Therefore, one problem with IMF lending facilities may be their size. Accordingly, a key issue related to the possibility of strengthening IMF facilities is their funding. Overall, the total amount of resources must be sufficient to give market participants confidence that the institution will be able to meet the needs of member countries.

We must recognize that the strength of a multilateral institution like the IMF rests on the fact that it is a quota-based institution. The contributions made by its membership not only give the necessary resources, but also guide its governance structure. In this regard, advanced economies should recognize the importance of quota-related reforms in order to maintain the economic relevance and the effectiveness of the IMF to deal with an increasing size of the global economy and related financial flows.

It is an issue of both legitimacy and effectiveness of the Institution. Temporary arrangements can solve the issue of increasing the financial requirements of the IMF. Nevertheless, they impose some problems related to the decision making process for



the availability of these resources. For example, in contrast with quotas, the resources coming from the NAB can be blocked by a relatively small group of member countries.Also, having temporary financial arrangements puts an unnecessary burden on the membership, which has to repeatedly engage in lengthy discussions regarding the activation and renewal of these resources. Finally, having temporary arrangements to finance the IMF gives the wrong signal to markets about the possible availability of these resources. There is no assurance that they will be available in a few years' time. So, instead of using our political will to discuss other less important endeavors, we should solve the quota reform issues, recognizing the increasing role that the EMEs play in the IMF and other multilateral institutions.

*EXCHANGE RATE FLEXIBILITY.* On the one hand, many advanced economies and several EMEs have flexible exchange rate regimes that facilitate the real exchange rate adjustment to external shocks, as well as the timely and orderly correction of external imbalances among them. On the other hand, as mentioned, a number of economies have managed their exchange rates. Accordingly, some of them have run large external surpluses and accumulated large amounts of reserve assets. Usually, sterilized foreign exchange rate interventions helped to prevent real exchange rate adjustments. External imbalances in these economies have shown a greater degree of inertia.

Without a doubt, the adoption of more exchange rate flexibility across economies would be a crucial measure to create a more stable international economic system. In principle, increasing exchange rate flexibility can prevent the development of large and unsustainable imbalances in the global economy. It should be noted that important steps have been taken on this regard, but additional efforts are needed.

In addition to the above, generally speaking, there are several benefits of greater exchange rate flexibility. For example, there is empirical evidence in favor of the stabilizing properties of a flexible exchange rate arrangement. The experience of a number of economies suggests that such arrangement can function as a shock absorber and help mitigate the impact of adverse external events on domestic economic activity. In addition, a higher degree of exchange rate flexibility would strengthen the capacity of national central banks to follow an independent monetary policy. These authorities can focus on implementing policies aimed at stabilizing the domestic economy.

Under these circumstances, countries that do not fix or manage their exchange rates may experience greater macroeconomic stability.

### FINAL REMARKS

In light of EMEs' vulnerability to adverse external shocks, such as sudden and sharp reversals in capital flows, international reserve accumulation has accelerated since the late 1990s. In periods of international financial turmoil, central banks can use reserves assets to moderate exchange rate volatility and to provide liquidity in foreign currency. Accordingly, EMEs have accumulated foreign reserves for precautionary purposes. Furthermore, part of the increase in reserves can be the result of the export-led growth strategy followed by some economies.

But self-insurance and the lack of exchange rate flexibility may generate distortions for the global economy. For example, over-accumulation of reserves can put downward pressure on international interest rates. Moreover, the lack of exchange rate flexibility prevents a timely and orderly correction of external imbalances. These factors may have contributed in part to the development of some financial imbalances. In this setting, adopting measures aimed at reducing the incentives to accumulate international reserves is necessary. In principle, multilateral arrangements, such as IMF precautionary lending facilities, may be an alternative to self-insurance. The challenge is to find ways to strengthen these schemes. Likewise, increasing exchange rate flexibility across economiesis an important step in creating a more stable international monetary system, one that prevents the development of large imbalances in the global economy.

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# POLICY COORDINATION IN A MULTIPOLAR WORLD

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The theoretical literature suggests that international monetary policy coordination may be instrumental in achieving a globally optimal solution, but the quantitative gains are small relative to an environment in which national policy makers pursue optimal domestic policies. There are, however, several practical challenges that make more explicit and binding forms of international monetary policy coordination difficult. Formal policy coordination would require consensus building concerning the transmission of spillovers and an alignment of mandates, time horizons, objectives, and accountability arrangements. That said, the international monetary system should provide incentives to foster appropriate preventive action that renders economies more resilient to shocks, and provide the necessary standards and infrastructures to make global markets work better, as well as make coordination possible when warranted.

History casts a long shadow over the international monetary system (IMS). Over the past three decades the global economy has changed in decisive ways but the IMS has not changed much. Three aspects are particularly striking. First, financial factors have become an increasingly relevant source of cross-country interlinkages, with some evidence of cross-country de-linkages since the global financial crisis. Second, emerging economies have raised their clout, as reflected by the impact of their business cycles on global growth and the growing use of their currencies: the global economy has become multipolar. And third, monetary policy in advanced economies has—more recently—entered new territory by resorting to unconventional measures. In this chapter, I would like to outline these shifts in the global economic landscape, and elaborate on the implications for the IMS and monetary policy coordination.

## THREE STRUCTURAL SHIFTS IN THE GLOBAL ECONOMY

*GLOBALIZATION, HOME BIAS AND REGIONALIZATION.* Clearly, the defining feature of the last three decades has been the dramatic strengthening of globalization in both trade and finance. Cross-border trade in goods and services as well as investment have soared, driven by trade-liberalizing policies, the lifting of capital controls, as well as innovations in transport and information technologies.

The global financial crisis has led to a halt in this trend, perhaps only temporarily. But there is also the possibility of a step backward, i.e. a re-emergence of financial home bias and a stronger drive toward regionalization. Early evidence of this is the resurgence of the so-called "Feldstein-Horioka puzzle," that is, a sharp rise in the correlation between savings and investments. For euro area countries the cross-country correlation between the savings and investment-to-GDP ratios fell continuously from 0.6 in the early 1990s to essentially zero in 2005; similarly, for non-euro area OECD countries it even fell from almost one to zero over the same time span. After the global financial crisis the correlation rose sharply to 0.6 for the euro area and 0.75 for non-euro area OECD countries. European banks have re-treated from dollar-denominated lending.[1] Banks from emerging economies also have a stronger regional orientation, in particular in South-East Asia, Central America and the Commonwealth of Independent States.[2] Regulators have been tempted to ring-fence their domestic financial systems. Restrictions on intra-European

1. V. Ivashina, D.S. Scharfstein, and J. Stein, "Dollar Funding and the Lending Behavior of Global Banks," NBER Working Paper No. 18528 (2012).
2. Bank for International Settlements, "EME Banking Systems and regional financial integration," CGFS Papers, No. 51 (2014).



cross-border liquidity flows or the US rules for foreign banking organizations may be seen as examples. Such a "de-globalization" scenario, if confirmed, could become self-validating and have profound effects on the degree of international risk-sharing, spillovers, and the global allocation of savings, and therefore on global long-term growth.

*SHIFTING ECONOMIC CENTER OF GRAVITY.* Since the early 2000s the world has also witnessed impressive growth rates in emerging economies, which have exceeded those in the advanced world. In particular the BRICS (Brazil, Russia, India,China, and South Africa) have more than doubled their share of global GDPfrom less than 10% in 2000 to 21% in 2013; similarly, other low and middle income economies have seen their share increase from 7% in 2000 to 12% in 2013. The rise of emerging economies is also reflected in the eastward shift of the world's economic center of gravity, which is occurring at a faster speed than ever before in human history. And the shift toward a multipolar world is in turn reflected in changes to global institutions and fora, as evidenced by the switch in relative importance between the G7 and the G20, and the ongoing governance reforms at the IMF.

In line with the shift in the economic center of gravity, the currency constellation in the IMS may also be gradually changing. In particular, in light of the remarkable growth of China's economy and recent policy measures adopted by its authorities, the international use of the renminbi has gained momentum.[3] And China's plans to liberalize its capital account as well as to increase exchange rate flexibility and develop domestic financial markets will enhance the role of the renminbi as an international reserve currency. Some analysts believe that, over time, it can reach international currency status, alongside the US dollar and the euro.[4] We would then enter an era of a tri-polar IMS.

*UNCONVENTIONAL MONETARY POLICY.* Before the global financial crisis the widespread adoption of explicit price stability objectives had been conducive to prolonged low inflation outcomes alongside economic growth. Major central banks were content to invoke the Tinbergen

3. This has been particularly visible in the rise of the renminbi as an invoicing and settlement currency for China's international trade: while in 2010 almost none of China's trade in goods and services was invoiced in renminbi, in 2014 this figure has risen to almost 25%. Similarly, the issuance of renminbi-denominated ("dim sum") bonds has grown by a factor of about 30, albeit from a very low level.
4. See Eichengreen and Kawai for a discussion of the international role of the renminbi: B. Eichengreen and M. Kawai, "Issues for renminbi internationalization: An overview," Asian Development Bank Institute Working Paper, No. 454 (2014). On recent trends in the IMS see European Central Bank, "Report on the International Role of the Euro" (2014), http://www.ecb.europa.eu/pub/pdf/other/euro-international-role-201407en.pdf?456475aa49c78ac8f912d9828d374c52 [last accessed November 28, 2014].

principle, aiming to achieve their primary objective of price stability through a single monetary policy instrument: short-term interest rates. The global financial crisis changed this setting abruptly. Pursuing central bank mandates in a zero lower-bound environment has meant that monetary policy needed to broaden the set of policy instruments at its disposal, including forward guidance and asset purchases by central banks. As a result of the latter, the balance sheets of all major central banks have increased significantly.

One of the major challenges in the years ahead will be the differentiated normalization of unconventional monetary policies in advanced economies. Many have argued that in this process central banks in advanced economies should be mindful of the spillovers to the rest of the world.[5] There have even been calls for a fundamental strengthening of international monetary policy coordination. In the next section, I would like to elaborate on this discussion.

## THE DEBATE ON INTERNATIONAL MONETARY POLICY COORDINATION

There are different proposals on how the IMS should change. In particular, there have been several calls to establish a more formal framework of monetary policy coordination, or some kind of revised Bretton Woods system. Overall, I believe that the forces which are at play today in the IMS, as described above, call for a strengthening of some of its features rather than a fundamental overhaul.

*INTERNATIONAL MONETARY POLICY COORDINATION IN THEORY.* First, while the theoretical literature suggests that international monetary policy coordination may be instrumental in achieving a globally optimal solution, it generally concludes that the gains from coordination are small relative to an environment in which national policy makers pursue optimal domestic policies.[6]

Second, it is not clear that the benefits from international monetary policy coordination increase monotonically with economic and financial integration.[7] On the one hand, financial integration intensifies the impact of foreign shocks on the domestic economy. On the other hand, it alsoimproves diversification and insurance opportunities, hence mitigating the impact of foreign shocks. It is difficult to know *ex ante* which

5. R. Rajan, "A step in the dark: unconventional monetary policy after the crisis," Andrew Crockett Memorial Lecture, Bank for International Settlements, Basel (June 23, 2013).
6. M. Obstfeld and K. Rogoff, "Global implications of self-oriented national monetary rules," *Quarterly Journal of Economics*, 117, 2 (2002): 503–35.
7. This may partly also depend on the model set-up characterized by limited policy trade-offs. See also B. Cœuré, "The internationalisation of monetary policy," Keynote address at the ECB-IMF conference on the "International dimension of conventional and unconventional monetary policy," Frankfurt am Main (April 30, 2014), forthcoming in a special issue of the *Journal of International Money and Finance*.



of these effects will dominate both in "normal" and "crisis" times. In fact, it is plausible to expect that while the diversification effect dominates in "normal" times, in "crisis" times the effects from large adverse spillovers prevail.

*PRACTICAL OBSTACLES.* There are also several practical challenges that make more explicit and binding forms of international monetary policy coordination difficult. The first stems from political economy. Central banks operate under different mandates, time horizons, objectives, and accountability arrangements. They are ultimately backed by their domestic fiscal authority and report to their domestic parliament (the euro area is no exception to this rule, even if sovereignty is shared locally). As a consequence, they cannot act as lenders of last resort other than in a discretionary way beyond the boundaries of their political constituencies. In addition, economic cycles do not always coincide across countries, which creates tensions between what is needed for domestic purposes and what is optimal from an international perspective (the demise of the Louvre Accord is a classic example).

Finally, given that uncertainty is pervasive in economic policy-making, developing a common assessment of global risks and spillovers will always be difficult. This considerably complicates consensus-building concerning the design and enforcement of policies that countries should implement. Take, for example, the pre-crisis debate on the risks stemming from global imbalances. The current account deficit in the United States was seen by some as problematic, as they believed it would eventually trigger a balance of payments crisis or a sudden and strong depreciation of the US dollar with global ramifications. Others instead argued that the current account deficit was not of concern given the international status of the US dollar; the positive valuation effects and the positive net foreign income balance were seen as evidence that the current account deficit in the US was sustainable. As a matter of fact, we did not experience a US balance of payments crisis, even though we did experience a spectacular *global* financial *crisis*.[8] What was the connection between global imbalances and the global financial crisis? What were the drivers of those global imbalances? The debate has still not been settled. Similarly, I would claim that the main obstacle today to international monetary policy coordination

8. B. Eichengreen, "A Requiem for Global Imbalances," Project Syndicate (2014), http://www.project-syndicate.org/commentary/barry-eichengreen-notes-that-a-decade-after-external-imbalances-emerged-as-a-supposed-threat-to-the-global-economy--the-problem-has-disappeared [last accessed November 28, 2014].

is the lack of consensus on (and maybe even of an understanding of) the degree of slack in the labor and product markets of the major economies.

Reaching a consensus on the nature of spillovers is not straightforward either. Most models of international monetary policy coordination assume thatpolicy makers are able to identify the types of shock and how they are transmitted to the domestic and global economy. But this is often not the case in practice.For instance, there have been marked differences in the views on the global impact of Federal Reserve announcements. On the one hand, some have argued that the Fed's monetary policy is driving a global financial cycle.[9] On the other hand, others have argued that the key driving forces of capital flows are global risk and uncertainty, with a much looser connection to US monetary policy.[10] Another example of diverging views concerns the question of whether emerging economies have the tools to neutralize the spillovers originating from other parts of the global economy.

As a result of our limited understanding of the types of shock and their transmission, establishing which policy responses are the best for each country seems to be rather difficult. Internalizing the effects of one's monetary policy on other jurisdictions would be even more challenging. Suppose the Fed had a mandate to internalize the global impact of its decisions, which it does not have, would the financial stability impact of cheap dollar funding in emerging market economies have called for a later, or for an earlier, normalization of US monetary policy? Ultimately, there is necessarily a high degree of subjective judgment involved. As I already suggested, crisis times such as 2008–09 are the exception, since the spillovers are at the same time less ambiguous and more visible.

*THE SCOPE OF INTERNATIONAL MONETARY POLICY COORDINATION.* These practical obstacles do not imply that regular dialogues between central banks as well as exchanges of views during meetings at the IMF, the BIS, the G20, and at the regional level, are not useful. In fact, I believe that it is quite the contrary. Global institutions and fora play an essential role for three reasons. First, they achieve a better understanding and a common assessment of the global spillovers from domestic policy actions and the potential policy trade-offs. The discussion on capital flow management measures is a

9. H. Rey, "Dilemma not trilemma: the global cycle and monetary policy independence," Proceedings, Economic Policy Symposium, Jackson Hole, Federal Reserve Bank of Kansas City (2013), pp. 1–2.
10. K. Forbes and F. Warnock, "Capital flow waves: Surges, stops, flight, and retrenchment," *Journal of International Economics*, 88, 2 (2012): 235–51.



good example.[11] The IMF should continue to lend its analytical and impartial voice to this effort.

Second, even if the scope for international monetary policy coordination is limited in good times, the existence of global institutions and fora makes coordination possible in bad times. Consider, for example, the establishment of a system of bilateral swap agreements among major advanced economy central banks, or the recent decision to establish such an agreement between the ECB and the People's Bank of China.

Third, global institutions and fora prompt work at bodies such as the Basel Committee for Banking Supervision, the International Organization of Securities Commission, or the Committee on Payments and Settlement Systems to establish the standards and infrastructures and create a level playing field, which are necessary for global markets to function in a smooth and safe way. In so doing, they foster risk-sharing through decentralized markets, avoiding the need to coordinate in the first place. Against the background of the possible "de-globalization" forces that I mentioned earlier, and given the ongoing transition to a more multipolar currency system, this work may become even more crucial.

To summarize, I am not convinced that the existing approach to monetary policy coordination should be fundamentally overhauled at the current juncture. Due to knowledge and legitimacy gaps, we should not believe that there can be a "global planner" which sets the rules or prescribes the monetary, prudential, fiscal, and structural policies that each country shall pursue. However, we can and should maintain the foundations for coordination to make global markets a safer place and allow for joint action in times of crises.

### THE EVOLUTION OF THE IMS

The IMS during the Bretton Woods era was strictly rules-based with fixed exchange rates and a gold standard. While appropriate in a world with capital controls and relatively modest trade flows, it proved to be too inflexible in the presence of large idiosyncratic shocks and growing internationalization. The end of the Bretton Woods era gave rise to an IMS that is mostly based on principles, which are discussed in fora such as the G7, G20, or the OECD and BIS. In particular, one principle holds that multilateral

11. International Monetary Fund, "The liberalization and management of capital flows: An institutional view," IMF Policy Paper (2012), http://www.imf.org/external/np/pp/eng/2012/111412.pdf [last accessed November 28, 2014].

financial safety nets should be available to countries facing large financial market disruptions caused by major external shocks.

An important element in the current IMS is the role of incentives. For example, the incentives for an economy to access the IMF's credit lines, bilateral swap agreements, or regional balance of payment support facilities depend on the conditionality embedded in each of these mechanisms, as well as on the degree of self-insurance acquired by this economy, e.g. through foreign exchange reserves. The problem here is that conditionality is not always explicit, nor is it consistent across instruments, providing a fuzzy set of incentives—and therefore a bias toward self-insurance. This may create arbitrage opportunities across facilities (in other words, a "race to the bottom" of conditionality, encouraging moral hazard) and, ultimately, a bias toward self-insurance, a sub-optimal way to deliver global stability. There is scope for improving the consistency of these facilities both horizontally across institutions and vertically between the global and regional level.

A different set of incentives stems from the surveillance carried out by the IMF and other institutions and fora. This has taken place since the demise of the Bretton Woods system at the bilateral level in the context of the IMF's Article IV consultations, and it has expanded recently at the multilateral level with the IMF's Spillover and External Sector Reports as well as the G20 Mutual Assessment Process, not to mention regional exercises.

The resulting recommendations are, however, not binding and therefore only constitute a light form of multilateralism. Clearly, countries may be reluctant to submit to closer scrutiny, fearing that the recommended policies may not be in their national interest. Thus, better awareness and maintaining a spirit of multilateralism will be a crucial element in strengthening the effectiveness of surveillance and contributing to global stability. This requires institutions that are both legitimate and effective. In particular, lack of progress in global governance reform (reflecting the shift toward a multipolar world) would fuel a lack of trust in the IMS. It would encourage the ring-fencing of national systems and the re-nationalization of savings, harming growth and jobs in all economies.

The belief that the comfortable pre-crisis world could return is long gone. And, in fact, we should not aspire to turn the clock back. The global economy has changed



fundamentally, and there is clearly a greater understanding of the role of cross-border linkages. The current IMS leaves countries with more domestic policy options to counter adverse idiosyncratic shocks than the inflexible system of the Bretton Woods era. At the same time, in a highly interlinked global economy consensus-building concerning the transmission of spillovers is crucial for dealing with shocks that affect substantial parts of the global economy. Moreover, the IMS should also provide incentives to foster appropriate preventive action that renders economies more resilient to shocks, and provide the necessary standards and infrastructures to make global markets work better as well as make coordination possible when warranted.

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# WILL THE GLOBAL FINANCIAL CRISIS HAVE A LASTING IMPACT ON THE POSITION OF MAJOR CURRENCIES VIS-À-VIS THE RENMINBI?

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According to the triennial central bank survey,[1] in 2007, just prior to the eruption of the US subprime crisis and two years before the emergence of the Greek sovereign debt crisis, forex deals with the US dollar (USD) on one side of the transaction represented 85.6 percent of total average daily foreign exchange market turnover, making it the most widely traded currency in the world.[2] The comparable figure for the euro was 37 percent, putting it in a distant second place after the USD.By contrast the same metric indicates that, with a meager share of 0.5 percent, the renminbi (RMB) was ranked in 20th position. In April 2013 the share of the USD had gone up to 87 percent, that of the euro down to 33.4 percent, and that of the RMB up to 2.2 percent of total average daily forex turnover.

Although the euro lost (and the USD gained) some ground, during the six years between 2007 and 2013, the USD and the euro maintained their first and second ranks respectively. However, the RMB climbed from the 20th to the 9th slot. Although its share is still very modest, the rate of growth of transactions involving it is very large. If,

1. Bank for International Settlements, "Triennial Central Bank Survey – Foreign exchange turnover in April 2013: preliminary global results" (September 2013), http://www.bis.org/publ/rpfx13fx.pdf [last accessed November 21, 2014].
2. The sum of the percentages adds up to 200 since, by convention, volume figures attribute the volume of any given traded currency pair to each of the currencies in the pair.

as some economists believe, this trend persists, the RMB may match the Japanese yen and the British pound and achieve the status of a key currency within the next decade.

The view that the RMB will in due time become a key currency was around even before the global financial crisis (GFC).[3] It is supported mainly by a record of fast rates of growth of the Chinese economy, by the growth of China's share in international trade during the last thirty years, and by a somewhat similar historical precedent involving the USD 100 years ago.[4] Although China is already a giant on the current account side of the balance of payments, it is still behind in capital account transactions.[5] In this respect, the RMB is obviously far behind major key currencies like the USD and the euro. In terms of both turnover on forex markets and use as a reserve currency, it is still dominated by lesser major currencies like the yen, the British pound, the Swiss franc, and even the Australian and the New Zealand dollars.

### THE IMPACT OF THE GFC ON THE RELATIVE POSITIONS OF THE USD AND THE EURO VERSUS THE RMB

The GFC triggered a number of changes in the relative positions of the US and the euro area on one hand and that of China on the other. Although, to date those changes have not appreciably altered the position of the RMB vis-à-vis the other two currencies, they have put in motion processes that have the potential to establish the RMB as a regional key currency within the next five to ten years. Foremost among those are the slowdowns in real growth and in international trade activity since the outbreaks of the subprime crisis in the US and the sovereign debt crisis in the euro area. Admittedly, the ripple effects of the GFC also slowed down Chinese growth after a while. Nonetheless, due to the persistence of the slowdown in real growth, particularly in the euro area, the relative position of China in terms of both GDP and share of international trade has risen in comparison to its pre-crisis level.

About a year after the November 2008 G20 Washington Summit on Financial Markets and the World Economy the leaders of the G20, of which China is a member, announced that this group would replace the G8 as the main economic council of wealthy nations. Since China was not a member of the G8 this change officially opened the door to its participation in decision making regarding the international financial system.[6] It is likely that this official recognition of China's increasing financial clout prompted Governor Zhou Xiaochuan, from the People's Bank of China (PBC) to propose a new international monetary system in which the IMF Special Drawing Rights (SDR) would eventually replace the USD as the world's main reserve currency.[7] Although this proposal did not take off, it signaled the beginning of China's involvement in attempts to reshape the international monetary system.

One of the conditions for becoming a key currency is the existence of deep and liquid bond markets in the currency. In terms of outstanding stocks, RMB denominated bonds are obviously far behind their US and euro area counterparts. However, by reducing the volume of new bond issues in both the US and the euro area, the GFC initiated a process that is reducing this gap. In particular, the US subprime crisis dramatically reduced the volume of US net new bond issues. This volume dropped from a yearly average figure of about USD3 trillion over 2004–07 to about USD200 billion per year over 2008–13. The euro area sovereign debt crisis had an even stronger adverse effect. The net new volume of bond issues in the euro area dropped from a yearly average of slightly less than EUR2 trillion over 2007–09 to practically zero between 2010 and 2013.[8]

By contrast the issue of RMB denominated offshore bonds accelerated dramatically during those years. A RMB Road Map, published by ASIFMA, reports that offshore RMB debt sold in the first quarter of 2014 peaked at USD31 billion following an increase of over 200 percent during the previous three years.[9] If those relative trends continue for several more years, the yuan denominated bond market will quickly acquire a respectable (although not yet dominant) position. During the first three quarters of 2011, RMB trade settlements amounted to about 8 percent of China's trade in goods and services.[10] The Chinese government actively promotes such developments particularly with trading partners within the ASEAN group of countries.[11]

3. R. Carbaugh and D. Hedrick, "Will the $ be Dethroned as the Main Reserve Currency?" *Global Economy Journal*, 9, 3 (2009); and D. Salvatore, "The Future Tri-Polar International Monetary System," *Journal of Policy Modeling*, 33 (2011): 776–85.
4. In 2010 China surpassed Japan in terms of GDP and became the second largest economy in the world after the US. The historical precedent is discussed in B. Eichengreen, "The Renminbi as an International Currency," *Journal of Policy Modeling*, 33 (2011), 723–30.
5. Aubain reports that, although the share of China in international trade (at 11.4%) is similar to that of the US, the share of the RMB in world trade payments is only a quarter of a percent (see in particular his Figure 1): M. Aubain, "Use of Currencies in International Trade: Any Change in the Picture?" World Trade Organization Staff Working Paper ERSD-2012-10 (2012).
6. There is little doubt that the decision to replace the G8 with the G20 was influenced in no small part by the financial panic cum credit arrest following the downfall of Lehman brothers in mid-September 2008.
7. Z. Xiaochuan (2009), "Reforming the International Financial System," People's Bank of China (March 3, 2009).
8. Details for the US and the EA appear respectively in Figures 6b and 6a of A. Cukierman, "Euro-Area and US Banks Behavior and ECB-Fed Monetary Policies during the Global Financial Crisis: A Comparison," Paper prepared for the SUERF Colloquium on Money, Regulation and Growth: Financing New Growth in Europe (2014).
9. ASIFMA, "RMB Roadmap" (May 2014), http://www.asifma.org/uploadedfiles/resources/rmb%20roadmap.pdf [last accessed November 21, 2014].
10. Further details appear in E. Prasad and L. Ye, "The Renminbi's Role in the Global Monetary System", Brookings Global Economy and Development (February 2012), http://www.brookings.edu/~/media/research/files/reports/2012/2/renminbi%20monetary%20system%20prasad/02_renminbi_monetary_system_prasad.pdf [last accessed November 21, 2014], pp. 37–38.
11. The ASEAN group includes: South Korea, Indonesia, Thailand, Malaysia, Singapore, Philippines, Vietnam, Myanmar, Brunei, Cambodia and Laos.

## THE FUTURE OF THE USD, THE EURO, AND THE RMB AS KEY CURRENCIES

It was even clear prior to the GFC that, in terms of GDP, China will eventually be the largest economy in the world. China is currently second only to the US. The crisis moved the point in time at which China will surpass the US closer to the present. Jorgenson and Vu estimate that this will happen sometime between 2018 and 2020.[12] It is clear that this change in relative size will eventually also elevate the RMB to, at least, the status of a major regional currency.

There is little doubt that the GFC moved the time of RMB exchange convertibility closer to the present by making Chinese policymakers more anxious to attain key currency status sooner, as well as by raising the growth differential between China and the issuers of current key currencies. But this still leaves the question of precise timing open. The Chinese authorities are keenly aware of the potential international role of their currency. Subject to the constraint that their control over the domestic financial system and the exchange rate does not dissipate too quickly they are taking steps aimed at increasing the role of the RMB in the settlement of trade transactions as well as at the creation of an onshore RMB denominated capital market.[13] The current separation between on-shore and offshore allows the Chinese authorities to foster the growth of an international RMB denominated bond market without losing control over the on-shore financial system. The offshore market has recently been growing by leaps and bounds and spreading to major international financial centers beyond Hong Kong.

Since 2006 the Chinese government allowed a substantial but gradual and controlled appreciation of the RMB—from over RMB8 to USD1 in 2005 to the current (November 2014) rate of RMB6.13 to USD1. It is likely that this persistent appreciation of the RMB along with expectations of additional liberalization of the exchange rate nurture expectations for further appreciation of the yuan. Those expectations naturally invigorate demand for RMB denominated bonds in offshore markets and with it the volume of RMB denominated assets in the world.

Eichengreen and Flandreau document an intriguing similarity between the USD at the beginning of the 20th century and the RMB today.[14] In spite of the fact that US

12. D. Jorgenson and K. Vu, "The Rise of Developing Asia and the New Economic Order," *Journal of Policy Modeling*, 33 (2011), 698–716.
13. Box 5.1 in Prasad and Ye (2012), op. cit., provides examples of specific measures. They include allowing overseas institutions to apply for RMB accounts for trade settlements, signing currency pacts with Brazil and Japan to promote the use of their currencies for bilateral trade and investment flows, allowing the Bank of China to offer RMB deposit accounts in NY, and allowing J.P. Morgan to create a RMB1 billion denominated fund in November 2011.
14. B. Eichengreen and M. Flandreau, "The Rise and Fall of the Dollar," *European Review of Economic History*, 13 (2009), 377–411; B. Eichengreen and M. Flandreau, "The Federal Reserve, the Bank of England and the Rise of the dollar as an International Currency, 1914–1939," BIS Working Paper No 328 (November 2010).



trade had surpassed that of the UK by 1914, the leading key currency of the time was sterling. They convincingly demonstrate that, given this background and following active promotion of the USD as an international currency by US authorities, the USD surpassed sterling as a leading international and reserve currency within a span of just ten years. An implication of this historical episode is that, if Chinese authorities seriously undertake the international promotion of their currency, the RMB is likely to become a key currency relatively quickly.

How vigorously the Chinese authorities pursue such a policy hinges on the tradeoff between the benefits of promoting the RMB to key currency level and the political and economic risks associated with relinquishing control over on-shore financial markets as perceived by the Chinese authorities. In tackling this fundamental question one should not lose sight of the basic ideological differences between the US and China. US norms favor minimal government intervention, free markets, and individualism. By contrast, the ideology of ruling Chinese elites is that individual behavior should be largely subordinated to the needs and requirements of the state and to its aggrandizement.[15] This ideology implies that, subject to adequate economic development, government should retain sufficient control in order to achieve state objectives.

In conclusion, although the USD/sterling historical precedent supports the view that Chinese authorities have the ability to quickly elevate the RMB to major currency status, they may delay full implementation of the necessary steps because they consider relinquishment of financial and exchange rate controls as a major cost.[16] On the other hand, recent experience shows that a financial crisis, such as the GFC in the countries issuing major key currencies, encourages Chinese authorities to speed up the process of liberalization in order to achieve key currency status sooner.

My current judgment (November 2014) is that within ten years the RMB will at least be at par with the USD (and surpass the euro) as a regional trade settlement currency in East Asia.[17] The RMB is also likely to become a close second to the euro as a world reserve currency. Ruling out the recurrence of a major financial crisis in the US, the USD will maintain its position as the world number one currency for both trade settlements

15. J. Craig, "Are East Asian Economic Models Sustainable?" Centre for Policy and Development System, Queensland, Australia, http://cpds.apana.org.au/Teams/Articles/AsiaSustainable.htm#Unsustainable [last accessed November 21, 2014].
16. Cukierman discusses the role of ideology, institutions, and politics for macroeconomic forecasting: A. Cukierman, "The Roles of Ideology, Institutions, Politics and Economic Knowledge in Forecasting Macroeconomic Developments: Lessons from the Crisis," *CESifo Economic Studies*, 56, 4 (December 2010): 575–95.
17. Salvatore (2011), op. cit., expresses a similar view.

and capital account transactions except possibly in East Asia. The euro will continue to function as the major currency in Europe, although its share of total daily forex turnover will go down and may even be overtaken by the RMB.

Looking ahead about ten years, the most likely scenario is that of a tri-polar system in which the USD maintains its primary key currency position, the euro functions as the main currency in Europe, and the RMB fulfills the same function, at least for trade settlements, in East Asia.

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## REFLECTIONS ON REFORM OF THE INTERNATIONAL MONETARY SYSTEM

JACOB FRENKEL

Very few international conferences have produced such consequential outcomes as the Bretton Woods Conference that took place at the Bretton Woods hotel in New Hampshire in July 1944. It created the twin sister organizations—the International Monetary Fund and the World Bank. It also laid the foundations for the international monetary system of the post World War II era.

Over the years, the world economic and financial system has witnessed a growing degree of interdependence and interconnectedness. The various economies are linked to each other through three key linkages: commodity trade; capital mobility; and exchange of national monies. The rapid growth of international capital markets contributed to the speeding up of the international transmission of business cycles and to the spreading of financial crises throughout the international economy. These developments gave rise to various proposals for reform of the international monetary system, some of them very complex.

The study of the historical record of the international monetary system is motivated by the notion that "those who do not remember the past are condemned to repeat it."

Unfortunately, when applying this dictum to the study of institutions and societies, one frequently observes that, in contrast with many of the experimental sciences, when forecasts of the impact of institutional and legal systems on the behavior of individuals and societies are made on the basis of past experience, the past is not useful in forecasting the future. This inherent difference between social and physical sciences reflects the impact of experience and memories on behavior. It renders the study of past records somewhat less productive than one would have liked since once we go through an experience (as individuals or as a society) we cannot ignore it and start all over again. For such cases Lewis Carroll's phrase "all the King's horses and all the King's men couldn't put Humpty Dumpty together again" is clearly applicable. Therefore, I believe that the restoration of the gold—US dollar system à la Bretton Woods is out of the question. In this paper I discuss: (i) the main characteristics of the flexible exchange rates system; (ii) the proposed restoration of exchange rate rules and policy cooperation; (iii) the persistence of diversity of views; (iv) the question of who should join target zones; and (v) the question of the timing and content of reform. The paper concludes with a list of seven challenges that remain and that need to be addressed in a future reform of the international monetary system.

## THE CHARACTERISTICS OF FLEXIBLE EXCHANGE RATES

The presumption that the flexible exchange rates system failed is typically based on the observations that exchange rates have been highly volatile, and that changes in exchange rates have been unpredictable and have not been closely linked to differentials between national inflation rates. Furthermore, if data from forward markets for foreign exchange provide measures of the market's prediction of future changes in exchange rates, then a comparison between actual and predicted changes reveals that most of the changes in exchange rates have been unpredicted. The forward market has accounted for only a small proportion of the actual variability of exchange rates. Since these changes in exchange rates have not reflected exactly inflationary differentials, they have resulted in large changes in *real* exchange rates.

These facts, however, should not have come as a surprise since they are intrinsic characteristics of flexible exchange rate regimes. Events in the foreign exchange markets, as in other asset markets, are frequently dominated by changes in information.



It follows that periods that are dominated by "news" are likely to be periods during which exchange rates, which are highly sensitive to expectations concerning the future course of events, exhibit large fluctuations. Since by definition the "news" cannot be predicted on the basis of past information, it is evident that, by and large, fluctuations in exchange rates are unpredictable. Furthermore, since the prices of goods comprising the aggregate price index are less sensitive to expectations, it follows that during periods dominated by the news that alters expectations, exchange rate developments will in general not mirror the course of inflationary differentials. Once we adopt a flexible exchange rate regime, we should expect to get these characteristics; they come with the territory.

## SHOULD EXCHANGE RATES BE "FIXED" THROUGH A PPP RULE?

The volatility and unpredictability of exchange rates have stimulated many plans for the restoration of some form of "orderly" conduct for them. A popular intervention rule has been the PPP rule (purchasing power parity rule) by which exchange rates adjust so as to exactly match inflationary differentials.

There are, however, at least five difficulties with a PPP rule. *First*, there are intrinsic differences between the characteristics of exchange rates and the prices of national outputs. These differences, which result from the much stronger dependence of exchange rates (and other asset prices) on expectations, suggest a more relevant yardstick: the volatility of exchange rates should be assessed by comparison with variability in the prices of other assets like securities rather than variability in the prices of national outputs. By this measure the evidence shows that the variability of exchange rates has been even lower than that of stock market indices. Of course, this does not mean that the degree of volatility of either exchange rates or stock market indices has been appropriate. Rather, that exchange rate volatility cannot be judged to be "excessive" on the basis that it exceeded the volatility of national output price levels.

*Second*, the prices of national outputs do not adjust fully to shocks in the short run, and thus intervention in the foreign exchange market to restore purchasing power parity would be a mistake. When commodity prices are slow to adjust to current and expected economic conditions, it may be desirable to allow for "excessive" adjustment in some other prices.

*Third*, continuous changes in real economic conditions require adjustment in the relative prices of different national outputs. Under these circumstances, what seem to be divergences from purchasing power parities may really reflect equilibrating changes.

*Fourth*, if there is short-run stickiness of domestic goods prices in terms of national moneys, then rapid exchange rate adjustments, which are capable of changing the relative prices of different national outputs, are a desirable response to changing real economic conditions. An intervention rule that links changes in exchange rates rigidly to changes in domestic and foreign prices in accord with purchasing power parity ignores the occasional need for equilibrating changes in relative prices.

*Finally*, there are the difficulties of determining the appropriate base period (one when exchange rates were in "equilibrium") and the appropriate price indexes (traded goods prices included in wholesale price indexes reflect the exchange rate fairly quickly).

Thus, while it might be tempting to "solve" the problem of divergences from PPP by adopting a rigid PPP rule, it will be a mistaken policy course. The key point to realize is that the volatility of exchange rates is not the likely source of the difficulties but rather a *manifestation* of the prevailing package of macroeconomic policies. Fixing or manipulating the rates without introducing a significant change into the conduct of policies may not improve matters at all. It may amount to breaking the thermometer of a patient suffering from high fever instead of providing him with proper medication. The absence of the thermometer will only confuse matters and will reduce the information essential for policy making. If volatile events and volatile macroeconomic policies are not allowed to be reflected in the foreign exchange market, they are likely to be transferred to and reflected in other markets (such as labor markets) where they cannot be dealt with in as efficient a manner.

The preceding argument ignores, however, one of the important characteristics of the gold–US dollar system—the imposition of discipline. Accordingly, it could be argued that the obligation to peg the rate or to follow a predetermined intervention rule would alter fundamentally the conduct of policy by introducing discipline. Experience seems to suggest, however, that national governments are frequently reluctant to adjust the conduct of domestic policies so as to be disciplined by the exchange rate regime. Rather, it is more likely that the exchange rate regime will adjust to the degree of discipline that national governments choose to have.



A similar argument applies to the feasibility of having an effective international coordination of macroeconomic policies. The case for coordination is clear: the interdependence among the various economies implies that policy actions in one country (especially if it is large) impact on the rest of the world and, unless such an impact is taken into account, the ultimate outcome from the global perspective is likely to be sub-optimal. Policy coordination was viewed as an effective mechanism through which such externalities can be internalized. In practice, however, experience has suggested that in present democratic systems, national governments are unlikely to adopt policy measures that are not consistent with their domestic policy objectives even if they may be seen as serving the global interest. Thus, a rigid international *coordination* of policies (especially fiscal policies) would be difficult to be relied upon. A more promising mechanism for internalizing the externalities can operate through policy *cooperation*, implying an ongoing exchange of information, data and analysis, which can contribute significantly to international harmony and mutual understanding in the globally integrated economic system.

### WHY OPINIONS DIFFER AND DO NOT CONVERGE?

One of the intriguing puzzles concerning the choice among alternative exchange rate regimes is the remaining wide division of opinions about the best choice. It seems that over the years neither the evolution of events nor the developments of economic theory have succeeded in eliminating the gap between extreme views and thereby bringing about a convergence of opinions in both academic and policy circles. For example, proposals for target zones have been the subject of considerable discussions and analysis, and yet many disagreements remain. My interpretation of the lack of convergence is that the participants in the debate have not shared the presumption concerning the relevant alternative to the system they promote. Thus, promoters of fixed exchange rate regimes believe that the relevant choice is between a "good fix" and a "bad flex"; on the other hand, promoters of flexible exchange rate regimes believe that the relevant choice is between a "bad fix" and a "good flex." As is obvious, if these are the alternative choices the outcomes are self-evident—for who would not prefer a "good fix" over a "bad flex"? And, by the same token, who would not prefer a "good flex" over a "bad fix"? In reality, however, the choices are more complex and much less trivial; they may involve a choice between a "good fix" and a "good flex" or, even more frequently, between a "bad fix" and a "bad flex." When these are the choices, one may expect a divergence of views. Reasonable people may also differ in their assessments of which "good" system is more likely to gravitate toward its "bad" counterpart. Furthermore, the likelihood that a given "good" system would deteriorate and be transformed into its "bad" counterpart depends on the circumstances and, therefore, it is not unreasonable that some economies would be wise to choose greater fixity of exchange rates while some other economies would be equally wise to choose greater flexibility.

The lack of convergence may also reflect the fact that there are also different ideas about the concept of the "equilibrium exchange rate." There is, of course, the trivial definition that defines the equilibrium exchange rate simply as the rate that is generated by the market. A more subtle approach defines the equilibrium exchange rate as the rate that minimizes deviations from "underlying competitive positions." Unfortunately, this definition lacks specificity in that it leaves open the definition and meaning of the concept of "underlying competitive positions." Some define the equilibrium exchange rate in a more useful and operational manner by focusing on the concept of "sustainability." Accordingly, to qualify as an equilibrium exchange rate, it has to be sustainable, in the sense that it reflects policies that are sustainable. Therefore, for example, an exchange rate that reflects an unsustainable fiscal position would be deemed to be a non-equilibrium exchange rate.

Alternatively, even if the exchange rate is technically sustainable, there can still be a great divergence of opinions regarding the desirability of alternative economic and social outcomes (such as growth, exports, income distribution and the like), which are generated by the exchange rate. By this criterion the definition of the "equilibrium exchange rate" is not just a technical matter as it also reflects social priorities and preferences. But such disagreement and lack of convergence regarding the desired package of economic policies, needs to be addressed directly and does not require necessarily a reform of the system as a whole.

Another reason for the lack of international convergence of views regarding the optimal system is that different economies face different economic shocks. Theory tells us fairly clearly that the desired exchange rate regime depends on the nature of the shocks



that the economies face. Are they fiscally generated? Are they monetarily generated? Are they induced by the private sector or by the public sector? Are the shocks "real" or "nominal"? Is the origin of the shocks domestic or foreign? Are the shocks permanent, or transitory? This long list of illustrative questions provides the rationale for the diversity of views regarding the optimal exchange rate system. A system that allows for diverse policies under diverse conditions is likely to be more sustainable than a system that forces common policies by countries that do not face common shocks.

### CRITERIA FOR JOINING TARGET ZONES

One of the difficulties in implementing exchange rate systems that are based on target zones (within which the exchange rates can move), concerns the criteria for the choice of membership of countries that participate in the scheme. The literature on optimal currency areas highlights several criteria according to which prospective members should be chosen. These criteria include: (i) the degree of openness of the economy; (ii) the size of the economy; (iii) the degree of commodity diversification; (iv) the degree of inflation rates among prospective members; (v) the degree of capital mobility; (vi) the degree of other prevailing forms of integration (like custom unions); (vii) the degree of similarities of tax structures and other fiscal characteristics; and (viii) the degree of similarities of external and domestic monetary and real shocks. A central question is: how do the various proposals for membership in target zones measure up to this set of characteristics?

Suppose target zones are established. Is it likely that the member countries will be willing to adjust their prevailing package of macroeconomic and structural policies so as to conform to the rules of the game? The recent experience of the eurozone demonstrates the very strong political will to keep the zone together but, at the same time, it demonstrates the great difficulty in bringing about the critical policy changes (to both structural as well as fiscal policies) that are necessary to ensure long-term sustainability. Other countries that do not belong to a currency area face the important choice between having an independent monetary policy with flexible exchange rates, and having a fixed exchange rate with the consequent loss of control over monetary policy. The increased integration of international capital markets implies that for most countries it will be very difficult to avoid making this tough choice.

In contrast with fixed parities, target zones are moving. As they move, how do we escape from the inherent difficulty of having the private sector speculate against governments? In the absence of an anchor what ensures credibility? How exactly are conflicts being resolved? These are critical questions that need precise resolution prior to implementation. I believe that the central difficulties with the current regime do not rest only with the exchange rate policies but rather with the overall mix of the uncoordinated macroeconomic policies as well as inadequate structural policies. It is unlikely, therefore, that the introduction of exchange rate targets can in and of itself do any good unless it is accompanied by drastic changes in the way macroeconomic policies are being designed. Placing excessive weight on the role of exchange rates may divert attention from the more central role that global macroeconomic policies play in the interdependent world economy.

In view of the clear benefits that small open economies can get by joining (or forming) a currency union, why does the international monetary system not have more currency areas? Why are so many small economies choosing to forgo the benefits of currency union? In dealing with this question it is instructive to recall John Stuart Mill's analysis in his *Principles of Political Economy* in the mid-19th century. There, he concluded regretfully that:

> *So much barbarism, however, still remains in the transactions of the most civilized nations, that almost all independent countries choose to assert their nationality by having, to their own inconvenience and that of their neighbors, a peculiar currency of their own.*

In predicting the future course of events, Mill believed that eventually the international monetary system would evolve into a unified currency area, a process that would be brought about by what he termed "the progress of political improvement."

### SHOULD THE SYSTEM BE REFORMED? OR "IF IT AIN'T BROKE, DON'T FIX IT"

A central characteristic of any operational monetary system must be a formal resolution of the so-called "(*n-1*) problem." In a world in which there are *n* currencies, there are only *n-1* independent exchange rates. Therefore, the system has a single degree of freedom. The disposition of this degree of freedom defines the system, and the way in which it is used must be explicitly specified. In the original Bretton Woods system each of the *n-1* countries pegged their currency to the US dollar; the extra degree of freedom was allocated to the United States which obliged itself to peg the price of gold at $35 an ounce; the other *n-1* countries then committed themselves to peg their currency to the US dollar. This example illustrates that a design of the international monetary system is not complete unless and until it provides an explicit resolution of this *n-1* problem.



A good international monetary system must be practical, easy to implement, transparent, and relatively simple but still sufficiently rich to fit the complex world. In this regard, it is worth recalling Albert Einstein's dictum, according to which: "to each problem one should always try to find the simplest solution, but avoid solutions that are simpler than that."

A reform of the international monetary system should be viewed as a constitutional change that occurs very rarely. It should clearly not be used as another "policy instrument." The success of a new monetary arrangement depends on the adoption of a consistent set of policy tools and on a reasonable understanding of the implications of each course of action. It might be very costly to experiment with a new system just in order to learn how it works. The cost of delaying the adoption of a new international monetary arrangement until its full (direct and indirect) implications are understood is likely to be small relative to the cost of a premature implementation. The various proposals for reform of the present international monetary system have many attractions. But since they are novel, prudence is clearly called for. More discussions and critical evaluations are highly desirable. In view of this it may be appropriate to recall a quote from John Maynard Keynes' remarks in his closing speech at the original Bretton Woods Conference in 1944. Speaking on the desirability of critical evaluations of the proposed system Keynes said:

> *I am greatly encouraged, I confess, by the critical, skeptical and even carping spirit in which our proceedings have been watched and welcomed in the outside world. How much better that our projects should begin in disillusion than that they should end in it!*

## UNFINISHED BUSINESS

The past few years have witnessed the deepest economic and financial crisis since the great depression of the 1930s. Economic policies have responded in an unprecedented vigor. Both fiscal and monetary policies have entered uncharted territories. Unconventional monetary policies with interest rates driven close to zero have become the rule rather than the exception. The international monetary system has been put under severe stress and both policy makers and academics wonder whether the system is ready to face the new challenges in the global economy. In what follows, I outline briefly seven challenges that remain and that a reformed international system must address.

1. The global economy has witnessed a dramatic shock in the recent financial crisis. As a result, the level of world output declined in 2009 as growth was negative. Practically all of the industrial countries went into recession and, in contrast with past crises, the developing countries, especially in Asia, have shown greater resilience. Has the system learned how to prevent such a cataclysmic event in the future?

2. Associated with the sustained economic growth of recent decades, the volume of international trade has also expanded every year. A major exception was 2009 in which the volume of trade actually shrunk by more than 10%. This decline in the volume of international trade has caused a further aggravation of the financial crisis. Has the system developed sufficient mechanisms to prevent a repeat such development?

3. After many years of debate concerning the size of external imbalances of various countries, such imbalances still prevail among the major economic blocs and also within an economic bloc such as Europe. Can the system develop operational mechanisms that will prevent the emergence of large and sustainable external imbalances before such imbalances create dangerous vulnerabilities to the system?

4. The center of gravity of economic power has shifted dramatically during the past twenty years from the industrial countries to the developing countries, especially in Asia. For example, while in 1990 sixty-three percent of the world output was produced in the US, Europe, and Japan, today the same industrial countries produce only forty-five percent of world output. The rising relative share of the developing countries made up for the declining relative share of industrial countries. For example, whereas in 1990 China and India together produced only seven percent of world output, today these countries produce more than twenty percent of world output; these are huge changes in a historical perspective. Is the international monetary system capable of adjusting so as to reflect the new structure of the world economy? Specifically, are the industrial countries willing to forgo part of their IMF quota share in favor of the developing countries? By the same token, are the developing countries able and willing to play a larger role in the international monetary system commensurate with their growing economic size?

5. Most central banks in the world have lowered their interest rates to levels close to zero. These low levels are below what is sustainable and desirable for the medium term. At the same time many central banks continued to inject liquidity to the system through the adoption of "quantitative easing" and unconventional monetary policies. Will the process by which normalization is restored and interest rates are raised be orderly? In particular, are the balance sheets of financial institutions sufficiently robust so as to withstand the challenges arising from higher rates of interest?

6. The creation of the eurozone provided the opportunity for great improvement in Europe's economic performance. However, it resulted in great structural imbalances within Europe. Are European policy makers able to reduce such structural imbalances so as to lower the rate of unemployment and reduce the gaps among the various eurozone countries in labor market conditions, as well as in competiveness and productivity?

7. Demographic trends all over the world pose serious challenges. In many countries, the population is aging and in some countries, the size of the population is shrinking. Such trends pose significant challenges to social security systems, to pension systems, to fiscal management and the like. Can the international monetary and financial system develop satisfactory approaches to deal with such medium-term challenges?

Hopefully, in the future when we commemorate the 80th anniversary of the Bretton Woods Conference, some (and maybe all) of these challenges will have found positive solutions.

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## STRENGTHENING LINES OF DEFENSE TO PREVENT FUTURE FINANCIAL CRISES

L. ENRIQUE GARCIA

Financial crises share some common features. Someone borrows too much from somebody else with excess cash. Debt builds up rapidly, until one day credit lines dry up. The crisis that follows is profound and the recovery is protracted, with large declines in output and employment. Borrowers, lenders, propagation mechanisms, and the triggers may change, but the accumulation of imbalances and their painful unwinding are always part of the plot of a crisis.

For example, in the 1970s and 1980s, financial crises in Latin America involved governments in emerging markets borrowing directly from banks in developed economiesto finance their increasing budget deficits. Current account deficits mirrored fiscal imbalances. External debt soared until countries were no longer able to pay and defaultedon it. A deep crisis followed and the aftermath is still remembered as the "lost decade" in Latin America.

During the last decade though, financial crises were characterized by lending booms to the private sector. Loopholes in the regulation enabled systemic risk-taking by financial institutions that further amplified the effect of large capital inflows. For example, mounting current account deficits in the US were financed by capital inflows from emerging markets, while countries with large current account surpluses in Europe financed the deficits in peripheral countries. While things fell apart abruptly after the Lehman crash in the US, the adjustment in Europe has been slow and ongoing but no less painful. Moreover, these banking crises morphed into sovereign problems as governments absorbed the cost of rescuing financial institutions and budget deficits expanded as economies slid into recession.

In a globalized world, it is hard to think that capital will stop moving from one place to another in search for yield or safe havens, even if global imbalances moderate as advanced economies progressively recover and emerging markets converge to more moderate growth rates. Capital shifts may stir volatility and affect the health of financial systems, even in mature markets.

### WHAT CAN BE DONE?

A first line of defense is to improve financial regulation, particularly to deal with capital upswings that may contribute to the formation of asset bubbles. Yet a global regulation is difficult to design and probably nearly impossible to implement. A universal approach to regulation presumes that countries are willing to surrender sovereignty to international agencies. This is rather unlikely. In fact, the European experience shows that creating bank supervision and regulation at the monetary union level has been problematic and that general rules may be inadequate to accommodate the varying needs and preferences of different jurisdictions. At the same time, experience shows that it is quite difficult to assign the oversight of banks that operate in several countries to a single national authority.

From the previous comments, it is clear that many issues remain to be addressed to improve local regulation and enhance coordination between national and regional supervisory authorities, in order to reduce the scope for regulatory arbitrage and mitigate the effect of cross-border capital movements.

A second line of defense from capital fluctuations is through the assistance of international financial institutions (IFIs) and regional financial arrangements (RFAs). When a sudden stop occurs, credit lines from IFIs and RFAs are crucial to avoid reserve depletion and strong adjustments in domestic absorption and to deal with liquidity shortages.



Ideally, global and regional financial institutions should be strengthened and complement each other to maintain financial stability and prevent disruptions on international payment systems.

Nonetheless, after the Asian crisis in the late 1990s, the role of the IMF in handling these situations has been questioned, and its governance—with little participation of emerging economies—has also been criticized. This has pushed regional cooperation initiatives, such as the Chiang Mai Initiative (CMI) launched in 2000, as complementary defense mechanisms to the IMF with more egalitarian governance. Contagion during the Asian crisis brought to light the importance of regional policy coordination to avoid crises in the future.

However, countries have resorted to reserve accumulation as their first line of defense for liquidity shortages instead of using credit facilities with RFAs. In fact, CMI was not activated during the global financial crisis, nor was the Latin America Reserve Fund (FLAR).

Although reserve accumulation may seem reasonable from an individual country perspective, it may not be globally efficient. It may actually be the root of future crises.

### WHAT SHOULD BE THE ROLE OF RFAS?

There is no doubt that RFAs can play a very important role. Nonetheless, RFAs should supplement but not substitute the IMF and can help their members to bridge liquidity shortages, reduce dependence on IMF lending, and strengthen regional financial cooperation and surveillance. But so far, they cannot supplant the IMF in its role of preserving global financial stability and providing liquidity in case of systemic crises. RFAs' lending capacity is actually rather limited compared to the reserves held by large member countries. For instance, CMI can draw up to USD240 billion while China's reserves surpass USD3 trillion. The situation with FLAR is not very different with USD2.3 billion of paid in capital compared to approximately USD170 billion dollars in reserves held by member countries.

What RFAs can do (and have successfully done so far) is to swiftly assist countries during liquidity shortages caused by idiosyncratic shocks. At least in Latin America, shocks with systemic impact and extensive contagion are not the norm. Since the debt crisis in the 1980s, there has been just one episode where the effect of the external shocks was generalized: 2009. Even in 1999, contagion did not extend through the entire region. This means that, with counted exceptions, countries do not register sudden stops or terms of trade shocks simultaneously. In fact, member countries have not demanded liquidity from FLAR at the same time. For systemic crises, countries resorted to the IMF instead.[1]

The need for strengthening cooperation between the IMF and RFAs is thus clear. But so far this lacks explicit rules and mostly amounts to ad-hoc engagements. Guidelines should be set before crises strike, not in the heat of them. This would minimize overlapping, increase effectiveness, and expedite processes. Some consistency in lending conditions may be attained to avoid facility shopping, while preserving comparative advantages. For instance, RFAs may extend liquidity almost immediately upon request from member countries and with no conditionality. This is not likely to change and perhaps it should not. In turn, gains could be derived from specializing in products to complement what each type of institution is best at providing.

This type of cooperation does not preclude the amplification of RFAs by increasing the reserve pool from which they can draw. In the case of FLAR, this could enhance its role as a first line of defense during non-systemic episodes. This is particularly relevant for small and medium sized countries with less external financing options than for larger members.

RFAs in their current form may not serve as a first line of defense during systemic of contagion episodes, for the demands of larger countries would surpass what RFAs can provide. One could think of a substantial increase of the pool of reserves, but countries may not be willing to forgo significant amounts of their reserves for balance of payments support of larger members, not unconditionally at least. There are other funding options like swaps between members and with central banks outside the region that RFAs can facilitate. Even when nature and magnitude of the shock demand IMF intervention, stronger RFAs may play a role to guarantee a smoother engagement between members and global institutions. This would no doubt improve the global financial architecture.

## A FINAL COMMENT

What is fairly certain is that the combination of persistent global imbalances and unfettered capital flows, through financial markets that are globally integrated but locally regulated, will continue to generate market volatility and financial crises in

1. For detailed empirical evidence, see Daniel Titelman, “Hacia una cobertura regional más amplia de un fondo de reserva,” (2012), https://www.flar.net/documentos/4925_Presentaci%C3%B3n_Titelman.pdf [last accessed November 11, 2014].



the future. The only uncertainty is the nature, origin and timing of the next financial crisis, as they always take us by surprise.

In addition to sound macroeconomic policies and strong and well-regulated national financial systems, RFAs can play an important role as a complementary line of monetary defense against contagion and systemic effects. Although FLAR represents an important regional effort in this direction, Latin America should take advantage of the current lull before the next storm to further strengthen its only effective regional monetary institution.

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# TURTLES DON'T CLIMB TREES: LACK OF FLOATING RESULTS FROM GLOBAL FAILURES

ILAN GOLDFAJN AND IRINEU DE CARVALHO FILHO

A LITTLE MORE than a decade ago, the case for the so-called "bipolar view" appeared beyond reasonable doubt. In 2001, Stanley Fischer, then the first deputy managing director of the International Monetary Fund, famously remarked that fixed or pegged exchange rates were a factor in every major emerging market financial crisis in recent years.[1] During that same period, those emerging market countries without pegged rates were able to avoid such crises.

In Fischer's formulation of the bipolar view, "for countries open to international capital flows, (1) pegs are not sustainable unless they are very hard indeed; but (2) that a wide variety of flexible rate arrangements are possible; and (3) that it is to be expected that policy in most countries will not be indifferent to exchange rate movements."

Thus, as many emerging economies chose their exchange rate institutions with the goal of minimizing the risk of financial crises, there was a "hollowing-out of intermediate regimes" during the 1990s, as the proportion of countries with hard pegs and more flexible exchange rate arrangements increased.

1. Stanley Fischer, "Exchange Rate Regimes: Is the Bipolar View Correct?" *Finance and Development*, 38, 2 (June 2001).

But since then, there have been challenges to the bipolar view, from an intellectual and a more pragmatic perspective. Firstly, the intellectual case for the bipolar view weakened because events raised doubts about the desirability of standing at either the hard or the soft end of the spectrum of exchange rate regimes.

On the hard end, the crisis in Argentina showed that even currency boards may not be hard enough pegs, and the crisis tested the belief of many in the profession that hard pegs could provide incentives for fiscal discipline in otherwise profligate countries. More recently, the profession's belief in hard pegs was tested by events following from the Global Financial Crisis. The problems on the periphery of the eurozone highlighted unrecognized frailties in currency unions, and the dynamics of the credit boom and the painful adjustment in the Baltics highlighted both the financial stability risks of fixed regimes and the costly adjustment to external shocks when monetary policy is not an option.

On the soft end, there has been a growing recognition that monetary policy independence may be overrated in a world where global financial cycles ignore national borders.[2] Doubts about the soft end are typified by the fear of floating[3] and the fear of appreciation,[4] which we saw played out in the active management of exchange rates even by countries that nominally float their currencies.

The generalized hoarding of foreign currency reserves by emerging countries is a strong pragmatic challenge to the bipolar view. At first, this was mostly an Asian phenomenon, as foreign exchange reserves in China increased from USD140 billion in December 1997 to USD1,528 billion in December 2007, and from USD20 billion to USD262 billion over the same period in South Korea. But soon reserve hoarding strategies spread to other regions, as demonstrated by the increase in Brazil's central bank reserves from some USD45 billion in December 2004 to USD368 billion in August 2014.

As more and more countries have felt the urge to hoard reserves, the middle ground has reappeared. Floating is free for only a few countries. For most other countries, one can recognize a pattern of reserve accumulation during the good (or normal) times, when money is cheap, capital inflows are plenty or terms of trade are favorable. When bad shocks trigger capital outflows, selling FX reserves helps limit the impact on the economy, curbing exchange rate and interest rate movements.

2. For example, Hélène Rey, "Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence," Paper presented at the Jackson Hole meeting (2013).
3. Guillermo Calvo and Carmen M. Reinhart, "Fear of Floating," NBER Working Paper 7993 (2000).
4. Eduardo Levy-Yeyati and Federico Sturzenegger, "Fear of Appreciation," World Bank Policy Research Working Paper 4387 (2007).



This pattern of reserve accumulation during normal times is widespread. It is remarkable that even among inflation-targeting countries, foreign exchange market intervention (under the guise of reducing exchange rate volatility or smoothing the transition of the exchange rate to its equilibrium) seems to be more the norm than the exception. That is in stark contrast to the conventional view in the early years of inflation-targeting regimes that exchange rate management was potentially in conflict with inflation targets.

It is tempting now to point fingers. To a purist's eyes, foreign exchange intervention may appear to be at odds with the goal of inflation stability. To other more pragmatic observers, the active management of foreign reserves may appear an unhealthy distraction—there is only limited evidence that foreign exchange intervention is effective at controlling exchange rates or volatility. If the market perceives that foreign exchange intervention has a goal (say, to maintain the exchange rate at a certain level), then failure to reach this goal clearly hurts a central bank's reputation.

But as we can learn from Brazilian folk wisdom, "turtles don't climb trees; if there is a turtle on a tree branch, someone must have put it there." Perhaps there is no puzzle behind all this foreign exchange intervention and reserve accumulation.

## NEED FOR A LENDER OF LAST RESORT

In our view, just like the bipolar view, the massive hoarding of reserves by emerging market central banks started as a byproduct of the emerging market crisis of the 1990s. For some observers,[5] Chinese reserve hoarding was part of a strategy to bias development toward export industries in order to overcome the problems caused by a distorted financial system. For others,[6] reserve accumulation was driven for the most part by a precautionary motive: after suffering through painful balance-of-payment crises and shunning the bitter medicine prescribed by international financial institutions, Asian emerging economies chose to self-insure through reserve hoarding.

The coming normalization of monetary policy by the Fed is in the minds of asset managers, bankers and civil servants in São Paulo, London and Jakarta. When it happens, interest rates on dollar instruments will increase, and we will approach the

5. Most notably Michael P. Dooley, David Folkerts-Landau, and Peter Garber, "The Revived Bretton Woods System: The Effects of Periphery Intervention and Reserve Management on Interest Rates & Exchange Rates in Center Countries," NBER Working Paper 10332 (2004).
6. For example, Joshua Aizenman and Jaewoo Lee, "International Reserves: Precautionary versus Mercantilist Views, Theory and Evidence," NBER Working Paper 11366 (2005).

end of the age of cheap money. That would most likely bring about some change in the pattern of capital flows.[7] When that happens, it is safe to expect that some emerging or advanced economies will find themselves at risk of balance-of-payment or liquidity problems, with the attendant output contractions and liquidation of viable long-term projects.

For some large and systemic countries, liquidity support is probable (as was the case for Brazil in 2009).[8] During the Global Financial Crisis, the Federal Open Market Committee (FOMC) authorized dollar-liquidity swap lines with the European Central Bank and the central banks of Australia, Brazil, Canada, Denmark, Japan, South Korea, Mexico, New Zealand, Norway, Singapore, Sweden, Switzerland and the United Kingdom. But even those large and systemic countries cannot count on ad hoc external support from a foreign government when it is most needed.

And there is the logic behind the generalized reserve hoarding. In the absence of a lender of last resort or insurance mechanism against sudden stops, there is a strong precautionary case for accumulation of international reserves, even if hoarding reserves is costly from an individual country point of view.[9] This behavior highlights the lack of confidence in a collective framework to limit the risk of sudden stops. The Bretton Woods institutions, most notably the International Monetary Fund, have stepped in to rescue countries facing currency crises or to provide precautionary credit lines to those at risk of suffering contagion effects of crises abroad. But having a financial program with the IMF is still a stigma in many neighborhoods.

The generalized hoarding of reserves entails consequences beyond the individual country's social cost of holding low-yield assets. The hoarding of liquidity that should be put to better use introduces a distortion into the international financial system. It would be welfare-improving to create conditions conducive to more countries floating their currencies and reducing their reserves of hard currencies. The establishment of a credible, well-regarded lender of last resort in the international monetary system would curb the need for reserve hoarding and allow for more floating of exchange rates.

7. International Monetary Fund, "IMF Multilateral Policy Issues Report," mimeo (2014).
8. See Mark R. Stone, W. Christopher Walker and Yosuke Yasui, "From Lombard Street to Avenida Paulista: Foreign Exchange Liquidity Easing in Brazil in Response to the Global Shock of 2008–09," IMF Working Paper 09/259 (2009).
9. For example, Dani Rodrik, "The Social Cost of Foreign Exchange Reserves," NBER Working Paper 11952 (2006).



Designing better institutions for international finance is indeed a daunting challenge—the original Bretton Woods conference in 1944 lasted 22 days! I would like to praise the initiative of the Reinventing Bretton Woods Committee for starting such an important debate.

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## TO REFORM WHILE PRESERVING THE SPIRIT OF BRETTON WOODS

RUSLAN GRINBERG

THE BRETTON WOODS system played a prominent role in the functioning of the global economy of the second half of the 20th century. The fixed parities, freely convertible currencies, and a natural extension of the US dollar as the key and reserve currency contributed to the unprecedented development of the global economy, and that provided the contractual respect of the capitalist (or the market) economic organization of society.

Now we have to state that the world faces a number of challenges that can only be handled by reforming the existing monetary and financial order.

Among the main challenges, I would first of all highlight the problem of the separation of the financial sector from the real economy. It seemed that after the crisis this gap would be overcome. But this did not happen. The global financial bubble did not die.

The available existing proposals on the reform of the global financial system are concentrated on single issues rather than on systemic deficiencies. Of course, it is necessary to support the reform of the OTC derivatives market, the limitation of the role of the systemically important financial institutions (especially at the global level), and the fight against the informal sector in the banking system, i.e. shadow banking. But all these measures do not constitute a comprehensive set of reforms aimed at the formation of a financial sector that does not generate excess risk for the global economic system as a whole.

From my point of view, the existing world monetary system is characterized by serious deficiencies, but they are not where they are often seen. Usually, the dominant role of the US dollar is the center of criticism. But the root of the problem is in the freedom of cross-border movement of capital and in a transfer through speculative flows of "contamination" from one part of the world economy to another.

With regard to the role of the US dollar in the global monetary system, there is indeed a number of signs of its decline.

The objective basis for this process is, first of all, the weight loss of the US economy in the world economy: from 2000 to 2013, the USA's share of global GDP, at purchasing power parity of currencies, decreased from 22% to 19%.[1]

The dollar exchange rate against other currencies over the last decade has followed a general downward trend: since the beginning of 2002 to mid-2014, the dollar's real effective exchange rate fell by 23%.

The role of the dollar in the world currency market has declined: if, in 2001, the dollar accounted for 90% of transactions on the world currency market, then in 2013 the figure was 87% (based on the total amount of 200%).[2] The share of the US dollar in world currency reserves decreased from 71% at the end of 2000 to 61% at the end of 2013.[3]

However, there are objective factors that make it unlikely that the dollar will lose its leading position in the global monetary system, at least in the medium term:

- Despite the decline in the US economy's share of the global economy, it remains the largest economy in the world. And, more importantly, the United States is the undisputed leader in the financial sector. Since the majority of transactions on the global currency market are financial, the position of the US dollar in this segment remain fairly stable. We see that, in all the reviews of the global foreign exchange market, the share of the dollar in it did not fall below 84% at any point in the past 15 years.

1. According to data in the IMF's *World Economic Outlook*.
2. Bank for International Settlements, "Triennial Central Bank Survey. Foreign Exchange turnover in April 2013: preliminary global results" (September 2013).
3. Calculated on the basis of the IMF's "Currency Composition of Official Foreign Exchange Reserves."



- By the beginning of 2012, the long trend of decreases in the real effective exchange rate of the dollar had stopped; now there are fewer grounds to speak about the falling value of the dollar than on the eve of the global economic and financial crisis.
- International securities continue to be actively denominated in dollars. Thus, the share of the dollar in international issues of debt securities, according to the narrow definition or to the narrow measure, increased from about 40% in 2003 to 55% in 2013.[4]

There are no real competitors to the dollar in the global monetary system of existing regional and national currencies. The euro has taken second place in the global monetary system since its introduction, but there are insufficient grounds to say that since that time it significantly outpaced the dollar. The share of euros in the turnover of the global foreign exchange market, after rising in the first decade of the 2000s, decreased to 33% in 2013 (based on the total amount of 200%).[5] The share of the euro in the world's foreign exchange reserves, somewhat raised in the first years after the introduction of the single currency, has stabilized and is now at around 25%.[6]

Over the past four years there has been a steady decline in the share of international debt securities denominated in euros; in a narrow definition or in a narrow measure, by 2013 this share approached 25%.

The Chinese yuan is increasingly considered as the potential competitor to the dollar. China's share of world GDP is increasing significantly: at the 2012 purchasing power parity of currencies it approached 12% and according to the 2013 purchasing power parity of currencies it exceeded 15% (having outstripped the GDP of the eurozone countries). However, China's financial system is still underdeveloped. The degree of openness with the country's financial system is still relatively low, and restrictions on the renminbi's external convertibility remain.

In short, China's role in international financial relations is still severely limited. This is evidenced and indicated by the share of Chinese yuan transactions on the world currency market. It had displayed rapid growth over the last decade, but in 2013 it was only 2.2%. Even taking into account the share of the Hong Kong dollar (which is 1.4%), it is not enough to strengthen China's position in the global monetary system. Australian and Canadian dollars, which are in the fifth and sixth positions with regards reserve currency, surpassing the Swiss franc, occupy 8.6% and 4.6% of the global market respectively.

4. European Central Bank, "The International Role of the Euro" (July 2014).
5. Bank for International Settlements (September 2013), op. cit.
6. Calculated on the basis of the IMF's "Currency Composition of Official Foreign Exchange Reserves."

As a potential vector of the global monetary system, the expansion of the number of regional currencies is also considered in addition to the euro. However, the processes of integration in other continents are still far from the formation of a monetary union. If, back in the early and mid-2000s, influenced by the successes of European monetary integration, many regions were quick to declare their aspirations, or ambitions, to create regional currencies (the Gulf countries, Asia, Africa, the Eurasian Economic Community, and others), then, in practice, these initiatives did not receive significant investment and development.

As it is not expedient to radically reform the world monetary system in current conditions, including the high costs of such a process, it seems to me that steps towards gradual, evolutionary reforms are still necessary.

The following key areas should be addressed:

- *The restriction of volatility of international capital flows.* A number of emerging markets are already trying to solve this problem by using macro-prudential regulation tools or introducing taxation measures. It seems to me that it is expedient to introduce a global tax, a type of Tobin tax, which would partially relieve some of the problems caused by international capital flows and the excessive development of the financial sector in the global economy. Possible mechanisms with global prudential measures should also be worked out.
- *The expansion of the role of emerging market countries.* In the first place, it is necessary to align the growing role of these countries in the global economy with their representation and participation in the decision-making mechanisms of international financial institutions (such as the IMF, the World Bank, as well as the Bank for International Settlements). It is important that these countries should be full participants in the development of the new rules in the global monetary and financial system, because this currently only happens partially (in the format of the G20).

Some initiatives are already being instigated by the countries themselves. In particular, the BRICS countries are strengthening their association, and working toward the establishment of a new development bank and an insurance monetary fund within its framework—these elements are designed to compensate for the shortcomings of the existing monetary and financial system. However, this group of countries cannot yet replace existing mechanisms.



One way of strengthening the position of emerging markets in the global financial system and, as a consequence, their positions on the world market could be an expansion in the volumes of securities circulated on the foreign stock markets of these countries, nominated in national currencies. However, such assets are unlikely to preserve their value, due to the high volatility of the exchange rates in these countries.

One way to solve the problem of finding reliable assets could be the creation of bonds, focused not on individual national currencies, but on the indices of the world economy as a whole (see suggestions by R. Schiller, B. Eichengreen, etc.). It is unlikely that such bonds will replace dollar assets, but they can supplement them with regard to the function of preserving value (or the store of value).

In conclusion, once again it is appropriate to emphasize that the root of the existing problems is in the hypertrophied financial sphere of the world economy with itsmodified system of incentives, and this should be reformed first. The reform should also affect speculative capital flows in the world economy. With regard to the global monetary system, its grounds are seen as relatively stable. But a gradual increase of competition within it is required, including at the expense of emerging markets' individual currencies. The most promising to us seem to be the positions of China, Mexico, Russia, and a number of other countries. Emerging markets must become subjects of global reform, including in the monetary sphere.

In short, the world monetary system needs to be changed, but no revolution is required. In general, it has withstood the test of time. And we all have to pay tribute to its Founding Fathers, who glorified a small town in the United States.

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# GLOBAL PROVISIONS OF FOREIGN CURRENCY LIQUIDITY

MÁR GUÐMUNDSSON

The focus of post-crisis discussion on reforming the international monetary system has shifted from issues centering on global current account imbalances and alternative reserve currencies toward the issue of global liquidity provision.[1] The crisis struck after a long period of progressive financial globalization. In general, financial globalization is beneficial in terms of risk-sharing and enhanced growth potential. On this occasion, however, it also involved unhedged risks that were embedded in the balance sheets of countries and cross-border banks. In many cases, these risks materialized with a vengeance during the crisis. As a result, several central banks around the globe engaged in large-scale foreign currency lender of last resort (LOLR) operations vis-à-vis banks in order to mitigate the fallout. The problem was that the system to deal with this did not exist and had to be introduced on the fly. It was a close call.

1. See, for instance, Michel Camdessus, Alexandre Lamfalussy, and Tommaso Padoa-Schippa, "Reform of the International Monetary System: a Cooperative Approach for the Twenty First Century," Palais-Royal Initiative (2011); Christophe Destais, "The International Monetary System as a Swap Nexus," French Research Centre in International Economics (2013); Barry Eichengreen, "The International Monetary System after the Financial Crisis. The World Economy after the Global Crisis," *World Scientific Studies in International Economics*, 19 (2012): 77–99; Emmanuel Farhi, Pierre-Olivier Gourinchas, and Hélène Rey, "Reforming the International Monetary System," Centre for Economic Policy Research (2011); Már Guðmundsson, "The Implications of Cross-Border Banking and Foreign Currency Swap Lines for the International Monetary System," in O. Blanchard, D. Romer, M. Spence and J. Stiglitz (eds), *In The Wake of the Crisis: Leading Economists Reassess Economic Policy* (Cambridge, MA:MIT Press, 2012); IMF, "Strengthening the International Monetary System: Taking Stock and Looking Ahead" (Washington, D.C.: IMF, 2011); Maurice Obstfeld, "Liquidity and the International Monetary System," in O. Blanchard et al. (2012), op. cit.

In this article, I discuss some of the potential implications of these developments for the evolution of the international monetary system. First, I describe the problem by discussing the build-up of cross-border banks' foreign currency balance sheets. Then I discuss the role of swap lines among central banks in dealing with the run on banks' foreign currency financing. This leads me into a discussion about making swap lines a more permanent and institutional part of the international monetary system, and from there I turn to retreat from financial globalization and self-insurance as alternatives to cooperative safety nets. Finally, I draw some policy conclusions.

### CROSS-BORDER BANKS' FOREIGN CURRENCY BALANCE SHEETS

Expansion of cross-border banking was an important form of financial globalization during the pre-crisis period. In many cases, this expansion was associated with the increase in banks' balance sheet size relative to the GDP of their home countries and an increasing share of foreign currency assets and liabilities on those balance sheets. Even when currency mismatches were largely avoided, maturity mismatches—the bread and butter of banking—were not. European banks are an example. They had built up large US dollar-denominated balance sheets that involved financing long-term US dollar assets with short-term debt.[2] Another example is Iceland's three internationally active cross-border banks. Just before their failure, they had foreign currency balance sheets amounting to almost 7.5 times Iceland's GDP, with a significant maturity mismatch between assets and liabilities. In comparison, the Central Bank of Iceland's foreign reserves amounted to 21% of GDP.[3]

This development implied that part of the banking system escaped the safety nets we have put in place around fractional banking in national settings; i.e. liquidity provision and LOLR operations for domestic central banks, later complemented by deposit insurance. Such domestic LOLR operations are facilitated by two factors. First, the funds withdrawn from banks during a domestic run flow in one form or another to the central bank, which can then channel them back to the banks. Second, central banks have a very large short-run capacity to expand the part of their balance sheets that is denominated in the currency they issue.

In this case, however, the maturity mismatch was in foreign currencies. Central banks can lend to their banks out of their foreign exchange reserves, of course, and they did so

2. This case is described in Ingo Fender and Patrick McGuire, "European Banks' U.S. Dollar Funding Pressures," *BIS Quarterly Review* (June 2010): 57–64.
3. Guðmundsson and Thorgeirsson describe the case of the Icelandic banks and draw lessons for cross-border banking: Már Guðmundsson and Thorsteinn Thorgeirsson, "The Fault Lines in Cross-Border Banking: Lessons from the Icelandic Case," SUERF Studies 05/2010, European Money and Finance Forum (2010).



to a significant degree during the crisis. However, those reserves are limited and, in many cases, far from the order of magnitude of potential runs on foreign currency liabilities. Banks can also obtain domestic currency liquidity and swap it into foreign currency liquidity. But, as this last crisis showed, foreign currency swap markets are likely to become dysfunctional when they are most needed.[4] All of this meant that the maturity mismatch in foreign currency was not backstopped by any effective lender of last resort. It was an accident waiting to happen.

### CENTRAL BANK SWAP LINES AND IMF FACILITIES

That accident did indeed happen in September 2008, when, during the panic that gripped markets after the collapse of Lehman Brothers, there was a full-scale run on crossborder banks' foreign currency liabilities. The only thing that prevented the ensuing international dollar shortage from triggering a widespread failure of internationally active non-US banks to deliver on their foreign currency payments was the use of LOLR operations in foreign currency, using countries' reserves and, more importantly, dollar swap lines granted to central banks around the globe on a large scale.[5]

Strictly speaking, a currency swap between two central banks is a symmetric agreement. In most cases, however, it is the central bank providing the reserve currency in excess demand at the time that is the party putting real money on the table.When the swap is used to lend to banks in the receiving country, that country's central bank bears the counterparty risk. But from a liquidity standpoint, the foreign central banks were intermediaries of the Federal Reserve's global liquidity operations. And so the LOLR function at the national level was replicated at the global level.

In the absence of almost total retrenchment in international banking—except in the cases of countries issuing reserve currencies and with strong fiscal capacity—the problem the swap lines were meant to address will not go away. There is therefore a case for making these ad hoc bilateral arrangements a permanent and more robust part of the international monetary system. Indeed, the central banks involved have taken some steps in this direction, as on October 31, 2013 the US Federal Reserve and five other major central banks announced their decision to make previously temporary swaps permanent.

4. Committee on the Global Financial System (CGFS) Study Group, "The Functioning and Resilience of Cross-border Funding Markets," CGFS Paper No. 37 (2010).
5. Fleming and Klagge describe the Federal Reserve's Foreign Exchange Swap Lines and Guðmundsson 2012 discusses their implications for the international monetary system: Michael J. Fleming, and Nicholas J. Klagge, "The Federal Reserve's Foreign Exchange Swap Lines," *Federal Reserve Bank of New York: Current Issues in Economics and Finance*, 16, 4 (2010).

The past few years have seen lively discussion of whether it is desirable and feasible to anchor the swaps more firmly in the international monetary system, through clearer and more transparent access criteria and a multilateral governance mechanism.[6] The issues are real ones. How, and by whom, should it be decided who gets a swap and who does not? Should the swaps be bilateral affairs only, or should there be a multilateral repository or governance structure? What about hybrid arrangements such as that proposed by Truman,[7] where activation of central bank swap networks would require initiation by the IMF, an independent assessment by a committee of central bankers, and any two or more central banks involved in bilateral swaps?

Clearly, there are arguments for such institutionalization, but I sense that this might be premature and that we should allow the discussion to evolve further. Those who oppose constraining central bank discretion in this area present important arguments. The most compelling are those based on the analogy with liquidity provision and LOLR in a national setting, where flexibility, speed, and large scale can be essential. This argues in favor of giving central banks a major role in the arrangements. Less compelling are arguments based on moral hazard, which would apply equally to domestic arrangements. Instead, moral hazard should be mitigated through accesscriteria, adherence to international standards for regulation, and IMF supervision and monitoring of financial sectors.

The above discussion should make it clear that even greatly enhanced IMF facilities are far from perfect substitutes for swap lines among central banks. First, the swap lines are there to provide short-term collateralized FX liquidity to banks, whereas IMF facilities are uncollateralized longer lending to sovereigns and are intended primarily to mitigate balance of payments problems. Norway and the eurozone were offered US dollar swaps without prior balance of payments disequilibrium. Second, IMF facilities generally cannot match the swap lines in terms of speed of delivery, as the decision processes at the IMF are unavoidably more cumbersome. At present, the IMF's maximum lending capacity is just over a trillion US dollars. At their peak in early December 2008, the US dollar swaps amounted to over USD580 billion,[8] after having increased very rapidly to that level in a matter of few weeks. In principle, the total could have risen much higher as the swaps had been uncapped vis-à-vis key central banks, which mattered greatly in terms of signaling. If the IMF or any other international organization is to be able to provide a credible alternative to the swaps, it must be able to expand its balance sheet speedily and on a large scale when the need arises. In short, it would have to function as a global central bank. That is not in the cards—at least, not at the present time.

6. See for instance Fahri et al. (2011), op. cit., Guðmundsson (2012), op. cit., Destais (2013), op. cit. and Edwin M. Truman, "Enhancing the Global Financial Safety Net through Central Bank Cooperation", VOX (September 10, 2013), http://www.voxeu.org/article/enhancing-global-financial-safety-net-through-central-bank-cooperation [last accessed November 11, 2014].
7. Truman (2013), op. cit.
8. Fleming and Klagge (2010), op. cit.



### RETREAT FROM FINANCIAL GLOBALIZATION AND SELF-INSURANCE

In the absence of credible global safety nets with clear and transparent access criteria, many countries might choose to retreat partially from financial globalization and self-insure through accumulation of foreign exchange reserves and other means. Some retreat from financial globalization is not necessarily all bad, especially for large cross-border banks headquartered in small and medium-sized countries, as the scale of operations has not been safe given the current and foreseeable global safety nets. Such retreat will be driven by market forces and the adaption of banks' business models after the crisis. But it will also be driven by local regulatory changes, where prudential limits on the size and composition of domestic banks' foreign-denominated balance sheets will restrict international activities. Such prudential measures are in the process of being introduced in my country, Iceland, in anticipation of the liberalization of our capital controls.[9]

Self-insurance through foreign exchange reserves was at least partially vindicated during the crisis. Reserves played a significant role in mitigating swings in volatile capital flows. Such swings will still remain an issue even if relatively large internationally active banks retreat from small and medium-sized countries. But we know that self-insurance is suboptimal compared to multilateral insurance; therefore, work toward fortifying global safety nets by enhancing IMF facilities and improving the network of swap lines remains an important item on the international reform agenda.

In recent years, capital controls have been used increasingly in order to affect volatile capital flows. Iceland introduced comprehensive capital controls on outflows after the collapse of its cross-border banks in late 2008. The situation in Iceland was indeed both extreme and unusual, so care should be taken when drawing general lessons from this case. However, the controls played an important role in stabilizing the economy by giving fiscal and monetary policy the scope to focus on the domestic economy. Other countries have introduced more targeted and shorter-lived controls on capital

9. Central Bank of Iceland, "Special Publication No. 6: Prudential Rules following Capital Controls – Report to the Minister of Economic Affairs" (2012).

inflows. Views have been shifting, and there is a growing consensus that such controls can have a positive role to play—as long as they are not introduced as substitutes for proper macroeconomic and prudential policies. But the thinking is still evolving, and new experience is being gained. What is clear, however, is that there is a need for internationally accepted ground rules on this topic, and the practices must be closely monitored. That role must fall to the IMF, but if the IMF is to be effective in that role, governance reforms that make the Fund more representative globally must proceed further. The IMF's institutional view on the management of capital flows is therefore to be welcomed,[10] but it is only one step in a longer journey.

### CONCLUSIONS

Under current conditions, swap lines among central banks are a key part of global safety nets, and they mitigate the retreat of cross-border banking. There is scope for improvement on the current ad hoc bilateral arrangements, but flexibility, speed, and large scale must be preserved. Capital flow management will become part of small, open economies' toolkits for dealing with volatile capital flows. This creates the need for multilateral monitoring based on agreed ground rules.

Már Guðmundsson, Governor,
Central Bank of Iceland

10 . IMF, "The Liberalization and Management of Capital Flows: an Institutional View" (Washington, D.C.: IMF, 2012).



# SOVEREIGN DEBT RESTRUCTURING AND THE GLOBAL FINANCIAL ARCHITECTURE[1]

PABLO E. GUIDOTTI AND JONATHAN C. HAMILTON

At the 2014 United Nations General Assembly meeting in New York, Argentine President Cristina Fernandez accused hedge funds pursuing payment on defaulted sovereign debt of engaging in "economic and financial terrorism," and pushed an Argentine plan for a multilateral legal framework for sovereign restructurings. Argentina's accusations followed a US Supreme Court decision last June refusing to hear Argentina's appeal against lower court rulings ordering the country to pay over US$1 billion or more to bondholders who refused to participate in earlier debt-swaps offers arising from its 2001 sovereign default. Argentina's disregard of the consequences of the Court's ruling led to Argentina's second default in just over a decade.

Argentina's focus on hedge funds distracts from the broader story and implications of its prior sovereign default in 2001, which has impacted the lives of tens and even hundreds of thousands of retail bondholders who were targeted by Argentina for bond placements, invested in Argentine bonds and still await relief years after Argentina benefited from their investments then chose to default over twelve years ago. Indeed,

1. The views expressed herein are for informational purposes only and are not attributable to individual authors, firms, countries, clients, or matters. The authors are not engaged in rendering legal or other professional advice in preparing these materials. The materials are not a substitute for the advice of an attorney.

on the same morning as the Supreme Court ruling in June, Argentina faced an even higher-stakes fight at the World Bank: the final hearing of international law claims by tens of thousands of retail holders of the defaulted Argentine "Tango" bonds.

History did not have to happen this way. The Argentine circumstances are a result of choices made over time with respect to the management of sovereign debt and, in particular, a failure to resolve the implications of sovereign default. This article considers the question of how we got here and discusses a set of reforms to bring greater certainty and stability to states and investors alike.

## INTERNATIONAL PRINCIPLES OF SOVEREIGN DEBT MANAGEMENT

Sovereign debt management is part of the prevention and resolution of international capital market crises and, more generally, is an essential element in the design of a new global financial architecture.[2] As documented by Reinhart and Rogoff,[3] although sovereign debt defaults and restructurings have occurred throughout history, they have changed as to how states manage crises and seek to facilitate stability. Defaults are often associated with traumatic and severe recessions in the debtor country, sometimes accompanied by high inflation, and a drastic reduction in capital flows and financing to both the public and private sectors. But the way that governments respond to such conditions have changed.

With the increase of globalization in the 1990s, a phenomenon that followed the implementation of the Brady Plan, emerging market economies entered international capital markets in full force. However, the rapid growth of external financing to emerging markets also brought about a series of financial crises affecting diverse regions such as Asia, Latin America, and emerging Europe. These crises introduced financial contagion as a major new element in the working of the global economy. Financial contagion meant that economies that were believed to be disconnected became simultaneously affected by a global loss of investor confidence.[4]

The notion that very diverse financial assets could be grouped in so-called "asset classes" and, hence, treated in the same fashion only on the basis of sharing similar risk and return characteristics is central to the phenomenon of contagion. In this context, sovereign defaults became important events not just for the domestic economy but

2. See P. Guidotti, "Toward a Liquidity Management Strategy for Emerging Market Economies," in J. Gonzalez, V. Corbo, A. Krueger, and A. Tornell (eds) *Latin American Macroeconomic Reforms: The Second Stage* (Chicago, IL: The University of Chicago Press, 2003); P. Guidotti, "Global Finance, Macroeconomic Performance, and Policy Response in Latin America: Lessons from the 1990s," *Journal of Applied Economics*, X, 2, (November 2007): 279–308.
3. C. Reinhart and K. Rogoff, *This Time is Different: Eight Centuries of Financial Follies* (Princeton, NJ: Princeton University Press, 2009).
4. See Reinhart and Rogoff, op. cit., and F. Sturzenegger and J. Zettelmeyer, *Debt Defaults and Lessons from a Decade of Crises* (Cambridge, MA: The MIT Press, 2006).



also for global capital markets, and diverse types of investors. The growing practice by emerging market issuers to place debt under foreign law and jurisdictions (such as, for instance, New York, London, Germany, Italy, and Japan) added a new legal element to the resolution of sovereign debt crises. The further promises made by Argentina and other states under bilateral investment treaties added a further element: international law and the prospect of recourse to international dispute mechanisms.

In this context, after the Long-Term Capital Management debacle and the Russian default, both in 1998, it became clear to the international community that the global economy was facing new challenges that could not be addressed by policymakers in the advanced economies alone, or with the traditional instruments at the disposal of the International Monetary Fund (IMF). In this context, a new global governance body was created under what was known as the Group of Twenty-Two (G22). The G22 soon evolved, after a brief G33 interlude, into what today is known as the Group of Twenty (G20) composed of the major advanced economies and a number of "systemically important" emerging market economies.

In the G22 and later the G20, and at the IMF and other multilaterals, sovereign debt default and restructuring became a central topic in the discussion of how to reform the international financial architecture to make the global economy more resilient to shocks and to the sudden loss of confidence by investors.[5] While the scope of such discussion was quite profound, especially between 1998 and 2003, the only practical reform that was agreed upon by the international community was the introduction of Collective Action Clauses (CACs) in bond contracts that allow a qualified majority of bondholders to bind all bond holders within the same issue as to the financial terms of a restructuring.[6] Notably, a proposal by Anne Krueger at the IMF, the adoption of a formal Sovereign Debt Restructuring Mechanism (SDRM), failed to gather the required political support.[7]

In addition, the international community reached consensus on a set of best practices (or, the principles) that guided sovereign debt restructurings. In particular, there emerged a consensus that, in an event of restructuring, and among other things: 1) the debtor should attempt to maintain payments to creditors while a workout is being negotiated; 2) creditors and the debtor should negotiate in good faith; 3) creditors of

5. See, for instance, The Group of Ten, "The resolution of sovereign liquidity crises" (May 1996); The Group of Twenty-Two, "Report of the working group on international financial crises" (October 1998).
6. See IMF, "Collective action clauses: recent developments and issues" (Washington, D.C.: IMF, March 2003).
7. See A. Krueger, "A new approach to sovereign debt restructuring" (Washington, D.C.: IMF, April 2002).

equal standing should be treated equally; and 4) in order to ensure transparency and sustainability, the negotiation process should involve the IMF.[8]

Issuing debt governed by the law of a foreign jurisdiction, especially in a major financial center, has important benefits for the issuer. By issuing debt governed by the law of the major financial centers, sovereigns seek to tap a larger demand for their bonds and, most importantly, "borrow" the credibility enjoyed by the legal systems of those jurisdictions. The effect of this is clear; the issuing state seeks to receive better terms on its debt and to enjoy a larger volume of financing than would otherwise be the case if it issued debt under its own domestic law.[9]

Issuing debt governed by foreign law, or certainly under international law, also has further implications. In particular, while governments (often with the participation of Congress) may have significant discretion for restructuring their obligations under domestic law, they cannot restructure their foreign obligations at their will (this limit on government discretion is what precisely makes these assets more credible in the view of investors). To restructure debts governed by foreign law requires reaching agreement with creditors, today mostly through a debt exchange operation. In this respect, some claim that sovereigns (as opposed to corporations) are uniquely unprotected as they do not enjoy in this instance the protection of a bankruptcy law.

In sum, for present purposes, the introduction of CACs came to be considered as a mechanism to facilitate sovereign debt restructurings by limiting the role of holdouts in debt exchanges, in the absence of a formal resolution mechanism such as the SDRM.[10] But the fact that the international community placed all of its emphasis on the adoption of CACs implicitly reflects the assumption that sovereigns would abide by the best practices embedded in the above-mentioned principles.

The recent experience of Argentina has shown that it cannot be taken for granted that sovereign debtors will abide by best international practices. As we will discuss below, a rogue sovereign debtor that defaults and openly defies foreign courts and international tribunals may generate externalities and, hence, have negative effects on the functioning of the international capital market and future debt restructurings.[11]

8. These set of principles have been proposed in various fora with some variations. See Institute of International Finance, "Principles for stable capital flows and fair debt restructuring," Report on implementation by the Principles Consultative Group (Washington, D.C.: October 2013); and IMF, "Sovereign debt restructuring—recent developments and implications for the Fund's legal and policy framework" (Washington, D.C.: IMF, April 2013).
9. There is ample evidence that emerging market bonds governed by foreign law trade at tighter spreads than similar bonds issued under domestic law.
10. As noted by IMF (2013), op. cit., however, CACs have not been as efficient as previously envisaged in blocking holdouts.
11. See IMF (2013), op. cit., and R. Olivares-Caminal, "The pari passu clause in sovereign debt instruments: developments in recent litigation," BIS Papers No. 72 (July 2013).



## THE ARGENTINE EXAMPLE

Sovereign finance and sovereign debt matter to Latin American history and development. Argentina's high-profile problems in the past decade set it apart, and undermine the broader stability nurtured in many markets across the region during the past twenty-five years and the global financial architecture that has facilitated it.

During the 1980s, Argentina and other countries in the region failed to service high levels of foreign debt, held largely by commercial banks. When foreign financing was cut off, a period of severe recession—often referred to as the "lost decade"—followed. As mentioned earlier, the Brady Plan introduced a solution to the debt crisis by converting the commercial bank debt to tradable bonds, often collateralized with US Treasury bills. Brady bonds were attractive to private investors, and were traded on a broad range of financial markets. The program helped restore the fiscal solvency of economies in Latin America and other emerging markets. It also paved the way for regional reforms and generated an active market for sovereign bonds in the 1990s.

In this context, Argentina built on the success of the Brady bond program to develop a new sovereign finance program centered on placements of sovereign bonds that relied on the reforms and promises of stability that Argentina touted at the time.Argentina developed a sovereign finance program to issue bonds in the international capital markets. Argentina's bond program was designed to attract a diversified global investor base, including institutional investors and individual or "retail" investors.[12] From 1991 through 2001, Argentina sold over US$186 billion in bonds, including 179 bonds issued in the international capital markets.

Although Argentina was not alone in implementing a package of macroeconomic reforms, investment protections and sovereign finance policies, it has followed a unique path to rogue debtor status on the world stage, starting with its fateful political decision in December 2001 to default, and then to dismantle the policy and legal framework it had adopted over the prior decade.

Following Argentina's declaration of default in 2001, many investors continued to hold onto their bonds, with the hope that Argentina would soon negotiate a reasonable

12. Institutional investors typically invested larger amounts, but their investment decisions were driven by market conditions. Argentina also successfully targeted retail investors, on the other hand, because they tended to "buy and hold" bonds until maturity, which offered stability during market downturns. Investing for their own account, including with retirement funds or other personal savings, retail investors sought the regular interest payments and full repayment of principal that the bond instruments offered.

restructuring and resume payment. In sharp contrast to what the international communityconsiders appropriate practice in sovereign debt restructuring, Argentina failed to meaningfully negotiate with bondholder groups, and offered nothing for years. Moreover, after choosing to repay its debt to the IMF, in advance of other creditors, Argentina severed all meaningful ties to it.[13]

Eventually, in 2005, Argentina opened a debt restructuring process that offered bondholders roughly 25 cents on the dollar. In order to force creditors to accept its unilateral offer, Argentina passed legislation, coinciding with its 2005 Exchange Offer, which expressly prohibited any form of recovery by bondholders who did not participate in the restructuring.[14] Ultimately, the 2005 offer garnered a historically low participation rate of 76%, including acceptance by only 63% of foreign bondholders.[15] Given these circumstances, it was little surprise that many bondholders chose not to participate, including tens of thousands of retail bondholders who were harshly affected by Argentina's conduct. To clearly signal its intentions toward holdouts, for a number of years Argentina deleted from its public debt statistics the claims of those that did not accept the 2005 Exchange Offer.

Many bondholders that chose not to participate in the restructuring instead opted to seek recourse in breach of contract actions in courts, particularly in the US under applicable bond instruments. While much attention has been given to the contract cases, the press has often overlooked that tens of thousands of Italian retail bondholders also pursued treaty-based claims for €2 billion through international arbitration atthe World Bank's International Centre for Settlement of Investment Disputes (ICSID).[16] The lead case, originally filed in 2006, presents claims arise under a bilateral investment treaty between Italy and Argentina ratified two decades ago, in which Argentina extended investment protections to Italian investors and consented to resolve disputes with these investors through ICSID arbitration.

The principal treaty case involves thousands of individual Italian claimants, each of whom provided individualized consent to arbitration and investment in Argentine bonds. In a landmark 2011 Decision on Jurisdiction and Admissibility, the ICSID

13. In the past eight years Argentina has not even allowed the Article IV consultations.
14. At odds with its economic recovery after 2003, Argentina also passed legislation each year to extend a state of emergency first declared at the beginning of 2002—a pretextual exercise that some legislators openly declared was intended to assist Argentina's legal defenses in bondholder cases. Argentina's latest renewal of the 2002 state of emergency remains in effect until 2015.
15. While Argentina has recently touted a 92% acceptance rate, that figure accounts for the cumulative acceptance of its 2005 Exchange Offer and a subsequent exchange offer, on similar terms, in 2010.
16. In a September 2003 presentation delivered in Dubai, the Argentine Finance Secretary acknowledged an "unprecedented significant portion of debt held by retail investors"—over 43% of the total bonds issued. The Italian retail market alone accounted for US$13.5 billion of bond sales, held by some 600,000 individual investors.



tribunal ruled that it has jurisdiction to decide the merits of the claims.[17] Moreover, the tribunal concluded that the "dispute does not derive from the mere fact that Argentina failed to perform its payment obligations under the bonds but from the fact that it intervened as a sovereign by virtue of its State power to modify its payment obligations towards its creditors." This ruling underscores the precedent of considering sovereign finance and default not just as an issue relevant to economic cycles, or contractual default, but as an issue of international undertakings.

A jurisdictional dissent by the Argentina-appointed arbitrator questioned the role of international investment treaties and arbitration for the resolution of sovereign debt disputes. Yet, it is Argentina's agreement to the treaty covering investment in bonds and subsequent disregard of its own laws and the decisions of courts that led to the treaty case, and suggest the importance of arbitration as an international legal tool and procedural mechanism for addressing the dilemma of sovereign debt. Indeed, the ICSID tribunal appointed an independent expert in Europe who reviewed the individual claims of the thousands of Italian bondholders and verified the procedure, management of materials, and individual files of bondholders, demonstrating the practical and procedural viability of a mass claims procedure related to sovereign debt.

### IMPLICATIONS FOR THE GLOBAL FINANCIAL ARCHITECTURE

As the ICSID case reaches conclusion, the contract-based cases in US courts have resulted in billions of dollars of judgments in favor of the bondholders. Yet, Argentina has refused to pay, leading to the impasse with hedge funds in New York that in July 2014 prompted Argentina to default for the second time in thirteen years.

Notwithstanding the fact that the New York ruling has been upheld by the US Supreme Court, Argentina openly defies the adverse ruling and is engaged in actions directed at evading the settlement.[18] In response to Argentina's unwillingness to comply, Southern District of New York Judge Griesa has resorted to a number of remedial actions that effectively affect not only Argentina, but non-interested third parties such as financial intermediaries and even potentially investors.[19]

17. The Decision in the case, which is called *Abaclat and others v. Argentine Republic* (ICSID Case No. ARB/07/5), was recognized as the most influential arbitration award of the last decade in a vote of worldwide lawyers conducted for the Oil-Gas-Energy-Mining-Infrastructure Dispute Management (OGEMID) Awards.
18. For example, Argentina enacted a new Law in an attempt to change the location where bondholders are paid away from New York, claiming that the rulings of the US courts are "illegal."
19. In September 2014, Argentina was ruled in contempt of court.

On the one hand, some argue that these remedial actions may affect negatively future debt restructurings by providing additional legal options to holdouts.[20] On the other hand, if Argentina were successful in eluding the New York ruling, such "success" may generate negative externalities to other potential sovereign issuers, as the enforceability of contracts and, hence, the credibility of the New York jurisdiction may come under question. No matter how the Argentine saga eventually ends, it raises new challenges as regards the international financial architecture.

In fact, this was evidenced in September 2014 at the aforementioned United Nations General Assembly meeting in New York, where Argentina succeeded in obtaining a favorable vote on Resolution No. 11542, which it instigated and championed (including for its own benefit in international disputes), in spite of opposition by the US and many states with major global financial centers. This United Nations Resolution derided the so-called vulture funds by "recognizing… that the efforts of a State to restructure its sovereign debt should not be frustrated or impeded by commercial creditors, including investor funds such as hedge funds, which seek to undertake speculative purchases of its distressed debt at deeply discounted rates on secondary markets in order to pursue full payment via litigation." However, it also stressed "the obligation of sovereign creditors to act in good faith and with a cooperative spirit to reach a consensual" restructuring. Moreover, it recognized that "real payment capacity" should be a "core element" of the debt restructuring framework.

In practical terms, the Resolution does little apart from recognizing what Argentina's brazen and rogue actions have already amply demonstrated: the lack of a robustlegal framework to facilitate orderly sovereign debt restructurings. While Argentina is at least partly to blame for undermining the existing framework, the authors agree that the time has come for reform, and believe that the international community should support a push for so doing. Indeed, it should work to establish a debt restructuring framework that does more than score cheap political points against easy targets like vulture funds, but rather provides states and investors alike stability,predictability, and certainty.

The Argentine debt saga has shown, among other things, the following:

- It cannot be assumed that governments agree and act under best international practiceswhen facing a debt restructuring; hence, the international discussion on sovereign debt restructurings needs to be rebalanced, and protection of the integrity and credibility of international financial centers should be expressly recognized.
- The international community has displayed significant lack of coordination as regards its actions vis-à-vis a rogue sovereign debtor as, through the Bank for International Settlements (BIS), it has facilitated the sheltering of assets.
- Any outcome from the Argentine dispute is likely to generate externalities toward other sovereign issuers.
- Arbitration may be a more effective dispute resolution mechanism than domesticlitigation as it avoids many of the negative externalities likely to arise in the context of the latter.

20. IMF (2013), op. cit., and Olivares-Caminal (2013), op. cit.



While recognizing that a detailed analysis of some of the complex operational aspects lies outside of the scope of this essay, the above-mentioned findings suggest thata reform of the international financial architecture may be considered along the following general lines.[21]

First, the international community should consider adoption of a further minimum set of best practices, beyond previously established understandings, through a Debt Restructuring Protocol (DRP) embedding: a) the best practices or principles mentioned at the outset, namely, good faith negotiations between creditors and debtors; equal treatment of equal status of creditors; and participation of the IMF; b) a mechanism to settle disputes; and c) a limited waiver on immunity of international reserves.

Second, sovereigns may agree to the DRP through a treaty in order to be allowed to issue debt in any of the major financial jurisdictions. In practice, this implies that a sovereign that does not agree to the DRP would essentially be limited to issuing debt governed by its domestic laws. The prohibition to issue debt governed by foreign law (implemented by the corresponding regulatory authorities) would apply to the sovereign and to any quasi-sovereign entity.

Third, in order to place a greater incentive for countries to adhere to the DRP, the BIS may adopt a policy not to accept deposits from countries that are not signatories of the DRP.

Fourth, the IMF should avoid lending into arrears to countries that are not signatories of the DRP as this only emboldens rogue sovereign debtors and decreases their incentives to abide by the above-mentioned principles.

21. It is worth stressing that the proposal made here should be viewed as complementary to the reform proposals advanced in IMF, "Strengthening the contractual framework to address collective action problems in sovereign debt restructuring" (Washington, D.C.: IMF, September 2014), and providing a framework to avoid favoring actions of rogue sovereign debtors that may damage the credibility of international sovereign debt contracts.

Finally, if disputes arise in the process of or after a restructuring, those disputes may be legally and procedurally settled through an international arbitration process (such as the procedure before the World Bank). To ensure enforceability of the awards arising from the arbitration process, the sovereign should waive its immunity on its international reserves only in connection with the settlement of awards resulting from the arbitration process contemplated in the DRP. The arbitration process gives advantages of neutrality, efficiency, international enforceability, and the procedural possibility to address concerns of both states and the numerosity and diversity of sovereign bondholders in the contemporary marketplace. Each of these elements is relevant to giving states and bondholders security in the sovereign finance system.

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# THE POLITICAL ECONOMY OF THE (NON-)EMERGING RESERVE CURRENCIES

SERGEI GURIEV

Since 1944, both the theory and the practice of macroeconomics have changed beyond recognition. The debate has shifted from questions of "how" to questions of "why"—or, more precisely, to questions of "why not." Economists by and large agree now on what it takes to maintain macroeconomic stability and promote long-term economic growth. The most important question now is why some countries successfully adopt and implement the right policies and why some other countries do not.

Some key lessons have been certainly learned well. Countries know how to fight inflation: hyperinflation is now hard to imagine, even double-digit inflation is a thing of the past. Governments and central banks know how to respond to recessions and therefore do this quickly. Not surprisingly, the Great Recession did not turn into another Great Depression. Moreover, governments also know what not to do: while protectionism did rise during the recent crisis, its increase was an order of magnitude below the levels economists feared (based on the experience of the Great Depression).

On the other hand, some lessons—which have also transpired in recent years—are yet to be learned. In particular, very much in line with economics textbooks, irresponsible fiscal policy did result in debt crises in both US and Europe. In recent decades, the conventional wisdom had it that debt crises were to arise only in developing countries. But by now, those countries have already realized how painful their debt crises were and learned how not to repeat them. Today, most developing countries understand the importance of running a balanced budget, and many even have built reserves and sovereign wealth funds.

The situation in OECD countries is exactly the opposite. Not only have they not learned the need for responsible macroeconomic policy; the period of low interest rates has also resulted in complacency and a false feeling of security. This has increased the debt to GDP ratios to unsustainable levels—unprecedented in peace time.

Among many other risks, these high and growing debt levels in developed countries undermine the credibility of their currencies, including the leading reserve currencies. This is a major problem for the global financial system. Reserve currencies are a global public good. The modern international financial system cannot function without a liquid market of safe assets. Each global investor wants to hold a share of his/her portfolio in risk-free bonds in international reserve currencies.

This cross-border externality is, however, not the end of the story. It would be too easy to argue that the US, Europe, and Japan are happy to keep spending as the real costs of their irresponsible fiscal policies are borne only by foreign holders of their bonds. This is not true. The highly indebted rich countries face significant costs themselves. In these countries, government borrowing will eventually result in crowding out of private investment that in turn will slow down economic growth.

Why do developed countries not learn the lessons that many developing countries have already learned? The most obvious explanation is that modern political institutions are likely to neglect or at least underappreciate the interests of future generations. Today's retirees vote while today's children, and future employees and retirees are still not allowed to influence economic policies. This is why fiscal policy is likely to be myopic resulting in large budget deficits and growing debts. This is especially salient in the times of low interest rates but will have substantial implications for growth when the interest rates go up.



Given the non-credible policies of the issuers of the reserve currencies, why is there no entry in the reserve currency market? Why cannot the currencies of developing countries with balanced budgets, reserves, and growth potential become the new euros and yens? Why—given the problems in the US financial system and in the eurozone—in the recent crisis did we see the "flight to quality" rather than a sellout of dollars and euros? Is this only because of path dependence and the sunk investment in creating financial infrastructure?

It is hard to quantify the technical barriers to entry into the "reserve currency market." However, there are much more important issues that have to be resolved by reserve currency wannabes. It is not a coincidence that all modern reserve currency issuers have strong and stable democratic institutions. Allegedly, Winston Churchill once said that "democracy is the worst form of government except all those other forms thathave been tried from time to time." With all the problems of modern democracies, the democratic system is inherently much more stable than the authoritarian alternative.Markets seem to believe in Francis Fukuyama's "End of History" argument (that liberal democracy is the end of history—in the positive or normative sense—or in both). Or at least, they believe a much older "modernization hypothesis" of Seymour Martin Lipset: a rise in income will eventually bring a change in political institutions in the direction of democracy.

The latter creates a reason for long-term optimism (as today's growing autocracies will sooner or later democratize) but also suggests that non-democratic countries' currencies are probably not going to become reserve currencies in the immediate future. The inefficiencies of democracy are well understood and therefore are reasonably easy to price in. On the other hand, the non-democracies' future is not predictable. However well the Chinese economy is doing now, and even if the yuan becomes fully convertible in the next couple of years, there is no straightforward way to charter China's exit from the current system of governance. And this transition may be very turbulent—in particular for holders of yuan-denominated bonds. Similarly, today's Russia—with a balanced budget and zero net debt—has seen investors voting with their feet even before the annexing of Crimea and war in Eastern Ukraine. Markets understood very well that, in order to stay in power, Russian elites would either have to spend more, raise taxes, or undertake unpredictable foreign policy moves—or all of the above. In the long run, Russia is also likely to undergo a regime change, which is yet another source of worries for potential ruble investors.

Unfortunately, these arguments bring us back to square one. The world will be a much better place with liquid risk-free assets. New global reserve currencies are unlikely to emerge as their issuers are non-democratic and therefore have substantial political and economic uncertainty forthcoming. Therefore, the key is for the issuers of existing reserve currencies to return to responsible macroeconomic policies. Doing so is in the interest of both developed countries and the rest of the world.

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## THE IMF AND THE GPS

ANDY HALDANE

In 1973, the global positioning system (GPS) was created by the United States Department of Defense. This used satellite technology to provide accurate location and time information anywhere on Earth. It was not until the mid-1990s that it became fully operational. Yet today GPS is extensively used in everything from planning military interventions to planning trips to the local DIY store.

In 1944, the International Monetary Fund (IMF) was created by the 44 member countries. This was intended to provide accurate information on the location and scale of flows of capital anywhere on Earth. It was not until the early 1970s that this model became fully operational with the breakdown of restrictions on cross-border capital flows. Yet today information on cross-border capital flows remains incomplete and the IMF's window on the financial world remains foggy.

I wish to argue that, in the next phase of its life, the IMF should seek to create a GPS for global finance. There is no technical reason why this should not be possible. And the importance of having such a system, in a world of large, volatile and interconnected global capital flows, has never been greater. This would help create an IMF fit for 21st century global capital markets, and give the IMF renewed purpose.

The economic case for making this change rests on dramatic developments in global financial markets since the 1970s. Global finance has become a classic complex, adaptive system. The growth in its scale and complexity would rival most other complex systems, whether physical or social. For example, the growth of cross-border capital flows has far exceeded flows of people, goods and services. Global capital market integration has reached its highest levels in human history.[1]

Yet what we get is not what we see. This dense cat's cradle of finance has been woven largely out of sight. At best, we snatch passing glances of this emerging leviathan. Data on the global financial network are incomplete and lagging. Making sense of the global financial system today is more act of archaeology than futurology. Not for nothing have some called global finance a "non-system."[2]

It is not difficult to see why. Financial regulation and multilateral surveillance have tended to operate on a bank-by-bank or country-by-country basis. For some purposes, node-based supervision and surveillance make sense. But not, regrettably, when making sense of the dynamics of the financial system as a whole.

Pre-crisis banking regulation operated as though the financial system's fortunes could be understood as a scaled-up version of individual banks' fortunes. Yet few, if any, complex systems behave in this fashion. Dense wiring or tight coupling of a network can quickly turn small failures into systemic problems.[3] Lehman Brothers was a small fish. But with sufficient uncertainty and hard-wiring, its failure was sufficient to pollute the whole financial pond. Interconnected webs exhibit a "robust-yet-fragile" property.[4]

That experience is now seared into the conscience of banking regulators worldwide. Systemic risk has entered the regulatory lexicon. There is an acknowledgment of the need to join the dots across the global banking network in order to make sense of risks, whether to individual banks or the system as a whole. Incrementally, the necessary data are being assembled to construct this international banking network map.

1. Haldane, A.G., "Managing global finance as a system," speech given at the Maxwell Fry Annual Global Finance Lecture, Birmingham University (October 29, 2014). Available at: http://www.bankofengland.co.uk/publications/Documents/speeches/2014/speech772.pdf (last accessed January 1, 2015).
2. De Larosière, J., "The international monetary 'anti-system'," CentralBanking.com (May 2014). Available at: http://www.centralbanking.com/central-banking-journal/feature/2343195/the-international-monetary-anti-system (last accessed January 1, 2015).
3. Perrow, C., *Normal Accidents: Living with High-Risk Technologies* (New York: Basic Books, 1984).
4. Watts, D., "A simple model of global cascades on random networks," *Proceedings of the National Academy of Sciences*, 99, 9 (2002): 5766–5771.



But there is far less progress to report when it comes to mapping the global financial web: if instead of banks we consider the balance sheet fortunes of countries; if instead of inter-bank exposures we consider cross-border flows of capital. That global financial network is largely uncharted territory. In part reflecting that, the surveillance efforts of the IMF have remained largely focused on country-specific risks.

Some progress has been made. For example, the IMF's *Global Financial Stability Report* has, since 2002, sought to explore risks to global finance at a system-wide level, using some new sources of data. In the same spirit, the IMF has since 2011 published "Spillover Reports," assessing the knock-on financial stability consequences of problems within one country. This, too, has strengthened multilateral surveillance.

Nonetheless, these steps have taken us only so far. The centerpiece of the IMF's surveillance efforts remain the country-specific Article IV consultations. But given today's highly integrated global financial network, what more can be done to ensure global surveillance keeps pace with the evolution of global finance?

I have a dream. It is futuristic, but realistic. It would involve tracking the global flow of funds in close to real time. Its centerpiece would be a global map of financial flows. To give this concept some (literal and metaphorical) color, consider Chart 1.

This shows a heat-map of correlations across a wide range of assets (both safe and risky) and a large set of countries (both advanced and emerging) at three dates—a precrisis period of calm, the Lehman Brothers crisis of 2008, and at present. These correlations are grouped by asset class and by country.

The heat-map indicates that correlation temperatures have been rising through time, with flare-ups during crisis. For example, correlations among risky assets headed toward one during the course of the crisis, whatever their country or origin. So too did correlations among some safe assets. The very strength of these correlations underscores the genuinely global nature of today's international financial system.

But there is a second, more striking, pattern which emerges when these correlations are grouped by asset class and by country. Correlations are far higher by asset class than by country. In other words, there is greater co-movement among similar asset types *across* countries than among different asset types *within* countries.

One plausible explanation of these patterns lies in the behavior of global asset managers. Asset managers are growing in scale and importance as a driver of financial markets.[5] For asset managers, the key determinants of portfolio choice may be the risk characteristics of different asset classes, rather than their country characteristics. Certainly, that is consistent with the correlation patterns.

This underlines the importance of multilateral and spillover-based analysis when assessing risks to both global and national financial systems. National country characteristics will provide too narrow a lens on drivers of financial market dynamics. Only a system-side view will provide the perspective necessary to understand dynamics, at a country or global level.

Now imagine the light this financial map might shine. It would allow regulators to issue the equivalent of weather-warnings—storm brewing over Lehman Brothers, CDO-squared, Greece. It would enable regulatory weather forecasts to be issued—keep a safe distance from Bear Stearns, sub-prime mortgages, Icelandic banks. And it would enable what-if simulations to be run—if Lehman Brothers were the first domino, who would be next?

This would be a GPS for global finance. As guardian of the international financial system, the IMF would be the natural home of this global-financial-map-cum-stress-testing-machine. A GPS for global finance would not necessarily prevent the next rupture in global finance. But it could provide policymakers with a navigation system better able to spot the next crash landing. That prize is a big but attainable one in the 21st century.

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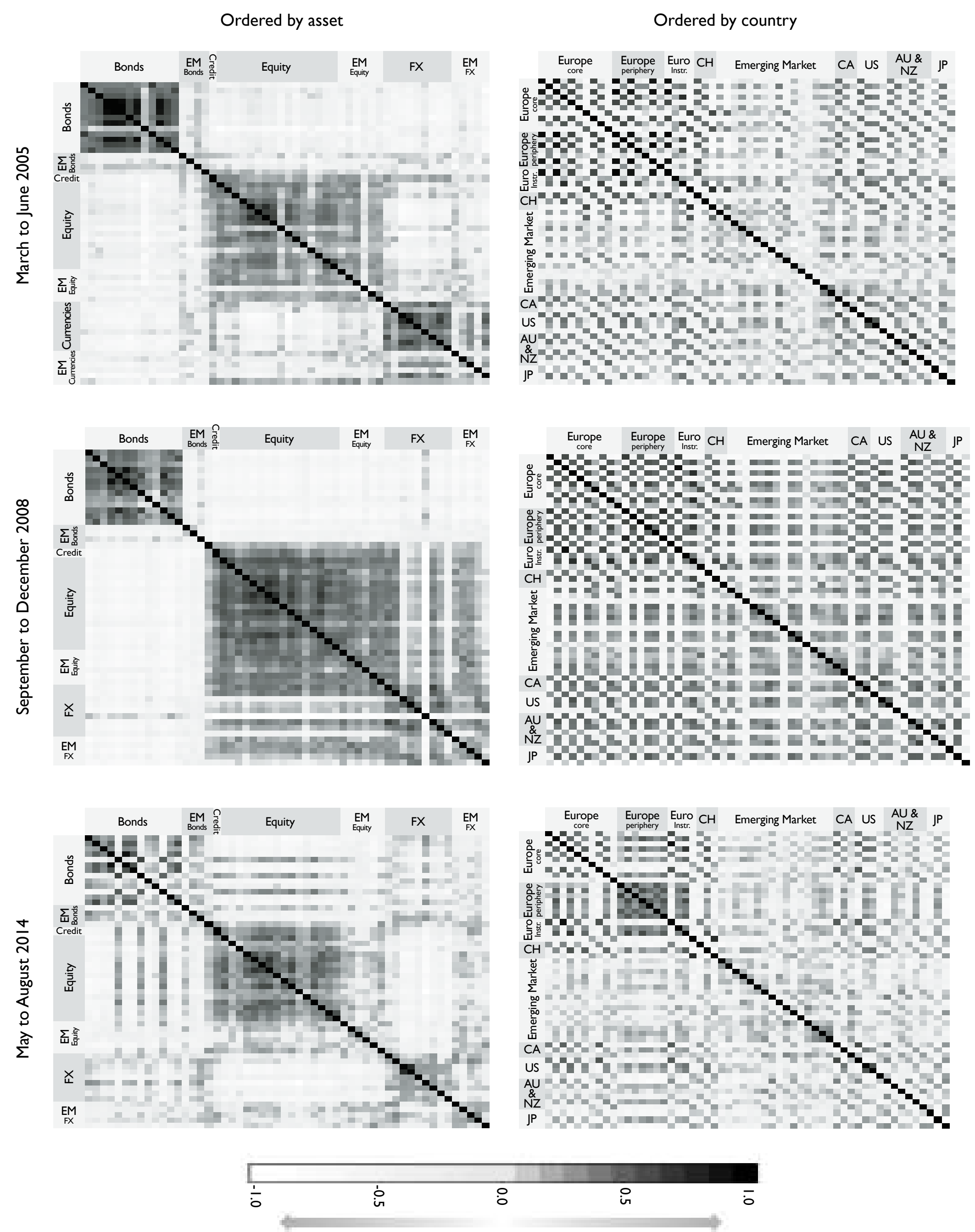
5. Haldane, A.G. (2014), op. cit.



CHART 1: CROSS COUNTRY ASSET CLASS CORRELATIONS




*Sources:* Bloomberg and Bank of England calculations.
*Note:* Correlation matrices are based on correlation matrices developed by HSBC FX Quantitative Strategy Team. Data refer to correlation of weekly returns measured over a backward-looking one-year period. Quotation conventions for prices and yields have been normalized onto a price-based quotation convention so that a positive correlation denotes equity prices going up and bond prices going up, for example (hence yields and spreads dropping). The VIX has been normalized like a yield, so that VIX going down with equity prices rising produces positive correlation.

# REHABILITATING THE BRETTON WOODS REGIME

KOICHI HAMADA

SEVENTY YEARS AGO, in the beautiful woods of New Hampshire, Lord John Maynard Keynes engaged in negotiations for building a new international financial architecture after World War II. He proposed his plan of the "Clearing Union," namely, a facility of extending credit to nations.

His plan was not adopted. Instead, the International Monetary Fund (IMF) was established as a compromise between the Keynes Plan and the White Plan that represented an American view. Keynes, disappointed with the failure of his plan, lamented, referring to his plan as a dog:

> *The loss of the dog we do not need to too much regret, though I still think that it was a more thoroughbred animal than what has now come out from a mixed marriage of ideas [the agreed upon IMF].*[1]

1. John Maynard Keynes, "The International Monetary Fund," S.E. Harris, ed., *The New Economics: Keynes' Influence on Theory and Public Policy*, London: Denis Dubson.

He added, however, that "this dog of mixed origin is a sturdier and more serviceable animal and will prove not less loyal and faithful to the purpose for which it has been bred."

The adopted system, the system of adjustable peg, was a hybrid between the system of fixed exchange rates and floating exchange rates. Thus this note will ask whether the Bretton Woods Regime, after seventy years, has proved to be a serviceable animal to the nations over the past seventy years.

## HISTORY

The IMF, itself a hybrid, was crafted as a compromise between the ideas of fixed and flexible exchange rates: "adjustable" because it allows changes in exchange rates in turbulences, and "peg" because it keeps them in normal times. It was often criticized as being a combination of two vices: rigidity when economies need changes in exchange rates, and fragility that does not give genuinely stable expectations of the fixed exchange rates.

Let me give a quick sketch of IMF for its seventy years. Until 1971, the IMF was operated as the system of adjustable peg with a strong emphasis on "peg." After President Nixon severed completely the tie between the US dollar and gold, major currencies were connected with flexible exchange rates. The pendulum was swinging toward flexible rates among major currencies.

The Plaza Accord in 1985 steered major exchange rates toward the direction of depreciating the real as well as the nominal exchange rate of the dollar. This tour de force was orchestrated by monetary policy coordination by major countries. This move was effective, and relieved the burden of an appreciated US dollar beforehand from the United States and might have stemmed the Japanese economic growth later.

In 1991, the euro was born. Major countries in Europe joined in the eurozone where a single money, euro, circulated. Member countries lost their independence of monetary policy except that they can jointly change the exchange rate of the euro relative to other major countries outside the euro region.

At present, the general economic picture of this endeavor does not appear too bright, to put it mildly. The G20 meeting in September 2014 reports that the European countries are threatened by deflation and the economic growth rate is static in the euro region.



## THEORY

Historical developments of international finance during these seventy years clearly show that the intuition of Robert Mundell was confirmed both in the analysis of macro policy assignment and in the concept of the optimum currency area.[2]

His two major contributions in international finance are conspicuous: (i) The Mundell-Fleming framework to the suitable assignment of monetary and fiscal policies in alternative exchange rate regimes, and (ii) the theory of optimum currency area.

Along with this wisdom, Harry Johnson connected monetary policy and the determination of exchange rates in his monetary approach to the balance of payments, and Rudiger Dornbusch revealed the volatile adjustment mechanism of the exchange rate when prices in asset market move much faster than those in goods market.[3]

The world experiences after the Lehman shock clearly indicate that the analysis by these scholars from the Chicago tradition generally explains the course of events.

For example, Japan plunged into an almost two-decade long recession since policy makers did not seem to understand the Mundell-Fleming framework and Johnson's monetary approach to exchange rates.

In the subprime crisis, securities incorporating the value of insecure repayments from marginal borrowers were evaluated in full value until the shock, but lost their values overnight. Subprime assets lost values just as the golden carriage of Cinderella suddenly turned into a pumpkin.

Courses of events after the Lehman shock in 2008 seem to have demonstrated that the Dornbusch overshooting model grasped the crucial monetary mechanism of flexible exchange rates. The subprime crisis hit the financial systems of the United Kingdom, the United States and Europe and left Japan's financial sector hardly damaged.

Japan's macro-economy was hardest hit relative to its scale by the inability of the Bank of Japan to counteract the waves of the yen appreciation caused by sudden and extraordinary quantitative easing by major countries. *Abenomics* put the Japanese economy right back on track by exploiting the efficacy of monetary policy under flexible exchange rates.

## EURO

I believe that, under the criteria of Mundell, the current eurozone definitely exceeds an optimum currency area. This is the very reason that the euro countries have to struggle

2. Robert Mundell, *International Economics*, New York, Macmillan.
3. Harry Johnson, "The Monetary Approach to balance of payment theory," *Journal of Financial and Quantitative Analysis*, 1972; Rudiger Dornbusch, "Expectations and Exchange Rate Dynamics," *Journal of Political Economy*.

repeatedly facing economic crises from the lack of independent monetary policy instruments to deal with different objectives and market conditions.

Notice that Abenomics could not have been implemented in Europe. In fact, Japan could have slipped out of the reverse shock to a sharp appreciation of the yen by its own monetary policy, but it had not done so until Shinzo Abe appointed a new governor of the Bank of Japan, Haruhiko Kuroda. Japan had behaved as if it had been under a fixed exchange rate. On the other hand, European countries are still now essentially constrained by the "Golden fetter" by Barry Eichengreen.

Under the flexible exchange rate, the Japanese monetary authority could have steered itself better if it knew the exact mechanism of flexible rates.

Unfortunately, countries in the euro region can hardly engage in independent monetary policy. An important lesson is that Abenomics is impossible for an individual country in the eurozone to deploy. What Europe can do is depreciate the general level of the euro relative to major currencies. Alas, the difference in appetites for inflationary or deflationary price levels cannot be serviced since there are no monetary instruments for member countries.

## MONETARY POLICY COORDINATION

The choice of exchange rate regime dictates the need for international policy coordination.

Monetary coordination is definitely needed under the fixed exchange rate or under a common currency. Each country has its own policy objective in terms of price level, output gap or a point on its Phillips curve. Since the number of policy instruments under a single money is limited, the choice of monetary objective is reduced to a political action. Under the fixed exchange rate, the use of monetary instruments is constrained because of the balance of payments constraints on each economy. Therefore, the need for monetary policy coordination arises.

Under the flexible exchange rate, as Eichengreen and Sachs suggested in 1984, and as Hamada and Okada showed in 2009,[4] *laissez faire* is what is desirable, because there are sufficient numbers of monetary instruments to cope with the stability of each nation.

Under flexible exchange rates, there is strong negative feedback from an expansionary policy in one country to a neighbor connected by a flexible exchange rate. This process is exactly captured by Rudiger Dornbusch's overshooting model of exchange rates. By

4. Koichi Hamada, "Strategic Analysis of Monetary Interdependence," *Journal of Political Economy*, Barry Eichengreen and Jeffrey Sachs, "Exchange Rates and Economic Recovery in the 1930s," *Journal of Economic History* (1985), Koichi Hamada and Yasushi Okada, "Monetary and international factors behind Japan's lost decade," *Journal of the Japanese and International Economies* (2009).



contrasting the adjustment speed in the asset (exchange) market and the adjustment speed in goods market, Dornbusch clearly showed that the asset market then reacts to nominal shocks abruptly and excessively. The exchange rate overshoots the long run equilibrium. This is consistent with the experiences after the Lehman crisis. In the long run, there may be positive spillovers due to externalities related to trade.

The need for policy coordination is dictated by the degree of freedom in monetary policy and the number of targets. The question is not whether the spillover is positive or negative. Under flexible rates, the number of targets is to be matched by the number of independent monetary policy instruments. Under a common currency, the number of independent monetary policies is drastically reduced to unity. Under fixed exchange rates, the number of monetary policy instruments is recovered. The number of policy objectives will be increased again by the number of balance of payments constraints.

## PEACE IN EUROPE

I explained the cost of a single money for Europe. What is the basic reason that European countries try to keep the eurozone so large? What are the benefits from these policy-wise sacrifices in terms of deflation and stagnation? The answer seems to be clear. European countries bought "peace." When Robert Schuman started the basis of European Community, he conceived it not merely as a basis of material gains. He thought of the long fought war between Germany and France that devastated the people of Europe. Definitely, his objective was realized. At least, except for small military conflicts among nations, there has been no major war in the European continent since the end of World War II.

I understand that peace between France and Germany is invaluable for these two countries as well as for Europe. Do they need, however, to be united in terms of money to such a scale that seems to be larger than optimal?

To repeat, the eurozone does not define the optimal currency area as it is. A European economist I respect said that it will be an optimal currency area if political consolidation progresses sufficiently. It may be true, but the argument seems to show that, right now, given the present stage of political and fiscal integration, Europe may be an optimal currency area at some time in the future. But it is still too large to be an optimal currency area.

Repeated economic or financial crises seem to deny the fact that the economic benefits of a single currency at such a scale as the current one is justified. Europe was larger than the optimal currency area. It has so far barely succeeded to overcome multiple crisis. As long as the eurozone is larger than the size of the optimal currency area, it will encounter more crises that will need to be encountered again and again with lots of toil and nerve. Is it the wisest choice?

It may not be Scotland that should decide on national independence. Should some southern Mediterranean countries begin to deliberate leaving the eurozone?

### EPILOGUE

Robert Triffin—master of Berkeley College, Yale, a bit reminiscent of Agatha Christie's Poirot—taught me a course of international finance in 1964. He was then writing his book, published with a colorful cover, *The World Money Maze*, in which he emphasized the transaction and information problems associated with too many monies in Europe. If Robert Schuman is the father of the European Community, so Robert Triffin is the father of the euro.

In his academic gown in a mural in the dining hall of Berkeley college, Triffin appears to talking to me even now, "When you listened to my lecture, you may have a doubt of the prospect for a single currency in Europe. As I predicted to you in the class, Mr. Hamada, however, the money in Europe has been unified beyond the maze or inconveniency of too many monies." From the reasons I explained in this essay, I still dare to ask him. "I appreciate your inspiring—more philosophical than just technical—teaching of international finance. But didn't the eurozone extend too far without sufficient economic integration or necessary progress in political integration?"

Koichi Hamada, Tuntex Professor Emeritus of Economics, Yale
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# WHY UNDERSTANDING THE HISTORY OF BRETTON WOODS MATTERS TODAY[1]

ERIC HELLEINER

THOSE SEEKING to reform global financial governance today often invoke the history of the Bretton Woods negotiations. But three aspects of that history are often misunderstood. Contemporary analysts often see the Bretton Woods negotiations as a kind of "Big Bang" moment in which the global financial system was redesigned *de novo*. It is also widely portrayed as a largely Anglo-American affair. In addition, the Bretton Woods negotiations are often critiqued for neglecting international development issues. Each of these overlooks an important part of the history of Bretton Woods that deserves greater attention at this 70th anniversary of the famous 1944 meeting.

### A BIG BANG EVENT?

The Bretton Woods negotiations have come to symbolize how an entirely new system of global financial governance can be created from scratch in a dramatic and decisive manner by skilled policymakers with creative visions. Ambitious reformers often call for

1. For further details and references for the arguments presented here, see Eric Helleiner, *Forgotten Foundations of Bretton Woods: International Development and the Making of Postwar Order* (Ithaca: Cornell University Press, 2014).

a "new Bretton Woods" as a way of reminding overly cautious officials of this possibility. But to what extent were the Bretton Woods negotiations really this kind of "Big Bang" moment?

There is no question that key individuals such as John Maynard Keynes and Harry Dexter White brought creative and ambitious ideas to the negotiating table and that their vision and agency contributed much to the success of the Bretton Woods conference. But it is often forgotten that the designs for Bretton Woods institutions also grew more incrementally out of some deeper institutional pre-history.

Particularly important were a set of institutional innovations that emerged during the late 1930s and early 1940s in the inter-American context. As part of its Good Neighbor Policy, the Roosevelt administration had begun in the late 1930s to extend loans to Latin American countries to cover short-term balance of payments fluctuations and to promote long-term development projects. This US public international lending program was the first of its kind and it established a key precedent for the two lending functions of the International Monetary Fund (IMF) and International Bank for Reconstruction and Development (IBRD).

In 1939–40, the Roosevelt administration then went further to negotiate the creation of an Inter-American Bank (IAB) that was designed to place this public bilateral lending program within a novel multilateral institutional context. The IAB was to be the first-ever public multilateral financial institution and its mandate was to offer both short-term balance of payments and long-term development loans. Congress subsequently refused to endorse this proposal, but the IAB's proposed activities and governance structure directly foreshadowed core features of the IMF's and IBRD's design.

White built directly on these experiences when he developed the first drafts of his Bretton Woods plans in early 1942. Not only had he been deeply involved in the Good Neighbor lending programs, but he had also been the key architect of the IAB proposal. Rather than being drafted de novo, White's designs for the IMF and IBRD—designs that heavily shaped the final outcome—simply placed these inter-American experiments within a global framework and improved upon them in incremental ways.

The "Big Bang" view of the origins of Bretton Woods thus neglects the importance of these incremental institutional innovations that predated and shaped the negotiations. In so doing, it risks encouraging unrealistic expectations for those seeking to reform global financial governance today. The Bretton Woods experience suggests that significant global financial reform takes time and requires detailed incremental work.



### AN ANGLO-AMERICAN AFFAIR?

A second aspect of the Bretton Woods negotiations that is often misunderstood is the role of countries other than the US and Britain. Many accounts of the negotiations depict them largely as a bilateral Anglo-American affair. But there were forty-two other governments represented at the 1944 conference and the minutes of the meeting show how many of them made many thoughtful contributions to the discussion.

For example, the Indian delegation was particularly active in commenting on a number of issues. Although still a British colony at the time, India was represented by a delegation made up of both Indians and Britons (four of each). The former represented Indian nationalist perspectives on the postwar international financial order very effectively, perspectives that had been developed by Indian analysts for many months in advance of the conference.

The Chinese delegation was also actively engaged in the conference negotiations. Indeed, the Chinese government sent an enormous delegation of thirty-three people to the meeting, making it the second largest delegation behind only that of the United States (forty-five) and more than twice the size of the British delegation (fifteen). The Chinese government's position drew on a fully-fledged alternative to the US and British plans that its experts had prepared in 1943.

Brazil also sent a large delegation of thirteen people to the conference and its representatives participated very actively in the discussions. Mexican officials also made prominent contributions. Indeed, Mexico's financial minister, Eduardo Suárez, chaired one of the three "Technical Commissions" around which the negotiations were organized (Keynes and White chaired the other two). Both Brazil and Mexico also worked closely to coordinate their positions with other Latin American countries which collectively acted as an influential voting bloc at the conference with nineteen of the forty-four delegations represented.

The contributions of the "42 other" governments were not restricted to their active role at the Bretton Woods conference. The important Atlantic City conference in June

1944—at which much core text for Bretton Woods was hammered out—also involved sixteen countries and once again delegates from countries other than the US and UK were far from passive observers of the proceedings. Chaired by White, that meeting also had four deputy chairs who included not just Keynes but also officials from China, the USSR, and Mexico.

Before these meetings, many of the "42 other" governments represented at Bretton Woods had also already commented extensively on the initial Anglo-American plans. For example, in the spring of 1943, the US had invited forty-three governments to send delegates to discuss White's initial plans in Washington. Eighteen of these countries sent representatives to a three-day multilateral consultation session that the US hosted in June 1943 at which wide-ranging discussions took place.

White and other US officials also met separately with many of these and other countries' officials around this time, and the minutes of these meetings in the US archives make clear that these discussions were often quite substantial. Governments that could not send representatives to Washington then also submitted written comments, some of which were quite extensive. Officials from other countries who participated in these various consultations also sometimes prepared very thoughtful detailed commentaries for their governments.

White and other US policymakers saw their efforts to solicit input from many countries as critically important to the overall vision of Bretton Woods. In the words of John and Toye and Richard Toye, they were strongly committed to "*procedural* multilateralism" in which all the United and Associated Nations would have an opportunity to contribute to the creation of the postwar international financial order.[2] When Keynes initially proposed bilateral Anglo-American talks as the best way to design that order, White explicitly rejected this idea, arguing that it would create the impression of an Anglo-American "gang-up."[3]

The strong US support for procedural multilateralism thus ensured that many other countries were actively engaged in the Bretton Woods negotiations. Recognizing this point is particularly important today. An excessive focus on the Anglo-American dimension of the Bretton Woods negotiations risks downplaying the core multilateral features that were not just built into the formal design of the Bretton Woods institutions but also part of its negotiation. These features have been among the most enduring

2. John Toye and Richard Toye, *The UN and Global Political Economy* (Bloomington: Indiana University Press, 2004), p. 18. "Associated" nations referred to countries that had broken diplomatic relations with the Axis powers but not joined the United Nations.
3. Quote from E.F. Penrose, *Economic Planning for the Peace* (Princeton: Princeton University Press, 1953), p. 48.



of the original Bretton Woods vision and they have particular significance now as power diffuses in the contemporary global financial system.

The depiction of the birth of Bretton Woods as simply the product of Anglo-American discussions also undervalues the contributions made, and perspectives offered, by policymakers from many of today's "emerging powers." Countries such as China, India, Brazil, and Mexico were all present at the creation of Bretton Woods and participated actively to its design, bringing thoughtful perspectives to the table. The recollection of their roles enables us to see their growing influence today as building on these earlier contributions.

### NEGLECTFUL OF INTERNATIONAL DEVELOPMENT ISSUES?

The neglect of both Bretton Woods' incremental origins and its procedural multilateralism has contributed to one further oversight: most histories of Bretton Woods ignore its pioneering role in addressing international development issues. Many analysts in fact go out of their way to suggest that the Bretton Woods architects showed little interest in international development. That perspective is very difficult to reconcile with the historical evidence.

White had already emerged in the late 1930s as one of the strongest supporters of US financial assistance to Latin America for development purposes, including in his drafting of the stillborn IAB whose core mandate was to have been the promotion of Latin American development. Since White's first drafts of the Bretton Woods institutions built directly on this Latin American experience, it is not surprising that they included provisions explicitly aimed at supporting the development of poorer countries.

These provisions included not just the creation of the IBRD with a mandate to mobilize long-term development lending. US officials also stressed that the IMF's short-term lending for balance of payment purposes would be particularly useful for poorer countries whose dependence on commodity exports left them vulnerable to unexpected seasonal fluctuations and price swings. In justifying his support for capital controls, White also called special attention to the fact that they could be used to curtail capital flight from poorer countries.

In addition, White initially empowered both the Fund and Bank to facilitate international debt restructuring, reflecting his frustrations with the unwillingness of US private creditors to accept settlements of defaulted Latin American debt from the Great Depression. Drawing on issues he had encountered in Latin America, White's plans of early 1942 also expressed strong support for the use of infant industry tariffs in poorer countries as well as a proposal that the IBRD support efforts to stabilize international commodity prices.

Taken together, these provisions outlined a highly innovative vision for international policy coordination that was supportive of the economic development of poorer countries. Never before had a multilateral framework of this kind been put forward at the global level. White's ideas in fact foreshadowed in a remarkable way many core issues that arose in the international policy debates on international development that heated up in the 1960s and 1970s: long-term development lending, short-term compensatory balance of payment finance, the regulation of capital flows, debt restructuring, special trade treatment, and commodity price stabilization.

Some of White's proposals were subsequently dropped from US plans, such as his proposals for debt restructuring and the trade issues relating to infant industry protection and commodity price stabilization (which were to be discussed in other international forums). But the core US commitment to international development remained and was widely shared among US policymakers at the time. This commitment was highlighted by US Treasury Secretary Henry Morgenthau in his welcoming speech at the Bretton Woods conference where he emphasized the need to establish "a satisfactory standard of living for all the people of all the countries on this earth." He made the case as follows:

> *Prosperity, like peace, is indivisible. We cannot afford to have it scattered here or there among the fortunate or to enjoy it at the expense of others. Poverty, wherever it exists, is menacing to us all and undermines the well-being of each of us.*[4]

It was not just US officials who were keen on Bretton Woods' backing of international development goals. Policymakers from many poorer parts of the world such as Latin America, China, and India had also strongly promoted the idea that the Bretton Woods negotiations should be used to build a new kind of international financial order that was supportive of their development goals. They were pleased to see the US and

4. Quoted in Helleiner (2014), op. cit., p. 122.



other countries support this objective. As one Indian official told an audience in India after the conference:

> *We all now apparently subscribe to the belief that poverty and plenty are infectious, in the international as well as in the national field, and that we cannot hope to keep our own side of the garden pretty if our neighbor's is full of weeds.*[5]

Far from ignoring international development, the architects of Bretton Woods were thus deeply committed to it and they pioneered many of the core ideas in this field that subsequently came to greater prominence. This history needs to be remembered today as emerging powers and other developing countries push for an international economic order that is more compatible with their development aspirations. These demands are often presented—and perceived in the high income countries—as a critique of the Bretton Woods system. Instead, they should been seen as efforts to resurrect the original Bretton Woods vision.

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5. Quoted in ibid., p. 254.

# THE BLEAK FUTURE OF THE INTERNATIONAL MONETARY FUND

HAROLD JAMES

Eight years after the outbreak of the global financial crisis, the outlook for the future of the world monetary system is dismal. We are sliding back into a world of economic and financial nationalism. We have currency wars, the national management and regulation of banking, and demands for greater levels of trade protection. International economic cooperation—and consequently the world economy—are more fragile today than at any moment in the postwar world, even at a time when prosperity is more widespread and growth more evenly distributed than at any previous time in human history. This is what Christine Lagarde memorably termed "the new mediocre," and it could get worse.

The phenomenon of globalization has today become a ubiquitous way of understanding the world. But people who used the concept as a tool of analysis failed to understand its volatility and instability. Globalization not only involves international movements of goods, people, and capital, but is also associated with transfers of ideas and shifts of technology. The rapidity of innovation makes for a continuous unsettling of conventional ideas. There is a continuous uncertainty about values, both in a monetary and a more fundamental and non-monetary sense.

At regular historical intervals, there are breakdowns of the monetary regime. The world order of the gold standard ended with the financial crisis that accompanied the outbreak of war in 1914. In 1931, the devaluation of sterling destroyed the chance of a "key currency" approach to the reform of the gold exchange standard.

In the six months following the 2008 Lehman collapse, during the most intense phase of the financial crisis, the world's political leaders reassured themselves that international cooperation in the new millennium was working splendidly. They loved to contrast their apparently unique and novel harmony with the grim precedent of the nationalistic and autarkic 1930s. Indeed the self-praise of the global elite became a soothing mantra, constantly replayed.

In the course of more recent years, the self-confident belief about the capacity for international coordination has been decisively shattered.

The European Union is polarized in its response to the crisis along national lines, with Germans blaming Greek extravagance, and Greeks bringing up history as an indictment of German brutality and irresponsibility. Stopgap crisis prevention measures are bitterly fought over. "Austerity" has become a phrase that divides Europe: The "South" sees it as a description of German irrationality and intransigence, and the Germans believe it to be an inappropriate redescription of a principle of responsibility.

Polite diplomacy has been shattered by the revelations of Wikileaks about NSA surveillance.

Reform of the IMF and of its archaic US-dominated and European-centered governance system, which appeared an urgent issue at G20 meetings at the height of the financial crisis in 2008–2009 has been stymied. The World Bank model of development is challenged by an alternative model associated with China.

The problems that have been diagnosed in and discussed since the mid-1990s by the Reinventing Bretton Woods Committee steered by Marc Uzan have only become more intractable.

First, the sovereign debt issue. In 2001, the IMF's First Deputy Managing Director Anne Krueger suggested a general Sovereign Debt Restructuring Mechanism, but the proposal ran into the sand. The Fund did evolve an approach which linked its programs to debt restructuring in small and non-systemic countries, such as Ukraine, Peru, and Pakistan.



But working out what is a sustainable level of debt cannot be a scientific exercise. Debt may be sustainable in some circumstances (for instance, with strong growth and a low interest rate environment) but unsustainable in others. This uncertainty, which cannot really be resolved at the moment when a crisis breaks out, creates a radical indeterminacy. Future growth and interest rates in turn depend on whether debt is thought by creditors as sustainable. Overall, the success of a debt reduction program thus became heavily dependent on "confidence effects."

Moreover, dynamic international capital markets establish channels of financial contagion between countries. As a consequence, debt reduction in one country would trigger broader systemic consequences for other economies. It was ambiguity about the need for a sovereign debt restructuring, and an inability to see how much was needed (and who should take the sacrifices), that made the European debt crisis so painful and so protracted.

The global financial crisis—and its particular aftermath in Europe—also created higher levels of government debt as governments were pressed to take over large debts built up in the private sector out of fear of the systemic consequences of widespread defaults on private contracts. The result increases the fragility of markets, as there is a constant fear of debt dynamics tipping in the direction of instability.

Secondly, the Reinventing Bretton Woods Committee has dealt with the question of currency instability and thought of answers in terms of a move to a multi-reserve system and away from dependence on the US dollar. In the interwar crisis, currencies become an instrument of policy, of statecraft, and of the competition and rivalry of states with each other in "beggar thy neighbor" actions in which economic and financial instability was exported to other countries. "Currency wars" was a phrase widely used in the interwar years, but then it was consigned to history books until the Brazilian Finance Minister Guido Mantega started using it again in 2010. Now it is a general buzzword: in China, Turkey, but also in Europe.

Even more devastating in their implications are the modern "financial wars," whose aim is even more aggressive: to persuade the other side in an escalating confrontation to change its course. Initially, as laid out in an important book by Juan Zarate, a new strategy was developed against Al Qaida, and then used against North Korea and Iran.[1] It depended on asset freezes and the isolation of rogue banks, thus cutting off access to international finance.

By 2014, after the Russian aggression in annexing Crimea and fomenting unrest in eastern Ukraine, the issue of financial wars took on a global or systemic dimension. The Russian banking system was over-extended and vulnerable even before the events in Ukraine. The stock market panics that followed the deposition of Yanukovych weakened the Russian economy and instantly depleted some of the assets of the Russian oligarchs.

In a system of crony capitalism, threatening the wealth of the narrow governing elite rapidly erodes their loyalty to the regime. The corrupt elite see a tipping point in which they would be more secure if they went over to an opposition. That is essentially the model that had been played out in Kiev as the Maidan protests gathered momentum in the course of a harsh winter.

President Vladimir Putin's calculation in the face of this strategy—as he reveals it in public speeches—is that the EU and the US cannot possibly be serious about the financial war. It would prove to be what he terms a boomerang: Russia would be less affected than the more developed financial markets of Europe and North America. Russia might be financially isolated, but the inter-connected markets of the West would seize up more completely and more catastrophically. The vulnerability of complex inter-connected institutions was the lesson of the Lehman crisis. Lehman is quite small compared to the Austrian, French and German banks that would be badly hit by a Russian financial crisis.

Financial interlinkages are becoming "weaponized" in a game of geo-politics. The problems that Bretton Woods was designed to solve in 1944 have reappeared, but there is absolutely no prospect of a new Bretton Woods.

The institutional vision was linked at that time to a global security system. Indeed it was quite deliberate that in the original agreement, the five large powers that would have permanent representatives on the IMF Executive Board (the United States, the United Kingdom, the Soviet Union, China and France) were also the countries with permanent seats on the UN Security Council.

How could a world order simply be negotiated by different powers that wanted to protect their national interest? At the same time as Keynes was setting out a view of

1. Juan Zarate, *Treasury's War: The Unleashing of a New Era of Financial Warfare* (NewYork: PublicAffairs, 2013).



how a process of international deliberation and planning could actually create an order, his great rival Friedrich Hayek was laying out the logic of why all successful and enduring orders had to be spontaneous. So can an event like Bretton Woods be repeated?

In 1933, Keynes had commented on the abortive London World Economic Conference that "a pow-wow of sixty-six nations" could never be expected to agree. A workable plan could only be realized at the insistence of "a single power or like-minded group of powers." Although there were forty-four countries formally represented at Bretton Woods (the wartime allies; the Axis powers, but also the neutrals, were of course excluded), in practice only two mattered, the United States and the United Kingdom; and in practice only one *really* mattered.

Bilateral talks subsequently remained the key to every major success of large-scale financial diplomacy. In the early 1970s, when the fixed exchange rate regime came to an end, the IMF seemed to have outlived its function. Its Articles of Agreement were renegotiated by the US, which was looking for more flexibility, and France, which wanted something of the solidity and predictability of the old gold standard.

Later in the 1970s, European monetary relations were hopeless when France, Germany, and the United Kingdom tried to talk about them, but were straightened out when only France and Germany took part. Today France and Germany are still the key voices in discussions of European monetary issues. In the mid-1980s, when wild exchange rate swings produced calls for new trade protection measures, the US and Japan found a solution that involved exchange rate stabilization. Today the major focus of international economic diplomacy is again bilateral, between the US and China.

In recent years, a debate has developed about whether the world of the 2000s constructed a "Bretton Woods II," in which rapidly growing export-led economies peg to the US dollar (more or less) in order to obtain faster growth, and consequently accumulatereserves at spectacular rates. Could China and the US really negotiate a formalized version of such an agreement, in which the renminbi would play an increased role?

The equivalent today of the time pressure that existed at the end of the Second World War is an urgent but also uncontrollably global crisis. What would constitute such a fear-inducing event that would make the achievement of a global pact an urgent necessity rather than just something that it might be nice to do? What shock would convince the Chinese leadership that it urgently needed to preserve the open global economy on which its past success as an exporter depended? A financial crisis emanating from China's shadow banking system? A contest for the political leadership? A realization that in the aftermath of the crisis the world is sliding back to some quiet forms of protectionism, and that TTIP might succeed by convincing Europeans and Americans that they have a common enemy in rising Asia?

The sad lesson of Bretton Woods is that things need to be extremely dangerous before a political dynamic of reform develops. It may be that today's world, for all its anxieties, is simply not obviously dangerous enough.

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# TOWARD A MULTI-CURRENCY INTERNATIONAL MONETARY SYSTEM

THOMAS J. JORDAN

The world economy is currently undergoing a number of decisive transformations. Some of them are structural in nature, such as increased interconnectedness between countries or the rising strength of emerging market economies. Other transformations are more cyclical, such as the recovery from the recent crisis or, in some countries, the exit from unconventional monetary policies. These transformations are rekindling the debate over the functioning of the international monetary system. One dimension of this debate is the transition from a US-dollar-dominated system to a multi-currency system.

History shows that the functioning of the international monetary system, in particular during periods of transition, has been challenged by large capital flows and financial crises. It was precisely to forestall and manage large capital flows and crises that international monetary cooperation was institutionalized in Bretton Woods in 1944. Despite a number of crises, the system has proved quite resilient so far. The present transition raises the question of whether international monetary cooperation will continue to enable a smooth functioning of the international monetary system going forward.

This essay aims to shed some light on the implications of currency internationalization for individual countries and for the system as a whole during the transitiontoward a multi-currency world. It also explores avenues to strengthen policy coordination in order to smoothen the transition.

### IMPLICATIONS OF THE TRANSITION FOR NEW RESERVE-ISSUING COUNTRIES

The world is growing multipolar. Large emerging market economies now account for an increased share of global economy and trade. As a result, the international use of their currencies has recently surged. More countries now have a stake in global stability and aim to play an active role in international monetary cooperation. The emergence of regional financing arrangements or the ongoing governance reforms in the multilateral institutions are examples of this trend.

The transition toward a multipolar world is reflected in the currency constellation in the international monetary system. So far, the system has been mainly centered on the US dollar and, to a lesser extent, the euro, reflecting the world's largest economic areas. Recently, new currencies have made inroads in line with the growing economic importance of emerging market economies.

The change in the currency constellation in the international monetary system is likely to be gradual. Currency internationalization is, in fact, the outcome of an evolutionary and market-driven process depending on more than just an economy's size and trade network. It is a function of the depth and liquidity of financial markets, capital account openness as well as the stability and convertibility of the currency concerned.[1] Admittedly, countries could accelerate this process by implementing policies that encourage the internationalization of their currencies. Countries could also reap benefits from the international use of their domestic currencies. The main advantage lies, of course, in a country's possibility to issue international debt in its own currency, which allows for lower yields and less costly economic adjustment. Other potential benefits include increased trade, reduced exchange rate risks and improved institutional frameworks.

However, currency internationalization may involve downside risks to monetary and financial stability. It may weaken the control of monetary aggregates due to the

1. See Barry Eichengreen, *Exorbitant Privilege: The Rise and Fall of the Dollar* (New York: Oxford University Press, 2011).



development of offshore activities and, thus, complicate monetary management. Moreover, it may reduce a country's competitiveness due to increased demand for assets denominated in its currency leading to exchange rate appreciation. Mindful of these risks, some countries have been reluctant to allow the internationalization of their currencies in the past.

Today, the desire of large emerging market economies to increase the international use of their currency indicates that advantages are perceived to outweigh potential downsides at the country level.

### IMPLICATIONS OF THE TRANSITION FOR GLOBAL STABILITY

Internationalization might bring benefits on the national level. It is, however, unclear how the transition to a multi-currency system would impact the overall stability of the system.

At least two arguments speak in favor of improved global stability during the transition phase. First, the desire to internationalize their currencies drives emerging market economies to implement economic reforms and strengthen institutions, thus improving the resilience of the global system. Second, the international use of major creditor countries' currencies is likely to result in an appreciation of their currencies, thereby facilitating adjustment of their external balance of payments.

Then again, the transition phase presents uncertainties due to the diversification effects among reserve currencies in international portfolios. On the one hand, an enlarged pool of reserve currencies increases the diversification of assets and risks in international portfolios, thus mitigating the impact of shocks. On the other hand, this increase in diversification in international portfolios exposes more countries to large portfolio shifts and therefore increases spillover risks that could intensify the impact of shocks. Insufficient experience makes it impossible to predict which of the diversification effects will prevail. However, recent developments indicate that in critical times large adverse cross-border spillovers usually dominate the system. These spillovers are likely to be amplified in today's highly interconnected world and through the abundant liquidity resulting from unconventional monetary policies. Cross-border spillovers could give rise to a bumpy transition to a multi-currency system. Enhanced international policy cooperation might be needed to ensure that the transition is as smooth as possible.

### MANAGING THE TRANSITION TO A MULTI-CURRENCY INTERNATIONAL MONETARY SYSTEM

There are different views as to how the international monetary system should be altered to address spillovers during the transition. The current system relies on four complementary layers that make up the global safety net: (i) countries' foreign exchange reserves; (ii) swap lines; (iii) regional financing arrangements; and (iv) multilateral lenders with the International Monetary Fund (IMF) at their center.

Some argue that the global safety net should be fundamentally revised. This overhaul of the system could, for instance, be accomplished by introducing formal coordination among its different layers. Coordination might enable synchronized provision of liquidity during crisis. In this context, the IMF would play the role of liquidity provider on a larger scale. To assume this role, the IMF shareholders would need to substantially increase the Fund's resources, presumably through their central banks' resources.[2]

This kind of fundamental overhaul of the global safety net would encounter a host of practical obstacles. It is, indeed, questionable whether central banks would be in a position to transfer substantial resources to the Fund. The transfer of such resources would entail a transfer of powers from national authorities to the IMF, and possibly from central banks to fiscal authorities. Both of these transfers would face legal andgovernance-related obstacles. In many countries, the transfer of resources may be legally impossible. Such a transfer of powers would most likely need to baccompanied by a fundamental reform of the current governance structure of the IMF. And, as it is well-known, governance reforms of international institutions are quite challenging and protracted.

A pragmatic approach would be to address spillovers by further strengthening the current global safety net. In fact, the existing system has served the world rather well, even though it is a relatively loose combination of institutions and rules governing exchange rates, capital flows, and reserves. It has proved fairly adept at tackling the worst financial crisis in recent times and in providing support to different countries in different circumstances. Moreover, several improvements have already been made to the various layers of the system: (i) the lending capacity of the IMF has increased and its toolkit has been refined; (ii) regional financing arrangements, especially the one in Europe, are gradually taking shape; and (iii) temporary bilateral currency swap arrangements have been converted to standing arrangements.

2. See IMF, "The Fund's Mandate—The Future Financing Role: Reform Proposals", Policy Paper (Washington, D.C.: IMF, June 2010).



To address spillovers, however, there is admittedly scope to increase the resilience of the global safety net by enhancing the IMF's advisory role and nurturing central bank cooperation. The following considerations could be taken into account.

First, the Fund has a key role to play in analyzing spillovers and in providing the best possible policy advice to address them. The Fund is a unique institution required by its mandate to oversee both countries' domestic policies and the international monetary system. Drawing on its cross-country experience and technical expertise, the IMF needs to further sharpen its analytical tools with respect to shocks and their transmission during the transition. Better analytical underpinnings, in turn, can lead to better policy advice on how to address spillovers from a domestic, a regional and a systemic perspective.

Second, close cooperation among central banks facilitates swift and coordinated policy responses to adverse spillovers. This cooperation could include concerted policy measures among major central banks as agreed during the recent crisis and dialogue among major central banks. Switzerland's experience with central bank cooperation provides insights into the advantages of these forms of cooperation. In particular, it underscores that effective coordinated actions on the demand and supply side of reserve currencies are key to mitigating liquidity risks and negative spillovers in times of extreme volatility. Furthermore, the Swiss experience shows that the dialogue with other central banks is crucial to foster good cooperation and avoid any misunderstanding of autonomous policy steps. Effective communication with other central banks was essential in clarifying that the introduction of the minimum exchange rate was by no means a beggar-thy-neighbor policy, but rather a necessary measure to escape the deflationary threat and the looming economic collapse.

This said, it is important to emphasize that enhancing policy coordination at international level does not replace the need to conduct sound policies at domestic level. On the contrary, "keep-your-own-house-in-order" policies remain necessary for global financial stability as they lead to strong and resilient fundamentals that act as effective buffers against shocks and avoid unnecessary spillovers.

### LOOKING AHEAD

As the world economy is heading toward a multi-currency system, the dynamics of the transition are far from clear. Increased diversification of assets and risks in international portfolios could generate spillovers, testing domestic policies and international policy coordination. At the same time, the transition from a US-dollar-dominated currency system to a multi-currency system offers a great opportunity to further enhance countries' resilience to shocks and contribute to global stability.

Smoothing the transition toward a multi-currency international monetary system is desirable and feasible. A fundamental overhaul of the current global safety net might be challenging to implement. A pragmatic approach to manage the transition could be to further strengthen the global safety net by enhancing the understanding of spillovers and improving the policy responses to address them. In this context, the IMF and central bank cooperation have a crucial role to play.

Today's international policy agenda should give prominence to improving the Fund's work on spillovers with a view to providing countries and the system with consistent policy advice. Further, central banks should nurture cooperation to facilitate policy implementation and mitigate spillover effects. Preparing for a more stable and efficient multipolar system in the future requires a stronger global safety net today. In this endeavor, international policy cooperation would be invaluable once more.

Thomas J. Jordan, Chairman of the Governing Board,
Swiss National Bank

## THE BRETTON WOODS SYSTEM: BEYOND ALL REPAIR?

MIKHAIL KHAZIN

It has already become commonplace to say that the Bretton Woods financial system is in crisis. However, no really compelling explanation is given as to what this crisis consists of. Attempts are made to find local problems and fix them, but these actions have no global effect. Thus we can assume that the true reason for this crisis has yet to be found. This essay will attempt to find a global cause for the crisis in the Bretton Woods system and to analyze the possibilities for preserving or adapting this system. In this essay I will use the conclusions reached in the book by A. Kobiakov and M. Khazin entitled *The Decline of the Dollar Empire and the End of the "Pax Americana,"* published in Moscow in 2004, as well as other works by these authors, by O. Grigoriev, and a number of other economists.

The modern economy is one of specialization of labor. Consequently, development within the current economic paradigm is a deepening of the specialization of labor, which is the primary model of development that we call scientific and technological progress. A necessary condition for this type of progress is innovation: the appearance of new products and new techniques for producing old ones. This model was first described in the 17th century in the works of the early mercantilists. A slowing or stopping of the process by which the specialization of labor takes place is perceived as a crisis in the modern economic model. A simplification of the specialization of labor system (or degradation of the system), as happened in the 1990s in the Soviet Union, is perceived as an economic catastrophe.

A deepening of the specialization of labor invariably results in an increased risk for manufacturers, who must engage in a process (manufacturing) chain of ever increasing complexity. If there are no mechanisms to reduce this risk, the specialization of labor will at some point stop deepening, and the system moves into a state of profound crisis.

In a closed economic system (one that does not interact with the rest of the world), a natural deepening of the specialization of labor can occur only to a certain extent, at which point innovation ceases to be beneficial and scientific and technological progress first slows and then comes to a halt. This hypothesis was first put forth by Adam Smith in the early 18th century and the topic was further developed by Rosa Luxemburg in the framework of Marxist political economy in the late 19th–early 20th century.

As we have seen, development within the paradigm of scientific and technological progress is possible only when mechanisms are employed to reduce risks for producers. Three such mechanisms have been devised: producer credit (risks are partially borne by the financial system); broadening of markets for product distribution (producer risks are reduced in the initial economic system); and consumer credit. It should be noted that only the physical broadening of markets actually reduces risk throughout the economic system; the other two mechanisms merely redistribute the risk.

The premises outlined above allow us to determine the current problems with the Bretton Woods system. Because the scale of *actual purchasing power* in the world has been exhausted, any further reduction of risks is essentially impossible. As for the redistribution of risk, the means of doing this have also reached their limit: credit and insurance instruments essentially no longer increase the efficiency of production (including with regard to services). The capabilities for credit stimulus on the demand side are also practically exhausted, as the world is experiencing a grave debt crisis. As a result, the world has entered a crisis in which the effectiveness of capital has fallen, along with a rapid decrease in the pace of further specialization of labor. This crisis has



precedents in the first and second "Great" depressions (1908–14 and 1933–41) and the crisis of the1970s. A defining feature of this type of crisis, as opposed to the usual cyclical crises, is that there is no "natural" exit: the economy continues to drop and growth does not begin.

In the financial system, this phenomenon is manifested in an inability to increase its effectiveness by offering new ways to reduce risk for producers. Attempts to resolve this problem on the basis of prudential measures have not had a significant positive effect, which is understandable in light of the foregoing: without growth in distribution markets, this objective cannot be achieved at present.

From the standpoint of the financial system, this means that it is not currently possible to resolve certain key problems faced by the system. This is primarily the contradiction of the dollar, which is, on the one hand, the national currency of the United States and is used to stimulate demand in that country and is, on the other hand, a global and reserve currency. In 1944 the US economy comprised more than 50% of the global economy, which led to a more balanced situation within this framework. But today this share has fallen to approximately 20%, and it is becoming much more difficult to maintain the stability of this global currency using the resources of the US. Incidentally, President Obama spoke about this in an address to the UN General Assembly, but he was not heard out on this point.

A further contradiction is the structural difference between aggregate consumer demand and personal incomes. In the United States at present, the actual disposable income of households (adjusted for the real rate of inflation and not the official one) is at the level of the early 1960s, and all additional demand comes from reducing savings and increasing debt (of both households and the government). A rough estimate of this structural shift is approximately three trillion dollars per year, and this has been supported by constant refinancing of debt against a background of systematic reductions in the cost of borrowing. In 1980, before the beginning of Reaganomics, the US Federal Reserve System borrowing rate was 19%, and by December 2008 this was reduced essentially to zero. It is, of course, no accident that this time frame corresponds to the beginning of the "acute" phase of the crisis in September of that year.

Still another contradiction is that the need to use more and more complicated financial instruments to reduce producer risks has led to a radical change in the distribution of aggregate profits in the economy in favor of the financial system. Before World War II, the norm was 5%. By the end of the 1940s, it had risen to 10%, and it now exceeds 50%. Clearly, it is fundamentally impossible to increase this, as an economy in which more than half of profits are removed from the production sphere (and here again I mean not only production of goods, but also services required by end consumers) to the intermediary cannot become more efficient.

There are other, less fundamental contradictions, but those already named demonstrate that it is impossible to solve the problems of the financial system using exclusively financial methods. The crisis covers the whole of the economy. However, the experience of the last 40–45 years or so, over which a shift occurred from Keynesian government management to monetary methods, makes it impossible to work outside of purely financial management methods: no one among the current bureaucrats even knows what that would look like. This is true at least of developed countries, but in Russia this is not the case yet.

A final conclusion from the foregoing: the crisis in the Bretton Woods financial system is connected less with the internal mechanisms of the system than with outside forces. This is the basis for our fundamental conclusion: reforming the Bretton Woods system itself is unlikely to help resolve the crisis that is underway.

However, the arguments presented above show how, at least in theory, we can compensate for some of the contradictions inherent to the Bretton Woods system. It is entirely possible that this would allow us to increase its lifespan and extend the current situation for perhaps a few decades.

This involves, first and foremost, dividing the functions of a national currency and an international currency. It should be noted that this was attempted in 2011as the "Central Bank of Central Banks," but after the Strauss-Kahn scandal this project was put aside. If we look for historical analogs, we see that the "Central Bank of Central Banks" is clearly meant to mirror the Federal Reserve System, but on the scale of the entire Bretton Woods system rather than on a national scale. But that which succeeded in 1910–13 was not achievable this time around. In point of fact, this unsuccessful attempt merely demonstrated that purely financial methods no longer work: an entirely reasonable proposal to reform global financial management, a reform that showed its effectiveness 100 years ago, failed for purely political reasons.



Another option for salvaging the situation is to forgive a portion of the accumulated debt. It will never be returned in any case, as the actual disposable income of the population does not produce sufficient liquidity, and the need to service this debt places significant constraints on economic growth. Several possible options exist for debt forgiveness: writing off corporate debt, which would allow corporations to reduce prime costs; writing off private debt to stimulate purchasing power and make it more robust; and, finally, restructuring the debt over several decades which, given the incipient processes of inflation, essentially amounts to writing it off entirely.

The problem with this is that the majority of assets in the current economy are purely financial assets and the above proposal not only requires a fundamental change in the entire financial infrastructure, but also requires closing down most current financial institutions and stripping their beneficiaries and owners of most of their income and assets. Obviously, these are the people who largely control the current political system and who will not permit such a decision to be made. And yet, maintaining the financial infrastructure in its current form is not possible in the long term in any case.

Thus we see that the Bretton Woods system, created to stimulate economic expansion of the dollar system after World War II, has reached its natural limit. In theory it would be possible to reform it to extend its viability, but the actions necessary to do this run into obstacles of a purely political nature. Consequently, I believe that preserving the Bretton Woods system in its current form is impractical, because in the medium term, the actions necessary to do this could have extremely negative consequences. However, it is possible to speak of creating a new system based on the ideas of the Bretton Woods system.

The nature of this system may be described as follows. The Bretton Woods system includes not only the commonly known institutions (the IMF, World Bank, and WTO [GATT]), but also an issuing center: the US Federal Reserve System. This includes the inherent contradiction between a national and an international currency function. For this reason, in order to create a global financial system based on Bretton Woods principles, we need to move from a mono-national currency system to a multinational currency system (currency zones).

This transition would resolve several issues at once. First, it would remove the burden on the currency: the scale of the new issuing centers within limited regional labor distribution systems would be greater than the current scale of the US economy in the world (and more comparable to its role in the late 1940s). Second, the new currencies (with the exception of the euro) would have essentially no debt problems. Consequently, and third, no political problems would be associated with accumulated financial assets.

Moreover, given the fact that aggregate private demand, which has been actively stimulated for the last few decades by dollar issuance (both in credit terms and monetary terms), will fall sharply, the problem of the unified system of labor specialization will be on the agenda no matter what. Thus the creation of regional systems (as happened, for example, in the first half of the 20th century) will also be on the agenda in any case. The only question is whether this process will be made controllable and, consequently, as painless as possible.

It therefore seems to me that the optimal structure for the global economy and finances takes the following form: it consists of several regional systems of labor specialization (currency zones) constructed internally on the principles of the Bretton Woods system. Commercial interactions between these zones would not operate on the principles of free trade, and in this regard the WTO would cease to exist. Roughly speaking, this might result in six or seven such systems (the Anglo-Saxon world with the dollar; the Latin American zone with South Africa; Western Europe and Western Africa with the euro; India; China, and southeast Asia with the yuan; and the Eurasian zone with the provisional ruble). Because interregional trade will still occur (though to a lesser extent than at present), an overarching infrastructure will be needed. Because the issuing principle is seriously compromised, interregional trade (or, more precisely, parity among regional currencies) could be based on gold, with control of interregional interaction being exercised by another international institution.

This model would make it possible not only to reduce the contradictions in the current system, but also to provide the world with at least a few decades to develop new tools for economic development. If this does not occur, we run the risk of falling into a series of crises, like the one in 2008, which will take place with increasing frequency and destroy all of the economic gains of recent decades.

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## CHALLENGE FOR THE JAPANESE YEN

HARUHIKO KURODA

2014 marked the 70th anniversary of the Bretton Woods Conference. Over the years, we have faced and addressed many challenges that might otherwise destabilize the global financial system. Following the abandonment of the Bretton Woods system, advanced economies adopted floating exchange rates, which became a catalyst for the emergence of the foreign exchange transactions. However, after the collapse of Bankhaus Herstatt in 1974, the issue of foreign exchange settlement risk drew attention in the global financial community. Followed by the collapse of several financial institutions in the 1990s, the concept of continuous linked settlement (CLS)—which allowed for the simultaneous settlement of currencies—came into existence. Now, foreign exchange transactions in 17 major currencies, including the Japanese yen, are settled through CLS, effectively mitigating the settlement risk of these currencies.

We also made it through a number of currency crises in the 1990s, including the Asian crisis. Emerging economies in Asia eventually accumulated their foreign exchange reserves and promoted regional financial cooperation such as the Chiang Mai Initiative.

The Bank of Japan (BOJ) has been playing an active role in furthering such cooperation in Asia. These episodes remind us that the current international financial architecture has been built on past policies and measures that have been aimed at containing the crises.

Looking ahead, we need to continue our efforts to improve the architecture that meets the challenges at present and in the future. Thus, the question is: what can we do to build an international financial architecture that is more resilient to adverse shocks and that helps the global economy to steer its growth?

In this essay, I will try to answer this question from the BOJ's perspective, by touching on one of the longstanding challenges facing Japan and its financial architecture. That is, to improve the financial infrastructure so that the yen and Japanese government bonds (JGBs) can be settled anytime and anywhere around the world. The ubiquity of these assets—in particular of the yen—is an important underpinning for Japanese financial institutions, which are increasingly playing a central role in the international financial system in light of financial globalization. Furthermore, the internationalization of the yen through the pursuit of such ubiquity will contribute to enhancing the stability of the international financial architecture.

In the following, I will first explain our efforts to enhance the BOJ's payment and settlement system, the BOJ-NET. Currently, we plan to extend the operating hours of the BOJ-NET so that a longer overlap of operating hours can be realized between the BOJ-NET and the overseas payment and settlement systems. Next, I will explain three possible areas in which financial institutions can take advantage of such an extension. These include measures such as establishing global access to the BOJ-NET by allowing those institutions to set up the BOJ-NET terminals abroad, connecting the BOJ-NET with overseas systems, and enhancing the efficiency of domestic retail payment services. All of these are aimed at improving the efficiency and resilience of the payment and settlement systems, and furthermore enhancing the convenience of the yen and JGBs both at home and abroad. Lastly, I will briefly touch on the government's initiatives aimed at enhancing payment and settlement services.

### ENHANCEMENT OF THE BOJ FINANCIAL NETWORK SYSTEM (NEW BOJ-NET PROJECT)

Let me start with our own initiatives to enhance payment and settlement services in Japan. The BOJ-NET constitutes an essential part of the Japanese payment and settlement systems, and we are currently carrying out a major project for its renewal (the New BOJ-NET Project). This project is underpinned by three overarching principles. First, we want to employ the latest information technology to enrich our services and improve convenience for our customers. Second, the new BOJ-NET has been designed to accommodate greater flexibility so that it can respond to ongoing and future banking needs and market developments. Last, but not least, we want to enhance the accessibility of the BOJ-NET in light of globalized financial markets and encourage interconnectedness among financial market infrastructures (FMIs).



Against this background, we have been developing the new BOJ-NET in two phases. This is intended to facilitate a smooth transition to a new system. The first phase, launched in January 2014, dealt with the transition of services concerning the auction for JGB issuance and those related to monetary policy operations. In the second phase, which is currently scheduled to be launched in October 2015, all the remaining services, including those related to the settlement of funds and JGBs, will migrate to the new platform.

After the launch of the second phase, the operating hours of the BOJ-NET will be further extended. At the moment, it starts daily operation at 9:00 and ends at 19:00 for the funds transfer services (for the JGB services, it ends at 16:30). From February 2016, it will start at 8:30, 30 minutes earlier than at present, and end at 21:00. In the next section, I will explain an important implication stemming from these extensions.

In developing the new BOJ-NET, we have made it clear that it is one of our strategic priorities to enhance the payment and settlement services and reinforce market infrastructure in Japan. Indeed, the BOJ released in March 2014 its strategic priorities for fiscal 2014–18, in which it stated that it would enhance Japan's payment and settlement services in response to the diversification of payment and settlement needs and financial globalization. Specifically, the BOJ would encourage the enhancement of retail payment systems and work to realize payment and settlement using the new BOJ-NET for cross-border transactions in the yen or JGBs.

### ENHANCING PAYMENT AND SETTLEMENT SERVICES

What is the benefit of extended operating hours of the BOJ-NET? This will generate a longer overlap between the hours of the BOJ-NET and those of overseas payment and settlement systems, in particular those systems in Asia and Europe. As a result, this will lead to faster and safer cross-border settlement by enabling same-day remittance in the yen for customers overseas, particularly Asian and European customers.

Indeed, we held a forum with market participants and examined how to make the most of the extension of the BOJ-NET operating hours. Some suggested that customers could transfer their funds from their Asian bases to domestic offices on the same day. Others proposed that the same-day settlement of JGBs would facilitate cross-currency repo transactions, in which Japanese financial institutions could post JGBs as collateral to foreign financial institutions in return for funds in foreign currencies.

Taking account of their views, we are currently looking into three possible areas where payment and settlement services can be enhanced; henceforth, improving the Japanese financial market infrastructure in the medium to long term. Namely, these are: to establish global access to the BOJ-NET by allowing financial institutions to set up the BOJ-NET terminals abroad; to link the BOJ-NET with overseas systems; and to enhance the efficiency of domestic retail payment services. Let me elaborate on these in detail.

### ESTABLISHING GLOBAL ACCESS

As for the first area—namely, global access to the BOJ-NET—the efficiency of payment and settlement services in the yen and JGBs can be enhanced by allowing the BOJ-NET terminals to be held at the BOJ-NET participants' overseas branches and subsidiaries. Global access can be achieved by allowing the BOJ-NET participants that physically have a presence in Japan and hold current accounts at the BOJ to set up their BOJ-NET terminals in their overseas locations, whereby staff members can operate the terminals. For example, if a Japanese bank sets up its BOJ-NET terminal in its London base, it can post JGBs as collateral to a European central counterparty (CCP) in London. Alternatively, if a Japanese bank sets up its BOJ-NET terminal in its Bangkok base, it can carry out same-day remittance of its customers' funds from Thailand to Japan. Global access will significantly improve the convenience of the yen and JGBs; furthermore, it will contribute to reinforcing the business continuity planning of financial institutions as well as their customers.



### ENABLING CROSS-BORDER LINKAGE

The second area concerns enabling cross-border linkage between the BOJ-NET and systems overseas. Allowing the BOJ-NET to be connected with its overseas counterparts can introduce a delivery-versus-payment (DVP) mechanism for JGB transactions, in which the delivery of JGBs can be made simultaneously with fund transfers. For example, a Japanese bank can provide JGBs as collateral to a foreign bank, which can provide foreign currency funds to the Japanese bank overseas at the same time. Alternatively, the DVP mechanism for foreign securities' transactions can also be used. A Japanese bank can make yen funding available to a foreign bank that provides foreign securities as collateral to the Japanese bank overseas. By linking the BOJ-NET with those systems overseas, we can facilitate such DVP transactions, and this will again contribute to enhancing the efficiency and convenience of the yen and JGBs. In this regard, we are currently continuing discussions with Asian peers concerning regional settlement infrastructure that promotes cross-border securities transactions in the region.

### ENCOURAGING THE ENHANCEMENT OF RETAIL PAYMENT SYSTEMS

The third area is to encourage further improvement in retail payment services. Currently, a number of initiatives are under consideration. The first is to process retail credit transfers on a near real-time basis around the clock. In some countries, such as the United Kingdom, Sweden, and Singapore, near real-time retail credit transfers are provided 24 hours a day, seven days a week (24/7 near real-time services). Australia is scheduled to introduce such services in late 2016. While near real-time retail credit transfers in Japan are available during the banks' business hours on weekdays, we are currently examining whether Japan can also introduce 24/7 near real-time services with a focus on improving convenience for individuals.

The second initiative in the enhancement of retail payment services involves the attachment of invoice information to payment messages. Firms are increasingly relying on the electronic data interchange (EDI) that enables them to exchange business information—such as purchase order and invoice information—in a standardized electronic format. However, the current EDI process is detached from the payment process, making it difficult to realize the straight-through processing from purchase order to payment and reconciliation. Once full straight-through processing is achieved, firms will be able to enjoy the considerable benefits of reducing costs associated with business transactions and increasing the speed of processing those transactions.

### CONCLUDING REMARKS

Developing an infrastructure that will enable the settlement of the yen and JGBs efficiently and safely will support the globalization of these assets. It is critical to enhance the payment and settlement services to meet the diverse needs of customers in light of globalized financial services.

Against this background, the government released its revised growth strategy in June 2014, in which several issues are included in order to enhance the payment and settlement services. First, it touches on the enhancement of funds and securities settlement at financial institutions and firms, while utilizing the extended operating hours of the BOJ-NET. Second, initiatives in the retail payment system—namely, further improvement of the near real-time processing of retail credit transfers and the expansion of the EDI information in payment messages—are also included in the growth strategy.

At this stage, a number of discussions are taking place across banks and industries to cement the specifics of how to make the most of the extended operating hours of the BOJ-NET, as well as how to realize those initiatives in the retail payment system. We welcome such initiatives taken by bankers and industrial peers. We will support those discussions and encourage further innovations that meet the challenges of users at present and into the future.

The BOJ is committed to collaborating with market participants and continuing our endeavors to enhance the efficiency and resilience of the payment and settlement system and to reinforce the market infrastructure in Japan.

Haruhiko Kuroda, Governor,
Bank of Japan

## TRI-POLAR CLUSTER SYSTEM: A PROPOSAL[1]

IL HOUNG LEE

The debate regarding the weakness of the international monetary system (IMS) has again surfaced following the 2008 global financial crisis; it questioned the desirability of the current IMS that relies heavily on the US dollar (USD). The debate was particularly acute as the financial crisis originated from the United States, traditionally a reliable economy and the issuer of the currency the rest of the world uses to settle a large portion of cross border transactions and holds as a store of value. The discussions, however, did not last for long, and rather than trying to overhaul the system, the G20 refocused instead on strengthening the status quo, such as beefing up the international financial safety net and enhancing exchange rate flexibility.

Under the current IMS, US monetary conditions are imposed on the rest of the world that do not necessarily share cyclical shocks. Choi and Lee (2010),[2] for example, found a significant pass-through of the global monetary policy stance (mainly that of the US) on Asian countries for 1980–2008. Moreover, to the extent that emerging markets (EMs) fix the value of their currency to the USD—often an optimal policy

1. An earlier version of this paper was posted as part of the "World Economy: Update" series, Korea Institute for International Economic Policy (September 5, 2014).
2. Woon Gyu Choi and Il Houng Lee, "Monetary Transmission of Global Imbalances in Asian Countries," Working Paper, International Monetary Fund (WP/10/214) (September 2010).

response from individual country's perspective—the IMS has facilitated bouts of global imbalances. It also exposes countries with non-convertible currency to foreign exchange crisis risks in times of USD market tightening, as was the case during the 2008 crisis.

For the United States, it is a mixed blessing. On the positive side, it benefits from a sizable seigniorage. Demand for the USD as "store of value" and for "precautionary motive" surged during the 2000s, partly in response to the Asian financial crisis, creating a huge base for actual and potential seigniorage. On the negative side, the increase in international reserves under fixed exchange rates by emerging economies, as noted above, exposed the US to reverse spillover of its own policies. US expansionary monetary policy contributed to growing current account deficit in the US and thus large payments abroad, which in turn was invested in US assets by surplus EMs, facilitating the global imbalance.

There are other downsides to the current IMS. Too much focus on the global imbalance tends to exert peer pressure on countries to target a certain level of current account balance that may not be optimal from their long-term equilibrium perspective when taking into account their aging profile. For example, in an analysis of an individual country's current account balance using demography as the only fundamental factor determining consumption under permanent income hypothesis, Lee et al. (2013)[3] show that the United States should have had a current account surplus during most of the 2000s and a deficit during the 2010s while China should have had a current account deficit and a surplus during these two periods, respectively.

Moreover, the gap between the actual vs. the optimal long-term equilibrium could arise either due to savings or investment being off a desired level reflecting fundamentals. For example, Lee and Yang (2013)[4] estimate such a desired level of investment using panel data on G20 countries. In order to attain these estimated desired levels of investment, and assuming savings to GDP remain unchanged in the short run, the "savings-investment" gap should be larger if lifting growth is a priority, until savings adjust to a level more conducive to the estimated investment level.

### DEMAND FOR A CURRENCY AS A RESERVE CURRENCY

Despite the shortcomings of the current IMS, the US dollar is likely to remain as the main reserve currency for the foreseeable future. Ultimately, it will depend on market

3. Il Houng Lee, Xu Qingjun, and Murtaza Syed, "China's Demography and its Implications," Working Paper, International Monetary Fund (WP/13/82) (March 2013).
4. Il Houng Lee and Dae Yong Yang, "Is More Investment the Answer to Deficient Global Demand?" *World Economy Update* 15, Korean Institute for International Economic Policy (April 2014).



confidence that the currency can be converted into desirable goods and services and at minimum cost and short notice. This in turn requires that the governance that underpins the credibility of the government of the currency issuing country is sound and sustainable, equivalent to what Mundell (1997)[5] refers to as "superpower" where "the currency of a superpower would always play a central role in the international monetary system." Additional requirements include a deep and liquid market, and a financial infrastructure that enables easy conversion (e.g. clearing, storage, and settlement system). Moreover, the value of the currency has to be stable relative to the price of goods and services, i.e. inflation of the currency issuing country has to be durably low.

These economic aspects in turn are underpinned by the size of the economy including GDP, trade, and capital flows. Non-economic factors are often equally important and include military and political influence in global affairs. The political system also matters as it is key to the governance structure of any monetary system. A shift from one reserve currency to another could take place rather rapidly, triggered by global incidences such as a war or major economic shocks. The change from the pound to the dollar as the world's reserve currency took place relatively rapidly once it started in the 1950s with the rise of the United States as the world's dominant political superpower, building on its economic size, which had overtaken that of the UK about four decades earlier.

Taking all these factors into account, market confidence of the US dollar will not likely wane anytime soon. The United States will remain as the dominant military and economic power over the next few decades; demand for US assets and their attractiveness as the most sought after "store of value" across the globe will remain strong. Moreover, the US dollar has a deep market with ample liquidity that provides convenience to traders.

### TIME FOR A CHANGE TO THE IMS?

Nevertheless, the supremacy of the USD as the main global reserve currency is being questioned. The 2008 global financial crisis that undermined market confidence on the US financial market, unconventional monetary policy that is now being normalized, large public/private debt in the US that has yet to be addressed, and the difficult fiscal outlook over the next decade or two are some of the sources of the doubt. In parallel, the emergence of China as an economic power is affecting the currency landscape in

5. Robert A. Mundell, "The International Monetary System in the 21st Century: Could Gold Make a Comeback?" Lecture delivered at St. Vincent College, Letrobe, Pennsylvania (March 12, 1997).

Asia and beyond. For example, the renminbi (RMB) has already established the first trading center outside Asia in London.

Despite these early successes, it is true that the RMB has its own share of challenges to overcome. In terms of daily turnover, the RMB still has a long way to go before becoming a meaningful player. China's capital account is relatively closed, and the RMB does not have enough market liquidity to cater for large volumes of transactions of financial flows. The euro will not likely increase its influence in the global currency market either in the foreseeable future given existing economic challenges in Europe.

While the market will ultimately decide which currency it will use, one should not undermine the important role governments can play in shaping "the framework" of the market. With this in mind, governments should coordinate to set the rule to the best interest of all parties, a point eloquently argued by Eichengreen (2010).[6] We have examples where progress was made by governments at the regional level, e.g. the euro. This suggests that any new initiative should start at the regional level and in the direction that the market is already taking.

To address the global imbalance as well as to ride on the growing use of the RMB, Asian economies could agree on an arrangement that will enhance the use of a few key Asian currencies for trade (and services) settlements within the region. As argued by Lee and Park (2014),[7] such an approach would not require opening the capital account prematurely nor waiting until the Asian bond market deepens sufficiently. It will also help promote the use of the RMB among Asian economies and beyond before full capital account convertibility is attained.

The benefits of such a system are many. First, it will allow countries involved to reduce the share of the USD in their reserves to the extent that they will be able to finance their intra-Asia trade with their own currencies. Second, as countries start using their currencies directly for settlements, policy efforts will be directed toward reducing the volatility between bilateral exchange rates that hitherto were determined by cross exchange rates. Greater stability among Asian currencies in turn will promote trade and the global value chain within Asia. Finally, it will also benefit the United States as these currencies collectively will become more flexible vis-à-vis the dollar, breaking the reverse spillover of its own monetary policy. In other words, this will dampen monetary policy transmission from the US to the EMs and help reduce global imbalance.

6. Barry Eichengreen, "Managing a Multiple Reserve Currency World," *Insights Volume 8*, University of Melbourne (November 2010).
7. Il Houng Lee and Yung Chul Park, "Use of National Currencies for Trade Settlement in East Asia: A Proposal," ADBI Working Paper No. 474, Asian Development Bank Institute (April 2014).



### POSSIBLE SHAPE OF A NEW IMS

A preferred arrangement would be to create a single world currency, such as the SDR, that could serve as the main reserve currency and as a unit of account. However, agreeing to such an arrangement would not only be difficult but also challenging to manage unless something equivalent to a world central bank is set up. The inability of making progress with the IMF quota reform and raising its resources provides a useful reality check, suggesting any significant reform of the IMS at the global level should not be considered.

The tri-polar currency cluster system, on the other hand, will be something that the market will shape itself only with limited support from governments once a currency arrangement in Asia is set up. The system should be developed initially to facilitate the use for "settlement" of trade and services, and then gradually expanded for financial flows. The greater use of the RMB, along with a few other key Asian currencies, for settlement within the region will provide additional confidence on the RMB that will help promote its use well beyond Asia.

Once this process is set in motion, the global currency map will be reshaped around a tri-polar currency cluster system. The US dollar, the euro, and the RMB will be the main trading currencies, with the British pound and the Japanese yen each playing a minor role. As for the other smaller currencies used for trade settlement, their role will largely be limited to their respective geographical regions and their value gravitate around one of these three major currencies.

Even then, it will be some time before the non-USD currencies in the tri-polar cluster can catch up to even partly replace the US dollar as "store of value." The tri-polar cluster system will be a hybrid system in the sense that it will initially be limited to settlement functions, and only gradually grow into a proper tri-polar currency system where non-USD currencies will also be used as store of value. Meanwhile, the hybrid system will be able to help address current shortcomings, including global imbalances, without unduly disrupting the current order.

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The views are those of the author and do not represent the position of the Korean government.

# CHINA AS A SHAPER OF THE NEW BRETTON WOODS SYSTEM

DAVID DAOKUI LI

Seventy years after the Bretton Woods conference, the world overall has become much more prosperous and stable than people at that time could have imagined. Despite the global financial crisis of 2008 and many other regional crises, the world economy has been growing rapidly, and many global economic issues have been mitigated by the Bretton Woods system. That said, the international monetary system and its supporting institutions are under pressure and undergoing changes. It is likely that in the coming decade, the system will evolve into a multi-polar system with the US dollar (USD), euro, and the renminbi (RMB) as the three leading international currencies providing stable support for the growing global economy.

The international governance system is also likely to be multi-polar, with the World Bank and the IMF being supplemented by a number of emerging new international economic institutions, including several which are being proposed and established by governments in the BRICS countries.

China is a key player in the game of the evolution of the architecture of global international governance. Given that China has been a major beneficiary of the existing global governance system, most likely, China will be a constructive and gradualist agent of the evolution.

### THE NON-SUSTAINABILITY OF THE EXISTING INTERNATIONAL MONETARY SYSTEM AND GLOBAL FINANCIAL ARCHITECTURE

The existing international monetary system features the USD and the euro as the most important international currencies. Most international transactions, especially financial transactions, are conducted in the USD. Most countries, including those which oppose the US in international affairs, have no alternatives other than putting a significant proportion of their currency reserves in USD-denominated assets. Overall, as much as 70% of international currency reserves are invested in USD assets. Meanwhile, the Washington-headquartered World Bank and IMF are playing important roles in resolving global and regional financial crises, and are providing much needed infrastructure investments. However, the system is unsustainable. First, the world economy is growing at a faster pace than the US economy. The share of the US economy as a proportion of the world economy is diminishing; it is now below 20%, down from a peak of 25% in 1989. The US simply cannot provide enough USD assets for the rest of the world to invest in, and even if the US can do it, it cannot ensure the credibility of the ever-increasing amount of USD-backed assets. The US fiscal status is unlikely to see a fundamental turnaround in the coming decade, resulting in an increasing fiscal burden on the federal government.

Consistent with this, the IMF, even with its own assets rising to a level of USD700 billion, still finds its assets insufficient to face the daunting task of fighting crises in many regions. At the same time, the US government seems to be unwilling to support further increases in the assets of the IMF, and is also unwilling to allow the IMF to make increased contributions, both in financial terms and in voting rights for emerging market countries like China. Similarly, the World Bank's scale of operation is much too small. China's state development bank alone is already much bigger than the World Bank, the European Bank for Development and Reconstruction and Development (EBRD) and the Asian Development Bank combined. In the ocean of the demand for infrastructure investments, the World Bank remains a drop in the bucket.



Worse than the size issue is the mentality of the US in facing global economic challenges. Seventy years ago, the US was the dominant force in the world, including economically. What was good for the global economy was good for the US economy, and the reverse was pretty much the case. But today, with the diminishing size of the US economy, that claim cannot be made. US domestic economic policies are increasingly at odds with what is important to the rest of the world. A case in point is the process of the quantitative easing of the US Fed's monetary policy. The US Fed, looking at the needs of the US economy, announced that it would begin to retreat from its quantitative easing policy as early as mid-2013. That announcement of tapering was not well received by the rest of the world, especially many emerging market economies, which are struggling to deal with the aftermath of the global financial crisis. Yet the Fed ended quantitative easing in October 2014. This incident demonstrates that the USD cannot be a reliable international currency because the monetary policy of the USD is controlled by a government which is mostly concerned with its domestic issues, rather than the global consequences of its policy.

### CHINA'S DILEMMA

China is facing a dilemma. On the one hand, China is a beneficiary of the Bretton Woods system. During the past three-and-a-half decades, the close to 10% annual GDP growth could not have been achieved had China not been able to borrow money from the World Bank to implement a great deal of infrastructure and educational projects. In the process, China became the World Bank's largest and most reliable client. China also proved to be a good student of the advice it received from both the World Bank and the IMF. Leaders from these international agencies frequently traveled to China and met with Chinese national leaders, who would treat leaders of these international organizations as state guests and listen carefully to their advice. During the Asian and global financial crises, China supported the IMF's efforts in various ways, including not devaluating the RMB during the Asian financial crisis and repeatedly pledging to lend more funds to the IMF.

On the other hand, China is also a beneficiary of the US-dominated monetary system. It conducts international trade and investments mostly in the USD. By using the USD, China has accumulated the world's highest currency reserves, and did so mostly by investing in the US economy, including US treasury bonds. China is unwilling to encourage a radical change in the Bretton Woods system. Meanwhile, China increasingly finds itself constrained and frustrated by the Bretton Woods system. China finds that most of its trade, including trade with non-US economies, such as the Middle East, Africa and Europe, are settled in the USD. Fluctuations in the value of the USD for reasons beyond China's and its trading partners' control make trade excessively complicated. China finds that its investment in the USD reserves is subject to US inflation and US exchange rate devaluation. And additionally, despite China's staunch support for the IMF and the World Bank, China's emerging role has not been fully recognized in the actual governance structure of these institutions. Therefore, China does desire some change. In particular, China finds it is increasingly in its best interests to conduct trade in its own currency, to be able to invest overseas in its own currency, and to see reforms in the governance of international organizations.

### PUSHING FOR GRADUAL REFORMS: CHINA IN THE POST-BRETTON WOODS SYSTEM

The overall outlook for China in global affairs is that it is in China's best interests to pursue a constructive and gradual reform of international governance. The Bretton Woods system is included in this. In fact, China has been pursuing such a policy. First, China is gradually but steadily pushing for the internationalization of the RMB. Interest rates at domestic banks are being gradually liberalized, and will be completely freed in two or three years. In three years, full convertibility of the capital account will be achieved. China has signed currency swap agreements with approximately 20 countries, and many wealthy countries including the UK, France, Germany, Canada, Australia, and Singapore are actively lobbying Beijing to set up RMB clearance centers. The incentive of these countries is to push for new growth engines in their financial transactions.

Starting in 2014, China began to establish international economic institutions to supplement, rather than to compete with, the existing ones. They are the BRICS New Development Bank; the BRICS foreign exchange swap arrangements; the Asian Infrastructure Investment Bank (AIIB); and the new Silk Road Fund. All these agencies are either backed or initiated by China, and will not compete with the IMF or World Bank. Instead, it was already announced that the loans and restructuring projects



conducted by these new institutions will be either contingent upon support from, or closely coordinated with, the World Bank or the IMF.

China's approach to reforming the Bretton Woods system is not hard to understand, because China is both a beneficiary and a victim of the existing international economic governance system. No reform is not ideal. Neither is a sudden and rapid change. China also has a limited capacity to conduct comprehensive reform of the international monetary system. Most importantly, leaders and elites in China know very well that the US is still a superpower in today's world. In order to assure China's peaceful development, it is critically important to maintain a good working relationship with the US. A constructive and gradual reform is in the best interests of China, since it will not alienate the US.

### THE PROSPECTS

Barring drastic changes, it is likely that, in about a decade, the global monetary system will feature three major currencies: the US dollar, the euro, and the RMB, with the RMB being a major currency for trade. China already is, and will continue to be, the largest importer and exporter in the world. The USD will still be dominant in international financial transactions, whereas the euro will be the most important currency in fixed income and bank lending in Europe, which is the backbone of the European financial system. In about a decade, the size of the Chinese economy will be very close to or larger than the US economy as market exchange rates. There will be several coordinated and partially competing international organizations. In addition to the World Bank and the IMF, there will be China-backed currency swap arrangements, the AIIB, and the new BRICS bank. The landscape of global economic governance will be quite different from what it is today. Overall, the global governance system will be multi-polar, and this will be good news for the entire world, because a multi-polar system should be more stable than the bi-polar or single-polar systems we have today.

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# P-GOLD: A PROPOSAL FOR A NEW INTERNATIONAL MONETARY SYSTEM

JUSTIN YIFU LIN

The 2008–09 global economic and financial crisis highlighted major deficiencies in the international monetary system. And while the system appears to have weathered the initial shock, it remains fragile. The global imbalances, which triggered the Great Recession, arising from the excess liquidity created by financial deregulation and monetary policy in the United Sates, were so large and lasted so long because of the reserve currency status of the US dollar.

The dollar became the reserve currency in the Bretton Woods system after World War II. For nearly two decades, the dollar maintained fixed exchange rates tied to gold. Then, in the mid-1970s, the tie to gold was broken but the dollar remained as the predominant international reserve currency.

The world is now moving toward a more diversified set of reserve currencies, including the dollar, euro, and likely the yuan as well. Either gradually (as the US economy's share in the world economy shrinks) or through a sudden debilitating shock, the dollar's central role is expected to diminish. Two key questions arise. First, how will this evolution toward a multi-reserve currency system affect global monetary and economic stability? Will it be more or less stable than the current system? Second, is there an alternative system, such as the creation of a new international reserve currency, that might be more favorable to the global economy? A new international reserve currency will be acceptable only if it is a win–win for both developed and developing countries.

Some economists think that a multi-reserve currency system would be more stable because competition among major reserve currencies could become a discipline mechanism for resolving the incentive incompatibility between national and global interests under the current system. If a reserve currency country conducts its monetary policy in support of domestic interests at the expense of global interests, reserve holders can switch out of that reserve currency and into others.

This argument has merit if all the major reserve currency countries have strong and healthy economies. It is more likely, however, that all of them have severe structural weaknesses. When these weaknesses become apparent in a reserve currency country, they can trigger the flight of short-term funds to other reserve currencies, causing them to appreciate sharply. The currency appreciation then weakens the real economy and worsens its structural weaknesses, inducing short-term funds to move yet again to another reserve currency. As a result, such a multi-reserve currency system is likely to be highly unstable. It is a lose–lose situation for both reserve currency countries and other countries.

Stability could be restored—and the conflict of national and global interests inherent in using national currencies as reserve currencies resolved—if all countries adopt a single supranational reserve currency. I propose replacing the system of national reserve currencies with a global reserve currency called paper gold (p-gold).[1]

Appropriately designed, an international currency can avoid the conflicts inherent in using national currencies as an international reserve currency, and it can have some of the desirable properties of precious metals used for that purpose while avoiding the limitations that inadequate supply growth imposes on global liquidity.

P-gold, as I propose, has the flexibility of paper money, in that it could support liquidity growth as the global economy expands, but that—similar to a commodity like gold—would be "outside" the system of national currencies. This offers stable exchange rates

1. Justin Yifu Lin, *Against the Consensus: Reflections on the Great Recession* (Cambridge, UK: Cambridge University Press, 2013).



without the deflationary tendency of the gold standard. In addition, it would eliminate the inherent conflict of interest between reserve currency countries' domestic policy concerns and the global public good of economic stability. This new currency would have the advantages of fiat paper money plus the stability of gold and so could be called p-gold (paper gold).

While the political process for agreeing on a governance structure for a new international currency would likely be complex, the economic structure of such a system is fairly straightforward:

- P-gold would be an international reserve currency, issued by an international central bank, according to the provisions of an international treaty. Countries would agree that p-gold could be used to settle all international transactions for goods and services, commodities, and securities. P-gold would serve as a store of value, medium of exchange, and unit of account for international transaction.
- The supply of p-gold would follow Friedman's *k* percent rule[2] (or a modified Taylor rule[3]) based on a projected measure of global economic and asset transaction growth. The precise value of k would be determined by an independent expert council created by the foundational international treaty.
- Again to be determined by an international treaty, the seigniorage created by issuing p-gold could be used to pay for the operations of the international issuer and for producing international public goods, perhaps through international development institutions.
- Countries could retain their national currencies but would have to fix their exchange rate to p-gold. Parity adjustments would require the permission of the international monetary authority and could be granted only in cases of severe balance of payments imbalances (when p-gold reserves have reached critical levels—either too high or too low relative to an agreed norm).
- To capitalize the international central bank, current reserve-issuing countries would turn over a combination of existing foreign currency reserves, gold, SDRs, and a predetermined amount of their national currency to the new international monetary authority. In exchange, these countries would hold equivalent p-gold reserves in a deposit reserve account at the international monetary authority. Other countries would place their existing foreign reserves—currency and securities—at the international

2. Milton Friedman, *A Program for Monetary Stability* (New York: Fordham University Press, 1960).
3. John Taylor, "Discretion versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy*, 39 (1993): 195–214.

central bank in exchange for a p-gold denominated account. Countries would still have access to these funds—now denominated in p-gold—to finance their balance of payments.

Setting up the new international monetary system and creating p-gold would require a credible treaty—especially if p-gold is to serve as a store of value. The *k* percent rule (discussed below) will work only if economic agents believe that the rule will not be tinkered with in politically motivated ways. Finally, any governance issues concerning the decision to allow the use of p-gold-denominated emergency liquidity support could be managed with a set of rules about the size of imbalances.

Providing adequate global liquidity and avoiding inflation would require a fixed rule governing monetary policy. The initial p-gold issuance could be based on an estimate of the current liquidity provided by international currencies and the value of trade and financial transactions. The agreement to use p-gold for all currencies would create instant demand for the new currency.

Thereafter, a simple rule of thumb could be devised along the lines of Friedman's *k* percent rule. The value of k could be tied to growth in world GDP and world trade. An expert commission, using selection criteria laid out in the foundational international treaty, could periodically review the value of k and suggest any needed adjustments.

P-gold would enter the international monetary system through purchases and expenditures related to the operations of the international central bank and the production of global public goods. This would be a way of broadly sharing the seigniorage from the new currency across the international community. The foundational international treaty could specify what types of global public goods were eligible for p-gold seigniorage. Examples might be purchases of carbon credits, creation of internationally valuable environmental reserves, and basic research related to mitigating and adapting to the effects of climate change.

Total world currency in circulation is a small fraction of world GDP of $65 trillion, and only a small fraction of that is now used for international rather than national transactions. For example, there is about $1 trillion in US currency in circulation, representing about 6 percent of the US economy; only about half is held inside the United States. Extrapolating these figures internationally suggests that a stock of about $2 trillion (times an international multiplier) would be needed to support international transactions. If the *k* percent is 3, the annual seigniorage flow would be about $60 billion.



As part of the international treaty, countries would agree to fix the parity of their national currency to the new global currency. With a fixed exchange rate countries would have less control over their monetary policy. A country's degree of capital account liberalization would have to be chosen carefully, based on the degree of monetary policy independence that makes sense for the country's structure, trade patterns, and level of development. Current reserve currency countries follow a broadly flexible exchange rate and hold relatively low levels of international reserves (other than their own currencies). To support a fixed exchange rate system, these economies would now require international reserves to finance temporary balance of payments deficits. An adequate initial level of reserves could be estimated for each current reserve currency country, based on standard measures such as the ratio of reserves to short-term external debt and months of imports or some combination of measures.

In this new international monetary system, national central banks and regulators could retain the bank regulation, supervision, and lender of last resort functions domestically. In addition, as part of the foundational international treaty, all countries would undergo annual surveillance and consultations in the spirit of IMF Article IV surveillance to avoid a drift toward unsustainable fiscal and monetary policies and maintain macro stability in each country. The international monetary authority could also set up a facility for emergency liquidity support, according to a pre-agreed rule.

If a multiple reserve currency system is as volatile as predicted, countries might be able to successfully negotiate an international treaty to create p-gold and a new international monetary system within the medium term—for two main reasons. First, for reserve currency countries, the seigniorage in the current system is small, but the benefits from avoiding harmful speculative flows could be large. Second, for non-reserve currency countries, the harmful effects of using national currencies as international reserves will worsen. As financial globalization deepens, unstable blocs could form around key reserve currencies as the non-reserve currency countries fix their exchange rate against a particular reserve currency. Meanwhile, exchange rates among reserve currencies would fluctuate widely against each other in response to shifts in macroeconomic policies, external shocks, and currency wars to gain global market share at the expense of other countries. The resulting volatility of capital flows and financial prices (exchange rates, interest rate, and equity prices) could slow growth in both advanced and emerging market economies.

The proposed p-gold, by reducing volatility and transaction costs, would be more conducive to long-term growth. The move to an international reserve currency would be a win–win for both sets of reserve currencies and non-reserve currencies countries. The global community should consider it now.

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## BRETTON WOODS: THE SYSTEM AND THE INSTITUTIONS

JIN LIQUN

As septuagenarians, the Bretton Woods institutions have long since faced the challenges of the present-day world. Their contribution to the global economic development and financial stability is well recognized. For sharp critics, however, their performance is perceived to be mixed. It comes as no surprise that the problems are more conspicuous as flaws are usually the natural focus of human attention. The recent financial crisis and the eurozone's debt crisis seemed to have refocused the public's attention on the Bretton Woods institutions. In a changed world, the system's continued relevance will depend on the stakeholders' willingness, readiness, and commitment to change, even though for some of them this is excruciatingly painful.

Perhaps the whole idea of reinventing the Bretton Woods institutions—an idea that is certainly appealing to many people directly or indirectly involved—is to render the system more efficient and effective without pulling down the entire structure. The attempt to reform a particular system is in the first instance an acknowledgment of the role hitherto played by such a system; the need to change is to sustain it under the new circumstances. It is crucial to maintain the vitality of the international multilateral institutions established toward the end of World War II.

The Bretton Woods system has traveled on a bumpy road in the rough and tumble of the world economy over the last seven decades. The architecture of this system has survived a number of crises and, paradoxically, the so-called collapse of the Bretton Woods system in 1972, when the Nixon Administration terminated the convertibility of the US dollar into gold, did not mean the collapse of the Bretton Woods system as a platform for working out multilateral solutions for multilateral issues.

A system called into being to address burning issues has to be conceptualized and established on the basis of the existing conditions in a particular period of time. The design of such a system is to make it work to solve the current problems, with its long-term function taken into account; however, the intelligent designers' so-called vision cannot reach out very far into the distant future to deal with the challenges light years ahead. Therefore, it is unfair to expect the system set up seven decades ago to unfailingly meet the needs of our times to our whole satisfaction. The unfairness, if any, rests with the big stakeholders' reluctance or even resistance to move with the times and to revamp it so that it can stay relevant.

The world is nowadays vastly different from what it was when the negotiators in Bretton Woods, New Hampshire, were trying to map out a program to fix the world problems under a formal, functional system. The US was an undisputed global power and leader, so much so that the US could dictate to the European countries the institutional setup of a post-war world economic order. Seven decades on, the world is still under the influence of this system, however inadequate it is to deal with the urgent problems of today. Bretton Woods can still claim its raison d'être, but it has to measure up to the higher standard required by the changed circumstances. Among the numerous issues, the two major ones are: global governance, and a lack of anchor currency for settlement in trade and investment in the context of globalized economy.

Mr. Harry Dexter White could have his proposal as the blueprint and thus overwrite much of Mr. John Maynard Keynes' proposals in designing the Bretton Woods system by drawing on his country's sheer political clout and economic strength. To conventional wisdom, this can hardly be questioned. The "world economic order" was custom tailored to the US given its relations with the European countries. The Bretton Woods system was the outcome of the negotiations between the UK and the US, reflecting the economic might of the US emerging glamorously during and after World War II. However, the US also made some compromises. Perhaps it is the second best scenario for the post-war world. The best scenario, unfortunately, is like the Holy Grail: as elusive as ever.



It makes sense to ponder the question raised by Mr. James Boughton in his IMF Working Paper, "Why White, Not Keynes?"[1] There were obviously merits in both White's and Keynes' proposals. And the issue is to deal with the tradeoff between Keynes' "technical stability" and White's "political feasibility." Normally, political feasibility trumps technical stability. However, White's proposal did not prevail because it was just politically correct; rather, its application was able to meet the needs of the post-war reality. The "international stabilization fund" White proposed was intended to achieve the objective of maintaining exchange rate stability, reducing balance of payments difficulties, and promoting trade and capital flows for productive purposes. These three objectives remain the most important factors for financial stability and growth in today's world. It should be noted that the White proposal did not encourage the in-and-out flows of what is now called hot money; it just argued for free capital movement between the members for trade and production. Turmoil in later years indicated the wisdom of the White proposal.

One of the noteworthy merits of the White's proposal is its multilateral nature. The US pushed for trade relations with as many countries as possible, instead of being restricted to the bilateral arrangement with the UK. The US could arguably underpin the members' economies under this proposed system, and the power of its dollar and gold reserve as well. The quota system of the IMF insisted on by the US reflects the core interests of the US, making the veto power firmly secure in its hand, without incurring the unlimited liability of providing credit to members in distress. For quite a while, the system established on the US concept worked pretty well. And this momentum could continue if the assumption is valid that the US economy could perpetuate its economic hegemony. Even though the US's advocacy for the multilateral feature of the Bretton Woods system was not altruistic, the concept takes on ever increasing relevance in the globalized economy.

With hindsight, however, the rejection of Keynes' proposal left one big problem for the next generations to solve: the banking feature of the system as proposed by Keynes.

1. James M. Boughton, "Why White, Not Keynes? Inventing the Post-War International Monetary System," IMF Working Paper No. 02/52 (2002).

He tried to avoid an arrangement which could only function by depending on a single nation providing the reserve currency, now that sterling was clearly left with no chance of serving such a role. He argued for the creation of a supranational currency, *bancor*, which would eventually replace gold as the international reserve currency, as opposed to *unita*, a unit of bookkeeping proposed by White. Keynes did not live to see the continued weakening of the dollar to such an extent that the anchor eventually lost much of its weight to effectively hold the system. Today, we are still faced with the debates on creating an anchor currency, or a supranational reserve currency. And the outcome is still in doubt.

As is known to all, a number of today's developing countries were still colonies of the Western powers, and naturally had no say in the making of the Bretton Woods system. China, as one of the winners in the war and the No. 4 shareholder in the Bretton Woods institutions, had little role to play. Other countries in the rest of the world whose representatives showed up were at best mere backbenchers rather than key players in the rule making of the game.

From day one, the function and sustainability of the Bretton Woods system were contingent on the power of the US. In this connection, the system could meet the needs of its members as long as the US could sustain its economy and live up to the expectation of the international community. However, history has never set any precedent that a valid assumption on which a system is set up will hold forever. Reality did not take long to upset the balance. The post-war reconstruction of the European countries turned out to be moving much faster than expected. Ironically, generous American support to the European countries quickly changed the economic landscape, and posed a serious challenge to the US in the space of a few years. The balance of payments situation started to swing in favor of the European countries in the early 1950s. The US was faced with huge trade deficit for the first time in 1958. It is a typical case that a policy for short-term solutions would create long-term challenges as unintended consequences, for good or bad. As the European countries were allies of the US superpower, their recovery was good news for the US as both a contributor and a beneficiary, and for the Western world as a whole, particularly against the background of the Cold War. In the ensuing years, European economies quickly moved toward integration as a means to prevent a recurrence of the devastating wars in the 20th century. The new challenge to the US economy is just a derivative of that integration and the inevitable



consequence of the Marshall Plan and the Bretton Woods system. Obviously, so far as the West is concerned, the redeeming feature of this change is the benign nature of the competition, that is, Europe and the US are economic competitors rather than strategic and ideological rivals.

The European countries' accumulation of trade surpluses and gold reserves in the late 1950s and 1960s put an increasingly heavy strain on the US economy, leading to the dollar's eventual break with gold at the fixed price of $35 dollar an ounce. The so-called collapse of the Bretton Woods system is the termination of an international monetary order under the system, not the system as an institutional set up. The revelation is that a system is usually more durable as an institution than the mechanism designed to address the issues for which the system is created. In this sense, the platform for multilateral consultation to address the global challenges is the most ingenious invention of the founding fathers of the Bretton Woods system.

The current financial and debt crisis has heightened the urgency of the reform of the existing world economic order. While the financial crisis has a lot to do with the domestic macroeconomic mismanagement of the countries in distress, few people would question the rationale for making a change to the international monetary system, the evolvement of which over the past seventy years has not yet arrived at its desired destination. So far as the Bretton Woods institutions' performance is concerned, there is much room for improvement. And in the run up to the next global financial or debt crisis, the Bretton Woods institutions should be able to respond most decisively and effectively, or had better nip it in the bud.

The resolution on the reform of shareholder structure and quota increases made in 2010 is still waiting for the nod of the US Congress for implementation. This is very unfortunate, particularly at a time when the financial capacity of IMF is so crucial to the global financial and economic stability. The US risks forfeiting its international relevance while stuck in its domestic political quagmire. Even purely from the perspective of the US, this should be done without further delay. Multilateralism is what the major economy proposed during the Bretton Woods conference; and this has served every member well over the last seven decades, for all the troubles experienced. The multilateral feature of the Bretton Woods institutions is well worth the effort to pursue by all, particularly the major economies.

Ever since Edward Gibbon's magnum opus, the monumental *The Decline and Fall of the Roman Empire*, was produced, the phrase "decline and fall" has been applied to the saga of defunct empires in the history, and indiscriminately to some nations that have lost much of their former luminous energy in recent history. While a power's "decline" seems to be the process, "fall" is not necessarily the inevitable denouement. In some cases, it is not true that a nation has suffered a straightforward decline or fall; it is just the consequence of the constant shift in the balance of power between nations. The new powers will perhaps nudge the big ones to indicate their need for a bit more elbow room. As long as they work in collaboration, the whole universe in which they live will continue to expand and everyone will feel comfortable. The worst scenario is that some mistakenly believe that they would behave in a way as if they touched the finite boundary of the zero sum game. Prior to any drastic social changes, an enlightened conservative has no alternative but to accept the reality. To some people who prefer status quo, they should perhaps savor the thought-provoking quote from the movie *The Leopard*—the words of an aristocrat when social change is looming large—"If we want things to stay as they are, things will have to change."

Jin Liqun, Secretary General, International Interim Secretariat for
Establishing the Asian Infrastructure Investment Bank

## BRETTON WOODS RECONSIDERED: THE DOLLAR STANDARD AND THE ROLE OF CHINA[1]

RONALD I. McKINNON

ALTHOUGH SIGNIFICANT, the importance of the 1945 Bretton Woods Agreement for the postwar international monetary order has been over-rated. Its major Articles were not effective until many years after World War II. It was not a grand treaty that reconciled the interests of many diverse counties over a few weeks. Rather, Bretton Woods was essentially an arrangement between just two countries—Britain and the United States—negotiated for more than two years before the founding conference in 1944.

After World War I, monetary chaos prevailed with the British trying and failing to re-establish the international gold standard, which ultimately imploded into the Great Depression. What then was the international exchange rate cum monetary regime that undergirded the remarkably rapid post World War II economic recovery and growth in the noncommunist industrial countries—what the French, somewhat inaccurately, still call "Les Trente Glorieuses." The underlying reality was that commercial banks and private traders—exporters and importers—began using the US dollar

1. This paper is written more as a memoir with only the occasional academic reference. Detailed references and supporting data in figures and tables are contained in the author's recent book *The Unloved Dollar Standard: From Bretton Woods to the Rise of China* (New York: Oxford University Press, 2013; Chinese translation, Beijing: China Financial Publishing House, 2013).

as international money, which was later codified by governments into a system of fixed dollar exchange rates with other currencies.

In 1945, the United States had the world's largest economy and the only intact financial system without inflation or exchange controls restricting the free use of its currency by foreigners. Exporters the world over (outside the restricted but declining British sterling area) began invoicing and demanding payments in dollars. Importers then began to hold dollar balances directly, but not exclusively, in American banks. Importers also came to rely on their banks to provide dollars on demand for their domestic currencies. So commercial banks everywhere became money changers using the dollar as the intermediary currency, subject to its country's more or less rigid exchange controls. And amazingly, outside of today's eurozone, the dollar is still the dominant vehicle currency for interbank foreign exchange transactions.

Following the lead of private markets, central banks in 1945 began to build up their official exchange reserves in dollars, in part as a backstop for their commercial banks' fluctuating dollar needs. In addition, as conveniently recognized international liquidity, interest-bearing US Treasury bonds (as distinct from gold) were favored as a precautionary reserve. But what then caused this dollar-based regime to evolve into one of officially fixed exchange rates? (After all, as late as 1949, there were chaotic and massive depreciations of some European currencies.)

### THE MARSHALL PLAN AND FIXED EXCHANGE RATES

Basically, it was the 1947 Marshall Plan that set the stage for the remarkable recovery of the Western European economies from World War II. The plan did not just alocate American funds bilaterally to individual countries. Instead, aid was given multilaterally with the strong conditionality that Western European governments start dismantling the currency restrictions and quota protections that were hampering intra-European trade. The capstone was the formation of the European Payments Union (EPU) in September 1950 among 15 Western European countries. Each member country declared an exact dollar exchange rate parity—without even the 1 percent margins on either side of the central rate permitted by the IMF's Article IV. Then Western European central banks (rather than private commercial banks) began to clear intra-European payments



multilaterally. If any one European country had a net payments deficit, i.e. the sum of its payments for imports exceeded what it was earning on exports, its central bank used a dollar line of credit from the EPU to fill the gap—but with effective sanctions requiring repayment. In addition to stimulating Western Europe's strong trade-led recovery from the war, the Marshall Plan cum EPU started what became wider European trade and monetary integration.

This fixed-rate dollar standard was substantially broadened when Japan joined in 1949. Like many continental European countries, Japan had suffered severe physical and financial damage during the war. It had open and repressed inflation, interest rate and balance of payments restrictions, multiple exchange rates, and virtually no postwar recovery. Then a Detroit banker, Joseph Dodge, visited Tokyo empowered with an American line of dollar credit to provide advice for stabilizing the economy under strict conditionality. In 1949, the multiple exchange rate regime was unified into a single exchange parity: 360 yen/dollar. For more 20 years, the Japanese government subordinated its monetary and fiscal policies to maintaining this fixed dollar exchange rate—thus ridding Japan of inflation and anchoring its price level (WPI). With a stable price level and stable exchange rate, the Japanese economy then took off into its "miracle" phase of 9 to 10 percent growth in real output into the early 1970s.

After the United States' emergence from World War II as the world's unique economic and financial hegemon, it did not complain about how other countries set their dollar exchange rates: a policy then called "benign neglect." Not having an exchange rate obligation of its own, the US could focus its monetary and fiscal policy on the state of purely domestic inflation or unemployment. And the American price level was stable in the 1950s into the mid-1960s—thus incidentally stabilizing prices in the rest of the noncommunist industrial world.

Having foreign central banks intervene only in dollars to secure their exchange rates, with the Fed staying out, has the great advantage of preventing official interventions at cross purposes: a great strength of the international dollar standard. But such a system only works smoothly if the government of the center country (without a direct exchange rate policy of its own) remains passive, i.e. it does not object to the way other countries set their dollar exchange rates.

### THE NIXON SHOCK

However, the worldwide anchoring effect of a stable dollar began to unravel with the Nixon shock of August 1971. By threatening to impose tariffs on imports of manufactures, the US government forced Japan and the Western European governments to appreciate their currencies against the dollar. As early as 1970, in anticipation of the dollar's being devalued, "hot" money flowed out of the United States to peripheral countries with at least semi-convertible currencies: Japan, Canada, and Western Europe. To prevent their currencies from appreciating even more than Nixon wanted, their central banks intervened massively to buy dollars with domestic base money. Their collective loss of monetary control then created the great worldwide inflation of the 1970s into the early 1980s.[2] Although the dollar remained the facilitator of multilateral exchange in private markets, its anchor for price and exchange rate stability worldwide was lost.

What so upset President Nixon? In the late 1960s, the US began to lose control over its own price level. Without proper tax financing, US government spending for the Vietnam War escalated along with welfare expenditures for President Lyndon Johnson's so-called great society programs—all accommodated by overly easy money by the US Federal Reserve Bank. The surge in demand caused US prices to begin rising modestly: the CPI increased from about 1.6 percent annually in 1965 to 5.5 percent in 1969.

Under Article IV of the Bretton Woods Agreement, other industrial countries kept their nominal dollar exchange rates fixed. Thus, with even moderate internal inflation, US industry became less competitive—particularly from foreign manufactured imports. American industrial trade unions, with hubris from the previous 25 years of uninterrupted growth, insisted on fully indexing nominal wages to internal price inflation while bargaining for additional real wage increments. By 1969, the previously large US trade surplus had virtually disappeared.

By 1970, to restore America's international competitiveness, particularly in manufacturing, the Nixon government faced a difficult choice, either: (1) raise taxes and tighten monetary policy to disinflate the American economy; or (2) force other industrial countries to appreciate their currencies ostensibly to make American industry more competitive. Although more painful politically, if (1) had been successfully implemented, the dollar's role as a stable nominal anchor for the rest of the world

2. Ronald McKinnon (2013), op. cit., Chapter 4.



could still be with us! Instead, the Nixon government chose dollar devaluation under (2), and the world experienced the great inflation of the 1970s and much financial volatility subsequently—which harmed the American economy as well as those of other countries.

### THE EXCHANGE-RATE TRADE-BALANCE FALLACY AND THE WEAK DOLLAR

In defense of politicians, however, many economists advocated (and still advocate) floating exchange rates. Worse, the standard textbook model linking a country's exchange rate to its net trade balance—sometimes called the elasticities approach—suggests that a country with an unwanted trade deficit should depreciate its currency, and countries with unwarranted trade surpluses should (be forced to) appreciate.[3] Although having some validity for insular economies when international trade had been severely truncated, and strict foreign exchange controls prevented the free movement of capital, as in the 1930s into the 1950s, this insular economy model fails to correctly portray the impact of exchange rate changes in today's highly open economies with massive flows of international trade and investment. When an economy is highly open, a government cannot manipulate its exchange to have any predictable effect on its net trade balance.[4] But predictable movements in future exchange rates can generate destabilizing hot money flows.[5]

However, faced with a seemingly unending string of American trade deficits from the end of the 1970s through to 2014, American policy makers have remained in thrall to the exchange-rate trade-balance fallacy. They have continually tried to devalue the dollar—either by threatening to impose import restrictions on trade surplus countries unless they appreciate, or by following ultra low interest rate policies that ignite hot money inflows into convertible-currency countries with naturally higher interest rates on the dollar standard's periphery—largely Western Europe and Japan in the 1970s, but increasingly emerging markets in the new millennium.

President's Nixon's demand in August 1971 that all the then industrial countries appreciate their currencies against the dollar, which they all did—averaging 17 percent by the following December—was a harbinger of things to come. In the mid-1970s, Japan bashing on the yen/dollar rate started and lasted for more than 20 years. The Japanese succumbed to American protectionist threats: the yen appreciated all the way from 360

3. James Meade, *The Balance of Payments* (London: Oxford University Press, 1951).
4. Ronald McKinnon (2013), op. cit., Chapters 7 and 8.
5. Ronald McKinnon (2013), op. cit., Chapter 5.

to the dollar in 1971 to touch 80 in April 1995. Japanese domestic investment slumped, knocking Japan off its high growth path. The flood of hot money into Japan contributed to land and stock-market bubbles, which burst in 1990. In 1985, the Japanese price level (WPI) began falling from the overvalued yen and then bursting asset bubbles—with even nominal wages falling into the new millennium. Short-term interest rates approached zero in the late 1990s. The only thing that did not fall was Japan's trade surplus![6] So Japan's lost decades of economic growth could well be attributed to what McKinnon and Ohno called "The syndrome of the ever-higher yen."[7]

The more recent China story has important parallels with Japan's historical experiences under the dollar standard. On the positive side, China unified its currency (eliminated multiple exchange rates) and successfully disinflated its domestic economy by credible pegging the renminbi at 8.28 yuan/dollar in 1994—much like Japan's earlier experience in 1949—while moving to current account convertibility by 1996. China kept its nominal dollar exchange rate stable for the next decade of extremely high growth in trade and real GDP.

However by 2000, China's bilateral trade surplus with the US surpassed that of Japan's and continued to rise rather sharply. Under the mantra of the exchange-rate cum trade-balance fallacy, many US politicians and economists then shifted from bashing Japan to bashing China on the renminbi (RMB) exchange rate. But Chinese politicians resisted much more strongly and avoided a Japan-like debacle—although the resistance was not complete. In July 2005, the People's Bank of China began to loosen its dollar peg and embarked on a series of mini-appreciations with occasional stops so as to average about 3 percent per year. It appreciated from 8.28 yuan/dollar in 1994 to about 6.2 yuan/dollar in mid-2014—nothing like the earlier more massive appreciations of the yen.

Although not much affecting China's trade and GDP, China's mini appreciations worsen hot money inflows. With US short-term interest rates near zero, and high-growth in China with naturally higher interbank rates averaging about 4 percent, and with expected RMB appreciation of about 3 percent, this amounts to a huge 7 percent gap in effective interest rates. Carry traders in various guises then try to move hot money from dollars into RMB. So China is forced to retain exchange controls—inevitably somewhat porous—on inflows of financial capital. Even so, the People's

6. Hong (Helen) Qiao, "Exchange Rate Changes and Trade Balances Under the Dollar Standard," *Journal of Policy Modeling*, 29 (2007):765–82.
7. Ronald McKinnon and Kenichi Ohno, *Dollar and Yen: Resolving Economic Conflict between the United States and Japan* (Cambridge, MA: MIT Press 1997).



Bank of China must continually buy dollars to stabilize the yuan/dollar rate—thereby risking an inflationary loss of monetary control unless this creation of excess base money is somehow sterilized.

Other emerging markets (EMs) have similar monetary control problems arising from US near-zero interest rates creating an ebb and flow of hot money into their economies. But they are less able than China to contain the resulting exchange rate volatility—for their own economies as well in creating cycles in primary commodity prices in the world at large.[8]

### LOSING THE WORLD'S NOMINAL ANCHOR AND AMERICA'S SAVING DEFICIENCY

Since 1945, the dollar standard has played a dual role in the world economy—for private international commerce, and for domestic macroeconomic control by governments—and these two roles are natural complements in such a key currency regime.

1. The dollar facilitates international trade by providing a common invoice currency for primary commodities and for the exports of developing countries, and it is the vehicle currency used by banks to greatly reduce the private costs of making foreign exchange payments multilaterally, both spot and forward.

2. Insofar as foreign governments have pegged their exchange rates to the dollar, it acts as a nominal anchor for their price levels—sometimes in the context of major domestic disinflationary financial reforms.

In the Trente Glorieuses with very high growth in the postwar industrial economies, US government policy ensured that both (1) and (2) more or less held. The US Federal Reserve acted correctly as the world's *de facto* central banker.

But from the 1970s down to the present day, an unfortunate confluence of economiccircumstances began to undermine (2)—the dollar's anchoring role in the world economy. US saving rates, both private and government, began to fall somewhat endogenously. Private saving edged downward but public saving, in the form of federal fiscal deficits, fell quite sharply on occasion. In the 1980s, President Reagan presided over a large military buildup that was not tax financed—and which led to the famous "twin" deficits of fiscal and trade.

8. Ronald McKinnon, *Hot Money Flows, Cycles in Primary Prices, and Financial Control in Developing Economies*, Stanford University (2014).

Although there were the usual dire warnings that such fiscal deficits would harm the economy, US interest rates actually fell in the course of the Reagan "boom" in the late 1980s.

While generally unrecognized by politicians and most economists, it was (and is) the US central position within the world dollar standard that allows the United States to borrow very cheaply by selling US Treasury bonds and other financial assets to foreigners—mainly central banks in West Germany and Japan in the 1980s. Having learned a false lesson that deficits did (and do) not matter, this has emboldened American politicians—Keynesians to be more Keynesian in targeting unemployment with massive fiscal deficits during the 2008 downturn and disappointingly slow recovery—and supply siders (sometimes called the Club for Growth) to become ever more reckless in their demands to cut taxes, or refuse tax reforms to raise more revenue, or to provide tax revenues for needed public goods—such as highways.

In the new millennium, EMs have been the big buyers of US Treasuries and other dollar assets—with China alone having official foreign exchange reserves of more than 4 trillion US dollars, which is about half the EM total. But so what? What harm comes from America's soft international borrowing constraint that reduces domestic saving and creates a more or less permanent fiscal and trade deficits?

First, the trade deficit itself. America's main international creditors—mainly West Germany and Japan in the 1980s, but now more China and other industrialized Asian EMs—are major exporters of manufactures. Thus the real counterpart of their purchases of US financial assets is to run trade surpluses in manufactures with the US. Indeed, in recent decades, virtually the whole of the US current account deficit (equal to America's saving deficiency) is equal to the US trade deficit in manufactures.[9]

If Democrats or Republicans want to ameliorate industrial decline, they should take steps to increase America's saving rate by reducing or eliminating the fiscal deficit. Instead they labor under the false doctrine: the exchange-rate trade-balance fallacy. They accuse foreigners of unfairly manipulating their exchange rates to keep them undervalued, and one result is the excessive use of antidumping duties against many different kinds of manufactured imports. But the major cost of this false doctrine is to distract political attention away from the fiscal deficit. And in his most recent budget, President Obama projects large federal fiscal deficits as far as the eye can see, through 2015 and beyond.

9. Ronald McKinnon (2013), op. cit., Chapter 6.



Second, this exchange-rate trade-balance fallacy undermines the dollar standard's natural stabilizing role in the world economy: providing a nominal anchor for other countries, most of whom for good reasons would prefer to operate with stable dollar exchange rates. Without an exchange rate policy of its own, the US government continually tries to weaken the value of the dollar against other major currencies—either directly as with Japan bashing followed by China bashing, or indirectly by setting interest rates too low (now near zero)—which induces volatile hot money outflows, which force at least some EMs to appreciate and other more mature industrial countries to keep their interest rates similarly too low to avoid appreciating.

### REFORMING THE UNLOVED DOLLAR STANDARD: THE ROLE OF CHINA

Despite this rather sorry tale of the loss of worldwide macro stability because of the erosion of the dollar's anchoring role under (2) above, its remarkably resilient facilitating role for money changing under (1) above remains in place. As of 2014, the dollar still remains the most commonly used currency for invoicing exports, vehicle currency for interbank foreign exchange transacting, and reserve currency for governments.

Even so, nobody loves it. Foreigners are distressed by macroeconomic shocks emanating from the United States, and the "exorbitant privilege" of America having an indefinitelylong line of cheap dollar credit from the rest of the world. Americans, laboring under the exchange-rate trade-balance fallacy and their large trade deficit, complain that foreign governments manipulate their dollar exchange rates unfairly to secure a mercantile advantage—while the rules of the dollar standard game leave the US with no direct exchange rate policy of its own.

So we have the great paradox. Although nobody professes to love the dollar standard, the revealed preference of both governments and private participants in the foreign exchange markets since 1945 has been to continue to use it. As the principal monetary mechanism ensuring that international trade remains robustly multilateral rather than narrowly bilateral, it is a remarkable survivor that is too valuable to lose and too difficult to replace.

There are great economies of scale of having just one international money. But, many, many suggestions have been made for replacing the dollar with something else—a commodity reserve currency in the 1950s, the IMF's Special Drawing Rights in the early 1970s, an internationalized yen in the Japanese bubble phase of the 1980s, the euro in its good phase in the early 2000s, and now an internationalized renminbi from China's trade ascendancy. I will not rehearse the pros and cons of each one here, nor propose a new one.

Realistically, the remarkable resilience of the dollar standard leads me to conclude that "international" monetary reform really should be directed to improving the monetary and exchange rate policies of the United States—possibly with China becoming a more equal partner, and the IMF continuing to provide important legal cover.

The most important aspects of any such reform are conceptual:

1. To rid Americans of their weak dollar syndrome by exposing the exchange-rate trade-balance fallacy in textbooks and in the financial press; and

2. To get US politicians to see the link between ongoing fiscal deficits leading to trade deficits and the "excess" imports of manufactures that so upset many of their constituents.

Although eliminating US fiscal deficits might be all well and good on domestic grounds, in a growing world economy are not US current account (trade) deficits needed to provide sufficient international (dollar) liquidity for foreign central bank exchange reserves on the one hand, and foreign commercial bank working balances on the other? While seemingly plausible, this common objection to the US returning to fiscal and trade balance is misguided.

During the Trente Glorieuses, the US ran with substantial current account surpluses—the counterpart of Marshall and other foreign aid, large US foreign direct investments, and substantial purchases of longer-term foreign private bonds—usually denominated in dollars. In the immediate postwar, this large American grosscapital outflow meant that foreign central banks could rather rapidly restore their official exchange reserves by building up stocks of US Treasuries and dollar depository claims on American banks. Thus the outflow from the United States of longer-term relatively illiquid investment abroad was greater than its current account surplus. This difference was then financed by a return capital inflow (albeit smaller) in the form of foreigners building up liquid dollar claims on the United States—thus gaining international liquidity.



In effect, if American politicians could be persuaded to eliminate the current US fiscal deficit or even move it into surplus, a reshuffling of the capital account of the US balance of payments would ensure the sufficient provision ofinternational liquidity. As the current account deficit was phased out, US longer-term capital outflows such as foreign direct investment would increase, possibly quite sharply, while foreigners could continue to build up their liquid dollar claims unimpeded. As the US moved away from being a net borrower in world financial markets, more international capital could flow into poorer countries— albeit only those which were creditworthy. And US protectionists would have a tougher time making arguments for tariff or quota restrictions on the reduced flow of imports.

But this hypothetical reshuffling of US international payments is best done in the context of mutual adjustment with America's largest creditor, China. Just as the 1944 Bretton Woods Agreement was negotiated between just two countries, the key to successful rehabilitation of today's dollar standard is a modus vivendi between China and the United States.

China's enormous trade-led growth since 1980, secured by its membership in the WTO in 2001, and macroeconomic stability since 1994 when its dollar exchange rate was fixed, has greatly benefited from unrestricted multilateral exchange under the dollar standard. The vast expansion of China's dollar-based trade has made it, albeit inadvertently, a pillar of the dollar standard. China would have a lot to lose if the dollar standard were to collapse or become seriously damaged. So what is a short laundry list of issues over which the two countries might negotiate?

1. The end of American China bashing to appreciate the RMB, which has been a consequence of the influence on Americans of the exchange-rate trade-balance fallacy.

2. The US agrees to phase out its fiscal deficits in return for China phasing in higher domestic consumption. Each country can decide on its own mix of tax and expenditure measures for achieving these ends. If both governments move simultaneously, disturbances in the foreign exchanges are minimized so that it is easier to maintain stability in the yuan/dollar exchange rate.[10]

10. Ronald McKinnon (2013), op. cit., Chapter 9.

3. The Fed agrees to begin raising US interest rates to more normal levels to relieve the pressure of hot money inflows into China and other EMs. China then agrees to start phasing out its capital controls as a step toward "internationalizing" the renminbi and opening up its capital markets.[11]

4. Mutual goodwill coming out of these negotiations then could spread to other areas such as flawed US antidumping laws and Chinese regulatory pursuit of highly competitive foreign firms for "anti-trust" and other questionable violations of Chinese laws.

Although cloaked in the garb of an international agreement, these measures could well increase domestic economic efficiency in each country. A relevant historical example is China joining the WTO in 2001. At the time, one motivation of Premier Zhu Rongji was that the by-laws of the WTO would help prevent protectionism from hampering China's own interprovincial trade.

### A CONCLUDING NOTE ON THE INTERNATIONAL MONETARY FUND

It may seem surprising that my "reconsideration of Bretton Woods" has not included any call for revising the present Articles of the International Monetary Fund established in 1944, with surprisingly few amendments since then. However, once one realizes that the world's basic money machine has always been an international dollar standard—albeit one which continually metamorphoses—it is not so surprising.

Although not particularly useful in the immediate aftermath of World War II, the IMF has evolved into an important and constructive legal adjunct to the dollar standard. In particular, it has successfully pressured virtually all member countries to adopt Article VIII, the commitment to current account currency convertibility for exports and imports of goods and services.

Although not required by any Article, the IMF has in the past been too hasty in pressuring some EMs with currency mismatches to get rid of capital controls—resulting in over-borrowing in international financial markets. But that era seems to be over. Of course, if the United States itself imposed comprehensive capital controls, the international dollar standard would collapse! But for EMs on the

11. Ronald McKinnon, "China's Currency Conundrum", Policy Brief, Stanford Institute for Economic Policy Research (May 2014).



dollar standard's periphery, there is a strong case for using capital controls to contain "hot" money flows.[12]

The second constructive role of the IMF is that of a crisis manager in the foreign exchanges—making (mainly dollar) loans with strict conditionality, usually to less developed countries that are not big enough to overwhelm the financial resources of the Fund. With its large body of financial experts, the IMF becomes (is) the natural lender of "first resort" in ameliorating foreign exchange crises around the world.

However, really big crises—such as those associated with the world economic downturn of 2008 or the euro crisis of 2011—are usually marked by a flight of private capital into dollars as the international financial "safe haven." Even when the world crisis was kicked off by the subprime mortgage crisis in the United States itself, international banks everywhere tried to replenish their depleted stocks of the world's vehicle currency. Then the US Federal Reserve Bank becomes the natural lender of "last resort." And in both crises, the Fed lent heavily to selected foreign central banks by swapping dollars for their domestic currencies—collateralized lending.

Much of the spirit of the 1944 Bretton Woods agreement was to try to curb beggar-thy-neighbor exchange rate changes and hot money flows that so disrupted the world economy in the 1930s. A return to exchange stability anchored by a credibly stable yuan/dollar rate, to which other countries—particularly in Asia—attach themselves voluntarily, would reflect that spirit.

Ronald I. McKinnon passed away shortly after submitting his essay.
He was Professor Emeritus, Stanford University.

12. Ronald McKinnon (2013), op. cit., Chapters 5 and 13.

# PERSPECTIVES ON THE GLOBAL FINANCIAL ARCHITECTURE AND THE FUTURE OF THE INTERNATIONAL MONETARY SYSTEM

DANIEL MMINELE

The frequency, heightened intensity and greater real economic impact-sof financial crises since the 1980s, and particularly since the mid-1990s, suggest that the international monetary system is not effectively performing its function of promoting a stable financial environment conducive to the achievement of strong, sustainable, and balanced growth. The underlying reason for this is that the global economy has changed dramatically since the Bretton Woods Conference in 1944, but the international monetary system has not moved along with it.

Each time there is a financial crisis there is an acknowledgment that the international monetary system and its governance should adapt to the new realities. But as soon as it seems we are on the road to recovery, this enthusiasm for reform fades. Unfortunately, when the next crisis hits, the world has moved on and the impacts tend to be even more severe and the challenge of reform becomes even more complex.

## A LOT HAS CHANGED SINCE BRETTON WOODS...

When the International Monetary Fund (IMF) was created in 1944, each member state committed to tie the value of its currency to the US dollar, which in turn was fixed at $35 per ounce of gold. This system of fixed exchange rates broke down in the early 1970s, when the US was no longer willing to maintain the dollar link to gold. The fixed exchange rate regime was replaced with a regime of floating exchange rates, and as such the US dollar remained the dominant reserve currency, albeit now with a floating value.

Since the 1980s, the world has experienced numerous financial crises, both in emerging market and developed countries. This is not surprising given that the gap between the development in the global economy and the development of the international monetary system has widened over time and there is insufficient recognition of the role of emerging markets in the global economy. To put this into perspective: emerging markets now account for over 45 percent of world GDP in purchasing power parity terms, which is 13 percentage points higher than it was in the early 1990s; emerging market GDP per capita increased by 70 percent in the 2000s, and the combined share of their world exports of goods and services has doubled since the early 1990s. In addition, the development of their financial markets has been impressive, not only in terms of size, but also depth, liquidity, and diversity. It is not surprising then that during the most recent global financial crisis, emerging markets became the main engines of global growth.

The gap between the pace of change in the global economy and in the dollar dominated international monetary system became too large to ignore after the Asian and Russian crises in the late 1990s. By that time it was obvious that the world economy had become much more globalized, and that the growing economic and financial influence of emerging market economies was insufficiently reflected in both the international monetary system and global governance arrangements. Moreover, it was becoming clear that the spillovers were no longer just from advanced to emerging economies. They could also flow in the opposite direction, as reflected by the failure of Long-Term Capital Management in 1998 following the debt restructuring in Russia. The result was a general recognition that it was essential for all systemically important economies, regardless of whether they are emerging or advanced economies, to be involved in and be part of global economic decision-making and cooperation.



The result was the establishment of the G20 in 1999, which was the first time that systemically important emerging markets were fully incorporated into global economic governance. However, this was only the beginning, and did not result in any major international monetary reform. At the same time, given growing disillusionment with the IMF and the manner in which it handled the Asian crisis, emerging market countries felt compelled to develop their own protection measures against the pressures and vicissitudes of the changing global economy. For this reason, the pace of foreign exchange reserves accumulation increased tremendously, particularly in emerging market economies. In 1998, emerging market economies held US$620 billion of the US$1.6 trillion global foreign exchange reserves. By the first quarter of 2014, emerging markets held US$8 trillion of the almost US$12 trillion global foreign exchange reserves.[1] Reserves provided insurance in the event of a crisis and helped to limit countries external vulnerability. Some would argue that this build-up in reserves helped sow the seeds of the 2007–08 global financial crisis as it resulted in growing imbalances in the global economy, artificially low interest rates in the US, and unnecessary risk-taking.

Following the 2007–08 global financial crisis, calls for the reform of the international monetary system, once again, became louder and more insistent. For a while at least, there was some progress and improvements were made: better economic data; improvements in multilateral surveillance; a recognition that sometimes capital flow management is necessary and should not be treated as taboo; there were concerted efforts to reform financial sector regulation and the G20 worked to increase the IMF's financial resources and make its financing facilities more responsive and less onerous to access. The global financial crisis also gave global economic governance a further boost, when the G20 was "upgraded" to a leaders meeting and was designated the premier forum for international economic cooperation and governance, a title which had previously belonged to the G7. Indeed, through its International Financial Architecture working group, the G20 began to address many important issues pertaining to the international monetary system such as capital flow management, the Special Drawing Rights (SDR) basket, and IMF toolkit. The G20 even began to pay careful attention to reforming the governance of the IMF. The quota reform agreed upon in 2010 was a big step toward giving emerging markets greater voice in the IMF. Unfortunately, to date, these reforms have not been implemented and, as a result, there has been very little progress in reforming IMF voting

1. IMF, "Currency Composition of Official Foreign Exchange Reserves," http://www.imf.org/external/np/sta/cofer/eng/ [last accessed November 17, 2014].

rights, representation at the executive board, and the process of choosing the managing director. An indicator of the serious governance deficit at the IMF is that, despite making up about a quarter of the global economy and population, BRICS still only have around 10 percent of IMF voting rights. Furthermore, the 53 sub-Saharan African countries, making up about 25 percent of the IMF's membership, are represented by only 2 of the 24 members of the IMF Board of Executive Directors.

Now that the global economy is on the mend, even though there is still much work to be done, reform efforts have slowed down, to the extent that they barely feature on the agenda of the G20.

### WHAT DID THE GLOBAL FINANCIAL CRISIS SHOW US?

The global financial crisis clearly highlighted the shortcomings of the international monetary system. The excess global liquidity caused by the unconventional monetary policies of the advanced economies has complicated the conduct of monetary policy in emerging market economies, resulting in massive capital inflows and wreaking havoc with exchange rates and negatively impacting real economies. It has also resulted in higher exchange rate volatility, causing instability in financial markets and having adverse ripple effects in the real economy. Moreover, and despite the fact that the crisis originated in the US, the US dollar (USD) remains the premier safe haven currency. Similarly, the first hints of asset purchase tapering in the US led to considerable capital outflows from emerging markets, significant depreciations in currencies and a massive spike in uncertainty and volatility in financial markets.

These facts all show the shortcomings of an international monetary system that is dominated by one country's currency serving as the primary reserve currency. The USD and euro (EUR) make up 90 percent of allocated global foreign exchange reserves. At the time of the introduction of the EUR, expectations were high that the EUR would challenge the status of the USD; however, its share of allocated global foreign exchange reserves has remained steady at around 25 percent while the share of the USD is 60 percent.

Unfortunately, reform will not be easy, but the process has already begun and can be expected to gather momentum over time, as the international monetary system evolves toward multi-polarity. The share of USD assets in central banks' balance sheets is steadily



declining as central banks diversify the currency composition of their reserves. While the USD maintains the lion's share of global reserve assets, it has witnessed a significant decline from over 80 percent in the early 1990s to the current 60 percent. Central banks have begun to diversify their foreign exchange reserves into currencies such as the Australian dollar and the Canadian dollar, and have also started investing in emerging market currencies, particularly of the largest developing countries such as Mexico, Brazil, Korea, and China. However, allocation to such currencies remains minimal and, in fact, recently, it has declined. In the case of the South African Reserve Bank (the Bank), we too have come a very long way in terms of diversifying foreign exchange reserves: in the 1990s foreign exchange reserves were denominated almost entirely in USD, and in the early 2000s the Bank moved to a more diverse composition including the British pound, Japanese yen and euro. More recently, the Bank further diversified its foreign reserves, including currencies such as the Chinese renminbi (RMB) and Australian dollar, albeit still on a small scale.

Another sign of the shift toward multi-polarity is the growing role of the RMB. According to the 2013 BIS Triennial Central Bank Survey, FX turnover in RMB increased from 0.9 percent of the world's total in 2010 to 2.2 percent (the ninth largest) in 2013. Separately, IMF analysis based on SWIFT payment data show that the RMB is now ranked as the seventh currency in global payments, whereas the share of the Chinese cross-border trade that is settled in RMB has risen to about 17 percent in January–May 2014, from less than 10 percent in 2012. A recent survey of 200 institutional investors published by State Street and the Economist Intelligence Unit found that 53 percent of investors surveyed, believed that in time the renminbi would surpass the US dollar as the world's major reserve currency.[2] However, there are significant differences in view on the time frame by when this could occur. Furthermore, as an important element of internationalization of the RMB, the People's Bank of China has signed over 30 currency swap agreements in local currency, with a value of RMB2.5 trillion.[3]

### SUBSTANTIAL INTERNATIONAL MONETARY REFORM WILL NOT OCCUR IN THE SHORT RUN: WHAT REFORMS ARE POSSIBLE?

In addition to the need for better data collection and transparency of data, there are a few measures that could be done relatively quickly and that would help make our inter-

2. State Street and Economist Intelligence Unit, "Renminbi Rising: Onshore and Offshore Perspectives on Chinese Financial Liberalization" (24 February 2014).
3. Institute of International Finance, "Catching up with the Renminbi," Research Note (7 July 2014), https://www.iif.com/publication/research-note/catching-renminbi [last accessed November 17, 2014].

national monetary system more appropriate and resilient. First, the G20 should revive its discussions on the issue of the SDR basket. When it was last discussed there was considerable support for greater diversification and representation in this basket. This in turn would help enhance its role in supporting the international monetary system and building the global economy's resilience to shocks. The SDR basket is up for review in 2015, and it is important that this opportunity is used to carve out a greater role for the SDR. In this regard, the Palais-Royal Initiative[4] is quite instructive, as it discusses how this objective can be achieved.

A resilient and effective international monetary system requires a financial backstop during times of economic crises or serious market dysfunction. Since the 1940s, this has been the job of the IMF. Recently, the IMF has improved its capacity to play this role by increasing its financial resources, and enhancing the flexibility of its toolkit. The IMF's efforts are now being complemented by the development of new financial safety nets, such as the newly established BRICS Contingent Reserve Arrangement. One step that the IMF can take to supplement this newly evolving set of financial safety nets and to help emerging markets build the requisite monetary and financial resilience to deal with problems under the current monetary arrangements is to play a facilitative role in the development of currency swap facilities in major international currencies for qualifying emerging market countries.

A third step that is needed is to reform the IMF's governance arrangements so that they are more reflective of the shifts in power in the global economy. The rising powers, such as some members of the BRICS, have made their dissatisfaction with the current governance arrangements clear and they are among the leaders in the global efforts to make the allocation of voting rights and board seats at the IMF more reflective of current global realities. They are also beginning to develop new international financial institutions. For example, at the BRICS Summit in Fortaleza during July 2014, the BRICS signed treaties establishing a New Development Bank.

It is clear is that the world has changed, but the international monetary system has not adequately adapted. Without the necessary reforms, we will not be able to solve the problems of global imbalances, and we will be ineffective in strengthening the system's ability to prevent future crises and the goal of strong, sustainable and balanced growth will remain elusive. It is the responsibility of the G20 to ensure that reform in

4. Palais-Royal Initiative, "Reform of the International Monetary System: A cooperative approach for the Twenty-First Century" (2011), http://global-currencies.org/smi/gb/telechar/news/Rapport_Camdessus-integral.pdf [last accessed November 17, 2014].



the international monetary system is given high priority. It is better that we undertake these reforms now when we can do so in a prudent and measured way than to wait to be compelled to do so in haste in response to the next big crisis.

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South African Reserve Bank

# BRETTON WOODS, THE WEST AND THE REST

KINGSLEY CHIEDU MOGHALU

Sired in new Hampshire 70 years ago, the Bretton Woods (BW) sisters, the International Monetary Fund (IMF) and the World Bank (WB), have grown gracefully into old age. They have had their share of crises—middle-age, geriatric symptoms and all—but one thing appears certain: they remain key players in global financial stability and development. News of their death is exaggerated.

At the time of their creation, not much thought was given to the colonies of Africa, Asia, Central and Latin America that were later to become the center of the WB's work and, at least for a time, that of the Fund as well. Here I examine the political economy dynamics of power and institutional reform embedded in the BW system in a world that has changed in many ways since 1944. There has been a gradual shift of economic power and influence away from the West and eastward, but this shift is yet to be satisfactorily anchored in the influence and voting powers of the member countries of the Fund and the Bank, especially the former. As a result, developments resulting from, but outside of, the BW system now threaten the relevance of these institutions.

There are also issues of effectiveness, with a valid questioning of whether the institutions' prescriptions and philosophy are truly the last word in macroeconomic stability and development.

### HISTORICAL AND CONCEPTUAL ORIGINS

There are two dimensions to understanding the BW system. The first is the historical process that was based on the economic need and argument for the IMF and the WB. The second lies in realist philosophies of international relations and political economy. Thus, limiting our understanding of these economic institutions to pure economics, financial stability, or the developmental needs of the member countries would give a thoroughly incomplete view.

The BW system was created for two main reasons. One was to create a reserve currency (the US dollar), use this currency as a basis for exchanging other currencies and thus facilitating international trade, and to monitor exchange rates and guarantee global financial stability by lending reserve currencies to countries afflicted by trade deficits.

The countries that set up the BW system agreed to link their currencies to the US dollar, which was in turn tied to gold. But the gold-denominated dollar standard collapsed in 1973 and the consequences of a transition to free-floating global currencies ricocheted around the world with the resulting drop in stock prices, sharply increased oil prices, and global inflation.

The other economic reason for the BW system was to provide capital to fund post-war reconstruction, a role to be performed by the WB. At its creation, its target recipients were the European nations devastated by war, also the beneficiaries of US assistance under the Marshall Plan. Thus, the BW system was created to prevent a resurgence of economic warfare in a previously uncoordinated international economic system.

The second standpoint—and perhaps the most important—from which to understand the BW sisters is that they are as much political institutions for the projection and protection of global power and dominance as they are economic institutions. This does not take away from the undisputed benefits of their existence, including for developing countries.

An understanding of international relations anchored on the nature of the international society of states—as opposed to the rhetoric of an international community in which global



financial and development institutions are completely altruistic agents—will illustrate this. The competing interests of states, generally managed by international institutions that formally advance shared goals but in reality project national interests, frequently produce anarchic tensions. Understanding this reality is essential for developing countries and emerging economies. Increasingly, these countries, especially the latter, do.

### ABSENT AT THE CREATION

The reality was that the BW system was entirely a creation of the Western nations that emerged victorious in World War II. US President Franklin D. Roosevelt was the inspiration behind the conference. Two individuals drove most of its work—Harry Dexter White, senior economic advisor to US Treasury Secretary Henry Morgenthau, and John Maynard Keynes, the influential British economist.

Although the focus of the World Bank's work subsequently shifted as a wave of decolonization spawned new signatories to the BW Agreements, Egypt, Ethiopia, Liberia, and South Africa were the only African countries that were original signatories. Indeed, of the 188 member countries of the IMF and the WB Group today, just 41 were original signatories to the BW Agreements. Thus, about 80 percent of today's members were absent at the creation—joiners rather than founders.

It is little wonder that the BW system was constructed in the image and world view of the West. This architecture was set up in two ways—the leadership of the Fund and the Bank, and in their voting structures. An American came to head the WB, while a European led the IMF. This arrangement has persisted to this day.

Both the Fund and the Bank are governed by a system not on one member one vote, as in the UN, but one of weighted voting. In this system, quotas are assigned to member countries upon joining the organizations, broadly based on the strengthof their national economies. A member country's quota in the IMF, for instance, defines its financial and institutional relationship with the Fund, its voting power, and its access to finance.

Clearly this situation concentrates a lot of power and influence in the hands of the mainly Western original founders of the institutions, who at the time were the leading lights of the global economy. But there are nuances. One such nuance relates to the widely held view, especially among developing and emerging economies, that the governance of the Fund and the Bank is "undemocratic" as a result of the weighted voting system. But is it undemocratic simply by virtue of the use of weights instead of nominally equal votes? Or is it undemocratic because it either confers hidden advantages to certain countries or because the weights no longer reflect economic facts on the ground?

One response is to remember that democracy, in its purest form, is a game of numbers. Thus, at the BW institutions, the argument could be made that accountability for financial outcomes is not equal, and therefore quotas and voting powers need not necessarily be equal. In the UN, where each country has an equal, one vote in the General Assembly, the power and influence of member states is still unequal—partly because, among other factors, financial contributions to the budget are not equal.

### THE RISE OF THE REST

Thus the best argument for the reform of the governance of the BW institutions lies in the reality that the structure of the global economy does not justify the existing governance structure, and that it is also important, especially in the case of the WB, for developing nations and emerging markets to have a voice in decisions that affect the lives of their citizens. The best argument is not necessarily that the weighted voting system confers additional hegemonic advantage on one country—the US.

Although economics appears to have assumed much greater importance in shaping the global economy, politics is not far behind. Global economic decision-making paradoxically remains driven by political factors that hark back to the founding structures and dynamics of global institutions. These dynamics, however, are facing a robust challenge from the emergence of new centers of economic gravity. Faced with stiff challenges to their legitimacy over the fairness of its original governance structure in light of current realities, represented mostly visibly in the rise of China as the world's number two economy after the US, the BW institutions agreed reforms to voting quotas and decision-making.

But there are two snags. First, despite the governors and executive board of the IMF passing a reform package that begins to address perceived inequities, the US Congress has declined to ratify the reform package—so the changes cannot take effect.



Second, China, deeply dissatisfied with progress on reform and seeking to project its newfound economic power, has moved to create alternative institutions designed to challenge BW's dominance. In 2014, Brazil, Russia, India, China, and South Africa launched a New Development Bank and a Contingent Reserve Arrangement (CAR), both designed to provide infrastructure finance and financial stability support for BRICS nations.

This development matters not because it will necessarily result in an immediate and fundamental alteration of the global public financial landscape—the New Development Bank is still four times smaller than the WB, and the CAR's resources are miniscule compared to those of the Fund—but because it could mark the beginning of a concrete assault on the monopoly and dominance of BW, which has continued despite the existence of several regional development banks. Those regional banks were not consciously set up to overthrow the BW institutions but to act as an adjunct, and they were not championed by any global power in the way that China is spearheading new alternatives today and as the US did in the postwar world. Moreover, China has championed the establishment of a new infrastructure bank for the Asian region and the US reportedly has pressured its key allies and regional players in Asia, such as Australia, not to join the new institution.

Other threats to the BW system include the rise of global capital markets and developing countries' access to these alternative sources of capital, the rapid expansion of China as an alternative aid donor to poor countries, and the rise of currency diversification in international trade—again led by the Chinese renminbi.

### BRETTON WOODS AND AFRICA

The relationship between the BW organizations and African countries was forged through the Structural Adjustment Programs (SAPs) of the 1980s—a combination of lending economic policy advice from the IMF and the WB. This relationship is important not just because African countries have been a dominant focus of the work of the BW institutions, but also because the relationship has shaped the philosophical evolution of the Fund and the Bank. As the consequences of BW policy advice and lending conditionality over the 1980s and the 1990s became harshly criticized, the BW sisters learned the lesson of humility, confronted with the reality that their macroeconomic orthodoxies were not infallible.

In many cases, SAPs cut government spending on social infrastructure in a bid to rein in fiscal outflows. The BW institutions pressured African countries that adhered to their programs to remove or reduce tariff barriers, and open up their markets. One result was a remarkable destruction of the little manufacturing capacity then present in African economies, as importing became a more lucrative business option than manufacturing.

The consensus of opinion, certainly in Africa, was that the SAPs did not work as they were intended, although it has been a matter of debate whether this failure lay in the policy prescriptions or in the inability of some countries to follow through with them given populist opposition. Whatever the case, the BW institutions have acknowledged their policy prescription errors, in particular the cuts in social spending. Even the IMF delved into concessional financing, approving zero-interest loans to poor countries struggling with the impact of the 2008 global financial crisis. Overall, the BW institutions, courtesy of their experience in and with African countries, have acquired a more humane visage than was the case decades ago.

Combined with more effective macroeconomic management by African countries, the Bank and the Fund also played a key role in the improvement of the continent's economic fortunes through the role they played in debt relief. The main instrument through which this was achieved was the Multilateral Debt Relief Initiative (MDRI)—debt relief for 27 African countries had been approved as of 2012.

Whatever the criticisms of the BW institutions, the vital value of their contributions to Africa's economic possibilities cannot be questioned. It is important not to get lost in an ideological opposition to these institutions that denies their value, imperfect as they doubtless are. In doing so, a word of caution to African countries remains necessary: development, in the end, must be an internally driven process in any society. It cannot be externally imposed. To that extent, the Fund and the Bank must give developing countries more policy space to adopt and adapt support from international economic institutions.

## THE FUTURE OF BRETTON WOODS

The IMF has benefited from a resurgent influence after a number of years during which it appeared to be drifting into irrelevance and self-doubt about its mission. As the Asian financial crisis in the late 1990s subsided and a period of calm returned to the global monetary system in the first half of the 2000s, many, including IMF staff, wondered if the global financial watchdog had become obsolete.



The collapse of the BW system of fixed exchange rates in 1973 dealt the first major blow to the power of the Fund. Second, the combination of the rise of risk management and the ascension of Asia, and "self-insurance" through the accumulation of massive quantities of foreign reserves by several nations reduced their need for the Fund as a macroeconomic stabilizer. Third, questions about the Fund's independence—its ability to speak out about the monetary and fiscal policies of powerful nations such as the US and China—have affected its credibility. Fourth, the rise of regional monetary and trade unions has weakened the Fund's influence in international monetary policy making.

But the global financial crisis of 2008 turned out to be a lifeboat for the Fund as the world turned to it for help. Paradoxically, it was not a crisis in Africa or Asia that nurtured the IMF back into reckoning: it was the cataclysm in the eurozone.

Although the Fund's involvement in the eurozone demonstrated its limited ability to undertake far-reaching bailouts and the need to bolster its own reserves as an international fund of last resort, there is no question that it will continue to be needed, even in Africa—as the problems faced by Ghana's economy in 2014 made clear.

This is especially so in the area of financial stability and because African countries have not developed the levels of "shock-absorber" reserves that Asian countries have. Because financial crises are not easy to predict, as their causes are rarely the same, it is essential to ensure the readiness of the IMF to deal with such a crisis when it does occur. When it comes to financial stability, however, the Financial Stability Board (FSB) has taken on a more proactive role in terms of rules to manage, prevent, or contain the next crisis, although most developing countries remain outside the immediate orbit of the FSB and it is still the IMF that has more direct relationships with these countries. In this case, the Fund's Article IV Consultations and the Financial Sector Assessment Program that it runs jointly with the WB still provide important opportunities for the exercise of its surveillance mandate.

It is the WB's turn to ponder its mission. The Bank is visibly under threat, largely from the rise of China and the latter's increasing geo-strategic financial support for developing countries in Africa, Asia, and Latin America. Moreover, the availability of alternative, private international capital poses a significant threat to the Bank's continued relevance.

The horizon of the WB Group's activity, however, is so wide that it will remain important to developing countries well into the future. The question is: how? When the role, for example, of the Bank's International Finance Corporation is combined with that of the Multilateral Investment Guarantee Agency (MIGA) in political risk guarantees for foreign investment, the result still has a lot of relevance, let alone concessionary lending by the International Development Association (IDA.)

The path forward, even in terms of the Bank's usefulness to clients, will require adaptation that distributes the weight of the Bank's utility more evenly between financing and its other value proposition possibilities. One of these is a shift to becoming a knowledge and solutions Bank. Despite the initial controversy that has greeted the reforms initiated by Bank President Jim Yong Kim in this direction, it is still a conceptually robust vision that will benefit developing countries in the longer term more than the previous largely country and regional focus that built bureaucratic power bases but was somewhat ill suited to the bold and innovative conceptual thinking that tackles the foundations of the development challenge.

It is in knowledge and its effective application in public policy across various clusters that that challenge rests. This is why the emphasis on development finance lending in many poor countries over past decades has not been matched by fundamental transformations in their societies. Knowledge through education and skills, and its application through innovation, is the path to prosperity for many poor countries, if those variables are effectively domesticated and internalized. Increased investments by the WB will have much higher impact when combined with infrastructure finance and development from internally generated revenue through effective taxation.

Kingsley Chiedu Moghalu, President and CEO, Sogato Strategies LLC

## REINVENTING DEVELOPMENT FINANCE

TAKEHIKO NAKAO

In 1944, after the devastation wrought by the Great Depression and World War II, representatives of the world's major economies met at Bretton Woods with two interconnected agendas: to build an orderly, rules-based system for global monetary stability, and to speed up reconstruction and global development. Seventy years on, despite dramatic advances in the way we live and cooperate, the quest for global monetary stability and development remains as relevant—and as elusive—as ever.

Most people think of Bretton Woods (or reinventing Bretton Woods) in terms of the exchange rate arrangements, reserve currencies, global financial architecture, and reform of the international monetary system. Of course, these will remain critical issues, as we learn lessons from past financial crises, strive to keep the global economy stable and safe amid increasing interdependence, and embrace a multi-polar world.

In this article, however, I will focus on the global development agenda—to eradicate poverty and bring shared prosperity to all countries—and particularly the role of development financing.

Development requires sound money and effective macroeconomic management, and is itself a critical foundation for monetary stability. Thus, any discussion on global monetary stability would be incomplete without looking at the issue of global development. Moreover, development is a global public good. Everyone benefits, whether it occurs in emerging or developed economies. More efficient use of resources reduces costs worldwide. A larger middle class, from rising incomes in developing countries, boosts global demand. Expanding economic opportunity and creating a more conducive climate for human advancement—especially for the disadvantaged or vulnerable—promotes stability and contributes to peace: a primary Bretton Woods goal. Global development hinges on many complex factors—political economy, quality of governance and institutions, efficacy of policy, etc. But there would be no development without financing.

Why does development financing remain so crucial today, whether in Asia or elsewhere? There are two fundamental reasons.

First, despite huge gains—particularly in Asia—massive gaps remain in the quality of human life, whether within or across borders. Narrowing these gaps requires adequate financing.

- While poverty is almost eradicated in some places, it persists in others. What constitutes being poor is growing in complexity. A recent Asian Development Bank (ADB) study finds that if vulnerability, food insecurity, and regional specificity are taken into account, about half of the developing Asian population could be considered as extreme poor in 2010.[1]
- Progress is uneven towards the Millennium Development Goals (MDGs). Not all the goals will be achieved by 2015. In developing Asia, most countries have made significant headway in reducing poverty, improving access to universal primary education, and promoting gender equality and women's empowerment. But the targets for reducing child mortality and malnourishment and improving maternal health have not been reached. We must continuously raise the bar on our goals. Thus, the post-2015 development agenda wants poverty and hunger eliminated, not just reduced, and at the same time puts a greater focus on the quality of economic growth.
- To raise living standards, the least developed countries will continue to require concerted attention. But middle income countries, which have been growing in number and are still home to most of the world's poor, face an array of new challenges—from rising income inequality, rapid urbanization and environmental degradation, large infrastructure deficits, to investing in human capital and productivity to avoid the middle income trap.
- On top of the challenges specific to each country, there are global challenges that affect everyone, especially the poor and low income countries. Tackling climate change and preventing communicable diseases are just two examples.

The second reason development financing is crucial is that developing economies continue to face the twin challenges of mobilizing domestic resources and accessing external finance. Many governments face significant barriers in mobilizing domestic resources for investment in infrastructure, education, health care, and social services due to weak tax collection and inefficient spending. In developing Asia, for instance, public spending on education in 2010 was only 2.9% and on health only 2.4% of GDP, compared with 5.3% and 8.1% respectively for advanced countries. Traditional overseas development assistance (ODA) remains significant, but has been declining in importance compared with what is needed and covers a shrinking portion. For example, net ODA at constant prices to developing Asia fell from $47.3 billion in 2008 to $36 billion in 2012.[2] Despite the increase in private capital flows, developing markets find it difficult to tap private finance, whether external or domestic, either because markets are not functioning properly, or because they remain underdeveloped.

How do we narrow these development finance gaps? How should development financing be "reinvented"? An array of opportunities must be explored, domestic and external, public and private.

First and foremost, countries themselves must own the development process and mobilize domestic resources more effectively. Fiscal reform is needed on both sides of the ledger—taxes as well as outlays. In developing Asia, for instance, personal income tax, currently 1.7% of GDP, can be increased by broadening the tax base and improving collection; value added tax should be introduced if it has not been already; corrective taxes—such as those levied on cigarettes, alcohol, and pollution—are another source; and taxes on property and capital gains can not only increase revenues, but also address income inequality. More non-tax revenues, like fees and user charges, can be explored at the national and sub-national levels. Large energy subsidies, which can go as high as 8% of

1. ADB, "Key Indicators for Asia and the Pacific 2014," Part I – Special Chapter: Poverty in Asia: A Deeper Look (2014), http://www.adb.org/publications/key-indicators-asia-and-pacific-2014 [last accessed November 17, 2014].

2. OECD, Query Wizard for International Development Statistics, http://stats.oecd.org/qwids/ [last accessed November 17, 2014].

GDP in Asia, should be reduced or eliminated. Transparency and good governance must elicit public confidence. Multilateral financial institutions—like those spawned at Bretton Woods—must support these reforms with both finance and expertise.

Second, domestic capital markets must be developed or deepened to mobilize savings, especially for infrastructure investment. Long-term financing—whether via debt flows, bank lending, bonds, portfolio equity, or foreign direct investment—is the fuel powering long-term, sustained global growth. Public–private partnerships (PPP) can not only complement public investment, but also help bring efficiency to public service delivery. Policy makers and regulators must innovate to stay in step with market players. Financial reform must keep pace with international good practices. Remittances are growing in importance—9.3% of GDP in the Philippines in 2013, for example—and offer another source of development financing.

Third, traditional concessional development assistance must be bolstered through both bilateral and multilateral channels. Despite the commitment to providing 0.7% of gross national income (GNI) as ODA, data suggests that OECD Development Assistance Committee donors met just 43% of the target in 2013.[3] This gap should be narrowed significantly. Growth of contributions from developed countries may have slowed given recent economic difficulties. But it is important to gain understanding and support from taxpayers that development assistance benefits everyone in the long term. At the same time, the recipient countries need to make greater efforts to achieve results.

Fourth, regional financial cooperation can also help mobilize finance for development. Capital inflows reduce domestic funding costs while enlarging the investment pool. Yet unfettered market-driven financial integration can create distortions and vulnerability. Cooperation through dialogue and surveillance can smooth the process, provide financial safety nets as buffers against shocks, and promote financial stability. The Asia and Pacific region is strengthening its cooperative framework. The ten members of the Association of Southeast Asian Nations (ASEAN) are moving toward the milestone of an ASEAN Economic Community in 2015. And with the People's Republic of China (PRC), Japan, and Republic of Korea, ASEAN+3 continues to strengthen its own financial safety net—the current $240 billion Chiang Mai Initiative Multilateralization. ADB is also deeply engaged in the Asian Bond Markets Initiative (ABMI) to help deepen the financial markets in the region. Other examples of regional cooperation in Asia include the South Asian Association for Regional Cooperation, Central Asia Regional Economic Cooperation program, and the Pacific Island Forum. Given Asia's great diversity in financial development and openness, it requires a more nuanced approach to integration than did the European Union.

3. Integrated Implementation Framework, "Official Development Assistance," http://iif.un.org/content/official-development-assistance [last accessed November 17, 2014].



What then is the role of multilateral development banks (MDBs)? Global and regional MDBs have played an important role in reducing poverty and promoting development. With their wealth of accumulated development knowledge and established creditability over the decades, they will remain key development partners in the future. To support an agreed development agenda, they can aggregate finance by pooling multiple sources, increasing leverage, and lowering funding costs. In addition to finance and expertise, they act as honest brokers when working with development partners. However, to retain relevance and maximize development impact, MDBs must continue reforms to meet the new and evolving demands of their clients.

ADB's recent midterm review of *Strategy 2020* was designed to adapt its operations to new realities.[4] ADB must strive to ensure that its finance is efficient and brings development results. Our direct lending is small, so we must add significant leverage to add value via guarantees, rating upgrades, PPPs, and co-financing, among others. We must apply our experience and expertise to add knowledge to our finance for development. We call it "Finance ++" (Finance plus leverage plus knowledge). And we must continue to innovate. For example, a dedicated Public Private Partnership Office, directly under my own office, has been established. Its main purpose will be to provide transaction advisory services to PPP transactions, as part of the need to innovate in our financing models. We are considering combining Asian Development Fund (ADF) lending operations with Ordinary Capital Resources (OCR) balance sheet and, by doing so, we can enhance our financial capacity for reducing poverty in the region. Finally, by intensifying cooperation with the private sector, we will better attune our operations with the evolving demands of our region, particularly for our growing middle income members.

The development side of the Bretton Woods mission remains as much a work in progress as is its goal of creating a global system of monetary stability. The ambitious agenda of 1944 still resonates. And in reinventing it as global realities dictate, the

4. ADB, "Strategy 2020 Midterm Review," http://www.adb.org/about/strategy-2020-mid-term-review [last accessed November 17, 2014].

demand for development finance must be met through innovation, greater inclusion, and a global commitment to cooperation. This is even more urgent as we embark on the far more ambitious post-2015 global development agenda. Our goals will be attainable if we evolve and reinvent ourselves and match our words with effective action.

Takehiko Nakao, President,
Asian Development Bank

## THE INTERNATIONAL MONETARY SYSTEM AND THE ROLE AND CHALLENGES OF REGIONAL FINANCIAL SAFETY NETS IN ASIA[1]

YOICHI NEMOTO[2]

SINCE THE GLOBAL financial crisis of 2008–09, there have been strong calls to reform the international monetary system. The crisis lays bare the inadequacy of the world's current monetary system in dealing with financial shocks, the stresses of which continue to be felt today. The inherent instability of the global monetary system is the object of much criticism and has prompted calls to re-think the architecture of the international monetary system. There are also important emerging and continuing trends, as well as crisis legacies that need to be addressed in order to enhance the long-term stability of the international monetary system. In particular, excessive risk-taking behavior in financial markets will continue to pose significant challenges for financial sector regulation and supervision, as well as capital flow management.

What then needs to be done? First, rising interdependencies in the global economy necessitate the stepping-up of global cooperation and further strengthening of the governance of the international monetary system. From the standpoint of policy, this would entail greater consideration for adverse global spillovers from domestic policies especially

1. The findings, interpretations, and conclusions expressed in this material represent the views of the author and are not necessarily those of ASEAN+3 Macroeconomic Research Office (AMRO) or its member authorities. Neither AMRO nor its member authorities shall be held responsible for any consequence of the use of the information contained therein.
2. This essay is written in collaboration with Chaipat Poonpatpibul (Group Head and Principal Economist) and Anthony CK Tan (Senior Economist).

from major advanced economies. While international cooperation through the G20 framework has helped ensure stability of the international monetary system through concerted policy efforts to provide liquidity during difficult periods, greater understanding about policy spillovers and transmission channels is warranted.[3] Second, financial regulatory and supervisory reforms to address systemic risks and to ensure sufficient capital buffers will need to continue, while minimizing any unintended consequences of over-regulation that may increase incentives for regulatory arbitrage and shadow banking. Third, given that one can never fully insure against future crises, and that any major reform effort will likely encounter arduous technical and political difficulties, financial safety nets at different levels will remain a core element in building resilience while the long process of re-designing the international monetary system is underway.

Amid an environment of heightened uncertainty and large capital flow fluctuations, adequate financial safety nets have proven to be crucial in buffering economies against financial shocks. At the global level, the realization of the magnitude of global shocks has led to an increase in the IMF's financial resources by USD456 billion, almost doubling its lending capacity,[4] as well as enhancement of the IMF's lending tools in 2009. This includes the introduction of a new Flexible Credit Line (FCL) to enable members with strong economic fundamentals and policy frameworks to gain access to contingent financing without conditionality beyond the initial qualification stage, thereby providing critical liquidity support to these "innocent bystanders" when they are affected by contagion from other economies. At the country level, apart from appropriate macroeconomic management and an enlarged policy toolkit (including macro-prudential policy measures where appropriate), foreign reserves and fiscal buffers have been important components of the country's first line of defense.

Notwithstanding those two levels of financial safety nets, history—particularly from the recent European experience in 2010–11—has shown that financial resources at both

3. The G20 mechanism remains an informal institution and therefore the tension between achieving national interests while serving the broader international community will continue to be a constant challenge.
4. Member countries from around the world committed to provide emergency resources for the IMF, pledging a total of USD456 billion by mid-2012, in order to increase the institution's lending capacity.



the global and country levels can still turn out to be insufficient during a severe crisis period. This highlights the importance of another level of insurance at the regional level. At present, there are two regional insurance mechanisms; bilateral currency swap arrangements (bilateral swaps) and regional financial safety nets. Bilateral swaps are short-term currency swap agreements that allow for the swapping or exchange of either local currencies, or a local currency against a hard currency, between two central banks. Bilateral swaps can be for the purposes of promoting bilateral trade and trade settlements, or serve as additional short-term resources for the central bank to deal with financial shocks, including with excessive currency fluctuations.[5] On the other hand, a regional financial safety net is positioned as a building block of international cooperation at the regional level, to provide adequate liquidity to stabilize financial markets. They are viewed as a necessary complement to existing international arrangements.[6] The European Stability Mechanism (ESM), currently the largest regional arrangement in the world in terms of financial resources that can be drawn, has played a crucial role to supplement the IMF's global financial assistance during the recent eurozone crisis.[7] In Asia, the Chiang Mai Initiative Multilateralization (CMIM) is the second largest regional financial safety net in the world.

The CMIM is a multilateral currency swap agreement that had evolved from a series of bilateral swaps among ASEAN+3 economies in response to the 1997–98 Asian crisis experience, where the global assistance proved to be inadequate and the prescription of crisis resolution measures by the IMF, in hindsight, contributed to the prolonged economic contraction.[8,9] These networks of bilateral swaps in the region were judged ineffective during the global financial crisis of 2008–09 due to the complex decision-making process, prompting their transformation into a single multilateral agreement—the CMIM. The original CMIM came into effect on 24 March 2010 with an initial greed size of USD120 billion, which served a crisis resolution function. The core objectives are to address balance of payments and short-term liquidity

5. For example, a bilateral currency swap agreement between Korea and Malaysia signed in October 2013, which allows for the exchange of local currencies between the two central banks of up to MYR15 billion or KRW5 trillion, and the bilateral currency swap agreement between China and Korea signed in October 2011 (which was subsequently extended to October 2017) allows both central banks to exchange local currencies up to RMB600 billion or KRW64 trillion.
6. C. Rhee, L. Sumulong, and S. Vallee, "Safety Nets: Lessons from Europe and Asia," Bruegel Working Paper, Brussels (2013).
7. The maximum lending capacity of the ESM currently stands at EUR500 billion.
8. The CMIM parties consist of the Ministries of Finance and Central Banks of the ten ASEAN countries, China, Japan and Korea plus the Hong Kong Monetary Authority (27 authorities).
9. In 2003, the IMF's Independent Evaluation Office issued a report which recognized frankly that the IMF's policy design and implementation in Indonesia, Korea, and Brazil was inappropriate: IMF, "The IMF and Recent Capital Account Crises: Indonesia, Korea, Brazil," Evaluation Report of the Independent Evaluation Office (Washington D.C.: IMF, 2003).

difficulties in the region, and are aimed at supplementing existing international financial arrangements such as those of the IMF. The CMIM has also institutionalized third party views on macroeconomic assessment through a portion of linkage with IMF programs, in order to support the CMIM mechanism and to mitigate moral hazard concerns of potential creditors.

To strengthen the CMIM as a regional financial safety net, in 2012, member authorities agreed to enhance its capability by doubling its initial size to USD240 billion. This enhancement took effect on July, 2014. Furthermore, in order to upgrade the region's ability to deal with a crisis, the IMF de-linked portion—an amount of CMIM that can be drawn without linking to any IMF program—has been raised from the initial 20 percent to 30 percent currently. Recognizing that even an economy with good fundamentals and sound macroeconomic management can face sudden difficulties, ASEAN+3 members also agreed to introduce a crisis prevention facility called the "CMIM Precautionary Line (CMIM-PL)." The CMIM-PL is crucial to strengthening the CMIM as part of the regional financial safety net that mirrors the crisis prevention toolkit of the IMF.

In order to support the CMIM mechanism, the ASEAN+3 Macroeconomic Research Office, or AMRO, was established as the surveillance unit of the CMIM in Singapore in 2011. AMRO's objectives are to monitor and analyze regional economies, to contribute to early detection of risks, as well as to support the swift implementation of remedial actions and effective decision-making of the CMIM. A relatively new institution, it now has around forty full-time professionals, half of whom are economists and specialist staff in the surveillance function.[10] Given its challenging mandate, AMRO is continually working to enhance the effectiveness of its surveillance activities, especially in monitoring financial sector stability and capital flows for early detection of risks. With the introduction of the crisis prevention function to the CMIM, AMRO is also building relevant surveillance capacity in specific areas of macroeconomic policy management, including in fiscal policy, monetary policy, external position and market access, as well as financial sector soundness and supervision.[11] With its focus on intra-regional economic activities and the implications for monetary and financial stability in the region, AMRO's surveillance work can be seen as complementary to the work of other international financial institutions such

10. During the early formation of the IMF, the British (led by Lord Keynes) thought that a team of 30 technicians, rather than 300 as envisioned by the Americans (led by H.D. White) would suffice; B. Steil, *The Battle of Bretton Woods* (Princeton, NJ: Princeton University Press, 2013).
11. The development of CMIM and AMRO in the region is taking place based on a step-by-step and measured way, under the guidance of member authorities.



as the IMF and the ADB while paying due attention to quick decision-making and activation.

There are, however, several challenges with respect to the functioning of the regional financial safety net and other defense mechanisms, as well as the focus of and division of labor in surveillance activities that should be undertaken at the regional and global levels. First, given the multiple layers of safety nets against potential or actual shocks, one important issue is how the different layers of safety net should interact and coordinate with one another, in order to effectively cope with crises while avoiding moral hazard. This includes not only the interactions between the global and regional safety nets but also the cooperation between regional and bilateral defense mechanisms, which is critically important given the significant role that bilateral swaps could play in East Asia. In addition, there are also other questions that need to be further addressed, such as "What should be done in peace time, in order to ensure smooth coordination in crisis?" and "Should the coordination mechanism differ depending on whether the objective is crisis resolution or crisis prevention?" Second, with respect to surveillance activities, there are differing views about the focus of surveillance that ought to be undertaken at the regional level, as well as those that should fall under the broader ambit of the IMF. Nevertheless, there is a general consensus that cooperation needs to be strengthened in the area of risk assessment, since there has been some complacency in the run-up to the global financial crisis, and different institutions have different comparative advantages in this area. By having a multitude of perspectives in surveillance activities, both regional and global surveillance mechanisms can help in better identifying sources of risks, inter-linkages and the attendant spillover effects.

Regional financial safety nets have started to play a crucial role in filling the gap at both the country and global levels. In the ASEAN+3 region, the size and functioning of the CMIM (including its supporting unit, AMRO) will need to be progressively enhanced, depending on the global financial market and capital flow developments, as well as the characteristics and degree of collaboration with other regional insurance mechanisms or global financial safety nets. These arrangements go a long way in helping to support market confidence and safeguard regional financial stability. However, a stronger regional financial safety net does not replace sound macroeconomic management, policy discipline, and further domestic reforms at the country level. Moreover, it does not obviate the need for a better assessment regarding spillover issues.

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## EMERGING ASIA AND THREE LESSONS FROM GLOBAL FINANCIAL CRISES

BANDID NIJATHAWORN

The last twenty years have been eventful for Emerging Asia in terms of financial crisis and policy management. Since the 1990s, emerging markets in Asia have experienced two major financial crises, one as a region where a crisis started and the other as a recipient of a major global crisis. With the risk of yet another financial crisis looming large in the global economy, the task of managing any possible contagion and spillovers will be once again thrust into the hands of policymakers in Emerging Asia. Their successful handling of the recent global financial crisis could obviously help guide policy response. But no two crises are exactly alike. And beyond that, and longer term, Asia policymakers will need to carefully calibrate policies to steer away from risks of future crises and to deepen intra-regional collaboration, and collectively raise the region's abilities and effectiveness to deal with capital flows and spillovers. Such a task is paramount and the stake is high as the region has potential to be one of the fastest growing economic regions in the world, especially after the launching of the ASEAN Economic Community in 2015. So, as a group, Emerging Asia is set to be more integrated as its countries' economic interests are bound together more than ever before.

Financial shocks do and will happen and, in the future, crises can be expected to occur with greater frequency as the process of financial globalization deepens and the structure of financial markets in Asia becomes more complex because of increased market interconnectedness and a higher degree of uncertainty and volatility in the global economy. To manage financial crisis risk under such setting, Emerging Asia will do well to learn lessons from the recent financial crises. To this end, three policy lessons stand out and are particularly relevant for Emerging Asia going forward.

The first lesson is that no country is above crisis. The financial crisis in East Asia in late 1990s, which was an emerging markets crisis, and the recent global financial crisis, in which the epicenter is in the advanced economies, show that financial crisis can happen in any country if conditions for a crisis exist. It could be a large or small country, a developed or developing economy, and with or without a well-developed financial system. The conditions for crisis can be domestic or external. The former includes fiscal and financial sector-led crises, while the latter relates to balance of payments and foreign exchange-led crises.

For Emerging Asia, both domestic and external sources of crisis risk are likely to be important going forward. Typically, the key external risks have been and will continue to arise from sharp changes in the terms of trade—especially the oil price, collapse of global demand, threats to financial stability from large and persistent capital inflows, and sudden stops and reversals of foreign capital linked to extreme financial markets uncertainty and volatility. These risks are inevitable products of a deepening global financial integration with unfettered and foot-loose capital. The importance of these risks for individual Asian emerging markets will vary according to their levels of financial markets development and openness. For the majority of Asian emerging markets that are relatively open, the abilities of domestic policies, bank and financial system, and regulatory environment to deal effectively with large cross-border capital flows will be crucial in lessening the likelihood of external forces setting the conditions for crisis. And for the financially less-open emerging Asian economies, collapse in global demand is likely to be an important source of external shock given the restrictions on capital flows characterizing these economies. In these economies, changes and adjustments are typically less continuous and gradual.



As for the internal source of risk, the key is policy risk that can precipitate a fiscal-led crisis or a financial sector-led crisis. To that effect, there exists ample evidence from the past two major global crises to support that poor policy can sow seeds of crisis through a build-up of unsustainable financial imbalances, while sound policy can help avoid major imbalances and build greater resilience against shocks and sudden capital outflows. In short, crisis is highly correlated with policy.

The second lesson is that financial crisis is, without exception, rooted in excessive debt and leverage. This places the public sector and the financial system at the forefront of policies to minimize and manage risk of crises. Public debt-induced crisis is typically the result of poorly-managed fiscal policy, which invariably leads to unsustainable debts of central government or public corporations or state enterprises. Private debt-induced crisis, on the other hand, is linked to excessive credit extension by domestic and foreign financial institutions, leading to currency mismatch and unsustainable debt positions of firms and households. Excessive growth in domestic credit is often a result of a combination of large and persistent capital inflows, loose monetary policy, misaligned incentives in the financial industry through taxes and subsidies, and lax financial regulation and supervision. Signs of financial stress preceding the crisis often manifest in large and persistent current account deficits, an overvalued exchange rate, high and rising inflation, and ballooning asset prices. A crisis breaks out either when the confidence of market on the abilities of the debtors to meet their financial obligations changes, or when markets have doubts about the abilities of policy to bring the imbalance down to a sustainable level. In both cases, it is the change in confidence that triggers or turns an unsustainable situation into a full-blown crisis.

The third lesson is that, to help the economy avoid a build-up of large imbalances and improve its resilience and capacity to deal with shocks, policy has an important role to play and the efforts must be directed at four broad areas.

The first is greater economic and price flexibility to provide the economy with the means and ability to adequately adjust to shocks. Important in this context are exchange rate flexibility, price flexibility, and labor market flexibility. All these are best promoted through a more extensive use of market mechanisms, rather than regulation or control, in the allocation of resources.

The second area is the self-insurance policy against financial crisis risk through policies that promote a sound external position via a sustained current account balance, low levels of external debt, and adequate levels of international reserves. For Emerging Asia, the importance of having a large enough level of reserves was clearly demonstrated in the recent global crisis when the strong reserve positions allowed Emerging Asia to successfully absorb shocks from the global financial crisis. More being preferable to less, in addition to the size of the country's international reserves, an effective regional safety net arrangement is also crucial for providing countries in the region with a supportive line of defense. This is especially important in view of the vagaries of international capital flows and the usual inadequacy and limitation of the international safety net. In this respect, Asia has done well, thanks to the establishment of the Chiang Mai Initiative Multilateralization (CMIM) that features combined bilateral swap arrangements, currently totaling USD240 billion.

The third area is the resilience and the efficiency of the domestic financial sector. For Emerging Asia, the past two crises show clearly that a robust and strong financial sector is important to the ability of the economy to cope with shocks and to defuse threats to financial stability that are a precursor to a financial crisis. Important in this context are policies that ensure good fundamentals in the financial system, especially banks, in terms of adequate profitability, strong capital base, effective risk management practice, and robust financial regulation and supervision framework, backed by mature bond and equity markets.

The fourth and final area is the disciplined conduct of fiscal and monetary policies, sine qua non for ensuring a sustained economic growth with stability, hence immunizing the economy against the risk of domestically-induced crisis. The key challenge here lies in the strength of the domestic institution and the governance framework: whether or not, and how well, it can focus policy on achieving a balance between growth and price and financial stability while keeping in sight the longer-term implications of the short-term stabilization policies.

These three lessons put policy at the heart of efforts to prevent and manage financial crisis risk. Such tasks will be increasingly important for Emerging Asia as the region moves forward to further consolidate its global position amid an increasingly turbulent and less predictable global economy. To date, Emerging Asian economies as a group have made considerable progress on policy reform and the payoffs from these efforts have been large in terms of the abilities of the regional economies to weather the impact of global financial crisis and maintain growth. Nonetheless, for most countries, including Thailand, the reform remains incomplete and the efforts need to continue to give Emerging Asia a stronger foundation to sustain growth and manage the risk of future crises.



With the prospect that Emerging Asia will be one of the world's fastest growing regions going forward, the stakes are high, and the cost and the consequence of policy not doing enough is enormous.

Bandid Nijathaworn, President and CEO, Thai Institute of Directors,
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# BRETTON WOODS @ 70: REGAINING CONTROL OF THE INTERNATIONAL MONETARY SYSTEM

EWALD NOWOTNY

In order to commemorate the 70th anniversary of the Bretton Woods conference, in February 2014 the Oesterreichische Nationalbank hosted an international conference titled "Bretton Woods at 70—Regaining Control of the International Monetary System," jointly with the Reinventing Bretton Woods Committee and the Austrian Federal Ministry of Finance. This conference constituted a successor event to a previous conference which had been held almost exactly ten years earlier, in June 2004.

In my view, these past ten years, which were characterized by such major events as the development of the euro, but also the deepest global economic crisis since the 1930s, deserve a closer look.

## FROM THE 60TH TO THE 70TH ANNIVERSARY: TAKING STOCK OF THE PAST DECADE

The past decade has indeed been an interesting and equally challenging period, both for Europe and for the global community.

In spring 2004, the European Union had just been joined by ten new Member States. Since then, the EU has undergone two further enlargements, with the entry of Bulgaria and Romania in 2007 and of Croatia in July 2013, so that it now comprises twenty-eight Member States.

Over the same ten years, the euro area of—then—twelve members (in 2004) has grown to eighteen (nineteen, as of January 2015) participating countries and constitutes a milestone in the European integration process. The euro is a fully functional and internationally traded currency, which shields its individual Member States from speculative currency attacks. From its start, the euro has been the second most important international currency after the US dollar. Despite the increasingly difficult environment in recent years, the relatively strong role of the euro on the global stage has remained broadly unchanged, with the euro's share in global foreign exchange reserves standing at around 24% at the end of 2013. Over the same period, the share of US dollar-denominated assets in global foreign exchange reserves remained stable at 61%.[1]

This still predominant role of the US dollar as a global reserve currency, sometimes referred to as the "exorbitant privilege," does not come without cost from the perspective of other currency areas, including the euro area. In this context, I would like to recall that several European commercial banks were forced to pay substantial amounts of fines to US authorities in the context of sanctions, being threatened by a ban on using the US dollar for their transactions.

The year 2008, however, marked a turnaround for the global economy. The US financial market turmoil of fall 2008 subsequently triggered the most severe economic crisis since the Great Depression of the 1930s. While the Bretton Woods institutions had to deal with a continuous series of financial crises over the previous decades, such as the Mexican or the East Asian financial crisis or the Russian debt default in 1998, this recent wave of crises was different insofar as it affected, for the first time, mainly advanced economies. Consequently, its effects were of a different magnitude and much more severe as compared to previous crises, and they are still lingering. While both the USA and the euro area underwent a period of stagnation in 2008 and a strong recession in 2009, the euro area was hit even stronger than the USA, with weaker growth in the following years and the emergence of banking and sovereign debt crises in several EU countries from 2010 onward.

1. ECB, "The international role of the euro" (July 2014), http://www.ecb.europa.eu/pub/pdf/other/euro-international-role-201407en.pdf?456475aa49c78ac8f912d9828d374c52 [last accessed November 18, 2014].



### DEALING WITH THE CRISIS IN EUROPE—A JOINT ENDEAVOR BY THE IMF AND EUROPE

While the IMF, as most other institutions, was caught more or less by surprise by the outbreak of the current crisis, as well as by its severity and its persistence, the crisis has been weathered relatively well so far. This was accomplished thanks to an unprecedented spirit of cooperation and support, which we have witnessed since the beginning of the current crisis, at the global level.

In April 2009, in response to the breakdown of international financial markets, the international community agreed to massively increase IMF resources to a total of USD750 billion, with substantial worldwide contributions. In March 2009, the EU quadrupled its balance of payments support funds for non-euro area EU Member States to EUR50 billion and the EU committed another EUR75 billion (approx. USD100 billion) in the form of bilateral loans to the IMF in order to support its lending capacity. This prompt increase of global and European firewalls constituted important stabilizing steps at this very early stage of the crisis, which were particularly important for the Central and Southeastern European (CESEE) region.

In a similar vein, the so-called "Vienna Initiative" had been launched in January 2009 in order to create a framework for safeguarding the financial stability in CESEE. The "Vienna Initiative" served as a forum for major international financial institutions, among them the IMF and the World Bank, the most important European institutions, home and host country regulatory and fiscal authorities and the largest banking groups operating in the region. The "Vienna Initiative" helped to avoid a potentially region-wide systemic crisis in the CESEE banking sector.

In the following years, as the crisis had not abated, European firewalls for the euro area members, the European Financial Stability Facility (EFSF), the European Financial Stability Mechanism (EFSM) and their permanent successor institution, the European Stability Mechanism (ESM), were established and their firepower was substantially increased in order to address the challenges arising from the banking and sovereign debt crises. Furthermore, in December 2011 the euro area and other EU Member States committed additional bilateral loans to the IMF of up to EUR200 billion (USD270 billion), thus strengthening once more the IMF's firepower.

Global cooperation even went one step further and got a new political and institutional dimension. For the first time in history, the IMF and the EU jointly entered into macroeconomic adjustment programs for individual EU Member States. This implied that consistent and mutually agreed decisions had to be taken on the respective program financing, the initial program design including macroeconomic conditionality, and program surveillance. This close cooperation between the IMF and the EU, which has posed numerous challenges for both sides, has proven mutually beneficial. The IMF's longstanding expertise in macroeconomic programming and its well-established international credibility have been instrumental for the success of these programs.

From 2009 to 2011, several EU Member States outside the euro area, such as Latvia, Hungary, and Romania, were the first beneficiaries of such joint IMF–EU programs. From spring 2010 on, Greece was the first EU Member State within the euro area to receive a financial assistance package negotiated by the IMF and the EU. By December 2010 and May 2011, respectively, Ireland and Portugal followed, and in May 2013 Cyprus was provided with financial support.

This vast support of comparatively wealthy, advanced economies did not remain without criticism in the international debate. Notwithstanding the unprecedented order of magnitude of some of these financing packages, I am convinced that it was the right approach that the IMF stood ready to provide financial support to its members, in these exceptional times, as need arose. As regards the issue of international burden sharing, I would like to emphasize that, as a rule, at least two-thirds of the total financing for euro area countries are provided by the EU itself. In addition to this direct involvement in program financing, the EU provides a substantial part of the IMF's share in program financing, via its contribution to IMF resources.

### CHALLENGES AHEAD

Looking at the challenges ahead of us, I am convinced that the IMF should continue to strive for program countries to regain access to market financing as soon as possible in order to prevent a prolonged use of Fund resources. Ireland's successful graduation from its program a few months ago can certainly be seen as a positive example in this context. In a similar vein, sustainable exit strategies have to be defined also for other program countries over the next few years, as well as for those which are benefiting from precautionary arrangements.



In view of the increasing economic importance of emerging economies, I support the IMF's governance reform which aims to increase the representation of emerging market countries in the IMF Executive Board at the expense of advanced European countries. In this context I would like to recall that in July 2012, Austria, together with other Central and Eastern European countries and with Turkey, established a new IMF constituency, thus contributing to achieve the aforementioned aim of the IMF's governance reform. This marks a historic milestone as it will place the Central and Eastern European region, in rotation with Turkey, directly on the map of the IMF's Executive Board.

Finally, in recent years it has become clear that the deregulation of financial markets has reached its limitations and that deregulated financial markets tend to be instable and are likely to trigger financial crises. The IMF finds that over the period 1970 to 2011 the world's economies were confronted with a total of 218 currency crises, 66 sovereign debt crises and 147 banking crises.[2] Laeven and Valencia show that dealing with crises causes high economic costs. They find cumulative output losses of 32.9% of GDP in advanced economies originating from banking crises, an increase in public debt levels by another 21.4% of GDP and cumulated fiscal costs (i.e. fiscal outlays directed to the restructuring of the financial sector) in the order of 3.8% of GDP.[3] Given these enormous costs related to banking crises, there seems to be a change of paradigm since the beginning of the current crisis in 2008, with a tendency to return to increase the degree of financial regulation and with a more active use of fiscal policies in order to counteract or avoid banking crises in advanced economies.

While the euro area Member States were protected against a currency crisis by their common currency throughout the current crisis, as mentioned earlier, some EU member countries were, however, affected by banking and subsequently sovereign debt crises. In response to these developments, the EU has substantially strengthened its economic and fiscal governance over the past few years, with the enhanced Stability and Growth Pact and the newly created Macroeconomic Imbalances Procedure. Furthermore, with the aim to prevent banking crisis for the future, the EU is currently preparing to establish a banking union, which will comprise the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM). I am confident that

2. Luc Laeven and Fabián Valencia, "Systemic Banking Crises Database: An Update," IMF Working Paper WP/12/163 (June 2012), http://www.imf.org/external/pubs/ft/wp/2012/wp12163.pdf [last accessed November 18, 2014].
3. IMF Database, Ibid.

the completion of the banking union will contribute to break the negative feedback cycle between sovereign and banking sector problems in the EU.

The continuing global economic turmoil underscores the importance of the Fund as a forum for multinational dialogue as well as of its financing capacity also for the coming years.

The unprecedented joint crisis management, undertaken by the IMF together with Europe, over the past few years has served the common goal of stabilizing the European economy which helped to stabilize the world economy. Moreover, this cooperation between the IMF and Europe can possibly be seen as a blueprint for future cooperation between the Fund and regional financial arrangements. I hope that the international financial organizations recently created by the BRICS countries will follow this successful European experience of close cooperation with the Bretton Woods institutions.

Looking ahead, the IMF's longstanding surveillance function should remain at the core of its activities and will have to be even further developed. Given the increasing inter-connectedness of economies in the world, the Fund's policy advice on how to address policy spillovers needs to be systematically included into bilateral surveillance. Furthermore, we welcome the Fund's increased efforts to strengthen its surveillance of financial sectors. In particular, even more emphasis will have to be put on spillover effects from national prudential measures, in order to prevent increased financial fragmentation originating from inconsistencies across national jurisdictions.

Our goal should be to reform the international monetary system so that it functions better and is less crisis prone in future. The Bretton Woods system has been very successful in avoiding financial crises and achieving high growth rates from 1945 to 1970. The long-term goal we are aiming for should be a stable international monetary system, conducive to growth.

Ewald Nowotny,
Governor, National Bank of Austria

## THE FUTURE OF GLOBAL CURRENCIES

JOSÉ ANTONIO OCAMPO

The celebration of the 70th anniversary of one of the major acts of international economic cooperation, the Bretton Woods Conference, coincided with renewed calls by France and other countries to reduce the role of the US dollar in the global economic system, and well as the launch of the BRICS Development Bank and Contingent Reserve Arrangement.

The recent calls bring us back to the debates of the 1960s, when the French Finance Minister at the time, Valerie Giscard d'Estaing, made a plea to reduce the "exorbitant privileges" that the US dollar had in the international monetary system. This was combined with the outstanding analysis of the Belgian economist Robert Triffin, who argued that an international monetary system based on a national currency was inherently unstable.

As we know, the original Bretton Woods arrangement based on a dual dollar–gold system (gold exchange standard) collapsed in the early 1970s. A new system or, perhaps, "non-system" then evolved—*de facto*, rather as the result of cooperation—in which major global currencies potentially compete with each other as reserve currencies and international means of payments.

The system is indeed one of competition: several currencies serve within their area of influence as means of payments, bonds denominated in a growing number of currencies (including several from emerging economies) are transacted in international markets, and the Chinese government, through the policy of internationalization of the renminbi, has an open policy of positioning its currency as a major global currency.

However, the US dollar still dominates. According to IMF statistics, in December 2013, over six-tenths of "allocated reserves" were invested in dollar instruments, followed by a large margin by the euro with a fourth of those reserves, with the remaining currencies representing just over one-eight. This is why, and despite the potential competition that the US dollar faces, the system can effectively be called a "fiduciary dollar standard."

There are several reasons why the dollar continues to dominate. One is the "network externalities" associated with the use of the same currency by different agents. But even more important, particularly for the dollar as a reserve currency, is the fact that the US has the largest and deepest financial system, and dollar assets are, therefore, the most liquid international financial instruments.[1]

The system has, nonetheless, several disadvantages, associated with the inherent deficiencies of using a *national* currency as a *global* currency. The most remarkable fact is that the international system becomes hostage of the monetary policy decisions taken by the US Federal Reserve based on domestic conditions and with total disregard of their international repercussions. As Triffin already emphasized in the 1960s, the system is also inherently unstable, as it tends to generate "generalized waves of confidence and diffidence in the future convertibility and stability of the dollar."[2] This has been confirmed in the very sharp cycles in the US balance of payments and real dollar exchange rates, which have in fact been stronger under the fiduciary dollar standard than under the original Bretton Woods arrangement.

This implies, furthermore, that the world has as the center of the system an unstable currency. More broadly, as the late Tomaso Padoa-Schioppa underscored: "the stability

1. See an extensive analysis of this issue in Eswar S. Prasad, *The Dollar Trap: How the U.S. Dollar Tightened its Grip on Global Finance* (Princeton: Princeton University Press, 2014).
2. Robert Triffin, *Our International Monetary System: Yesterday, Today and Tomorrow* (New York: Random House, 1968), p. 87.



requirements of the system as a whole are inconsistent with the pursuit of economic and monetary policy forged solely on the basis of domestic rationales".[3] It is, finally, an inequitable system, as it gives the US and a few other countries the "exorbitant privilege" of appropriating the largest share of international seignorage and financing its deficits with their own domestic assets.

As a result of the debates of the 1960s, the only truly global currency that the world has was created in 1969: the IMF's Special Drawing Rights (SDRs). IMF members then made the commitment to make SDRs "the principle reserve asset in the international monetary system", as it reads in the Articles of Agreement (Article VIII, Section 7, and Article XXII). When the Committee of Twenty was convened in 1972–74 to design a new international monetary system after the collapse of the original Bretton Woods arrangement, there were proposals to place the SDRs as the center of a new system.

However, the very peculiar way they were adopted made the SDRs only partially useful, indeed transforming them into one of the most underutilized instrument of international cooperation. By separating the "SDR account" from the "General account" of the IMF, it made it impossible to use SDRs to finance IMF lending, as it is normally done by modern central banks when they create money. Furthermore, although countries receive interest on holdings of SDRs, they also have to pay interest on the allocations they receive. Thus, SDRs are peculiarly both an asset and a liability, and perhaps should be best considered as a credit line which can be used unconditionally by the holder—i.e. an unconditional overdraft facility.

Despite these limitations, SDRs have proven to be a partially useful instrument. After the initial issues in 1970–72, allocations have been made to increase global liquidity during major international crises: 1979–81, 1997 (effective only in 2009) and, particularly, 2009, when the largest issue was made, for the equivalent of USD250 billion. These allocations are used by countries, including developed countries. For example, the US and, particularly, the UK, have used their allocations at different times. But the major users have been developing and, particularly, low-income countries.[4] Equally important, this is the only way in which developing countries (China aside) share in the creation of international money.

3. Tomasso Padoa-Schioppa, "The Ghost of Bancor: The Economic Crisis and Global Monetary Disorder", in Jack T. Boorman and André Icard (eds), *Reform of the International Monetary System: The Palais Royal Initiative* (New Delhi: SAGE Publications, 2011), p. 64.
4. Bilge Erten and José Antonio Ocampo, "Building a Stable and Equitable Global Monetary System", in José Antonio Alonso, Giovanni Andrea Cornia and Rob Vos (eds), *Alternative Development Strategies for the Post-2015 Era* (New York: Bloomsbury, 2013), Chapter 9.

There have been calls for a more active use of SDRs. They came in 2009–11 from the Governor of the People's Bank of China, the Stiglitz Commission convened by the President of the UN General Assembly and the Palais-Royal Initiative led by former IMF Managing Director Michel Camdessus.[5] Most recently, the Triffin International Foundation has made a similar call.[6] There have been several estimates, including by the IMF,[7] which indicate that, given the additional demand for reserves, the world could absorb annual allocations in the order of USD300–400 billion.

There are essentially two ways to reform the system.[8] The first is evolving into a fully-fledged multi-currency reserve system. The advantage of such an arrangement is that it would provide all—but especially developing countries—the benefit of diversifying their foreign exchange reserve assets. However, the system would continue to be inequitable, as the benefits from the reserve currency status would still be captured by few, mostly developed countries.

The second reform route would be to design a system based on the only truly global reserve asset. This reform would meet the objectives outlined by the Chinese central bank governor:

> *An international reserve currency should first be anchored to a stable benchmark and issued according to a clear set of rules, therefore to ensure orderly supply; second, its supply should be flexible enough to allow timely adjustment according to the changing demand; third, such adjustments should be disconnected from economic conditions and sovereign interests of any single country.*[9]

Countries issuing global currencies are unlikely to support a major reform of the system. Despite the 2009 statements by its central bank governor, this is also true of China, as

5. Zhou Xiaochuan, "Reform the international monetary system", People's Bank of China, Beijing (2009), http://www.pbc.gov.cn/publish/english/956/2009/20091229104425550619706/20091229104425550619706_.html [last accessed November 18, 2014]; United Nations, "Report of the Commission of Experts Convened of the President of the UN General Assembly on Reforms of the International Monetary and Financial System" (Stiglitz Commission) (New York: United Nations, September 2009), at: http://www.un.org/ga/econcrisissummit/docs/FinalReport_CoE.pdf [last accessed November 18, 2014]; and Jack T. Boorman and André Icard (eds), *Reform of the International Monetary System: The Palais Royal Initiative* (New Delhi: SAGE Publications, 2011).
6. Triffin International Foundation, "Using the SDR as a lever to reform the international monetary system," SDR Working Party Report (May 2014), http://www.uclouvain.be/en-fondation-triffin.html [last accessed November 18, 2014].
7. See, for example, International Monetary Fund, "Enhancing International Monetary Stability—A Role for the SDR?" (January 7, 2011), and "The Case for a General Allocation of SDRs During the Tenth Basic Period" (June 10, 2011), both available at http://www.imf.org.
8. For a more extensive analysis, see José Antonio Ocampo, *Reforming the International Monetary System* (Helsinki: United Nations University World Institute for Development Economics Research (WIDER), 2011).
9. Zhou Xiaochuan (2009), op. cit.



reflected in the policy of internationalization of the renminbi. So, the inertial route of slowly rising competition for the global currency status is the most likely route forward. But such a system can be combined with a more active use of the SDRs, essentially as an instrument of payments and reserve accumulation by central banks—i.e. as "central bank money."

Following the suggestions by the outstanding IMF economist, Jacques Polak, this would involve, first of all, the elimination of the separation of the SDR and General accounts and the decision that the IMF should undertake *all* its operations in SDRs.[10] The best and simple way that I have suggested would be for the SDRs to be allocated as a full reserve asset, which countries could either use or "deposit" them in the IMF. The IMF would then use those deposits to finance its lending operations, rather than having to rely on quota allocations of "arrangements to borrow" from members. A "substitution account" would also be created, through which countries could exchange their reserves in specific currencies for SDRs, thus reducing the possible effects of changes in the demand by central banks for specific reserve assets.

Other elements could be added. A formula can be created that gives developing countries a larger share in SDR allocations than the quotas they currently hold. This would reduce the inequities of continuing to rely on the currencies of the dominant countries and would also recognize the fact that they demand larger reserves. The private use of SDRs could also be encouraged, and in fact could naturally evolve in a mixed system. However, by keeping them as "central bank money," this could eliminate the opposition to the reform by countries issuing international currencies.

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10. Jacques J. Polak, "Thoughts on an International Monetary Fund based fully on SDR", Pamphlet Series No. 28 (Washington, D.C.: International Monetary Fund, 1979).

# REFORM OF THE INTERNATIONAL FINANCIAL ARCHITECTURE: A DISCUSSION OF THE BRETTON WOODS SYSTEM AS WELL AS THE PREVAILING INTERNATIONAL FINANCIAL ARCHITECTURE IN THE LIGHT OF ISLAMIC FINANCE

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The financial architecture is an integral part of any economy and unless its goals are in harmony with the overall goals of the economy, it may not be able to contribute effectively towards the realization of these goals. Some of the most important of these goals include the development of an efficient as well as equitable money and banking system that can help promote a reasonable rate of economic growth, reduce poverty and unemployment, minimize the frequency and severity of financial crises and reduce the inequalities in income and wealth.

In contrast with this, the prevailing international financial architecture seems to have a limited parameter. This is because of the particular circumstances in which it came into existence after the Second World War. Its roots lie in the Bretton Woods Agreement which was formulated in the light of circumstances prevailing before the War when different countries were trying to solve the problems created by the Great Depression of the 1930s. Some of the countries had tried to solve these problems by resorting to the 'beggar-thy-neighbor' policy of competitive devaluation to increase their exports and decrease their imports with the purpose of boosting growth and employment in their domestic economies. This policy of competitive devaluations met with resentment and gave rise to a general consensus at that time in favor of fixed exchange rates with some flexibility for countries having balance of payments problems.

Within the framework of such a general consensus, the Bretton Woods system had the limited perspective of bringing about a system of fixed parities. However, unlike the gold standard in which parities were fixed in terms of gold, the par values were fixed in the Bretton Woods system in terms of the US dollar which was convertible into gold. It thus became known as the gold/dollar standard.

The gold/dollar standard worked relatively satisfactorily initially but started facing difficulties when some major industrial countries started converting their dollar holdings into gold, leading thereby to a substantial decline in the US gold holdings. This gradually made it more and more difficult for the US to ensure convertibility of the dollar into gold. Accordingly, the US Treasury terminated the convertibility of the dollar into gold on 15th August 1971. The dollar thus became a fiat currency and brought to a virtual end the role of gold in settling international payments. The loss of the gold peg also brought to an end the system of fixed parities which the gold standard as well as the Bretton Woods system stood for, and led to the start of the now-prevailing flexible exchange rate system where exchange rates of major currencies are determined with respect to the dollar, and not gold, by market forces, with some intervention by monetary authorities to prevent excessive fluctuation.

The fixed-parities Bretton Woods system thus came to a virtual end for major currencies whose exchange rates are now floating and determined by market forces with some intervention by monetary authorities to maintain order and prevent excessive fluctuations. The currencies of smaller countries are generally linked to some major currency, particularly the dollar, the pound sterling or the French franc. It is expected that the Chinese renminbi may also start playing such a role in the future in keeping with the ongoing Chinese efforts to encourage the use of its currency not only as a unit of settlement but rather also as a store of value and a reserve currency.

The flexible exchange rate system has proved to be more realistic because the exchange rates now change by small margins, even though more frequently, when they used to change previously by relatively much larger percentages, even though less frequently.



The continuous fluctuation in the exchange rates of currencies, however, injects a dimension of uncertainty into the foreign exchange markets and gives impetus to speculative forces. Moreover, the movements in exchange rates are at times more in keeping with the self-interest of the speculators rather than the generally agreed development and humanitarian objectives of the world community or the parent country of the currency concerned.

In addition to the continuous and, at times, erratic fluctuation in exchange rates, there is now a rivalry between some major countries to promote the international use of their own currencies. This is natural because the use of a country's currency provides it with seigniorage which is the difference between the purchasing power of that currency and the relatively very small cost incurred in creating it. The dollar has been enjoying this privilege of earning seigniorage after the declining role of the pound sterling and the French franc. Now the Chinese renminbi is trying to compete with the dollar.

This rivalry, which is likely to become more intense gradually over the years, gives rise to the need for the creation of an international currency which would not only be readily acceptable for settling international payments but whose expansion would also be in harmony with the interests of the world economy and international trade rather than the interests of a particular country. This problem could not have been anticipated by the Bretton Woods Agreement because the United States had emerged as the only super power after the Second World War, its economy was strong, and its currency was readily acceptable around the world. It seems to have been assumed that the strength of the US dollar would perhaps continue and enable it to play the role of an international currency, facilitating international payments in the same way as it did at that particular time. It was perhaps also assumed that the US current account deficits would be able to provide the additional liquidity needed to finance the growth of international output, employment and trade.

This, however, raises the question of whether the currency of a member country can satisfactorily play the role of an international currency that serves not only as an acceptable worldwide medium of payments but also a reasonably stable store of value and means of realizing internationally accepted goals. It should also be able to provide simultaneously the increase in liquidity that is needed to finance the continuous growth in international output and trade.

Although the US dollar seems to have performed this task relatively well so far, it has started facing problems now. This gives rise to the question of how long can it continue to play this role when the US has been suffering from continued budgetary deficits and a substantial rise in its debt from $5,674 billion or 55 percent of GDP in 2000 to $16,732 billion or 101 percent of GDP in 2013. The cumulative deficit over all these years comes to US$9,962 billion. It is expected that these deficits will continue to rise in the future because the US faces the problem of unemployment and needs to raise its rate of economic growth. It has also had continuous current account deficits from 1982 to the present except for a small surplus of $2.9 billion in the year 1991. If this were true of any other country, its currency would have perhaps faced serious problems in the international foreign exchange markets. The dollar has, however, not been affected seriously because of the dollar's general strength and worldwide acceptability. This enables the US to continue its deficits without check. The effect of this is the injection of uncertainty into the international foreign exchange markets. Such uncertainty had also prevailed in the late 1960s and early 1970s when the dollar was convertible into gold and there was a rush to convert dollar into gold or other assets. With the end of the dollar's convertibility into gold, it is not likely that a similar situation may arise. However, if it does, it may lead to a severe international financial crisis.

The continued US budgetary deficits, however, pose a significant problem. Even though the situation is now different from the time when the dollar was linked to gold and there was uncertainty about the US ability to convert the dollar into gold, there is still a great deal of uncertainty about the effect of US deficits on exchange rates and interest rates and ultimately the growth rate of its economy. It is, therefore, likely that the dollar may again become subject to speculative attacks, creating once again a situation that is similar to, though not as severe as, that which prevailed in the late 1960s and early 1970s.

In addition to this problem of excessive exchange rate fluctuation, it is also necessary to create adequate international liquidity for financing international trade. This takes place at present in keeping with primarily the U.S. current account deficits. This need not necessarily be in conformity with the needs of the international economy. If the US deficits are reduced, which is necessary in the interest of the long term health of the US economy, the desired liquidity may fail to be generated. And if the deficits are



increased, they may generate additional high-powered reserves for banks around the world leading to an excessive rise in the volume of credit extended by them. This may tend to exacerbate the problem of international financial crises, the primary cause of which is generally agreed to be excessive expansion in credit.

It is, therefore, imperative that an international currency is created and the dependence on the dollar is gradually reduced. This would also enable the distribution of the seigniorage equitably among IMF member countries instead of going entirely to a single country. The question, therefore, is that of creating an alternative to take its place. Would the US be willing to accept such a displacement of the dollar which would deprive it of the seigniorage that it is earning and also make it difficult for it to pay for its current account imbalances in its own currency in the manner in which it has been doing for a long time? The US had resented such a suggestion in the past and it is very likely that it may do the same now.

Moreover, no alternative to the dollar has yet become available. The SDR, which was created to provide the liquidity needed by the world has not yet been able to play the role of an international currency. One of the reasons for this is that it is not freely useable like the dollar. It can be used primarily by the monetary authorities of deficit countries to make payments within limits to surplus countries. This makes it unattractive for surplus countries to accept it willingly beyond what they are required to do by the IMF rules.

John Maynard Keynes had suggested the creation of an international currency called BANCOR to serve as a means of international payments and also to provide the needed liquidity. This proposal did not, however, get accepted and the dollar has, therefore, continued to play the role of an international currency. This has not created any serious problems so far. It may not, however, be able to do this for a long time in the future. This is because the creation of dollars is not subject to any international discipline. It gets created randomly in accordance with US budgetary and current account deficits. The US is able to settle its payments imbalances in dollars, and is not, therefore, exposed to the balance of payments discipline to which all other countries are exposed. It does not, therefore, have any incentive to reduce its budgetary deficits which get reflected in its current account deficits.

The dollar will, nevertheless, continue to play the role of an international currency-as long as it enjoys confidence in the international financial markets. This confidence may, however, tend to decline if the US budgetary and balance of payments deficits continue, particularly when China is trying hard to make the renminbi acceptable around the world as a means of payment, a store of value and a reserve currency. China's effort to promote the formation of the BRICS Bank seems to be a step in this direction. The higher the US deficits the greater may be the international acceptability of the renminbi. China has the advantage of having current account surpluses over a substantially long period.

To avoid the competition between these two countries to increase the acceptability of their currency, it may be better to create an international currency that could serve as a unit of account as well as a means of payment and store of value. However, this also has a problem associated with it. If the US continues to have budgetary and current account deficits, then the creation of an international currency will inject additional liquidity into the world economy. This may tend to have a worldwide inflationary impact.

There is one other financial problem which also needs to be addressed while discussing the international financial architecture. This is the frequency and intensity of international financial crises which have plagued the international financial system over the last few decades. It is generally agreed that one of the major causes of these crises is excessive lending. This is partly due to the excessive reserves that have become available to banks around the world as a result of not only the US current account imbalances but also the budgetary deficits of different countries. The excessive lending by banks on the basis of these reserves promotes speculation in asset prices which rise steeply. There is then the Hyman Minsky syndrome of decline in credit which leads to a fall in assets prices and a recession in the world economy.

It may, therefore, not be possible to address the problem of excessive lending without reducing the availability of excessive reserves and also reforming the international financial system. Reducing the availability of excessive reserves is difficult. It may require a check on the fiscal policies of major countries which may not be possible. If there is a continuous rise in reserves due to fiscal deficits and this is also accompanied by the absence of a system where there is no risk-sharing by financial institutions, there may be a substantially large amount of lending in a fractional reserve system. Therefore, in addition to a check on fiscal deficits, one of the essential reforms that needs to be brought about in the financial system is the introduction of risk-sharing by banks in their lending business. This would motivate banks to be more cautious in their lending.



This is one of the strong points of the Islamic financial system. It does not mandate only risk-sharing but also links credit extension to the growth of the real sector. There is no direct lending and borrowing in the Islamic system. Credit is related primarily to the purchase and sale of goods and services. Credit can, therefore, expand primarily in step with the growth of the real economy and thus help prevent excessive credit expansion. Thus, by introducing risk-sharing and also linking the growth of credit to the growth of the real sector, the Islamic financial system can help put a check on excessive credit expansion.

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# GOVERNANCE, MANDATE AND THE FUTURE OF THE IMF

GUILLERMO ORTIZ

In 2009, the IMF Managing Director convened a committee chaired by Trevor Manuel, of which I was a member, to study the Fund's governance reform (the *Manuel Report*). In 2014, together with Malcolm Knight, I wrote a report on multilateral surveillance with an emphasis on key risks to global stability in the context of the 2014 Triennial Surveillance Review.[1] This essay draws on the parts of those two studies that deal with governance issues and the mandate of the Fund to strengthen its role as the primary institution for global economic and financial cooperation. I want to outline some background elements and two concrete proposals.

## BACKGROUND

The Fund underestimated the risks to the global economy that were building up before the Great Crisis. Several reports, prepared by the IMF and the Independent Evaluation office, assess that the Fund did not provide sufficient specific warning,

1. The views expressed in that paper are those of the authors and do not necessary represent views of the IMF, its Executive Board or its management.

missed interlinkages and spillovers, and was too optimistic on the advanced economies (particularly the US and the UK at the center of the global financial system) and on financial innovation.[2] The April 2006 global Financial Stability Report concludes with the following statement, which conveys the IMF's stance at the time:

> *There is growing recognition that the dispersion of credit risk by banks to a broader and more diverse group of investors, rather than ware housing such risk on their balance sheets, has helped to make the banking and overall financial system more resilient. The improved resilience may be seen in fewer bank failures and more consistent credit provision.*

Today, a growing body of academic research suggests that the opposite is true. Excessive financial complexity leads to systemic instability, rather than increased safety.

The Fund has made major changes to its multilateral surveillance framework to address the weakness that emerged during the crisis. The Integrated Surveillance Decision (ISD) adopted formally in 2012 after a lengthy discussion establishes a conceptual and operational link between the bilateral and multilatera surveillance; establishes the Fund's role in providing guidance to members regarding domestic and financial policies reducing the exchange rate bias in previous surveillance work; and allows the IMF's Managing Director (MD) to call for multilateral consultations.

Although the 2012 ISD provides clear guidance in the correct direction by emphasizing that the IMF should monitor any source of risk that may lead to the ineffective operation of the international monetary system, including all potential sources of economic and financial instability, it does not grantadditional tools with which to effectively mitigate them. It does not propose any obligations on IMF members beyond Article IV. To bring about a more stable global economy, significant reforms to the international financial architecture are warranted.

2. International Monetary Fund, *Global Financial Stability Report: Market Development and Issues* (Washington DC: International Monetary Fund, April 2006), p. 51.



### PROPOSAL 1: CREATE A NEW IMFC TO STRENGTHEN MULTILATERAL SURVEILLANCE AND ENHANCE GLOBAL COOPERATION

Currently, there is a sense that the post-crisis cooperative thrust has seriously waned and the IMF does not have the appropriate mechanisms to promote the optimal level of global cooperation. The Fund can flag spillovers and risks, but consultations do not have much traction. Although the ISD does provide new modalities for multilateral consultations to take place, the dominance of the G20 as the principal forum for policy coordination seriously limits the Fund's capacity to lead in this process—especially since it is stated that multilateral consultations are only warranted if the relevant parties are not already engaged in discussions in alternative fora. Furthermore, the elevation of the G20 to the Heads of State level and its ever-growing agenda have meant that both focus and efficiency have been diminished with regard to economic and financial objectives.

At a global level of governance the potential duality between the G20 and the IMFC should be resolved by merging these two institutions into a unified committee (a "new" IMFC) of finance ministers and central bank governors to deal with particular aspects of economic cooperation, be it macroeconomic policy, trade policy, issues relating to capital flows, or financial regulation. Only in this way would the IMFC have the authority to recommend a major initiative of international cooperation in economic policymaking particularly if the proposal was unpopular in some quarters.

The new IMFC would be a decision-making body that delivered strategic and policy direction and dealt with macroeconomic and financial policy coordination. The IMFC would have legal powers, such as the adoption of Surveillance Decisions or the establishment of new financial facilities. It would—among other functions—engage in policy coordination and react to emerging risks: namely, macroeconomic policy coordination, international harmonization of financial regulation, and oversight of capital movements to ensure their global consistency and effectiveness.

Instituting a standing IMFC committee similar in structure to the G20 (where all members would be represented) would provide a forum for continuous dialogue in dynamic (rather than periodic) fashion in order to constructively discuss countries' policy interactions, and align goals and means. It would also establish an efficient mechanism for policy coordination through the production of actionable items, and would establish the IMF as the leader in this process. Concrete steps towards this end could include formal voting rules, periodically published *communiqués* about the committee's assessment of the global economy and members' policies, some degree of agenda-setting power by the IMF MD, and technical assessments by IMF staff on policy proposals, among others. A mandate to promote economic and financial stability is important in this regard as it would avoid the committee's agenda from becoming overburdened—as the G20's has become in recent years.

The Executive Board of the IMF would be redesigned as an advisor to the IMFC (see the *Manuel Report*). The Board would continue to legislate in ordinary areas of Fund policy review and implementation, decide on financing arrangements, and formulate the medium-term budget. The restructuring would aim to take advantage of the IMF Governors' experience and knowledge by creating a formal link between them and the IMFC in order to provide strategic counsel.

The Articles of Agreement could be amended to explicitly entrust the Fund with achieving global economic and financial stability through a combined strengthening of multilateral surveillance procedures and reform of the Fund's governance structures along the lines mentioned above.

### PROPOSAL 2: GIVE THE IMF A MANDATE OVER ITS MEMBERS' CAPITAL ACCOUNTS

In addition to the IMF governance reform along the lines mentioned above, the Articles of Agreement could be amended to grant the Fund explicit jurisdiction over members' capital accounts. It should aim at: (i) enabling the Fund to promote a coordinated response to mitigate any potential risk to the global economy which arose from 'liquidity imbalances' by influencing the combination of countries' policies; and (ii) granting the Fund additional tools to address risks due to volatile capital flows that may threaten the stability of the international monetary system.

With an IMF extended mandate, changes to countries' capital account policies would then be pursued within a multilateral framework and be supported by the IMF's technical assistance and guidance from the IMFC. The aim would be to have an *ex ante* assessment of risk and potential spillovers, and to give the IMF the instruments needed to address them in an orderly manner, employing its new prerogatives where warranted. Additionally, extending the Fund's jurisdiction over the capital account would strengthen its position to manage global liquidity by potentially acting on source countries. This would greatly increase the Fund's capacity to impact the distribution and dynamics of private liquidity—if a compelling case to do so were to emerge. Finally, with an expanded mandate and enhanced tools to impose sanctions, it is likely that the IMF's role as facilitator of cooperation would substantially gain in traction, as it could enforce agreements when necessary.



Of course, the idea of extending the IMF's jurisdiction over members' capital accounts has long been an issue of heated debate given the political tension commonly associated with it.

On the one hand, such a mandate should by no means constitute a directive for the IMF to encourage all members to liberalize their capital accounts—as the benefits from doing so vary widely depending on country-specific factors. Rather, it would seek to endow the Fund with the capacity to achieve a sustainable level and distribution of liquidity worldwide. It is important to stress this point as past IMF efforts to extend its jurisdiction have been unsuccessful, partly because they largely represented a campaign to move all Fund members, including large emerging economies, toward open capital accounts. Today, it is no longer a mainstream view to consider such opening as unequivocally welfare-enhancing.

On the other hand, countries whose currencies are seen as safe havens and function as international reserves will have little incentive to endorse an expansion of the IMF's jurisdiction over their capital accounts unless a framework is in place that credibly serves to reduce systemic risks.

The IMF is the only international institution capable of building the technical elements with which to support continuous cooperation. In this sense, a consistent analytical framework, endorsed by the Fund's full membership, is a necessary condition.

Without a clear description of its operational details, a reform giving jurisdiction to the IMF over capital accounts is unlikely to garner much support. Thus, from a short-term perspective, the Fund could steer the debate by publicly fleshing out the specifics of what a capital account remit would involve through institutional papers, sequentially developed. This approach would be similar to that adopted in the "mandate papers" which set in place the building blocks for the 2012 ISD. Clearly, the IMF is the institution best positioned to develop this analysis, which would provide considerable value towards enhancing the stability and efficiency of the IMS.

Summing up, as the global economy becomes more interconnected, more balanced in terms of income shares, and more uncertain, the capacity to react efficiently and in coordinated fashion to crises which are global in scope will be key in avoiding huge welfare losses. This implies making the IMF governance structures more "cooperation oriented" and fair: enhancing its analytical framework to incorporate new cross-border transmission channels and enhancing efficient "early warning indicators"; increasing and making more flexible crisis response facilities and resources; endowing it with the proper tools to achieve traction in risk mitigation though collective action; and extending its mandate to fully cover all potential sources of systemic global risk, including capital account dynamics.

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# GLOBAL IMBALANCES, GROWTH AND INTERNATIONAL MONETARY SYSTEMS

PIER CARLO PADOAN

THOSE WHO HAVE designed and managed international monetary systems, i.e. the broad set of rules and institutions that govern international payments, have repeatedly tried to prevent protracted current account (CA) imbalances to avoid the destabilizing consequences of growing stocks of debt on exchange rates and payments stability.

However, resolving protracted CA imbalances has traditionally addressed stability concerns much more than growth concerns. The resulting distinction of targets—CA stabilization and growth—while justifiable on the ground of a division of tasks and responsibilities for policy making, has conveyed the notion of a functional separation that has several undesirable practical consequences. One of them is the asymmetric pattern of CA imbalance adjustments—a serious shortcoming of past and current international monetary arrangements.

Post-war experience with CA adjustment exhibited three main asymmetries. The first and most noticeable is the unequal burden sharing between deficit and surplus countries—the former charged with the bulk of the rebalancing efforts and the latter often paying little more than lip service to discipline enforcement. The second, which is linked to the "exorbitant privilege" of the reserve currency issuer, is caused by the system's inability to discipline sustained CA deficits of reserve currency issuers. The third asymmetry is generated by the substantial lack of sanctions imposed on countries that use exchange rate devaluations to retain their competitiveness at the expense of other trading partners.

Each of these asymmetries is a consequence of ineffective enforcement mechanisms and of the misaligned incentives to comply with the existing rules, which have arguably weakened the control of global imbalances. Neither the extraordinary development of international economic and financial institutions nor the improvement of surveillance practices over the last few decades has significantly reduced existing asymmetries and strengthened incentives to CA rebalancing. This has left the system exposed to crises and to higher rebalancing costs when crises are averted. Indeed, the huge expansion of financial markets has spurred the idea that imbalances need not be corrected as long as markets are willing to provide finance, thus feeding imbalances rather than correcting them.

The inconsistency of past CA imbalances reduction policies makes the G20 experiment of global economic policy coordination, which addresses global imbalances within a framework aimed at maximizing global economic growth, all the more remarkable. Triggered by alarmingly low and decreasing growth rates worldwide, G20 countries have set a goal—to collectively achieve economic growth 2 percent higher than projections between 2014 and 2018, while further reducing global imbalances—that goes beyond the (intermediate) goal of economic imbalances prevention and addresses the (final) goal of economic growth. The explicit combination of growth targets and CA imbalance reductions eliminates the artificial segmentation between the two, recognizing that CA stabilization can be achieved at very different levels of growth and therefore should be found along a satisfactory growth path. Operationally, the joint establishment of growth and CA objectives calls into question the traditional practice of time sequencing stabilization policies (to be implemented first) and growth policies (to be enacted subsequently).

The new policy makers' objective function underlying the G20 "integrated approach" has altered the incentive structure behind the CA adjustment process, inducing a more cooperative behavior among G20 countries that may help reduce the asymmetries of past CA rebalancing processes. In fact, the "growth game"—differently from that of CA imbalances—is not a zero sum game; each player's contribution is needed to maximize collective results. It is harder to free ride on others' discipline—the exorbitant privilege—when it comes to growth levels. Growth targets prevent the full adjustment burden to be laid on deficit countries alone, because this would conflict with growth maximization, and instead requires coordinated pro-growth action from all parties.



The G20 approach to stabilization policies revolves around the pivotal role of investments. Investments, joint with saving, define the CA balance and capital accumulation—in size and distribution—that will feed into future potential growth.

The G20's call for coordinated policy action has resulted in a rich menu of policy options and has favored the adoption of a country specific set of policies with respect to investment and saving gaps. This has helped somewhat reduce savings where they were too high (China), increasing them where they were too low (US), and facilitating investment recovery where investments had been severely hit by the recent financial crisis (Japan and the United States). The degree to which the integrated framework in the eurozone has been implemented is less clear for reasons that will be discussed in the concluding section.

The dual nature of investment, which is part of today's demand and tomorrow's supply, has made "investment climate" reforms a key ingredient in the adjustment policy mix. As a further consequence, the reform agenda—developed by the multilateral institutions as part of the competitiveness agenda to contain external imbalances—has become a key pillar of the global growth policy debate.

While the structural reforms (SRs) agenda focuses on private investment, which represents the vast majority of the global investment aggregate, we must not overlook public investments and, in particular, public investments in infrastructure. The level and quality of infrastructure (transport, energy, telecommunications) vastly impacts capital productivity. This calls for public intervention due to the significant positive externalities that private investors would not be able to internalize. Running against the traditional "crowding out" notion, associated with public spending, public investments in infrastructure are needed to "crowd in" private investments. Lack of confidence in public spending has substantially hindered the public sector from having a more proactive role in investment. However, as a key ingredient of an "integrated" stabilization package, public investment in infrastructures must now be given new consideration.

Let me now turn to examine CA imbalances from the perspective of another monetary arrangement—the Economic and Monetary Union (EMU)—and compare (a) the CA adjustment process within the EMU to that which prevails at the global level and (b) past EU policies to the G20 "integrated approach" to growth and external balance.

The euro was created to remove the obstacle to economic integration representedby the impossible trinity of stable exchange rates, free capital movements, and independent monetary policy. Largely unanticipated were the consequences that the removal of national exchange rates—and domestically managed money rates—would have on the incentives to pursue structural adjustment. Contrary to expectations, without national exchange rates signaling external imbalances, the convergence process toward common productivity and competitiveness standards within the eurozone slowed down. Moreover, due to upward rigidities in surplus countries and downward rigidities in deficit countries, inflation differentials have not played a stabilizing role.

As a result, when the clear need for CA adjustments arose during the sovereign debt crisis, deficit/debtor countries found themselves facing larger CA imbalances but a smaller toolbox. The size of the cumulated imbalances of deficit/debtor countries, as measured by their net foreign liabilities, had reached or exceeded their GDP level, while only nominal prices were left to carry the burden of a real exchange rate depreciation in the 10–25% range. A monetary union, whose goal was the reduction of the balance of payments stabilization burden, ended up making that very burden heavier and more unevenly distributed.

With crisis countries forced to severely cut domestic demand and with no countervailing price or demand adjustment taking place in surplus countries, the eurozone CA surplus increased yet its aggregate demand and growth faltered. By separating stability from growth policies, the eurozone has fallen prey to the same composition fallacy that has characterized CA adjustment policies globally.

The policy question for the eurozone is then: what toll will CA stabilization policies request in terms of economic growth? Optimists have interpreted the recent growth rebound in several crisis countries—notably Ireland, Spain, and Portugal—as a signal that CA adjustments will not impede growth anymore. However, hasty conclusions—that one-sided fiscal discipline quickly restores growth—should be avoided because a sizable share of these countries' CA adjustment is due to cyclical factors. Therefore, if output gaps and unemployment were to disappear, CA imbalances would emerge again, showing that internal and external equilibriums are not yet mutually compatible. Furthermore, signs of structural adjustments in these countries are still scant and possibly counterproductive in the short term (for example, causing a fall in potential output). Finally, the very sustainability of a CA adjustment based on price deflation in deficit countries is questionable when these countries have large public or private debt stocks and deflationary scenarios would make the debt dynamics unstable and the CA adjustment ultimately self-defeating.



In summary, the growth toll of current policies in the eurozone is high and, unless corrected, may become higher. Failing to recognize that, within the eurozone, CA imbalances have grown larger and their domestic management has become harder, adjustment policies have thus far been focused on fiscal consolidation and demand management mostly or only in crisis countries. This approach, however, has underestimated the relevance of negative spillovers from crisis to surplus countries, which are now slowing down the whole area's growth pace. Moreover, declining business confidence continues to keep investment in the eurozone very low—still far below pre-crisis levels—and growing much slower than in the US and Japan. This suggests that the negative legacy of current policies will continue to be seen in the future, affecting the eurozone potential output for many years to come.

What then must be done to exit the current doldrums? How can unemployment be contained, while preventing social tensions from rising further? First, the lesson of the G20 "integrated approach" must become part of euro area economic governance and, the G20 call for more symmetric demand adjustments should be followed. Second, obstacles to productivity alignments across EMU member states should be removed through a new and more effective governance of the SRs process. Third, the Single Market must be re-launched by promoting productivity enhancing investments in infrastructure, such as telecommunications, transport, and energy, spanning the whole European Union. This responsibility should come with appropriate budget allocations in the common interest of all member states.

No major obstacles to the proposed policy shift can be found on normative grounds (the Stability and Growth Pact clearly points to the need of an integrated policy approach), on the institutional setting (the European Semester offers an already tested set of procedures for its implementation), or on operational implementation (the G20 experiment provides a useful reference on methodological and operational features). Perhaps the time is ripe for eurozone policy makers to set a new growth-compatible course of economic governance. What history teaches us and helps us remember is that the incentives for creditor and debtor countries are aligned: in fact, asymmetric CA adjustments and related income transfers—when large in size—have never promoted growth in creditor, let alone debtor, countries.

Pier Carlo Padoan,
Minister of Economy and Finance, Italy

# AN INTERNATIONAL MONETARY SYSTEM FOR THE 21ST CENTURY

MARTIN PARKINSON

The global economy is undergoing a remarkable period of transformation. The center of world economic gravity, which had been shifting from Asia to the West since the Industrial Revolution, is now returning to the Asia-Pacific region. Along with this shift we are also seeing dispersion. The world is no longer unipolar with a clear single center; the centers of growth are increasingly spread across a range of hubs.

At the same time, the architecture of the international monetary system has remained stubbornly static and is increasingly seen as anachronistic. Ever since the breakdown of the Bretton Woods System in the early 1970s, the US dollar has been the dominant international currency: it is used in one side of eight out of ten foreign exchange transactions and comprises 64 percent of international reserves. This is significantly disproportionate to the US's declining share of the global economy.

Emerging market and developing economies have grown to make up slightly more than 50 percent of global GDP (on a PPP basis) and, on reasonable assumptions, are expected to increase their share to more than 60 percent of world GDP within the next ten years, yet their currencies are no more than minor players on the international stage.

A continued reliance on the strength of the US dollar alone will add to the potential costs and inefficiencies of the existing international monetary system. The sheer size of emerging market economies will result in an increased demand for liquid assets that advanced economies will just not be able to supply. Demand for US dollar debt was not a problem in the past when the size of the US economy was large relative to the world. However, the insatiable foreign appetite for US dollar denominated debt has meant that the US has been able to borrow to fund large current account deficits at nominal interest rates that are lower than would be possible for a country that was not the issuer of the world's single international currency.

As the US shrinks as a share of the global economy, continued large flows of foreign financing for the US's current account deficit will exacerbate the problem of these global imbalances. This risks perpetuating misalignment of exchange rates, further distorting the global allocation of capital, depressing potential global growth, and building up the risk of a painful global adjustment further down the track.

What continues to hold the US dollar above other currencies is trust. It is not only trusted because it is the dominant currency in trade and will, therefore, generally be accepted by others, but also because of confidence in the durability of the US economy and its institutions—its democratic government, financial markets, public institutions, and legal framework.

However, changing dynamics mean that this status quo will inevitably be challenged. I do not expect that the US economy will lose its influential position in the global system, nor that the US dollar will be displaced in the immediate future as the dominant international currency. I do however see, and indeed this is already happening, that other currencies will need to grow in prominence and vie for positions in the international monetary system in order for the current system to be sustainable.

There are emerging economies that are reaching the potential size to support an international currency, but this in itself is not sufficient. New sources of trust will have to be found to underpin a more diverse, multi currency international monetary system.



As a first step, governments that aspire to greater international use of their currency will have to give market participants reason to be confident in their currency and their financial systems. In our own region, China is making notable efforts in this direction. Its embrace of market forces has unleashed the economic potential of its massive population, though this transformation is far from complete. Renminbi internationalization, that is, the use of renminbi for international trade and financial transactions, will be an important part of this transition.

Designed to foster renminbi internationalization, Australia is party to a A$30 billion AUD–RMB currency swap arrangement with China, and is establishing Sydney as a renminbi clearing hub. The Australian financial sector is also supporting the development of a renminbi market by providing access to information regarding the renminbi trade settlement process and renminbi banking and hedging products, as well as ensuring renminbi product needs of Australian corporates are met.

Renminbi internationalization will be beneficial for both Australia and China: greater use of renminbi will reduce transaction costs and exchange rate risks for Chinese and Australian companies, and has advantages in strengthening already-established trading relationships. But that is not the end of the story. For the renminbi to be a real alternative to the US dollar, China will need to pursue liberalization of its capital account, reform domestic financial markets, and make efforts toward renminbi currency convertibility and flexibility. This will be a gradual process that will need to be managed in a measured and careful way.

However, for a multi-currency system to flourish, more will be needed than individual actions. International cooperation, even more so than exists currently, will be vital to building trust in a system centered on multiple key players.

The world we are faced with today is one in which economic circumstances and policy decisions made by one economy can have significant and lasting effects on another. We are deeply interconnected by intricate economic, financial, and technological networks, and this integration, while bringing uncountable benefits, also has the potential for greater instability and contagion.

It is more important than ever that countries identify common interests, take action to mitigate negative spillovers, and recognize the potential benefits of collective action to provide global public goods.

Critics argue that multiple currencies cannot have equal status in the international system as markets will constantly re-evaluate the policies underpinning different economies and ultimately converge toward a single currency.

To avoid this, countries will need to be more willing to be guided by the collective judgment of the international community in setting economic policies. It is incumbent upon domestic policymakers to articulate that the long-term benefits of international cooperation outweigh immediate national interests. This will be a challenge in a policy and political environment dominated by short-term thinking.

As Martin Wolf, chief economics commentator at the *Financial Times*, pointed out:

> *Ours is an ever more global civilisation that demands the provision of a wide range of public goods. The states [governments] on which humanity depend to provide these goods, from security to management of climate, are unpopular, overstretched and at odds. We need to think about how to manage such a world. It is going to take extraordinary creativity.*[1]

To continue to realize the benefits of a world that becomes increasingly more interconnected, we must cross a new threshold of cooperation between governments. Economic multilateralism, referring to precisely this economic cooperation and collaboration between countries, is vital. It is the best way to meet the changing needs of this new multi-polar world and deliver benefits that cannot be achieved just through a network of bilateral, plurilateral, and regional arrangements.

Fortunately, the world already has usable forms of multilateralism that have been largely effective to date. The International Monetary Fund (IMF) has served the global economy since World War II by enabling international coordination. In a world where globalization has created more international connections than was even imaginable 70 years ago, the role of a global institution of this sort is greater than ever.

The need for international cooperation does not, *de facto*, mean the IMF is best placed to provide it. However, its well-established place in the global architecture and broad-based membership are comparative advantages that should not be lightly discarded.

With 188 members, the IMF brings together the broadest possible spectrum of countries, perspectives, and approaches—a diverse membership that has taken the past seven decades to establish. This diversity means it is uniquely placed to assess global risks and policies in a way that simply cannot be replicated at a regional level. But to be successful, the IMF must be seen as legitimate. Unfortunately, continued refusal to allow the reform of IMF quota shares threatens this legitimacy. Short-term political expediency therefore puts at risk the effectiveness of one of the world's key providers of global public goods.

1. Martin Wolf, "The world's hunger for public goods," *Financial Times* (January 24, 2012), http://www.ft.com/cms/s/0/517e31c8-45bd-11e1-93f1-00144feabdc0.html#axzz36wqw1pba [last accessed November 18, 2014].



Moreover, the changing distribution of economic power and influence is also resulting in the creation of new institutions and forums. The emergence of the G20 is an example of effective cooperation at the international level. Emerging out of the Asian financial crisis, and the realization that more, and different, countries were required at the table to address key economic challenges, it morphed into a leader-led process as a result of the global financial crisis. Representing 85 percent of the world economy, 75 percent of global trade and two-thirds of foreign direct investment, it is well placed to be a key global economic policy-making body.

Of course more voices make cooperation harder, particularly given the diversity of those voices. How we globally manage the paradox of "the tendency for the world to grow further apart, even as it draws closer together," as Christine Lagarde, Managing Director of the IMF, describes it, will be critical to the success or failure of efforts to boost cooperation.[2]

The growing number of voices and the absence of meaningful progress at the global level are resulting in a preference for issues to be addressed in sub-global forums. While these forums serve important purposes, the basis for economic cooperation risks being weakened as countries are pulled into plurilateral groupings. In order to live up to its full potential, indeed just to remain relevant, the global architecture needs to be urgently reformed to ensure its inclusiveness, credibility and effectiveness. Emerging powers will increasingly be unwilling to participate in processes that are unrepresentative or dominated by the traditional players.

Unfortunately, progress has been painfully slow. Evolution of the formal institutions and structures that support the international monetary system must accelerate to keep pace with the changes in the global economic landscape. Faltering progress in this space is primarily due to weak leadership from the larger players in making

2. Christine Lagarde, "A new multilateralism for the 21st century," Richard Dimbleby Lecture, London (February 3, 2014), http://www.imf.org/external/np/speeches/2014/020314.htm [last accessed November 18, 2014].

global cooperation successful. This is only serving to undermine their own leadership and encouraging emerging powers to establish alternative arrangements based on regional or ideological groupings.

While reform is required in a range of areas, it is at the IMF where it is most critical. With near-global membership, the IMF has the ability to facilitate the needed cooperation, knowledge sharing, and coordination toward common goals. To be effective, it must modernize and adapt to ensure it better represents the global economic landscape, not how it was half a century ago, but for now and for the future. The historic 2010 reforms would go a long way to achieving this. They would rebalance Board representation and shift voting shares to emerging market and developing countries. The reforms must pass for the Fund to be viewed as more balanced, credible, and legitimate. Unfortunately, these reforms will not be passed without US support, which at present is the critical obstacle to completion.[3]

The need for the international monetary system to accommodate the increasing diversity of the future global economy is certainly a challenge that might well be seen as daunting from our current viewpoint. However, if we succeed with reforms, both domestically and internationally, we can reap the benefits of a more robust, sustainable international monetary system that will be central to supporting global growth over the decades ahead.

Martin Parkinson,
Secretary, Department of the Treasury, Australia

3. As at July 2014.

## A STABLE GLOBAL AND LOCAL FINANCIAL SYSTEM FOR THE 21ST CENTURY: A VIEW FROM THE TROPICS

LUIZ A. PEREIRA DA SILVA[1]

We are celebrating the 70th anniversary of the Bretton-Woods (BW) conference, and the 7th anniversary of the Global Financial Crisis (GFC), with an old question about international financial architecture that has evolved into a question about global financial stability: can a set of global accepted rules that imply to take some local policy action under specific state-contingent conditions prevent crises and guarantee global and local financial stability? BW was supposed to deliver an international architecture designed to solve and/or prevent current account payments crises in the context of relatively modest capital account activity and much less developed financial sectors. It was predicated on member countries using fixed-but-adjustable pegged currencies to take, when needed, policy (monetary and exchange rate intervention) action when imbalances grew excessively. Prevention included accumulating one reserve-as-good-as-gold currency and requesting, when needed, a portion of its pooled resources sitting in an International Monetary Fund (IMF) that was capable of intervening to prevent or solve balance-of-payment (bop) problems in member countries. This ar-

1. These remarks are personal and do not necessarily reflect the opinion of the Banco Central do Brasil.

rangement collapsed for reasons that seem obvious *ex post*: the excessive accumulation of dollar-denominated liabilities outside the US given a fixed amount of available gold reserves to back them up. BW after that ran subsequently with floating currencies that were supposed to act like a buffer or a first line of defense, dollar-reserve accumulation and a reinforced IMF with more resources, especially after Emerging Market Economies (EMEs) crises in the late 1990s. Despite some successes, further financial globalization changed the emphasis from current to capital account imbalances and global financial cycles overcame what was left of local capacity to manage domestic monetary policies overburdened by a more complex, interconnected and large financial sector.

In the 21st century we will have to deal with the global transmission of financial crises such as the GFC, but hopefully learning from its causes to find solutions. It might sound presumptuous to say that the Tropics and EMEs can provide a view and perhaps even some lessons to Advanced Economies (AEs) in terms of financial stability and the future contours of a financial system for the 21st century. Nevertheless, we down here in the Tropics have lived through some features of the GFC before. We have also experienced the consequences of its policy responses, such as abundant global liquidity with its capacity to produce financial exuberance in our markets by triggering unprecedented capital inflows. We had our own financial crises, though not on that scale, and because of our past experience with excessive debt, macro-financial populism, information gaps, financial panics, etc., we had to put in place in Brazil a set of very conservative regulatory-prudential rules to make our financial system more resilient and to avoid crises. In addition to this practical experience, there is also a significant amount of academic thinking about the causes of financial crises. Finally, the post-crisis work of the Basel Committee, the G20 and the Financial Stability Board (FSB) has been providing some guidance as to what kind of reform framework should be implemented to strengthen financial stability.[2]

In a nutshell, putting together the lessons from EMEs' experience with the new global regulatory framework that is being put in place, a new arrangement for global financial stability should be built around local and global-coordinated features: (a) local macro frameworks delivering as much macro-financial stability as possible by smoothing local business-financial cycles and reducing excessive risk-taking and imbalances; (b) local shock absorbers (liquidity buffers in local and reserve currencies) that can

2. Financial Stability Board, "Overview of Progress in the Implementation of the G20 Recommendations for Strengthening Financial Stability," Report of the Financial Stability Board to G20 Leaders (2013).



accommodate large global mood swings and global market volatility; (c) local instruments to smooth excessive capital inflows (e.g. forex interventions, macroprudential policies and capital flows management tools); (d) global rules to build a more resilient financial system; and (e) some form of global coordination to minimize negative spillovers when (c) is implemented locally.

Therefore, I will speak about: the main lessons from the crisis to reform and improve the future financial system; the fixing as seen by the Basel Committee on Bank Supervision (BCBS), the G20 and the FSB; some issues that are still challenges for any financial system to perform well its functions; and provide some partial answers in part based on Brazil's experience. I will then draw some conclusions.

## LESSONS FROM THE CRISIS

*Lax regulation and perverse incentives:* Alan Blinder and also Raghu Rajan (as early as 2005) see the origin of the GFC in the perverse combination of deterioration in the quality of mortgage origination (the US subprime market), and the opaque and complex build-up of poorly regulated derivative instruments, disseminated in excessively and highly leveraged interconnected balance sheets, etc., all allowed by lax regulation-supervision and (very) bad incentives.[3]

*Global easy money and global imbalances:* What about also lax monetary conditions or "easy money," and not only from the lax post dotcom bubble US monetary stance? Remember the controversy about "global imbalances." Perhaps the systematic purchase by (mostly) Asian surplus countries of large amounts of US debt and especially Treasuries did contribute to lower term spreads and therefore acted perhaps as an "additional" accommodative factor for monetary policy (the Greenspan conundrum). It certainly facilitated financing in the US market and exerted a pro-cyclical push in an already booming local housing market. The GFC was also preceded by a debt-driven growth model: global financial systems allowed large global imbalances to go unchecked, especially because of distortions in risk ratings (for sovereigns during the eurozone convergence, for houses in the US). So when a poorly regulated global financial system with bad incentives meets easy foreign financing, it can allow large, growing current account imbalances to go unchecked (for quite a while) by recycling surpluses into deficit countries. Too much easy money coming back to deficit countries contributed

3. Blinder, Alan S., *After the Music Stopped: the Financial Crisis, the Response and the Work Ahead* (New York: The Penguin Press, 2013); Rajan, Raghuram, "Has Financial Development Made the World Riskier?," Paper presented at the Jackson Hole Economic Symposium (August 2005), available at: http://www.kansascityfed.org/publicat/sympos/2005/pdf/rajan2005.pdf (last accessed January 13, 2015).

to the build-up of financial fragilities that have—given the global nature of mature financial systems—a global dimension. The perverse effect of "easy money" in building financial instability is something that we know very well in EMEs.

*Macro-financial populism in the North:* Rudy Dornbusch and Sebastian Edwards coined "macro-populism" (as early as 1991) as mainly happening in the Tropics but the GFC showed that "macro-financial populism" also has its Northern form.[4] You can say, for example, that the role of government sponsored entities in the US, allowing excessive risk-taking by private banks, combined with lax regulation is a form of "credit "populism"; you can also say that the reduction of sovereign risk spreads between Germany and the EU periphery in the aftermath of eurozone accession, with the complacency of private and public agencies, is a form of "financial populism."

### FIXING THE FINANCIAL SYSTEM

The post-GFC effort has consisted of understanding these weaknesses and its perverse incentives, and trying to fix the global financial system through more regulation. The agenda consists of:

1. Building resilient financial institutions, i.e. that can resist shocks with more capital, provisions, and liquidity, including by proposing an additional capital surcharge for systemically important financial institutions (SIFIs); a much stronger, higher quality regulatory Basel III minimum capital base that can absorb larger, several standard-deviation crises; not allowing debt-like hybrid instruments to be counted as capital; creating new instruments should become capital in specific circumstances (e.g. "bail-inable" products); ensuring the system is well-provisioned, and has sufficient liquidity—only specific highly liquid instruments will be allowed.

2. Reducing the size of large SIFIs, by shrinking "Too-Big-To-Fail" financial institutions that create moral hazard.

3. Avoiding regulatory arbitrage—coverage and applicable prudential rules should be capable of including all providers of financial services (e.g. insurance, shadow-banking providing some form of credit).

4. Dornbusch, Rudiger and S. Edwards (eds), *The Macroeconomics of Populism in Latin America* (Chicago, IL: University of Chicago Press, 1991).



4. Improving trading and transparency of OTC derivatives markets—financial instruments should be more easy to understand, standardized as much as possible and traded in central clearing houses.

5. Improving accounting, disclosure, and data quality to assess risk in the financial system properly—transparency and data quality could be promoted through registration of financial transactions.

The solutions proposed by the BCBS-G20-FSB are supposed to increase global and local financial stability. But there are some issues for the financial system of the 21st century that remain unanswered.

*Risk and pro-cyclicality:* Do you really want to avoid completely financial pro-cyclicality? Or do you want just to avoid "bubbles" and excessive mood swings? How do you create incentives for the system to be capable of taking risk but not "too much"? How do you design the incentives system to originate credit at an adequate pace with well-known asymmetry of information?

*Macro and financial stability:* How do you relate macroeconomic and financial stability (e.g. the global imbalance problem)? How do you react (and should you?) to massive cross-border flows in an open macro framework?

*Market failures and role of a financial public sector:* How do you make the system capable of supplying a wide array of clients, i.e. capable of providing maturity transformation without full information? How do you promote financial inclusion without macro-financial populism?

These are not easy issues but after the GFC the differences between AEs and EMEs became less salient and many of these questions are common to both of us.

### SOME PARTIAL ANSWERS TO THESE NEW CHALLENGES AND ISSUES

Let me provide some partial answers based on our Brazilian experience: my view is that you need to allow some "animal spirits" to flourish, with financial innovation being

5. Akerlof, George and Robert Shiller, *Animal Spirits* (Princeton, NJ: Princeton University Press, 2009).

rewarded without creating excessive systemic risk;[5] therefore, you probably need some form of coordination to smooth the business-financial cycle between macro policies, especially monetary and macroprudential policies. Then you need information and quality data to know what is happening in your financial system in real time: in Brazil we have *mandatory registration* of financial assets. Data allows you to understand the degree of interconnectedness in your system, which is a key issue for systemic risk and too-big-to-fail. And finally, you need some form of international coordination or cooperation to deal with global banks and the cycles of AEs that produce spillover effects on EMEs, good and bad, exuberance and gloom, sudden floods and sudden stops of capital.

So first, we have perhaps with the GFC an opportunity to think about both macro *and* financial stability. Perhaps a more Integrated Inflation Targeting Framework for Monetary Policy could achieve both price and financial stability. This framework will have to build its own institutional set-up, coordinating the "old" Monetary Policy Committee (MPC) with the "new" Financial Stability Committee (FSC), somehow capable of "acting" on indications of systemic risk. It will have to clearly identify its modus operandi, its reaction function, and communicate clearly with markets. Moreover, in order to ensure both macro and financial stability, you might need to consider the complementarity between monetary policy (MP) and macroprudential policy (MaP). There are still many directions to the ongoing debate.[6] One possibility is to consider a division of labor along the lines of a separation principle: MP using an IT framework would address price stability; and macroprudential policy would be used to mitigate financial systemic risk. Another possibility is to ask whether MP should explicitly incorporate a financial stability objective, and be more proactive in response to perceived risks to financial stability. It is an old debate, i.e. whether MP should be concerned with asset prices directly or simply by the potential inflationary consequences of it (e.g. their wealth effects, etc.). Therefore, in considering the role of MP in addressing financial stability, this view would consider new policy-reaction rules for central banks that would be augmented to include a financial or credit gap argument of some sort.

What about innovation and risk-taking? If you want to avoid "excessive risk-taking" or "irrational exuberance," you can certainly go even further than Basel III and its counter-cyclical capital buffer, liquidity, and stable funding and leverage ratios. You

6. See Agénor, P.R., and L.A. Pereira da Silva, "Inflation Targeting and Financial Stability: A Perspective from the Developing World," e-book by IDB and CEMLA (November 2013); and IMF, "The Interaction between Monetary and Macroprudential Policies," January 29, 2013, available at: http://www.imf.org/external/np/pp/eng/2013/012913.pdf (last accessed January 13, 2015).



can think of more stringent rules that will automatically kick-in when some indicator of financial (in)stability sends a warning. Now while this is possible in theory, it is analytically and practically complicated. To begin with, because financial stability is not a one-dimension, single-variable determined concept, so you will have a hard time identifying the moment to act and perhaps an even harder time communicating to markets how you will do it. And then you will also have to deal with your own political economy: removing systemic risk entails reducing the exuberance in financial sector growth and credit creation. In moments where there is optimism and a "feeling good" mindset about financial sector growth and positive collateral externalities in other sectors, it is difficult to explain and implement, to say the least; that is why crisis avoidance is not popular and does not bring rewards, votes, or improvements in polls. But don't you want some innovation, some animal spirit in the finance industry? I think you do.

So Brazil's response has been to favor innovation (e.g. development of new products, securitization, real estate loans with extension of maturities, etc., that Brazil needs) but while keeping a strongly capitalized, highly provisioned financial sector with conservative regulation. A first key feature here is mandatory registration of financial instruments to improve knowledge of credit and counter-party risk. Brazil has conservative financial regulation and effective supervision with all financial institutions regulated and supervised by the central bank. Regulations for risk management and internal controls have been in force for years. We met the requirements of Basel II (simplified standardized approach for all risks implemented in July 2008) and IFRS; we have mandatory structures for risk management (operational, credit, and market risks). In addition, we hold a Basel III-compliant minimum capital ratio; credit ratings are not used to determine credit risk weights under the standardized approach; exposures to funds are risk-weighted according to the underlying assets, for all risk factors; there are regulatory multipliers for the standardized capital requirements for interest rate risks; and provisioning in excess of expected losses is included in Tier 1 capital. Supervision is integrated into the central bank, which is obliged to produce biannual stability reports—communicating system wide implications of the bank stress tests. And our salient feature has been mandatory reporting of all credit extended by banks above R$1,000 (about USD450) and of OTC derivatives that are required to be registered at a central trade repository (e.g. Cetip). We also put in place registration for sales of credit portfolios within the system through the C3 (Central de Cessão de Crédito). In addition, there is a responsibility for the trade repository to understand the pay-off of any financial instrument before registering it and also to register counterparties in the transaction. Those features might seem intrusive but they allow the supervisor to have a real-time view of the individual and systemic risk conditions prevailing in our financial system. In particular, that allowed us to conduct financial inclusion with accurate knowledge of what was going on with credit allocation to poor households, including through extending the search vis-à-vis potential household over-indebtedness on databases that report credit extended by non-bank entities (e.g. retail shops, etc.) usually to low-income households.

Another key feature has been to implement a program of intervention in forex markets to tame volatility. The central bank has implemented a program of daily scheduled interventions aimed at providing predictability to economic agents. This program has offered a bit more than USD100 billion in FX protection through FX swaps since August 2013, a major part of which was channeled to non-financial corporates. The FX swaps are liquidated in Brazilian Reals (BRL) and do not affect the level of international reserves. The swaps were deployed rather than direct spot interventions because the Banco Central do Brasil (BCB) had diagnosed that the pressure on BRL came from agents seeking currency hedging, and not urgent USD cash outflows. This is possible because Brazil has a deep derivatives market in which financial and non-financial corporates can and do hedge their FX exposures. After an initial period of turbulence, the BCB was able to anchor expectations over the future exchange rate and its effects over inflation. The hedge supplied by the BCB was essential to calm local FX markets after the beginning of the program and has been successful in taming FX volatility since then. The evolution of the exchange rate over recent years confirms that the FX swaps program did not have the goal of impeding exchange rate adjustment, since the trend of the nominal exchange rate remained broadly the same after the establishment of the program.

Third and finally, we had in Brazil a good example of how these lessons for financial stability work together and require some degree of international macro policy

7. UMP in advanced economies (AEs) is defined here as the combination of a monetary policy stance at the zero lower bound (ZLB), large scale asset purchase programs (QE) and forward guidance (FG).
8. See IMF, "The Interaction between Monetary and Macroprudential Policies," op. cit.; and IMF, "2013 IMF Spillover Report," August 1, 2013, available at: http://www.imf.org/external/np/pp/eng/2013/070213.pdf (last accessed January 13, 2015).



coordination (IMPC) à la Eichengreen. For example, IMPC can help to mitigate the spillover effects of unconventional monetary policy (UMP)[7] into EMEs in its two phases: entry and exit. AEs' UMP implemented to save the world from another Great Depression did save the world, but had also some collateral effects, especially on EMEs with "sound and strong" fundamentals. The spillovers effects stemming from large capital inflows related to UMP are documented in several IMF reports.[8]

Brazil and other EMEs are especially attentive to the effects of the current exit phase but had to manage the spillover effects of quantitative easing (QE) earlier when we faced large inflows of capital.[9] We were used to managing "sudden stops" of capital flows; we then had to learn how to manage "sudden floods." Both types of events pose risks, albeit different, for our macro and financial stability. For EMEs, it complicates domestic macro policies. The problem is not capital flows per se, since EMEs usually need foreign savings. It's the volume and intensity for short periods of time: too much capital inflows can lead to excessive credit expansion, lower quality of credit origination, increased financial system exposure to exchange rate risk, asset price distortions (including excessive exchange rate appreciation), and inflationary pressure; easy global money can boost domestic demand, it amplifies expansion beyond what you might desire, and you might have then to shut down expansion sooner than envisaged. In any event, we saw the beginning of this story unfolding in Brazil,[10] and we worked hard to slow it down. Our policy response was to "lean against the wind." The first textbook and well-tested line of defense against these large capital inflows was to allow exchange rate appreciation and undertake international reserves accumulation. However, the effectiveness of these policies, together with other textbook demand management policies, depends on the volume and intensity of inflows. Given the exceptional level of inflows brought by UMP, many emerging markets[11] pragmatically complemented their toolkit of aggregate demand management instruments with MaP measures, targeting both credit markets and capital inflows directly. How would IMPC help here? Well, certainly by having EMEs sharing with AEs the cost of implementing contra-cyclical or smoothing-cycle policies could have nicely complemented the CFMs that we had to put on our side to preserve our financial stability.

9. See Pereira da Silva, Luiz A., "Global Aspects of Unconventional Monetary Policy – an EME Perspective," in *Global Dimensions of Unconventional Monetary Policy, A Symposium Sponsored by the Federal Reserve Bank of Kansas City*, Jackson Hole (August 22-23, 2013), pp. 373–385.
10. We did our own empirical exercises in Brazil to assess the collateral effects of UMP using a rigorous counter-factual exercise. See Barroso, João Barata, L.A. Pereira da Silva and A. Soares, "Quantitative Easing and Related Capital Flows into Brazil: Measuring its effects and transmission channels through a rigorous counterfactual evaluation," Working Paper No. 313, Central Bank of Brazil (July 2013).
11. Countries that actively used macroprudential measures targeting capital flows included, among others, Brazil, Peru, Korea, Turkey, South Africa, Thailand, and the Philippines.

Although IMPC would be nice and that the prevention of financial crisis could benefit from IMPC, realistically speaking it remains primarily a domestic affair, much more under the responsibility of the local regulator. And therefore, for an emerging market, I argue that the most important task is to "have your house in order," doing your homework for price and financial stability first, and then looking how, if, and when the AEs and the IFIs can be of some help.

### CONCLUDING REMARKS

The crisis and its aftermath have highlighted the importance of: (a) strong regulation, covering the whole system and avoiding regulatory arbitrage as an important element for crisis prevention (e.g. with higher capital bases and provisions); (b) high quality data and information in order to precisely identify the dynamics of a financial system—how it is fulfilling its positive role without creating excessive systemic risk; (c) coordination and interaction between two components of macroeconomic stability—financial and price stability through the appropriate dialogue between MP and MaPs; (d) a strong institutional set-up for regulators and supervisors to monitor, sometimes with some degree of gentle intrusiveness, the compliance of the financial system with regulatory standards including those agreed upon at the international level; and (e) some form of IMPC to ensure cooperation between jurisdictions, homogeneity in standards, sharing of information, capacity to solve global financial institution issues, and capacity to smooth the global cycle of exuberance and gloom.

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# 70 YEARS SINCE BRETTON WOODS: DEFINITELY NOT ENOUGH!

MURILO PORTUGAL

The profound international financial disarray of the 1920s, with its competitive exchange rate devaluations, beggar-thy-neighbor policies, hyperinflations, and the massive destruction generated by the ensuing Second World War led the major countries of the world to do something that they rarely do: abdicating of a portion of their sovereignty in favor of international organizations, agreeing on the creation of the Bretton Woods institutions.

Over the past 70 years, the many deeds and public goods that the Bretton Woods institutions, especially the IMF, have contributed to the international monetary and financial systems and to the global economy are testaments to the wisdom of their founding fathers and to the work of their successors.

In its initial two decades, the IMF functioned as the guardian of the Bretton Woods system of fixed exchange rates that could only be adjusted in case of fundamental disequilibrium and with the prior authorization of the Fund. Countries were allowed to rely on capital controls to manage international capital flows and their capital accounts.

Under the Bretton Woods system the global economy overall presented a favorable economic performance. Real economic variables showed greater stability, inflation was low, and per capita incomes grew steadily.

When the Bretton Woods system collapsed in 1971, with President Nixon's unilateral decision to end the convertibility of the dollar, the IMF contributed to international efforts to put in place a system based on floating exchange rates and on the opening up of capital accounts, which came to be known as Bretton Woods II, given the IMF's new role of exercising firm surveillance over its member countries' exchange rate policies.

While its surveillance mandate was too narrow, covering only indirectly domestic policies other than the exchange rate, in practice, the IMF gradually and successfully extended that mandate to cover fiscal and monetary policies, financial sector issues, and capital flows. But the IMF was never able to exercise fully its surveillance powers in relation to the countries that did not borrow from it, while it has been perhaps too powerful in relation to the countries that do borrow.

Under Bretton Woods II, the IMF made positive contributions, dealing with important international crises. In the 1980s it helped with the Latin America debt crisis. During the 1990s it assisted steering the transition of Russia and Eastern Europe from socialism to capitalism. In the late 1990s and early 2000, it helped to deal with a spate of financial crises in Asia, Russia, Brazil, and Argentina.

During the 2007–2009 global financial crisis, the IMF has again proved its worth to the global economy. It exercised intellectual leadership in helping to expose the failures of excessive risk taking by private financial institutions, the failures in financial sector regulation and supervision and in macroeconomic policies by national governments, and helped in devising proposals to deal with these problems. The IMF actively assisted the crisis-hit countries with policy advice and financing. It created new short-term liquidity lines to help countries with strong policies to face short-term liquidity needs and helped to improve overall liquidity with a large Special Drawing Rights (SDR) issuance.

Despite some shortcomings that still need fixing, the IMF's generally well-thought governance structure has contributed to rapid and effective decision-making in many of these events, when compared with other international organizations. The IMF constituency system allows reconciling the legitimacy of almost universal country representation with efficient decision-making of a not-too-large Executive Board. Weighted voting based on relative economic strength gives confidence to creditor countries that their views will carry most weight, while the tradition of consensus decision-making and special voting majorities for certain topics confer some protection to large minority groups, making weighted voting acceptable to debtor countries, and leading to better decisions that are easier to implement.



It is clear, however, that many challenges persist in the international financial architecture and in the international monetary system in order to promote steady growth of global output, employment, and income. Such growth needs to be closer to potential, non-inflationary, financially and fiscally stable, environmentally sustainable, socially inclusive, and should allow for faster convergence of developing countries to the per capita income levels of advanced countries.

While the to-do list is extensive, I wish to point to four important international challenges: 1) strengthening the macroeconomic framework of systemic countries; 2) strengthening the effectiveness of bilateral surveillance; 3) moving from multilateral surveillance to international collective action; and 4) speeding up the implementation of a multilateral reserve asset.

The 2007–2009 global financial crisis showed the enormous damage that can be done when crisis occurs in a systemic country. There is, therefore, a strong case not only to focus greater attention on such countries, but also on strengthening their macroeconomic frameworks. The global economy would benefit from stronger and more explicit nominal anchors and multiyear fiscal plans that would guide and constrain excessive discretion in economic policy-making in the US, China, Japan, and the euro area. Moving fully toward a floating exchange rate in China is also important for international monetary stability, and would help the renminbi to become an important global reserve currency and to be included in the SDR basket.

IMF bilateral surveillance has expanded and improved substantially since it was created in 1977, and presents higher quality of analysis, greater precision, and consistency than alternative sources for most countries. Yet, it lacks effectiveness in influencing policy-making in member countries that are not borrowers, and does not encompass sufficient integration between country and global aspects and between macroeconomic and financial issues. It is important to make IMF surveillance more independent, authoritative, valued, effective, and even-handed than it currently is by increasing both its persuasiveness and pressure. In order to add value to its bilateral surveillance, the Fund needs to better exploit its superior knowledge of the global economy, its cross-country experience in economic policy-making, and its relative detachment of national situations which might allow it to see things from different perspectives. It should discuss not only what to do, which some countries may already know, but also how to do it, being politically savvy and mindful of domestic political constraints, suggesting a road map of feasible steps that are likely to generate positive results within the period in office of the incumbent authorities. As Keynes once said, the secret of persuasion is to stay within the boundaries of feasibility. In special cases, the Fund should hire outside renowned academic experts and successful policy-makers to integrate the surveillance missions.

A main purpose of the IMF is to promote international cooperation on monetary and financial affairs, being the machinery for consultation and collaboration among countries on these issues. The Fund needs to move one step further from multilateral surveillance to be a facilitator of international collective action.

The IMFC record in promoting international cooperation in economic, monetary, and financial issues has been mixed. Maybe one avenue would be to transform the IMFC into the Council of Ministers, an idea created in 1978 and never implemented as it requires the consent of 85% of the voting power. The Council would have more political representation and authority than the Executive Board to engage in discussion of multilateral action plans that are the essence of international collective action.

The Articles of Agreement attribute to the Council the authority to supervise the management, adaptation, and the adjustment process of the international monetary system, to supervise developments in global liquidity, and consider proposals to issue SDRs. It has never been specified how this authority should actually be exercised in practice. One possible interpretation would be that the Council should have powers to enact decisions on any matters under the IMF purview that would have a binding character for all IMF members.

The creation of the SDR in 1969 was a major achievement. The aim was to deal with the Triffin Dilemma, named after the Belgian economist Robert Triffin, once chief of the IMF's exchange control division. He explained the dilemma of the gold exchange



standard that existed under Bretton Woods I in the absence of an adequate supply of gold: either the key currency country maintains equilibrium in its balance of payments and the other countries experience a shortage of reserves needed to expand trade and growth, or there will be persistent increases in the financial liabilities of the key currency country, which will ultimately raise doubts about its ability to honor its debts and bring the system to collapse. The SDR was introduced to become a major reserve asset, complementing the dollar and gold. However, the SDR never came to perform its functions as the US used its voting power to systematically oppose the issuance of SDRs, which requires an 85% majority.

Any national currency that is also a major international reserve currency plays a dual role and inconsistencies may eventually arise between these two roles. National policy may at times be at odds with the goal to have a stable numeraire that can function as an international unit of account and store of value. A multilateral reserve asset like the SDR, being a weighted average of the major national reserve currencies, could help smooth volatility of exchange rate movements.

These are some of the reasons why 70 years have not been enough. The world needs stronger internationalism and multilateralism. The nation state has played an important role in securing fast economic progress, allowing large national markets to emerge, guaranteeing law and order for private economic activity to thrive, and providing a stable macro environment, public goods, and regulation to support and complement private activity. The nation state will continue to be the major form of political organization for a long time to come, certainly as long as there are large income disparities among different regions of the world. The forces in favor of nationalism are many and powerful. Support for multilateralism and internationalism is timid and weak. Some shift toward greater international and multilateral governance would be beneficial. Production, trade, and finance have become increasingly globalized, accentuating the inadequacy of dealing with some problems only at the national level. The solution should be a strengthening of international organizations and some expansion of their mandates, which will require simultaneously improving their governance.

The move toward greater internationalism will have to be coupled with greater multilateralism. Dominance of the system by a single country or a small group of countries, as it has happened under Bretton Woods I and II, should be avoided. It will be increasingly difficult to take international decisions that are enforced in a cooperative manner without the willing participation of the large, fast-growing and internationally integrated emerging market countries. Some now have international reserves that are larger than or close to the size of the IMF's own financial resources. These geopolitical realities have to be recognized in the design and operation of a revamped Bretton Woods.

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# TOWARD A MORE BALANCED GLOBAL MONETARY SYSTEM

MARTIN REDRADO

THE WORLD is moving to a multipolar landscape with a growing share of buoyant emerging market countries. They are gradually taking over the driver's seat as reflected by the rising power of their economic resources, their increasing decision-making responsibilities in global financial institutions and the proliferation of multilateral and bilateral trade and financial agreements. As a result, in the years to come we will witness an increasing role of emerging market currencies in the world economy, becoming a natural hedge against risks to global financial stability as economic and political institutions in the developing world gain strength. While it will take decades to consolidate this process and several challenges remain, I believe there is a role for multilateral financial institutions to underpin it by providing instruments that help to minimize the occurrence of episodes of financial disruption.

This new landscape started to emerge several years ago but the magnitude of change of the underlying forces became evident after the 2008/2009 crisis. While the emerging world has obviously been affected by sustained headwinds, the global crisis has exposed the macroeconomic and financial weaknesses and vulnerabilities of the largest economies in the world, exacerbating this dynamic. After avoiding the collapse, policymakers in industrial countries have been puzzled with conditions that were typical in emerging markets in previous decades. With limited instruments and increasing fiscal, external and political constraints in an uncertain environment, the main challenge has been to boost growth while preserving financial and price stability at the same time. In fact, the crisis became an opportunity to revisit not only the way monetary and financial policy is conducted but also the design of the main frameworks and their effectiveness to respond to shocks. Not long ago a simple "Taylor rule" would have been enough to describe monetary policy. Now, a more complex central bank "reaction function," which entails a rebalancing of monetary policy and financial stability objectives and their contribution to long-run macroeconomic stability, is called for.

The dollar has shown resilience regardless of the position of the US economy along the business cycle. Even during times of weak growth and overwhelming monetary stimulus, flight to liquidity episodes buoyed the currency. This has been the consequence not only of the US's weight in the world economy or its highly-developed financial market but also of sound economic and political institutions. The dollar preeminence, however, is inevitably bound to decline over time as emerging markets manage to sustain faster growth while maintaining macro stability and making progress to reduce vulnerabilities.

While the euro has become a more global currency in recent years, it has struggled to meet the demands of a group of countries with significant asymmetries. In my view, the obstacles remaining for full integration of euro area markets are hindering the "competitiveness" of the euro in the world economy. The euro will gain further momentum as a major global currency only after the asymmetries among countries in the region are reversed and the structural impediments to economic growth in the region are lifted. This process is still incipient but European policymakers have already started to lean in this direction with adequate doses of pragmatism, maximizing efforts to jump-start economic growth while preserving price and financial stability.

Albeit with divergences, in general, emerging market countries have proven increasingly resilient in recent years, which is reflected in overall stronger currencies. The way these economies have handled the downfall of developed countries, the subsequent



period of extraordinary monetary expansion and, more recently, the beginning of the retrenchment of global liquidity, has helped to test the soundness, strength, and effectiveness of the different macroeconomic policy frameworks. Emerging market economies seem to be less vulnerable to turbulences in the global economy than in the past. This has been the result of what, in my view, is an underlying framework of sound macroeconomic policies. Policymakers in the emerging world have applied a common set of macro principles, which has been tailored to each country's particular circumstances without following a unique recipe. Its main features include five pillars: i) strong fiscal positions; ii) external sustainability; iii) robust monetary and exchange rate policies; iv) sound financial regulation and supervision; and v) ample liquidity buffers.

First, most of the emerging market economies feature stronger fiscal positions than in the past. In previous decades, fiscal policy was by itself an additional source of uncertainty as a result of overspending and over-indebtedness. This led to recurrent currency and balance-of-payments crises and episodes of macroeconomic instability. In recent years, however, many countries have strengthened their institutional frameworks by establishing fiscal rules and stabilization funds in order to encourage macro discipline. For instance, in 2013, general government gross debt remained below 40% of GDP for emerging markets and below 50% of GDP for Latin America, in particular.[1] This allowed for the build-up of savings to counteract a slowdown in economic activity or the impact of lower commodity prices or capital outflows. Fiscal responsibility, including better liability management, is no longer discussed in terms of left- or right-leaning policies: it has been accepted as common sense and good macro policy management. While the tools vary from country to country and I acknowledge that many countries have had a hard time building savings and enforcing discipline, this approach has helped to preserve financial stability.

The second factor is the sustainability of external accounts. On average, emerging markets managed to maintain lower current account deficits than in the past, when external imbalances were the main source of macroeconomic vulnerability. In Latin America, for instance, the current account deficit averaged 0.5% of GDP in the last ten years, down from 2.3% in the 1990s and 2.0% in the 1980s. Higher reliance on foreign markets through bilateral free trade agreements or multilateral alliances,

1. This and other statistics reported below were obtained from the IMF World Economic Outlook Database.

export diversification both by product and destination (e.g. south-south trade has soared in the last ten years) and increased external competitiveness as a result of sounder macro policies, structural reforms, and improved infrastructure has provided resilience to external accounts, thereby strengthening the macro positions.

Third, monetary authorities have been able to build credibility on the development of robust monetary and financial policy frameworks to better accomplish their goals. Central banks have gained autonomy and have expanded the set of tools at hand. Regardless of their particular objectives and tools, independent central banks have been a key driver of the recent period of long-lasting macroeconomic stability in emerging countries. In recent years, inflation has remained well-contained in a context of robust growth and well-entrenched financial stability despite multiple shocks. The gap between inflation in an average emerging market economy and an average advanced country declined from 49.5% in the 1990s to 4.5% in the last ten years. During turbulent times, central bankers in emerging markets have acted decisively to curb expectations and rebuild confidence, showing capacity to rapidly execute and deliver. Several economies rely on well-established inflation targeting regimes. While intervention in the foreign exchange market remains widespread, the exchange rate has played an increasing role as a shock absorber. Many central banks have rested on exchange rate flexibility to accommodate domestic monetary conditions without having to rely exclusively on interest rates. Economic agents, even in highly dollarized economies, have gradually learned to deal with exchange rate volatility, which contributed to minimize the pass through.

Finally, the development of liquidity buffers both in foreign and local currency has been a common pattern among emerging countries. This included three key elements: i) the design and implementation of strong prudential regulatory and supervision frameworks to ensure a well-balanced, well-capitalized, liquid, and solvent banking system, avoiding currency mismatches or excessive exposure to public sector debt (two of the key sins of the past at least in Latin America); ii) the build-up of foreign reserves to overcome periods of limited financial market access and heightened financial volatility, shielding domestic variables from external headwinds (even countries with fully flexible exchange rate regimes have had in place mechanisms to use foreign reserves to mitigate market concerns over dollar availability); and iii) the development of a domestic currency capital market to act as a shock smoother rather than a shock amplifier, lending financial stability amid volatile capital flows (countries have not only reduced overall indebtedness but also substituted external with domestic debt).



These, combined with the proliferation of financial vehicles and the deepening of market liquidity, have increased the demand for local currency assets, particularly sovereign, at the expense of dollar or euro denominated assets. The widespread use of derivatives has expanded the set of instruments avaiable for managing risk while widening the options for sources of financing. The emergence of local currency instruments as an asset class has already fared well beyond what could be a transitory trend driven only by "search for yield" and diversification. Increased access to international debt markets has taken place vis-à-vis a decline in interest rates, particularly on long-term instruments.

Challenges to consolidate these macro principles, however, remain, which hinder the chances for local currencies to become global. I identify five main challenges:

First, not all emerging markets have shared this path: a number of countries have followed populist and anti-business policy frameworks, taking advantage of the extraordinary long period of accommodative monetary policy in the US and high commodity prices while making little progress in advancing productivity-enhancing reforms or reducing macro policy weaknesses.

Second, these countries have struggled to cope with the deleterious effects of capital flows (a particular concern for commodity exporters is that the same underlying fundamentals in the global economy that worsen terms of trade affect negatively global market access), which have led to significant volatility in currency markets. Finding the right balance between letting the exchange rate act as an automatic stabilizer and intervening in the market to avoid destabilizing effects on domestic monetary and financial conditions of a temporary exchange rate misalignment remains a key challenge for central banks in the emerging world. Economic theory, however, is yet to capture the extent of the current effective practice of monetary and financial policy frameworks. Another factor in this equation is the dollarization of balance sheets: the lower the liabilities in foreign currency, the larger the flexibility of the exchange rate to absorb shocks without destabilizing effects.

Third, while the build-up of fiscal savings has allowed for a better-balanced policy response to lower commodity prices or a sudden reversal in capital outflows, coordination between the monetary, fiscal, and financial policy responses is still limited in many countries, particularly when dealing with sudden shifts in capital flows or commodity price fluctuations (e.g. there is room for state-owned banks to play a more central role in the stabilization efforts). While monetary policy has been overburdened with multiple goals, fiscal policy still lacks of flexibility to act counter cyclically.

Fourth, emerging economies are still lagging behind in competitiveness as a result of lagged infrastructure investment, inefficient judiciary systems, politically vulnerable institutions with limited checks and balances and little progress achieved to reduce poverty and income inequality or to overhaul education, health care, and public security systems. Fifth, in recent years the corporate sector in emerging markets has continued to issue mostly in dollars, taking advantage of lower costs and abundant liquidity, increasing their exposure to currency mismatches and raising the risks to macro instability.

I believe international financial institutions could play a more active role to help countries dealing with sudden shifts in private capital flows that are not related to domestic fundamentals. While the IMF flexible credit line, for instance, is a well-intended instrument, the fact that only a handful of countries applied for it shows that there is significant room for improvements on this front. On the development of local currency bond markets, further action can also be pursued by international financial institutions to help deepen and accelerate the process.

To conclude, emerging market economies face significant challenges but are better prepared to provide stronger assets to contribute to global financial and monetary stability than in the past. A common set of macro principles built upon past experiences has been applied in many of them without a pre-designed recipe. The implementation has taken into account the idiosyncratic factors, the social preferences, the instruments available, and the particular constraints faced by policymakers in each country. Identifying adequate policies under specific circumstances for a country is not enough: the right timing and pace is also crucial for effective implementation. The build-up of liquidity buffers, including foreign reserve accumulation and the development of a sound financial system, has been an effective addition to the traditional monetary and fiscal policy tools to withstand increased volatility. The availability of such policies has expanded substantially the room to maneuver, allowing policymakers to minimize



the effects of external shocks on the real economy and strengthen their currencies. Emerging market currencies are called to play a bigger role in the future. Stronger economies and a more resilient macroeconomic policy framework will be key to provide stability in the global monetary and financial system.

Martin Redrado, Chairman, Fundacion Capital and
Governor, Central Bank of Argentina

# REFORM OF THE INTERNATIONAL MONETARY SYSTEM: LESSONS FROM THE EUROPEAN CRISIS

KLAUS REGLING

The global financial crisis of 2008–10 has reignited reflections and debates on reforming the post-Bretton Woods international monetary system (IMS). The current IMS has been heavily criticized as it failed to prevent the build-up of global imbalances preceding the crisis, to curb financial contagion, and to provide sufficient global liquidity when needed.

The same types of deficiencies in the IMS seem to be mirrored with potentially even stronger impact in a monetary union due to tighter economic and financial connections among member states and the non-existence of a nominal exchange rate adjustment mechanism. This is why severe financial turbulences from 2009 onwards raised serious doubts in financial markets about the viability of the European Economic and Monetary Union (EMU) and the future of the euro.

Fortunately, far-reaching political decisions were taken in Europe. The euro area was preserved and its economy began to move out of recession in early 2013. Europe's crisis response comprised five key elements: structural reforms and fiscal adjustment to eliminate imbalances, decisive central bank actions, more effective economic policy coordination, a strengthened and more resilient banking system, and the creation of a crisis resolution mechanism. I believe that the European experience of safeguarding financial stability and supplying cross-border liquidity in recent years can provide useful lessons for the design of future reforms of the IMS.

### IMPORTANCE OF THE EURO AND EUROPEAN ECONOMIES FOR THE IMS

European integration, and in particular the creation of the euro, brought the biggest change to the IMS since the breakdown of the Bretton Woods system in 1971.

First, the euro became quickly the second most important currency worldwide, although it was initially created for internal reasons, namely to support the Single Market and to further strengthen European integration. The euro provides an alternative to the US dollar to settle international trade and to diversify asset allocation.[1]

Moreover, the use of the single currency eliminated exchange rate volatility in the euro area. It also mitigated a European analogue of the Triffin Dilemma. Due to the central role played by the Deutsche Mark until 1998, German monetary policy, which had to be based on economic conditions in Germany, had strong spillover effects to other European economies. The creation of the euro internalized this externality as the monetary policy of the European Central Bank (ECB) is based on conditions in the entire euro area.

Finally, with the euro area being the second largest economic entity in the world just behind the United States, assuring growth and stability within the Monetary Union is a contribution per se to the stability of the global economy. Many non-EU countries perceive the euro area as a pole of stability, a source of new capital, as well as a reference for integration and regulatory harmonization. The recent European crisis demonstrated that economic uncertainties in the euro area indeed could have strong spillovers on global financial markets. With Europe moving out of the crisis, it can again play its useful stabilizing role.

### THE ORIGIN OF THE CRISIS IN EUROPE

The European sovereign debt crisis, which was amplified by the worst global financial crisis in eighty years, exposed problems in the conduct of economic policies and institutional gaps in the design of EMU. Member States did not fully accept the political

1. As of end 2013, 67.2% of exports and 51.7% of imports between the euro area and non-euro area countries are invoiced in euros; 24.4% of global foreign reserves, whose currency composition is known, are denominated in euros; similarly, 25.3% of international debt securities are euro-denominated (see ECB, "The International Role of the Euro," July 2014).



constraints of EMU membership. For example, the Stability and Growth Pact (SGP) was not always implemented with sufficient stringency. Easy access to borrowing, partly because of the market's failure to price sovereign risks properly, also helped governments to postpone reforms.

The original design of the economic governance in the Union was not complete either. Economic surveillance had a narrow approach and did not adequately take into account the interaction between fiscal issues and wider macroeconomic imbalances (e.g. competitiveness and current account balances). Moreover, methodological problems of calculating structural fiscal balances made it difficult to give a proper appraisal of the diverging economies. Spain and Ireland were in fiscal surplus for many years but their growing real estate bubbles went undetected by the criteria of the SGP and disguised underlying fiscal problems. Furthermore, financial integration accelerated in EMU without common financial supervision and no crisis resolution mechanisms existed to safeguard financial stability. The rationale had always been that the SGP would deliver the necessary fiscal discipline to sustain market financing.

### EUROPE'S CRISIS RESPONSE

In order to mitigate the crisis impact and to deal with the above-mentioned structural deficiencies, policymakers reacted rapidly and adopted a number of important reforms.

First, at national level, Member States have made substantial progress on fiscal consolidation and structural reforms. All members, not just those under a macroeconomic adjustment program, have worked out budgetary consolidation paths and ways to reduce macroeconomic imbalances. Countries under an adjustment program have made even greater efforts, in terms of fiscal adjustments and structural reforms. Greece, Ireland, Portugal, and Spain have been constantly ranked highest as "reform champions."[2]

Second, the ECB adopted unconventional monetary policies to ease credit market conditions in the euro area and played a crucial role in turning around market sentiment. Particularly, its announcement of potential unlimited government bond purchases—Outright Monetary Transactions—constituted an innovation, as it links the ECB's potentially unlimited firepower to a program with strict conditionality from the European Stability Mechanism (ESM).

2. See OECD's report *Going for Growth* published in February 2014 and the Lisbon Council's report Euro Plus Monitor, published in May 2014.

Third, the European sovereign debt crisis fostered a complete overhaul and redesign of the framework for economic policy coordination of EMU. Member States now must adhere to more comprehensive and binding rules, stipulated in the latest EU legislations or intergovernmental agreements.[3] The rules are more comprehensive, because governments are subject not only to fiscal surveillance but also to a scrutiny of macroeconomic imbalances against a scoreboard. The rules are more binding, because both the preventive and corrective arms of the SGP have been strengthened, especially through implementation of the Fiscal Compact in national legal systems. Financial sanctions against deviation from fiscal rules have become quasi-automatic with a reversed qualified majority vote in the Council of Finance Ministers. All twenty-eight EU members also set up the so-called "European Semester" to coordinate national budgetary policies and to reduce spillover effects of national policies.

Fourth, the banking sector has been reinforced with better surveillance at the European level and the construction of the European Banking Union. From 2008 to 2014 (second quarter), €560 billion fresh capital has been added by euro area banks; and the median of the core Tier 1 capital ratio in banks supervised by the Single Supervisory Mechanism (SSM) reached 11.9% at the end of February 2014. In addition, a single rulebook provides a level playing field for banks in the twenty-eight EU Member States with the establishment of three new European supervisory authorities[4] and the harmonization of the regulatory framework.[5] With the SSM up and running since November 2014, the ECB supervises all major banks (around 130) following a comprehensive balance sheet assessment and stress test. The Single Resolution Mechanism will assume an effective crisis resolution role using private sector contributions once all members will ratify the agreement.

Fifth, Europe has created strong firewalls. The establishment of a robust crisis resolution framework in the euro area—European Financial Stability Facility (EFSF) and European Stability Mechanism (ESM)—has closed a gap in the original design of EMU. By providing loans against conditionality, EFSF and ESM bought time for program countries to implement reforms. The ESM's direct bank recapitalization instrument is designed—as a last line of defense—to mitigate the link between sovereigns and banks. As of July 2014, EFSF and ESM together had disbursed €231.19 billion to five

3. Five Regulations and one Directive were adopted in 2011 to reform the SGP (6-Pack); two additional Regulations were adopted to improve the budgetary process in 2013 (2-Pack). Finally, an intergovernmental agreement, the Treaty on Stability, Coordination and Governance, was ratified in 2013 by all euro area Member States plus eight other EU countries, and includes the so-called Fiscal Compact.
4. They are the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA).
5. Including CRD IV/CRR and Bank Recovery and Resolution Directive (BRRD).



program countries, exceeding three times the total disbursement of IMF programs under the General Resources Account during the same period. Moreover, compared to the IMF funding, EFSF and ESM provided loans at lower costs and much longer maturity. This paradigm of program financing is based on regional solidarity and generates substantial budgetary savings—about €13 billion a year,[6] much bigger than the Marshall Plan. These savings are crucial for program countries to regain market access and debt sustainability.

### LESSONS FOR IMS REFORMS

The European response to the recent crises epitomizes possible ways to strengthen policy coordination, tackle macroeconomic imbalances, improve financial surveillance, and foster crisis resolution in a monetary union. This experience points to several possible directions for future reforms of the IMS.

First, coherent policy coordination and credible surveillance frameworks are crucial to prevent excessive macroeconomic imbalances and financial volatility, key issues facing the IMS since the end of the Bretton Woods system. For macroeconomic surveillance, one may think of strengthening the so-called Mutual Assessment Process, launched at the G20 Pittsburgh Summit in 2009, to assess global imbalances and to contain spillover effects. The IMF should maintain a central role here to monitor imbalances at the global level and to provide advice for corrections. The G20 provides an additional platform for cooperation and commitments among major economies, although it lacks an institutional basis. Regarding financial stability, one important step forward was the enlargement of the Financial Stability Forum to include major emerging economies in 2008. The newly formed Financial Stability Board has a clear mandate to monitor vulnerabilities in financial sectors and to oversee the actions needed to address them.

Second, successful global policy coordination ultimately needs to be supported by concrete reforms at national level. The success stories of Europe's "reform champions" illustrate how important national efforts to solve domestic idiosyncratic problems are for the overall stability in a region. Looking into the future, macroprudential policies will become a major tool for a large number of countries. In addition, many countries need to continue to generate fiscal space, even though the extent will depend on each country's vulnerabilities.

6. See ESM, "2013 ESM Annual Report," p. 22, http://www.esm.europa.eu/about/governance/index.htm [last accessed November 18, 2014].

Finally, proper crisis resolution mechanisms are needed to alleviate the immediate effects of any financial crisis. The European experience shed light on the importance of regional financial backstops. Although different in nature, a number of regional financial arrangements (RFAs) have been created since the 1970s in response to past financial crises.[7] RFAs have comparative advantages in sustaining financial stability at the regional level. They have in-depth knowledge on region-specific issues and can mobilize large amounts of financing relatively quickly. Founded by regional members, RFAs also have stronger democratic support and less stigma than the IMF to intervene in regional economies. Further reflections on the role of RFAs should concentrate on finding efficient ways for them to coordinate with the IMF, which has a wider representation, established surveillance and monitoring capacity, and a global role at the center of the IMS. An efficient coordination would certainly generate synergies in terms of resource allocation and surveillance capacity. Coordination failure, in particular with respect to conditionality, could lead to "program shopping" and associated moral hazard.

### MY PERSPECTIVES ON THE FUTURE IMS

What will the IMS look like in ten years? We are heading toward a multi-polar currency world. Although the US dollar will very likely remain the most important global currency, the euro and one or two Asian currencies will play influential roles in supporting international trade and financial transactions. Many emerging market economies have already been diversifying their foreign reserves toward euro- and renminbi-denominated assets. The euro's role in this multi-polar currency order would be further strengthened if the euro area deepens its integration.

Moreover, the IMS should be protected by solid global financial safety nets composed of three lines of defense. At the national level, countries need to generate fiscal space to be able to conduct counter-cyclical policies and to smooth out business cycles. Fully-fledged RFAs should constitute the second layer of protection and absorb unexpected shocks at the regional level to limit cross-regional contagion. The final layer of the safety nets would be the IMF and other forms of global policy coordination (e.g. the G20 and coordinated central bank actions).

The road toward a stronger international monetary and financial architecture is full of obstacles and challenges. Currently, many countries devote their energies to domestic issues. Global cooperation, for example within the G20 framework, worked better during the peak of the crisis than today. Reforming the current IMS would also challenge some vested interests. The Triffin dilemma remains relevant for the world economy as US monetary policy largely determines global financial conditions. Finally, reforms of the IMS cannot go far without democratic support. We must nourish people's interest in debates on the IMS; this is particularly important when cuts in wages and pensions as well as high unemployment rates in many countries have diverted people's attention. Despite these challenges, effective global cooperation and an efficient international framework are of utmost importance, especially in times of economic and financial crises.

Klaus Regling, Managing Director,
European Stability Mechanism

7. Such as the Arab Monetary Fund, Fondo Latinoamericano de Reservas and Chiang Mai Initiative Mutualization, to only name a few.

# THE FUTURE OF THE IMS: THE NEW "HOLY TRINITY" OF EXTERNAL, MONETARY, AND FINANCIAL STABILITY

ERIC SANTOR AND LAWRENCE SCHEMBRI

The overarching goals of the international monetary system (IMS) are to foster global economic integration and to promote strong, sustainable, and balanced global growth. An effective IMS guides and coordinates each country's exchange rate and macroeconomic and financial sector policies towards the achievement of these goals.[1] Clearly, these goals become more achievable when sovereign governments manage their domestic policies to attain their own economic goals in a manner consistent with these global objectives.

In an economically and financially integrated multi-polar global economy, these domestic and global economic goals should, in practice, be aligned over the medium to long term. One large country cannot sustainably use its economic power and policies for its own advantage to the detriment of others. In fact, experience suggests then when a large country tries to act in its own self-interest, it usually ends in tears for all of those involved. The United States hiking import tariffs in the 1930s in a misguided effort to boost domestic demand is a classic example.

1. Carney provides a useful definition of the IMS in Mark Carney, "The Evolution of the International Monetary System," speech given to the Foreign Policy Association, New York City (November 19, 2009), http://www.bankofcanada.ca/wp-content/uploads/2010/03/sp191109.pdf [last accessed November 18, 2014].

A critical element of the IMS is the system of exchange rate regimes among major countries. The choice and operation of an exchange rate regime directly influences other economic policy decisions and outcomes, chiefly monetary and capital account policy, and the process of economic adjustment to shocks. In the past, the choice of an exchange rate regime was typically nested within the "impossible trinity" of policy decisions: namely, that it is impossible to have a fixed exchange rate, an independent monetary policy, and an open capital account, because only two of the three can be achieved simultaneously. The purpose of this paper is to reframe a "holy trinity" to take into account financial stability considerations, which have received much less attention than they deserve (especially in light of the 2008–09 global financial crisis). We argue that for major economies, a necessary condition to achieve the new "holy trinity" of external, monetary, and financial stability is to have a policy framework consisting of a flexible market-determined exchange rate and an inflation target.[2] A flexible market-determined exchange rate would itself imply a convertible currency and an open capital account. When combined with credible fiscal policy and sound regulation and supervision of the financial system, this framework will contribute to external stability and the good functioning of the IMS.

### WHAT DOES THE FUTURE HOLD FOR THE WORLD'S MAJOR CURRENCIES? FOR THE INTERNATIONAL MONETARY SYSTEM?

An important starting point for this discussion is to recognize that most of the major currencies, including the U.S. dollar, the euro, pound sterling, and the Canadian and Australian dollars, largely operate within the framework of a flexible exchange rate coupled with an inflation target. This policy configuration is also in place in a number of other jurisdictions, including Mexico, Chile, Sweden, and Norway. The current circumstances of a very slow recovery from the global financial crisis of 2008–09 have complicated policy choices and created misperceptions of tension between the achievement of domestic and global goals. Some major jurisdictions have been forced to resort to unprecedented unconventional monetary policies to meet their mandated domestic price stability objectives and avoid even deeper recessions.

Given that the global financial crisis originated in some of these major economies, one could argue that this is prima facie evidence that the policy configuration of inflation

2. For further information on the benefits of the combination of a flexible exchange rate and inflation targeting, see Andrew Rose, "A stable international monetary system emerges: Inflation targeting is Bretton Woods, reversed," *Journal of International Money and Finance*, 26, 5 (2007): 663–81; and Eric Santor and Lawrence Schembri, "The International Monetary System: An Assessment and Avenue for Reform," *Bank of Canada Review*, Autumn (2011): 1–10.



targeting and flexible exchange rates did not achieve financial stability. This would not be true. Clearly, these policies were not sufficient by themselves for two reasons. First, financial sector policies, most notably those that limit excess leverage and credit expansion, are more important for preserving financial stability. Second, financial stability can be undermined by the policies of other jurisdictions. Indeed, many observers point to large and persistent global imbalances as an important contributing factor to the financial crisis.[3] These external imbalances were the result of domestic macroeconomic imbalances and insufficient real exchange rate adjustment.

While most advanced and some emerging-market economies (EMEs) have adopted the policy configuration of a market-determined floating exchange rate and an inflation target, some important EMEs have not—at least, not yet. Their choice of an intermediate regime, usually involving some degree of foreign exchange market intervention to maintain an undervalued real exchange rate and capital flow management, does not represent a sustainable policy configuration from either a domestic or global perspective.

From a domestic perspective, such intervention not only creates a distorted mix of domestic and foreign demand, which leads to resource misallocation, but can also contribute to financial instability by causing financial repression and encouraging credit creation outside of the regulated banking system. At the global level, such intervention represents the greatest threat to the global economy, since it increases the likelihood of secular stagnation due to deficient global demand and another round of global financial instability.

The clearest example of this set of circumstances is China, but it is not alone, since its EME neighbors are also forced to follow similar polices to retain competitiveness. Exchange rate adjustment to external imbalances is being thwarted through foreign exchange market intervention, which is typically sterilized through sales of central bank liabilities to the commercial banking system. This creates financial disintermediation and repression, since domestic savings are being channeled at depressed interested rates into these central bank liabilities, not to private borrowers for investment purposes. Consequently, other less-regulated means of intermediation arise, for example, through shadow banking activities, to meet the needs of borrowers and savers, creating a financial vulnerability. Moreover, the cost for depositors from financial repression

3. Ben Bernanke, "International capital flows and the returns to safe assets in the United States, 2003–2007," *Financial Stability Review: Global Imbalances and Financial Stability*, 15 (February 2011): 13–26; and Maurice Obstfeld and Kenneth Rogoff, "Global Imbalances and the Financial Crisis: Products of Common Causes," *Proceedings*, Federal Reserve Bank of San Francisco (October 19–20, 2009): 131–72.

is large—Lardy estimates that the implicit tax on Chinese households is as large as 4 percent of GDP.[4]

The other important implication of this financial repression is that the central bank cannot effectively use the short-term policy interest rate to control domestic monetary conditions and achieve price stability. In fact, the country would be importing the monetary policy of the reserve currency—a policy setting that is likely often inappropriate for domestic circumstances. Hence, jurisdictions under such a policy regime struggle to achieve external, monetary, and financial stability simultaneously. Since the first-best equilibrium would be to have all major jurisdictions implement the desired policy configuration to achieve the holy trinity of external, monetary, and financial stability, what is the best way forward? Given that these jurisdictions ultimately wish to attain this new holy trinity—which would be in their long-term best interest as well as that of the global economy—the right policy is to accelerate the pace of exchange rate and financial liberalization while establishing effective regulation and supervision consistent with the G20/Financial Stability Board (FSB) standards in order to create a credible and coherent financial safety net. This controlled liberalization would promote financial market development and more stable and sustainable domestic financial intermediation. This, in turn, would facilitate more resilient intermediation of foreign capital flows through markets rather than primarily through financial institutions, and allow the central bank to adjust policy interest rates to its domestic circumstances.

The experience of jurisdictions such as Canada, Australia, and Mexico with this type of transition is instructive. In each case, the adoption of a flexible exchange rate regime accelerated financial development and improved macroeconomic performance, because it facilitated the adoption of an independent and credible low-inflation monetary policy.

For the international monetary system, a more rapid move by important EMEs to the proposed policy configuration would promote global economic adjustment and a needed rotation of demand. Such adjustment would mitigate the risk of secular stagnation, lessen the need for extraordinary monetary policies in the advanced economies, reduce financial vulnerabilities across countries, boost the post-crisis recovery, promote economic and financial integration, and help achieve strong, sustainable, and balanced global growth over the medium to long term.

4. Nicholas Lardy, "Financial repression in China," Peterson Institute for International Economics Policy Brief 08-8 (2008), http://www.iie.com/publications/pb/pb08-8.pdf [last accessed November 18, 2014].



### AND THE INSTITUTIONS THAT UNDERPIN THE INTERNATIONAL FINANCIAL ARCHITECTURE?

A well-functioning IMS depends on countries pursuing the appropriate set of domestic policies. In order to ensure that countries undertake such policies, the IMS would benefit from a set of institutions that can provide the needed surveillance, calling them out when they fail to do so. The International Monetary Fund (IMF) was well positioned to fulfill this this role, given its universal membership, considerable resources, and expertise. However, in the lead up to the crisis, the IMF's leadership was ineffective. It didn't provide sufficiently candid and even-handed surveillance. As the crisis un-folded and only a slow recovery took hold, key opportunities were missed to push for policies that were needed to restore strong, sustainable, and balanced growth. In particular, the IMF tolerated currency intervention by some members, rather than effectively promoting financial development.[5]

Part of the problem can be traced to the IMF's governance structure. First, members' representation has failed to keep pace with their changing weight in the global economy. Second, and perhaps more importantly, the Fund's corporate governance doesn't allow for adequate accountability.

To improve the effectiveness of the IMF, reform is needed. Members' voting and quota shares need to reflect their weight in the global economy. Moreover, countries should earn their voting shares; better performance with respect to policies that contribute to external stability should be rewarded with more votes. At the same time, the roles and responsibilities of each level of decision maker should be clearly delineated to ensure greater accountability. As part of this overhaul of governance, the International Monetary and Financial Committee could be better aligned with the G20, in order to better coordinate the policy objectives of the two institutions.

The focus of the Fund should also evolve, with greater emphasis put on crisis prevention than on crisis resolution. In practice, this means more surveillance and less lending. In terms of surveillance, the Fund should focus on external, monetary, and financial stability, from a bilateral and multilateral perspective. There should also be a clear division of labor between the IMF and the World Bank: upper and lower halves based on economic and financial development.

5. Independent Evaluation Office of the IMF, "IMF Performance in the Run-Up to the Financial and Economic Crisis: IMF Surveillance in 2004–07," Evaluation Report (2011), http://www.ieo- imf.org/ieo/pages/EvaluationImages107.aspx [last accessed November 18, 2014].

### WHAT CAN BE DONE TO HELP STEER A COURSE TOWARD FINANCIAL STABILITY?

If the desired policy framework of a flexible exchange rate and low inflation target were adopted by all of the major jurisdictions, this would represent an important step for attaining global financial stability. This is because macroeconomic stability, characterized by the absence of unsustainable macrofinancial imbalances, is necessary for financial stability. However, it is not sufficient. Macroeconomic stability may encourage excessive risk taking because macroeconomic and financial volatility may be low. In fact, some observers point to extended periods of macro stability as one of the contributing factors to the financial crises of 1929–30 and 2008–09.[6]

In addition to macro stability, a strong prudential framework is needed to prevent excessive risk taking to promote financial stability and lessen the likelihood and severity of future financial crises. This framework, like a military fortification, consists of multiple mutually reinforcing layers of defense:

- own risk management,
- market discipline,
- microprudential regulation and supervision, and
- macroprudential regulation and supervision.

For households and firms, their risk-management practices should be based on the expectation that they will bear the consequences of their risk-taking behavior. Government policies should not provide the implicit or explicit guarantees that often create moral hazard and encourage reckless behavior. Consumers and investors should receive adequate education and information as well as protection from misrepresentation. For publicly traded firms, especially financial institutions, transparency is critical for market discipline to work. Financial statements and risk disclosures must be accurate and fulsome.[7]

Firms engaged in financial intermediation, especially those that are systemically important at the global or domestic levels, need to be effectively regulated and supervised to ensure that they hold sufficient liquidity and capital buffers, maintain sustainable leverage levels, have credible recovery and resolution plans, and establish strong internal risk governance. Macroprudential measures should mitigate systemic risk by increasing transparency, and by reducing interconnectedness, common exposures, and procyclicality.

6. For example, the Great Moderation of 1992 to 2006.
7. Financial Stability Board, "Enhancing the Risk Disclosures of Banks. Report of the Enhanced Disclosure Task Force" (October 29, 2012), http://www.financialstabilityboard.org/publications/r_121029.pdf [last accessed November 18, 2014].



For example, over-the-counter derivatives and repo transactions should be reported to trade repositories, cleared through central counterparties, and traded on exchanges or trading platforms. They should be subject to minimum through-the-cycle haircuts or margins. Other policies should also be in place, such as deposit insurance to prevent runs and minimum retention requirements for securitization to reduce moral hazard.

Since the financial system is highly integrated across institutions and markets and across jurisdictions, minimum global standards for regulation and supervision must be developed and implemented. To be effective, and thereby prevent regulatory arbitrage and financial fragmentation, these standards need to be comprehensive, coherent, and consistent. The G20 has charged the FSB to lead and coordinate this effort by working with the standard setting bodies (SSBs) and FSB member jurisdictions.

While the FSB and SSBs are conducting peer reviews to promote consistent implementation, the IMF and World Bank also have important roles to play by providing independent assessments of compliance with minimum global standards through their Financial Sector Assessment Program (FSAP). The two approaches are complementary and mutually reinforcing. Technical assistance should be provided to promote financial sector development, as well as the establishment of strong macroeconomic and prudential frameworks.

With respect to the identification and assessment of global financial vulnerabilities, the FSB and IMF can again play complementary roles. The FSB can bring to the table information and expertise from its members who are regulators and supervisors of financial institutions and markets, while the IMF can draw from its extensive surveillance of macrofinancial conditions to identify and assess material imbalances.

It will be important to ensure that the IMF, G20 and FSB (and the related SSBs) each play a complementary role. While some overlap may be unavoidable, the respective roles and responsibilities of each institution should be clearly delineated when possible.

### WHAT CHALLENGES LIE AHEAD?

While the global economy has continued to expand, the recovery has been modest and uneven. To some extent, the slow recovery should not come as a surprise, since the recovery from financial crises can be long and difficult. In this environment, many challenges remain. The lack of adjustment in surplus countries has meant that the burden of adjustment has fallen on deficit countries—and the end result is deficient global demand.[8] While financial system repair has proceeded in the advanced economies, very accommodative monetary policy may be contributing to excessive risk taking in financial markets. In EMEs, there are also concerns. In China and India, the rapid expansion of the shadow banking sector poses risks to both internal and external stability. More generally, there is a risk that if financial reform is inconsistent, financial fragmentation will increase, followed by a reversal of global economic integration and weaker global economic growth.

These challenges reinforce the urgency for major economies to adopt a policy framework that embodies the new holy trinity to ensure the proper functioning of the international monetary system and the achievement of strong, sustainable, and balanced global growth.

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8. Summers notes that deficient global demand is an important contributing factor to the "secular stagnation" of global growth: Lawrence Summers, "Why stagnation may prove to be the new normal," *Financial Times* (December 15, 2013), http://www.ft.com/intl/cms/s/2/87cb15ea-5d1a-11e3-a558-00144feabdc0.html#axzz3F5TQYOJ9 [last accessed November 18, 2014].

The authors would like to thank Andrew Rose and their colleagues at the Bank of Canada for helpful discussions, and Marc Uzan for his encouragement.

## THE UNFINISHED TASK OF BRETTON WOODS: CREATING A GLOBAL RESERVE SYSTEM

JOSEPH E. STIGLITZ[1]

As we celebrate the achievements of Bretton Woods some seventy years ago—the creation of the World Bank and the IMF—we have to be mindful of what might have been done that was not. When Keynes came to Bretton Woods, he had (at least) two ambitions. One was to rid the UK of the status of the reserve currency. He understood how adverse being the reserve currency was for the UK economy. But Keynes was an internationalist: he did not simply want to foist the UK's problems on some other hapless country. He wanted to create a global reserve currency (for reasons that I shall explain shortly). He succeeded in the first objective, but failed in the second, but not for want of trying.

The United States was the central culprit. It was not that the United States did not believe in international institutions: the country was, after all, behind the creation of the United Nations (having perhaps come to realize the costs of not joining the League of Nations). It was to play a central role in the creation of the two new international

1. Much of my work in this area has been done with Bruce Greenwald, to whom I owe a great debt. See Greenwald, B. and J.E. Stiglitz, "A Modest Proposal for International Monetary Reform," in S. Griffith-Jones, J.A. Ocampo, and J.E. Stiglitz (eds), *Time for a Visible Hand: Lessons from the 2008 World Financial Crisis*, Initiative for Policy Dialogue Series (Oxford: Oxford University Press, 2010), pp. 314–344; and Greenwald, B. and J.E. Stiglitz, "Towards a New Global Reserves System," *Journal of Globalization and Development*, 1, 2 (2010). Some of the ideas here are elaborated in greater detail in Stiglitz, J.E., *Making Globalization Work* (New York: WW Norton, 2006). Financial support from INET is gratefully acknowledged.

economic institutions, the IMF and the World Bank. (It did not, however, sign on to what was supposed to be the third pillar of the new international economic order—an international trade organization, which was meant to prevent the kind of protectionism that had seemingly played such a role in the genesis of the Great Depression). But the US Treasury—long captured by the special interests of its own financial markets, and, to this day, still more parochial in many ways than either the White House or the State Department—seemingly saw the UK's weakness as an opportunity for the US dollar to become the new reserve currency. The Secretary of the Treasury, Henry Morgenthau, opposed the creation of a new global reserve currency. He did not seem to understand the disadvantages of being the reserve currency. The advantages of being able to borrow at a low interest rate may have been more apparent than the disadvantages of the resulting appreciation of the currency and weakening of aggregate demand. Perhaps he and the Treasury Department that he headed placed excessive value on the seeming hegemony that being the reserve currency might give to the reserve currency country.

Keynes thus left Bretton Woods with one of the two missions accomplished: UK ceded the mantel of the reserve currency to the US, but he failed to create a new global reserve currency.

There are, of course, three interacting reasons for this failure, which has proven to be so consequential: a failed understanding of the principles that govern international economics; a failure to be able to predict the evolution of the global economy, and what might be needed in response; and a failure of politics. It is the third that played the central role. It is important to understand the reasons for the failure if we are to rectify it: we have had ample opportunity to correct the mistake in the ensuing seventy years and to adapt to the changing global economic environment. Moreover, there have been significant increases in our understandings of the principles of economics. It is the politics that continues to be the impediment. One hopes that if we come to appreciate the consequences of *what we have not done*, there will be greater resolve to finish the unfinished business of Bretton Woods. I will argue here that while there was a compelling case for creating such a global reserve currency in 1944, changes in the global economy since have made doing so even more imperative.

Keynes' overarching concern was the lack of global aggregate demand. It was this that brought on the Great Depression. Many (including Paul Samuelson) assumed that,



with the end of World War II and the enormous source of demand that it provided, the economy would revert to recession. These concerns turned out to be wrong, but for reasons that are just now coming to be well understood.

The early part of the 20th century was a period of enormous economic transformation—a movement from agriculture to manufacturing; the huge increases in agricultural productivity were a double-edged sword. Though it meant that fewer and fewer people were required to work to meet the world's food needs, the surplus labor had to move from agriculture to manufacturing, and from the rural to the urban sector. Markets do not make these transformations well on their own. Incomes of farmers in the United States fell by some 50 to 75 percent in the space of three years, from 1929 to 1932, and this decline in income meant that they couldn't afford to move, and couldn't afford to get the education and training required for the "new economy" of the time. They were trapped, and so was the economy. The war added demand, but it was also a major industrial policy, helping people move and to get the training required. After the War, the GI bill provided a college education for anyone who had fought in the war (which was almost all young males) and wanted it.[2]

There were four other reasons that the pessimism about a return to depression turned out to be unfounded. The first was that whatever the causes of the Great Depression, the debt accumulated by many in America in the years prior exacerbated it, deepening and lengthening the downturn. The deflation associated with the Depression made matters worse, as the effective leverage increased further. By contrast, the high savings rate during the war meant that households left the war with a large legacy of savings. Indeed, the deficit was in their household assets, their durable goods.

The second was that though there were global imbalances, with the US having large surpluses, the Marshall plan helped "recycle" these surpluses to the European countries desperately in need of help. Later, global financial markets would allow developing and emerging countries to borrow large amounts, thereby supporting global aggregate demand.

The third was that the US government itself continued with strong expansionary government policies, under both Truman and Eisenhower. Indeed, Eisenhower, a Republican, supported massive infrastructure, education and technology programs,

2. Delli Gatti, D., M. Gallegati, B. Greenwald, A. Russo and J.E. Stiglitz, "Mobility Constraints, Productivity Trends, and Extended Crises," *Journal of Economic Behavior & Organization*, 83, 3 (2012): 375–393; Delli Gatti, D., M. Gallegati, B. Greenwald, A. Russo and J.E. Stiglitz, "Sectoral Imbalances and Long Run Crises," in F. Allen, M. Aoki, J.-P. Fitoussi, N. Kiyotaki, R. Gordon, and J.E. Stiglitz (eds), *The Global Macro Economy and Finance*, IEA Conference Volume No. 150-III (Houndmills, UK and New York: Palgrave), pp. 61–97.

so much so that even though the country had left the war with a record debt-to-GDP ratio, in most years the government continued to run deficits.[3]

The fourth was that inequality fell precipitously from the heights reached during the roaring 1920s. As a rule, those at the top consume a far smaller fraction of their income than those at the bottom, so that unless something offsetting occurs (like the creation of a housing bubble), a growth of inequality will lead to a reduced aggregate demand.[4] After World War II, the reverse occurred: greater equality led to stronger demand.

Today, we have in some ways returned to the "under-consumption" era of the 1930s. Emerging markets and developing countries that had sustained global aggregate demand learned the heavy lesson of the 1997 crisis: those running large deficits risked a financial crisis in which they would lose their economic independence to the IMF and their creditors. They also learned the advantages of running a surplus: export-led growth proved to be the most effective development strategy ever conceived; lower exchange rates could help sustain these exports in manufacturing, which enabled the emerging markets to reduce the knowledge gap separating them from the advanced countries—a gap even more important than the gap in resources.[5] Countries could get a lower exchange rate by building up reserves.

The fundamental law of trade, though, is that the sum of surpluses must equal the sum of deficits. If deficits are a problem, threatening economic stability, they are like a hot potato: a reduction of a deficit by one country must show up either in an increase in the deficit of another or a reduced surplus. And if the surplus countries actively and successfully managed to maintain their surpluses, then the reduced deficit by one country *will* be manifested in an increase in the deficit of another. As countries realized the risks of deficits, each struggled to make sure that it would be some *other* country that had the deficit. The United States, the reserve currency country, became the deficit country of last resort.

Triffin long ago pointed out the unsustainability of such a course of events:[6] these deficits, year after year, meant that confidence in the reserve currency country

3. U.S. Federal Reserve Bank of St. Louis, "Federal Surplus or Deficit [-] as Percent of Gross Domestic Product" (2014), available at http://research.stlouisfed.org/fred2/series/FYFSGDA188S (last accessed December 30, 2014).
4. See Piketty, T., *Capital in the Twenty-First Century* (Cambridge, MA: The Belknap Press of Harvard University Press, 2014); and Saez, E. and G. Zucman, "Wealth Inequality in the Unites States Since 1913: Evidence from Capitalized Income Tax Data," NBER Working Paper 20625 (2014). The latter estimate that the average saving rate for the wealthiest 1 percent of Americans was 36 percent from 1986 to 2012. In the years before the crisis, savings for the bottom 80 percent of Americans was negative; see Stiglitz, J.E., *Freefall: America, Free Markets, and the Sinking of the World Economy* (New York: WW Norton, 2010).
5. Greenwald, B. and J.E. Stiglitz, *Creating a Learning Society: A New Approach to Growth, Development, and Social Progress* (New York: Columbia University Press, 2014).



diminished.[7] If confidence weakened enough, the country could no longer serve effectively as a reserve currency.

But there is another problem: the demand for reserves by others leads to a higher value to the reserve currency (the dollar), contributing to a trade deficit, weakening aggregate demand. If the reserve currency country is to maintain full employment, this has to be offset somehow. The healthiest way is an investment boom; but if investment outpaces underlying demand, there will eventually be excess capacity, and it will not be sustained. In the case of the US tech bubble of the 1990s, the excess capacity was reached extraordinarily quickly. The US tried a second way—engineering a consumption bubble based on a housing bubble; but for obvious reasons, that too could only be a short-run palliative. The more typical way is to run fiscal deficits, as the US did in the Reagan and Bush years, and in the aftermath of the 2008 crisis. But this strategy exposes the country to a new form of the Triffin Paradox with the same consequences—the eventual erosion of confidence. Alternatively, the country striving not to expose itself to excessive indebtedness cuts back on government spending, and sinks into a recession or an extended malaise—only slightly better for confidence, and worse for global demand.

The consequences of this fundamental problem for global demand have been exacerbated by three forces reminiscent of the pre-World War II era: growing inequality in most countries,[8] with many households, firms, and governments burdened by heavy debt, and the need for structural transformation, indeed two transformations—now not from agricultural to manufacturing, but from manufacturing to the service sector; and a transformation necessitated by massive changes in global comparative advantage. As we noted, markets do not make these transformations smoothly on their own; and in the absence of government assistance, there is a high risk of getting trapped into structural stagnation.

In addition, there are two further factors making matters worse today. We noted that surpluses need not be a problem if the surpluses can be recycled, either through foreign assistance or through financial markets. The scale of the surpluses has

6. Triffin, R. *Gold and the Dollar Crisis: The Future of Convertibility* (New Haven, CT: Yale University Press, 1960).
7. There are but two ways that other countries can accumulate reserves in the reserve currency. The reserve currency country can have a trade deficit or it can make (net) investments abroad. In recent years, reserve accumulations have reflected a huge trade deficit.
8. Piketty (2014), op. cit.; Stiglitz, J.E., *The Price of Inequality: How Today's Divided Society Endangers Our Future* (New York: W.W. Norton, 2012).

become huge. But contrary to Bernanke's assertion of a savings glut,[9] savings do not exceed the investment needs of the global economy, which are huge—retrofitting the global economy to face the challenge of global warming and providing the basic infrastructure required by developing and emerging economies. The problem is that private financial markets have shown themselves not up to the task, either for the process of allocating capital or managing risk.[10] The Bretton Woods institutions themselves have not grown at the scale required, and the new institutions (the BRICS bank or the Asian Investment Fund), even when fully funded, will also be insufficient to fill the gap.

The irony is that these failures in global financial markets have occurred even though there has been a large increase in capital flows over the past seventy years. We are in a world markedly different from that of 1944—or even the early 1970s when the original Bretton Woods system broke down. Then, there was a hope that private markets might be stabilizing. Some might even have hoped that these capital flows could substitute for more and better official coordination among central banks. In the late 1990s and the years preceding the 2008 crisis, a market fundamentalist triumphalism even led the IMF and the US Treasury to advocate stripping away restrictions on capital movements. Even then, some academics pointed out that there was neither theory nor evidence in support of this view.[11] Now there is a broad consensus against such unfettered flows, reflected in recent IMF positions.[12]

These volatile capital flows, rather than sustaining global aggregate demand, may actually undermine it, in several ways. Worried about the consequences, countries have an incentive to build up even more reserves. The large exchange rate fluctuations to which they give rise have asymmetric effects, with those enabled to expand consumption doing so far less than those induced to contract consumption.[13]

9. Bernanke, B., "The global saving glut and the U.S. current account deficit," a speech at the Sandridge Lecture, Virginia Association of Economics, Richmond, Virginia (March 10, 2005).
10. Wolf, M., *The Shifts and the Shocks* (New York: Penguin Press, 2014); Stiglitz (2010), op. cit.
11. Stiglitz, J.E., *Globalization and Its Discontents* (New York: W.W. Norton Company, 2002).
12. See International Monetary Fund, "The Liberalization and Management of Capital Flows: An Institutional View," (2012), available at http://www.imf.org/external/np/pp/eng/2012/111412.pdf (last accessed December 28, 2014), and several studies the IMF has conducted in recent years to support it (http://www.imf.org/external/pubs/ft/survey/so/2011/NEW040511B.htm).
13. Greenwald, B. and J.E. Stiglitz, "Financial Market Imperfections and Business Cycles," *Quarterly Journal of Economics*, 108, 1 (February 1993): 77–114.



Moreover, they make the prospects of moving from a single reserve currency to a multiple reserve currency less propitious. Shifts in confidence about the different currencies can lead to large destabilizing movements in the relative exchange rates among the reserve currency countries.

Changing institutional arrangements, especially in Europe, and ideologies, have compounded the problems. The eurozone has introduced into that region the kind of rigidity associated with the gold standard. The structural problems associated with the design of the eurozone itself have interacted with the region's commitment to austerity to reduce the deficits of the deficit countries, and increase the surplus of the surplus countries, increasing deficits elsewhere in the world, and weakening global aggregate demand.[14] But the austerity ideology has found adherents around the world, even as the IMF and others have shown the adverse economic effects.[15]

The world has once again entered into an era of deficient global aggregate demand. Excessively loose monetary policy and deregulation may have, at various times and places, provided a temporary respite. But now there is a significant risk of having entered into an extended period of malaise.

There is an obvious response: finish the work of Bretton Woods. As I have suggested, what Keynes argued for then is even more important today: a global reserve system. It is doable. Indeed, within the IMF there is an embryonic form of such a system in SDRs (special drawing rights). The International Commission of Experts on Reforms of the International Monetary and Financial System appointed by the President of the United Nations General Assembly in the aftermath of the 2008 crisis which I chaired (2010) urged this, and laid out a number of ways by which it could be done. Numerous countries, including China, Russia, and France, have at various times called

14. Note that since the sum of deficits must equal the sum of surpluses, a reduction in deficits by one country must result in either an increase in deficits of others or a reduction of some countries' surpluses. Stiglitz, J.E., "Crises: Principles and Policies: With an Application to the Eurozone Crisis," in J.E. Stiglitz and D. Heymann (eds), *Life After Debt: The Origins and Resolutions of Debt Crisis* (Houndmills, UK and New York: Palgrave Macmillan, 2014), pp. 43–79; Stiglitz, J.E., "Can the Euro Be Saved? An Analysis of the Future of the Currency Union," *Revista di Politica Economica* (forthcoming).
15. The argument that there could be expansionary contractions (Alesina, A. and S. Ardagna, "Large Changes in Fiscal Policy: Taxes versus Spending," in Jeffrey R. Brown (ed.), *Tax Policy and the Economy*, Vol. 24 (Chicago: University of Chicago Press, 2010), pp. 35–68) was quickly refused by Baker (Baker, D., "The Myth of Expansionary Fiscal Austerity," Center for Economic Policy and Research working paper, October 2010), Jayadev and Konczal (Jayadev, A. and M. Konczal, "The Boom Not the Slump: The Right Time for Austerity," Roosevelt Institute working paper, 2010), and the IMF (International Monetary Fund, "Will It Hurt? Macroeconomic Effects of Fiscal Consolidation," in *World Economic Outlook: Recovery, Risk, and Rebalancing*, Washington, DC: IMF, 2010, pp. 93–124). The argument that countries with debt to GDP ratios that were in excess of 90% would face slower growth (Reinhart, C.M. and K.S. Rogoff, "Growth in a Time of Debt," *American Economic Review: Papers & Proceedings*, 100 (2010); Reinhart, C.M. and K.S. Rogoff, "Growth in a Time of Debt," Working Paper 15639, National Bureau of Economic Research, 2010, available at: http://www.nber.org/papers/w15639, last accessed January 1, 2015) was subsequently critiqued by Herndon, T., M. Ash, and R. Pollin, "Does High Public Debt Consistently Stifle Economic Growth? A Critique of Reinhart and Rogoff," University of Massachusetts Political Economy Research Institute, Working Paper no. 322 (April 15, 2013).

for it. Even those at the highest level of the US administration have realized its virtues, but focusing more on the short-term benefits of the exorbitant privilege that being the reserve currency affords in being able to borrow cheaply, than on the long-term adverse consequences to domestic demand and growth, they ultimately pushed back and have been the major impediment now to the creation of a global reserve system—as they were back in 1944, seventy years ago.

Our report argued, however, that there was still a way forward: a coalition of the willing, agreements among other countries to develop reserve currency arrangements among themselves. We explained how, eventually, pressure would be brought to bear even on the US, even if it mistakenly tries to reap the benefits of the exorbitant privilege.

The current system is inequitable and unstable. And the current system poses a risk for an extended period of underperformance of the overall global economic system. We are paying a high price for our failure to do what should have been done in 1944.

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Columbia University

## FROM BRETTON WOODS TO A NEW ERA OF MULTILATERALISM

BAKHYT SULTANOV

Over the seventy years of its existence, the Bretton Woods system has created the foundation of a modern financial architecture, providing a base for the International Monetary Fund (IMF) and the World Bank, both of which remain at the center of global financial governance.

The Bretton Woods system played a prominent role in the functioning of the global economy over the second half of the 20th century and it was created to ensure stable exchange rates to help growth and reconstruction after the Second World War, and to prevent the return of the "beggar thy neighbor" competitive currency devaluations of the 1930s.

In the last two decades, the international financial architecture has been ineffective in preventing major financial crises, and the dramatic changes and transformation of the global economy and global cooperation in general, which include:

- the bipolar world of the 20th century became unipolar at the beginning of 1990s;
- socialist and communist economies moved to open economies with western capitalist systems;

- the breakthrough of globalization in the financial and banking sectors;
- the Mexican crisis of 1994;
- the Asian financial crisis of 1997 and 1998;
- the Russian ruble crisis of 1998;
- the Western bipolar world since the introduction of the euro as a new reserve currency and the creation of the eurozone in 1999;
- The Argentinean default of 2001;
- cross-border capital flow movements are more uncontrolled;
- the world financial crisis of 2007–09; and
- the European crisis since 2009.

Today's world is not the same as it was twenty years ago; it is not only faced with financial and economic crises, but also with a series of global challenges, including trade, political, social, and ecological risks.

### INTERNATIONAL ECONOMY AND GLOBAL COOPERATION

The international economy is still under considerable distress amid continued uncertainty in addressing the debt crisis in Europe, stagnation in the world economy, a slowdown of rapidly developing economies and BRICS countries, decreasing supply and demand, and comprehensive and vast unemployment, which is one of the major factors hindering economic growth.

In addition, besides social consequences and destabilization, worldwide regional conflicts greatly affect the divergence in prices for raw materials. One of the factors of the current fall in oil prices are the dumping prices at which oil is selling in the Middle East; and the conflict in Ukraine strongly influenced prices for food products, as well as the instability of the dollar, the euro and the Russian ruble.

Despite predicted global economic growth of about 3.4 percent in 2014 (IMF, July 2014), the world economy still cannot cope with the global recession and restore the pre-crisis growth of 2007. There are no effective solutions globally, no keys and influence levers found.

The risk of prolonged global recession is a threat. *This is not a new wave of the crisis, but the continuation of the crisis of 2007–09, which the current world financial architecture, subjected to constant imbalances, poses on a permanent basis.*



We go beyond the usual perception of the world and move toward new economic scenarios. Obviously, the systems and methods that we used yesterday, do not meet the reality and do not work properly today. *The debt model of economic growth is a matter of the past.*

There are not only changes in individual parts of the world economic system, but the system itself is radically changing.

*The capitalism in which we are living today, like previous models, is exposed by time and acquires new socially oriented contours.* This process is indicated by the victory of social democrats in European elections, the growing inequality of the population in both developed and developing countries, as well as awareness of the need for change in the distribution of wealth and the restoration of a sense of social responsibility.

*The most challenging task we face: how to achieve sustainable growth, both now in times of financial and economic distress, and later when our financial and economic system becomes safer.*

Changing the geography of the international economy requires new concepts, definitions, and directions for the assessment of international economic trends. The foundations of the Western order, the Bretton Woods system, are evaluated by time and lose their effectiveness. Managing the transition from the era of Bretton Woods to a new era is an actual challenge of our time. *We need to restore a new form of multilateralism in order to prevent fragmentation and segmentation of the global economy.*

Over the past two decades a massive change in geopolitics has happened. The parade of sovereignties around the world in the late 20th century and the beginning of the 21st century put on the world map new emerging markets: rapidly developing countries increased their influence in the world economy and today are the catalysts of future development.

The world is no longer unipolar with a clear single center; the centers of growth are increasingly spread across a range of hubs.

*However, emerging markets are not included in the economic analysis, the formation of market views, and policies of the international community.*

The IMF's data shows that the growth in emerging markets and developing economies reached 5 percent in 2013 and it is going to be about 5.5 percent in 2014.

Fifty years ago, emerging markets and developing economies accounted for about a quarter of world GDP. Today, it is half, and rising rapidly—very likely to two-thirds within the next decade.

*That is why, with the rapidly changing world where growth shifts to developing countries, the revision of principles and today's global cooperation are essential.*

In the absence of credible global safety nets, financial integration can make crises more frequent and more damaging. It should have clear and transparent access criteria; many countries might choose to retreat partially from financial globalization and self-insure through the accumulation of foreign exchange reserves.

Global coordination and cooperation acquires a completely new meaning. In the 21st century, the role of emerging markets and developing countries, with the leadership of China and other BRICS countries, is increasing significantly.

### THE ROLE OF INTERNATIONAL AND REGIONAL ORGANIZATIONS

The decreasing role of international organizations in the processes of global economic coordination is a part of the changes we are faced with. Regional organizations and trade agreements are playing an increasing role in trade, financial, and economic cooperation.

Further, while maintaining the growth trend of regional cooperation, the role of international organizations will continue to decline.

There is a need for radical reforms of the principles of international organizations but, given current processes, as well as the history of their activities, regional organizations will play an increasingly important role and in future will be able to stand on the same level with international organizations or to push them into the background.

And this is the philosophy of the current global financial and economic processes which seems to rely on each country managing its own economy with regional partners in what it perceives to be its own best interest without giving much attention to global consistency.

How we globally manage the paradox of "the tendency for the world to grow further apart, even as it draws closer together," as Christine Lagarde,[1] Managing Director of the IMF, describes it, will be critical to the success or failure of efforts to boost cooperation.

In this context, the establishments of a BRICS development bank and a contingency reserve arrangement seem to indicate new momentum for change in intergovernmental

1. In "A New Multilateralism for the 21st Century," February 3, 2014, http://www.imf.org/external/np/speeches/2014/020314.htm [last accessed November 21, 2014].



finance and cooperation, and also increasing confidence that China and leading emerging markets can do it on their own. It is only a modest start though.

### INTERNATIONAL CURRENCY SYSTEM

Another great challenge in redesigning of Bretton Woods system is which currency or currencies should retain or acquire a key role in the operation of the international currency system. What will the international monetary system look like in ten years? We are heading toward a multipolar currency world. The US dollar will very likely remain the most important global currency; the euro and one or two Asian currencies (highly likely the renminbi) will play influential roles to support international trade and financial transactions. Many emerging market economies have already been diversifying their foreign reserves toward euro- and renminbi-denominated assets. The euro's role in this multipolar currency order would be further strengthened if the euro area deepens its integration.

### MIDDLE INCOME TRAP

The great issue that we face and can destroy all efforts to build sustainable economic growth is the middle income trap.

Global growth can decrease rapidly if developing countries do not find a way out from the middle income trap and are squeezed between low-wage producers and highly skilled and fast-moving innovators.

Caught between these two groups, many middle income countries are without a viable high-growth strategy. They are faced with new challenges, including social cohesion, a large pool of young people in search of jobs, as well as millions who still live in misery and poverty, particularly in lagging regions.

Many middle income countries tend to make two common mistakes: either they cling too long to past successful policies, or they exit prematurely from the industries that could have served as the basis for their specialization process. *Timing and smooth transition are the two keys to success.*

Avoiding the middle income trap entails identifying strategies to introduce new processes and find new markets to maintain export growth. Ramping up domestic demand is also important—an expanding middle class can use its increasing purchasing power to buy high-quality, innovative products and help drive growth.

Policy makers should promote structural transformation, entrepreneurship, and innovation to begin reaping the benefits of information networks and skilled labor before the gains from cheap labor and knowledge spillovers are exhausted. Rapidly expanding the secondary and then tertiary education system will be critical in producing graduates with the skills that employers require. Highly skilled workers and professionals are an indispensable ingredient of high, valued-added, modern services and manufacturing.

Therefore, in addressing contemporary development challenges we need concrete action and cooperation at all levels between all countries.

The risk is of a world that is more integrated—economically, financially, and technologically—but more fragmented in terms of power, influence, and decision-making. This can lead to more indecision, impasse, insecurity—and it requires new solutions.

Finally, I want to refer to Martin Luther King's words: "We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly."

Pressing challenges require effective and open dialogue which will allow to find the keys and required solutions.

I wish to thank Marc Uzan and the Reinventing Bretton Woods Committee for giving this opportunity to share my vision on the contemporary challenges of the financial and economic system based on the Bretton Woods order, and I am confident that the attempts and analysis of the Reinventing Bretton Woods Committee will help decision makers to find solutions for today's and future challenges of the international financial system.

Bakhyt Sultanov, Minister of Finance,
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# DELEVERAGING WITH A MICRO, MACRO AND GLOBAL APPROACH

GYÖRGY SURÁNYI

In the decades preceding the Great Depression, regrettably few people recognized and admitted how limited the knowledge of economic theory and economic policy practice was with regards to the actual operation of the global and national economies. However, the severe trauma of the Great Depression—which also gave rise to systemic stability risks—rewrote the very foundations of previous theoretical and economic policy approaches. This change is also referred to as the Keynesian revolution. It was J. M. Keynes who pointed out, with increasing emphasis, that it was not possible to either understand the crisis or mitigate its terrible effects if they were approached unilaterally from a microeconomic perspective.

The primary reasons leading to the Depression, and the resulting dramatic plunge in output, the chronic unemployment, deflation, or inflation, the lack of sufficient demand, and the issue of growth or financial equilibrium can only be interpreted in the context of a new, macroeconomic approach.

The new macroeconomic analysis of the Great Depression of 1929–33 confirmed in several respects that what was true on a microeconomic level did not necessarily apply on the macro level.

While for players in the microsphere (a household, for instance) it is obviously reasonable to save, and the thrifty management of resources is an essential requirement at micro level, this does not lead automatically to an equilibrium at macro level or help to avoid crises. If all the players in a national economy—including the state—adjust their balance sheets mechanically, without coordination, it may lead to a lack of demand and/or deep recession.

The classic debate between Keynesians and non-Keynesians has been raging for many decades. At the Bretton Woods Conference and in the three decades that followed it, both theory and practice were dominated by Keynesian thought, often beyond its scope of validity and not without excesses. The collapse of the Bretton Woods system and then *stagflation* paved the way for the monetarist counterrevolution—to the anti-Keynesian turnaround associated with the economic policies of Ronald Reagan and Margaret Thatcher. In practice, however, the previous trend continued, with the increasing involvement of the state in the economy, the widening of budgetary reallocation and the strengthening role of fiscal and monetary policies in smoothing out economic cycles in virtually every developed and emerging economy.

In the euphoria of the Great Moderation, the world was truly shocked by the crisis that erupted in 2007–08, the so-called Great Recession. The shapers of economic policy, but also the academic world and the hundreds of millions afflicted by the crisis, experienced serious trauma or at least a very unpleasant surprise. It seems as though we are back in the era of the Great Depression. The world appears to be caught in a web of the same uncertainties, trying to find the right answers to the recession, just as at the time of the Great Depression. It is, of course, virtually beyond dispute that during the recent crisis it was the Keynesian approach and the drawn lessons of the Great Depression that allowed us to avoid the recurrence of a devastating crisis similar to the one seen in 1929–33. This fact, however, is little reassurance for the millions who have become permanently unemployed or whose jobs are continuously under threat.

The US reached its pre-crisis output levels in 2011, the eurozone still falls short of its pre-recession output, not to mention the worrying developments in employment.



We must ask the question why it is that the US has apparently been able to deal with the Great Recession with smaller overall losses than the countries of the eurozone.

So far, the different performance of the two regions seems to prove that American pragmatism successfully prevails over European orthodoxy. A monetary policy that deploys conventional as well as new, unorthodox measures, the short-term fiscal stimulus, the focus on growth and employment, and the asymmetric and asynchronous adjustment of balance sheets has brought tangible results in the United States.

In contrast, the EU's insistence on symmetric fiscal restrictions that apply uniformly to everyone, the belated, half-hearted and limited monetary easing, the morbid fear of accelerating inflation (when actually being threatened by deflation) and the procrastinated consolidation of the banking system—despite the significant progress achieved in respect of the banking union—undoubtedly limit Europe's recovery.

If we compare European and American crisis management, the difference is striking. US economic policy did not even attempt to restore imbalances simultaneously. It defined a clear sequence and a clear set of priorities in eliminating disequilibria, while subordinating all other goals to returning to a course of sustainable growth and boosting employment.

With slight oversimplification, the precise opposite of this process can be said to have taken place in the EU. The restrictive fiscal and monetary policy mix contributed not only to the slower and more painful external and internal balance sheet adjustment of member countries within the eurozone, but also to keeping the single currency area as a whole in a regional net saver position with an external surplus (i.e. low demand), which is not necessarily desirable in a recession.

When examining the background to the differing approaches to crisis management, it is reasonable to start from a little further away. There is almost complete agreement that excessive internal and external debts had been accumulated in the pre-crisis period. In several countries, the government, household, business, and financial sectors became overly indebted both individually and as a whole, and the equilibrium of saving and investment fell apart.

The countries hardest hit by the crisis—both inside and outside the eurozone—were those where the savings and investment was the most unbalanced at macroeconomic level, i.e. where the external disequilibrium and indebtedness became unsustainable.

While the excessive indebtedness of the public sector may be dangerous in itself, the deteriorating position of the private sector may jeopardize sustainability just as much. In the eurozone—with the exception of Greece—it was primarily the "tipped" balance sheet equilibrium of the private sector rather than simply the government's overspending that undermined external equilibrium. However, when equilibrium was being restored, an in-depth analysis of the causes of the crisis was omitted, and crisis management (perhaps with the sole exception of the Irish program) focused primarily and disproportionately on fiscal adjustment only (just as had—wrongly—the Maastricht Treaty and the Stability and Growth Pact.)

The excessive accumulation of debts and disequilibria (at micro, meso, macro, and global levels)—which, of course, is excessive saving from another perspective—is obviously unsustainable in the long run, and deleveraging is inevitable. At first sight, this approach seems as convincing as it is simple. But is unilaterally microeconomic.

At this point it is worth going back to Keynes and the classic debate. Let's bear in mind the fact that the micro and macroeconomic approaches do not necessarily coincide, especially if the intention to find and restore equilibrium is on a global scale. In the world economy the major economic centers, and the various country groups, regions and integrations, have a relationship similar to that of the micro and macro levels in each national economy. Consequently, the adequate handling of the excessive debts accumulated before and in part during the crisis seems far more complex than a simple debt reduction or deleveraging procedure. This is in part because it involves major sacrifices and conflicts socially and politically, but also because the underlying economic policy logic is far from evident.

The process of deleveraging should to all intents and purposes be interpreted in the framework of the creation of fiat money. Fiat money is money that has no intrinsic value, i.e. credit money. In classical terms, its existence begins and ends by lending and repayment. In other words, the variously defined aggregates of the money supply have underlying credit relationships. In a closed economy, therefore, the broadly defined money supply, i.e. monetary savings, equals the monetary debts accumulated.

If inflationary expectations are steadily anchored around price stability, along the equilibrium path the demand for money (monetary savings) *ex ante* equals the money supply, which means that financial equilibrium can be maintained in this dimension. If we assume an open economy rather than a closed one, in addition to price stability the sustainable balance of external accounts is by far the most important element in preserving the equilibrium. So if there is external and price stability, i.e. the macro-level balance of savings and investment is right, monetary debts and monetary savings will be accumulated in equal amounts.



Therefore within a given national economy reducing debts as a whole—that is, deleveraging—may be justified if the sustainable equilibrium of saving/investment is threatened, and there is excess demand that manifests itself in external disequilibrium and/or an increase in inflation or inflationary expectations. The *ex ante* oversupply/lack of demand, the "tipping" of the external equilibrium and/or price stability can all result from an adverse development in the balance sheet equilibrium of the public and/or private sector. Naturally, a balance sheet adjustment between sectors may also be justified if saving and investment are in equilibrium at macro level.

For micro level players balance sheet adjustment and the bulk accumulation and reduction of debts (leveraging and deleveraging) are typical everyday phenomena. However, as we move from the players of the micro sphere toward bigger units/aggregates the necessity of deleveraging becomes increasingly less evident and there are increasingly strict conditions to meet.

On a global level the *saving/investment ratio is even*, and external balance (sheet) deficits and surpluses also even out by definition. If price stability is not damaged and the natural environment is not harmed irreversibly either, then saving and investment can be around the equilibrium not only *ex post* but also *ex ante*. So if there is no global threat of accelerating inflation, the money supply has increased just as much as the demand for money, the system has created exactly the amount of money it needed. The faster the growth of the world's economies is—with pronouncedly fixed inflationary expectations—the more money, the larger money supply will be necessary.

However, because of the nature of fiat money this also means the accumulation of more and more debt. To quote my late professor, Miklós Riesz (with somewhat stricter conditions: global price stability, sustainable external accounts for regions and countries), the more developed and richer the world/region/country is, the more debt/money supply/financial savings is/are accumulated.

In light of that, deleveraging or reducing the growth rate of debts is only needed at a global level if there is excess demand globally and price stability is threatened at a global level. If this condition is not met, global deleveraging is not simply unjustified but—due to its very nature—it also entails the equivalent, absolute, or relevant destruction of financial savings. There is no global debt reduction without a decrease in savings. It seems, however, that those who push for general deleveraging forget about the other side of the process. Little is heard about excessive financial savings (without which there could be no excessive indebtedness), or that a decrease or partial destruction of (real) savings would assume inflation or some other devastating event (e.g. war).

Before 2007–08 commodity markets (energy, raw materials, food) saw price trends and several countries experienced asset price bubbles that may be identified as global excess demand (overhang). The eruption of the crisis and the subsequent restructuring, however, made the excess money supply, the inflationary pressure, and thus the bubbles disappear almost immediately. In such a situation it does not seem reasonable to prescribe immediate and one-way balance sheet adjustments for the global economy as a whole and, within that, all crisis-stricken countries and regions, and simultaneously for all income holders. If the painful balance sheet adjustments do not take place at the level of, and among, the various regions, countries, and income holders asymmetrically, separately in time, and with global and regional coordination, they will result in a lengthier crisis than that which is inevitable. If deleveraging at a global, regional, country, or income owner level is not accompanied by leveraging, it will bring about—both globally and at the level of smaller units—losses that could have been avoided, failed growth, procrastinated recovery, even higher unemployment, and, of course, serious social and political tensions. In general, using the Keynesian analogy, if countries that could afford to incur additional debts under certain conditions (e.g. reducing their substantial external surpluses by stimulating domestic demand) fail to do so, they will—despite their own intentions—deepen the crisis further and limit their own growth and thus also that of the global economy.

For balance sheet adjustment to be successful and entail the smallest possible loss in a national economy or a region, strict coordination between fiscal, income, and monetary policies is essential, and if the situation allows, so is asymmetrical and asynchronous adjustment among the key income holders. In today's globalized world *very similar requirements* would have to be met: smoothing economic cycles, mitigating the fallout of crises/setbacks, does not simply require global coordination, which in itself demands extreme discretion and efforts from countries that are otherwise competitors and have different interests. *Nevertheless, global balance sheet adjustment and the elimination of unsustainable global disequilibria should also be carried out in cooperation, asymmetrically and* asynchronously*, with continuous external and internal leveraging and deleveraging—this is how losses could be minimized.*



After all, this was also one of the key goals of the Bretton Woods Conference…

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# DESIGNING SAFETY NETS FOR VOLATILE CAPITAL FLOWS

CHALONGPHOB SUSSANGKARN

The extent of financial globalization and volatilities of short-term capital flows mark huge changes from the situation at the beginning of the Bretton Woods era. The international monetary system needs effective safety net mechanisms to maintain financial stability under these volatilities. These safety nets still need to be developed.

Over the past two decades, East Asian emerging market economies have faced many periods of stress or even crisis as a result of volatile short-term capital flows. Large inflows of short-term debt in the first half of the 1990s together with macro policy mismanagement led to an economic bubble, the bursting of the bubble, rapid capital flow reversal, the Asian financial crisis, and painful crisis resolution measures.

Since then, there have been periods of large and rapid short-term capital inflows (mostly portfolio) coming from advanced economies, driven by search for higher yields and plenty of liquidity, whether from high leveraging or quantitative easing policies. There have also been periods of large and rapid capital outflows, such as after the closure Lehman Brothers or at signs of tapering from quantitative easing.

Both the inflows and outflows pose challenges for macroeconomic policy to maintain economic stability. Pressures on emerging markets from volatilities can be particularly large, especially for those with relatively open capital accounts. Moderate flows can lead to large changes in exchange rates and asset prices.

### SELF-PROTECTION FROM VOLATILE FLOWS

The most effective protection from volatile capital flows is self-protection through appropriate macroeconomic policies. There are, however, many constraints. Large and rapid inflows can lead to rapid appreciation of the exchange rate leading to loss of competitiveness for countries that rely heavily on exports (such as many East Asian economies). Exchange rate intervention can ease the appreciation and also increase reserves to insure against capital flow reversal. However, sterilization of exchange rate intervention can have large costs when domestic interest ratesare much higher than foreign rates (particularly US$ rates). Also when the exchange rate appreciates from the inflows, another valuation loss occurs. These can have significant fiscal implications.

Exchange rate appreciation trend attracts even more inflows to speculate on increases in asset prices as well as the exchange rate. Inflows also reduce the effectiveness of using the interest rate as the instrument of monetary policy to cool down the economy as increasing the interest rate will attract even more inflows.

Capital controls measures can also be utilized. Although Thailand did not have good experience with capital controls introduced in December 2006, capital control measures should still be part of the toolkit, but better designed. Better still if there were some global or regional guidelines on appropriate controls, otherwise a country risks downgrades. Capital controls should certainly not be used only as a last resort.

As outflows can also be very rapid and unexpected, as after Lehman Brothers' closure, smoothly managing outflows to maintain stability can also be challenging. Rapidly liquidating sufficient reserves to meet requirements of the outflows may be problematic. Foreign exchange liquidity problems may occur leading to rapid currency depreciation, loss of confidence, and impacts on the real economy.

So in addition to self-protection, additional safety nets can be very helpful.



### BILATERAL SAFETY NETS

During the severe global US$ liquidity shortages after the closure of Lehman Brothers, bilateral safety nets helped to stabilize foreign exchange markets. South Korea was affected quite severely and Indonesia was also affected, though less so. The Chiang Mai Initiative (CMI), a series of bilateral swaps among the five ASEAN founding member countries and Japan, China, and South Korea, the Plus 3 countries, was an option but played no role, presumably because of the IMF link and the IMF stigma (the IMF unlinked portion was only 20% at that time). To ease the US$ liquidity shortages, Korea got a swap with the US Federal Reserve of US$30 billion. This, together with a turnaround in the current account, helped to reverse currency depreciation.

Indonesia also requested a swap with the Fed but was refused. Instead Indonesia got a swap with China and expanded the swap with Japan under the CMI so the portion unlinked to the IMF would be larger (again emphasizing avoidance of the IMF link). Possibly because the bilateral swaps seemed to be effective during the global financial crisis, countries have been moving to do more bilateral swaps with each other as part of their defensive mechanism against possible foreign exchange liquidity shortages.

As an example, in 2011 Korea expanded its US$13 billion bilateral swap with Japan under the CMI to a total of about US$70 billion; a $30 billion won–yen swap, a $30 billion won–US$ swap and a $10 billion swap under the CMI. Korea also has a 360 billion yuan (about $57 billion) swap with China, which may possibly be convertible to US$ in the future.

Indonesia now has a US$22.76 billion bilateral swap agreement with Japan, a 100 billion yuan (about $16 billion) rupiah–yuan swap with China, and a US$10 billion equivalent won–rupiah swap with the Republic of Korea. Philippines also recently doubled its swap with Japan from the CMI level to US$12 billion.

However, these bilateral swaps are inevitably political as demonstrated by the reduction of the swap between Japan and Korea back to US$13 billion (CMI level) following territorial disputes between the two countries. It is also very unlikely that the Philippines can or wants to increase its swap with China given current political tensions. Bilateral swaps should, therefore, not be seen as the best approach to provide safety nets for volatile capital flows.

### IMF (GLOBAL) LIQUIDITY SAFETY NETS

At the global level, the IMF has been developing new liquidity support facilities since the global financial crisis. Countries with very strong fundamentals as judged by the IMF may try to qualify for the Flexible Credit Line (FCL), while those with strong fundamentals but with some policy vulnerabilities may qualify for the Precautionary and Liquidity Line (PLL), which will have some *ex post* conditionality.

So far, only Poland, Mexico, and Colombia have applied and qualified for the FCL, though none have drawn on it. Only Morocco and the Republic of Macedonia have applied and qualified for PLL. The very small demand for what are meant to be global facilities is clearly a major problem.

In a January 2014 review of the FCL, PLL and another small and unused facility, the Rapid Financing Instrument (RFI), IMF staff admitted that IMF stigma is still a major issue for many emerging market economies, especially in East Asia and Latin America. The lack of demand for these facilities "to a large degree, … reflects the degree of political stigma related to Fund engagement that prevents some members from seeking preemptive Fund financial support."[1]

Also, "… some EMs—feeling vulnerable to heightened capital flow volatility but unwilling to request Fund arrangements—are seeking to expand regional financing arrangements (RFAs) and networks of bilateral swap arrangements (BSAs)."[2]

In East Asia, IMF stigma is easy to understand. East Asian economies that went through IMF conditionality during the Asian financial crisis are unlikely to risk a link to IMF programs unless absolutely unavoidable. There is also the risk that countries may apply but not qualify for FCL or PLL, which will be a severe loss of face and have market implications, so countries are likely to avoid taking the IMF exam. A rethink of how to design the IMF (global) facilities is necessary. Criteria for access to these facilities should be: 1) objective; 2) transparent; and 3) automatic.

Instead of having countries applying to and then being examined by the IMF and its Board, in which some discretions and politics are unavoidable, it would be better to establish clear objectively measurable criteria, which are publicly available, for access to various levels and lengths of liquidity support. Countries would qualify automatically, and would know that they qualify, for these liquidity supports based on these criteria without having to apply.

1. IMF, "Review of Flexible Credit Line, the Precautionary and Liquidity Line, and the Rapid Financing Instrument," Policy Paper (January 27, 2014).
2. Ibid.



The qualification criteria should vary depending on the amount of liquidity support needed and the maturity of the support, and dependent mostly on the likelihood of repayment. For example, the ability of any country to draw upon such an IMF liquidity facility for an amount of say 1% of its current foreign reserves for a period of three months should be basically automatic, unless data show huge short-term debt and current account deficits and a high probability of large capital outflows that will run down almost all of the reserves in a short period of time.

For larger amounts and longer maturities (there could be a number of levels for these), qualifying criteria would gradually become more stringent, but again these need to be transparent and automatic. Of course, as many stakeholders should be consulted in developing these criteria as possible and the criteria can be fine-tuned over time.

As the system is objective, transparent, and automatic, a country will know exactly what liquidity supports from the IMF are available to it at any point in time. The system will also be global, automatically covering all member countries of the IMF.

Basically, the liquidity facilities should simply be additional tools that countries can, if they wish and at a cost, use as part of their normal foreign exchange liquidity management strategies in addition to foreign exchange intervention and sterilization, liquidation of some of its foreign exchange assets, or other aspects of its monetary policy.

### REGIONAL SAFETY NETS

At the regional level in East Asia is the Chiang Mai Initiative Multilateralization (CMIM), which now totals US$240 billion of self-managed reserve pooling. No real money is paid into a central pool, but contributions will be required (based on contribution percentages) if a swap program with a member is invoked. Real money is also paid to fund the ASEAN+3 Macroeconomic Research Office (AMRO), which carries out surveillance on the ASEAN+3 region and each individual economy (plus Hong Kong) to support the CMIM mechanism.

The CMIM is currently linked to the IMF based on the percentage of a country's borrowing quota that is needed: 30% of the quota is unlinked. The maturity of the swap is one year for the IMF linked portion with two possible renewals, and six months with three renewals for the IMF unlinked portion. This is to be regarded as a crisis resolution facility to be called CMIM Stability Facility (CMIM-SF).

As the CMIM (and the CMI before it) has never been used, it is not totally clear how the link to the IMF will be operationalized. For example, if the IMF linked portion is used together with additional money from the IMF, how will a renewal decision be made, which part has seniority, and how will surveillance be done?

There is also going to be a crisis prevention facility, called the CMIM Precautionary Line (CMIM-PL), again with a maturity of six months for the IMF unlinked portion and one year for the IMF linked portion, with a maximum duration of two years for both cases. Detailed qualification criteria for the CMIM-PL, which seems to mirror those of the IMF's PLL, remain to be worked out.

Developing the CMIM-PL to be an effective crisis prevention facility and provide value-added to the global mechanism should be given high priority. As in the discussion of the IMF facilities, qualification criteria for CMIM-PL should be objective, transparent and automatic. It should also provide value-added to current IMF facilities (and any future facilities that may emerge).

In principle, regional facilities should have easier access criteria than global facilities. This is because contagions within the region (particularly for East Asia) tend to be larger than contagions from outside the region, so regional members should be willing to take more risks (in terms of default risks) from providing liquidity support to regional members. Also, the sense of ownership for the regional facility from regional members tends to be much stronger than their sense of ownership of the global facility, so the sense of obligation to avoid default in repayment should be very high.

On this, one can look at the experience of another regional fund that has been operating for almost 35 years. The Latin American Reserve Fund, or Fondo Latinoamericano de Reservas (FLAR), started in 1978. It has seven member countries: Bolivia, Colombia, Costa Rica, Ecuador, Peru, Uruguay and Venezuela. The size is relatively small, with paid in capital of about US$2.3 billion (but this is real money compared to the self-managed reserve pooling of CMIM).

FLAR has no operational link to the IMF. Member countries frequently borrow from it, totaling about US$11 billion throughout its history. There is no conditionality, but no country has ever defaulted on its loans from FLAR, even in cases where the country has to suspend or default on its public external debt service. This shows that members are given the benefit of the doubt, and the importance members attach to ownership of the Fund.



CMIM can draw from this experience. When members request drawing from the CMIM-PL (IMF unlinked part), the approval should be almost automatic. The only exceptions are when: i) it is clear that the member is or will shortly be insolvent in terms of foreign currencies; and ii) the likelihood of the member being able to repay the swap amount (with interest) within a reasonable period of time is very low. To cover such cases, objective and transparent criteria can be developed to limit the amount of drawing that a country can access automatically.

However, it should be noted that even when Thailand became highly insolvent in mid-1997, with remaining net foreign reserves of only about US$2.8 billion compared to short-term foreign debt totaling about US$40 billion, the country was able to quickly accumulate foreign reserves through currency depreciation so that within two years, no further drawing was needed from the IMF, and full repayment was made in 2003. Therefore, CMIM-PL should lean toward giving members the benefit of the doubt.

The amount of drawing available to members without linking to the IMF needs to be increased as sufficient size and quick disbursement are important to generate market credibility. For drawing of relatively short maturities (say six or nine months) the IMF link should be removed. If problems persist after a specified period, the likelihood that the problem is not a temporary one, but one of solvency, becomes much higher, with need for fundamental changes in policy, and a crisis resolution mechanism is called for. In such a case, the link to the IMF can be invoked.[3]

So the CMIM crisis prevention facility (temporary liquidity support) will be similar to FLAR, with no link to the IMF, but crisis resolution will be carried out with the IMF, and so will be more like what has been happening in Europe over the past few years.

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3. For detailed discussions of the CMIM, see Chalongphob Sussangkarn, "Chiang Mai Initiative Multilateralization: Origin, Development, and Outlook," *Asian Economic Policy Review*, 6, 2 (2011): 203–20.

# SOME NEW QUESTIONS ON THE INTERNATIONAL MONETARY SYSTEM EVOLUTION

JEAN-CLAUDE TRICHET

The expression "international monetary system" (IMS) is often used today in its broad sense, meaning not only the arrangement(s) concerning exchange rates relationships but more generally the "international monetary and financial system" or the "international financial architecture." In terms of official commitments, the IMS, in the broad sense, comprehends four major elements: exchange arrangements and exchange rates; payments and transfers relating to current international transactions; capital movements; and exchange reserves. The design of various official arrangements is inspired by the objective of facilitating the exchange of goods, services, and capital among countries.

Let us concentrate on the recent evolution of the IMS after the dismantling of the Bretton Woods system, at the beginning of the 1970s. Since then, we have run a system of floating exchange rates and free capital flows in the major advanced economies issuing free floating convertible currencies.

The evolution of the IMS since the dismantling of the Bretton Woods system continued to be characterized by the search for the optimum system that could provide stability to the system, together with a high and stable level of real growth in each economy and in the global economy as a whole. After a difficult period of high level of inflation and disappointing level of growth, the international community reached a point where growth was satisfactory and inflation contained, starting in the mid-1980s.

Two opposing views can be mentioned as regards this period of "Great Moderation" from the mid-1980s to 2007. The prevailing view during these twenty years was that the global economy had reached an optimum state, simultaneously running a high level of real economy growth and a low level of inflation. In both cases, these satisfactory results were accompanied by a low level of volatility.

Another view, which became progressively dominant after the start of the "global advanced economies crisis," in 2007–2008, underlines the repeated financial crisis which continued to mark that period despite the so-called "Great Moderation." The legacies of the Latin America crisis of the 1980s, the default of Soviet Union in 1991, the Mexican crisis of 1994, the Asian crisis starting in 1997, the Russian crisis in 1998, and the dot.com bubble explosion in 2000 were part of several financial, banking, and sovereign crises characterizing that period long before the subprime financial crisis, the bankruptcy of Lehman Brothers, and the global advanced economies financial crisis.

Both views reflect part of the reality as regards the economic and financial situation in the period concerned. But what we know now is that we ignored in real time, during all that period, two important truths. First, the "Great Moderation" was paradoxically accompanied by a considerable accumulation of endogenous financial and economic risks that remained largely ignored. This systemic fragility was abruptly and dramatically revealed in mid-September 2008. And, second, this weakness was mainly concentrated in the advanced economies financial sector. This came as a major surprise in the eyes of many, at a time when the international community was wrongly convinced that the advanced economies were shielded from such dramatic systemic crisis.

More precisely, and without pretending being exhaustive, I would propose three main reasons to explain the gravity of the financial crisis of the advanced economies.

*The first reason* is a generalized excess of leverage, private and public, characterizing the advanced economies. This phenomenon was almost totally neglected by the international community over many years before the crisis, as the financial instability hypothesis of Hyman Minsky and the debt deflation analysis of Irving Fisher were forgotten. This excess of leverage signals a grave deficiency of the IMS, in the broad sense, which did not comprehend effective mechanisms to signal and prevent highly abnormal levels of outstanding debt.



*A second reason* is the generalization of a sentiment of excessive tranquility and confidence, both in the public and the private sector already mentioned as part of the "Great Moderation" interpretation. The low volatility of both output and inflation—in a context of steady growth and low inflation—was considered a solid, long lasting phenomenon, not requiring traditional more prudent and cautious policies. The governance of many private financial institutions was exceptionally loose and the risk management culture dramatically defective. This relative ignorance of longer-term economic and financial risks was largely shared in the public sector, including in central banking, even when the build-up of potential deflationary and inflationary risks (due respectively to private and public sector excessive indebtedness) was accentuated. This sentiment of confidence was reinforced by the large consensus of the international community on the "efficient markets hypothesis." The belief that the financial system could never be far away from a Pareto-optimal single equilibrium—and that the possibility of multiple equilibria should be neglected—was also generalized. This explains why many had the sentiment, after the burst of the financial crisis, that "in the face of the crisis, we felt abandoned by our conventional economic tools." This second reason reinforced the IMS deficiency associated with the first reason mentioned.

*And the third reason* is the impact of advances in technology, in particular information technology. In the domain of financial instruments, technology triggered a considerable increase of sophistication, fostered the setting up of new derivatives markets of all kinds, and contributed to the emergence of new instruments and markets that were complex, obscure, and extremely difficult to decipher. Even more important was the fact that the advances in information technology had increased in an extraordinary manner the interconnectedness between all financial and non-financial institutions, markets, and economies at national and international levels. This unseen level of interconnectedness had given rise to new untested properties of global finance. New dimensions of systemic risks emerging from the very high level of interconnectedness were abruptly revealed in 2008. This third reason suggests that it is essential that the IMS, in the broad sense, be permanently adapted to the new "emerging properties" of global finance, arising from the continuous and unstoppable advances of new IT. Benign neglect in this respect could be catastrophic.

In any case, the crisis has paved the way for a welcome multidimensional transformation of the IMS, in the broadest sense of the concept. This transformation is only beginning. It has, in my view, to be firmly pursued by the international community as a priority.

The main provisional lessons drawn from the crisis can be summed up along the following lines:

*First*, the informal governance of the IMS has been transferred from the G7/G8 and from the G10, namely from the advanced economies alone, to the G20, namely to all systemic economies of the world, whether emerging or advanced. This represents a profound structural change in the global economic and financial architecture. Naturally, this change in informal governance must be accompanied by equivalent changes in the formal governance of international financial institutions, in particular the IMF and the World Bank. It is regrettable that these changes are so laborious to deliver. But in any case, the emergence of the G20 as the prime grouping is not only a powerful symbolic statement but a major structural change.

This decision of the international community is an important start. It remains up to member countries to demonstrate that, together with the international financial institutions, the G20 can make a difference. The G20 should be able not only to firmly lead the global reform of financial supervision but also to considerably improve the coordination of economic macro-policies to ensure stable growth, job creation, and stability at a global level.

*Second*, precisely under the auspices of the G20, the necessity to considerably reinforce financial microprudentials in a closely coordinated way at the global level is an absolute priority to consolidate the IMS, in the broadest sense. From that standpoint, a lot has been done since the crisis erupted in 2008. Banking regulations and supervision have been significantly improved at national, continental, and global levels, including the new minimum standard for "total loss absorbing capacity," which has recently been issued for public consultation. But a lot of hard work remains to be done as regards the OTC derivatives market reforms, in particular to promote trading on exchanges or electronic trading platforms.



A lot remains to be done as regards shadow banking, the oversight and regulation of which should be strengthened.

It is also essential to avoid the fragmentation of the international financial system. Preserving an open level playing field, preventing regulatory arbitrage and avoiding segmentation or renationalization of the global financial system is of the essence. In this respect too, the G20 must be a good guardian of an open stable IMS.

*Third*, vigilance must continue to be exerted as regards the prevention of systemic risks. To the extent that a number of these risks are closely associated with continuous advances in science and IT, the international community should not be surprised to see new systemic threats emerging. One of the major lessons drawn from the recent crisis is the gravity and amplitude of systemic risks, including endogenous systemic risks embedded in the financial sector itself. All public institutions that have responsibilities at national, continental, or global levels should be aware of these systemic risks and of the necessity to apply specific "macroprudentials" to complement the financial "microprudentials."

*Fourth*, last but not least, I think that one remarkable lesson drawn from the crisis is a "rapprochement" in the domain of central banking between views that were previously opposing. I have called this phenomenon "conceptual convergence." It is, in my view, a potential important contribution to a better functioning of the IMS in the medium and long run. "Conceptual convergence" is a multidimensional change. Stimulated in the time of the crisis, it manifested itself in a set of new consensus in the domains of ability of central banks to exert banking surveillance, of their ability to be involved in macroprudentials, and also of communication by central banks to the general public. Practically all central banks of the advanced economies have now very similar views in these important areas, as well as in a significant number of other fields including the necessity of embarking on "unconventional monetary policy" and adopting "forward guidance" in exceptional circumstances.

This is obviously remarkable. But even more remarkable, in the perspective of the evolution of the IMS, is the convergence on the same "definition of price stability" for the US Fed and the ECB, or the same inflation "objective" for the Bank of Japan (BOJ) and the Bank of England (BOE). The four central banks of the large advanced economies that issue all the currencies components of the weighted basket of SDRs have the same reference number for their medium-term inflation.

As already mentioned, this is a relatively recent phenomenon: the ECB and the BOE were the first to mention 2% or "close to 2%." The Fed mentioned 2% in January 2012 and the BOJ on April 4, 2013. Among the four, some are theoretically remaining or becoming inflation targeters, even if the introduction of medium considerations has considerably transformed the BOE's initial concept of "pure inflation targeting." Others are explicitly or implicitly mentioning that they do not have an inflation target but a "definition of price stability" (the ECB and, to some extent, the Fed). The crisis has driven central banks to pay considerable attention to growth and job creation, and to financial stability, which for some of them, such as the Fed and the BOJ, is a statutory or de facto "dual mandate." At the same time, in my understanding, all consider medium-/long-term price stability as one of the necessary conditions for sustainable growth and financial stability.

This remarkable convergence should not be underestimated. Particularly important is the fact that all central banks concerned have stressed the importance of a solid anchoring of inflation expectations over the medium and long run. We have now, thanks to this convergence, a global nominal anchor for the first time since the dismantling of the Bretton Woods system. If the major central banks are to be trusted in their capacity to deliver in the medium and long term the same 2% inflation, this would entail a number of consequences for the IMS in the narrow sense, namely the monetary core of the system.

### REFLECTION

In this perspective I would call, in conclusion, academia and practitioners to reflect, in particular, on the five following questions.

*On the SDR*

Could we expect that the SDR, representing a set of core currencies having the same definition of price stability, becomes a monetary instrument significantly more credible in the medium and long term, particularly in progressively becoming a convincing better store of value?

The traditional analysis on the enlargement of the composition of the SDR basket stresses the importance of the potential new currency, the renminbi, free floating and full convertibility before joining. Is it likely that the definition of price stability associated with the candidate new currency would also be an issue? This would not necessarily be a very difficult new hurdle… (Chinese inflation: 2.7% in 2012; 2.6% in 2013; 1.5% in December 2014.)



*On the relationship between core currencies*

As regards the recent past, could we explain the absence of crisis in the exchange markets of core currencies (including the euro and dollar), when all other financial markets were in the gravest crisis since World War II, with the multidimensional conceptual convergence between central banks (including their same definition of price stability)?

As regards the present, could we have a window of opportunity to embark on some kind of stabilization between core convertible currencies? The fact that present CPI inflation is below 2% in all four economies issuing SDR basket currencies creates a new situation.

As regards the future, could the present core currencies be likely to see the volatility of their exchange rates significantly diminish in the longer run, taking into account the new intended parallelism of their medium- to long-term domestic purchasing power?

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# THE PRESENT STATE OF THE INTERNATIONAL MONETARY SYSTEM

TATIANA VALOVAYA

The Bretton Woods monetary system celebrates its 70th anniversary going through the deepest crisis in recent times. Indeed, the financial and economic crisis, which we are experiencing today, has exposed serious flaws in the existing international monetary system. It is evident that substantial structural reform is required in order to put the global economic situation back in balance.

The world economic landscape at the end of the Second World War, when the foundations of the Bretton Woods monetary system were laid, was completely different from what it is today. In 1944, there were sixty-seven sovereign states on the world political map. Forty-four of those participated in the Bretton Woods Conference (compare that to 188 member states the IMF now has), while some, most notably the USSR, later abstained from participation in the Bretton Woods institutions. Gold was still a universally recognized store of value and the British pound played an important, albeit diminishing, role as an international currency and a liquid representation of gold, while the US dollar's influence was on the rise. At that time, the fixed exchange rates system seemed set in stone—or indeed, set in gold, for that matter. The combined share of the United States and the United Kingdom in world exports amounted to 33% in the late 1940s (while by the early 1970s it fell to 17%). Based on the gold–dollar convertibility, the Bretton Woods system played a positive role in the re-establishment of international economic and trade relations, guaranteeing stability, which was so badly needed in the post-war period. However, consequential economic development in European countries and Japan, and their accumulation of dollar reserves (in a context where there were no alternatives to the dollar as a monetary asset while the supply of gold was too unstable and insufficient) made the dollar–gold system unviable in the long term.

The problems and flaws of the Bretton Woods system of fixed exchange rates became fully apparent in the early 1970s, but the first tentative steps toward adjusting the precarious state of affairs had already been taken in the mid-1960s. That was when the creation of a new international reserve asset was proposed under the name of "Special Drawing Rights" (SDRs). However, it was quickly seen that the creation of SDRs as such was a merely cosmetic measure, which could not ensure the stability of international monetary relations.

The abandonment of dollar convertibility into gold in 1971 marked the collapse of the fixed exchange rate system. The years of negotiation on reform of the international monetary system that ensued led to the signing in 1976 of the Jamaica Agreement, which remains the factual basis for the global monetary order to this day.

What the world got, instead of a full reform of the Bretton Woods system, was an adjusted and degraded version of that system. The US dollar—no longer backed by gold—continued to play the role of *de facto* international currency, although its role was not fixed *de jure* by any international agreement. What we have as a result is a pure dollar standard in the background of ever growing balance of payments deficit in the United States, the exponential increase of instability in the international monetary system, growing imbalances in the global economy, numerous local financial crises, and the current global crisis on top of that.

Indeed the world is very different from what it was a few decades ago. Significant shifts in the balance of economic power in the world compared with the post-war period, when the dominant position of the dollar was based on economic facts, have included the emergence of such economic giants as united Europe, Japan and, somewhat later, the emergence of new economic growth centers, particularly in the Asia-Pacific region and Latin America.



The main outcome of recent developments in the global economy is the newfound economic dynamism of the emerging economies. According to UNCTAD, the share of the developed countries in global GDP fell from 79% in 1990 to about 60% in 2012, while the respective figure for developing countries more than doubled in the same period from 17% to 36%.

The overall share of emerging market currencies increased from 10.6% in 2001 to 15.7% in 2013, including an increase from 1.9% to 7.0% for the BRICS currencies. At the same time, the share of BRICS currencies in the total volume of emerging market currencies traded on the world currency market has increased from 18% to 45%.

Ongoing changes in the structure of the world economy are reflected in the decision of leaders of the BRICS countries to establish a development bank and a shared pool of foreign exchange reserves. In the present situation, this is a pragmatic step, which should be viewed as an additional insurance mechanism for regulating global finances and global sustainable development.

Greater use of regional and national currencies is a logical continuation of polycentric and regionalist trends in the world economy. There are more than 100 regional trade and economic organizations functioning in the world today, which either use regional currencies or are developing projects for the introduction of such currencies (including international currency units).

These new regional currencies can serve as "building blocks" for a new world monetary system, which will replace the dollar standard. The use of regional currencies, based in the world's fastest growing regional markets (or national currencies of countries that have systemic importance for the global economy), as international reserve assets is bound to increase. In this sense, regional economic integration meets the future development challenges of the global monetary system, providing a more diversified and therefore more stable basis for that system. It is very important to both support objective tendencies toward regionalization and at the same time to strengthen strong horizontal ties between the various regional blocs in the world economy. This will certainly enhance the stability of the global system and make it better able to withstand crises of all kinds.

The euro is a good example of the creation of a single currency based on deeply developed regional economic integration and I have no doubt that the European experience will be used as a model for the creation of other regional currencies in the future. However, existing and future regional organizations that find it expedient to establish their own currency will have to take account of the mistakes and miscalculations that occurred in the case of the euro.

Specifically, the creation of a single European currency failed to address banking supervision and coordination of fiscal policy in the euro area. Candidate countries for admission to the euro zone have to be much more disciplined in their fiscal policy. The current financial crisis has served as a test, exposing the flaws of the EU monetary system. A single currency is not merely a single central bank: it is primarily a fully functional single market and coordinated fiscal policy, which requires, at the very least, coordination between national governments in the monetary union and an efficient and understandable mechanism for responding to any crises within the monetary union. In this regard, as the Minister for Macroeconomics of the Eurasian Economic Commission, I am pleased to note that we in the Eurasian Economic Union are building on and developing the European experience, giving priority to economic expediency and deep (i.e. carefully planned and gradual) economic integration. The establishment of a monetary union is not on the agenda in the near future; our current priority is work to create a fully functioning single market.

Indeed, the most obvious lesson from the European experience is that a single market is a necessary but not a sufficient precondition for a single currency. At a minimum, there has to be a single fiscal and macroeconomic policy as well.

For similar reasons, a global currency is a utopian dream (at least today), because the necessary conditions for a truly global single currency—a genuinely free global market and universally shared principles of political governance—are not in place. The ease with which gold was used as universal money in the past is telling: gold served as a measure of value at a time when the world's political structure was based on the relatively simple and understandable principles of feudalism and early capitalism. What we today call globalization is in fact the aggregate of highly interlinked but still diverse and divided national and regional markets. The world is many decades away from a truly global single currency, and current objective trends favor the formation of several strong regional currencies, underpinned by large and well-developed markets for goods and services, and for human and financial capital.



Meanwhile, the International Monetary Fund is an organization, whose operating principles were laid down by the Bretton Woods agreements, based on the international economic situation that existed at that time. As such, the IMF needs to rethink its role in the light of recent trends in the world economy. This process has already begun, and we can only welcome the review of IMF quotas, aimed at increasing the shares of developing countries. This is a necessary and overdue decision, and has the support of G20 leaders.

SDRs, which, as already noted, appeared in the 1960s and failed to live up to expectations, remain a tool that the IMF can use to influence international monetary relations and they still have a certain stabilizing potential. SDRs are certainly not suited to play the role of a global currency in the foreseeable future—not merely because they have their own substantial flaws but also because, as I have already said, no truly global currency can emerge unless necessary conditions are met. But SDRs can play the role of an aggregating mechanism for the totality of strong regional currencies, for the calculation of their value in respect of each other, and as a viable alternative reserve asset. Therefore, revision of the SDR basket, though perhaps not required in the short term, will be imperative in the future, if current trends in the global economy are maintained. Inclusion of the single currencies of several large and dynamic regional economic blocs in the updated SDR basket is probably the nearest feasible approach in the medium and long term to the utopian ideal of a global currency.

To conclude, let me emphasize that reform of the international monetary system is an extremely complex task requiring coordination of the interests of numerous, diverse, and sometimes conflicting participants in international economic relations. Hence, there will be incompleteness in decision-making and inefficiency in implementing decisions. Nevertheless, I believe that evolutionary development of the global monetary system to a qualitatively new and higher level, at which it can respond to the challenges of global economic reality in the 21st century, is an achievable task, provided that the necessary goodwill is in place.

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# GLOBAL IMBALANCES AND MULTILATERAL COORDINATION

JULIO VELARDE

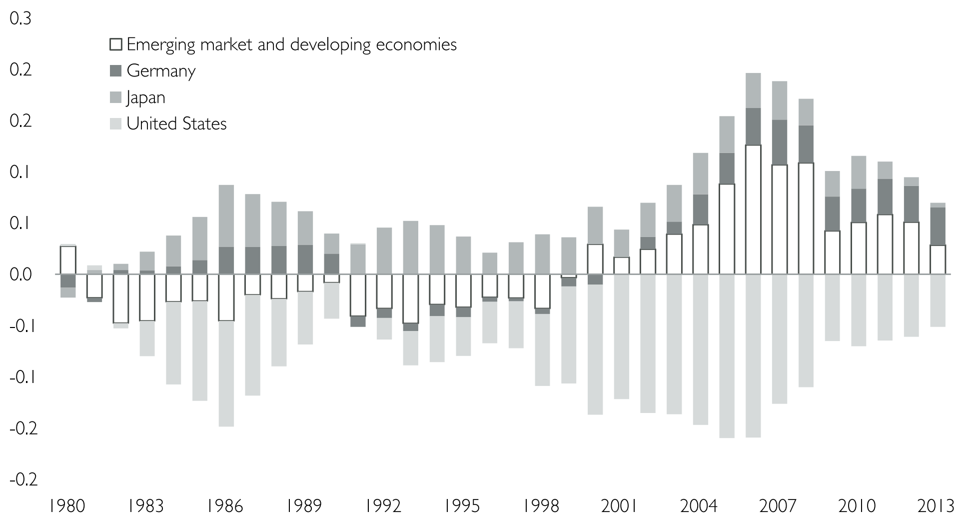
Seventy years after the signing of the Bretton Woods Agreement and forty years after its collapse, many problems persist in the world economy. In particular, global imbalances are a recurring concern. The recent financial crisis has resulted in only a partial—and largely temporary—correction of such imbalances, and—as in the past—there is an emerging consensus on the need for global policy coordination to prevent abrupt corrections in international financial markets. Such coordination must involve an important participation of emerging market economies (EMEs), in light of their increasing importance in the global economy and their role as the world's main reserve holders. However, coordination at the global level is hampered by low EME participation and voting power in the main multilateral agencies and the lack of incentives for EMEs to subordinate their individual interests.

## EMES AND GLOBAL IMBALANCES

During the past century, global imbalances involved mainly the world's developed economies. In the 1950s and 1960s, the considerable US current account deficit had its counterpart in trade surpluses in Germany and Japan (then considered "peripheral"). After the fall of the Bretton Woods system, the latter countries allowed an appreciation of the currencies of around 50 percent in the framework of the Plaza Accord (1986). Throughout these episodes, the EME bloc was on the deficit side of the equation, even though its weight had little significance.

Since the last decade, the share of EMEs in global imbalances has increased significantly, in line with their higher growth and, in many cases, their strong export bias. In recent years, EME surpluses have actually been higher than Germany's and Japan's. An outstanding feature of that period was China's export strategy based on strong currency undervaluation, which depressed long-term international rates and aggravated global imbalances.[1] In parallel, Latin American countries left behind the large deficits of the 1980s and achieved a neutral position—and even surpluses—in the run-up to the international financial crisis.

FIGURE 1: CURRENT ACCOUNT BALANCE OF SELECTED COUNTRIES (% OF GLOBAL GDP)




*Source:* IMF "World Economic Outlook Database" (April 2014).

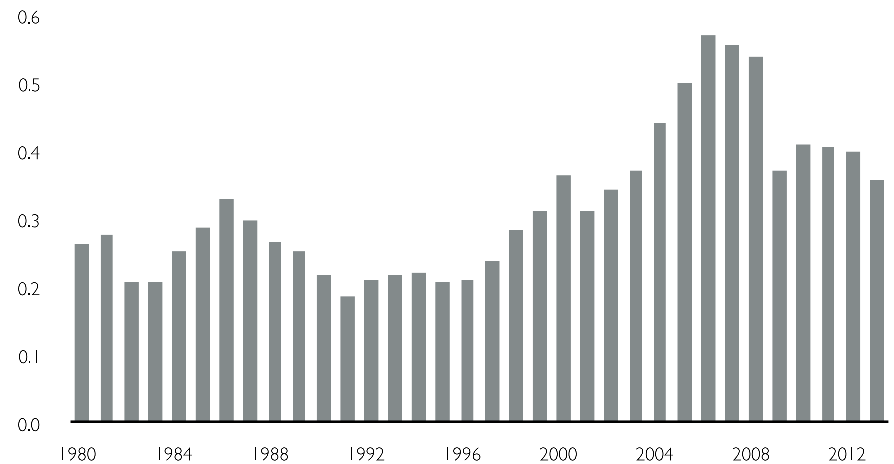
1. Michael Dooley, David Folkerts-Landau, and Peter Garber, "The Revived Bretton Woods System's First Decade," Deutsche Bank Research (2014).



The case of China stands out among EMEs. Between 2000 and 2014, China's cumulative current account surpluses reached US$2.3 trillion, slightly higher than Germany's over the same period. China's exchange rate regime resulted in a considerable international reserve build-up (currently US$4 trillion). This increase in reserves has taken place even in periods (like the first quarter of 2014) when the renminbi depreciated slightly relative to the dollar. During the same period, Latin America's reserves soared from US$100 billion to US$700 billion.

Global imbalances have decreased significantly after the international financial crisis. Figure 2 shows that the reduction has been sustained, down to 50 percent of the 2006 peak. The correction was due mainly to declining current account surpluses in China—mainly associated with the appreciation of the renminbi (5 percent on average in 2006–13 according to the IMF),[2] weak global demand, and a deterioration of the terms of trade and investment)—and Japan; and a reduction in the US current account deficit. Additionally, there has been a correction in other currencies that used to be strongly undervalued before the crisis.

FIGURE 2: GLOBAL IMBALANCES*




*Note:* *Sum of the absolute value of the current accounts of all countries (as a percentage of global GDP).
*Source:* IMF "World Economic Outlook Database" (April 2014).

2. IMF, "2014 Pilot External Sector Report" (2014), http://www.imf.org/external/np/pp/eng/2014/062614.pdf [last accessed November 18, 2014].

## GLOBAL IMBALANCES AND MULTILATERAL COORDINATION

In spite of these developments, global imbalances persist. A part of the recent correction is likely to be temporary, as it is due to cyclical factors like weaker demand from developed economies and the recent investment stimulus packages in China.[3] The IMF estimates that: the US current account deficit will remain around 3 percent of GDP in the coming years; China's surplus will increase to 3 percent of GDP; and global imbalances will be 3 percent of global GDP (similar to the figure for 2000).[4]

Even under the assumption of a correction of global imbalances, their persistence over such a protracted period has resulted in a substantial international reserve accumulation by EMEs (particularly China). This makes markets highly sensitive to portfolio shifts.

EMEs possess 65 percent of the world's dollar reserves, in contrast with 25 percent held by developed economies. Twenty years ago the situation was more or less the opposite.[5] Additionally, in spite of the gradual de-dollarization of global reserves, 61 percent are still in dollars (from 71 percent in 1999).

The latter suggests that the risk of a disorderly unwinding in international markets is more likely to be associated with a stock recomposition than flow fluctuations. A small recomposition in the reserve portfolios of China and other EMEs may lead to significant changes in the prices of financial assets and exchange rates.

What would be the consequences of an abrupt market correction? First, the decrease in the demand for dollars and the associated portfolio shifts are likely to be gradual. While the US economy represents around one-fifth of world GDP (from close to 50 percent when the Bretton Woods agreement was established), it is still the most dynamic among developed economies. US participation in the developed bloc is estimated to remain around 40 percent by 2019. In parallel, in view of the difficulties for the emergence of EME reserve currencies, most trade and financial operations continue to be carried out in dollars. In particular, most commodity prices are fixed and negotiated in dollars.

At the same time, as a long-term trend, the potential for a recomposition in global portfolios may represent a considerable risk for the stability of the international financial system and the supremacy of the dollar as reserve currency. In this scenario, many EMEs will continue to reduce domestic dollarization and issue debt denominated

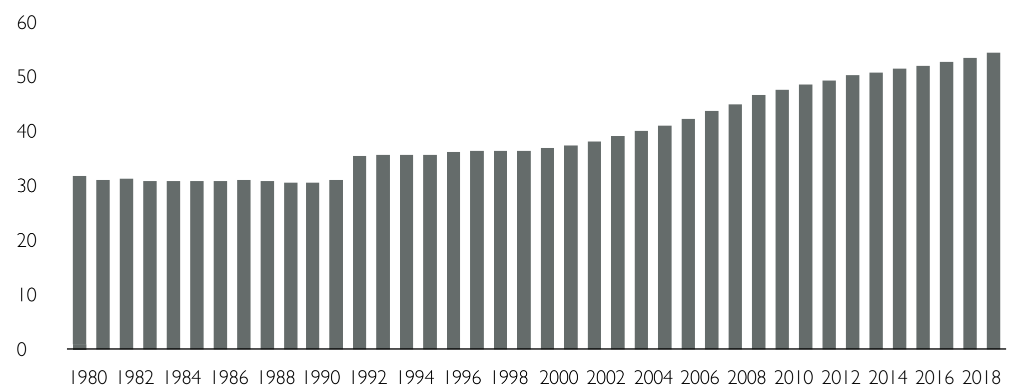
3. IMF, "People's Republic of China: 2013 Article IV Consultation" (2013), https://www.imf.org/external/pubs/cat/longres.aspx?sk=40786.0 [last accessed November 18, 2014].
4. IMF, WEO database (April 2014), http://www.imf.org/external/pubs/ft/weo/2014/01/weodata/index.aspx [last accessed November 18, 2014].
5. pencer Lake, "Remminbi, a new reserve currency?" HSBC Global connections (July 15, 2014), https://globalconnections.hsbc.com/us/en/articles/renminbi-new-reserve-currency [last accessed November 18, 2014].



in their own currencies in international markets. First, the "original sin" problem seems to have dissipated, at least partially, thanks to stronger fundamentals in the issuing countries and a reduction in the number of risk-free assets due to rating agencies' downgrading of many securities issued by developed economies.[6] This de-dollarization process reduces the incentive to build up dollar reserves and paves the way for a greater diversification of international reserve currencies.

Second, a factor that can further accelerate de-dollarization is associated with the growing participation of EMEs in global economic activity and trade. This trend is likely to be accompanied, in the medium term, by greater capital account openness. Recent agreements to carry out operations directly in renminbi in markets like Australia, New Zealand, Japan, and Malaysia suggest that the use of EME currencies in international markets can increase in the medium term. While initially confined to trade, there is a potential for wider currency convertibility to expand as liberalization takes deeper roots in these economies. The agreement between the Hong Kong and China stock exchanges, effective October 2014, points in that direction.

FIGURE 3: EMES: % OF WORLD GDP (1980–2019)




*Source:* IMF, global database.

6. IMF, "Global Financial Stability Report: The Quest for Lasting Stability" (April 2012), http://www.imf.org/external/pubs/ft/gfsr/2012/01/ [last accessed November 18, 2014].

Third, there are issues associated with the performance of the US economy. Current US deficits are mostly the result of low savings, an important difference with the period governed by the Bretton Woods agreement, when the US imbalance reflected mainly high investment. There is also concern about the US medium-term fiscal position and its decreasing weight in the global economy. It is likely that these problems will be limited by increased flexibility in US markets and certain productivity shocks, in particular associated with the fuel revolution.

### THE NEED FOR COORDINATION AND ITS CHALLENGES

This context, characterized by global imbalances, high reserve concentration in a few countries (and one currency), and the prospects for a declining role of the US in the world economy, creates a consensus around the need for greater international coordination to limit the risk of a disorderly unwinding in global markets.

Several factors hamper multilateral coordination. In principle, the IMF seems to be the agency that would best lead the process. However, voting power within the IMF does not reflect the important changes that have taken place in recent decades; especially, it underestimates the participation of EMEs in the decision-taking process. Other international agencies also have legitimacy issues. For instance, the G20, which has recently gained importance as a world forum, only directly represents large EMEs, but not the majority of developing economies.

Additionally, according to Eichengreen, peripheral countries, particularly in Asia, do not have sufficient incentives to subordinate their national interests to collective ones.[7] Notably, this has been reflected in China's exchange rate policy in the precrisis period, when the pace of appreciation was insufficient to correct imbalances (and considerably slower than in Japan in the mid-1980s). Moreover, the countries in that region are much more diverse today than they were in the 1960s (with different degrees of development and policy priorities), which makes collective coordination more difficult; and regional cooperation is much less institutionalized in Asia than in Europe forty years ago (when Europe was part of the "periphery").[8]

Finally, some economic policy institutions (like central banks) have restrictive mandates, which makes policy coordination more difficult to carry out; and others, especially those responsible for fiscal policy, operate in politicized environments.

7. Barry Eichengreen, "Global Imbalances and the Lessons of Bretton Woods," NBER Working Paper No. 10497 (May 2004).
8. Ibid.



Coordination seems to work better when focused on technical questions (supervision and financial regulation). However, this shifts the focus toward other entities such as the Basel Committee and away from the IMF.

Julio Velarde, Governor,
Central Reserve Bank of Peru

# THE INTERNATIONAL MONETARY SYSTEM AFTER THE GLOBAL CRISIS

IGNAZIO VISCO

THE CHALLENGES FACING the international monetary system today derive from trends that were already evident before the global financial crisis: the contrast between increasing economic and financial interdependence and nationally oriented policies; the disruptive effects of volatile capital flows; and growing reserve accumulation. However, the crisis has lent new urgency to the need to reform existing arrangements.

As I have argued elsewhere,[1] the build-up of stresses and vulnerabilities that eventually led to the crisis was due to the interaction of macroeconomic and financial factors. Since then, a concerted effort has been made to limit the risk of future crises and to make the global system more resilient in the event that one occurs. Quite appropriately, this effort has attached high priority to fixing the international financial system, since flaws in financial regulation and weak supervision were the most obvious proximate causes of the crisis. Important lessons have also been drawn for macroeconomic policies, although in this area there are still disagreements on what went wrong and how to fix it.

1. P. Catte, P. Cova, P. Pagano, I. Visco, "The role of macroeconomic policies in the global crisis," *Journal of Policy Modeling*, 33, 6 (2011).

The effort to build a sounder and more resilient global economy and financial system has focused on both crisis management and prevention. As regards *crisis management*, the immediate response to the crisis was on the whole successful. Interventions to preserve the financial system's stability and restore markets' normal functioning prevented a destructive spiral. At the same time, coordinated fiscal and monetary stimuli and moves to strengthen global safety nets (more IMF resources; the establishment of central bank swaps) helped restore confidence. National authorities' perception of a common threat and aligned interests (to a large extent, what was needed to help oneself would also indirectly help others) promoted a relatively high degree of *de facto* coordination. However, it is not clear that coordination would work equally well under different circumstances. Moreover, while authorities were ready to adjust crisis management tools quickly during the crisis, support for making them more structured and permanent appears to have weakened since then.

As regards *crisis prevention*, the key limitations of existing arrangements in the years leading up to the crisis had to do with their failure to impose effective discipline on national economic policies and on the behavior of financial sector agents; as a result, the market mechanisms that were supposed to prevent the accumulation of unsustainable financial positions and correct macroeconomic imbalances failed to work. To address these issues, a multi-pronged effort is being conducted by the G20, the Financial Stability Board (FSB) and the IMF:

- The G20 Framework for strong, sustainable and balanced growth is a cooperative effort to encourage mutually beneficial policies via peer pressure. The objective is an ambitious one. The results so far have been mixed.
- The FSB, under the guidance of the G20, has engaged in a comprehensive program of regulatory reforms in order to extend the perimeter of regulated sectors, strengthen the financial sector's resilience to global and idiosyncratic shocks, and mitigate the costs associated with the resolution of large and complex institutions, lessening the perception that they are "too big to fail."
- The IMF has developed a broad strategy for enhancing its surveillance framework. This strategy is intended to enable the Fund to have an integrated view of all the macroeconomic and financial elements essential for identifying systemic risks, to promote greater awareness of these risks among its members, and to solicit countries' policy response and cooperation. The steps taken have included, in particular: a) better coordination of bilateral and multilateral surveillance; b) regular attention to policy spillovers from systemic economies; c) the development of "norms" for the assessment of countries' external positions (exchange rates, current account balances, reserves); d) the development of a more nuanced view of the benefits and risks connected to capital flows, and of the policy measures for dealing with them; e) strengthened financial sector surveillance, with the requirement of having regular Financial Sector Assessment Programs for systemically relevant countries.



I will concentrate on two aspects: 1) the implications of broadening the IMF's surveillance mandate to explicitly include the capital account; and 2) the available alternatives for strengthening global safety nets given the growing size of capital flows.

### IMF SURVEILLANCE AND THE CAPITAL ACCOUNT

The IMF's traditional focus on the current account, which had its roots in the postwar Bretton Woods regime, has already been broadened substantially in practice over the years. As capital movements have been liberalized, first in advanced economies and then increasingly in emerging ones, the Fund has inevitably had to look at a country's capital account to identify potential vulnerabilities. Similarly, it has become increasingly necessary to focus on gross rather than net capital flows, and on the composition of assets and liabilities rather than just on net positions.

This stronger emphasis on the capital account goes hand in hand with the expansion of the IMF's surveillance to cover financial stability, since the potential vulnerabilities arising from external capital transactions can only be properly understood in the context of a country's financial system, along with its specific structure and regulatory framework.

So far, these enhancements of Fund surveillance have taken place without modifying its Articles of Agreement and without entailing new obligations for IMF members. Is there a pressing case for changing the Fund's mandate so as to give it a clearer jurisdiction on capital flows and financial sector policies? And how ambitious should these amendments be?

The answer is not straightforward. Surveillance reforms are too recent and it is still too soon to say whether they will bear fruit in terms of enhanced policy cooperation. Besides, the IMF has been able to coordinate with the FSB and other regulatory bodies in an informal and cost-effective manner, while remaining within its current mandate. Yet a decision to give the Fund a more comprehensive mandate would signal the importance attached to an integrated surveillance covering both macroeconomic and financial sector policies; it would also allow the IMF to gather more granular information and upgrade the analytical content of its policy advice. But changes in the Articles are difficult to approve, and the jury is still out on the extent to which the Fund's jurisdiction on capital flows should be expanded (e.g. whether it should only pertain to capital liberalization, or also cover crisis resolution and sovereign debt restructuring issues). In these areas—as in those for which it already has a clear mandate—the Fund's traction on members' policies will continue to hinge mainly on the quality of its analyses and policy advice.

### STRENGTHENING GLOBAL SAFETY NETS

The accumulation of large official reserves by many emerging economies has resumed since the crisis. It is being driven, at least in part, by the desire to build protective buffers against sudden capital outflows and their disruptive effects, in a context where portfolio investment flows are highly volatile, financial markets in emerging economies remain relatively underdeveloped, and a number of countries continue to rely on short-term inflows to finance current account deficits. Reserve accumulation as a form of self-insurance is not only costly for the countries themselves but also, given the limited supply of safe assets, a source of distortionary effects in global financial markets.

The existing elements of a safety net that might provide an alternative to self-insurance include: the IMF's precautionary facilities (the flexible credit line, FCL, and the precautionary and liquidity line, PLL), accessible to countries with sound fundamentals; a number of regional financing arrangements (RFAs), such as Asian countries' Chiang Mai Initiative and the European Stability Mechanism; and bilateral swaps between central banks, which were used during the crisis for the specific purpose of relieving funding pressures in foreign currencies.

However, these arrangements cannot be taken as perfect substitutes of official reserves because of the quantity and access constraints that limit their attractiveness. Access to IMF facilities and RFAs is usually conditional on qualification criteria in order to guard against moral hazard and to protect lenders (implicit qualification may also exist for central bank swaps). Both the IMF and RFAs have limited overall resources, which could become binding in a systemic crisis. Central banks' resources, though unlimited in theory, are *de facto* constrained by risk and monetary control considerations, and can only be used for specific purposes. Finally, borrowers' willingness to request official financial support may be discouraged by political stigma (i.e. a perceived loss of national sovereignty vis-à-vis institutions dominated by foreign governments), which is not to be confused with market stigma (i.e. unintended adverse signals sent to private investors).



Overcoming these limitations will probably require action on various fronts. Increasing the IMF's resources is likely to remain the centerpiece of the strategy (these can also be leveraged by borrowing from official sources—as has often been done in the past—or from the market). Since the 1980s, the size of IMF resources has failed to keep pace with the expansion of the global economy and, even more to the point, with that of global financial markets. Resistance to increasing Fund resources has often been justified by a choice to privilege its "catalytic role," i.e. its ability to encourage private financing by certifying the soundness of a country's policies or, at least, reliable progress toward their adjustment. While pertinent when the Fund is confronted with the need to financially support individual countries, this argument cannot be applied to its role in containing potentially systemic crises. In fact, as we have seen during the last crisis, in presence of massive increases in risk aversion, private lenders cannot be relied on to contribute to the solution. Rather, it falls upon official entities to act as a lender of last resort. A commitment to provide the IMF with adequate resources for this task would require first of all an increase in IMF quotas. The most urgent priority is to complete the ratification of the 2010 General Quota Review (which, however, would leave untouched the Fund's overall size because it entails a mere reallocation of resources from the New Arrangements to Borrow, NAB, to quotas).

Expanded safety nets would help make the system more resilient. As was the case for the IMFs precautionary facilities, the "firewalls" need not be used: in most instances their existence alone should be enough to reassure markets and discourage speculative flows. However, for this crisis-prevention role to be credible, the availability of a large pool of resources is essential.

Nevertheless, we should not overestimate the extent to which the availability of alternatives to self-insurance would help reduce the demand for owned reserves. First, self-insurance is only one reason why countries hold reserves: for some countries their accumulation is just the passive reflection of exchange rate policies, while for some energy exporters it is a way of setting aside resources for the future. Second, owned reserves, which are available unconditionally, will always be preferable to some countries. As long as alternative forms of insurance are only imperfect substitutes for reserves, it is not clear that making them available would translate into a decrease in actual reserve holdings.

Ignazio Visco, Governor,
Bank of Italy

# INTERNATIONAL MONETARY SYSTEM: RECENT PAST, PRESENT AND CHALLENGES AHEAD

BORIS VUJČIĆ

Financial system crises of the recent magnitude are rare tests of the robustness of the international financial system. Up until now, the system has been able to overcome the global financial crisis, although it was, and in part still is, confronted with exceptional challenges. The financial crisis was characterized by an intensive market turmoil affecting almost every corner of the financial world. It started with a bust in one relatively small part of the US market, which eventually caused failures of a few systemic institutions in the United States, and then quickly spread across markets and countries leading most of the global economy into a deep recession. Thanks to the timely and determined reaction of the leading international monetary system actors, systemic impact of these disturbances was partly contained and the global financial system managed to regain its stability.

A successful response of the international monetary system to the global financial turmoil stems primarily from the timely and coordinated involvement of the IMF and the leading central banks. Coordinated action by the Federal Reserve and other leading central banks prevented panic in the international financial markets, while the Bretton Woods twins, in particular the IMF, contributed significantly to the stabilization of the global economy by preventing simultaneous sovereign defaults after the initial abrupt slowdown in international capital flows. The IMF quickly adjusted to the financial crisis by allowing exceptional access for all countries facing balance of payments crises, providing them with unprecedented amounts of funding through standby arrangements. In several instances the troubled countries borrowed amounts exceeding 1000 percent of their respective quotas in the IMF, which helped them to avoid imminent sovereign default. In its activities, the IMF cooperated with other international institutions, such as the EBRD, the EIB, and the IDB. With regard to standby arrangements with the EU Member States, the IMF worked in close cooperation with the European Commission and the European Central Bank in both program design and the program surveillance phase. The role of the World Bank in crisis management was based on reinforced project financing in countries that had been particularly affected by the crisis. In addition, it was actively engaged in IMF's crisis mitigation activities by co-financing some of the macroeconomic adjustment programs.

When analyzing the crisis response of the leading monetary institutions, one should recognize the tremendous efforts undertaken by the central banks at the peak of the financial crisis. Their policy response consisted of ambitious and coordinated monetary easing operations, which provided banks with much needed liquidity at a time when the interbank market was effectively frozen due to high risk aversion. In particular, the central banks engaged in bank refinancing operations with full allotment against broadened set of eligible collateral. By expanding their balance sheets and providing abundant liquidity to the system, the central banks temporarily took over the role of the interbank market to prevent a liquidity crisis turning into a systemic solvency crisis. Furthermore, a number of central banks also engaged in currency swap operations with the Federal Reserve in order to obtain dollar liquidity for financial institutions with the need for US dollar funding.

The experience of the recent financial crisis enhanced the policy framework of the main actors of the international monetary system, which builds the resilience to future financial crises. The contribution to the resilience of the global economy also stems from the enhanced economic governance in the major economies. That is especially the case in the European Union, where policymakers made important steps by strengthening the framework for coordination of fiscal and structural policies, and introducing the surveillance mechanism for macroeconomic imbalances. The motivation for monitoring macroeconomic imbalances is to timely prevent Member States from accumulating harmful internal and external imbalances which make them vulnerable to negative macroeconomic shocks. Fragile economic recovery in the EU after the crisis is mainly a result of continuous correction of macroeconomic imbalances in a number of Member States, which were built up in the pre-crisis period. The achievement of a sustainable growth path is a priority, also from the perspective of central banks. Namely, the experience of the recent crisis clearly demonstrates that the transmission channels of monetary policy can be heavily impaired during the long lasting recessions caused by widespread deleveraging, which prevents the transmission of monetary impulses to stronger credit activity toward the real economy. However, one should also be mindful of risks stemming from a prolonged period of excessive liquidity and low interest rates, as we are witnessing at the moment. Given the obvious limitations of the monetary policy in such a situation, it is crucial for policymakers to realize a necessity of appropriate fiscal and structural policies in dealing with current economic challenges, since this is the only healthy way to put economic recovery on a firm and sustainable trajectory. Unrealistic expectations of what monetary policy can achieve risks not doing enough of what other policies should do, and ending up with another asset price bubble coupled with weak structural fundamentals.



As a consequence of the global financial crisis which emerged within an apparently very benign financial environment, there is a consensus that central banks and other policymakers should put more weight on several other macroeconomic and financial variables instead of focusing merely on price stability. Potential benefits of conducting macro-prudential policy as a tool for mitigating systemic risks, an area in which Croatian National Bank was one of the pioneers before the crisis, have been appreciated and policies have been developed extensively in the last few years. To a large extent these are not new but previously abandoned policies, but some innovative approaches have also being developed.

The most recent reform of international banking regulatory standards (Basel III), which was transposed into EU legislation at the beginning of 2014, provides for a number of instruments that could help to preserve financial stability. Specifically, the new legislation empowers national regulators with various capital buffers to enhance solvency of credit institutions, and introduces flexible risk weights to address sector specific risks, as well as two new liquidity standards. As regards the capital buffers, their primary purpose is to enhance the resilience of credit institutions by directly increasing their loss absorption capacity, while their effectiveness in containing unfavorable developments, such as excessive credit growth and leverage, is much less certain. The new liquidity standards, on the other hand, are designed to mitigate the exposure of credit institutions to market liquidity risk and to avoid imprudent funding practices, which contributed heavily to the global financial crisis. To be precise, the liquidity coverage ratio (LCR) will require banks to hold sufficient level of highly liquid assets so that they could withstand a sudden deposit outflow without defaulting, while the net stable funding ratio (NSFR) will oblige them to rely more on stable sources of funding, such as retail deposits.

The collapse of a number of financial institutions since the outbreak of the global financial crisis incurred considerable costs for national governments, which in most cases intervened by bailing out failing banks in order to avoid simultaneous defaults and potential implosion of the financial system. The situation was particularly severe in the euro area, where in several cases bank recapitalizations almost led to insolvency of the sovereign. As a response to such adverse consequences of bank failures, the G20 encouraged the Financial Stability Board (FSB) to develop guidelines for establishing effective national resolution regimes. The main aim of the proposed resolution framework is to mitigate the systemic impact of bank failures while minimizing the fiscal costs of the process. One of the key elements of the suggested framework is the bail-in provision, which stipulates that during the resolution procedure the capital losses are first deducted from the claims of shareholders and junior creditors, and only then the credit institution can be recapitalized with public resources. In this way, regulators intend to limit the social costs of bank failures and reduce the moral hazard arising from government bailouts. Responding to those suggestions, the crisis response at the EU level also included the legislative adjustments to create a harmonized framework for bank resolution, implementing the key principles emphasized by the FSB. However, given the obvious lack of experience in using instruments such as the bail-in rules, it remains to be seen how the new resolution regime will actually perform in future crisis episodes from the financial stability point of view. Some unintended consequences should not be excluded.



The crisis has had little or no effect on the world's leading currencies so far. They retained their status in the global economy, although some of them were exposed to market pressures during the past couple of years. It especially concerns the euro, which was in serious danger at the height of the sovereign debt crisis, when considerable capital outflows from euro denominated assets were recorded. However, due to the determined reaction of policymakers, including the crucial involvement of the European Central Bank, the pressures subsequently diminished. The roots of the euro area crisis stem from the inadequate economic governance structure inherent to the EMU since its inception. Member States shared the common monetary policy and the relatively loose set of fiscal rules, while other aspects of economic policy, as well as financial supervision, remained under national discretion. A consistent application of the recently enhanced coordination procedures and a successful implementation of the banking union should help strengthen the euro as the single currency, but the key question remains how much is enough to make the monetary union a sustainable project. The answer to that question would be best found out by policymakers rather than the markets.

The US dollar's role as the global reserve currency was unaffected by the global financial crisis. A lot of factors work in favor of such a status of the dollar, including the strength of the US economy, the central role of the US financial market for the global financial system, and the dollar's well established roles in world trade and the management of countries' foreign currency reserves. The dominant share of US dollar in the total global stock of international reserves stems from the fact that US government securities are considered the most liquid and safe financial instrument in the world, which makes them attractive to investors that need to respect the principles of safety and liquidity in managing the reserves. The dominance of the dollar in the global stock of foreign reserves, nevertheless, entails a risk of sudden reallocation of foreign reserves by major investors. This event would certainly heavily affect the US sovereign debt market, causing significant capital losses to investors with possible global consequences. The probability of such a development, however, is low due to a lack of substitutes of equal quality, and because a major exit from US government securities would negatively affect both sides in the portfolio reallocation. Thus, the materialization of such a scenario remains unlikely.

Among the risks that could arise in the post-crisis period, policymakers should bear in mind the risk of the reappearance of the large global savings imbalance. Part of the economic literature suggests that the financial bubble in the US financial market, which subsequently caused the global financial crisis, arose from the global savings imbalance, with the United States as the leading importer and the emerging market economies as major exporters of capital. The strong inflow of capital into the United States from the surplus countries put downward pressure on market returns in the US market, which stimulated financial institutions to search for yield by engaging in risky activities. Therefore, in the following period, sufficient attention should be given to the issue of global imbalances. An important role in that regard should be taken by the IMF, which shall encourage national governments to pursue sustainable growth trajectories, applying appropriate macro-prudential measures in order to contain looming risks to financial stability and to prevent the accumulation of macroeconomic imbalances. Monetary policy should also take its part in the overall efforts to mitigate financial stability risks, primarily by controlling the credit cycle, since it does not possess instruments for more targeted response to specific asset markets. In that regard, the central banks also need to bear in mind the potential systemic risks stemming from a prolonged period of extraordinary monetary easing, since low interest rates encourage mispricing of risks, as we have clearly witnessed during this crisis.

Finally, although policymakers, central banks in particular, adjusted quickly to the extraordinary circumstances limiting the adverse impact of the financial crisis through a timely financial assistance and unprecedented monetary easing, and although the resilience of the international monetary system is further enhanced by the rich experience gained from the successful multilateral response to the recent financial crisis, and also by the recent overhaul of the banking prudential standards, serious risks remain. I find it worrisome that most recent discussions develop around unrealistic expectations on what monetary policy can achieve. That risks not doing enough of what other policies should do, and ending up with another asset price bubble coupled with weak structural fundamentals. Particularly so in places where structural issues are continuously the key obstacles for a sustainable growth. "South" European countries have, for example, seen productivity divergence compared to the "North" since the mid-1990s. Monetary policy can do little to change that. And that might be a main long-term risk for the sustainability of the monetary union. Emerging market countries have learned a lot from previous crises, and have weathered the storm much better this time around. They should not be complacent though. The next crisis might be of a very different kind—not a spillover that stems from capital flow reversals, but a genuinely domestic one. There are lessons to be learned there as well. Overheating of domestic financial markets has happened many times before. Capital misallocations on a large scale as well. Much has been done to mend the banking system fragilities. The system today is certainly much more robust than was the case six years ago. Huge, and increasing, financial flows and innovations, however, will continue. We must be careful in judging where they might represent systemic risks that need to be addressed in a timely manner. Not only because "too big to fail" does not necessarily pertain only to banks.

After the crisis, more sustainable and balanced growth in the world is sought. The international financial system is one of the key elements in achieving that goal, as it has always been. Some of the challenges to the stability of that system are new, some are old, and some are old wine in new bottles. Therefore, the ability to learn from the past in order to understand the future is of crucial importance, again.

Boris Vujčić, Governor,
Croatian National Bank

# USABILITY OF US DOLLARS IN THE MARKET—BRIEF COMMENTS

HIROSHI WATANABE

Seventy years have passed and many challenges have fallen onto the US dollar and more will fall in the future. The dollar's dominance in the currency market has been declining and it will decline further. But so far there is no other good alternative currency to take on the same roles assumed by the US dollar. It will remain as a key currency for a few decades yet.

The development of its value and coordination with other currencies including the use of baskets or other ideas will be fully discussed by other contributors. Here I wish to raise two points which relate to the usability of the US dollar (USD).

## LESSENING THE BURDEN ON THE USD

Since the USD is a key currency and mostly transacted in the markets in terms of volume, many foreign exchange transactions are done through the USD, even involving third currencies, e.g. conversion from currency X to currency Y. Two-step conversions are taken: X to USD and USD to Y before the final settlement. Previously, as the volume of trade finance among non-US countries was limited and the portfolio transactions were negligible, such two-step conversions through the USD were inevitable given the cost for the financial institutions that offer swaps, and the small size of aggregate two-step conversions has never burdened the USD in the foreign exchange markets.

But this type of two-step conversions has gradually increased the burden on the USD as this type of trade finance and portfolio transactions has steadily and significantly increased outside the US. In Europe and also in Asia, intra-regional trade has drastically increased in absolute volume and as a share in total global trade. In the case of Europe, the creation of the euro and the integration of the market decreased the reliance on the USD in European monetary transactions. But in Asia, even though its intra-regional trade has improved and that share against the total trade volume has reached the same level that Europe reached in the 1980s, each currency has remained individual and there has been little movement toward further currency coordination. Some of the Asian currencies are still non-convertible and strict limitations for external use are enforced by the authorities. Mutual convertibility is scarcely developed and use of the USD remains popular. Also, capital transfer to emerging and developing countries in Asia and other regions in the form of direct investment or mutual portfolio transactions has rapidly expanded. But offers of swap arrangements for minor currencies are limited and foreign exchange transactions still mainly go through the two-step conversion process via the USD.

In these circumstances, the volume of USD transactions are decided by non-US reasons:they are not explained by analysis of the US economy, by change in monetary policy by the Federal Reserve, by tax reform by the US government, or by trade treaties between the US and other countries. The demand for USD foreign exchange are coming from countries X, Y, and Z, even when they are not the counter-party of the USA in any area. If these demands rise further in the foreign exchange market, USD transactions will fluctuate and be influenced by non-US reasons and the USD value and status would also become fragile and uncertain. So a direct foreign exchange transaction between country X and country Y could be done without any detour through the USD. The financial institutions in the region (regional ones or global ones) should offer a wider variety of swap arrangements, even covering minor economies' currencies. In this sense, we should discuss:

- How could we reduce the cost of swap-offerings for multiple currencies?
- How much we should include each central bank in this operation?



### RECONSIDERING THE USABILITY OF USD—FINANCIAL SANCTIONS, ETC.

The global money flow is supported by the USD and most settlements of transactions are denominated in the USD. Moreover, a gigantic amount of monetary transfers go through the Federal Reserve in New York, every day. So when sanctions are initiated and transactions through the USD are banned, the negative effect is enormous.

Such sanctions have already been enforced, and have worked. But such sanctions could be introduced again and again; the ban on the use of the USD would cause some malfunction in the international settlement system. In particular, when these sanctions are not introduced by the international community but based only upon US decisions, the sense of burden felt by financial institutions is rising.

The size of sanctions or punishment in monetary terms are unpredictable and difficult to estimate, with many financial institutions reluctant to use the USD. Given other reasons, such as anti-terrorist financing or anti-money laundering, many financial institutions, such as banks, have already spent huge amounts on modernizing their IT systems. Some became reluctant to keep their position in the USD money transfer network. Now, in many emerging and developing countries, citizens have lost contact with the money transfer system, because of the exit of some small banks from the USD money transfer network due to the shortage of funds necessary to upgrade IT systems.

This fiscal burden has already deteriorated the potential capacity of these banks. When some innocent and non-targeted countries face the fear of sanctions instigated by US authorities, they feel huge inconvenience and may try to seek an alternative way: the use of a non-USD currency or of a new transaction unit. It may have some effect on the usability of the USD, and its value in the future. We must have some good discussions on this matter.

- Do we need a new "clearing mechanism"?
- Can we use SDR or a similar basket for a new mechanism?
- Can we make a freer legal agreement which allows the easier switch of currencies for actual payment of settlements?

Hiroshi Watanabe, Governor and CEO,
Japan Bank for International Cooperation

# RECONCILING PRICE STABILITY WITH FINANCIAL STABILITY

AXEL A. WEBER

Inflation targeting has become the predominant monetary policy framework in the past two decades. Although none among the US Federal Reserve, European Central Bank, and Swiss National Bank purely target inflation, these central banks have also adopted the inflation targeting paradigm.

The decline of inflation and inflation expectations in the past twenty years has often been hailed as a success of inflation targeting. Some have even attributed the so-called Great Moderation, that is, the decline in macroeconomic volatility from the mid-1980s until the Great Financial Crisis in 2008–09, to improved monetary policy.

However, the Great Financial Crisis and the absence of a healthy and sustained global economic recovery ever since, despite enormous monetary stimulus, have raised doubts about the role of inflation targeting. In particular the Bank for International Settlements has been arguing for many years that pure inflation targeting is not compatible with financial stability, because it does not take into account the financial cycle, resulting in monetary policy that is too expansionary and asymmetric.

The decline in inflation and inflation expectations in recent decades is probably also not mainly due to inflation targeting. The decline in global inflation started in the early 1980s when Paul Volcker launched his attack on inflation—well before inflation targeting was invented. From the 1990s onward, globalization, in particular the integration of China into the world economy, resulted in persistent downward pressure on goods prices and has probably become the main reason for the decline in global inflationary pressure ever since. A more recent indication that disinflation since the 1990s has not been caused by the inflation targeting paradigm is the unsuccessful effort of a growing number of central banks to reflate their economies. If central banks are unable to raise inflation, it stands to reason that they may not have been instrumental in suppressing it during the past twenty years. The undisputed success of inflation targeting in emerging economies is probably mostly due to the fact that, simultaneously with the introduction of inflation targeting, these central banks also became independent of their governments, having previously been appendages of their respective treasuries.

While inflation targeting is all well and good in theory, in practice it is based on a fallacy. The original objective of central banks was not consumer price stability. In fact, when most central banks were founded, there were no consumer price indices available. The original objective of central banks was to provide war finance to governments. Later on, their task became providing an elastic currency and acting as lenders of last resort in order to avoid seasonal price fluctuations and recurrent banking panics. For example, the Federal Reserve Act of 1913 that created and set up the Federal Reserve System, was titled "An act to provide for the establishment of federal reserve banks, to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes."

Only the excessive inflation of the 1970s led to the (re)discovery that having a stable value of money is desirable, that the value of money depends on the supply of money, that inflation is therefore a monetary phenomenon, and, consequently, that ensuring a stable value of money should be the exclusive preserve and an overriding objective of central banks, in addition to their serving as lenders of last resort.

But how can you measure the value of money? Prices are an indicator of the value of money, the consumer price index being the most obvious choice. Consumer prices do indeed have some very attractive features. First and foremost, they measure the price of consumption, the ultimate objective of economic activity. Furthermore, consumer prices are easy to collect, quickly available at a high frequency, and are not usually revised. In contrast, the GDP deflator, for example, is not that easy to collect and calculate, is only available quarterly, is published with a long time lag, and may be revised after its initial release.



However, it is necessary to note that consumer prices, and all other prices or price indices, are merely indicators of the value of money. The ultimate objective of central banks is not stable prices; the ultimate objective is a stable value of money. Prices are the scale by which the value of money is measured. It is impossible to precisely specify the value of money by some "general" price level, because there is no stable relationship between changes in the quantity of money and prices. The response of individual prices to changes in money supply, and the respective time lag, are unpredictable.

The use of the consumer price index as a sole measure of the value of money is highly problematic. First, the lag between changes in money supply and consumer prices is long and variable. Second, the consumer price index creates a false sense of accuracy. In fact, different approaches to measuring consumer prices yield different results, in particular depending on the treatment of housing costs and the application of hedonic adjustment. Lastly, and most importantly, consumer prices represent only a small subset of prices in any economy and are, therefore, far from a comprehensive indicator of the value of money. In fact, consumer prices have become an ever smaller subset of all prices in recent decades, because financial markets have broadened and deepened massively, and the capital stock has grown. When measured in terms of real capital, financial assets, or financial flows, consumption has shrunk significantly. Monetary policy has therefore been relying on an imprecise, small and shrinking subset of prices which exhibit long and variable lags to changes in money supply.

The notion that monetary policy should target consumer prices is an operationalization of the underlying objective—a stable value of money. Unfortunately, this operationalization has taken on a life of its own. For example, today's economics text-books assume that stabilizing consumer prices is one of a central bank's primary objectives. Economists now understand inflation as a rise in consumer prices, though, in fact, inflation is a decline in the value of money due to an excessive increase in money supply. The quantity theory of money is being (mis)interpreted insofar as money affects consumer prices, and Milton Friedman is (mis)understood as claiming that consumer price inflation is always and everywhere a monetary phenomenon while, in reality, money affects all prices, and general inflation is a monetary phenomenon.

As a consequence, central banks, correctly wishing to protect the value of money, wrongly restricted their focus to consumer prices. In order to operationalize the consumer price inflation target, most central banks decided to provide "price stability" on a horizon of two years. For that matter, "price stability" is nowadays interpreted as meaning 2% of annual CPI inflation, hence implying that an almost 50% loss of purchasing power over the course of twenty years is consistent with a stable value of money. To add insult to injury, nowadays central banks routinely deny responsibility for any prices other than consumer prices.

Unfortunately, money does not care about that change in semantics. Money and, thus, monetary policy do not confine themselves to consumer prices. Money affects all prices, including non-consumer goods prices, commodities, real estate, stocks, bonds, and, probably most importantly, exchange rates.

The underlying idea of inflation targeting—stabilizing prices—is commendable. However, the narrow focus on consumer prices on a relatively short horizon has proven to be insufficient to provide a stable value of money. The experience of the past ten years has clearly shown this: The massive rise in housing prices in many countries in the run-up to the Great Financial Crisis of 2008–09, the steep decline in asset and commodity prices immediately after the bankruptcy of Lehman, and the steady inflation of asset prices ever since are all inconsistent with a stable value of money. In fact, the focus on consumer prices may have even become counterproductive. By vainly trying to boost consumer prices, monetary policy is massively interfering with capital markets, hampering efficient allocation of capital and fostering malinvestment. This perpetuates unproductive structures and opposes the creative destruction that is the source of growth. In addition, monetary policy is creating moral hazard, causing large swings in asset prices and sowing the seeds for future instabilities in the value of money.

A policy which stabilizes the value of money in the long term does not lend itself to a short and elegant mathematical formulation, whereas inflation targeting does. The economy is a complex system that is constantly evolving. Consequently, a monetary policy which is aimed at stabilizing the value of money has to be equally complex and



would have to be adequately adapted to changing economic and financial realities. Due to the uncertainties in the behavior of such a complex system, risk management would have to be at the center of a stability-oriented monetary policy. Instead of relying on static mathematical models, a stability-oriented monetary policy would have to take into account a multitude of changing, not to mention known and unknown, relations, risks, and ambiguities. Such a monetary policy might rely more on the judgment of policy makers and might be less predictable. It would also abstain from counterproductive forward guidance. This would discourage excessive risk taking and reduce moral hazard.

History provides many clues to how a stability-oriented framework could look. For example, many central banks used a host of intermediate targets, including monetary aggregates, in the last quarter of the previous century. Credit, interest rates, exchange rates, asset and commodity prices, risk premia, and intermediary goods prices are also candidates for such intermediate targets in a monetary policy framework geared toward a stable value of money in the long term.

Short-term stability of consumer prices does not in and of itself guarantee economic stability, financial stability, or a stable value of money. A monetary policy oriented toward a stable value of money in the long term, however, would contribute to economic and financial stability and also guarantee the long-term stability of consumer prices. In the short term, though, consumer price inflation under such a monetary policy framework might well deviate from what central bankers nowadays consider "price stability." Temporary fluctuations in a narrow and imprecisely measured consumer price index are a small price to pay to secure the long-term stability of the value of our money.

Axel A. Weber,
Chairman, UBS

# PROSPECT AND FUTURE OF THE INTERNATIONAL MONETARY SYSTEM

YU YONGDING

It seems that there are basically two different approaches to the reform of the international monetary system. One approach is to create a global reserve currency based on the SDR. This is an approach adopted by Zhou Xiaochuan, the governor of the People's Bank of China (PBOC), and the UN Commission on the Reform of the Global Financial and Monetary System, led by Joseph Stiglitz. A variety of the approach is proposed by McKinnon, who argues that, despite the fact that no one loves the US dollar, there is no better alternative and the solution lies in the possibility that the US government will behave itself in the future. Another more popular approach argues for "the development of a multiple- reserve-currency world, where the largest roles are played by the currencies of the three largest economies: the dollar, the euro and the renminbi…" Eichengreen predicted that "a multiple-reserve-currency system is coming."[1]

As a result of the rise of China, the renminbi certainly will play an increasingly more important role in the international monetary system. However, it will be a long drawn

1. Barry Eichengreen, "Managing a multiple reserve currency world," April 2010.

process. There are many serious obstacles in the way of renminbi internationalization. Among them, two stand out at the moment. First, the sequencing of capital account liberalization implied by the road map of renminbi internationalization is problematic. The road map of renminbi internationalization implies a particular sequencing of capital account liberalization. However, this sequencing is not the "right" one. For example, at the moment, China's financial reform is far from completed. In China an effective benchmark interest rate is nonexistent and there is not a risk-free yield curve as a benchmark for the pricing of financial products. The creation of a risk-free yield curve is a prerequisite for a deep and liquid government bonds market. But such a market has yet to be created. A more controversial issue is related to the so-called impossible trinity. China has to maintain an independent monetary policy. Is it possible that, with an inflexible exchange rate, China can maintain monetary independence without capital controls? The partial liberalization of short-term cross border capital flows without having created the necessary conditions first has led to the surge of hot money inflows aimed at exchange rate arbitrage and carry trade.

Hence, the question is: if the renminbi exchange rate becomes more volatile as a result of China's exchange rate regime becoming more flexible and China's capital account being fully liberalized, will the demand for using the renminbi as trade settlement currency still be strong? Faced with the inflows of hot money, the Chinese government may have to adjust its process of renminbi internationalization. When it is doing so, the process of internationalization may be halted for quite a long period of time.

The second problem is related to the channel of liquidity provision. Because China is a current account surplus country, it cannot provide liquidity to the rest of the world without increasing its foreign liabilities correspondingly. China's currency structure of foreign assets and liabilities is very irrational. While most of its foreign assets are denominated in the US dollar, most of its liabilities are denominated in the renminbi. As a result, China suffers from valuation losses whenever the dollar devalues. At the same time, while most of its assets are in the form of US Treasuries, most of its liabilities are FDI. As a result, although China has net assets worth two trillion US dollars against the rest of world, it has suffered from an investment income deficit for more than a decade. In 2012, the deficit was 85 billion US dollars. Renminbi internationalization



makes the situation worse. Many foreign economists are hoping that the renminbi will become one of the most important sources of global liquidity. However, China has utterly failed on this account. The reason is simple: because China has to pay high yields on renminbi assets (which are China's liabilities) to entice nonresidents to hold the renminbi. The "recycling of the renminbi" means that nonresidents will not hold it even for a very short period of time. Under this circumstance, how can the renminbi serve global liquidity? The very idea of "recycling mechanism" contradicts the idea of using the renminbi for global liquidity. In contrast, nonresidents hold the US dollar as liquidity when the holding earns no return and the dollar may devalue. If nonresidents hold the renminbi just for the purpose of obtaining higher returns than when they hold assets denominated by other currencies, whatever the amount of renminbi used for trade settlement, renminbi internationalization will not contribute to the provision of global liquidity in place of the US dollar. Another point is that you cannot expect nonresidents to change their behavior, because China's financial markets are under-developed, illiquid and the credibility not tested for nonresidents yet. This means that, despite the rapid increase in using the renminbi as a trade settlement currency, the conditions are not mature enough for the renminbi to become an international currency in its true sense.

Are there other ways for China to inject renminbi liquidity into the rest of the world? Perhaps yes. When discussing the possibility for the US to inject liquidity to the rest of the world, if it is no longer running a current account deficit, Professor McKinnon said that "(i)n the immediate postwar, this large American gross capital outflow meant that foreign central banks could rather rapidly restore their official exchange reserves by building up stocks of US Treasuries and dollar depository claims on American banks. Thus the outflow from the United States of longer-term relatively illiquid investments was greater than its current account surplus. This difference was then financed by a return capital inflow (albeit smaller) in the form of foreigners building up liquid dollar claims on the United States—thus gaining international liquidity."[2] Actually, this is the situation currently facing China. As a current account surplus country, China may try to inject liquidity into the rest of the world via the capital account. In other words, China should increase its foreign assets denominated in the renminbi rather than increase its foreign liabilities denominated in the renminbi.

2. Ronald I. McKinnon, "Bretton Woods Reconsidered: The Dollar Standard and the Role of China," Speech at the "Bretton Woods 2014: The Founders and the Future" Conference, Bretton Woods, New Hampshire, 3–4 September 2014.

China can increase its outbound FDI, encourage nonresidents to issue panda bonds, make more contributions to international organizations (the IMF and so on) and regional financial organizations or arrangements (the CMI, "the BRICS bank" and so on). The recipients will use the renminbi obtained to buy Chinese products, which will translate China's capital outflows into China's current account surplus. However, there must be a portion of the renminbi funds that will be kept by the recipients of China's capital outflows as liquidity. As a result, China's current account will be equal to its long-term capital deficit plus the liquidity kept abroad. Now China is making efforts to increase its investments abroad. Perhaps this endeavor will produce more meaningful results than providing renminbi liquidity via renminbi import settlements. But the obstacles for China to pursue renminbi internationalization along this line are also Herculean, due to all sorts of constraints. It is also worth mentioning that China is a poor country: its per capita income in 2013 was just 6700 US dollars. One cannot help but to ask: should such a poor country as China be a capital exporting country? Whatever improvement China can make to the road map of renminbi internationalization, to be a capital exporting country implies misallocation of resources one way or another. Perhaps only after China's per capita income has risen to the level of advanced economies will the renminbi become a global reserve currency.

Yu Yongding,
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*Annexes*

OUSMÈNE MANDENG, SENIOR FELLOW
REINVENTING BRETTON WOODS COMMITTEE

# ESSAY SUMMARIES

JOSHUA AIZENMAN (see page 1) underscores that the global financial and economic crisis was evidence that financial globalization and deregulation overshot as financial deepening became a source of instability. Views more dynamic policies curbing excessive financial liberalization as needed to mitigate costly financial crises. Cautions that, while nominal anchors such as fixed exchange rates and inflation targeting may be welfare enhancing, too rigid an anchor may unduly increase exposure to tail risks.

ABDULRAHMAN A AL HAMIDY (see page 7) outlines the importance of the multilateral institutions to set common economic policy standards. Is critical of assistance provided by the IMF and World Bank in the transition countries of the Arab region but acknowledges the usefulness of their broader role. Considers that the governance of the institutions does not provide for a fair distribution and representation, highlighting a profound “sense of frustration and grievance” of emerging and developing economies. Affirms need for multilateral surveillance to improve understanding of the transmission of shocks to the financial sector while emphasizing the need for sound domestic

These summaries were compiled to support a guided reading of this volume. They represent Ousmène Mandeng’s interpretation of the essays, with which their authors may or may not completely agree.

financial systems. Sees measures to enhance financial strength as essential to improve the international financial architecture.

ALI BABACAN (see page 15) reflects on the shift in international economic power and its impact on the governance of the international financial institutions. Sees emerging markets as increasingly driving economic growth, implying a shift in the world's economic center of gravity toward the East and South that should trigger a redistribution of power among economies. Assesses that the international financial institutions, in particular the IMF, have not responded to these changes. Stresses that the challenging economic backdrop should imply that no country is excluded and underrepresented in the global decision making channels, underlining preference for a more polyphonic system.

MUHAMAD CHATIB BASRI (see page 19) underscores the need to strengthen external financial assistance for emerging markets. Points out that IMF assistance still maintains a significant stigma in Asia that has unduly deterred Asian countries from relying on the IMF. Affirms that greater perception of ownership in the IMF will be needed to overcome stigma. Underlines alternative arrangements that have been established relying on bilateral central bank swap facilities. Acknowledges that the IMF has made significant advances in accommodating demand for emerging markets, citing the IMF's precautionary facilities.

MAREK BELKA (see page 25) reviews the challenges for the international monetary system underscoring that the strong demand for safe assets amid persistent external imbalances may not be met due to inadequate supply. Stresses that short-term loans between financial institutions are possibly most damaging for international financial stability. Remarks on the adoption of interventionist exchange rate policies by advanced economies and emerging markets. Sees the US dollar as remaining the major reserve currency, the euro playing an important role, and the proliferation of emerging markets currencies. Proposes the enhancement of the role of SDRs.

ERIC BERGLOF (see page 33) views the global financial and economic crisis as a mixed blessing for the multilateral institutions, exposing poor crisis preparation and weak responses while demonstrating the importance for global and regional stability offering some a new lease of life. Sees a new financial system evolving with an expanded role for central banks, increasingly constrained commercial banks and increased shadow banking. Stresses the advantages of development banks to facilitate risk mitigation in project finance, help leveraging, mobilize private capital, and address other key development objectives, representing important convening and catalytic powers.



LORENZO BINI SMAGHI (see page 39) sees developments in the global economy necessitating a transition from the hegemonic system of the past based on the US dollar to a multi-polar world with the inclusion of other currencies like the euro and the renminbi. Highlights risks to the transition from relative asset prices and exchange rate changes that could give rise to deflationary forces amid increasing demand for European and Chinese assets, deleveraging and its possible adverse distributive effects between creditors and debtors, and the uncertainty surrounding possibly required debt restructuring. Affirms need for coordination between monetary and fiscal policies to mitigate adverse effects from transition, citing the necessity for monetary policy to be more accommodative in surplus countries than in deficit countries. Stresses that, while crisis prevention is a key priority of the international financial system, there is a fundamental inconsistency due to the need to manage an increasingly integrated world economy with a politically decentralized system.

JEROME BOOTH (see page 45) views the dominant role of the US dollar in the international monetary system as a source of imbalances. Affirms reasons for diversifying central banks' US dollar holdings based inter alia on high concentration of reserve holdings, excessive levels of reserves, and riskiness of high dollar exposure. Draws attention to risk of a disorderly unwinding of emerging markets holdings of US securities and underscores that liquidity in key reserve markets may be overstated in the event of concentrated selling. Views quantitative easing as a policy to increase asset prices to help banks recapitalize and reduce government debt while playing only a marginal role in the build-up of global imbalances.

MICHAEL BORDO AND BARRY EICHENGREEN (see page 51) review the historical role of the IMF, highlighting changes in its mandate toward a fully-fledged crisis manager. Reflect critically on the effectiveness of IMF surveillance, its forecasts and detection of risks capability amid a tendency to be unduly optimistic. Lament limited capacity of the IMF to adequately assess debt sustainability and deal with sovereign debt while considering multilateral statutory agreements on sovereign debt restructuring as a political "non-starter." Do not consider feasible the IMF's role of lender of last resort but see the need to define dealings with regional arrangements. Stress the requirement for IMF governance reform to enhance representativeness and legitimacy of the institution as necessary to play a larger global role.

GUILLERMO CALVO (see page 63) proposes the establishment of an emerging markets external debt fund to support debt prices and preserve orderly price formation in the event of a crisis. Views the widening of emerging markets current account deficits as warranting higher international reserve levels. Warns that the international economy is on the verge of a new crisis triggered by a higher US interest rate and a deep financial crisis in China amid shadow-bank fragility. Sees that such a crisis may move the world economy away from trade globalization.

ANA MARÍA CARRASQUILLA (see page 69) reviews the role of the Latin American Reserve Fund (FLAR) as a regional arrangement to aid countries in balance of payments crises as part of a global financial safety net. Sees role of FLAR as complementing IMF support on the basis of a division of labor between systemic and non-systemic countries and crises, and including a possible extension of a facility by the IMF to FLAR to enhance its resources. Highlights desire to increase membership to include Brazil and Mexico and achieve full regional representation.

AGUSTÍN CARSTENS (see page 75) emphasizes the adverse externalities of an over-accumulation of international reserves and the effect on global financial markets as countries do not internalize the effect of reserve accumulation on international interest rates. Sees as remedial measures strengthening reserve pooling arrangements including the IMF's capacity to provide liquidity assistance. Emphasizes the need to increase the quota resources of the IMF to deal effectively with the increasing size of the global economy and address required governance reforms to maintain its effectiveness and relevance. Sees the importance of greater exchange rate flexibility as a critical component of a more stable international monetary system.

BENOÎT CŒURÉ (see page 83) remarks that the international monetary system should offer sufficient incentives to make economies more resilient and that the current structure offers a bias toward self-insurance. Outlines three structural shifts in the global economy: the possibility of re-emergence of home bias and regionalization; the move toward a multi-polar world amid the increasing importance of emerging markets; and the adoption of unconventional monetary policies. Highlights that the



global economy has changed significantly over the past three decades but that the international monetary system has not. Underscores limitations and obstacles to greater formal policy coordination amid narrow perceived coordination gains, limits due to domestic policy dominance and accountability, and lack of consensus on the degree of slack in the labor and product markets of the major economies. Emphasizes the need to build a common understanding about the transmission of policy spillovers.

ALEX CUKIERMAN (see page 93) highlights the ascendance of the renminbi as an international currency indicating that the renminbi may soon rank equally to the yen and sterling in terms of exchange market turnover, brought forward by the global financial and economic crisis. Predicts that the renminbi within ten years will be on a par with the US dollar as a regional trade settlement currency in East Asia and close to second to the euro as a world reserve currency. Affirms importance of deep and liquid bond markets for currency use. Views engagement of Chinese authorities to promote renminbi internationalization as critical despite concerns about the loss of control over on-shore financial markets.

JACOB FRENKEL (see page 99) Offers that reform of the international monetary system should be viewed with caution amid risks of a premature implementation. Outlines that any new system must address the prevention of severe economic recessions, shrinkage of international trade, avoiding emergence of large and sustainable external imbalances, adjust to the significant structural changes in the international economy with the emergence of China and emerging markets, facilitating an orderly normalization of interest rates, restoring competitiveness in the euro area and managing adverse demographic trends. Provides an overview of fixed and flexible exchange rate regimes and contemplates considerations for exchange rate target zones, emphasizing the persistent gap in views regarding the advantages of different exchange rate regimes. Stresses that the volatility of exchange rates should be seen as a manifestation of macroeconomic policies and that there is a risk of placing excessive weight on the role of exchange rates diverting attention away from the more central role global macroeconomic policies play. Sees the choice of membership as one of the difficulties of implementing target zones, indicating that the euro area struggles to bring about critical policy changes to ensure its long-term sustainability and asks why the international monetary system does not have more currency unions.

L. ENRIQUE GARCIA (see page 111) reviews occurrences of financial crises, emphasizing the role of debt cycles. Doubts common financial regulation can be implemented globally to avert such crises. Sees an important role for regional arrangements as a second line of defense to supplement the IMF, highlighting their capacity to deploy support rapidly and possibly with no conditionality. Stresses that Latin America does normally not experience region-wide shocks. Underlines the need to reinforce cooperation between the IMF and regional arrangements. Appeals for the strengthening of regional institutions.

ILAN GOLDFAJN AND IRINEU DE CARVALHO FILHO (see page 117) consider the bipolar view of exchange rate regimes as weak. The accumulation of foreign exchange reserves is seen as challenging the bipolar view even under inflation targeting regimes as foreign exchange market interventions have become the norm. Underline that international reserve accumulation introduces a distortion in the international financial system, recommending that countries should adopt flexible exchange rates and reduce reserve holdings. Argue that a lender of last resort would curb the need for reserve hording. See interest normalization in the US as possibly triggering a renewed balance of payments crisis.

RUSLAN GRINBERG (see page 123) calls for comprehensive reforms to mitigate the risks emanating from the financial sector. Considers as main threat to stability free cross-border capital movements and adverse spillovers. Limiting speculative capital flows through a Tobin tax is seen as expedient. Views an intimate involvement of the emerging markets in shaping needed reforms as essential, including through stronger representations at the main multilateral institutions. The dominant role of the US dollar is highlighted but seen as receding.

MÁR GUÐMUNDSSON (see page 129) underlines the desirability of institutionalizing central bank swap lines as a crisis prevention mechanism, stressing the importance of maturity mismatches in foreign currency. Outlines that IMF facilities are poor substitutes for central bank swap lines. Highlights growing consensus about use of capital controls.

PABLO E. GUIDOTTI AND JONATHAN C. HAMILTON (see page 135) highlight deficiencies in sovereign debt management and dealings with sovereign debt defaults, arguing that those constitute essential elements in the design of a new global financial architecture. Review the case of Argentina and emphasize the effect of rogue sovereign debtors on the functioning of international capital markets. Also criticize the lack of coordination among international institutions, indicating that the BIS has sheltered assets of sovereign rogue debtors. Reveal the importance of establishing a robust sovereign debt restructuring framework, underlining the importance of arbitration as a dispute mechanism.



SERGEI GURIEV (see page 145) considers the role of reserve currencies as a global good while affirming apprehension about the erosion of fundamental strength of the main reserve currency issuing countries. Laments that advanced economies have not learned the lessons of many emerging markets attributed to a myopic bias in policy formulation and sees a return to responsible macroeconomic policies as critical. Doubts whether currencies of non-democratic countries can become reserve currencies.

ANDY HALDANE (see page 149) calls for improving data on financial transactions to map the global financial web to address effectively systemic risk amid increasing capital market integration. Regrets insufficient data to allow adequate international financial surveillance stressing that IMF analysis has remained largely focused on country-specific risks. Recommends adoption of tracking the global flow of funds administered by the IMF to offer early warning signals and scenario simulations to regulators. Shows data indicating that financial flow correlations have been increasing through time and that correlations are higher by asset class than by country, attributing that to the behavior of global asset managers and as the rationale for the need for multilateral and spillover-based analysis.

KOICHI HAMADA (see page 155) offers a brief overview of the main theoretical foundations of the international monetary system reiterating the case for international monetary coordination. Questions the size and sustainability of the euro area, emphasizing that the euro area is too large to be an optimum currency area. Indicates that Japan was among those hit hardest by the global financial and economic crisis due to the inability of the Bank of Japan to counteract strong yen appreciation and extraordinary quantitative easing by major central banks.

ERIC HELLEINER (see page 161) reviews the history of the Bretton Woods Conference underscoring that key features of its outcome were the result of a gradual process that emerged during the late 1930s and early 1940s as part of US engagement in Latin America. Also emphasizes the importance of countries other than the US and Britain in influencing and contributing to the outcome, referring to the delegations from Brazil, China, India, Mexico, and the USSR, and the fact the conference addressed development concerns for poorer countries including ideas being discussed though not adopted, covering debt restructuring and regulation of capital flows. This is seen as important to help guide new efforts to reform the international monetary system to incorporate development objectives.

HAROLD JAMES (see page 169) emphasizes the risk of sliding back into economic and financial nationalism amid the erosion of international coordination in different spheres including economic policy, security, international governance, and debt restructuring. Underscores the re-emergence of the notion of currency wars but also financial wars using financial sanctions leading to a "weaponization of financial linkages." This evokes the institutional vision of Bretton Woods that wanted permanent representations of Britain, China, France, the US, and the USSR both on the IMF Executive Board and the UN Security Council. Stresses the importance of bilateral relations to shape an international order but cautions that only calamitous events are likely to prompt meaningful action for reform, noting that today's world is not obviously dangerous enough.

THOMAS J. JORDAN (see page 175) highlights possible frictions with the transition toward a multiple currency system amid the possibility of heightened spillovers while underscoring advantages of a more diversified international monetary system. Indicates that currency internationalization is an outcome of an evolutionary market-driven process that allows a country to issue international debt in its own currency but risks weakening control of monetary aggregates. Flags that it is unclear how the transition to a multiple currency system would impact overall stability. Sees better coordination among central banks and improved IMF surveillance and understanding of policy spillovers as important to strengthen the international financial safety net and to aid an orderly transition toward a multiple currency system. Is skeptical about prospects of transferring substantially more resources to the IMF.

MIKHAIL KHAZIN (see page 181) outlines fundamental weaknesses in the international monetary system based on natural limits to further expansion due to the inability to increase purchasing power in the world amid constraints to credit growth to stimulate production efficiency. Sees international dependence on the US dollar as a cap to further expansion amid constraints in the US and therefore preservation of the current international monetary system as unfeasible. Proposes as a remedy the introduction of a supranational currency, debt forgiveness, and time for the development of new economic tools and the establishment of several currency zones based on national currencies to facilitate intra-zone expansion while preserving inter-zone linkages through a system of fixed exchange rates.



HARUHIKO KURODA (see page 187) underscores the need to improve the international payments infrastructure to allow smoother cross-border financial transactions in support of a more resilient and stable international financial architecture. Presents recent efforts in Japan to adopt settlement for yen and Japanese government bonds (JGBs) in response to an increasing globalization of the yen and JGBs, and to improve Japan's financial market infrastructure and facilitate cross-border linkages. Envisages more cooperation in Asia to improve regional financial settlement arrangements.

IL-HOUNG LEE (see page 193) predicts emergence of a hybrid system based on a "tri-polar cluster" around the US dollar, euro, and renminbi. Underlines as a disadvantage of the current system the fact that countries may unduly target current account balance levels that may be inconsistent with their demographic profile. Sees the US dollar remaining the main reserve currency for the foreseeable future despite the shortcomings of the current international monetary system, and stresses the importance of government credibility. Highlights the importance of an adequate framework to promote local currency use and the desirability for Asia to move to using local currencies for trade settlement to dampen adverse monetary policy spillovers from the US.

DAVID DAOKUI LI (see page 199) emphasizes that the international monetary system is no longer adapted to a changed world. Describes the current system dependent on the US as unsustainable, in part due to increasingly diverging needs between the US and the rest of the world but also to the relative scarcity of US assets. Sees the evolution toward a multi-polar system around the US dollar, euro, and renminbi, and considers such a system as more stable. Presents China as a major beneficiary of the current system and as advocating a gradual transition to a new system, highlighting the expectation that China will have achieved full capital account convertibility within three years. Stresses important changes in international governance with the establishment of new institutions including the BRICS Development Bank and Contingency Reserve Arrangement, some as substitutes and other as complements to existing institutions.

JUSTIN YIFU LIN (see page 205) highlights that global imbalances were the cause of the global financial and economic crisis and can be attributed to the reserve currency status of the US dollar, which provided undue policy leeway. Sees the world moving toward a more diversified set of reserve currencies. Questions stability conditions of a multiple reserve currency system. Proposes adoption of a global reserve currency (p-gold) to be issued by an international central bank on the basis of a fixed monetary rule and an international treaty of fixed exchange rates.

JIN LIQUN (see page 211) reflects on the international monetary system as a vital platform for international economy policy dialogue. Sees the need for reform but with a focus on making the system more efficient, emphasizing as major challenges adjustment to global governance and restoration of an anchor currency for settlement in trade and investment. Notes that reforms of the system are critical to preserve its viability and sees the refusal by the US to support pending reforms of the IMF as risking forfeiting its international relevance.

RONALD I. MCKINNON (see page 217) affirms that the international economy has been on an international dollar standard for decades. Outlines the paradox that despite significant adverse factors characterizing the US dollar, the US dollar has remained the dominant international currency cited as “too valuable to lose and too difficult to replace.” Sees advantages of using a single international money. Explains the need to reform the international monetary system by improving the monetary and exchange rate policies of the US possibly with China becoming a more equal partner, arguing that a rehabilitation of the dollar standard depends on the relationship between the US and China. Considers as key reform elements for the US to abandon bias towards dollar weakness and establish link between fiscal deficit and trade deficits in particular in manufacturing. Proposes that the US should phase out its fiscal deficit in return for an increase in China’s consumption and increase its interest rates to reduce pressure on capital flows into China. Draws parallels between monetary and exchange rate developments in Japan and China. Clarifies that a US current account deficit is not a necessary condition for the use of the US dollar internationally. Envisages a return to exchange stability anchored in a stable renminbi/US dollar rate.



DANIEL MMINELE (see page 231) underscores that the international monetary system is not functioning effectively enough to produce a stable financial environment and highlights that, while the international economy has changed significantly, the international monetary system has not amid an insufficient representation of emerging markets. This tension is being attributed to repeated crises. Sees the persistent dominance of the US dollar as the primary reserve currency as a fundamental shortcoming but indicates that central banks have already started to diversify foreign exchange reserve holdings including allocations to emerging markets currencies such as Brazil, China, Korea, and Mexico, although allocations remain small. Affirms the importance of China’s bilateral swap arrangements. Considers the 2015 SDR valuation review as an important opportunity to support greater diversification of the basket. Calls for the G20 to make the reform of the international monetary system a high priority.

KINGSLEY CHIEDU MOGHALU (see page 239) emphasizes the importance of the IMF and World Bank for Africa’s economic development given its continued needs for assistance but for that development to be successful it must be driven by internal forces, stressing the importance of education, skills, and innovation. Remarks that focus of development finance lending has not been matched by societal transformations in poor countries. Indicates that the relationship between the multilateral institutions and Africa was unduly forged through structural adjustment programs. Sees the importance of new institutions, such as the BRICS Development Bank, which may undermine the dominance of the IMF and World Bank.

TAKEHIKO NAKAO (see page 247) outlines the role for development finance and the link between economic development and monetary stability. Sees development financing as critical to address persistent widespread occurrences of poverty and to support a post-Millennium Development Goals agenda focusing on quality economic growth to address rising income inequality, rapid urbanization and environmental degradation, global climate change challenges, and to prevent communicable diseases. Describes a need to reinvent development finance through raising domestic taxes and developing local capital markets to mobilizing domestic resources, increasing overseas development assistance, and fostering regional financial cooperation.

YOICHI NEMOTO (see page 253) views the strengthening of the global financial safety net to safeguard stability as essential, underlining the role of regional arrangements.

Reviews recent changes to the Chiang Mai Initiative Multilateralization (CMIM) such as an increase in size and the portion delinked from the IMF and the agreement on the introduction of a precautionary credit line. Sees a need to better define the division of labor between regional safety nets and other mechanisms and coordination on surveillance and risk assessments.

BANDID NIJATHAWORN (see page 259) emphasizes that policy makers need to focus on crisis management and prevention and deepen intra-regional collaboration amid increasingly converging economic interests and mounting financial globalization in particular in Emerging Asia. Summarizes as key policy lessons from past crises that no country is immune to crises, domestic policy risk represents a key source of vulnerability, financial crises are rooted in excessive debt and leverage, and highlights as remedies exchange rate flexibility to allow economies to adjust to shocks, self-insurance through international reserves and regional arrangements, and strengthening the resilience of the domestic financial sector.

EWALD NOWOTNY (see page 265) reviews recent developments in the European Union, highlighting the international role of the euro, summarizes institutional adjustments made to address the euro area crisis, underscoring the cost of financial crises, and emphasizes the cooperation between the IMF and the EU as a model for future cooperation between the IMF and regional financial arrangements. Calls for a reform of the international monetary system helped by strengthened IMF surveillance to address systematically important policy spillovers.

JOSÉ ANTONIO OCAMPO (see page 271) underscores fundamental flaws in the international monetary system based on the Triffin dilemma and sees possible solutions in moves toward a multi-currency system and added use of SDRs. Recommends merging the IMF SDR and GRA (general resources) department, the use of SDRs in all IMF transactions, and the establishment of a substitution account to allow countries to exchange conventional reserves assets for SDRs. Repeats that robust domestic conditions may not be sufficient to insulate countries from crises.

MOHAMED AZMI OMAR (see page 277) affirms that excessive credit expansion is a main cause for international financial crises. Advocates the introduction of risk-sharing elements among banks and a closer link between economic growth and credit expansion. Underscores that Islamic financing offers bank risk sharing and



links credit extension to growth in the real sector to help contain excessive credit growth.

GUILLERMO ORTIZ (see page 285) proposes to enhance IMF surveillance effectiveness and to gain cooperation traction through governance reform and a broadened mandate by establishing a "new IMFC" (International Monetary and Financial Committee) as an integral part of a reinforced surveillance framework in substitution of the G20 and to bind IMF members to major initiatives for international cooperation. The latter would be based on an amendment of the IMF Articles of Agreement also give the IMF explicit jurisdiction over member countries' financial accounts within the multilateral framework, recognizing policy spillovers and the need to strengthen international liquidity distribution.

PIER CARLO PADOAN (see page 291) feels that the resolution of protracted current account imbalances is constrained due to persistent asymmetries given unequal burden sharing between surplus and deficit countries, the advantage of the main reserve currency issuing country, and a lack of sanctions for countries resorting to exchange rate devaluations that produce adverse incentives for rebalancing. Views the adoption by the G20 of the dual target of raising economic growth while achieving a reduction of current account imbalances as inducing a more cooperative behavior among G20 countries that may help address those asymmetries. Affirms that European monetary union has rendered balance of payments adjustment more burdensome and criticizes the euro area for pursuing payments adjustment without promoting growth. Sees the need for the G20 dual approach to be adopted by the euro area in addition to measures to raise productivity. Calls for public intervention to increase investments in infrastructure.

MARTIN PARKINSON (see page 297) remarks that international cooperation is critical to allow for an orderly transition of the international monetary system toward a multi-currency system. Sees that the system has failed to adjust to the significant changes in the world economy. Points out that the continued dominant role of the US dollar is disproportionate to the declining share of the US in the world economy. Iterates a concern that the US will not be able to satisfy the demand for safe assets which may distort capital allocations and cause exchange rate misalignments. Stresses the importance of trust to support a currency's international role and argues for the need for new sources of trust to underpin a multiple currency system underscoring the advances China has been making. Outlines that international cooperation will be vital to build broader trust and urges reform at the IMF as the entity best placed to preserve international cooperation. Laments weak leadership from large players in making global cooperation successful which may unduly encourage emerging powers to seek alternative arrangements.

LUIZ A. PEREIRA DA SILVA (see page 303) outlines that emerging markets' experiences in addressing financial fragility and strong capital flow volatility offer critical input for strengthening the global financial safety net. Sees as unanswered how to manage effectively financial pro-cyclicality, undue risk-taking and large cross-border financial flows, remarking that Brazil was used to managing "sudden stops" and learned to manage "sudden floods" of capital. Underscores the importance in Brazil of mandatory registration of financial assets including OTC derivatives as a critical component to allow real-time monitoring of credit and counterparty risk in the financial system. Describes the Central Bank of Brazil's foreign exchange protection through foreign exchange swaps to help non-financial corporations seek foreign exchange hedging as an important component to safeguard financial stability.

MURILO PORTUGAL (see page 313) highlights the need for stronger internationalism and multi-lateralism. Sees IMF surveillance as needing to become more independent and authoritative. Proposes adoption of the Council, a provision in the IMF Articles of Agreement, as part of the organization of the IMF which would have more binding power of IMF decisions on member countries to facilitate multilateral surveillance and international collective action. Considers the IMF's weighted voting system as adequate but urges the avoidance of dominance by a small group of countries. Advocates promotion of the SDR as a reserve asset to include the major currencies and to help smooth volatility of exchange movements.

MARTIN REDRADO (see page 319) underscores that emerging markets have become increasingly resilient with the adoption of more robust policy frameworks amid stronger fiscal positions, more sustainable external accounts, greater credibility of monetary authorities, build-up of sizable foreign exchange reserves, and deepening of local capital markets, but indicates that significant inter-emerging markets differences remain. Considers that international financial institutions could play a more active role to assist countries in the event of sudden shifts in capital flows. Sees emerging market currencies as playing a more important role in the international financial system.



KLAUS REGLING (see page 327) draws a parallel between the deficiencies of the international monetary system and the European monetary union aggravated by tighter economic and financial linkages. Recalls that the euro area crisis exposed problems in the conduct of economic policies and institutional gaps in the design of the union as members did not fully accept the political constraints of monetary union. Underscores that significant changes were adopted in the euro area including the ECB's unconventional monetary policies and overhaul of the euro area governance structure with more comprehensive rules on fiscal surveillance and macroeconomic imbalances, the strengthening of the banking system with a new supervisory structure and establishment of a robust crisis resolution framework. Sees the future of the international monetary system as heading toward a multi-polar currency world with the need to adopt a solid financial safety net with an important role for regional arrangements. Stresses the need to nourish the debate on the international monetary system in particular to address mounting social challenges.

ERIC SANTOR AND LAWRENCE SCHEMBRI (see page 335) propose a policy framework to achieve external, monetary, and financial stability based on inflation targeting with a flexible exchange rate in combination with a credible fiscal policy, and sound regulation and supervision of the financial system. Consider foreign exchange market intervention as unduly increasing the likelihood of secular stagnation due to repressed global demand and undermined financial stability as domestic savings are being channeled at depressed interest rates away from private borrowers as exemplified by China. Recommend acceleration of the pace of exchange rate and financial liberalization while establishing effective regulation and supervision to create a robust financial safety net. View the IMF's governance structure as inadequate to allow accountability and advocate dynamic voting shares based on economic performance. See the need for adoption of global standards for financial regulation and supervision.

JOSEPH E. STIGLITZ (see page 343) argues that a new international monetary system is needed to avert the deflationary bias of the current system as the world has entered an era of deficient global aggregate demand. Outlines that the system rests on the US dollar, burdening the US unduly with the role of deficit country of last resort, reducing aggregate demand in the US, and eventually causing a loss of confidence in the sustainability of its deficit (Triffin dilemma). Stresses the role of increased and volatile capital flows and associated exchange rate fluctuations that have asymmetric inter-country effects resulting in a net decline of international consumption. Laments absence of an effective mechanism amid market failure to distribute aggregate demand globally, smoothly and reduce mounting inequalities between countries. Indicates that the euro area has forced external deficits on the rest of the world. States that the Bretton Woods conference has been unsuccessful in creating a global reserve currency amid a lack of understanding of the principles that govern international economics, inability to predict the evolution of the global economy, and a failure of politics. Emphasizes that the changes in the global economy have made the case for a global reserve currency more imperative but that politics may, as with Bretton Woods, be the greatest impediment to change. Proposes adoption of a global reserve system that could be based on the SDR.

BAKHYT SULTANOV (see page 351) sees important destabilizing forces due to divergence in prices of raw materials, in particular the fall in oil prices, conflict in Ukraine, continued uncertainty in addressing the debt crisis in Europe, and the slowdown of the world economy. Outlines important challenges for the capitalist system amid the need to address increasing inequalities and considers as the most important task the achievement of sustainable economic growth, stressing the risk of the middle income trap. Views as urgent the establishment of a new form of multilateralism to prevent fragmentation of the global economy. At the same time, sees an increasing importance of regional arrangements and the decline of multilateral institutions. Affirms that the new BRICS Development Bank indicates new momentum for change in inter-governmental finance and cooperation.

GYÖRGY SURÁNYI (see page 357) highlights the risk of simultaneous deleveraging that may exacerbate crises. Criticizes that euro area crisis resolution may not have adequately taken into account the underlying causes of the crisis of excessive internal and external indebtedness. Emphasizes the adverse impact of deleveraging on financial savings. Given global savings and investment balances, views that deleveraging is only needed when there is excess demand globally and that countries that may incur additional debt but that fail to do so may deepen the crisis further and endanger their own growth.



CHALONGPHOB SUSSANGKARN (see page 365) views the need to strengthen financial safety nets to maintain financial stability and ensure adequate use of capital controls. Does not consider bilateral swaps as effective amid undue political considerations and appeals for the rethinking of the design of the IMF's facilities to consider the introduction of more transparent and verifiable qualification criteria to ensure that countries know at all times what facilities would be available in case of need. Advocates regional arrangements to offer easier access, citing FLAR as an example, and calls for increases in the IMF delink portion of existing regional arrangements.

JEAN-CLAUDE TRICHET (see page 373) recalls that the search is for an optimum international monetary system that provides stability together with a high and stable level of real growth in each economy and the global economy as a whole. Emphasizes that the period of "Great Moderation" ignored a considerable accumulation of endogenous financial and economic risks, the concentration of such weakness in the advanced economies due to a generalized excess of leverage that was neglected by the international economy, a sentiment of excessive tranquility and confidence amid an undue reliance on the efficiency of markets, and low levels of volatility in output and inflation. Remarks that the international monetary system needs to adapt to the complexity of global finance and urges that reform be pursued as a priority. Insists that the G20 should considerably improve coordination of economic macro-policies and that a fragmentation of the international financial system needs to be avoided. Underscores the importance of the convergence of the definition of price stability between the central banks of the euro area, Japan, the UK, and US, underlining that the international economy has now for the first time a global nominal anchor. Asks whether this could lend itself to a stabilization of core convertible currencies. Proposes a potentially greater role for the SDR while being open to the broadening of the SDR basket.

TATIANA VALOVAYA (see page 381) outlines the regional dimension of currency unions and projects establishment of several regional monetary blocs with strong ties between blocs as a more diversified and more stable system. Sees the SDR as a possible aggregation mechanism for strong regional currencies and a viable alternative reserve asset in the long term, affirming that a future SDR basket could also include single currencies of several large and dynamic regional economic blocs.

JULIO VELARDE (see page 387) calls for better global policy coordination involving emerging market economies and sees constraint in the fact that emerging markets representation in the multilateral institutions remains inadequate. Affirms that countries may vary significantly in their interest to coordinate their policies citing China's exchange rate policy. Underscores the persistence of global imbalances and sees a risk in a recomposition of emerging markets central bank reserve portfolios as countries reduce dollarization.

IGNAZIO VISCO (see page 395) emphasizes the need to strengthen financial system stability to prevent future crises. Focuses on IMF surveillance, with a possible broadening of the IMF's remit, and an increase in the IMF's resources to constitute a more effective "firewall." Views countries' self-insurance as still dominating and doubts whether alternatives can be substitutes for countries' owned reserves. Remarks that international reserve accumulation given a limited supply of safe assets leads to distortions in global financial markets.

BORIS VUJČIĆ (see page 401) highlights the favorable policy response to the crisis, in particular the role played by the IMF, central bank measures, and how the crisis has led to strengthening economic governance in particular in the European Union. Offers a comprehensive account of economic policy measures taken around the crisis but emphasizes risks amid unrealistic expectations regarding the effectiveness of monetary policy, affirming the possibility of another crisis amid persistent underlying structural deficiencies. Points to the risks for market stability of a sudden reallocation of central banks' international reserves but dismisses such a scenario as unlikely.

HIROSHI WATANABE (see page 409) reflects on the importance of the US dollar for payments in international transactions with regard to its effect on dollar stability. Underscores the risk of US sanctions and the related impact on the international payment system raising the question of whether a new clearing mechanism is needed.

AXEL A. WEBER (see page 413) underscores weaknesses in inflation targeting frameworks due to the choice of consumer prices seen as too narrow to be effective and proposes a broader set of parameters relevant for the long-term stability of the value of money. Advocates the use of a range of intermediate targets to guide medium-term stabilization objectives. Warns that central banks, by trying to boost consumer prices, interfere in capital markets and hamper efficient allocation of capital.



YU YONGDING (see page 419) sees the emergence of the renminbi as a major international currency as a long process amid concerns about the sequencing of capital account liberalization and incomplete financial reforms. Affirms the risk that the renminbi with greater liberalization may become more volatile, which may dampen its attraction as a trade settlement currency. Stresses need for China to incur a capital account deficit to channel renminbi liquidity abroad. Questions whether China should engage in capital exports while it is still relatively poor and whether renminbi internationalization should wait until China has achieved an income per capita similar to advanced economies.

## ABOUT RBWC

RBWC is a US-based not-for-profit organization established in 1994 and dedicated to pushing forward the thinking on how best to manage the international monetary system. The organization's guiding philosophy is that policy directions emanating from research must not only consider the usual public and influential private sector perspectives, but must also take into account the viewpoints of members of emerging markets, whether major powers like China or smaller economies. To this end, RBWC designs a yearly program of conferences to stimulate dialogue at the highest level between academics, policy makers and market participants representing a diverse mix of actors, both longstanding and new.

Since its creation, RBWC has organized nearly 100 conferences conducted in every continent and involving numerous academic presenters in dialogue with varied stakeholders of the international monetary system (e.g. central bank governors, ministers of finance, market practitioners, representatives of international organizations, G20 delegates).

In the mid-90s RBWC monitored and discussed the Mexican financial crisis, the evolving role of emerging markets, the implications of financial contagion, and the introduction of the euro in the international monetary system. Also addressed in the mid-90s were subjects such as regional monetary cooperation, China in the aftermath of the Asian crisis, the shifting role of major international organizations, and the establishment of an international bankruptcy court.

The late 1990s marked RBWC's focus on bringing attention and fresh perspectives to issues raised during the G7 Summit, the IMF/World Bank annual meetings, and the annual meetings of multilateral development banks.

Since the creation of the G20 in 1999, RBWC made it a priority to serve as an informal partner to this forum with which it co-hosted and organized influential events focusing on global imbalances, reforming the governance of the Bretton Woods institutions, exchange rate debates, as well as capital flows and financial regulations at an international level.

In 2009, at the peak of the financial crisis, when the G20 was elevated as the premier forum for international economic policy, RBWC had already been performing an outreach role for the different chairs of the G20 by helping them identify priorities from past summits and outline new objectives for their presidency.

In 2011, RBWC supported G20 priorities under the French presidency and worked in cooperation with the French Treasury and the Banque de France toward achieving the set goals. The program included the reform of the international monetary system, a framework for sustainable growth, supporting the expanding role of emerging countries, and developing local currency finance and local capital markets.

In 2012, RBWC assisted Mexico's G20 presidency to facilitate dialogue and communication with all relevant stakeholders of the international economic community and support continuity of the G20 policy agenda. Under the implications of sovereign default in Europe, fragmentation and strained multilateralism, RBWC promoted the importance of strengthening the international financial architecture in order to restore confidence across G20 countries, but also on a global level.

The incremental reform proposals driven by the G20, and the objectives to reform the existing institutions of the international financial architecture, have been the core undertaking of RBWC and remain a top priority in the organization's agenda today. As RBWC continues to work closely with the G20 chair, it is also more committed than ever to giving a strong voice to emerging markets and others often left out of the conversation.

In 2014, RBWC's program entitled Bretton Woods @ 70 focused on broadening the area of common ground on steps needed to adapt the international financial architecture to challenges being faced seven decades after the Bretton Woods conference. The publication of this volume is an outgrowth of the work carried out during this year.

At the time of the publication of this volume RBWC had started to work on its 2015 agenda entitled "Mapping the Route Towards a Multipolar Architecture" and



focused on elucidating how the international financial architecture is being redefined by China's growing presence in the global financial system and the shock wave this shift is creating.

For further information: http://www.reinventingbrettonwoods.org/

## ACKNOWLEDGMENTS

THE PUBLICATION OF this commemorative volume would have been impossible without the participation and support of many. First, we would like to thank all the authors who kindly agreed to contribute to this publication. We are very grateful to each and every one of them for taking the time to share their perspectives in writing and for accepting to work within the limits set by the questions they were asked to ponder.

Second, we want to thank Prudential Investment Management for sponsoring this publication. Without their generous financial support this volume might not have seen the light of day. We thank the leadership at Prudential Investment Management for having believed in this project when it was only an idea and for their vision in being able to appreciate the importance of such an undertaking.

Third, we want to express our deep gratitude to Ousmène Mandeng not only for being the spokesperson for this publication at Prudential Investment Management, but also for serving as a formidable intellectual partner in the planning stages as well as in the execution and oversight of this project.

A big thank you also goes out to Catherine Bonifassi and Vanessa Blondel at Cassi Edition, who patiently and expertly guided us in designing and assembling this publication. We also want to acknowledge Abi Saffrey and Claire Annals for their careful editorial work, and Maxat Kurbenov for his helpful comments and suggestions. Julie Conrard, Manon Guerin, Agathe Jambu-Merlin, and Gabrielle Nauguet must also be mentioned for their help and patience in moving this project forward.

Reinventing Bretton Woods Committee

*Bretton Woods: The Next 70 Years*

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New York NY 10016
www.reinventingbrettonwoods.org

Edited by Marc Uzan


Art direction, design, editorial coordination and production:
CASSI EDITION
Catherine Bonifassi, Vanessa Blondel, Martine Trelaun



Printed in the United States of America