CIGI

FIVE YEARS AFTER THE FALL

The Governance Legacies of the Global Financial Crisis

SPECIAL REPORT

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57 Erb Street West
Waterloo, Ontario N2L 6C2
Canada
tel +1 519 885 2444 fax + 1 519 885 5450
www.cigionline.org

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John F. Helliwell

ABOUT THE AUTHOR

John F. Helliwell, of the Vancouver School of Economics at the University of British Columbia, is Arthur J.E. Child Foundation Fellow of the Canadian Institute for Advanced Research (CIFAR) and co-director of CIFAR's program on Social Interactions, Identity and Well-Being. His most recent books include *Well-Being for Public Policy* (Oxford University Press, with Ed Diener, Richard Lucas and Ulrich Schimmack, 2009), *International Differences in Well-Being* (Oxford University Press, edited with Ed Diener and Daniel Kahneman, 2010) and the *World Happiness Report* (edited with Richard Layard and Jeffrey Sachs for the April 2, 2012 United Nations meeting on happiness). He is a fellow of the Royal Society of Canada and an Officer of the Order of Canada.

More information and publications are available at: http://faculty.arts.ubc.ca/jhelliwell/.

OVERVIEW

This special report contains five papers commissioned to provide the basis for discussion at the panel sessions of the CIGI '12 conference, Five Years After the Fall: The Governance Legacies of the Global Financial Crisis. This overview first sets the five papers in the context of the discussions at the meeting, and then explores, as was done in the final session at the conference, some ways of using recent research in the science of well-being to provide a fresh perspective on different and possibly fruitful ways of increasing international cooperation in governance.

The need for a fresh approach was apparent throughout the conference sessions, as the panel discussions revealed many flaws, weaknesses and shortcomings in the goals and procedures reviewed in the papers. The prevalence of discouraged and pessimistic opinions on the state of post-global financial crisis governance had become so pervasive in the discussions by the fifth session, that CIGI Distinguished Fellow Paul Heinbecker challenged participants to make a more optimistic search for better ways forward.

The Short View: The Global Conjuncture and the Need for Cooperation by James A. Haley, sets the stage by presenting current evidence on the short-term economic conjuncture, listing the key legacies and recommending ways to implement "a common interest in timely external adjustment, consistent with the return to full employment and the maintenance of the system of open international trade and payments that has been constructed over the past 70 years or more." Haley celebrates the short-term policy cooperation, particularly among major central banks, that avoided pro-cyclical policy responses, but left the global economy "dangerously unbalanced." He notes three problematic legacies — the deterioration in public finances, uneven monetary policy trajectories, and incomplete and ill-coordinated reforms of financial regulations. Together, these legacies have resulted in widespread overhanging debt and impaired balance sheets across many countries and sectors.

Haley's policy recommendations focus on three areas: a medium-term orientation in order to deal with unsustainable debt levels in ways that do not jeopardize the restoration of sustainable patterns of growth; the need to build a stronger and more resilient global financial system; and more explicit recognition of international spillovers of domestic policies.

Especially in dealing with the latter problem, Haley contends that the Group of Twenty (G20) Mutual Assessment Process remains the best hope of assuring timely and orderly rebalancing. For all three areas, the paper argues that governance reforms are needed to ensure that international financial institutions (IFIs) and the G20 are regarded by their members as legitimate, credible and effective. In considering how this can best be done, Haley underlines the importance of striking "a judicious balance between the key public policy objective of stability and the need for efficiency and innovation." He also raises another governance issue that is central in several of the other papers: addressing what is widely seen as "a fundamental trade-off between effectiveness on the one hand and representation on the other."

Another Fine Mess: Repairing the Governance of International Financial Regulation by Pierre Siklos on the governance of international financial regulation, makes a stern judgment at the outset: five years after the onset of the crisis, policy makers "continue to believe that the severity of any crisis-led downturn can be divorced from its source," and that "instead of limiting the extent to which the financial sector is prone to crises, policy makers have opted to socialize the downside risks of a future economic crisis." Siklos contends that a world of flexible exchange rates and internationally mobile capital renders international collaboration essential if "beggar-thy-neighbour" policies are to be avoided. Although this has long been recognized in the realm of macroeconomic policies, Siklos argues that it is equally important, even if more difficult to achieve, in the realm of prudential policies ensuring the stability and resilience of financial systems.

Looking forward, Siklos maintains that "as long as the international community recognizes the potential spillovers from crisis-response measures…there is nothing to prevent the adoption of local solutions to problems that have global repercussions." What is needed to achieve this in the regulatory sphere, he contends, is "leadership in agreeing on a range of acceptable regulatory frameworks…capable of operating with a minimum of spillovers that might threaten financial system stability." To achieve this, Siklos argues that especially in the case of financial regulation, a top-down approach is not workable, while current surveillance has failed to assess the global impact of individual country policies. As one step towards an improved framework, he suggests that the Financial Stability Board (FSB) might provide a more representative model than that of the G20.

Strengthening International Financial Institutions to Promote Effective International Cooperation by Thomas A. Bernes, focuses directly on what can be done to make IFIs better able to promote international cooperation. Although Bernes' attention is more on formal aspects of governance, such as voting structures and membership, his conclusions are akin to those of Siklos. Meaningful international cooperation has been easiest to achieve for short-term actions required to deal with immediate threats, and especially where spillovers are modest. Bernes argues, therefore, that when the G20 first met at the leaders' level in 2008, the spur provided by the financial crisis was sufficient to produce concerted macro responses plus a crisp approach to governance reform of IFIs. The implementation pace on key elements has, however, been mixed. He points to, for example, the full implementation by 2011 of the agreed IMF quota and voice reforms, but scant progress on further reforms and the proposed Charter for Sustainable Development. Bernes gives high marks to a parallel institutional improvement — the broadened scope and effectiveness of what is now the FSB.

More generally, Bernes quotes, with reluctant approval, the judgment of Raghuram G. Rajan that "politics is always local; there is no constituency for the global economy." Bernes sees the subsequent history of G20 leaders' meetings as one of a shift to longer communiqués couched in vaguer language, and more inclined to call for further studies than for immediate action. He concludes by documenting what he considers to be flagging belief in the prospects for reform of international financial governance.

In *Sustainable Development and Financing Critical Global Public Goods*, Barry Carin takes up explicitly the problems of developing a global political constituency and of designing mechanisms to match. In choosing sustainable development as his case study, Carin has clearly identified a policy area where new constituencies and mechanisms are both essential, at least with respect to global warming. Carin makes a spirited defence of the idea that global public goods require global public financing. He invites readers to "think outside the box," recounting what it took to deliver some previous major changes in social norms and international institutions. The two main examples Carin provides of large institutional changes are the development of the euro and sovereign debt relief. In both cases, he cites as necessary but not sufficient ingredients, "a coherent vision of a better option, a champion to articulate and promote the vision, and a process of scheduled meetings to develop and nurture strategy to realize the vision." Most important, Carin suggests, is "incrementality — the process of change accomplished by a series of small steps towards the vision."

Carin continues his discussion by explaining and evaluating a number of existing mechanisms for funding green investments, finding them inadequate, and proposes Special Drawing Right linkage as a new source for green investment funds. His use of specific examples of institutional reforms, both past and potential, is perhaps of most use in exposing some often ignored elements of successful reforms, especially the time required to change minds, build new relationships and change long-standing social norms.

Leadership in a Turbulent Age by Fen Hampson and Paul Heinbecker, starts by listing several ways in which international governance issues are becoming inherently more complicated, as interdependencies increase and global leadership necessarily becomes multilateral, or at least multipolar. They contrast minilateral and maxilateral approaches to global leadership, which leads, once again, to a key issue raised in all of the papers and conference discussions: How is it possible to secure the breadth required for democratic legitimacy while maintaining the focus and urgency required for action? "Invariably, minilateral arrangements are necessary to make international institutions work — notably in climate change negotiations — and sometimes exclusive clubs are more effective than inclusive ones, as the response to the financial crisis has demonstrated. The trend towards a greater role, voice and responsibility for the world's emerging powers is, nevertheless, evident in the dispute over UN Security Council enlargement, in IMF voting rights reform, and especially in the G8's ceding of much of its responsibility for steering the global economy to the G20."

Hampson and Heinbecker also note the emerging importance of non-state leadership, as communication technologies enable global issues to be the subject of worldwide petitions, mass demonstrations and informal plebiscites, which can be seen to reflect the emerging views of "tech savvy" global publics that are "increasingly attracted to direct, rather than representative, democracy."

Two other important ways of finessing the legitimacy/efficiency conundrum are put forward by the authors: narrowing the scope of the mission and creating voluntary coalitions of interested parties to address problems of mutual concern. The first is the continuing and growing importance of regionalism, which Hampson and Heinbecker note was envisaged by the UN Charter. The second involves state and non-state actors cooperating on the solution to specific problems. Early examples of this would include the Montreal Protocol on controlling chlorofluorocarbons to save the ozone layer and the Ottawa Treaty to eliminate landmines, both signed in 1997. The authors' more recent examples focus on collective conflict management in which "countries or institutions address security threats by banding together to…diminish or end conflict," and to mediate or otherwise improve conditions for a sustainable peace. Referring to the example of the Proliferation Security Initiative, they see these informal coalitions as being based on principles in lieu of formal charters, involving operations rather than regular meetings, and requiring neither headquarters nor intergovernmental budgets. Using the Dubai Process for improving cooperation to deal with a variety of issues related to the Afghan-Pakistan border as a second example, Hampson and Heinbecker argue that informality avoids the need for great power leadership and permits relatively easy collaboration among national, international and non-governmental stakeholder groups with relevant interests and expertise. While the informality of these ventures increases the speed and effectiveness of responding to emergencies, the consequential lack of equal access raises the risk of a democratic deficit in cases where there are widespread differences of opinion about what should be done, including how and by whom, and at whose expense.

When opening the fifth panel discussion Paul Heinbecker remarked on the prevailing pessimism in the discussions of the first four papers stating, "If you had been sick yesterday, you would have been afraid that you wouldn't die." He argued that although we hear and see bad news being transmitted from around the globe, the world is, nonetheless, richer, healthier, safer, better educated, better connected and more long-lived now than ever before. The proportion of children vaccinated against childhood diseases around the world is 95 percent. There are 80 percent fewer interstate wars than 30 years ago. There were more Canadian casualties on the first morning at Juno Beach on D-Day than in the entire Afghan operation. Let us see, Heinbecker urged conference participants, where the opportunities are and look for solutions rather than just enumerating the problems.

Heinbecker's challenge to change the tone of the discussion struck a responsive chord among the participants, and as rapporteur, it steered me to frame the conference summary in the final session in the way he had suggested. The discussions on the first day of the conference detailed how traditional economic policy instruments and institutions had not managed to achieve the traditional economic objectives. How different might the issues and discussion be if the reference document used as the basis for a paper's framework was not the *World Economic Outlook* (as it is in James Haley's paper), but instead the *World Happiness Report* (WHR)?[1] The WHR, and the research it reviews, advocates thinking of conventional economic objectives within a broader framework of well-being, one that more easily embraces the CIGI '12 topics of peace, security and environment sustainability. Perhaps even more important for attempts to resolve the governance issues under the microscope at the conference, the fledgling science of well-being already has many implications for changing not just the "what," but especially the "how" of governance. If the constraints imposed by the saying that "all politics are local" are to be relaxed, which will be necessary if a global constituency is to be created to address climate change and other global issues, then creating and strengthening broader social identities will be required. The science of well-being also has some hints for how this might be done.

The WHR was commissioned to support a UN High-level Meeting on "Happiness and Well-Being: Defining a New Economic Paradigm" on April 2, 2012, pursuant to a General Assembly Resolution in July 2011, proposed by the prime minister of Bhutan to make happiness and well-being explicit criteria in the selection of national policies. It has been proposed by some, including Jeffrey Sachs, that happiness should be made one of the UN Sustainable Development Goals for 2015 through 2030. The WHR makes it clear that the key measures of happiness used to

1 The report is available at: www.earth.columbia.edu/articles/view/2960.

monitor progress should be the evaluation by individuals themselves of the quality of their lives. Such evaluations have been shown to depend, much as Aristotle presumed two millennia ago, not just on positive emotions, but also on fundamental judgments about freedom, life purpose, health, social trust and the overall quality of the social fabric, in addition to the material supports provided by GDP and other conventional measures of economic development.

To be more specific, the life evaluations for more than 150 countries collected in the WHR show vast international differences in average life evaluations. Measured on a scale from 0 to 10, with 10 as the best possible life and 0 as the worst, the average score for the top four countries (Denmark, Finland, Norway and the Netherlands) is 7.6, more than twice as high as the average of the four lowest countries, all of which are in Sub-Saharan Africa. This is not just another way of dividing rich and poor countries, although the top four are vastly richer than the bottom four, with real GDP — measured at purchasing power parities — more than 30 times greater. All of the other key explanatory factors are higher in the top countries, and together, these other factors explain more than two-thirds of the difference in the quality of lives being lived in the top and bottom countries. Healthy life expectancy is 28 years greater in the top countries than in the bottom group In the top countries, more than 95 percent of the population have someone to count on in times of trouble, while in the bottom countries, this can be as low as 50 percent. The happiness consequences of the critical differences in basic social support is the single biggest factor explaining the happiness gap between the top and bottom countries. Other key factors include freedom to make life choices (more than three times higher, on average, in the top countries than in bottom countries), corruption in business and government, where the gaps are even greater, and generosity, too long ignored as a source of life satisfaction.

All of these key variables have been on development agendas, in one form or another, but when funds are allocated, meetings called and agendas set, the focus is often centred on levels and growth rates for income, in large part because national accounts of income and expenditure have, over the past half century, become the major currency for international comparisons.

What lessons can be drawn from this happiness research to improve the ways in which international cooperation is managed and how international meetings are run? In some of the discussions that took place during the first day of the conference, participants were skeptical of the usefulness of face-to-face meetings between leaders and officials. In contrast to this skepticism, several decades of experimental research by Elinor Ostrom and colleagues[2] shows that even a minimal number of face-to-face meetings significantly increases trust and willingness to adopt cooperative solutions to the management of common property resources and a variety of other problems where cooperative solutions are required. There is also another strand of psychological experiments that shows that bottom-up and other decentralized approaches, produce greater happiness and more durable solutions, by providing individuals and groups the capacity to influence their own destinies.[3]

Taking happiness seriously could bring a wider range of objectives into a comparable focus, improve the methods used to design and deliver international collaboration, and help to create the broader social identities required to build international constituencies for global action. It also shows that human beings are much less self-interested than policy "realists" assume them to be. The scope for mutually satisfactory solutions to international issues is, therefore, much larger than is often presumed.

If the objectives for national and international policy are broadened from economic development to self-assessed well-being, a broader range of policies would be available to improve well-being, making it easier to resolve what is often seen as an intractable conflict between economic growth and environmental sustainability. If (as is argued in the WHR) well-being has stronger support in the social context than in the material one, then many new options become available for improving lives without increasing pressures on the physical environment. The availability of overarching measures of human well-being (such as those provided by life evaluations) permits economic and non-economic supports for the quality of life to be assessed in comparative terms. This raises the credibility and visibility of those non-material aspects of life that are suspected or known to be important, but are usually relegated to the footnotes of benefit/cost analysis and other policy evaluations.

How can happiness research influence the "how" as well as the "what" of international policy cooperation? There are two connected issues at play here. One relates to the conference conundrum of how to simultaneously achieve representation and efficiency when the number of interested parties grows and the issues become more complicated. The second relates to how specific policies are designed and delivered.

To help break the representation/efficiency trade-off, people need to trust the quality and values of a decision

2 The research findings are summarized in Ostrom's Nobel Prize Lecture, available at: www.nobelprize.org/nobel_prizes/economics/laureates/2009/ostrom_lecture.pdf.

3 See: www.csls.ca/festschrift/Helliwell.pdf.

mechanism far more than they need or even want to be directly involved. The Ostrom and other experiments with trust games demonstrate how important face-to-face meetings are for creating trust. And where trust is high, there is less need to be at the table. In high-trust environments, it is that much easier to use flexible statements of principle rather than detailed plans and commitments as a basis for joint action. Examples include the Hampson and Heinbecker paper's collective conflict management case studies, as well as instances of effective informal Commonwealth cooperation described by Cyrus Rustomjee. Rustomjee noted the informality and trust that characterized cooperative activities to better defend many low-lying Commonwealth islands and territories at risk from past and expected rises in ocean levels. This example speaks to both aspects of "how" — the ways in which an agreement comes about and how policies are designed and delivered in practice. It has been possible to assemble expert Commonwealth teams from far-flung sources that are able, on short notice, to work collaboratively with those living in an affected area to find and implement mitigating measures.

The keys to the success of these easily formed cooperative ventures are that power is entirely out of the picture, goodwill can be safely assumed, and most of the resources employed represent voluntary redirection of skills normally used elsewhere. These should not be surprising to those versed in the science of well-being, as it is increasingly well documented that those who provide effective assistance to others gain even more from the exchange than do the recipients. But the best outcomes result when both givers and receivers of expertise combine their knowledge and initiative to deliver better solutions.

Increasingly, well-being research is documenting, based on a variety of survey and experimental evidence, that human beings are not merely social beings,[4] but also pro-social beings who are happier when they are doing things both with and for others. Indeed, recent experimental research has shown not only that generosity has claims to be a psychological universal,[5] but that even young toddlers are happier to give than to receive.[6]

The emerging understanding of the social and pro-social nature of humankind rationalizes and supports the number and variety of interlocking groups that, together, make up the fabric of international cooperation. But to make this fabric work effectively, it is first essential to unshackle the meetings and the minds of the participants from the presumption, so frequently mentioned in discussions on the first day of the conference, that national politics require that primacy be placed on achieving a narrow set of national goals. If national interest can become more broadly defined, to reflect that leadership is at its finest when it can convert the "I" into the "we" and to serve broader global interests, then countries can become individually and collectively able to live better lives. If national interest remains defined in terms of narrow self-interest — achieving gains at the expense of others — then international cooperative efforts will end in frustration and well-being will remain only a concept in speeches and not a reality in people's lives.

4 Much more so than are other species with smaller neo-cortexes. See: www.cogsci.ucsd.edu/~johnson/COGS184/3Dunbar93.pdf.

5 See: www.nber.org/papers/w16415.

6 See: www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0039211.

THE SHORT VIEW: THE GLOBAL CONJUNCTURE AND THE NEED FOR COOPERATION

James A. Haley

ABOUT THE AUTHOR

James A. Haley is currently the Executive Director for Canada to the Inter-American Development Bank. Prior to his appointment, he was CIGI's Director, Global Economy Program. He has served in a number of positions in Canada's Department of Finance, most recently as general director of the Economic and Fiscal Policy Branch, in addition to serving on the staff of the Bank of Canada and the International Monetary Fund.

INTRODUCTION

In the autumn of 2008, the global economy was perched precariously on the edge of an abyss as financial markets seized up and output, employment and trade all collapsed. These extraordinary times called for extraordinary measures. Governments responded. Heeding the three key lessons of the Great Depression, Group of Twenty (G20) countries avoided pro-cyclical fiscal policy responses; their central banks provided liquidity to mitigate financial market dysfunction, and G20 leaders eschewed the temptation to impose protectionist measures. A potentially catastrophic global economic collapse was averted.

Timely, concerted policy actions prevented another Great Depression. For most advanced economies, however, the subsequent recovery has been disappointing — leading some observers to dub recent history the "Great Stagnation." At the same time, the crisis and the extraordinary policy responses to it have bequeathed a number of legacies that cloud the global economic outlook and pose significant adjustment challenges to the international community.

In many advanced economies at the core of the global economy, high public debt has led to a disproportionate burden of stabilization policy being placed on monetary policy. Yet, the effectiveness of traditional monetary policy instruments has been blunted by continuing dysfunction in some financial markets and the effects of ongoing deleveraging, which have weakened monetary transmission mechanisms — or the channels through which monetary policy affects growth. As a result, key central banks around the globe have turned to unconventional measures to stimulate growth in an effort to restore full employment and prevent the threat of deflation.

Such measures, adopted to support domestic growth, also have external effects. For emerging market countries that rebounded quickly from the crisis, the impact on exchange rates is reminiscent of the beggar-thy-neighbour currency devaluations of the 1930s. That experience led to a tit-for-tat escalation in trade restrictions, as country after country sought to prevent the loss of employment; eventually, global trade flows collapsed. In this respect, while most emerging market and developing countries quickly returned to the high rates of growth they enjoyed prior to the crisis, in a world marked by large imbalances, enormous fiscal challenges and unemployment that remains too high in a number of countries, all countries share a common interest in timely external adjustment, consistent with the return to full employment and the maintenance of the system of open international trade and payments that has been constructed over the past 70 years.

The purpose of this paper is to take stock: to assess where we are, what we have learned, and what we need to do going forward. Five years after the start of the subprime crisis provides a span of time that offers a perspective for deep and serious reflection. Such a stock-taking cuts across several domains, including the real economy, the financial system, domestic considerations, international linkages, governance and leadership. This is not a small undertaking; it is a critically important one. And, to provide this perspective, we need to know how we got to the present conjuncture.

Global policy makers will not be able to successfully address the short-term challenges they face, however, without also tackling the medium-term problems that loom large on the policy horizon. To cite the late Doug Purvis — a thoughtful, policy-oriented economist and gifted teacher: "the medium-term is the message."[1] Successfully addressing these medium-term policy challenges requires policy horizons much longer than the myopic orientation adopted by too many, and it will take global economic leadership to secure the cooperation that is needed to strike a judicious balancing of adjustment burdens. These are the fundamental conclusions of the paper.

WHERE WE ARE: THE CONJUNCTURE AND RISKS TO THE NEAR-TERM OUTLOOK

In broad strokes, global growth has remained tepid with more recent indications of widespread slowing across both advanced and advancing economies. As the October 2012 International Monetary Fund (IMF) World Economic Outlook points out, by late 2012, many advanced economies were flirting with the risk of recession, with growth projected to halve from 2010 levels (see Table 1).[2] This figure masks some large divergences, however. Of particular note is the deterioration in growth prospects in the euro area, where key players are expected to remain in recession; even Germany, widely viewed as the powerhouse of Europe and main beneficiary of the euro, is projected to slow significantly as a consequence of the difficulties that have afflicted its euro area partners.[3] The economic expansion in the United States, meanwhile, continues at a modest pace.

Table 1: World Economic Outlook Projections

	2010	2011	2012	2013
World Output	5.1	3.8	3.3	3.6
Advanced Economies	3.0	1.6	1.3	1.5
United States	2.4	1.8	2.2	2.1
Euro Area	2.0	1.4	-0.4	0.2
Japan	4.5	-0.8	2.2	1.2
Emerging Market and Developing Economies	7.4	6.2	5.3	5.6
Brazil	7.5	2.7	1.5	4.0
China	10.4	9.2	7.8	8.2
India	10.1	6.8	4.9	6.0

Source: IMF, 2012b.

At the same time, the engines of growth that have powered the recovery — that is, the emerging market and developing economies — have slowed significantly. In China and other major advancing economies, growth decelerated somewhat more quickly than previously expected during 2012. Reflecting trade linkages with Europe, the projected slowdown in Brazil has been particularly severe, from 7.5 percent in 2010 to 1.5 percent this year, although activity is expected to recover somewhat in 2013. Moreover, commodity prices have remained high, in part reflecting serious supply disruptions, especially owing to drought conditions in North America, with immediate consequences for the poorer regions of the world.

As a result, five years after the onset of the global financial and economic crisis the global economy remains dangerously unbalanced, with the balance of risks clearly weighted on the downside. The October 2012 *World Economic Outlook* notes that unemployment in most advanced economies remains too high, and the risks of global recession, which the IMF staff assesses as "alarmingly high," have increased appreciably over the past year. The key *downside* risks identified by IMF staff

1 See Douglas D. Purvis, "Public Sector Deficits, International Capital Movements, and the Domestic Economy: The Medium-term is the Message," *Canadian Journal of Economics* 18, no. 4 (1985): 723–742. As Purvis notes, "of central interest is the potential for conflict and time-inconsistency in policy formation that arises because of the different effects that policies can have in the short and long run." In some respects, the economic conjuncture dealt with by Purvis was similar to today — although most would agree that current debt burdens are much greater and that the list of challenges that must be addressed, which includes issues such as transition in global leadership and the need to secure timely, effective international cooperation, is longer.

2 While low, positive growth avoids the technical definition of recession, for many advanced economies, projected growth is too low to absorb excess capacity and move to full employment. As a result, labour market conditions will remain stressed, with continuing risks of social cleavages. Moreover, at such low rates, the economy remains susceptible to negative shocks that could result in negative growth.

3 It should be noted that these relatively sombre projections assumed significant policy action to avoid key risks; in particular, that European policy makers take additional actions to "advance adjustment at national levels and integration at the euro area level (including timely establishment of a single supervisory mechanism)" (IMF, 2012b). Similarly, it is assumed that US policy makers raise the debt ceiling "while making good progress toward a comprehensive plan to restore fiscal sustainability" (IMF, 2012b). Failure on either front could result in a very sharp deterioration in growth prospects. Notwithstanding encouraging developments in terms of the US fiscal situation early in the year, the January 2013 update of the projections point to a slightly weaker outlook across the globe, with growth marked down by between 0.1 percent and 0.3 percent in most countries "as underlying economic conditions remain on track" (IMF, 2013).

at that time included: a further deepening of the euro crisis, as the protracted fiscal, financial and banking crises gripping some members of the euro zone spill over to impair growth in the euro area and beyond; the potential fiscal shock from expiring tax cuts coupled with automatic spending cuts in the United States — the so-called "fiscal cliff" in the popular press; and a renewed spike in oil prices arising from heightened geopolitical tensions.[4] In this respect, while the immediate threat of "tail risks" has diminished, major risks to the global outlook remain. These risks reflect a number of sources.

Excessive credit growth and unsustainable debt levels have been at the heart of the global financial and euro-zone crises. In many countries, problems first materialized as excessive bank lending and private sector borrowing, especially in the housing and mortgage markets. But problems that originated in the private sector quickly became a sovereign debt crisis as a result of financial sector bailouts and government revenues weakened by economic stagnation.

In addition, the global financial crisis and ensuing "Great Recession" demonstrated the fundamental interconnectedness of the global economy. Traditionally, international interdependencies have been thought of in terms of trade linkages. In emerging markets, trade links indeed have acted as the main channel for the transmission of the global financial crisis as advanced economies cut back on consumption and imports. This had spillover effects on export demand throughout the global supply chain, with the result that the crisis led to an unprecedented synchronicity of business cycles.

Across advanced countries, however, financial linkages proved to be a stronger explanation of the scale of the downturn and the subsequent fallout in the aftermath of the crisis. Indeed, those countries with greater financial linkages and weak financial positions have done much worse than other countries.[5] Unfortunately, these effects were largely absent in the large macroeconomic models that guided policy and risk assessment prior to the crisis.[6]

Intimately intertwined with these financial linkages and the propagation of the crisis was the abject failure of the financial system to fulfill its most basic fiduciary responsibilities. There were failures in the assessment and management of risk at virtually every level — loan originators, credit rating agencies and within financial institutions themselves. Leverage ratios at many institutions rose to levels such that only a small percentage point decline in the value of a bank's loan portfolio would wipe out its capital. Financial innovation, especially through new so-called synthetic products, was marketed as a way to repackage and diversify risk; in too many cases, however, the resulting instruments obscured the amount and type of risk being taken on. Lax financial sector regulation and supervision at both the individual institutional level and at the macroprudential level were also widespread.

The lead up to the crisis also witnessed persistent large current account imbalances with a concomitant rise in the accumulation of international reserves. While not the immediate cause of the global financial crisis, these current account imbalances, at a minimum, contributed to the excessive credit growth and misallocation of capital that were central to the implosion of the global economy.

WHAT WE HAVE LEARNED: LEGACIES OF THE GLOBAL FINANCIAL CRISIS

The worrisome conjuncture outlined above suggests that, while the extraordinary policy responses elicited by the

4 IMF staff also identified upside risks, reflecting a possible bimodal view of global prospects. This is consistent with the argument that the global economy is subject to a heightened level of uncertainty that could constrain growth, as individual firms exercise the "option value of waiting" before committing to long-term investments. An assessment — admittedly imperfect — of the relative importance attached to the challenges to global financial stability as a result of developments in the euro zone, the United States, Japan and emerging markets, is given by their treatment in the IMF's *Global Financial Stability Report: Restoring Confidence and Progress on Reforms,* which allocates almost 2,000 words (not including text boxes) to a discussion of the challenges in the euro zone, fewer than 400 words to the United States and fewer than 250 words to Japan. The discussion of all emerging markets and other economies is covered in fewer than 500 words (IMF, 2012a).

5 Cross-country comparisons between countries with highly developed, but also complex, financial instruments and countries with "plain vanilla" financial systems could be a proxy of the social benefits from increased "efficiency" associated with financial engineering and the potential costs, in terms of risk of instability. The fact that countries less integrated into the global financial system suffered less than most advanced countries whose financial systems were closely connected to the source of the shock, could be taken as support for Keynes' initial response to the Great Depression, which he later recanted: "I sympathize, therefore, with those who would minimize, rather than with those who would maximize, economic entanglement among nations. Ideas, knowledge, science, hospitality, travel — these are the things which should of their nature be international. But let goods be homespun whenever it is reasonably and conveniently possible, and, *above all, let finance be primarily national*" (Keynes, 1933; emphasis added). The experience of Canada, with a financial system highly integrated with the United States, but that largely avoided the financial excesses and subsequent disruption elsewhere, is the counter example.

6 The obvious importance of these effects has led to efforts to articulate more robust financial linkages. See, for example, Tamim Bayoumi and Francis Vitek, "Macroeconomic Model Spillovers and their Discontents," International Monetary Fund Working Paper WP/13/4, January 2013, available at: www.imf.org/external/pubs/ft/wp/2013/wp1304.pdf.

crisis helped stem the collapse of output and provided the stimulus needed to fuel global recovery, continuing legacies of the crisis — reflecting both macroeconomic imbalances and microeconomic distortions — now pose fundamental challenges to the goal of strong, sustainable and balanced growth, as articulated by G20 leaders at the Pittsburgh summit.

What are the policy challenges created by the legacy of the crisis? Three areas stand out.

FISCAL CHALLENGES

First, obviously, is the deterioration in public finances in many advanced economies. As the IMF's *World Economic Outlook* makes clear, in many cases, public debt levels have returned to levels not seen since the end of World War II (2012b). These debt burdens have created a dilemma of conflicted virtues: between the need to ensure medium-term fiscal sustainability and the desire to use fiscal policy as an instrument of short-term stabilization policy to restore full employment.

In most recessions, governments can — and, many argue, should — offset the needed deleveraging of private sector agents. This reflects the fact that households' spending may be credit-constrained. In these circumstances, government borrowing and spending both mitigate the effects of private sector deleveraging and stimulate the economy until private sector balance sheets have been restored to health. Sweden, during the early 1990s, provides an example of this effect: when highly indebted private borrowers reduced their obligations by cutting spending, the Swedish government increased spending and restructured the financial system, running large fiscal deficits in the process.[7]

In the current context, however, activist fiscal stabilization has been ruled out in many countries. In some European countries, this is because public debt incurred in supporting failing financial systems, coupled with weak growth have led to concerns of unsustainable debt burdens and the potential loss of access to private capital markets. Elsewhere, counter-cyclical fiscal stimulus measures have been limited by conscious policy choice or political gridlock.[8] Regardless, there is a risk that growth prospects are held back by a concerted deleveraging of debt by private and public agents. The problem, from a macroeconomic perspective, is the fallacy of composition that underlies Keynes' paradox of thrift: while balance sheet repair is undoubtedly necessary for individual households, firms and governments, by constraining growth, the combined effect of these independent efforts makes the job more difficult for all.[9] In other words, a response that might be rational and beneficial at the individual level is collectively irrational. Such effects undoubtedly account for the protracted, painful process of recovery associated with past debt crises documented by Reinhart and Rogoff (2010).[10]

While fiscal austerity is unavoidable in countries that have lost access to capital markets and in which debt burdens are clearly unsustainable, the presumptive pro-growth benefits of fiscal austerity should be carefully assessed. Conceptually, fiscal consolidation can support growth by compressing sovereign risk premia, thereby reducing interest rates. Such effects likely played a role in successful fiscal stabilization efforts in Sweden and Canada in the 1990s, for example. But the faith placed by some in this effect is difficult to reconcile with the current global environment, in which interest rates for key major advanced economies that have retained high credit ratings — even countries with large public debt burdens — are at historically low levels. In such cases, with interest rates

7 See Stijn Claessens: "Shedding Debt," *Finance & Development* 49, no. 2 (June 2012), available at: www.imf.org/external/pubs/ft/fandd/2012/06/claessens.htm. It is important to note, however, that Sweden benefitted from a cut in interest rates and a substantial exchange rate adjustment that supported growth. Moreover, once the economy recovered, the government undertook a credible program to reduce its debt helping to resolve potential problems of time inconsistency and preserving a favourable interest rate environment to support growth.

8 A likely factor behind the political resistance to fiscal stimulus is a fundamental misunderstanding of potential Ricardian equivalence effects — the proposition that higher debt incurred today will lead to higher taxes tomorrow. Higher future taxes implicit in public debt burdens, it is argued, will reduce private spending and delay recovery. While such effects are theoretically possible (provided a number of rigid assumptions hold) if the economy is already at full employment, in a situation in which output is below its potential and employment below its full employment level, fiscal stimulus can reasonably be expected to increase incomes and hence tax revenues.

9 To the extent that growth is depressed by these effects, fiscal stimulus that raises growth and restores full employment could result in improved public finances. See J. Bradford DeLong and Lawrence H. Summers, "Fiscal Policy in a Depressed Economy," Brookings Papers on Economic Activity, Spring 2012.

10 Chapter 3 of the *World Economic Outlook*, "The Good, the Bad and the Ugly: 100 Years of Dealing with Public Debt Overhangs," provides an excellent review of past episodes of fiscal stabilization (IMF, 2012b).

at the effective zero lower bound, the additional boost to growth would presumably be modest, at best.[11]

Moreover, the IMF has reassessed the short-term potential impact of fiscal stimulus. Unsurprisingly, the IMF staff finds that the size of fiscal multipliers — the impact of government spending on output — is larger when more recent data, including the Great Recession of the past four years, are considered.[12] This is precisely what one would expect: in an environment of high unemployment and unused capacity, fiscal stimulus of a given size will have a larger impact on output than in a situation in which the economy is at, or near, full employment. In the latter case, part of the effect of stimulus is dissipated in higher wages and prices; in the former case, in contrast, fiscal stimulus that puts people to work, will raise their incomes and thus consumption.[13]

As a consequence of overestimating the short-term beneficial effects of fiscal austerity and underestimating the size of fiscal multipliers, some countries that could have provided additional fiscal stimulus (or moderated the pace of fiscal austerity) to help promote a more robust recovery and full employment are now temporizing with the paradox of thrift. Elsewhere, fiscal policy is hamstrung by political gridlock that, arguably, provided too little stimulus when it was needed most and which now threatens premature austerity. The paradox of thrift is most prominent, however, in euro area countries that have surrendered monetary independence and thus have no choice but to pursue fiscal austerity despite its detrimental effects on growth and unemployment, which in some euro-area countries is now at Great Depression levels. In this respect, the policy framework in the euro area resembles the monetary policy of the 1920s, in which efforts to sustain a dysfunctional gold standard ultimately led to global economic stagnation and sustained deflation. In these circumstances, the risk of global deflation cannot be discounted; indeed, global core inflation has steadily trended downward since mid-2011. Should the negative risks identified by the IMF materialize and global growth falter, the threat of deflation would increase appreciably.

These considerations underlie the IMF's policy prescription in the October 2012 *World Economic Outlook,* that fiscal adjustments should be "gradual and sustained, where possible, supported by structural change, as, inevitably, it weighs on weak demand" (IMF, 2012b). Presumably, the goal is to ensure a more felicitous adjustment path that reduces the so-called "tail risk" associated with the paradox of thrift — the threat of sustained deflation. But, as IMF staff also point out, governments cannot ignore the other conflicted virtue — public finances must be sustainable over the medium term. Even before the crisis, many advanced economies were facing looming fiscal challenges as a result of demographic changes. In this respect, the crisis has brought forward in time fundamental challenges associated with rising pension and medical care expenses from the aging demographic profile in these economies, and have raised concerns of longer-term fiscal sustainability.

Accordingly, the key medium-term "message" with respect to fiscal policy is that uncertainty about the future of public finances could be reflected in higher-risk premiums that would complicate efforts to undertake fiscal stabilization. These effects need not reflect Ricardian behaviour (although such considerations could become increasingly relevant as the economy moves to full employment), but more fundamental concerns regarding the sustainability of debt burdens that cross key thresholds and the effects of demographic changes on underlying potential growth. The challenge is how to provide support to the economy in the short term, where appropriate, while ensuring medium-term sustainability.

MONETARY POLICY

Monetary policy is the second area in which the crisis has had long-lasting legacy effects. These effects pose challenges for both advanced and emerging market economies alike. With fiscal policy constrained by a combination of high debt and political gridlock in key advanced economies, the burden of stabilization policy has fallen largely to monetary policy. In the extraordinary circumstances of the financial crisis, central banks adopted extraordinary measures, including reducing interest rates to very low levels. But widespread deleveraging, as banks and households work to repair balance sheets, and continuing dysfunction in some financial markets have weakened the monetary transmission mechanism

11 Of course, a distinction must be made between countries that have their own currencies, with strong, credible central banks, and countries that have ceded monetary independence by joining a currency area. In the former, government debt is issued in the national currency, allowing for better coordination between the monetary and fiscal authorities and, potentially, a broader menu of adjustment options to deal with external shocks. In these countries (the United States, the United Kingdom, Canada, Australia and others) interest rates remain at historically low levels, even those, like the United States and the United Kingdom, that have experienced a sharp increase in debt/GDP ratios. In the latter group, however, debt is denominated in a currency over which they have only limited and ill-defined jurisdiction; the result can be damaging problems of time inconsistency between the monetary and fiscal authorities. This accounts for the steep increase in interest rates in many euro-area countries, where financial markets are pricing in the risk of possible default and/or potential reintroduction of national currencies.

12 See Olivier Blanchard and Daniel Leigh "Growth Forecast Errors and Fiscal Multipliers," IMF Working Paper WP/13/1, January 2013, available at: www.imf.org/external/pubs/ft/wp/2013/wp1301.pdf.

13 In an environment of dysfunctional financial markets and widespread balance sheet restructuring, these second-round effects may be dampened somewhat by the reluctance, or inability of households to take on additional debt to support higher consumption. But this effect does not negate the general point that fiscal multipliers will necessarily be larger in cases of high unemployment, or the point made above that, in such circumstances, government borrowing and spending can substitute for credit-constrained households.

by which monetary policy affects output. The result has been a tepid recovery in most advanced countries. With nominal interest approaching the zero lower bound, meanwhile, some advanced economy central banks have adopted unconventional policy responses, including large-scale asset purchases, in an attempt to support growth and break free of the liquidity trap that threatens deflation.[14]

Underlying the use of unconventional measures is the risk that, with output remaining below its potential level, a negative shock could result in further disinflationary pressure, or possibly deflation.[15] This conjuncture would, it is feared, lead to higher real interest rates that would depress growth further and exacerbate downward pressures on prices and generate still higher real interest rates. In this respect, the decision by the US Federal Reserve Board to extend its asset buying program (known as quantitative easing) indefinitely, or until there are clear signs of improved labour market conditions, and similar actions by other central banks, may reflect the extent to which this threat is judged credible.[16]

At the same time, however, it should be noted that the Fed has a dual mandate — price stability and full employment. Viewed through this lens, its commitment to unconventional measures simply reflects its full employment objective. Yet some observers contend that this second objective is redundant; that price stability is the surest way of ensuring the economy moves to full employment. They argue that the additional objective of full employment clouds the decision-making process and creates unnecessary uncertainty with respect to the objectives of monetary policy. And, by undermining the independence of central banks through the accumulation of large holdings of government debt, they warn that unconventional measures threaten the independence of central banks and could erode the hard-won gains with respect to price stability that have been achieved since the last great wave of inflation following the collapse of the Bretton Woods system.[17]

Under normal conditions, with well-functioning financial, labour and product markets, price stability should indeed deliver full employment over time. In key advanced economies, however, current conditions are not indicative of normal times. In this respect, the adoption of unconventional measures by central banks reflects the exceptional circumstances that are the legacy of the global crisis. Given the pervasive uncertainty hanging over the economy, individual households and firms are reluctant to make long-term commitments.[18] In the prevailing low interest rate environment, a strategy of hoarding cash may not yield a return, but neither does it result in large losses. The result is an economy in which firms sit on cash, rather than invest.[19] And if investment is below savings, firms cut

14 Once thought to be a pathology of the extraordinary circumstances of the Great Depression, signs of the liquidity trap, in which traditional monetary policy instruments are rendered less effective, are evident in Japan's two-decades-long fight with deflation and the more recent US experience. In such circumstances, central banks may be required to adopt unorthodox measures, including large-scale asset purchases to counter the effects of the liquidity trap by, inter alia, affecting the slope and level of the yield curve. The use of these measures harkens back to earlier episodes of active debt management in support of broad macroeconomic objectives. The theoretical underpinnings of this approach were developed by James Tobin, "A General Equilibrium Approach to Monetary Policy," *Journal of Money, Credit and Banking*, 1(1969): 15–29.

15 This scenario illustrates the risks of operating at the zero lower bound for nominal interest rates if the level of economic activity is related to the real interest rates (nominal rate less the rate of expected inflation). With nominal rates held at very low levels, a decline in expected inflation or deflation from, say, a negative fiscal shock would increase real interest rates and further depress economic activity. But with output already below potential or the full employment level, this would put further downward pressure on inflation or exacerbate deflation, leading to still higher real interest rates. This unpalatable scenario suggests that the decision by the Federal Reserve Board to expand its unconventional measure may be insurance against the effects of premature fiscal tightening.

16 The underlying goal, presumably, is to avoid the situation in Japan, which has been struggling with sustained deflation and a protracted economic slump. Adherence to the Bank of Japan's inflation of target of one percent has, it could be argued, prevented the real interest rate adjustment that is required to restore growth. In this view, the problem is not that inflation is too high; it is that inflation is too low. Moreover, while the "stop-and-go" nature of repeated episodes of fiscal stimulus has similarly been insufficient to break the deflationary psychology, it has produced a steep increase in public debt, which exceeds 200 percent of GDP. Elections in December 2012 were fought, in part, over the monetary policy and the independence of the Bank of Japan. With the election of Prime Minister Shinzo Abe, who campaigned on the need for more aggressive fiscal and monetary policy measures to resuscitate growth, the Bank of Japan agreed, in January 2013, to raise its inflation target to two percent. Given the high debt burden, however, some worry about following through on additional fiscal stimulus. See Adam Posen, "Japan Should Rethink its Stimulus," *Financial Times*, January 15, 2013.

17 See, for example, Jens Weidmann, "Everything Flows? The Future Role of Monetary Policy." Speech at the 2012 ZEW Economic Forum in Mannheim, Germany, June 12, 2012.

18 The problem is that, given the Knightian uncertainty that prevails, expected returns from investments are difficult to assess or simply do not compensate for the "option value of waiting" (holding cash). See Frank Knight, *Risk, Uncertainty and Profit* (1921). Risk, Knight argued, is an outcome to which some probability can be attached: a particular investment that has a range of potential payoffs; each payoff has an associated probability (which sum to unity). Uncertainty, in contrast, is associated with an outcome or an event to which individuals cannot attach a probability — the event might happen, but individuals are able to assess whether it is with a 10 percent probability, or a 90 percent probability. In such an environment, it is difficult to price assets or evaluate the returns from investment.

19 One indication of the extent of this phenomenon is the spread — albeit limited — of banks charging fees on investors seeking to make "safe haven" deposits. See Alice Ross, "UBS Introduces Fees on Franc Deposits," *Financial Times*, December 11, 2012.

back on employment, reducing incomes and validating households' decisions to defer consumption.[20]

In a closed economy, equilibrium is restored only when desired savings equal desired investment. Of course, in the global economy, differences in savings and investment are reflected in current account positions, and foreign demand can help facilitate adjustment in an economy, such as the United States, undergoing balance sheet restructuring. By facilitating exchange rate changes consistent with a rebalancing of global demand, unconventional measures utilize one channel of the traditional monetary transmission mechanism that remains operative.[21]

For advanced economies undergoing the effects of deleveraging and fiscal austerity, the resulting currency depreciation is wholly appropriate. But for dynamic emerging economies and some advanced economies such as Switzerland, which are reluctant to absorb the sustained appreciation of their exchange rates (particularly when some others have tied their currencies to the dollar), such policies are reminiscent of the beggar-thy-neighbour exchange rate depreciations that marked the global economic stagnation of the Great Depression. These adjustments led, of course, to the introduction of protectionist measures to preserve domestic employment and, subsequently, to retaliatory tit-for-tat protectionist measures as countries tried to prevent the loss of domestic employment. While overt trade restrictions have thus far been limited, countries affected by the unconventional measures of key central banks have resorted to "prudential regulation" to limit capital inflows and suppress the appreciation of their currencies.

Despite such measures, the central banks of emerging market economies have had to cope with their own policy challenges. Real credit growth remains strong — albeit at a somewhat slower pace than a year ago. In this environment, the concern is poorly intermediated credit flows that fuel imbalances and asset price bubbles, rather than support sustained growth. As IMF staff note in the October 2012 *Global Financial Stability Report*, "several key [emerging market] economies are prone to late-cycle credit risks following an extended period of rising leverage and property prices" (2012a). Although the IMF counsels these countries to build additional "buffers" in private and public balance sheets to guard against possible shocks, such measures could, paradoxically, increase the risk of insufficient global aggregate demand. At the same time, such measures are unlikely to be fully effective in containing the risk of macroeconomic instability. The problem these countries face is that, as long as they thwart exchange rate adjustment, they lose a key instrument of stabilization policy, as monetary policy is subordinated to the goal of maintaining external competiveness; in the interim, resource misallocation from misaligned real exchange rates continues.

FINANCIAL REGULATION

Financial regulation is the third area in which the legacy of the crisis has had lasting effects. As is to be expected, these issues are closely related to the challenges facing monetary policy. After all, central banks have had to adopt unconventional measures because of the dysfunctional nature of some financial markets and the ongoing deleveraging by financial institutions — which underscores the need for institutions to raise capital and the importance of fixing the system. There are also concerns that, in addition to creating an incentive for additional investment, central banks' unconventional measures create an environment conducive to imprudent risk-taking and the search for yield that characterized the excesses prior to the global crisis.[22] This is indeed a possibility, underscoring the need for heightened (and, hopefully, improved) prudential surveillance and regulatory oversight of those who might take non-mean-preserving bets, which could leave taxpayers bearing the costs of their imprudent behaviour.

The need to contain the potential for monetary policy "puts" is real.[23] In this respect, it is clear that, while

20 This conjuncture has led to an active debate regarding the relative effectiveness of possible alternative monetary frameworks, including the possible use of nominal income targeting, by which the central bank would target a given path for nominal GDP. As Bank of Canada Governor Mark Carney explained: "adopting a nominal GDP (NGDP)-level target could in many respects be more powerful than employing thresholds under flexible inflation targeting. This is because doing so would add 'history dependence' to monetary policy. Under NGDP-level targeting, bygones are not bygones and the central bank is compelled to make up for past misses on the path of nominal GDP." Under normal conditions, Carney added, the gains from this approach are likely to be modest; but in the context of interest rates "stuck" at the zero lower bound constraint, such a policy may be more credible and, possibly, more effective in restoring full employment. See: Mark Carney, "Guidance," Speech at the Chartered Financial Analysts' Society, Toronto, December 11, 2012, available at: www.bankofcanada.ca/2012/12/speeches/guidance/.

21 Even before the announcement of an increase in the Bank of Japan's inflation target, the Japanese yen depreciated significantly in late 2012 and early 2013 on the anticipation that a change in Bank of Japan policy would be forthcoming.

22 In addition, there is a risk that the current conjuncture blocks necessary adjustment as banks avoid writing down loans to so-called "zombie" firms that are struggling to survive. Such firms do not invest, constraining growth while blocking other firms' access to capital, thereby by preventing them from investing and generating growth.

23 The monetary policy "put" arises from the fact that individuals, acting in anticipation of central bank intervention to limit downside risks, will make highly risky investments and accept non-mean-preserving spreads. Such bets provide high yields if successful, but do not compensate for the additional risk on an expected value basis. If the investments pay off, the private institution reaps the return and the individual is rewarded with a large monetary compensation; if the investment fails, however, the institution is rescued by central bank liquidity. On these risks, see: Mohamed El-Erian, "Beware the 'Central Bank Put,'" *Financial Times*, January 7, 2013.

the proximate source of the crisis was the systematic mispricing of risk and excessive credit growth in the preceding years, many factors contributed to the global financial crisis.[24] Two stand out. Some have pointed to fundamental underlying trends in advanced country economies, particularly the slowing of growth owing to the shifting demographic composition of the population, as labour force participation rates of the aging "baby boomer" generation fell and the harvest of "low-lying fruit" of technological innovation, which had sustained earlier periods of high growth.[25] In this narrative, financial systems in key major economies were deregulated while policy actively encouraged credit expansion and reduced taxes in an effort to sustain growth at levels not supported by underlying productivity levels.[26]

At the same time, the so-called "great moderation," during which global growth expanded for a sustained period, bred a culture of complacency.[27] Rather than a fortuitous long string of favourable "draws," this remarkably benign period of strong, stable growth and low inflation was widely attributed to better inventory control, an increased share of services in advanced economies and the adoption of sound policy frameworks that led to a reduction in underlying systemic risk. In hindsight, the reliance placed on inflation targets as the sole indicator of macroeconomic sustainability was misplaced, as monetary policy accommodated growing imbalances and deferred adjustment, resulting in larger domestic imbalances as money flowed to real estate and other asset markets.[28] In any event, the combination of these effects weakened incentives to undertake risk assessments and contributed to a search for yield — which ultimately led to efforts to increase leverage and regulatory arbitrage through unregulated off-balance-sheet structures.

In view of these effects, the initial response to the crisis was a flurry of regulatory measures to address the weaknesses revealed. Banking sector reforms include measures to raise the costs of engaging in inherently risky activities to encourage banks to internalize risky activities. At the same time, Basel III requirements for more and better-quality capital and liquidity buffers have been adopted and will be implemented over time.

In addition, given the extent to which financial institutions and markets across countries had exposures to similar risks leading up to the crisis, and responded in a similar manner, considerable efforts to address system-wide risks through so-called macroprudential regulation and supervision have been undertaken. Broadly, two types of systemic risks to the financial system have been identified: resiliency risks, which reflect a concentration of risks at a point in time because of similar exposures; and procyclical risks, which cumulate over time and reflect the tendency of the financial system to procyclical behaviour. A number of macroprudential tools have been developed as a first line of defence against the build-up of systemic risks.

A range of issues remain to be addressed, notwithstanding these efforts. Especially noteworthy is international financial regulatory reform, including strengthened cross-border resolution regimes, rules and regulation on trading, clearing and reporting of over-the-counter derivative contracts, and a framework for understanding and mitigating potential risks from the so-called "shadow banking system," which operates outside the regulated banking sector.[29] In addition, basic issues — associated with limits on institutional structures, such as separating some risky activities from funding sources with an explicit government-backed guarantee, limits on proprietary trading (the so-called Volcker Rule) and containing the "too-big-to fail" problem — remain. And we are very early on in our design and use of macroprudential tools in addressing financial imbalances and system risks.

All of these issues will take time to resolve. In the meantime, as IMF staff note, there are growing concerns that new financial instruments are being developed to circumvent these measures and that some reforms could provide a barrier to competition, providing an advantage of scale to

24 See, for example, "Conclusions of the Financial Crisis Inquiry Commission" in The Financial Crisis Inquiry Commission, *The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States*, submitted pursuant to Public Law 111-21 (January 2011), available at: www.gpo.gov/fdsys/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf.

25 See Tyler Cowen, *The Great Stagnation: How America Ate All the Low-Hanging Fruit of Modern History, Got Sick, and Will (Eventually) Feel Better.* (New York: Dutton, 2011).

26 See Raghuram Rajan, "A Crisis in Two Narratives," Project Syndicate, January 27, 2012, available at: www.project-syndicate.org/commentary/a-crisis-in-two-narratives.

27 The global economy has experienced four recessions since World War II — 1975, 1982, 1991 and 2009. Seven years separate the first three episodes; 18 years elapsed between the third and fourth. See: M. Ayhan Kose, Prakash Loungani and Marco E. Terrones, "Tracking the Global Recovery," *Finance & Development* 49, no. 2 (June 2012), available at: www.imf.org/external/pubs/ft/fandd/2012/06/kose.htm.

28 In an environment of major structural change in the global economy — especially the integration of key emerging markets — that put downward pressure on goods prices, inflation targeting failed to signal growing problems in asset markets. In hindsight, it is clear that price stability was a necessary and not a sufficient condition for financial stability. That said, even before the crisis some observers warned presciently against placing too much reliance goods price inflation. See William R. White, "Is Price Stability Enough?" Bank for International Settlements Working Paper No. 205 (April 2006).

29 The threat is panicked "runs" on unregulated shadow banks that subsequently put pressure on governments to intervene to prevent dangerous spillovers to regulated financial institutions and the real economy. See "Strengthening Oversight and Regulation of Shadow Banking: A Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities," Financial Stability Board Consultative Document, November 18, 2012, available at: www.financialstabilityboard.org/publications/r_121118a.pdf.

large, complex institutions that are better able to absorb the costs of regulatory compliance.[30] Moreover, the initial burst of activity has given way to questions about the pace and effectiveness of some reforms. In this environment, three legacy effects stand out:

- *The St. Augustine's prayer problem.* Concerns have emerged that, however desirable over the medium term, Basel III requirements to augment capital pose a threat to short-term economic prospects. Banks that are required to increase capital ratios can meet higher ratios by either raising capital or shedding assets. In the current uncertain environment, banks can raise new capital only by paying a high premium; the alternative is to reduce assets through a process of deleveraging. The former implies that firms that need access to capital for financing production or investment are denied resources, with a negative effect on economic activity. Given the very high leverage of many euro-area banks before the crisis, combined with the continuing financial disruption in the euro zone, this effect is especially worrisome in Europe. In any event, this concern has led some to argue that, while stronger prudential standards are needed, they should be deferred until the recovery is well and truly established.[31]

- *Balancing efficiency and stability.* Another legacy of the global financial crisis is the need to establish the appropriate balance between two key public policy objectives: efficiency and stability. The financial system that led to the global financial crisis was incredibly efficient — by facilitating leverage, a small amount of capital was transformed into an enormous pool of assets. The problem was that the system was also very unstable, with profound consequences to individual countries and the global economy. In the wake of the crisis, the natural inclination is to prevent a repetition of this experience. That is to be expected. However, regulatory reform should avoid an over-correction; moving from a system that is too "efficient" in terms of generating assets, to a system that is so "stable" that it does not provide the capital needed to finance the innovation required to successfully address the challenges that must be confronted over the medium term, including climate change and the problems associated with looming demographic changes.

- *Rehypothecation and the risk of collapsing collateral.*[32] The third legacy effect reflects the means by which the financial system was able to leverage small amounts of capital into very large asset books. This process was made possible by the use of highly liquid assets — typically, highly rated sovereign bond issues — pledged as collateral to support more complex and highly levered transactions ("rehypothecation").[33] Given the increase in debt burdens in key advanced economies, the deterioration in credit ratings of many countries and unconventional monetary measures that entail the purchase of these instruments by central banks, the concern is that the available stock of collateral is shrinking as bonds eligible to perform this role are, in effect, "locked away" in central bank vaults or subject to "haircuts" (discounts) by regulatory or private sector authorities.[34] At the same time, regulatory measures to strengthen the over-the-counter derivatives market, such as a central clearing of those derivatives and prospective margin requirements for transactions, are likely to increase the demand for high-quality collateral. The effect is to impart a deflationary shock on an already-fragile global economy.

These effects underscore potential time consistency problems with respect to financial policies: strengthened prudential standards may pose a constraint on short-term economic growth, but failure to implement such measures risks a repetition of the excessive risk taking and search for yield that characterized the lead up to the last crisis in an environment of unconventional monetary policy measures — the monetary policy put.

30 See chapter 3 (IMF, 2012a).

31 In January 2013, these concerns led to the relaxation of proposed Basel III liquidity requirements. The new guidelines, it has been agreed, will be phased in at a slower pace, allowing for full implementation by 2019. In addition, the menu of assets that can be used to meet liquidity requirements was broadened, and underlying assumptions regarding deposit outflow rates and resulting liquidity requirements were relaxed. See Bank for International Settlements, *Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools*, January 6, 2013, available at: www.bis.org/publ/bcbs238.htm.

32 See Manmohan Singh and James Aitken, "The (Sizable) Role of Rehypothecation in the Shadow Banking System," IMF Working Paper WP/10/172, July 2010, available at: www.imf.org/external/pubs/ft/wp/2010/wp10172.pdf.

33 The remarkable increase in assets that could be securitized was facilitated by the shadow banking system, which was subject to a "light touch" regulation. The underlying rationale for this approach was that the use of high-quality collateral, in conjunction with strong market forces, would ensure appropriate risk taking and the distribution of risk to informed investors with the financial acumen and wherewithal to bear the risk. See Manmohan Singh and Peter Stella, "Money and Collateral," IMF Working Paper WP/12/95, April 2012, available at: www.imf.org/external/pubs/ft/wp/2012/wp1295.pdf.

34 An interesting historical analogy is the impact of gold hoarding by central banks in the dysfunctional gold standard of the inter-war period in the early twentieth century, as some central banks, notably the Banque de France and the Federal Reserve, sterilized the effects of gold inflows, thereby destroying global liquidity and forcing deficit countries into debt deflation. The resulting problem of insufficient global aggregate demand accounts for the subsequent stagnation that characterized the first half of the 1930s.

WHAT WE NEED GOING FORWARD: RECOMMENDATIONS FOR RECOVERY AND DURABLE GROWTH

These features of the financial crisis point to a legacy of debt overhang and impaired balance sheets across countries and sectors of economies. While some advanced economies and emerging market economies are not affected by these challenges, in many advanced economies, public debt burdens are at levels last seen at the close of the World War II.[35] In contrast, balance sheets of private non-financial firms are flush with cash; yet firms have been reluctant to invest, perhaps because of pervasive uncertainty about future policy frameworks and political gamesmanship, as well as future demand. Dealing with this debt overhang, from both a debtor and a creditor perspective, in order to restore the health of private- and public-sector balance sheets, represents the basic challenge facing the global economy today.

More than six decades ago, a similar challenge was addressed by a judicious mix of adjustment options that included sound fiscal management and monetary policy targeted at restoring full employment, as well as the Bretton Woods system of managed exchange rates, which provided a framework for international monetary cooperation. Of course, the situation then was vastly different from today's conjuncture. The Bretton Woods system was supported by the widespread use of capital controls, which assuaged the problem of the international "trilemma" under which a country could choose to have an independent monetary policy, a fixed exchange rate and an open capital account, but not all three — the choice of two determined the third. Capital controls also allowed governments straining under high debt burdens to engage in financial repression through prudential and monetary policy regulations to create an inelastic demand for public debt. Under this policy framework, modest levels of inflation together with high tax burdens gradually eroded debt burdens.[36]

This policy assignment is not possible today, in an environment of open capital accounts, highly integrated financial systems and footloose, internationally mobile capital, nor is it desirable. In addition to the gains from trade in goods and services facilitated by the system of open, dynamic international trade and payments system painstakingly constructed over the past 70 years, which has fostered the economic, social and political development of key emerging economies, there are important gains to be reaped from inter-temporal trade. These gains reflect the fact that aging populations in capital-rich advanced economies will need to channel savings into high-return projects in younger, dynamic emerging market economies that have very large requirements for public infrastructure and other investments. But this felicitous outcome is the inverse of recent experience: prior to the crisis, most advanced economies were characterized by insufficient savings and an excess of consumption and investment (much of it channelled into real estate) financed by key emerging market economies.

Although these imbalances have been reduced, largely as a result of the global crisis, the various legacy effects discussed above pose serious obstacles to a path of global adjustment consistent with full employment. Addressing them will require careful policy design and the rigorous implementation of measures to assuage the time consistency problems associated with them, and policy makers will, arguably, need to adopt longer time horizons than has been the recent experience.

In practical terms, this points to three areas of critical focus.

First, it means a medium-term orientation and a better coordination of macroeconomic policies to restore full employment and resolve unsustainable debt levels. Among sovereign borrowers, where the solvency of the sovereign is not in doubt, sufficient and timely levels of liquidity support are critical. Over the medium term, fiscal consolidation is clearly part of the solution, especially where sovereign borrowers have lost access to private capital markets. But austerity alone is not the answer; certainly not in situations of insolvency. In these situations, there is also the need for the acceptance of timely and orderly debt restructuring to place the long-run health of sovereign balance sheets on a sustainable track and, thereby, encourage growth.[37]

Policy makers must also coordinate more closely to ensure that fiscal and monetary policies do not work at cross-purposes. Canada's successful fiscal stabilization, as documented by the IMF staff, provides a good example (IMF, 2012b). In some advanced economies, monetary policy must support growth, where necessary, by raising inflation targets and adopting extraordinary measures to

35 Moreover, it could be argued that all countries are affected by the indirect effects of these legacies, either in terms of lower global growth or by the impact of policies adopted to deal with these legacies as discussed below.

36 In effect, the combination of the inflation tax and taxes on labour and capital worked on both the numerator and the denominator of the debt–to-GDP ratio. Modest inflation grew nominal GDP (the denominator) while high tax revenues has a share of GDP reduced the numerator. In a sense, the use of the inflation tax is supported by public finance theory, which suggests that an efficient tax is one that is levied on the broadest possible tax base at a low marginal tax rate.

37 Similarly, in some cases, measures to facilitate the timely, orderly restructuring of excessive private debts — especially real estate debt, the foreclosure and liquidation of which threaten a vicious cycle of the fire sale of assets that potentially distorts the incentives to service the stock — may be required to resuscitate growth going forward.

help expectations break free of the liquidity trap. Over the medium term, monetary policy should be supportive of fiscal stabilization efforts. Moreover, authorities must map out credible fiscal consolidation plans that preserve access to capital markets while not impairing short-term recovery. The problem faced here is the difficulty of pre-committing future governments, particularly in the face of political gridlock, and given the potential loss of social consensus in support of fiscal consolidation.[38] In the absence of such coordination, the result can be damaging "policy games" reminiscent of a war of attrition. In this respect, political gridlock in the United States and the absence of a credible medium-term strategy for restoring fiscal sustainability has led to a situation in which the Federal Reserve has had to adopt unconventional measures to guard against the "tail risk" of deflation. Done well, the result can support good outcomes; ill-conceived, poorly executed or lacking necessary support from the fiscal authorities, such efforts could foster expectations of inflation and contribute to stagnant productivity growth reminiscent of the 1970s.[39]

Second, there is a need to build a stronger global financial system. Banks must hold higher levels and a better quality of capital. A simple, effective leverage standard is required. In addition, through the work of the Financial Stability Board, a solution to end "too-big-to-fail" must be put in place, and the oversight and regulation of the shadow banking system (i.e., credit intermediation outside the banking system, such as hedge funds) must be greatly strengthened (Carney, 2012). In this respect, it is important to recognize that the likely effect of proposals to restrict the ability of regulated banking entities to engage in certain prescribed risky activities, as mandated under the Volcker Rule and similar national and international rules, is to "migrate" these activities to unregulated parts of the financial system with potential systemic implications in the event of future shocks.[40] More generally, there is a need to challenge the traditions of efficient markets and rational expectations in light of what now appears as intrinsic instability in critical parts of the global financial system.

At the same time, legacy effects of the crisis impinge on financial sector reform. Of particular concern is the potential impact of shadow banking and the scope for the private sector to develop new instruments to circumvent the effects of regulation. Such considerations suggest that a new approach to regulation may be required — one that is more flexible and targeted to striking a judicious balance between the key public policy objective of stability and the need for efficiency and innovation. One approach would be to hold national regulators accountable for outcomes, not the enforcement of specific regulations of ever-increasing complexity that breed yet more complexity and, ultimately, greater uncertainty.[41]

Third, while better coordination of policies at the national level, and strengthened financial sector regulation and prudential supervision are necessary conditions for the resolution of current imbalances in the global economy consistent with full employment, they are not sufficient conditions. In this respect, the global nature of the financial crisis has refocused the policy debate back on the interconnectedness and spillover effects among countries, which have become more complex than previously understood or recognized. The depth and breadth of these interdependencies demand collective action. Put differently, in today's highly integrated global economy, externalities and spillovers must be recognized and evaluated when designing and setting domestic policies. This is where the G20 needs to step up and provide global leadership (Subacchi and Jenkins, 2011).

This is easier said than done.

38 Conceptually, the goal is to create a set of policy rules that tie fiscal policy to the state of the economy: to provide stimulus when the economy is weak and renormalize policy once the economy has returned to full economy. In effect, the result would be fiscal counterpart to the Fed's commitment to keep interest rates at current low levels until labour market conditions improve and key thresholds are crossed. See, for example, Larry Summers, "How to Ensure Stimulus Today, Austerity Tomorrow," *Financial Times*, March 25, 2012, available at: www.ft.com/intl/cms/s/2/52818152-74d8-11e1-ab8b-00144feab49a.html#axzz2IzjW7XQh. The difference between fiscal and monetary rules is that, as a quasi-independent institution, the Fed is capable of making credible commitments to such state-contingent policy rules. It is far more difficult to bind legislatures to fiscal measures that are conditional on the state of the economy.

39 The issue of whether — and under what conditions — extraordinary monetary policy responses could lead to undesirable outcomes is the subject of considerable controversy and continuing debate. It has been argued, for example, that in the absence of fiscal authorities' full backing of the central bank's balance sheet, an exit from quantitative easing would be inflationary and that central banks cannot successfully unwind inflated balance sheets. The conclusion is that fiscal authorities' full backing of the monetary authorities' quasi-fiscal operations is a pre-condition for effective monetary policy. See Seok Gil Park, "Central Banks Quasi-Fiscal Policies and Inflation," IMF Working Paper WP/12/14, January 2012, available at: www.imf.org/external/pubs/ft/wp/2012/wp1214.pdf.

40 See Julian T. S. Chow and Jay Surti, "Making Banks Safer: Can Volcker and Vickers Do It?" IMF Working Paper WP/11/236, November 2011, available at: www.imf.org/external/pubs/ft/wp/2011/wp11236.pdf, and Zoltan Pozsar and Manmohan Singh, "The Nonbank-Bank Nexus and the Shadow Banking System," IMF Working Paper WP/11/289, December 2011, available at: www.imf.org/external/pubs/ft/wp/2011/wp11289.pdf.

41 See Andrew G. Haldane, "The Dog and the Frisbee," speech given at the Federal Reserve Bank of Kansas City's 36th Economic Policy Symposium, "The Changing Policy Landscape," August 31, 2012. Available at: www.bankofengland.co.uk/publications/Documents/speeches/2012/speech596.pdf. Such an approach would require investing regulators with some degree of constrained discretion. See James A. Haley, "Is Constrained Discretion the Future of Global Financial Regulation?" The New Age of Uncertainty (blog), CIGI, April 18, 2012, www.cigionline.org/blogs/new-age-of-uncertainty/constrained-discretion-future-of-global-financial-regulation. As one commentator points out, however, the incentives of the regulators would be to err on the side of caution and impose additional restrictions, creating a tension with the need to balance efficiency and innovation with safety.

The extraordinary measures that prevented a catastrophic collapse in output in the autumn of 2008 reflected an unprecedented degree of international cooperation that was made possible because of the common threat that confronted all G20 members. As noted, however, these policies, adopted to prevent global economic collapse, have created new challenges to effective cooperation. As a consequence of these measures, capital flows have increased to the dynamic emerging economies that are growing rapidly and offer the prospect of higher returns.

These countries are, understandably, concerned about the impact of these inflows, and as a result, they have implemented prudential capital controls to limit the appreciation of their currencies. In part, this response may reflect a desire to maintain the current account surpluses that have provided a cushion of foreign exchange reserves. From the perspective of individual countries, this process of self-insurance through reserve accumulation is a sensible, prudent strategy. Indeed, it can be argued that self-insurance has served the dynamic emerging economies well, given the limited impact of the crisis on their economies and the rapid recoveries they have enjoyed.

From a global perspective, however, efforts to resist the exchange rate adjustments that are required to facilitate global rebalancing pose a risk of insufficient global aggregate demand. Of course, real exchange rates will adjust over time, notwithstanding efforts to block the adjustment process. And this, in turn, implies that the real exchange rate adjustments required to facilitate the needed rebalancing must come from inflation in surplus countries and deflation in deficit countries.[42] Such adjustments would be inconsistent with the goal of strong, sustained and balanced growth.

The imperative is to avoid the problem of insufficient global aggregate demand reflecting the Keynesian paradox of thrift that could result if every country tried to grow through net exports. With most advanced economies and Europe generally needing to undertake fiscal consolidation in light of their sovereign debt problems, China and other major advancing countries may need to re-orient their growth models toward one that places greater reliance on domestic demand. In fact, fiscal consolidation in advanced countries should motivate action in emerging economies to support economic growth through domestic demand in the face of weaker exports. To some extent, this process may already be under way, with some emerging markets recording current account deficits. More broadly speaking, these analytics highlight the importance of interdependencies and understanding spillovers as part of the collective action problem of global rebalancing.

Structural reforms can help to facilitate real exchange rate adjustments and reduce the potential costs associated with the adjustment process. Moreover, for advanced economies facing the challenges of demographic change, structural reforms are required in a range of sectors in order to deal with prospective labour shortages, but also to contain health care costs. Such changes take time to implement and take effect, however. In the meantime, the G20 Mutual Assessment Process remains the best hope for securing the timely, orderly rebalancing of the global economy that is needed to avoid a disruptive scenario. This will take a shared analysis of the problem and a renewed commitment to cooperation to support the goal of an open, dynamic international trade and payments system.

The IMF can help to reanimate this shared commitment and to support cooperative agreements, but only if it is viewed as legitimate, credible and effective by its members. In this respect, the crisis has served to underscore the need for governance reforms to allow the institutions of international cooperation to assist their members in dealing with the challenges they face, and ensure that the global economy remains a source of growth and development. Moreover, the Fund must articulate a clear, consistent message on the role of monetary and fiscal policies in key economies confronting the risk of prolonged economic stagnation. Absent effective global leadership from the international financial institutions (IFIs), individual national self-interest will prevail, and effective international cooperation will remain merely an aspiration.

CONCLUSIONS: GLOBAL REBALANCING — A QUESTION OF LEADERSHIP

The question today is whether the G20 is capable of providing the collective leadership that is required to deal with the formidable challenges that its members must address. With dynamic emerging economies growing in economic size and exercising their voices in international fora, the United States handicapped by fiscal challenges and political paralysis, and most other advanced economies preoccupied by their economic, financial or monetary challenges, neither the United States alone nor the Group of Seven collectively has the capacity to project its will on the rest of the international community. This is evident in a number of areas, including multilateral surveillance and the issue of global adjustment, as well as providing the resources needed for the provision of critical public goods and reforms to the IFIs.

The G20 has assumed de facto responsibility for global economic and financial management, but collective leadership is difficult — the more so the larger the number

42 However well designed, over time, prudential controls will become porous and subject to regulatory arbitrage as financial instruments designed to circumvent controls are developed. The eventual result would be an increased risk of financial instability.

of players, reflecting a fundamental trade-off between effectiveness on the one hand, and representation on the other. Moreover, the creeping expansion of the G20 agenda beyond the core economic and financial base is worrying. The legitimacy of the G20 was established by the unprecedented degree of cooperation that members demonstrated to prevent a catastrophic collapse in global output, employment and trade. While broadening the agenda allows members to claim success on an issue of their interest or to "commit" to actions they were going to do in any event, it does not address the real economic problems in the global economy, which gave the G20 process legitimacy.

That said, the combination of adjustment challenges in the advanced economies and frustration over voice and representation in global financial institutions by key dynamic emerging markets could pose a risk to the global economy. As Mervyn King, governor of the Bank of England, has mused, the concern is that G20 countries have lost their sense of common purpose that produced the remarkable response to crisis in late 2008 and early 2009.[43] In this environment, there is a danger of new currency wars and protectionist trade measures as every country attempts the logical impossibility of expanding domestic employment through exports. Most disconcerting is the possible retreat from the cooperative arrangements built on the foundations of the Bretton Woods conference, which would be hugely disruptive. Fortunately, the cornerstones of those foundations remain — the IFIs are the key institutions of international cooperation, assisting their members through the provision of key public goods. In this respect, they have demonstrated their usefulness in the midst of the crisis by helping mobilize a concerted international response to the threat of economic collapse. Going forward, however, governance reforms are required to ensure IFIs are viewed by their members as legitimate, credible and effective. That is the fundamental challenge of collective leadership posed by the global crisis.

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43 See Mervyn King, Speech given at The Economic Club of New York, December 10, 2012, available at: http://econclubny.com/events/Transcript_MervynKing2012.pdf.

ANOTHER FINE MESS: REPAIRING THE GOVERNANCE OF INTERNATIONAL FINANCIAL REGULATION

Pierre Siklos

ABOUT THE AUTHOR

Pierre Siklos, a CIGI senior fellow, is the director of the Viessmann European Research Centre at Wilfrid Laurier University, and a research associate at Australian National University's Centre for Macroeconomic Analysis. Pierre Siklos's research interests are in applied time series analysis and monetary policy, with a focus on inflation and financial markets.

EXECUTIVE SUMMARY

Five years after the fall, policy makers seemingly continue to believe that the severity of any crisis-led downturn can be divorced from its source. At the global level, the best the international community is able to do is to grudgingly provide the International Monetary Fund (IMF) with greater financial capacity subject to a reweighting of the influence of emerging market economies in the institution. Meanwhile, the Financial Stability Board (FSB) remains in stock-taking mode. It is also hampered by the need to rely on the Bank for International Settlements (BIS) for resources and the heads of government decision not to convert the Board into a treaty-based international organization.

There is too little appreciation that earlier international monetary systems required cooperation precisely because exchange rate systems rendered economies dependent on collaboration between the participants. This paper argues that credibility and trust in any new international regulatory framework must first begin at home with a determination for fiscal and monetary policies to work in harmony. This includes cooperation, if not coordination, of regulatory and supervisory functions to ensure that macroprudential policies effectively complement domestic monetary policy and provide an additional tool to implement a sound macroeconomic framework that will soften the blow from the next financial crisis.

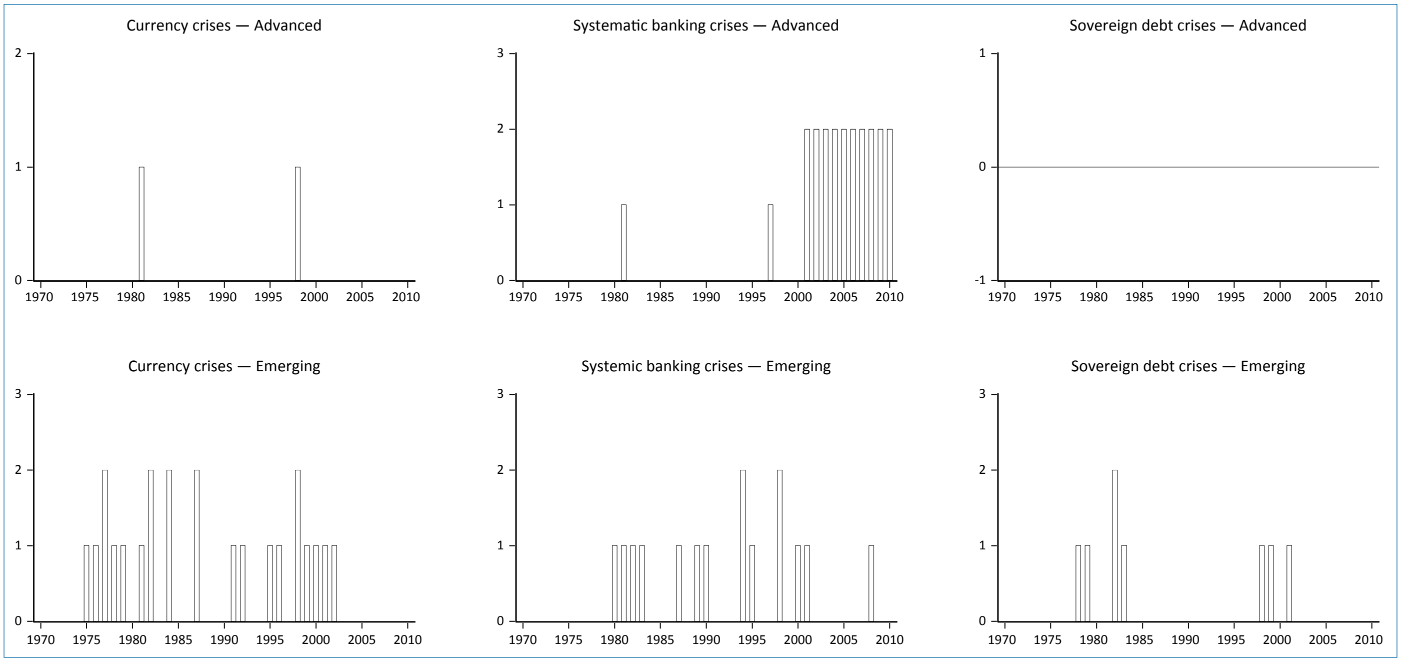
As long as the international community recognizes the potential spillovers from crisis response policies and is convinced that any trade-offs eventually produce a better global solution there is no reason why an international financial system should prevent the adoption of local solutions to problems that have global repercussions. Systemically, and politically important, nations ought to demonstrate some leadership by agreeing on a range of acceptable regulatory frameworks and demonstrate, in a transparent manner and at regular intervals, how each is capable of operating with a minimum of spillovers that might threaten financial system stability. Financial stability and how it interacts with other elements of sound macroeconomic policies, to borrow the words of Winston Churchill, remains "a riddle, wrapped in a mystery, inside an enigma." We should aim for less, not more, in repairing the governance of international financial regulation.

INTRODUCTION: WHAT THE CRISIS HATH WROUGHT

Financial crises are neither new nor are they infrequent, as Figure 1 illustrates with data from 1970 to 2010. When attention is restricted to the Group of Twenty (G20) countries, and these are subdivided into "advanced" and "emerging" market members,[1] three conclusions emerge.

1 Using the IMF's definition.

Figure 1: Financial Crises in the G20, 1970–2010



Source: Author's calculations based on Luc Laeven and F. Valencia (2012), "Systemic Banking Crises Database: An Update," IMF Working Paper 12.163, June; Barry Eichengreen and Michael Bordo (2003), "Crises Now and Then: What Lessons from the Last Era of Financial Globalization" in Monetary History, Exchange Rates and Financial Markets: Essays in Honor of Charles Goodhart, *edited by Paul Mizen. Vol 2. London: Edward Elgar Publisher; and author's calculations.*

Note: Number of crises is the sum of crises in the individual countries according to the classification in Table 1 (see page 30).

First, advanced economies experienced crises almost exclusively of the systemic banking variety. Second, emerging markets have not only known all three kinds of financial crises noted in Figure 1, but have done so more often than their counterparts in advanced economies. Finally, with one exception, the global financial crisis (GFC) was a crisis that originated in advanced economies, but eventually spread beyond that group. Despite convincing research that finds that financial crises are more costly in terms of lost output, and recovery can typically take almost a decade (see, for example, Reinhart and Rogoff, 2009; Jordà, Schularik and Taylor, 2011; IMF, 2012), five years after the fall decision makers seemingly continue to believe that the severity of any crisis-led downturn can be divorced from its source. Instead of limiting the extent to which the financial sector is prone to crises, policy makers have opted to socialize the downside risks of a future financial crisis. Moreover, in some parts of the world, the consequence of the buildup of government debt has led to a more intertwined relationship between banks and sovereigns.

A distinctive characteristic of the GFC is that it first engulfed the advanced industrial world, where best practices in the area of economic policies and governance were thought to originate. Policy makers underestimated the impact global financial markets that know no borders would have when a large negative shock is transmitted globally. They also harboured the belief that the real economy might be spared from any loss of financial system stability. More than a few also entertained the notion that price stability somehow translates into financial system stability.[2]

Policy makers point to various aggregate demand or supply shocks in their explanations for root causes of the crisis although it is unclear whether global factors or a confluence of domestic factors explain how the world economy has unfolded since late 2007. Indeed, a scorecard listing what we know and don't know about the crisis would likely tilt in the direction of items we have yet to fully comprehend. Many economists, however, have a more prosaic explanation for the events since 2007. The crisis was a systemic event and its proximate cause is a failure of the banking system in a financial system that was too highly leveraged. Within months, the financial shock — a channel absent from the New Keynesian macroeconomic synthesis that policy makers and academics relied on at the time — morphed into an aggregate demand shock, first through a collapse of exports and, later, into aggregate demand more generally, as confidence evaporated and the process of

2 Consider, for example, Jean-Claude Trichet, former president of the European Central Bank (ECB), who declared in 2008: "The primary goal of a central banker and certainly of the ECB is to maintain price stability… which is a necessary condition for financial stability, if not a sufficient condition" (Trichet, 2008). There are, however, more serious reasons for preventing central banks from straying into the financial stability area (see, for example, Laidler, 2004). This issue is returned to below.

deleveraging began. Not surprisingly, almost all industrial economies went into a recession. Emerging markets, in contrast, fared much better in economic growth terms before, during and after the crisis.[3] This is, in part, because their financial sectors lagged behind their counterparts in the advanced world, but also because business cycles are not always as synchronous as one might think, in spite of the rhetoric of globalization (see, for example, Siklos, forthcoming 2013a, and references therein).

The advanced economies, and several emerging market countries (for example, China), did respond by stimulating their economies in the "old-fashioned way," that is, by priming the pump of fiscal policy. Later, this reaction would lead to regret, and a U-turn, as "austerity" became an essential element of a sound macroeconomic policy.[4] Another effect of the crisis was the transfer of more responsibilities to some central banks (that is, the United States, the United Kingdom and the euro zone). The task of maintaining financial system stability, involving greater emphasis on regulation and supervision at both the micro (for example, financial institutions) and macro (for example, financial sector) levels, was added. Next, central banks felt the need to engage in several types of unconventional forms of monetary policy. More "radical" measures were adopted, increasingly interpreted by some as politicizing or "fiscalizing" monetary policy. As a consequence, the clear demarcation lines between fiscal and monetary policies, normally the *sine qua non* of a sound macroeconomic policy regime, began to blur. Indeed, it is tempting to view some central banks as picking up the fiscal slack created by the withdrawal of conventional fiscal stimuli. The consequences of central banks "not sticking to their knitting" are, as yet, unknown, but must be part of the discussion concerning the future of international financial regulation. Central banks may well regret their enlarged role in spite of their best intentions to condition any assistance on meeting certain macroeconomic objectives.[5] The retort from these same institutions, in the face of mounting output losses and high or rising unemployment rates, is to ask: if not us, then who?

The belief in a shared purpose quickly evaporated following the April 2009 G20 summit in London. The countries most affected by the financial crisis began to turn their attention to reforming homegrown institutions and revising domestic policies in place prior to the GFC. As a result, international commitments have been given less priority or recast to suit domestic preferences, as in, for example, the adoption of Basel III capital adequacy standards. As will be argued below, these developments need not be viewed as entirely negative for progress in international monetary and financial system reform.[6] Yet, as Hellwig (2010) and Goodhart (2012) point out, it remains unclear whether proposed capital standards represent a minimum — a standard or target that all financial institutions should aim for.[7] Next, the theoretical rationale for capital standards has never been properly articulated. Indeed, the higher capital standards of Basel II, a reaction to earlier financial turmoil, did nothing to prevent the onset of the GFC. Finally, the spread of shadow banking has been somewhat country-specific, even if the investments in question have common names. Consequently, it is difficult to see how a top-down approach will be able to reduce the likelihood of a future systemic financial crisis.[8]

Consider another example, the G20's so-called Mutual Assessment Process (MAP), which is being administered by the IMF. It was never made clear what the individual country submissions would be based on, nor how the IMF would verify the "internal consistency" of the submissions. Since it is unlikely that a single policy framework will be right for all countries, it is no wonder that progress has been unsatisfactory, to say the least. What is required is not an assumption that our existing understanding of the link between macroeconomic and financial conditions is known, but rather, a rethink of what is inherently successful or unsuccessful about existing heterogeneous

3 Note that while real per capita GDP growth turned negative in the advanced economies of the G20, the downturn in economic growth was also felt among the emerging market members of the same group (not shown).

4 Not surprisingly, this turn of events would produce analyses about the benefits and costs of fiscal stimulus and austerity programs. See, for example, IMF, 2010, chapter 3, and references therein.

5 Conditionality in offering financial support to institutions and countries is likely to receive even more scrutiny, not only because of the ongoing euro area crisis, but also in light of past experiences at the international level. Although, on balance, some forms of conditionality (for example, *ex post*) may be successful while others have a more checkered history, it seems that generalizations are not possible. Instead, the ultimate success of conditionality is likely a function of idiosyncratic factors as well as the quality of governance in the recipient country. See, among others, Jeanne and Ostry, 2008; Dreher, 2009; and Acharya and Backus, 2009.

6 International regulators (for example, the Basel Committee on Banking Supervision) responded by introducing new capital standards in an effort to placate those who argued that capital requirements were insufficiently high or wide in scope (for example, the omission of shadow banks). Examples of domestically oriented reforms include the United States' massive overhaul of its financial legislation (that is, the so-called 2010 Dodd-Frank bill), the merger of the activities of the Bank of England and the Financial Services Authority, and the ongoing discussions in Europe about a banking union.

7 Hellwig (2010) summarizes the rationale for capital standards as follows: they exist as a buffer against a shock that could lead to bank failure; to ensure that financial institutions have "skin in the game"; and as protection against transitory losses. The first one of these objectives failed in the GFC, bankers found novel ways to avoid the second and ineffective regulation can actually raise the costs of the third motive.

8 Instruments such as repos, asset-backed commercial or other paper, money market funds, structured investments vehicles and so on, are associated with the shadow banking system. Due to their nature, it is difficult to imagine international standards that are able to manage these complex and myriad types of assets. For a discussion of challenges in Canada, see, for example, Longworth, 2012.

policy frameworks.[9] An obvious example is how some central banks that target inflation reacted at the onset of the crisis. Instead of asking how to square the circle of the nexus between price stability and financial stability, when the former is reasonably well defined while the latter concept has yet to be clearly articulated, some central banks continue to advocate a business-as-usual approach (Carney, 2012). However, this attitude does not address the trade-off between monetary policy and macroprudential frameworks or the division of responsibilities in carrying out the necessary actions when the two goals come into conflict, let alone where accountability rests.[10] Moreover, one has to ask whether a form of Goodhart's law misleads policy makers into assuming that the current regime is as credible as some central banks claim (for example, Canada, Australia and New Zealand) based on how well-anchored inflation expectations appear to be.[11]

Credibility and trust in policy makers is now at low ebb,[12] with few signs that they know the way forward, at least as far as the global economy or international financial regulations are concerned. At the global level, the best the international community is able to do is to grudgingly provide the IMF with greater financial capacity, subject to a reweighting of the influence of emerging market economies in the institution.[13] Meanwhile, the FSB remains in stock-taking mode, with the results of an international survey of "key attributes" of regimes used to deal with failing institutions due at the end of 2012.[14] In addition, while the FSB's remit includes a strengthening of its capacity as an organization, it is also hampered by the need to rely on the BIS for resources and the heads of government decision not to convert the FSB into a treaty-based international organization.[15]

9 As Jenkins and Thiessen (2012) point out, there is a need for improvements in the governance of macroprudential frameworks since agencies with vastly different motives and responsibilities have to coordinate decisions to ensure financial system stability.

10 It does not help the cause of those who wish to find a way out of the crisis that opponents of inflation targeting continued to equate the policy with what Mervyn King called the "inflation nutter" strategy (see, for example, Stiglitz, 2008). If there ever was a "straw man" this is it, and such a position does a disservice to the cause of international financial reform.

11 Goodhart's law (Goodhart, 1975) suggests that targets, once publicly announced, cease to be useful as behaviour changes to meet the target. However, this may not change the type of behaviour that policy makers sought to control in the first place.

12 For US evidence, see, for example, Sapienza and Zingales, 2012.

13 See: www.imf.org/external/np/exr/facts/quotas.htm. Proposed new quotas are not yet ratified as of early January 2013.

14 See: www.financialstabilityboard.org/publications/r_120813.pdf.

15 See: www.financialstabilityboard.org/publications/r_120619c.pdf.

The question, then, is whether these country-specific movements to regulate finance conflict with the desire to build an international financial regulatory system that protects the world economy from the consequences of a future financial crisis. As a consequence, there is an increasing amount of blame shifting.[16]

A now well-established body of evidence supports concerns over financial spillover effects, even if economists cannot easily identify interdependence versus contagion-type effects (for example, see Forbes, 2012; Forbes and Warnock, 2012; Burdekin and Siklos, 2012). Ultimately, what is lacking is an understanding of how we can balance the benefits of a globally integrated financial system against the costs or risks of crises, which, at first glance, appear local in nature but can become global through the systemic elements that underpin them (for example, see Bernanke, 2010; IMF, 2011).

THE PROBLEM: COOPERATION IF NECESSARY, BUT NOT NECESSARILY COOPERATION

In October 2011, the G20 endorsed what were termed "coherent conclusions" on the management of capital flows.[17] On the one hand, the agreement would obviate the need for cooperation among the members. After all, imagine that each G20 member heeded the group's expressed desire to the effect that "sound macroeconomic policies bear the prime responsibility for ensuring overall economic health, and an appropriate structural environment, including effective regulation and supervision, is important for financial stability" (G20 Finance Ministers and Central Bank Governors, 2011). Setting aside the question of what constitutes "sound" policies, it would seem almost tautological to conclude that, if individual economies behaved in a way that would ensure their own financial system stability, the prospect of global financial system stability would be immeasurably enhanced.

The difficulty, of course, is that what's best for an individual country may create unanticipated spillover effects that may potentially undermine the global financial

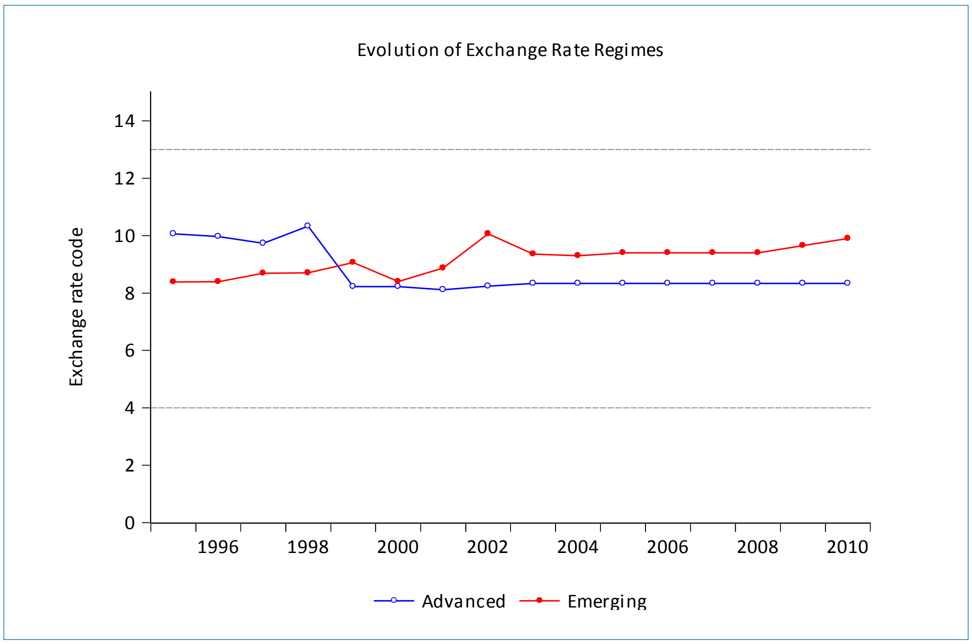
16 There are plenty of illustrations of this kind of behaviour. Consider, for example, German Chancellor Angela Merkel, who, in 2008, stated: "'The German government pointed out the problems early on,'" but added, "'Some things can be done at the national level…but most things have to be handled internationally.'" *Spiegel* staff (2008). "The End of Arrogance: America Loses Its Dominant Economic Role." *Spiegel* Online International. September 30. Available at: www.spiegel.de/international/world/the-end-of-arrogance-america-loses-its-dominant-economic-role-a-581502.html. More recently, Brazilian President Dilma Rousseff is quoted as saying: "Monetary expansionist policies that lead to currency depreciation are policies that create asymmetries in trade relations — serious asymmetries" (Leahy, 2012).

17 See: www.g20.utoronto.ca/2011-finance-capital-flows-111015-en.pdf.

system. A prime illustration is the threat of a "currency war" over the application of unorthodox monetary policies.[18] Since the same G20 also undertook to "move more rapidly toward more market-determined exchange rate systems and enhance exchange rate flexibility to reflect underlying economic fundamentals…from competitive devaluation of currencies" (G20 Leaders, 2011), this would seem to further reduce the need to cooperate, let alone coordinate, among the G20 economies. That is, unless there is: little indication that several of the G20 members will actually permit their exchange rates to float freely in the foreseeable future; there is a shift away from the view by some members that fully flexible exchange rates truly insulate economies against external shocks; and that if "country-specific circumstances have to be taken into account when choosing the overall policy approach to deal with capital flows" (G20 Finance Ministers and Central Bank Governors, 2011), then another avenue exists through which shocks that hit one economy can systematically affect others.

18 This idea was apparently coined by Brazil's finance minister, who has labelled the quantitative easing policies of the US Fed, for example, as protectionist in nature. See, for example, Rathbone and Wheatly, 2012.

Figure 2: Exchange Rate Regimes in the G20, 1995–2010



Source: Raw data from Ilzetzki, Reinhart and Rogoff (2008).

Note: The data were constructed by taking the arithmetic average of the exchange rate codes for advanced and emerging G20 economies. See Table 1.

The exchange rate codes refer to the following classification of exchange rate regimes:

1. No separate legal tender
2. Pre-announced peg or currency board arrangement
3. Pre-announced horizontal band that is narrower than or equal to +/-2%
4. De facto peg
5. Pre-announced crawling peg
6. Pre-announced crawling band that is narrower than or equal to +/-2%
7. De facto crawling peg
8. De facto crawling band that is narrower than or equal to +/-2%
9. Pre-announced crawling band that is wider than or equal to +/-2%
10. De facto crawling band that is narrower than or equal to +/-5%
11. Moving band that is narrower than or equal to +/-2% (i.e., allows for both appreciation and depreciation over time)
12. Managed floating
13. Freely floating
14. Freely falling
15. Dual market in which parallel market data is missing

Figure 2 illustrates that, based on the exchange rate classification scheme of Ilzetzki, Reinhart and Rogoff (2008), it is only the G20 emerging market countries that have moved slightly closer to a free float since the mid-1990s. Indeed, advanced economies have, on average, less flexible regimes than in the mid-1990s. The view emanating from the United States, however, is that currency manipulation is spreading mainly beyond the G20.[19] It is striking that the G20's stated goal (cited above) omits any reference to the failure of some key economies to reign in their habit of accumulating foreign exchange reserves. Yet, there is considerable empirical evidence that reserves accumulation behaviour and financial stability are closely connected (for example, Frankel and Saralevos, 2010). The IMF's own calculations reveal that Brazil, India, Russia and China have excess reserves that exceed what is deemed adequate.[20] There are likely many other economies in this camp.

Fears of the consequences of unfettered capital movements greatly influence the choice of exchange rate regimes. Recent events, of course, have prompted a flurry of new studies that revisit this question. Both the time series evidence, as well as case studies (see, for example, Du Plessis and Du Rand, 2010) suggest that, while there have indeed been successful episodes, there is, on balance, little persuasive evidence that capital account liberalization is harmful to an economy. More recently, attention has turned to the connection between the volatility of capital movements, financial stability and economic outcomes. Here too the conclusions are inconclusive at best. For example, Forbes and Warnock (2012) suggest that policy makers would be better off strengthening their domestic economies so they can withstand volatile capital flows instead of devising restrictions on their movements. Fratzscher (2012) essentially reaches the same conclusion, but he also underscores the impact of US policies on capital flows. These results are contradicted by Ostry et al. (2012) who contend that restrictions on capital movements can be a useful element in a policy maker's toolkit. Since they do not quantify the costs of such policies, nor is their evidence necessarily applicable beyond the emerging markets they examine, it is unclear how this kind of result can translate into concrete policies that improve the cooperation between advanced and emerging market economies.

The IMF has given its blessing to some forms of "prudential" capital controls as a device that internalizes the inherent instability created by individual economies facing a financial crisis, which then spills over into the rest of the world (see, for example, Korinek, 2011). Even if this kind of thinking were sufficient to promote more cooperative behaviour, it remains unclear what prevents economies from excessive reliance on capital controls as an excuse for defending domestic policies that may become increasingly distorted as a result. Moreover, if a series of bad policies by governments is responsible for most financial crises, then it is doubtful that governments can be trusted to implement effective forms of prudential controls on capital movements.

To be sure, there is likely a zone of tolerance when it comes to permitting countries or regions to tailor specific regulatory policies to suit their own needs. Establishing tolerance limits is another area that the MAP approach fails to consider. It does not help the cause of cooperation that two of the largest economic entities, namely the United States and the euro zone, avoid asking how their policies affect the rest of the world. Consider Chairman of the Federal Reserve Ben Bernanke's latest defence of the Fed's unconventional monetary policies, delivered at the 2012 Jackson Hole conference. Bernanke never refers to the potential spillover effects that the Fed's policies have on other economies, particularly among emerging markets. Yet, he goes on to remark that the resulting "strains are most problematic for the Europeans, of course, but through global trade and financial linkages, the effects of the European situation on the US economy are significant as well" (Bernanke, 2012: 17). The message is clear: we will defend ourselves against spillovers that originate from abroad but we evince little concern over how our policies may contribute to the continuing global economic malaise.[21]

Of course, whether the Fed's actions are a reflection of the need for the central bank to "do whatever it takes" in reaction to failures from events outside its control continues to be debated. To the extent that near-zero policy rates may create unintended consequences (see, for example, White, 2012 and Turner, 2011), there ought to be strong incentives to go beyond domestic imperatives alone and consider addressing "vulnerabilities affecting the financial systems in the interest of global financial stability" (FSB, 2012). Consequently, it is necessary to identify the relative importance of the systemic component of sovereign risks. Instead of an emphasis on macroeconomic fundamentals alone, as presumed by the MAP approach, the proximate cause may well be found in the behaviour of financial markets (for example, see Ang and Longstaff, 2011). After all, these unintended consequences can have macroeconomic effects, implications for financial stability or both.

19 See, for example, Bergsten and Gagnon, 2012, who list China and Japan, both members of the G20, as among the group of currency manipulators, along with several other countries in Asia, Europe and the Middle East, none of which belong to the G20.

20 See IMF, 2012. There is insufficient space here to deal with the question of how to measure foreign exchange reserve adequacy. Filardo and Siklos (2012), and references therein, cover the relevant issues.

21 To be fair, establishing the significance, let alone the size, of financial spillovers is difficult. Bauer and Neely (2012), for example, conclude that US monetary policy has had significant spillover effects on financial markets in select countries, including Canada. However, the results are model sensitive. Woodford (2012) also concludes that a great deal of uncertainty surrounds existing estimates.

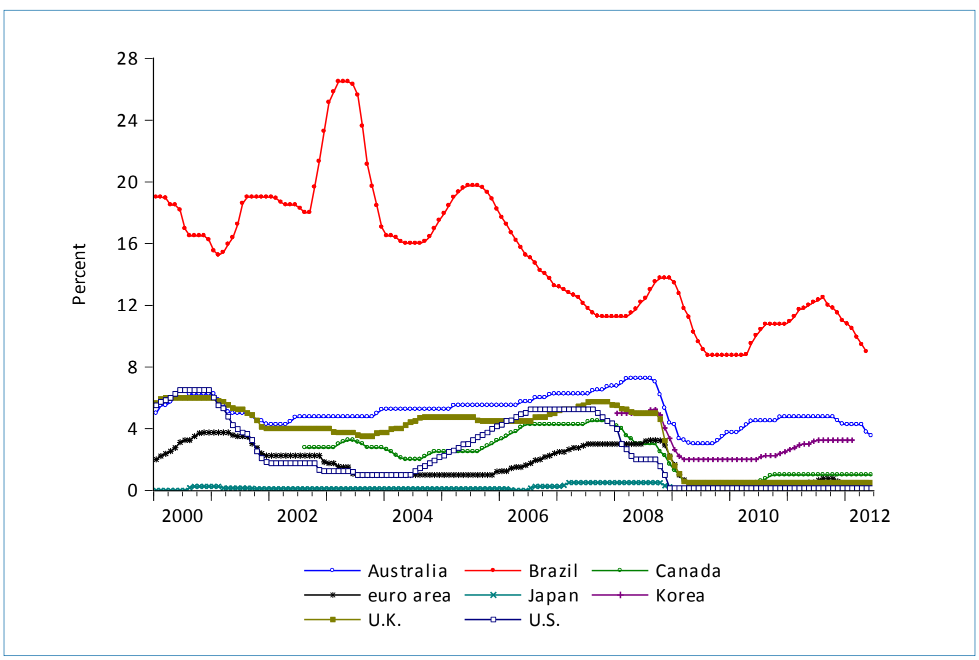
With one exception, central bank policy rates at major central banks in the G20 are fairly similar, as shown in Figure 3. If interest rates and exchange rates combined are the primary drivers of capital movements across countries, then it is hard to see how, under the circumstances, some of the key fundamentals can help solve the riddle of how to tame what is considered one of the destructive features of the international financial system — namely, that, so far, very low yields appear incapable of stimulating economic growth.[22] Moreover, if the IMF or other international bodies focus their attention on consistency in the area of macroeconomic management across countries, it is unlikely that they, or other analysts, will consider the "tail events" that did much to unravel global economic conditions over the past five years.[23] In this kind of environment there is an urgent need to fill a vacuum. Clearly, searching for a set of policies that will encourage meaningful cooperation is necessary. To complicate matters even further, we may well be going through an era when there is no economy, institution or central bank that can "call the tune," as the Bank of England did several decades ago (Eichengreen, 2008: 33) and the US Federal Reserve did until recently. While the rise of China is seen as promising a realignment of sorts in the global economic environment, even the optimists (for example, Subramanian, 2011) believe there are significant economic and financial risks if the United States shares the global stage with China. Nevertheless, it is far from clear whether, for example, the dollar will soon be displaced as a reserve currency (see, for example, Yu, 2012). We appear, then, to be without a "conductor" for the international financial system, with untold consequences. Finally, if higher inflation is not an option for reducing the debt buildup by sovereigns around the world, and middling economic growth is the prospect for the foreseeable future, then micro- and macroprudential policies are the only other means to control "animal spirits."[24] As a result, we have entered a world with a new trade-off — namely, between the degree of monetary ease and the forbearance of regulators, supervisors and central bankers.

22 Not surprisingly, this state of affairs is creating consternation in some circles. Richard Fisher, president of the Dallas Fed, and a lone dissenter on the Fed's board (that is, the Federal Open Market Committee) against additional monetary stimulus, put it bluntly: "Nobody really knows what will work to get the economy back on course. And nobody — in fact, no central bank anywhere on the planet has the experience of successfully navigating a return home from the place in which we now find ourselves" (Fisher, 2012).

23 Macroprudential regulation and supervision may well be intended to deal with this issue, but we remain far away from knowing which tools work and how financial stability and monetary policy can best work together.

24 This term was coined by Keynes in *The General Theory of Employment, Interest and Money* (published in 1936) to refer to how emotion, as opposed to purely rational decision making, could influence consumer behaviour.

Figure 3: Policy Rates in Selected Economies, 2000–2012



Source: International Financial Statistics CD-ROM (Washington, DC: IMF), August 2012.

There is too little appreciation that earlier international monetary systems required cooperation precisely because exchange rate systems, whether of the gold standard or Bretton Woods varieties, rendered economies dependent on collaboration between the participants. Therefore, if the aim of policy makers is to make the exchange rate flexible and allow each economy to decide individually what is "sound" in macroeconomic terms while also recognizing that domestic considerations may well trump global needs when it comes to regulating capital flows, then another mechanism is needed to create incentives for cooperation on reforms of the international financial system. At the moment, then, it is looking a lot like the interwar era when, as the influential report published in 1944 by Ragnar Nurkse concluded, "The piecemeal and haphazard manner of international monetary cooperation sowed the seeds of subsequent disintegration" (Nurkse, 1944: 117). Now, as then, we are living under an extended period of monetary and fiscal experimentation, with little understanding of the long-term consequences of the global rush to ease monetary policy (see Figure 3), while simultaneously restraining fiscal policy with a good measure of macroprudential regulations thrown in.

Other forces that contribute directly to the GFC are still around. Consider, for example, the international reaction to the so-called Volcker Rule,[25] which aims to limit the risk-taking activities of investment banks.[26] The World Trade Organization (WTO) agreement on financial services permits countries to take measures dictated by domestic needs to ensure financial system stability. However, in the same breath, domestic considerations cannot infringe on the agreement to do no harm to others: "Notwithstanding any other provisions of the Agreement, a Member shall not be prevented from taking measures for prudential reasons, including for the protection of investors, depositors, policy holders or persons to whom a fiduciary duty is owed by a financial service supplier, or to ensure the integrity and stability of the financial system. Where such measures do not conform with provisions of the Agreement, they shall not be used as a means of avoiding the Member's commitments or obligations under the Agreement."[27] It is this last sentence that has been used by Canada, and other countries, to water down the intent of the Volcker Rule.[28]

NO SINGLE REGULATORY FRAMEWORK IS RIGHT FOR ALL COUNTRIES

This paper argues that credibility and trust in any new international regulatory framework must first begin at home, with a determination for fiscal and monetary policies to work in harmony. This includes cooperation, if not coordination, of regulatory and supervisory functions to ensure that macroprudential policies effectively complement domestic monetary policy and provide an additional tool to implement a sound macroeconomic framework that will soften the blow from the next financial crisis. Nevertheless, it is necessary to ask how much cross-country variations can be tolerated if it is assumed that it is either impractical or undesirable to expect a "one-size-fits-all" international monetary regime. The fear seems to be that policy makers cannot be seen to disagree on the governance of an international monetary system. Why this is the case is not entirely clear. After all, in the early days of inflation targeting, many believed that disagreements inside central bank policy-making committees were detrimental to the cause of a first-rate monetary policy (see, for example, Siklos, 2002). However, disagreement in the economic outlook, when combined with sufficient transparency, can be beneficial (see, for example, Siklos, forthcoming 2013b). The same principle can surely be extended to devising a stable international financial system.

Soundness cannot be defined in a unique fashion. Instead, what is considered good practice in monetary, fiscal and regulatory policies must be evaluated along a range of acceptable metrics. More importantly, as discussed below, the international community needs to more effectively account for spillover effects from individual nations' attempts to determine what is right for them. This pre-condition must be met before institutions entrusted with preserving financial system stability are themselves reformed or their tasks and responsibilities are revisited. Reforming existing institutions, or creating new ones, when some key constituents appear incapable of putting their own houses in order, exemplifies the strategy of "putting the cart before the horse." Indeed, as we are now

25 The rule is aimed at maintaining some separation between retail banking and investment banking. The objective is to prevent speculative investment bets made by banks from spilling over into their traditional banking activities.

26 Another example comes from money market funds, a vehicle used by many banks, especially in the United States and Europe. Any signs of financial stress can prompt large withdrawals; in the United States, attempts to regulate money market funds so that they are required to act more like banks, or place limits on redemptions in times of crisis, have so far failed. See, for example, Gapper (2012). Therefore, systemic-type risks stemming from this source have yet to be tamed.

27 From the WTO Uruguay Round Agreement, Annex 1B: General Agreement on Trade in Services, Annex on Financial Services, available at: www.wto.org/english/docs_e/legal_e/26-gats_02_e.htm#annfin2a.

28 As Volcker (2012) has pointed out, there is considerable irony in the objections raised by Canada, and other countries, about the Volcker Rule. First, Canadian banks rely less on proprietary trading relative to their US counterparts. Second, if others object to some of the elements of the Dodd-Frank legislation, then why is the European Union considering a version of the so-called Tobin tax on foreign exchange transactions and why are UK policy makers devising a system to "ring fence" conventional from investment banking? More generally, what does macroprudential regulation represent, if not a means of potentially avoiding external commitments with the aim of ensuring financial system stability?

witnessing in real time in Europe, creating supranational entities that are capable of disciplining only their weakest members, cannot credibly serve the goal of enhancing financial system stability. That is, unless they are able, in a coherent fashion, to supervise, regulate and otherwise adopt policies across the spectrum of micro- and macroprudential areas. Ultimately, coherency also requires the consent of the sovereign members for these authorities to obtain the legitimacy on democratic accountability grounds. Hence, it is difficult to see how even a partial top-down approach to regulatory reform can succeed.

WHERE ARE WE NOW?

For the issues posed in this paper, it is relevant to ask: if the need for systemically important nations to cooperate is so clear, then — other than the combined size of the G20 (as measured by GDP) — what are the ties that bind them? What economic incentives enhance the likelihood of adopting cooperative solutions to financial problems that have a global dimension (also, see Subacchi and Jenkins, 2011)? Can cooperation extend to the "outsiders" of the G20 process? After all, the FSB already includes important members not in the G20 (Hong Kong, the Netherlands, Singapore, Spain and Switzerland).

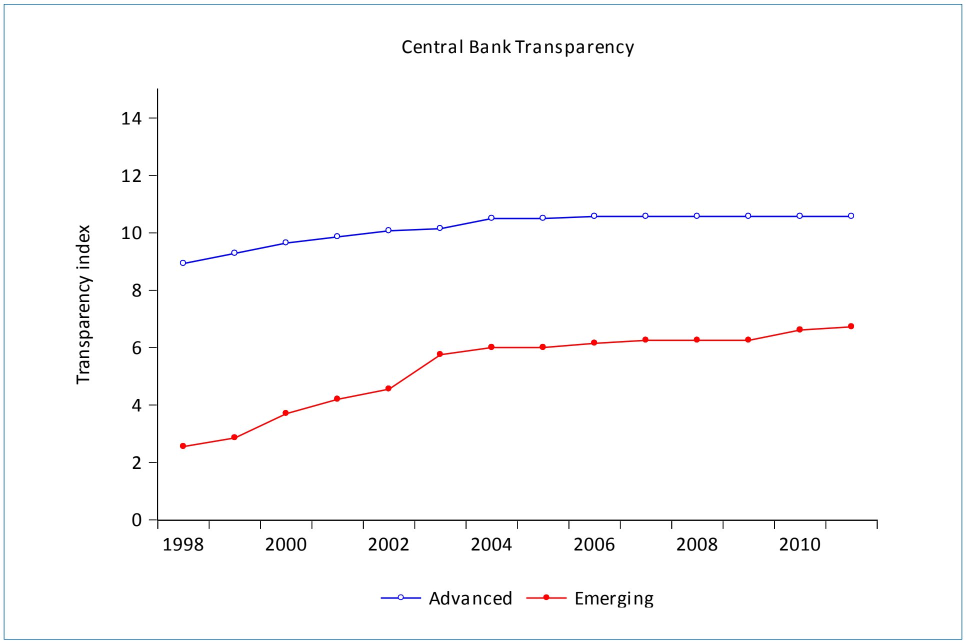
For the sake of simplicity, group the members of the G20 into two separate categories — namely, the advanced market economies (AMEs) and the emerging market economies (EMEs). Table 1 lists the countries that belong in each category. Next, consider a series of institutional and broad economic characteristics that many observers would agree help define the capacity to deliver both sound macroeconomic policies as well as a stable financial system. Figure 4 displays a measure of central bank transparency for the G20 group. Three conclusions are immediately clear. First, central banks in the advanced world remain relatively more transparent than their emerging market counterparts. Second, the gap in transparency has narrowed considerably over the years. If the core of any good policy strategy, whether it is monetary, regulatory or fiscal, rests on transparency, then central banks have certainly shown the way. Nevertheless, there is room for progress. However, it is also legitimate to ask what the record of the last decade and a half has contributed, for example, to achieving the aims of the FSB? Clearly, transparency is not enough.

Table 1: G20 Economies Classification

Advanced
Australia
Canada
France
Germany
Italy
Japan
Korea
Great Britain
United States
Emerging
Argentina
Brazil
China
India
Indonesia
Mexico
Russia
Saudi Arabia
South Africa
Turkey

Source: www.g20.utoronto.ca/members.html and author's classification based on IMF's definition.

Figure 4: Central Bank Transparency in the G20, 1998–2011



Source: www.central-bank-communication.net/. Update by author from data that originally ended in 2009.

Note: The individual transparency estimates are averaged according to the subdivision given in Table 1. The transparency scale is based on values ranging from 0 (no transparency) to 15 (complete transparency). The overall index of transparency consists of the arithmetic aggregation of five sub-indices, each of which attempt to isolate a specific area of monetary policy. The subgroupings consist of economic transparency, which refers to the quantity and type of information released by a central bank (for example, an inflation forecast); procedural transparency signals how much information about the internal workings of the central bank is made public (for example, voting records); policy transparency provides an indication of how central banks announce their decisions (for example, explanations of policy rate setting decisions); political transparency refers to the openness of the central bank – government relationship; and operational transparency indicates the extent to which the monetary authority opens itself to assessments of its conduct (for example, policy assessments and reviews).

Figure 5 plots two of the three elements of the so-called "trilemma" or "impossible trinity" that is the foundation of international macroeconomics. The left-hand side of Figure 5 displays Aizenman, Chinn and Ito's (2010) monetary independence (in relation to a "base" economy, typically the United States) index, which essentially supports some of the earlier findings based on the Ilzetzki, Reinhart and Rogoff (2008) exchange rate classification system (see Figure 2). AMEs in the G20 have retreated over time from their express desire for greater monetary independence through exchange rate flexibility. Turning to the EMEs in the G20, they are seen as being rather opportunistic in their willingness to accept monetary independence. In the aftermath of the 2000-2001 bursting of the tech financial bubble, monetary independence declines precipitously, recovers and then reaches a peak just before the GFC, only to begin showing signs of another rapid decline, at least until 2010, the last available observation. One might have expected EMEs in the G20 to aim for greater monetary independence in the midst of the crisis. Assuming that the index is informative about the true underlying degree of monetary independence, this supports the coupling of economies in "bad" times and ought to provide an incentive for the G20 to design and supervise each others' policies more effectively.

The right-hand-side plot in Figure 5 shows the extent to which the G20 economies are open to cross-border capital account transactions. Remarkably, there is virtually no change in openness among the AMEs, whereas openness remains noticeably lower in the EME camp, especially in relation to the advanced economies but also over time, at least compared to the mid-1990s, in spite of a modest rise beginning in the early 2000s.[29] It is striking that the GFC has not led to a collapse in capital account openness, or rather, that the behaviour of capital account openness was not matched by the dramatic drop in trade in the immediate aftermath of the events of 2007-2008.[30] No wonder credit booms are pro-cyclical, but the problem eludes a satisfactory solution since policy makers cannot agree on how to define the credit cycle.[31]

29 The Asian financial crisis of 1997-1998 clearly produced a steady decline in capital market openness until 2001.

30 See the IMF's *World Economic Outlook*, 2008. Trade has since recovered, although the precise sources remain a matter of debate. See, for example, www.econbrowser.com/archives/2010/10/a_postmortem_on.html for a discussion of various points of view.

31 The Basel Committee has recommended that the warning signs should to be based on the difference between the private credit-to-GDP ratio and a "trend" indicator. See: www.bis.org/bcbs/.

The bottom line is that it is not difficult to find inconsistencies in macroeconomic and financial policies. It should then be plain enough that there has to be a meeting of minds, beginning with the G20 and the FSB, if a coherent international financial system beyond the crisis can be properly designed. The foregoing brief exploration also suggests that the two groups considered here are far apart along most of the characteristics considered. This is not to say that all EMEs are far apart from all AMEs. Indeed, it is possible to find some AMEs that are as distant from another AME as the distance that separates a particular AME from a chosen EME. The point is simply that it is far from obvious that the goal of bringing together this group of economies, simply because they are believed to be systemically important, is sufficient to generate cooperative behaviour, especially in the area of international financial regulation.[32]

WHERE DO WE GO FROM HERE?

Unless policy makers in the G20 and the FSB recognize that their regulatory frameworks and policies cannot operate independently from each other, individual attempts to "ring fence" parts of the financial sector from each other or protect the real side of the economy from negative shocks emanating from the financial sector will come to nothing. As long as the international community recognizes the potential spillovers from crisis response policies and is convinced that any trade-offs eventually produce a better global solution, there is no reason why an international financial system should prevent the adoption of local solutions to problems that have global repercussions.

The announcement at the June 2012 G20 summit in Los Cabos that the working group on international financial architecture would enhance both the resources available to the IMF and its governance are clearly positive steps. The agreement dealing with how members would cooperate via enhanced surveillance, while helpful, represents a missed opportunity to advance the cause of better international governance. First, if the methodology of surveillance follows the Article IV approach, it does not inspire confidence. After all, these regular consultations failed to identify elements that would map an individual economy's state into the possibility of a global impact.[33] In other words, it is the failure to address the sources of systemic shocks that needs to be addressed, among other necessary reforms. Exactly how this kind of approach is supposed to, in the words of the working group, "help achieve a better integration of bilateral and multilateral surveillance, with a focus on global domestic and financial stability, including spillovers from policies"[34] is not spelled out, nor has thought been given to either sanctions or remedial steps if a nation's policies fail to deliver the desired outcome.

Systemically, and politically, important nations ought to demonstrate some leadership by agreeing on a range of acceptable regulatory frameworks and demonstrate, in a transparent manner and at regular intervals, how each is capable of operating with a minimum of spillovers that might threaten financial system stability. In this sense, the FSB's approach to take stock of what works, and why, is emblematic of the correct strategy to persuade policy makers to reform. Transparency, by its nature, is more likely to be achieved within a simple framework and when there is formal recognition of the following: there are "unknown unknowns" that, from time to time, require an economy to step out of an international policy strategy in place, but with due allowance and accountability for the spillover costs that may be created under the circumstances. This is best achieved by allowing each member country to issue a "directive" to the international community when it is incapable or unwilling to follow the range of standards set by the international community. If what works between certain central banks and their governments (see, for example, Siklos, 2002) can be extended to international regulatory questions, then a mechanism will have been created wherein it is the country that disagrees or wishes to opt out that has to explain why it chooses this route. Under current arrangements, the burden rests largely with international institutions and these can be circumvented or ignored behind the principle of sovereignty.

Just as sovereign nations have devoted decades to finding the right macroeconomic strategy to deliver stable prices, a growing economy and financial stability, since the end of World War II, there has not been much thought given to what a coherent global macroeconomic and financial regulatory strategy might look like. If this rests on the priors of a pure float, unfettered capital movements and free trade, then an international framework is, arguably, of second-order importance. If, however, there are unintended consequences from these choices, establishing a range of acceptable domestic policies and an understanding of how the resulting spillovers operate may help the next time economic shocks, particularly of the financial variety, are transmitted globally.

32 See Cooper (2012) for a broad discussion of the concerns over the legitimacy of the G20.

33 In 2011, the IMF introduced the *Consolidated Spillover Report:* "Spillover reports explore the external effects of policies in five systemic economies: China, Euro Area, Japan, United Kingdom and the United States." Available at: www.imf.org/external/np/pp/eng/2011/071111.pdf. The calculations are partly based on a dynamic general equilibrium model called the "Global Integrated Monetary and Fiscal Model" (Kumhof et al., 2010). This is a welcome addition, even if the approach so far is to assume that spillovers are only from systemically important economies.

34 From *G20 International Financial Architecture Working Group Report*. Available at: www.g20mexico.org/images/stories/canalfinan/deliverables/financial_architecture/IFA_Working_Group_Report_Final.pdf.

Policy makers should also reconsider the status of the FSB. In terms of global finance, the group is more representative than its G20 cousin. Finally, international cooperation ought to recognize that a single set of acceptable standards is unlikely and unreasonable. The potential for a mutually assured destructive financial crisis of the Great Depression variety ought to be sufficient to concentrate minds on open and cooperative behaviour in regulating global financial markets.[35] Bretton Woods failed, in part, because it never spelled out how the system would function, and there is the same danger that the international monetary system will again fail because there is little agreement or understanding of how financial system stability is attained and maintained over time. Financial stability and how it interacts with other elements of sound macroeconomic policies, to borrow the words of Winston Churchill, remains "a riddle, wrapped in a mystery, inside an enigma."

If the last several decades have taught us anything, it is that, overall, policy making has improved. Economic systems have not collapsed as they once did, demonstrating some resilience, but financial crises remain far too commonplace. The real danger is complacency, because we then surrender our ability to develop tools to understand how to lessen the sizeable economic losses from singular bad events. If the answer lies with taming the systemic elements in global finance, then the way ahead is clear: focus on improving our understanding of real financial links and policies that mitigate their ability to destabilize the global economy.

35 Corsetti and Pensenti (2005) argue that gains from international cooperation are higher, but only for intermediate degrees of exchange rate pass-through. Indeed, pass-through effects that are either too small or too large are detrimental to the cause of cooperation. Since pass-through effects have declined globally, more so among the AMEs than in EMEs (see, for example, Sekine, 2006 and Ca'Zorzi, Hahn and Sánchez, 2007), this represents a thin reed on which to argue in favour of international policy coordination as the only way to solve the GFC. Nevertheless, it is an approach that merits further study.

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STRENGTHENING INTERNATIONAL FINANCIAL INSTITUTIONS TO PROMOTE EFFECTIVE INTERNATIONAL COOPERATION

Thomas A. Bernes

ABOUT THE AUTHOR

Thomas A. Bernes, CIGI distinguished fellow since 2012, held a celebrated career in the Canadian public service and at leading international economic institutions before becoming CIGI's executive director from 2009 to 2012. Mr. Bernes has held high-level positions at the International Monetary Fund, the World Bank and the Government of Canada.

EXECUTIVE SUMMARY

The current global financial and economic crisis resulted from the failure of major economies and global institutions to recognize and address, in a meaningful way, emerging fault lines in global financial markets and global institutions. The crisis brought to light long-standing weaknesses in the global system for economic and financial cooperation, providing opportunities for reform. Most experts agree that there is a need for strengthened international cooperation and improved governance and accountability in multilateral organizations and forums, including the Financial Stability Board (FSB) and International Monetary Fund (IMF). No single country has the ability or resources to fix things on its own — a near-unprecedented degree of collective action is required. While some progress has been made, many analysts caution that the reforms achieved to date are inadequate to the challenge at hand. Global economic cooperation involves more than addressing crises, it must also consider the medium term. The challenge remains that the necessary (and promised) action to tackle global governance issues in order to promote greater economic cooperation has not occurred, and many observers are losing confidence that anything can happen. The agenda for reform to promote greater economic cooperation, including reform of the international financial institutions (IFIs), has been laid out many times, but the commitment of Group of Twenty (G20) leaders appears to have faltered, leading one expert to suggest that in the event of another crisis, G20 countries would have only themselves to blame.

INTRODUCTION: A WINDOW FOR CHANGE

Major crises often present new opportunities for genuine change and reform. The current global financial and economic crisis, which began to manifest itself in 2007, is no exception. Long-standing weaknesses in the global system for economic and financial cooperation are beginning to be addressed. We have witnessed the emergence of the G20 as their "premier forum for economic cooperation," we have seen the transformation of the Financial Stability Forum (FSF) into the expanded (but still not universal) FSB and we have heard promises of reforms in the governance of the IMF and World Bank. Many observers, however, caution that the reforms achieved to date are inadequate to the challenge at hand.

The second-biggest global economic crisis in the last 100 years illustrated yet again the importance of international cooperation and the risks for the global economy of uncoordinated national policies driven by concerns for politically important or motivated domestic agendas. While the genesis of the crisis is complex and still subject to much study, there is a near-universal recognition by most analysts of the need for strengthened international cooperation and improved governance and accountability in our multilateral organizations and forums. Many proposals have called for strengthened international rules together with enhanced international bureaucracies, such as a world financial organization, an international lender of last resort and so on (Eichengreen and Baldwin, 2008).

This should come as no surprise. The biggest economic crisis in the last century, the Great Depression, and its aftermath gave birth to the IMF and the World Bank as the premier forums for economic cooperation. At the time, plans for an International Trade Organization were stillborn, but a less ambitious institution ultimately emerged as the World Trade Organization. This was not global government (nor was it meant to be), but the vision of the founders was that these two institutions could help level the playing field, correct negative externalities, compensate for asymmetric information and provide public goods (domestic and international). However, despite the evolution in the roles and functioning of these institutions, the gap between evolving and expanding markets, the changing balance of major economic players and the capacity of these institutions to play their envisaged role grew large.

In the lead-up to the current crisis, the United States and many other nations clearly committed errors in policy and judgment. So did virtually all of the multilateral institutions (for instance, the Organisation for Economic Co-operation and Development and the Bank for International Settlements) established to survey and coordinate global economic activity, including, in particular, the global watchdog — the IMF. For excellent perspectives on the Fund's role, one only needs to look at the evaluation undertaken by the IMF's Independent Evaluation Office (IEO), *IMF Performance in the Run-Up to the Financial and Economic Crisis: IMF Surveillance in 2004–07* (Lamdany and Wagner, 2011), and CIGI's 2012 publication by Paul Blustein entitled *A Flop and a Debacle: Inside the IMF's Global Rebalancing Acts* (2012).

While the subprime crisis in the United States was, arguably, the first major crack to appear in the global financial system, problems were not restricted to the United States (witness Europe today). Ultimately, the crisis was a failure of major economies and global institutions to recognize and address, in a meaningful way, emerging fault lines in global financial markets and global institutions: "There are deep fault lines in the global economy, fault lines that have developed because in an integrated economy and in an integrated world, what is best for the individual actor or institution is not always best for the system. Responsibility for some of the more serious fault lines lies not in economics but in politics" (Rajan, 2010).

Regardless of the origin of the problem, it was clear that no single country had the ability or resources to fix things on its own — a near-unprecedented degree of collective action would be required. The elevation of the G20 from a relatively unambitious finance ministers' level to the level of heads of government in 2008 was, therefore, to be welcomed. In their first meeting, leaders admitted that inconsistent and insufficiently coordinated policies had led to the crisis and they committed themselves to bringing about the necessary cooperation.

The creation of the G20 at the leaders' level was, potentially, an important step forward. To start, it brought the major emerging economies to the table for the first time, in a more balanced forum than at the IMF, recognizing that the G7/8 was no longer sufficiently representative of the global economy or powerful enough to respond to the massive challenges. It recognized, as Rajan (2010) stated, that a major fault line was politics and held out the prospect of truly global political leadership. Its first two meetings produced an important list of policy areas for action. Sadly, as the length of the communiqués (and associated annexes) in subsequent meetings grew and the language became vague, the tantalizing prospects for leadership have lagged. The first two communiqués spoke to people and set out areas for policy action; subsequent ones have spoken to technocrats and appear to have shifted toward calling for studies.

As Frieden et al. (2012) wrote in July 2012: "The recent experience of international economic cooperation is not very encouraging. As the crisis broke, to be sure, there was some effective coordination among major central banks, and it appeared for a time that a revitalized G20 might work together to confront common problems. But G20 summitry seems to have gone the way of most previous summitry, dissolving into vague promises about a proliferating array of feel-good topics. There is little reason to think that the obstacles to greater collaboration will diminish over time."

To be sure, the issues are complex and politically treacherous. New leaders and continuous election cycles complicate the process further. Some progress has been made, but global economic cooperation is not just about addressing crises (when other issues tend to be shunted aside). It is also about the medium term, where a lack of agreement on economic objectives and divergence of priorities makes progress that much more elusive. As we are witnessing in Europe today, the challenge of reconciling diverse domestic political interests within a region is daunting (some would say impossible), and even more so at the global level.

WHAT ROLE FOR THE G20?

Nonetheless, at the present time, the G20 is the "only game in town," so for those seeking to strengthen international economic cooperation, it is important that it succeed. To do so, there needs to be a clear understanding of what the G20 is…and what it is not. It is not a formal organization with conferred powers, it is not universal, and it has no supporting bureaucracy and permanent secretariat. What it can do is focus on activities such as agenda setting, policy coordination, consensus building and task distribution across existing institutions (Wouters and Geraets, 2012). However, the G20 must work hand-in-hand with institutions such as the IMF, World Bank, the WTO and the other 170-plus nations who are not members of the G20 for this to work. But as Kharas and Lombardi (2012) warned recently, "The more it [the G20] goes into detail, the more it risks losing the authoritativeness granted by its members and encroaching upon the mandate of established multilateral institutions with far greater technical expertise. Its energies are better directed toward broad strategies, and thus it should make efforts to engage with those institutions that can translate its vision into specific actions, agreeable both technically and politically to the parties involved" (2012). Therefore, a critical question becomes how does the G20 exercise inclusive leadership without getting lost in details or being seen as subverting the governance structures of the institutions concerned?

So how does the G20 stack up on this score? Let us look in particular at the institutional issues the leaders embraced in their first meetings — IMF and World Bank reform, trade and the WTO, and the FSB. The need for governance reform at the IMF (that is, who decides what for whom) has been long recognized — including in a 2008 evaluation by the IMF's IEO (see Lamdany, 2008), and a subsequent final report from the high-level Committee on IMF Governance Reform[1] (chaired by then South African Minister of Finance Trevor Manuel) in 2009. Both reports came to similar conclusions and recommendations, but little happened in the face of strong institutional inertia and entrenched interests. As the director of the IEO at the time, I wrote in my introductory comments:

> Improving its governance is widely recognized as a critical element in enhancing the Fund's relevance, legitimacy, and effectiveness. The Fund started some 60 years ago as the guardian of the par value system, with 44 member countries and 12 Executive Directors. Today, the par value system is long gone, and the Fund has 185 member countries and 24 Executive Directors. While roles have evolved over time, in many ways the formal structure and many practices remain largely untouched; and the evaluation found that reforms have not kept pace with changes in the membership and in the environment in which it operates. (Bernes, 2008)

And as CIGI Senior Fellow Pierre Siklos (2012) noted:

> The creators of the Bretton Woods system did not give much thought to economic governance as this term is understood today. Essentially, the victorious powers got the international framework they wanted, although the United States was seen as largely dictating the shape of the new international monetary system. Eventually, responsibility and accountability shifted back and forth between the United States and the major industrial economies in the Group of Seven until the more diverse set of countries, the global financial crisis of 2008 forced an expansion of consultations to a larger and more diverse set of countries, the G20. In the meantime, institutions were created or existing ones were tasked to deal with issues that arose (such as the Financial Stability Forum and its successor, the Financial Stability Board, and the Bank for International Settlements). With an enhanced role for EMEs, including those with different political systems than most of the industrial economies, the economic governance problems became more acute.
>
> …No amount of effective cooperation is possible unless some of the pressing governance questions are resolved, such as the thorny issue of the most powerful members of the G20 agreeing to treat other members as equals.

How did G20 leaders address this critical question of governance? As stated above, the first two leaders' G20 communiqués were crisp and action oriented. They were clear on their intentions. On the subject of IMF and World Bank reform, leaders seemingly drew from earlier analyses and laid out a clear program of action. The 2009 London G20 Summit communiqué stated:

> In order for our financial institutions to help manage the crisis and prevent future crises we must strengthen their longer term relevance, effectiveness and legitimacy. So alongside the significant

1 A high-level panel chaired by former Mexican President Ernesto Zedillo raised similar issues at the World Bank, which has witnessed a parallel debate because its governance structure essentially copied that of the IMF.

increase in resources agreed today we are determined to reform and modernise the international financial institutions to ensure they can assist members and shareholders effectively in the new challenges they face. We will reform their mandates, scope and governance to reflect changes in the world economy and the new challenges of globalisation, and that emerging and developing economies, including the poorest, must have greater voice and representation. This must be accompanied by action to increase the credibility and accountability of the institutions through better strategic oversight and decision making. To this end:

- we commit to implementing the package of IMF quota and voice reforms agreed in April 2008 and call on the IMF to complete the next review of quotas by January 2011;
- we agree that, alongside this, consideration should be given to greater involvement of the Fund's Governors in providing strategic direction to the IMF and increasing its accountability;
- we commit to implementing the World Bank reforms agreed in October 2008. We look forward to further recommendations, at the next meetings, on voice and representation reforms on an accelerated timescale, to be agreed by the 2010 Spring Meetings;
- we agree that the heads and senior leadership of the international financial institutions should be appointed through an open, transparent, and merit- based selection process; and
- building on the current reviews of the IMF and World Bank we asked the Chairman, working with the G20 Finance Ministers, to consult widely in an inclusive process and report back to the next meeting with proposals for further reforms to improve the responsiveness and adaptability of the IFIs [international financial institutions].

In addition to reforming our international financial institutions for the new challenges of globalisation we agreed on the desirability of a new global consensus on the key values and principles that will promote sustainable economic activity. We support discussion on such a charter for sustainable economic activity with a view to further discussion at our next meeting. We take note of the work started in other fora in this regard and look forward to further discussion of this charter for sustainable economic activity. (Leaders of the G20, 2009)

The objective of strengthening the relevance, effectiveness and legitimacy of global economic and financial institutions is the same language used in the earlier IEO report. Leaders committed, in general, to reforming the mandate, scope and governance of the institutions, and increasing their credibility and accountability, followed by a series of specific undertakings. What has happened?

GOOD GOVERNANCE OF IFIS REMAINS A CENTRAL TASK

Governance structures should logically follow from an institution's purpose and mandate. Discussions of the mandates of the IMF and World Bank do not appear to have progressed very far. Indeed, the G20's initial action was to delegate to itself the responsibility for surveillance through the Mutual Assessment Process, with the IMF to serve only as a technical adviser.[2] While some argue that the IMF's role has increased over time and the IMF has begun to produce spillover reports (impacts of national policy actions on other countries), the reality is that a large difference of opinion on the appropriate role for the Fund continues to exist between countries. Instead, recent debates have focused almost exclusively on "shares and chairs" — the quota share and board representation of countries. This is a political debate, not unimportant, but probably irreconcilable without a prior understanding on the future role of the Fund. Where mandate has been discussed — in the context of agreeing on a new surveillance decision — the absence of a meaningful consensus on what the role of the Fund should be has been deftly papered over. The IMF's new Surveillance Decision of July 2012[3] has been trumpeted as a step forward, but after reading this decision I had to ask whether it could be considered a clear mission statement. To this observer, it only underlines the continuing divergences between IMF members on its surveillance role.

2 One wonders what the prospects are for success given that this would require a common vision, not only of the benefits, but also the costs of coordination, but that is another topic.

3 To read the document, see Hagan and Tawari (2012).

Let's turn to the specifics of the leaders' statement:

- The 2008 quota and voice reforms were finally fully implemented in 2011. The further reforms agreed upon and hailed at the Seoul summit as an "historic" breakthrough (most unofficial observers called them a small incremental step), have yet to be ratified and implemented (the April 2010 agreement) principally because the United States, which has a blocking vote, has yet to present them to Congress.[4] The promise of reform of the IMF board to achieve a better global balance in its composition risks becoming simply a reshuffling of the makeup of European chairs.

- Greater involvement of governors (usually ministers of finance) in providing strategic direction and accountability has not progressed. Ministers today perform only an advisory role through the ministerial steering committee of the International Monetary and Financial Committee (IMFC) and the board of governors meets for only a few hours once a year. Meetings of the IMFC continue to fall back into the reading of prepared statements, despite the effort of enthusiastic chairs like the current Singaporean finance minister.

- The World Bank has added an African chair to its board and made some other steps to address its governance arrangements. However, the bigger questions impacting the role of the Bank, the size of its capital base and the relevance of its board, have been left hanging. Indeed, frustration has led the BRICs (Brazil, Russia, India and China) to give consideration to the establishment of a new development bank that they would fund and control.

- On leadership selection, there were open contests for the most recent selections of the heads of the IMF and the World Bank. Without impugning the capabilities of the successful candidates, the result was the "same old, same old" — a European (Lagarde) to head the IMF and an American (Kim) to head the World Bank. As for an "open and transparent process" for the selection of the senior leadership, forget it. Nothing appears to have changed. Indeed, at the IMF, a share of the spoils (a deputy managing director position) has now been given to a senior Chinese official, while the United States retained the number two position.

- On proposals for further reform, we are still waiting. Important issues concerning the role of the board(s) — whether surveillance should be a separate function from lending in the IMF structure, ensuring appropriate oversight and accountability of management — remain as elusive as ever.

- And, as for a Charter for Sustainable Development, when was the last time you heard leaders mention this? The work that was tasked to the World Bank and the IMF on financing has been left in limbo.

Almost all attention has been focused on the issue of IMF quota (voting) shares and representation on the board. While these are symbolically important, the cold reality is that these will result in virtually no change as to how the IMF operates, because of the Fund's voting rules and the small nature of the changes. The more substantive issues of ministerial involvement and accountability, the role of the board and holding management (appointed through an open and merit-based system) accountable — all of which could lead to significant changes, are being quietly ignored for the most part.

The reasons why this is all so important were articulately laid out by the Indian IMF executive director who stated:

> Issues of Global governance of the International Financial Institutions such as the IMF have moved centre stage since the eruption of the Global financial crisis in 2008. It is not clear how many decision makers and their parliament/legislature/ Congresses have learnt the lessons of the crisis. Many analysts and academics, who have learnt some of the lessons, advocate an expanded mandate and role for the IMF. As it stands, Article IV, section 3(a) of the IMFs articles of agreement states that, "The Fund shall oversee the international monetary system in order to ensure its effective operation and shall over see the compliance of…" The quoted mandate can be interpreted either as being all encompassing or as very limited! In general those who control the governance structure of the fund tend to favor the former interpretation, while those who feel they have an unfairly low share of quotas and governance tend to favor the latter interpretation. Thus the issue of expanded mandate is intimately related to quotas and governance issues. (Virmani, 2011)

To some readers, these judgments on progress made to date may sound harsh. This is not to denigrate the hard work of many officials and the incremental progress that has been made. But the situation calls for a more ambitious leap forward and small steps are not sufficient. And more importantly, where is the commitment of leaders? Are we again to bear witness to 10 years of reaffirmations, as with the Doha Round, with nothing in the end to show for it?

4 So, nothing has happened before the 2012 IMF/World Bank Annual Meetings and, therefore, the January 2013 deadline has been missed.

FINANCIAL STABILITY REMAINS AN ELUSIVE GOAL

Now let us look at what has transpired on the critical issue of fostering greater financial stability. After all, it was the financial meltdown that brought us to this path.

More progress, and rightly so, has been made in this area. The FSF, set up as a virtual organization, has been transformed into the FSB. More countries have been brought into the tent (namely, and mostly, the non-G7 members of the G20). An embryonic institutional structure has begun to emerge, as well as a regional consultative structure. The basic criteria of what would become Basel III were agreed to in record time. Many meetings have been held.

But stepping back, how confident are we (three years later) that systemically important financial institutions won't threaten global financial collapse again? Are "near-banks" beginning to be seriously addressed? What progress has been made in ensuring that Financial Sector Assessment Programs (which finally cover the United States and China) are being treated as important analytical tools by the IMF, the World Bank and the FSB? Are there clear lines of responsibility and accountability established between the IMF and the FSB for global financial stability?

Even more importantly, what is our confidence level that we are better off (in avoiding a new financial crises) than we were four years ago? The recent *Global Financial Stability Report* produced by the IMF asked the question of "whether these reforms are moving the financial sector in the right direction against a benchmark set of desirable features — financial institutions and markets that are more transparent, less complex, and less leveraged. The analysis suggests that, although there has been some progress over the past five years, financial systems have not come much closer to those desirable features. They are still overly complex, with strong domestic interbank linkages, and concentrated, with the too-important-to-fail issues unresolved" (IMF, 2012).

Crises often force people to think "outside the box." The immediate response to the great recession was a lot of unorthodox policy actions (mainly by central banks). But a breather allows people to slip back into comfort mode and the politics of "unorthodox" actions become much more difficult. Too often, further progress becomes more incrementalism out of the same policy toolbox, rather than the more ambitious rethink that may be necessary. Or is it that with a bit of breathing space, some of the major parties (read the United States and Europe) chose to proceed unilaterally — quickly forgetting their earlier pledges?

In an important policy speech at Jackson Hole in August 2012, Andrew Haldane, executive director for financial stability at the Bank of England, raised important questions as to whether our policy direction for ensuring financial stability has not been based on the wrong approach for the last 50 years. His speech, entitled "The Dog and the Frisbee," presents an impassioned argument that our policy approach to trying to capture and understand complexity through greater regulatory complexity may have been a horrible error and that simplicity may offer us greater security. In fact, the approach he advances is not dissimilar to the regulatory approach of the Canadian system (Haldane, 2012). Now Haldane may be right, or he may not. It is not within the scope of this paper to explore this broader question. But his argument does underline a huge question: are our institutions capable of asking (and answering) the "big questions" — and going back to explore fundamentals? Or, are we trapped in a process of bureaucratic incrementalism that prevents us from exploring a path more than two degrees off centre? One would like to have some faith that our global institutions, and our political leaders, are up to this task, but perhaps they are not. As Siklos (2012) stated, our institutions and institutional leadership may only be up to the task of steerage in normal times. At times of crisis, we may need to escape institutional structures if there is to be any hope of addressing the challenges we face.

Where does this leave us? Many elements of the reform agenda are not new. They were laid out in the IEO evaluation, in the final report of the high-level committee chaired by Trevor Manuel and in the Zedillo Commission Report on World Bank reform, as well as in many other reports, and in the London G20 communiqué. The issue is implementation.

But implementation involves a different future. As Raghuram Rajan (2010) stated: "Our existing global institutions, like the IMF and the World Bank, will likely prove ineffective in fostering global cooperation if they continue to operate as they have in the past. They will have to make radical changes in how they function, appealing more directly to the people than their leaders, to soft power rather than to hard power."

Looking at the Pittsburg summit communiqué, Rajan went on to ask whether the G20, working through the IMF, will be effective. His response:

> Unfortunately not. It is very easy to get politicians to spend in face of a crisis and to get central banks to ease monetary policy. No coordination is required, as every country wants to pump up its economy to the extent possible: the G20 leaders were pushing on an open door when they called for coordinated stimulus. The real difficulties emerge when countries need to undertake politically painful reforms, reforms that might even seem to be more oriented toward helping other countries

> in the short run rather than the reformer itself. Politics is always local: there is no constituency for the global economy. (Rajan, 2010)

Let us examine for a moment, the record of the G20 leaders on trade and the WTO. Starting from London, the ambition was clear. In their communiqué, they stated:

> We remain committed to reaching an ambitious and balanced conclusion to the Doha Development Round, which is urgently needed. This could boost the global economy by at least $150 billion per annum. To achieve this we are committed to building on the progress already made, including with regard to modalities.
>
> We will give renewed focus and political attention to this critical issue in the coming period and will use our continuing work and all international meetings that are relevant to drive progress" (Leaders of the G20, 2009).

By the time of the Los Cabos summit, the language had shifted:

> [W]e stand by the Doha Development Agenda mandate and reaffirm our commitment to pursue fresh, credible approaches to furthering trade negotiations across the board. We will continue to work towards concluding the Doha Round negotiations, including outcomes in specific areas where progress is possible, such as trade facilitation, and other issues of concern for least developed countries.
>
> We support strengthening the WTO through improving the way it conducts its regular business, and its dispute settlement system. We also direct our representatives to further discussions on challenges and opportunities for the multilateral trading system in a globalized economy. (Leaders of the G20, 2012).

It does not take a skilled devotee of communiqué interpretation to recognize the slide from commitment to an ambitious conclusion to the Doha Round to a commitment to working towards concluding the round. In fairness, G20 countries did, by and large, keep to their commitments to avoid new protectionist measures at the time of the crisis. But at the same time, they have clearly failed in providing the leadership to conclude an ambitious trade round, let alone begin to address the institutional/governance challenges of the WTO, nor important policy issues for global economic growth and stability including the impact of shifting patterns of trade (supply chains) and their impact on outdated trade rules, nor the intersection between financial flows which are addressed in the WTO rules as well as through the IMF and the FSB (Schadler, Tan and Yoon, 2009).

WHERE NEXT?

Returning to the question of where are we now, it is evident that the G20 has played a constructive role, but it is far from earning its self-proclaimed status as the "premier economic forum." It may have helped to minimize a serious crisis, but can it go further in moving the global economy in a positive direction? Against leaders' originally stated objectives — financial reform, open markets, IFI reform and macroeconomic coordination — they have yet to deliver anything close to what they promised.

Global financial stability, open markets and macro coordination are public goods that require global cooperation and countries willing to confront the domestic political forces that militate against such an outcome.

As Frieden et al. (2012) observed: "There is a profound disconnect between the G20's statement of purpose as laid out in their initial meetings and what has happened with economic policy in the US and in the European Union. This points towards what may be a deeper obstacle to the construction of the global public goods that are indispensable for globalization's sustainability: the limitations of each political domestic system, democratic or not, to internalize the consequences of others' policies on their own economic performance, as well as the ramifications of their policies on others' performance."

The agenda for reform for greater economic cooperation, including reform of the IFIs to help achieve this, has been laid out many times. The G20 leaders initially subscribed to its main elements. The window is there; however, the greatest obstacles may not be economic, but political and bureaucratic.

For the IMF, the principal steps involve:

- clarity on the relationship with the G20;
- strengthening the role of ministerial oversight;
- agreement on the role (and requisite resources) of the IMF;
- more substantial progress on the political litmus test of quota reform;
- greater progress on the process for an open merit-based system for senior appointments and their accountability;

- clarity on the role of the executive board; and
- much greater accountability of senior management for their stewardship.

For the World Bank, the principal steps involve:

- clarity on the relationship with the G20;
- agreement on the role (and requisite resources) of the World Bank;
- greater progress on the process for an open, merit-based system for senior appointments and their accountability;
- clarity on the role of the executive board; and
- much greater accountability of senior management for their stewardship.

For the FSB, the principal steps involve:

- clarity on the relationship with the G20;
- continuing steps to strengthen the institutional structure; and
- clarity on the respective roles of the FSB, the IMF and the World Bank.

For the WTO, the principal steps involve:

- development of an institutional structure for the WTO; and
- clarification of the respective role of the WTO with the IMF and the FSB with respect to financial issues.

The challenges identified in this paper are significant, but most are not new. The real challenge is that the necessary (and promised) action to address governance challenges in order to promote greater economic cooperation has not taken place, and many observers are losing confidence that anything can happen. Many strong and long-time supporters of the IMF, in particular, appear to be losing faith in the prospects for achieving reform. Arvind Subramanian of the Peterson Institute wrote last summer that the IMF "has not provided independent intellectual leadership, most evidently on the euro zone crisis. And it is unprepared to provide stability for the next big global crisis" (2012). Edward Truman, former senior US official, wrote an article addressing the lack of necessary progress on governance reform (2012). Nancy Birdsall, who heads the Center for Global Development, recently blogged (with respect to the lack of progress) "surely most if not all the blame is not with the bureaucracy (of the IMF) and the managing director. Surely, it is with the powerful members of the institution, gathered regularly at G20 meetings, and especially with the United States and Europe — which still hold the cards, in quota shares, votes and influence" (2012).

These *cri de coeur* reflect the flagging belief in the prospects for reform. As Truman concluded his article: "What is not acceptable, however, is for countries to allow these important reforms to remain in limbo indefinitely. A failure to do what is necessary will put the global economy and financial system at risk by starving the IMF of resources and sidelining it as the principal institution of the global economic and financial cooperation. This time, if there is another crisis, the G20 countries would have only themselves to blame" (2012).

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SUSTAINABLE DEVELOPMENT AND FINANCING CRITICAL GLOBAL PUBLIC GOODS

Barry Carin

ACRONYMS

ADB	Asian Development Bank
AMCs	advanced market commitments
BTA	border tax adjustments
CCF	Climate Change Fund
CCS	carbon capture and storage
CGD	Center for Global Development
CIF	Climate Investment Fund
COP 18	Conference of the Parties 18th session
CP3	Climate Public Private Partnership
CTF	Clean Technology Fund
DFID	Department for International Development (UK)
DoE	Department of Energy (US)
EC	European Community
ECA	export credit agency
EMS	European Monetary System
EMU	economic and monetary union
FSF	Fast-Start Finance
G8	Group of Eight
G20	Group of Twenty
GCF	Green Climate Fund
GEF	Global Environment Facility
GSF	Green Super Fund
HIPC	Heavily Indebted Poor Countries
IFC	International Finance Corporation
IFI	international financial institutions
IMF	International Monetary Fund
LDCs	least developed countries
LDCF	Least Developed Countries Fund
MDBs	multilateral development banks
MDRI	Multilateral Debt Relief Initiative
NGOs	non-governmental organizations
OECD	Organisation for Economic Co-operation and Development
R&D	research and development
SCAF	Seed Capital Assistance Facility
SCF	Strategic Climate Fund
SCCF	Special Climate Change Fund
SDRs	special drawing rights
SGP	small grants program
SPA	Special Program of Assistance for Africa
UNDESA	United Nations Department of Economic and Social Affairs
UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
WTO	World Trade Organization

ABOUT THE AUTHOR

Barry Carin is a senior fellow at CIGI and adjunct professor and former associate director of the Centre for Global Studies at the University of Victoria in the School of Public Administration. From 2006 through 2009, he was editor of the journal *Global Governance*.

Prior to joining CIGI, Barry served as high commissioner of Canada to Singapore and as assistant deputy minister of trade and economic policy in the Department of Foreign Affairs and International Trade. He was the Canadian representative on the executive committee of the Organisation for Economic Co-operation and Development (OECD), assistant deputy minister for strategic policy and planning in the Department of Employment and Immigration, and was director of effectiveness evaluation in the Treasury Board Secretariat. He has a Ph.D. in economics from Brown University and an honours B.A. in economics and political science from McGill University.

EXECUTIVE SUMMARY

Based on two ideas — first, that it is a fruitless approach to try to arrange financing for sustainable development without first explaining how the funds will be spent; second, that the many constituencies supporting a clever expenditure plan will support the lateral thinking needed to change the rules to allow for the financing to be effected — this paper explains why the resolution to the climate change problem is deadlocked. Presuming that the required financing will not be forthcoming until there is consensus on the details of the expenditures, the paper presents a putative global package of "expenditure" ideas that will win widespread support from all major countries. These ideas include financing a variety of funds and programs with potentially significant leverage that will mobilize powerful constituencies to lobby for the package. Next, the paper provides two examples where rules and norms changed: the creation of the euro and sovereign debt relief, in order to encourage the reader to "think outside the box," considering options beyond the status quo. Finally, based on a brief review of the wealth of potential innovative financing mechanisms, the paper suggests a "no loser" initiative that would finance the putative global package.

INTRODUCTION

The climate change debate is stuck. The many justifiable projects to mitigate or adapt to climate change are sidelined for lack of money. Sustainable development in general requires extensive expenditures on environmental global public goods, but the prospects for requisite investment are diminished by aversion to risk and the tragedy of the commons. It is imprudent to rely exclusively on an elusive future global agreement on carbon taxes or to expect conventional cap-and-trade schemes to deal with climate change; however, increased global taxation schemes to fund the needed investments are unlikely. The challenge is to address market failures and incorporate social and environmental costs in the regulation and pricing of goods and services. Can assets be created with incentives that increasingly value long-term sustainable development in investment and financial transactions? Is there a global strategy to increase finance for sustainable development, including public and private funding and partnerships to mobilize large volumes of new financing?

The Copenhagen and Cancun climate summits committed to mobilize US$100 billion per year in climate finance for developing countries by 2020; the Durban climate summit agreed on steps to launch the Green Climate Fund (GCF). The 18th session of the Conference of the Parties (COP 18) to the United Nations Framework Convention on Climate Change (UNFCCC) convened in Doha, November 26 to December 7, 2012. For various reasons, "a funding hiatus looms between the end of the 'Fast Start' climate funding

(2010–2012) and the 2020 commitment" (De Nevers, 2012). The legacy of the financial crisis, aside from diverting attention from other issues, has overwhelmed the capacity of governments to invest in needed global public goods. In particular, governments in advanced economies have excessive debt burdens. Fiscally challenged governments — particularly those in crisis — are unlikely to provide resources for global public goods.

Agreement on raising funds should follow consensus on the specific details on how the funds would be spent. The first premise of this paper is that, in order to promote investments in environmental global public goods, major countries must be "bribed." To reach any agreement on the financing of global public goods, a strategy that highlights selfish national interests is required. The debate has not progressed, in large part, because it has focused on raising funds instead of calling attention to the recipients of the expenditures. Proposals have not described the uses of the funds, the expenditure package or the institutional and governance modalities, nor have they identified the many potential beneficiaries. Discussions about how to raise the revenue for global public goods should follow the identification of all the beneficiaries (countries, contractors, firms, universities and research labs) of the expenditure of those resources. It will be easier to raise money if it is obvious how the proposed expenditure package corresponds to the national interests of the major players. It is unlikely that any blank cheques will be written without a convincing picture to show how the proceeds will be disbursed. To advance the file, an explanation must be provided on what, and by what means, the new resources would be managed and spent. Acceptable governance arrangements must be proposed. It is clear that "agreement on any option for collective financing is unlikely, including in the case of the United States, without clarity on what new or existing institutions, under what governance and management arrangements, would deploy the resources" (Birdsall and Leo, 2011).

A second reason the debate has not progressed is that proposed conventional "inside-the-box" solutions cannot deal with the difficulties of long-time horizons, uneven intergenerational benefit streams, uncertainty and lack of shadow prices. Orthodox approaches cannot sufficiently change the incentive structure to generate financing at the scale required. Instead, the second premise of the paper is that what appears to be a "free lunch," that is, an array of subsidy schemes where major countries will agree to a seemingly cost-free approach, analogous to the seigniorage effect of issuing currency, must be devised. Unless countries can "have their cake and eat it too," political obstacles will frustrate any initiative to address various market failures or incorporate social and environmental costs in the regulation and pricing of goods and services. The rules need to be changed.

This paper is organized in an unconventional manner. It starts with a diagnosis of the climate change problem, then presents a putative global package of "expenditure" ideas that will win widespread support from all major countries. The ideas include financing a variety of funds and programs with potentially significant leverage to mobilize powerful constituencies who will lobby for the package. Next, to encourage the reader to "think outside the box," the paper provides a summary of two examples in which rules and norms changed: the creation of the euro and sovereign debt relief. Finally, based on a brief review of the wealth of potential innovative financing mechanisms, the paper suggests a "no loser" initiative that would finance the putative global package.

DIAGNOSING THE CLIMATE CHANGE PROBLEM

Climate change is the environmental public good issue with the most dysfunctional global process. Mobilizing the necessary collective action would ideally entail a range of measures to price carbon emissions, provide accurate credit ratings for countries on unsustainable development paths, tax environmental "bads" and ensure the enforcement of collective agreements. The UNFCCC negotiations are going nowhere. Incompatible bottom lines — especially with China eschewing binding commitments and the United States insisting on them for all countries (see, for example, the Byrd-Hagel US Senate Resolution[1] regarding the conditions for the United States becoming a signatory to any international agreement on greenhouse gas emissions under the United Nations). Negotiations are fruitless despite the growing appreciation of the need for significant investments in new technologies and abatement to respond effectively to the challenge of climate change and to foster sustainable development. Unproductive negotiations continue because the UNFCCC process has become a cottage industry subsidized by taxpayers.

Since the 1989 UN General Assembly resolution mandating the Rio summit to "identify ways and means to provide new and additional financial resources for environmentally sound programmes and ways to effectively monitor the provision of such new and additional resources," there has been little progress on funding mechanisms (UN, 1989). The UN Department of Economic and Social Affairs (UNDESA) report on climate and development (2009: 151–183) reviews methods to "crowd in" private sector financing. It describes cap-and-trade schemes; carbon taxes; sources of green investment and consumer financing; global auctioning of emission permits; a global carbon levy; and revenues from carbon offsetting schemes.

The November 2010 report of the UN Secretary General's High-level Advisory Group on Climate Change Financing

1 See: www.nationalcenter.org/KyotoSenate.html.

concluded that it is challenging but feasible to mobilize US$100 billion a year by 2020 to address the needs of developing countries.[2] The sources analyzed by the group and the annual amounts that can be raised include the auctioning of allowances in domestic emissions trading schemes (US$2 billion–US$70 billion); global offset levies (US$1 billion–US$15 billion); revenues from taxes on international aviation (US$1 billion–US$6 billion); taxes on maritime emissions (US$2 billion–US$19 billion); carbon taxes (US$10 billion); removal and redirection of fossil fuel subsidies (US$3 billion–US$8 billion); redirection of fossil fuel royalties (US$10 billion); financial transactions tax (US$2 billion–US$27 billion); direct budget contributions (reference was made to the proposal of assessed contributions of 0.5 to 1 percent of gross national product, which is US$200 billion–US$400 billion); and net flows of development banks (US$11 billion).

There are three categories of problems that prevent agreement on an appropriate course of action. First, it is difficult to determine where the money will come from. Proposals on potential sources of finance for international development cooperation have been discussed for decades. Agreement on mandatory assessed contributions by developed countries is impossible. Conventional appropriations are unlikely. For example, in the US Congress, which "has raised concerns regarding the cost, purpose, direction, efficiency, and effectiveness of the UNFCCC and existing international institutions of climate financing, the appropriations process" is an intimidating labyrinth (Lattanzio, 2011). Authorizations and appropriations "would rest with several committees, including the US House of Representative Committees on Foreign Affairs (various subcommittees); Financial Services (Subcommittee on International Monetary Policy and Trade); and Appropriations (Subcommittee on State, Foreign Operations, and Related Programs); and the US Senate Committees on Foreign Relations (Subcommittee on International Development and Foreign Assistance, Economic Affairs, and International Environmental Protection); and Appropriations (Subcommittee on State, Foreign Operations, and Related Programs)"(Lattanzio, 2011).

There are severe practical difficulties confronting every innovative suggestion. Internationally concerted taxes are challenging to orchestrate.[3] Ideas for international reserve asset creation, where the International Monetary Fund (IMF) Articles of Agreement would be amended to issue more international liquidity in the form of special drawing rights (SDRs), are generally shelved after two observations. An SDR allocation requires an 85 percent majority (i.e., there is an American veto) and allocations are constrained to be proportional to country quotas.

The second difficulty is that there is no obvious consensus on how a "windfall" or an unconditional "bequest" would be allocated across countries or program categories. Would a prospective "Green Super Fund" (GSF) be allocated proportional to country quotas, proportional to CO_2 emissions or on a per capita basis? Any agreement on a fair and efficient allocation will be elusive. Further, for any given allocation across countries, every expenditure idea has a disadvantage or a perverse unintended consequence. Complications include free riders, administrative provisions to counter the relabelling of activities to allow eligibility, gaming of the programming and unintentional damage to agents offering similar services.

The third difficulty will be reaching an agreement on the day-to-day operation and governance of the GSF. Ban Ki-moon noted that "strong international agreement is needed, along with adequate governance mechanisms, to manage the allocation of additional resources for development and global public goods" (UNDESA, 2012: iii).[4] Even if the world received a windfall from a fabulously wealthy rich uncle, there will be controversy on the process to decide allocations. Who will decide? What are the decision criteria? What are the conditions? The premise of this paper is that it will be easier to gain agreement on raising international resources and on governance mechanisms if agreement on the parameters of the expenditure plan is sought first.

THE GSF ILLUSTRATIVE EXPENDITURE PACKAGE

Suspending disbelief and assuming that (truly new and additional) hundreds of billions of dollars were available for climate change mitigation and adaptation, could the resources be allocated to an effective package of initiatives

2 Of the US$30 billion Fast-Start Finance (FSF) pledged at Copenhagen in 2009, the African Climate Policy Centre found that only US$2.8 billion was "new" funding and only US$2.1 billion has been disbursed. While developed countries' 2010 FSF reports indicated they had collectively generated US$10 billion of the US$30 billion FSF pledge, some developing countries have said that as little as US$2.4 billion has actually been made available. See: http://pdf.wri.org/working_papers/ocn_us_fast-start_finance_contribution.pdf. "According to reported information of the pledged funds, USD 28.06 billion has been requested and/or budgeted by the executive bodies of the countries during the fast-start period. In some cases, the legislative bodies have also approved these requests. The actual delivery and implementation of the finance, however, can be complicated to track, and is generally not documented in countries' fast-start finance reports" (Polycarp et al., 2012).

3 One very optimistic scenario is that over time, a regime of carbon taxes will be established in major countries, followed by a series of border tax adjustments (BTA) to protect domestic industries, perhaps leading to export taxes on carbon content to recapture BTA revenue — eventually leading to a global World Trade Organization (WTO) regime that ultimately prices carbon effectively and resolves the climate change problem. Don't hold your breath.

4 Agreement was reached at COP 18 to host the GCF in Songdo, Korea. FCCC/CP/2012/5. See: http://unfccc.int/resource/docs/2012/cop18/eng/05.pdf. The executive director will be selected in 2013.

in a manner that would generate worldwide support? This section proposes such a package. Subsequent sections give examples of presumably inviolable rules being changed, suggest ideas to raise the money to fund the expenditure package and assess the potential reaction of the major players.

To get over the humps inherent in investing in the environment and global public goods, a series of market failures that prevent appropriate investments must be confronted. Clearly, if there was agreement on international fees, such as a tax on financial transactions, international aviation or shipping,[5] so much the better. But this paper presumes that politics prevents action on taxation or shadow pricing and that the catalyst to change will be expenditure-based. Where upfront costs and barriers to investment justify technical and financial assistance, a putative GSF could cover the cost of infrastructure, policy measures to promote low carbon choices, or investments needed to make economies resilient to the adverse impacts of climate change.[6]

Richard K. Lattanzio's GCF Congressional Research Service Report (2011) outlines the design challenges of a new global instrument. First, there is the question of the relationship with other funds. The GSF should be an umbrella "fund of funds," able to exploit the comparative advantages of the other mechanisms. Then it would become a source of funds for, and not a competitor with, the Global Environment Facility (GEF) or the Adaptation Fund, for example. Second, there is the question of eligibility. All countries, not just developing countries, would be eligible. If the United States is eligible and would, in fact, receive windfall funds, it would not object to allocations to middle-income countries like Brazil, India, South Africa and China. Third, there is the question of balance in allocations between mitigation and adaptation. Obviously, though, it will be easier to gain agreement on the balance in a context of significant additional resources. Fourth, there is the question of how countries would access funds, which agencies and organizations would be allowed to acquire funds to implement projects and whether all funds would be channelled through UN agencies, multilateral development banks (MDBs) or major non-governmental organizations (NGOs). The GSF could allow a recipient country to access financial resources directly or allow it to assign an implementing agency of its own choosing. Finally, there is the question of grant versus debt instruments. The intent should be that resources are sufficient to provide grants when necessary, depending on the country and the nature of the project.

Where appropriate, auctions could be used to produce the largest expected greenhouse gas reduction per dollar of funding. "Incentivizing, informing and nudging, or imposing — some combination of the three is likely to be needed," advises the World Bank (2012b). Imposing a global solution is extraordinarily unlikely, so this paper focuses on measures to incentivize, inform and nudge. Subsidy, insurance and guarantee approaches can be supported by the GSF. It could also encourage all funding vehicles to add an information activity aimed at changing behaviour. Citing Thaler and Sunstein (2008), the World Bank suggests that "[a]nother approach showing promise is tweaking 'choice architectures' to 'nudge' people to make better decisions for the environment…without restricting their freedom of choice. To count as a nudge, the intervention must be easy and cheap, but not constitute a mandate."

A graphic example of a nudge case was reported by CNN — the question: what is the best way of encouraging men to pee more accurately in public urinals? Answer: Give them a target. "That's what a maintenance man working at Amsterdam's Schiphol airport suggested: Etch an image of a house fly on the urinals to give men something to aim at. Overnight, the quantity of misdirected urine fell by about 80 percent, according to the airport. The painted fly is an example of a 'nudge' — a subtle way of influencing behavior without offering material incentives or imposing punishments" (Webster, 2012). One approach is to make consumers more aware of how much energy others are consuming. "Knowing how other people behave is often a potent determinant of our own actions. Energy bills that inform users of how they compare with those on the same street or neighborhood are currently being trialled in parts of the UK" (Webster, 2012). The World Bank notes that "[c]hanging the default options — without changing the options themselves — can be an efficient way to promote greener behaviors" (2012b). They point to a case where the default option offered by the electricity provider was cleaner, but more expensive. In this scenario, fewer than five percent of customers requested a shift to a cheaper, but less green, source of electricity (Picherta and Katsikopoulos, 2008).

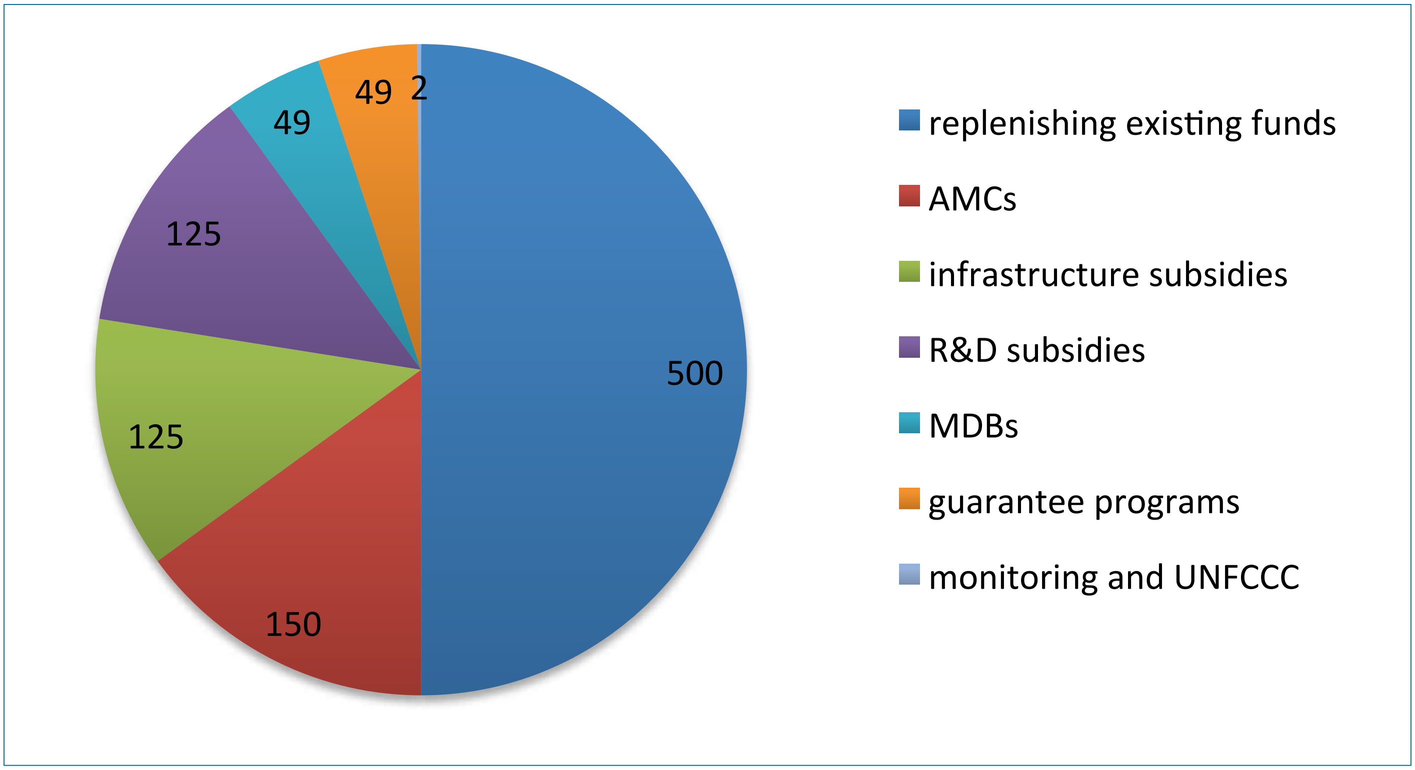
A range of interventions are called for:

- contributions to existing funds;
- advanced market commitments (AMCs);
- guarantee programs;
- infrastructure subsidies;
- research and development (R&D) investments;

5 Proponents point to the precedent for global fee collection that does not go through national tax authorities, the International Oil Pollution Compensation Fund, which provides compensation for oil spills from tankers.

6 For a good review, see www.globaleconomicgovernance.org/wp-content/uploads/Climate-Finance-for-Development_deNevers.pdf.

Figure 1: GSF Expenditure Package (Billions of US Dollars)



Source: Author

- MDBs; and
- monitoring.

Figure 1 pictures a hypothetical bequest of US$1 trillion dollars to be distributed at a rate of US$200 billion per year for a five-year period.[7]

CONTRIBUTIONS TO EXISTING FUNDS

To gain widespread support and to avoid accusations of reinventing the wheel, prudence requires contributing to several current funding vehicles to exploit the existing administrative capacity. Governance and decision rules for allocation are controversial. Noting that no new bureaucracies will be created will avoid controversy and help sell the idea to all countries' electorates. The disadvantage of this approach is that traditional funding sources may withdraw due to the new "replenishment," leading to criticism that the incremental resources are not "new and additional." The Overseas Development Institute and the Heinrich Böll-Stiftung track activity in more than two dozen funds for climate change mitigation and adaptation.[8] Among the existing funds that could be capitalized or replenished are:

- The Global Environment Facility
- The GCF
- The Climate Catalyst Fund LP
- The Climate Public Private Partnership
- World Bank Clean Technology Fund[9]
- World Bank Strategic Climate Fund
- The Adaptation Fund
- The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD)

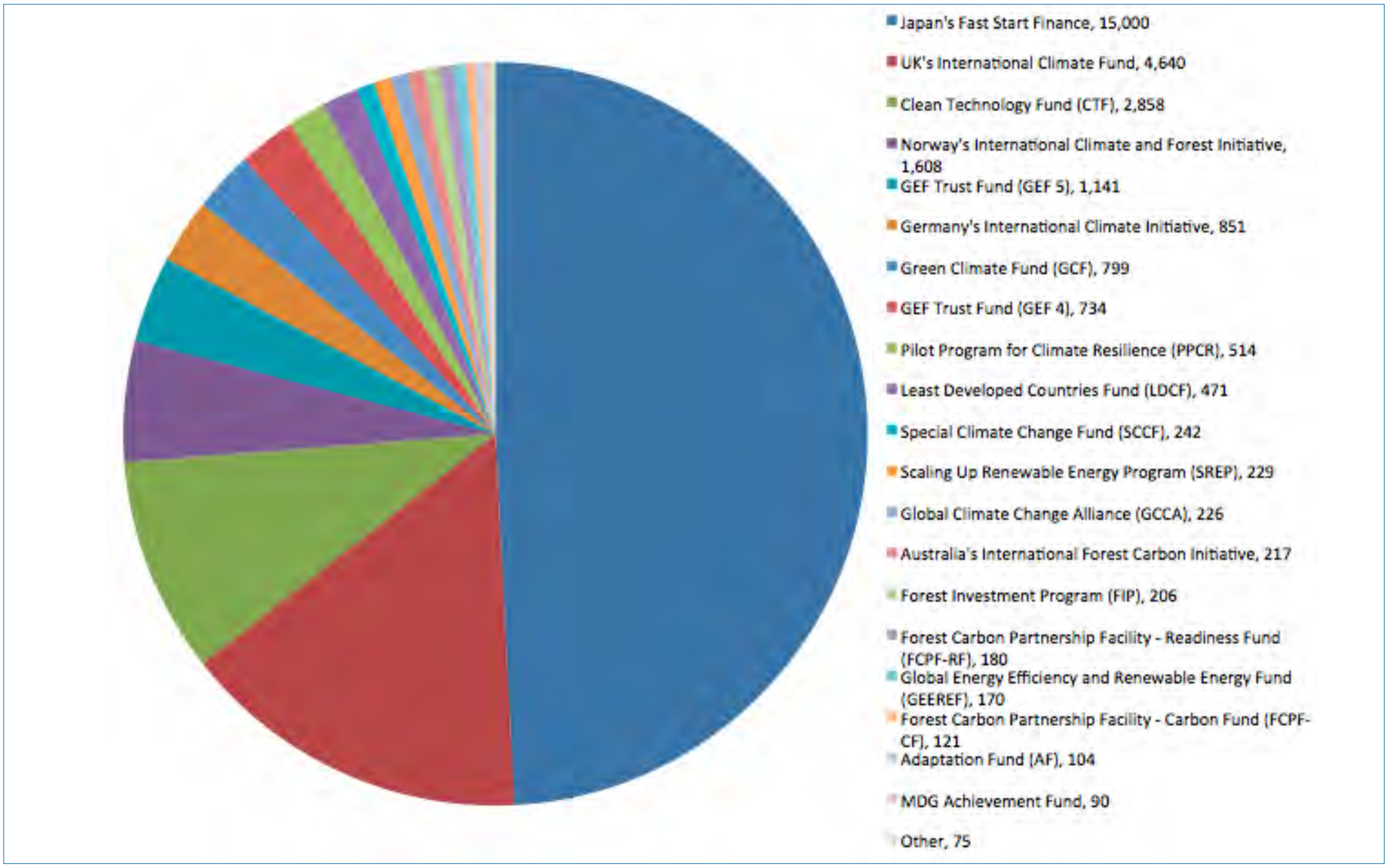
Annex 1 provides brief descriptions of some of these funds. The management and proponents of these existing organizations will strongly support significant financial infusions.

7 The US Federal Reserve announced "quantitative easing," that it would buy US$40 billion of mortgage-backed securities each month (less than the US$75 billion a month it bought in its second round of bond-buying or the more than US$100 billion monthly tab for its first round).

8 See: www.climatefundsupdate.org/listing.

9 See: http://www.climateinvestmentfunds.org/cif/.

Figure 2: Climate Funds, Based on Pledges (Billions of US Dollars)



Source of Data: Climate Funds Update (2012).

AMCs FOR LOW CARBON

AMCs are market creation mechanisms that provide the incentives and guarantees needed to ensure sufficient returns on investment by private sector developers. They have been defined as temporary interventions accelerating investment to promote the deployment of existing technologies, or to encourage incremental R&D, by increasing the certainty of revenues from markets. They include a wide number of well-established interventions in the developed world, such as feed-in tariffs and obligations with respect to renewables. Commitments can be defined in terms of price, quantity or revenue. The idea was first proposed as a solution for the development and manufacture of vaccines for diseases prevalent in poor countries,[10] but the idea can be applied to support research, development and deployment of low-carbon technology. AMCs offset risks to first movers by repaying investors upfront investments.

Ten years ago, the Center for Global Development (CGD) promoted the idea of AMCs for vaccines to address the market's failure to sustainably serve poor countries. CGD Visiting Senior Associate Jan von der Goltz (2010) has considered the merits and risks of extending the idea to climate change mitigation, and their takeaway message for extending the concept to climate change issues is that "the specific product, market, industry, and policy context matter!" Von der Goltz's presentation reviews the parameters and questions to ask in assessing the merit and risks of a proposed AMC.

For example, if the AMC is to finance off-grid renewable energy in developing countries, can it be installed, operated and maintained with local capacities? Von der Goltz concludes that the basic conditions for an AMC include a market failure due to uncertainty over recouping investment, knowledge of the demand and cost curve for the product, a high and robust social return high, and knowledge and trust of government policies.

The critical issue is the leveraging of private funds. A Chatham House/UK Department for International Development (DFID) meeting report (2010) explored the use of AMCs to support low-carbon technology deployment. The three conditions for AMCs are proven technology, potential scalability and investor uncertainty. Necessary factors for success include capable producers, a market

10 See www.gavialliance.org/funding/pneumococcal-amc/ for information about its current status.

guarantee and a financing agreement that would price the product once it has been scaled up, since risk will fall with the advance of scale. The concept of AMC interventions has been applied to climate issue in the developed world in the form of feed-in tariffs and renewables obligations.

In theory, AMCs could be used to promote radical breakthrough technologies, but they are better suited to promote the deployment of existing technologies or incremental R&D (Vivid Economics, 2009). AMCs are temporary measures to reduce the costs of deployment, not permanent subsidies. Administrative mechanisms, different support for different technologies or competitive auctions can be applied to minimize the creation of inappropriate rents (Vivid Economics, 2009).

The idea of applying AMCs is not new. In 1991 and 1992, the Swedish Energy Agency successfully arranged for a group of public sector buyers to commit to the procurement of energy-efficient lighting. Sweden has also used an AMC approach to successfully accelerate the market for heat pumps.

In 1998, the US Department of Energy (DoE) accelerated the introduction of appropriately sized, energy-efficient (compact fluorescent) light bulbs by coordinating private procurement. Targets were achieved and the AMC was swiftly withdrawn. By 2009, energy-efficient light bulbs provided over 90 percent of the lighting needs in commercial and industrial buildings.[11]

Germany has used feed-in tariff regulation (a fixed-priced AMC) to support renewable energy production since the early 1990s. Public electricity suppliers were required to buy power supplied by renewable generators at a fixed but reasonable price.[12] The volume of wind turbines installed led to a lucrative market for the manufacturing of wind turbines.

One option is to establish a corporate entity to sit between private renewable power plant developers and utility and industrial electricity customers, buying and reselling power, paying suppliers tariffs that are adequate to justify projects. In any case, dedicating significant incremental resources should be enthusiastically welcomed, especially if overseen by a new subsidiary jointly owned by the World Bank and the United Nations.

11 The barrier to widespread installation of energy-efficient light bulbs (also known as compact fluorescent lamps) was that they did not fit into standard light fittings. The DoE coordinated with private institutional buyers, such as housing developers, to devise a detailed specification for energy-efficient light bulbs, then offered a tender call, providing the requisite demand to ensure that the small innovation costs were covered (Vivid Economics, 2009).

12 That is, 90 percent of the average price of electricity as charged to final consumers in the previous year.

INSURANCE AND LOAN GUARANTEE PROGRAMS

It has been argued that, given that banks and institutional investors are sitting on tens of trillions of dollars of investible cash, the question ought to ask how to attract those funds to new low-carbon technologies and climate action investments in developing countries (de Nevers, 2011). Trevor Houser and Jason Selfe (2011) suggest that "Washington's best hope is to use limited public funds to leverage private sector investment through bilateral credit agencies and [MDBs]." Ideally, public money would catalyze large multiples of private investment. De Nevers (2011) concludes that there is no silver bullet — leveraging public funds to mobilize private finance "will require developing deal flow: identifying well designed projects with good underlying economic and financial parameters, that conform to investment grade standards in countries with attractive regulatory regimes; reducing real and perceived risks; enhancing returns; and supporting the creation of new investment vehicles." It would be difficult to ensure that public funds would not overcompensate rent-seeking private investors by reducing risks and enhancing returns. Well-designed insurance schemes must offer some prospect of success.

Any scheme must anticipate opposition, based on the Solyndra debacle in the United States, so named for the solar panel manufacturer that declared bankruptcy in 2011, shortly after receiving a US$535 million loan guarantee from the Obama administration. The US House of Representatives recently passed the "No More Solyndras Act."[13]

Major countries can exploit the experience of their export credit agencies (ECAs) and MDBs to provide investment guarantees or co-investment. The World Bank offers partial risk guarantees in low-income countries to private lenders against country risks that are beyond the control of investors, and where official agencies and private markets currently offer insufficient insurance coverage. These guarantees can cover up to 100 percent of the principal and interest of a private debt tranche for defaults arising from specified sovereign risks, including government breach of contract, foreign currency convertibility, expropriation and political violence. The World Bank provides guarantees that cover export-oriented foreign-exchange-generating commercial projects operating in low-income countries that would not normally be eligible for market-based lending.[14] This kind of instrument may

13 Opponents of the bill said it would take government out of innovation and unfairly preserved loan guarantees for nuclear and fossil fuel projects. See: http://thecaucus.blogs.nytimes.com/2012/09/14/house-passes-solyndra-act-aimed-at-obama/.

14 See: http://siteresources.worldbank.org/INTGUARANTEES/Resources/IBRDEnclavePRG.pdf.

be relevant for renewable energy projects in very low income countries, for example, large hydropower projects such as the Nam Thuen 2 project in Laos, where most of the power will be exported; this type of guarantee might also be relevant for hydropower projects in Africa. As a recent Leading Group conference agenda (2012) suggests, an innovative financing mechanism that contributes to resource development would include "[p]ull mechanisms which make it possible to secure massive guaranteed prefinancing based on loans, such as the International Finance Facility for Immunisation."

If the GSF provides billions of dollars as seed capital to establish new dedicated facilities in existing ECAs and MDBs, those institutions should be able to leverage very significant investments in desired activities that are currently not undertaken for want of insurance or appropriate guarantees.

INFRASTRUCTURE

Many national governments have recent experience in the accelerated funding of infrastructure as part of their stimulus package responding to the financial crisis. An allocation process could be devised for a global infrastructure fund that would channel resources directly to national governments as 100 percent forgivable loans to fund projects selected on the basis of their merit vis-à-vis adaptation imperatives or on the case for reducing future carbon emissions. Sign-off could be required by the Group of Twenty (G20).

R&D

We need significant advances in science and technology to meet the challenges of climate change. Incremental funding for R&D create the necessary technologies and knowledge that will help decrease reliance on fossil fuels. There are two approaches, which are not mutually exclusive. One is a royalty-free, global R&D collaborative to focus on low carbon energy R&D, with royalty-free technology transfer. There are many examples of collaboratives: ITER (formerly International Thermonuclear Experimental Reactor); the Consultative Group for International Agricultural Research; the China Greentech Initiative; and the Asia Pacific Partnership on Clean Development and Climate. A new institute — with research facilities in several countries (to help garner support for the overall SDR-funded GSF concept) — would receive the financial resources for an order of magnitude increase in low-carbon research efforts. The institute could house an international adjudication committee of international experts to assess submissions and award funding to the best proposals. Research outputs would be put in the public domain so they could be deployed in projects and for practical use.

The second approach would be a notional allocation by country, distributed through national competitions. Universities, government laboratories, non-profit organizations and the private sector would be eligible to submit research proposals. Several countries have programs for promoting R&D at the national level and there is extensive experience worldwide with granting agencies administering competitive bidding processes. Care would be taken that funding would not displace investment that would take place anyway, in the absence of the initiative.

MDBs

The World Bank recommends that international financial institutions help by changing risk-return profiles and giving investors more confidence in the long-term viability of their projects, especially in developing countries that lack well-developed capital markets or banking institutions able to transform short-term deposits into long-term products and refinancing tool options. Their diagnoses are that:

- "Energy efficiency suffers from the fact that most local banks rely on balance sheet financing, rather than project-based financing that is based on the cash flow generated by the investments."
- "Developing-country governments are often reluctant to borrow to prepare uncertain projects, while private investors are unwilling to invest in preparing a project they may have to bid for and not win."
- Vacillating and unreliable government support. "Spain's retroactive reductions in solar feed-in tariffs, and Germany's and France's decisions to reduce the amount of support for future projects, plus the lack of progress on a US energy bill all combined to depress the private sector's appetite for renewable energy investments" (World Bank, 2012a).

In sum, private financing of green infrastructure is handicapped by:

- The scarcity of resources to prepare projects and bring them to the "bankable" stage.[15]
- The mismatch between the nature of the funds available (given the preference of investors for short-term funds) and the needs of capital intensive infrastructure for renewable energy with a long payback period of 15–25 years.
- The challenge of cost recovery, while ensuring affordability for low-income households.

15 The Seed Capital Assistance Facility (SCAF) helps energy investment funds in Asia and Africa to provide seed financing to early-stage clean energy enterprises and projects. The SCAF is implemented through the United Nations Environment Programme, the Asian Development Bank (ADB) and the African Development Bank. See: www.scaf-energy.org/about/introduction.html.

- The profitability of green investments, which is often dependent on public policies, such as feed-in tariffs (World Bank, 2012a).

To maximize leverage, the World Bank prescribes:

- Credit lines or guaranteed instruments to engage private banks.
- "Fund of funds," under which governments invest a relatively small amount of long-term capital in a range of private, professionally managed funds that then invest in clean energy or energy efficiency.[16]
- Public funds to reduce interest rates for consumer financing, typically through financial institutions or utilities.
- Energy service companies can pay for environmental services.

With respect to credit lines, the World Bank (2012b) reports that "the experience of the International Finance Corporation [IFC] is telling: between 1997 and 2011 some US$65 million in concessional funding, primarily for risk-sharing facilities, generated US$680 million in sustainable energy finance investments." The IFC would be given the resources to scale up by orders of magnitude. Each regional development bank could be endowed with resources to establish a "fund of funds" and challenged to invest amounts of long-term capital in selected private, professionally managed "green" funds. Budget support would be provided to governments to support funding programs to utilities to reduce interest rates for consumer financing. Energy service companies could be subsidized to support energy savings measures by farmers and landowners such as regulation of water flows, water purification and control of soil erosion.

Concessional resources for climate finance are nothing new for the regional development banks.[17] The Clean Energy Financing Partnership Facility is an ADB mechanism "to coordinate existing and new resources to promote the deployment of new, more efficient and less polluting supply and end-use technologies…The facility's resources also finance policy and institutional reforms, as well as regulatory frameworks that encourage clean energy development" (ADB, 2012).

The ADB has partnered with the Australian chapter of the Global Carbon Capture and Storage (CCS) Institute to assist in preparing demonstration projects that will lead to commercial-scale deployment of CCS. Another initiative the ADB is proposing is "an assisted broker model that will proactively identify partnerships between willing buyers and sellers of low-carbon technologies in order to facilitate their rapid transfer and diffusion in Asia and the Pacific" (ADB, 2012). The ADB reports that the Asia Climate Change and Clean Energy Venture Capital Initiative supported an equity infusion to several venture capital funds to accelerate private-sector-based innovation, transfer and diffusion of climate change technologies. In addition to the mainstream vehicles, the ADB is involved with the Climate Change Fund (CCF), the GEF, the Climate Investment Funds (CIFs), the Water Financing Partnership Facility and administers the Poverty and Environment Fund.

The African Development Bank just announced the Sustainable Energy Fund for Africa, a joint initiative with the Danish government. It approved its first grant of US$825,000 to finance the concept phase of the Green Tech Financial Facility, a vehicle for investments in private-sector-driven green technology projects including market scoping and positioning studies, fund conceptualization and fund manager selection.

The World Bank and the regional development banks are already in the business. The question that remains is by how much and over what time period can they effectively scale up, if the funds were available?

MONITORING

An independent organization would have to be set up to monitor allocations, progress and outcomes for activities funded by the GSF, and transparency will be essential. Individuals of unquestioned integrity and ability will have to be selected for this group, as there will be unprecedented scrutiny of both the fund and its allocations; any hint of corruption or incompetence would be highlighted. Without complete transparency and the possibility of "naming and shaming" to provide some accountability, the idea will founder.

MISCELLANEOUS IDEAS

Room would have to be provided for ideas that do not fit into any of the boxes described above. For example, it is likely that the most significant factor in reducing emissions would be the leverage exercised by national regulators and fiscal authorities. They set the ground rules and incentives that influence investments. Perhaps a highly publicized, prestigious prize could be established for the regulatory or fiscal actions that are most effective or ingenious, along the lines of a Nobel Prize, with a significant financial award to be provided to the charity of the winner's choice. The jury awarding the prize could be selected by the G20.

16 The ADB reports it recently selected five funds that will invest for long-term capital appreciation in private companies and projects that are active in the renewable energy and energy efficiency sector in Asia.

17 See www.adb.org/sectors/energy/overview for details.

THINKING OUTSIDE THE BOX

We all suffer from the presumption that the status quo will not change. Despite overwhelming historical evidence to the contrary, it is difficult to foresee that some political entities will die, some unions will dissolve, and new federations, communities and unions will be formed. Despite the manifest history of business cycles and innovation, we find it difficult to anticipate the disappearance of powerful multinational corporations and the decline of formerly important economic sectors.

Despite the accepted fact that we are living in an environment of constant and accelerating change, we cannot envision how certain desirable (in the sense of the global interest) economic and political changes will come. There are cases when we should suspend disbelief. Necessary, but not necessarily sufficient, ingredients to catalyze change include a coherent vision of a better option, a champion to articulate and promote the vision, and a process of scheduled meetings to develop and nurture strategy to realize the vision. Perhaps the most necessary condition for radical change is "incrementality" — the process of change accomplished by a series of small steps towards the vision. Two examples are the euro currency and policy on sovereign debt relief.

In 1961, Canadian economist Robert Mundell raised the then bizarre question: "When would it be advantageous for nations to give up monetary sovereignty in favour of a common currency?"[18] The founders of the European Community (EC) realized as long as 50 years ago that the creation of a common market would one day necessitate a common economic and monetary policy. In 1969 the heads of state officially launched the initiative for economic and monetary union (EMU). Luxembourg's Prime Minister and Finance Minister Pierre Werner chaired a committee that mapped out a timetable for the project, outlining a three-stage plan that would fuse national instruments for economic and monetary control into EC instruments to be used for common ends by 1980. The oil crisis, divergence in national economic policies and a weak US dollar scuttled the second stage of the Werner plan in 1974.

In 1979, the European Monetary System (EMS) was created, involving an unprecedented transfer of monetary autonomy. The EMS created a stable, adjustable mechanism for exchange rates by defining central rates in relation to a new "basket" currency — the European currency unit. Exchange rate fluctuations were greatly reduced, ushering in a new era of economic stability between member states. As inflation rates fell and converged in the mid-1980s, it became clear that the time was right for a new push toward EMU.

In 1988, a committee was established under the then President of the European Commission, Jacques Delors, to make the proposals for the legal and economic arrangements required for the completion of the EMU. Mr. Delors recommended a three-stage plan for greater coordination of economic and monetary policies with the intention of creating a single European currency under the stewardship of a European central bank. The first stage of the Delors plan began in 1990, and the European Council was convened at Maastricht in 1991. It was there that the heads of state signed the Maastricht Treaty, setting out the tough economic convergence criteria that had to be met to qualify for the single currency. The third and final stage of EMU started January 1, 1999, and the new single currency was born. Who, even as late as 1985, would have believed that the German mark, the French franc and the Italian lira would disappear? It happened only 25 years after Mundell raised the question, generated by an articulate vision, effective champions, a host organization where the principals met repeatedly and a series of calibrated steps.

By the end of the 1980s, sovereign debt repayments were crippling many developing countries, impeding poverty reduction and economic development. These countries were spending more on servicing debt payments than on health and education. Debtor countries arranged new loans to service interest payments on their old loans to donors and international institutions. The response to observations that these loans should be written off — carrying them as assets was a fiction — was countered at the time by the axiom that: "All sovereign debt is collectible." Over the next 20 years, however, there was a gradual shift in this norm. By the end of 2010, donors and international financial institutions (IFIs) approved more than US$76 billion in debt reduction packages for 36 countries, 30 of them in Africa (IMF, 2012).

One of the first debt initiatives was the Special Program of Assistance for Africa (SPA) in 1987. The SPA was a voluntary group of donors who started to provide bilateral debt relief. The SPA was followed by the highly contentious Brady Plan of 1989, launched by the US treasury secretary at the IMF meetings to promote relief for countries heavily indebted to commercial banks. Similar initiatives intensified in the 1990s, with bilateral donors moving away from concessional loans toward grants and simultaneously negotiating formal programs of official debt relief with the multilateral lenders. By the mid-1990s, an increasing proportion of the debt of the poorest countries was owed to the IMF and the World Bank.

The 1995 Group of Eight (G8) summit agreed to pursue the development of a comprehensive approach to address the special problems of the poorest heavily indebted countries. The World Bank and IMF encourage flexible

18 Mundell's Nobel Prize was awarded for a body of work that includes the 1973 chapter "A Plan for a European Currency" in *The Economics of Common Currencies*, edited by H. Johnson and A. Swoboda, (London: George Allen & Unwin Ltd., 1973).

application of existing instruments and the creation of new mechanisms for debt relief to help those poorest heavily indebted countries that have demonstrated a track record of sustained good policy performance. The IMF and World Bank launched the Heavily Indebted Poor Countries (HIPC) Initiative in 1996, "with the aim of ensuring that no poor country faces a debt burden it cannot manage" (IMF, 2012). In 1999, the Fund reviewed the HIPC Initiative and began a more comprehensive relief program, linking debt relief to poverty reduction and social policies.

In 2005, the Multilateral Debt Relief Initiative (MDRI) supplemented the HIPC Initiative to facilitate progress towards the Millennium Development Goals. Under the MDRI, once countries complete the HIPC Initiative process, the IMF, World Bank and African Development Bank provide 100 percent relief on eligible debts (IMF, 2012).

In 20 years, the IFIs transformed the norm that sovereign debts will always be collected. The norm began to change because of key states and NGOs advocating for debt relief. They were able to persuade others, including the World Bank and the Group of Seven, to allow the emergence of a new norm of sovereign debt forgiveness for developing countries.

FINANCING THE GSF: HOW TO GET THE MONEY

The UNDESA report *World Economic and Social Survey 2012: In Search of New Development Finance* is the latest comprehensive study reviewing new approaches to raise funds for public goods. The survey canvasses innovative sources including new issuance of SDRs; carbon taxes; means to leverage SDRs; taxes on financial transactions, billionaires and currency transactions; as well as emissions trading and an air passenger levy. It also reviewed mechanisms to manage risk, such as insurance pools (UNDESA, 2012).[19] Among the ideas promoted for innovative financing mechanisms to raising new resources, several categories are unlikely to be finalized and operational in the near future. Four approaches are prohibitive long shots:

- coordinated international taxes on globalized activities with management of their usage being pooled (for example, air tickets or the financial transaction tax);
- global carbon emissions trading;
- debt management mechanisms, for example "debt to health" and "debt to nature"; and
- international lotteries.

New taxes are highly unlikely, given the extensive political opposition. For example, a scheme based on the extraction of resources from the global commons through the taxation of seabed mining in international waters is a problematic long shot. Instead, the solution must be an apparent "free lunch" — the only such vehicle is the innovative use of SDRs. The most likely of the unlikely alternatives is innovative use of SDR allocations. As the IMF fact sheet on SDRs says, "The SDR is an international reserve asset, created by the IMF in 1969 to supplement its member countries' official reserves. Its value is based on a basket of four key international currencies, and SDRs can be exchanged for freely usable currencies. With a general SDR allocation that took effect on August 28 and a special allocation on September 9, 2009, the amount of SDRs increased from SDR 21.4 billion to around SDR 204 billion

19 Useful surveys include the World Bank Report, Innovative Financing for Development (http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1110315015165/%5Bebook%5DInnovative_Financing_for_Development.pdf); the Landau report (www.cttcampaigns.info/Members/mikael/docs040415); A. B. Atkinson's "Innovative Sources for Development Finance: Over-Arching Issues" (http://www.cbd.int/doc/external/unu/unu-dp2003-088-en.pdf) ; William Jack's 2001 article "Social Investment Funds: An Organizational Approach to Improved Development Assistance," exploring the efficacy of social investment funds in projects in Armenia, Zambia and Honduras (http://wbro.oxfordjournals.org/content/16/1/109.abstract?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=1&title=Social+Investment+Funds&andorexacttitle=phrase&andorexacttitleabs=and&andorexactfulltext=and&searchid=1126040033061_51&stored_search=&FIRSTINDEX=0&sortspec=relevance&journalcode=wbro); the World Bank's Pilot Programme for Climate Resilience (http://siteresources.worldbank.org/INTCC/Resources/progressreportPPCR.pdf); Stephen Spratt's report detailing the Global Capital Fund Mechanism, where money is frontloaded by issuing bonds on the international capital markets (www.stampoutpoverty.org/download.php?id=381); and the BioCarbon Fund, a public-private initiative administered by the World Bank. See, particularly, the call for project proposal for Tranche Two, with a total capital of US$36.6 million (http://wbcarbonfinance.org/Router.cfm?Page=BioCF).

(equivalent to about [US]$310 billion, converted using the rate of August 20, 2012)" (IMF, 2012).[20]

In 2009, the IMF established a framework for issuing securities. The notes are denominated in SDRs, with a maximum maturity of five years. The notes, which pay interest, are not traded on private markets, but are tradable within the official sector. IMF securities are an attractive element in the portfolio of some countries' reserves.[21] But under the current legal arrangement, a source has to be found to raise the notes' interest. Current arrangements to raise revenue are limited to apply the resources from the sale of IMF gold or applying the income from conventional IMF loans (IMF, 2009). This approach will not work for the scale required; thus, a method must be devised that does not require interest to be paid.

The IMF's Bredenkamp and Pattillo propose a green fund based on an initial capital injection by developed countries in the form of reserve assets to leverage resources from private and official investors by issuing low-cost green bonds in global capital markets (2010). They suggest that "Contributors could agree to scale their equity stakes in proportion to their IMF quota shares, making these the 'key' for burden sharing among the contributing countries" (Bredenkamp and Pattillo, 2010: 4). (The allusion to "burden sharing" dooms this idea.) They suggest the fund would mobilize subsidy resources from contributors, sourced by carbon taxes and expanded carbon-trading schemes, bond proceeds, interest income on its reserve asset capital base and revenues from other innovative international tax schemes. In sum, the idea is a political non-starter.

In a similar scheme, Birdsall and Leo (2011):

> recommend that willing governments utilize a modest portion of their existing SDR allocations to capitalize a third-party financing entity. This entity would offer bonds on international capital markets backed by its SDR reserves. The proceeds would back private investment in climate-mitigation projects in developing countries that might otherwise lack adequate financing. This approach could mobilize up to [US]$75 billion at little or no budgetary cost for contributing governments. Any limited budgetary costs could be offset by using excess proceeds from recent IMF gold sales. In our view, capitalizing a small portion of existing global assets — SDRs with a small back-up reserve of the income from gold already sold — to finance programs that deal with global public goods and bads makes eminent sense.

What Birdsall and Leo propose is not to directly spend SDRs, but rather to float bonds backed by SDRs.[22] In one proposal, a GCF would issue US$1 trillion in bonds backed by US$100 billion in SDR equity in a leverage ratio of 10 to 1. In another proposal, idle SDRs would be used to purchase bonds directly from MDBs. The GCF (or global fund to fight climate change) could collect market-based interest payments from at least some borrowers, which it would then use to pay its bondholders. As low-income countries may not be able to afford such loans, the fund would also receive additional annual contributions from donors to enable it to underwrite its concessional activities. The main concept underlying the proposal entails using SDRs to purchase long-term assets. The attraction resides in the ability to tap the large pool of "unused" SDRs, in order to invest them either for development purposes or, as in the above proposal, in equity shares in a GCF.

Another idea, suggested by the Beijing Group, is "that the SDRs' role be expanded through new issues and by increasing their use in IMF lending" (Beijing Group, 2011). They argue that "doing so would build on the enlightened suggestion made at the G20's London meeting in April 2009 to issue SDRs equivalent to $250bn," as a means of increasing liquidity to counter recessionary trends arising from the global financial crisis (Beijing Group, 2011). But as the 2009 issuance was to countries in accordance with the IMF quotas, developing countries obtained only a small share of the allocation. For future issues (the Beijing Group suggests an annual issue of SDR 150–250 billion, approximately US$240–US$390 billion at current exchange rates), countries' unused SDRs could be held as "deposits" by the IMF, which the Fund could then use to finance its lending programs. The Beijing Group argues that it would have the associated effect of modestly reducing "the recessionary bias in the world economy" and "would also facilitate some reduction of global imbalances" (Beijing Group, 2011).

The UNDESA suggests a general SDR allocation, with two-thirds dedicated to developing countries (2012). The argument is that "SDRs remain a reserve asset, but

20 As the IMF states, "The SDR is neither a currency, nor a claim on the IMF. Rather, it is a potential claim on the freely usable currencies of IMF members. Holders of SDRs can obtain these currencies in exchange for their SDRs in two ways: first, through the arrangement of voluntary exchanges between members; and second, by the IMF designating members with strong external positions to purchase SDRs from members with weak external positions. SDRs represent a potential claim on the freely usable currencies of IMF members, which may be exchanged in times of need. Currently, the value of the SDR is determined by a basket of four currencies (euro, yen, pound sterling, and US dollar)." See IMF Fact Sheet: Special Drawing Rights, available at: http://www.imf.org/external/np/exr/facts/sdr.htm.

21 John Williamson argues that the SDR will become an attractive asset if, and only if, they provide reserve holders a higher interest rate — which involves a cost to the entity paying the interest.

22 A similar scheme is proposed by Bredenkamp and Pattillo (2010).

their additional availability" would "reduce the need for individual developing countries to set aside foreign-exchange earnings in reserve holdings of their own as a form of self-insurance against global market shocks" (UNDESA, 2012). This idea was "dead on arrival," because allocating SDRs in a proportion different from country quotas requires amending the IMF Articles of Agreement and, like decisions for a general SDR allocation, requires an 85 percent approval of member votes, giving the United States an effective veto. There is no realistic scenario where the United States would agree to this proposal.

As ingenious and politically courageous as they are, all the proposals to date for the innovative use of SDRs — which include monetizing existing SDRs (either through SDR on-lending or in freely usable currencies following conversion);[23] committing existing SDRs to support the capitalization of a third-party entity; or holding unused SDRs as "deposits" by the IMF, which the Fund could then use to finance its lending programs — remain unambitious because they are working within existing legal constraints.[24] A more radical option is required, relaxing some axiomatic assumptions. Counterintuitively, the more radical option is more likely to prove acceptable.

Imagine if the IMF Articles of Agreement were amended to allow for a new issue that was provided entirely as an endowment to the GSF.[25] The new fund would be restricted to spending the endowment according to a formula based on quota shares and adjusted to provide proportionately larger shares to large emitters. Where necessary, countries could amend legislation to accord with the interpretation that allocations to the GSF are grants and not loans, hence, they do not involve any liability to any individual country. The key points are, first, that countries would perceive the "free lunch" elements in the resulting expenditures in their countries, and second, that this action is unlikely to be inflationary in the current world macroeconomic context.

Holdings of foreign exchange reserves are excessive — the current level is more than US$10 trillion. Central banks and monetary authorities could be convinced to increase the proportion of SDRs in their reserve holdings in exchange for reserve currencies, even if SDRs did not pay interest.

The likely criticisms of "quantitative easing" for SDRs will relate to the degrees of centralization, ambition and scale, the sanctity of SDRs for the purpose of reserve, potential crowding out, inflationary trigger issues and the lack of transparency. Potential criticisms include:

- the danger of a world central bank, leading to the eventual loss of national sovereignty;
- the excessiveness of the sums involved;
- that reserve assets are intended to be reserves and should not be diverted for other purposes;
- that inflation will result;
- the scheme creates "off-balance sheet" liabilities for contributing governments, in a non-transparent fashion;
- Americans may argue that the scheme is an opaque attack on the US dollar's role as premier reserve currency; and
- success would unleash a flood of unlimited requests to use "SDR quantitative easing" for development purposes in general.

The size of the GSF capital base should be set at the apparently outrageous sum of US$1 trillion (10 percent of total international reserves, disbursed over a period of years). The scheme will not deplete the reserve holdings of any country — they will simply be exchanging currency reserves for SDRs. In any event, the IMF Articles of Agreement can be amended to deem the new allocation dedicated to the GSF as equivalent to seigniorage, disbursed to avoid major disruption to global activity. Inflationary pressure is unlikely in the next few years, given the extensive unemployment in OECD countries and slowdowns occurring in BRICS countries (Brazil, Russia, India, China, South Africa). Pressure will ease on sovereign bond issues. Currently, SDRs are entered on both the asset and liability sides of the balance sheet when issued, but this accounting convention can be changed by amending the Articles of Agreement. The issue is political. For proponents of funding global public goods to counter climate change, the question remains, "Is the apprehended danger severe enough, and is the GSF attractive enough, to generate agreement of countries holding 85 percent of quota?"

23 Several countries have agreed to lend a portion of their SDRs to the Poverty Reduction and Growth Facility, which provides concessional loans to low-income members.

24 See also the January 2011 IMF paper, "Enhancing International Monetary Stability — A Role for the SDR?" The focus of this paper was limited to exploring other ways of creating new reserve assets, denominated in SDRs. It explores how SDRs might help serve several objectives, among them, to reduce the extent and costs of international reserve accumulation; to augment the supply of safe global assets and facilitate diversification; and to reduce the impact of exchange rate volatility among major currencies. The paper concludes that: "In order to make a difference in any of these areas, the role played by the SDR would need to be enhanced considerably from its current insignificant level. Very significant practical, political, and legal hurdles would need to be overcome in the process" (IMF, 2011: 1). The paper concludes there might be a helpful role to play for the SDR.

25 As Birdsall and Leo (2011) point out, given that "climate change poses a direct and indirect threat to financial and geopolitical stability — particularly given its unpredictable risk profile over time and across countries," it is not a stretch to conclude that "minimizing the resulting uncertainty and risks using SDRs would contribute to global stability."

REACTIONS OF MAJOR PLAYERS

The GSF idea will be dead unless the United States, China and the European Union support it. If approval is elicited from these three major players, backing will also be required from the rest of the G20. Proponents of the idea would have to lobby extensively, highlighting the financial resources to flow to organizations in their own countries and the increased activity and employment to be generated. There may be a window of opportunity to do something about climate change in the United States, with US President Obama's recent re-election. The likelihood for a US endorsement will depend on the stipulation that major American institutions and businesses receive incremental resources. Potentially, bipartisan support could be arranged if it is clear that significant funds would flow to institutions in the states of key congressmen and senators. The visibility of the fund's competitive processes and auctions will be important.

China and India both worry about their vulnerability to climate change and may give serious attention to a potentially effective proposal. Global warming may "cause a 5 to 10 percent reduction in Chinese agricultural output by 2030; more droughts, floods, typhoons, and sandstorms; and a 40 percent increase in populations threatened by the plague" (Huang, Baipai and Mahbubani, 2012).[26] The Chinese will like the idea in that it will diminish the proportion of reserves held in US dollars.[27] As reported in *The Economist*, "According to the Peterson Institute for International Economics, India's agriculture will suffer more than any other country's…[B]y 2080, India's agricultural output is projected to fall by 30–40%" ("Melting Asia," 2008).

The European Union, to date the champion of moving on climate change, will be hard pressed to oppose an effective proposal to fund a public good. Even German economists and politicians, allergic to anything that smacks of debasing the currency, would applaud the fund of funds concept and the replenishment of the MDBs. They would be mollified if a worthy German, like Horst Köhler, was tasked to lead the process establishing the GSF.

CONCLUSION

If the rules do not allow for a solution to an existential problem, we have to change the rules. Can we imagine an articulate vision, effective champions, a host organization where the principals meet repeatedly and a series of calibrated steps to provide for dramatic change?

The idea of a GSF can be framed as a positive sum game, with a win-win-win allocation that would garner widespread global support and ultimately be accepted by all the major players, meeting the 85 percent approval threshold of member votes at the IMF. Once the expenditure plan is devised, creating many influential constituencies to support it, an acceptable process can be devised to govern the Fund's allocation decisions. An effective accountability regime can be devised. Major players in the G20 can be effective champions, as they account for the bulk of emissions and are the principal economic powers. As the G20 president in 2014, Australia is a good candidate. A series of incremental steps can be developed to prove the concept and win universal support.

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26 The authors further state that: "The Himalayan glaciers, feeding the great rivers of China, India, and Southeast Asia, are melting. Chinese experts predict that by 2050 the icy area on their side of the Himalayas will shrink by more than a quarter. Indian glaciologist Syed Iqbal Hasnain estimates that in 20 to 30 years the Himalayan glaciers will have receded completely, leaving many rivers dependent on seasonal rainfall. The Intergovernmental Panel on Climate Change suggests that the Indus, Ganges, and Brahmaputra may come to depend on seasonal rainfall by 2035" (Huang, Bajpai and Mahbubani, 2012).

27 See Global Finance's exchange reserves data, available at: www.gfmag.com/tools/global-database/economic-data/11858-foreign-exchange-reserves.html#ixzz24IcYNdAK.

ANNEX 1

THE GEF

As the financial mechanism of the UNFCCC, the GEF allocates and disburses about US$250 million dollars per year in projects in energy efficiency, renewable energies, and sustainable transportation. It provides grants for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer and persistent organic pollutants. Since 1991, the GEF has provided US$10.5 billion in grants and leveraged US$51 billion in co-financing for over 2,700 projects in over 165 countries.[28]

The GEF manages two special funds, the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF), and has a small grants program (SGP). The LDCF addresses the special needs of the 48 least developed countries (LDCs). This includes preparing and implementing National Adaptation Programmes of Action to identify urgent and immediate needs of LDCs to adapt to climate change. The SCCF was established to support adaptation and technology transfer. The SCCF supports both long-term and short-term adaptation activities in water resources management, land management, agriculture, health, infrastructure development, fragile ecosystems (including mountainous ecosystems) and integrated coastal zone management. There are two active funding windows under SCCF: one for adaptation and another for technology transfer. So far, the GEF has mobilized voluntary contributions of about US$537 million for the LDCF and US$242 million for the SCCF. Through its SGP, the GEF has also made more than 14,000 small grants directly to civil society and community-based organizations, totalling US$634 million.

THE GCF

The GCF is an operating entity of the financial mechanism of the UNFCCC with an independent secretariat.[29] The purpose of the Fund is to "promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change, taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change" (GCF, 2012). As of August 2012, less than US$1million has been provided to the Fund.[30]

28 For details, see: www.thegef.org/gef/whatisgef.

29 See: http://gcfund.net/secretariat/interim-secretariat.html.

30 See: http://gcfund.net/fileadmin/00_customer/documents/pdf/B.01-12.Inf.3_Financial_statement_FINAL.pdf.

THE CLIMATE CATALYST FUND LP

The Climate Catalyst Fund LP is an instrument of the IFC. It is a private equity fund of funds focused on providing growth capital for companies delivering resource efficiency and low-emission products and services in emerging markets. (It was originally established with US$75 million seed money).

THE CLIMATE PUBLIC PRIVATE PARTNERSHIP (CP3)

According to the DFID project page, "CP3 aims to demonstrate that climate friendly investments in developing countries, including in renewable energy, water, energy efficiency and forestry are not only ethically right but also commercially viable. It aims to attract new forms of finance such as pension funds and sovereign wealth funds by creating two commercial private equity funds of funds which will invest in sub-funds and projects in developing countries, creating track records of investment performance that should, in turn, encourage further investments and accelerate the growth of investment in climate" (DFID, 2012).

THE CIFs

The Climate Fund Info website describes climate investment funds (CIFs). "CIFs, including the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF), were approved by the board of directors of the World Bank on July 1, 2008 and endorsed by the G8 nations in the G8 Hokkaido Toyako Summit Leaders Declaration of July 8, 2008. G8 members have, thus far, pledged approximately US$5.7 billion to the funds, which gives the CIFs a real possibility to become the most important international financial tools to combat climate change [they are trust funds for developing countries for low-carbon, climate resilient development]. The most significant financial pledges have so far been made by the United States (US$2 billion), Japan (US$1.2 billion), the United Kingdom (approximately US$1.1 billion), Germany (approximately US$710 million) and France (approximately US$260 million). The other pledges are in the order of US$100 million or less" (Climate Fund Info, 2012).

"The CTF is a climate fund that will aim to promote low-carbon economies by helping to finance deployment in developing countries of commercially available cleaner energy technologies through investments in support of credible national mitigation plans that include low-carbon objectives" (Climate Fund Info, 2012). The fund leverages US$7.7 billion from other sources, such as domestic public and private finance, carbon finance and private finance. "The SCF will help more vulnerable countries develop climate-resilient economies and take actions to prevent deforestation" (Climate Fund Info, 2012).

"Developed and developing country governments gave an important signal for action on adaptation on January 30, 2009 by deciding which countries will be offered funding under a pilot program within the CIFs. Bangladesh, Bolivia, Cambodia, Mozambique, Nepal, Niger, Tajikistan and Zambia have been invited to take part in the Pilot Program for Climate Resilience, which will provide about US$500 million for scaled-up action and transformational change in integrating climate resilience in national planning. It should be noted that these funds operate mainly with loans, not grants…It is unclear how the developing countries are expected to pay the loans back some day" (Climate Fund Info, 2012).

THE ADAPTATION FUND

The Climate Fund Info page also provides an overview on the Adaptation Fund. "The Adaptation Fund has been established by the parties to the UNFCCC Kyoto Protocol to finance concrete adaptation projects and programmes in developing countries. In mid-August, it reported a balance of available funds as US$116 million" (World Bank, 2012c).

OTHER FUNDS

A proposed Green Venture Fund to Finance Clean Technology in Developing Countries includes a technical assistance component to develop deal flow. The CIF overall leverage is 1:7.7 of which private finance is 1:2.7. The Pilot Program for Climate Resilience (adaptation) leverage ratio is 1:2.7.

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LEADERSHIP IN A TURBULENT AGE

Fen Osler Hampson and Paul Heinbecker

ABOUT THE AUTHORS

Fen Osler Hampson, CIGI distinguished fellow, is also director of the Global Security Program and oversees the research direction of the program and related activities. Most recently, he served as director of the Norman Paterson School of International Affairs and continues to serve as chancellor's professor at Carleton University. He is the recipient of various awards and honours, and is a frequent commentator and contributor to the national and international media.

Paul Heinbecker, CIGI distinguished fellow, has had a celebrated career in Canadian diplomacy, including posts as ambassador to Germany, permanent representative to the United Nations and adviser to various prime ministers. Paul Heinbecker is one of Canada's most experienced commentators on foreign policy and international governance. He is also the director of the Centre for Global Relations at Wilfrid Laurier University.

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EXECUTIVE SUMMARY

Our world is transforming itself at a rate never before seen. How well countries cope with the pace and extent of contemporary change depends, as the experience of the financial crisis makes clear, on how effectively they govern themselves, and how well they cooperate with others. Sound economic policies especially are of fundamental importance to national security and international leadership. Governments with healthy fiscal books are better positioned to lead — to underwrite the provision of key global public goods and, *in extremis*, to use military force — than those incurring persistent deficits and dragging enormous debts. If the United States, now and for years to come the leading global power, is to continue to wield decisive influence, it will need to fix its myriad governance and economic problems. But, even then, a return to the dominant *status quo ante* is not in the cards; others can and will assert legitimate claims to participation in global leadership. The United States will likely find it beneficial — even necessary — to share authority, and advantageous to accept that others will sometimes work together without it. As the complexity and integration of the world accelerates, new forms of "minilateralism," entailing voluntary, exclusive and targeted governance approaches and deriving from comparative advantages and issue-based interests, will take shape, complementing inclusive treaty-based agreements. These will also include new, informal partnerships among countries that are not themselves "great powers" by the traditional definition, but that nonetheless have compelling strategic interests, and the diplomatic and, sometimes, military capacity, economic strength and political disposition to make a significant difference. Other forms of cooperation, notably multi-stakeholder governance, comprising governments, industry and civil society, also seem likely to materialize in response to challenges arising in the global commons that defy conventional, state-based management.

INTRODUCTION

In the second decade of the twenty-first century, the contours of the future of international relations are becoming clearer. It seems certain that no country, or even group of countries, will be capable of dominating world affairs, and unilateralism will be of little avail. Problem solving where possible and issue management where necessary will require cooperation — multilateral and minilateral — between states and with non-state actors. The United States, still the world's greatest power and most resilient major economy, is, nevertheless, handicapped in its efforts to lead by deficits, debt, political deadlock and investor pessimism. The latter two problems hobble Washington in its attempts to achieve the bipartisan cooperation needed to deal with the first two issues and, thereby, to restore the United States to its former pre-eminence. Europe, with a collective GDP that outstrips America's, is in the grip of economic woes, including a widespread recession, a persistent banking and financial crisis and, in its southern tier, a lack of competitiveness, all of which threaten the viability of the euro zone; indeed, raising questions about the future of the European Union itself. The world's largest emerging economies — China, Brazil and India — that were the drivers of global economic growth and expansion in the past decade, are also not immune to global shocks. As key goods and services markets in Europe and North America sputter, China's rocketing growth rates have fallen well below the two-digit figures that catapulted it to the rank of world's second-biggest economy. There are also worries that China's real estate market, which accounts for more than 10 percent of the country's GDP, is a bubble that could burst. Meanwhile, Brazil's impressive GDP growth rates have slowed to a crawl as global demand for its commodities and resources weakens, and upward pressure on the Brazilian real makes its products less competitive in world markets. India is also grappling with a litany of problems that are stymying its growth, including the failed reform of its Byzantine tax laws, an energy sector that cannot keep pace with demand, an education system that lags its competitors — especially as regards pervasive female illiteracy — and chronic corruption and red tape, which deter investment and hamper growth. At the same time, Russia is caught between nostalgia and ambition, able to frustrate international cooperation, but unable to lead it. And Japan, which remains the world's third-largest economy and one of its most successful, struggles to surmount the challenges of a shrinking birth rate and anemic growth, an object lesson in the difficulties inherent in recovering from financial delusion and real estate extravagance.

The "tight shoe" of economics has direct and indirect impacts on global security. The North Atlantic Treaty Organization (NATO) is struggling with the impact of cuts — in some cases major cuts — to the defence budgets of its European and transatlantic partners.[1] As official development assistance spending is reduced in Western countries, there are fewer funds to support impoverished nations, with potentially adverse consequences for their social and political progress. During tough economic times, there is also less appetite among politicians and publics alike to attack the causes of climate change, or to intervene abroad in countries that are experiencing social unrest, or to deal with dictators who are turning their guns against their own citizens. Meanwhile, issues that directly threaten the security of citizens, such as deepening organized crime, generate social accommodations to

1 See Clara Marina O'Donnell (ed.) (2012). "The Implications of Military Spending Cuts for NATO's Largest Members." The Brookings Institution Analysis Paper. Available at: www.cer.org.uk/sites/default/files/publications/attachments/pdf/2012/military_spending_nato_odonnell_july12-5500.pdf.

worsening circumstances at progressively lower levels of security and rule of law.

Sound economic policies are fundamental to national security and international leadership. As former World Bank head Robert Zoellick has argued, when great powers take care to live within their means by carefully managing the public purse, they are better positioned to fight wars, underwrite the provision of key global public goods and rise to the "Olympian feats" that are sometimes required of them (2012). When they run up massive deficits and become hostage to their creditors, they are poorly positioned to do so. Sound economic policy is not simply a *sine qua non* of "hard power" or military power. It is also integral to "soft power," the influence derived from success obtained through economic dynamism, industrial innovation and social progress (Zoellick, 2012).

It is evident that if the United States aspires to leadership it must overcome its political deadlock, resolve its deficit and debt problems, and make itself more competitive by getting its skilled population back to work. But even if it does all of this and avoids labour market hysteresis, a return to American hegemony seems unlikely. In a world where geo-economics buttresses geopolitics, there are too many rivals for leadership for any one country to dominate in all fields all the time. Other powers can also build economies "that [can] shape the world" if not on their own, then collectively or in niches (Zoellick, 2012). To paraphrase an old idiom, "what is good for the American goose is sauce for the global gander." American exceptionalism, the apparently intoxicating elixir of American political convention-goers, seems an ever less convincing concept in real-world practice than in self-referential theory.

The real world is one of a plenitude of issues from regional rivalries to the spread of nuclear materials and weapons, from transnational organized crime and terrorism to climate change and pandemic disease, from cyber security and social media to financial regulation and economic protectionism. By their natures, these challenges are in fact best only met by collective effort. In the descriptive phrase of Richard Haass of the US Council on Foreign Relations, it is a world of "messy multilateralism" in which the United States is *primes inter pares* but probably more *pares* than *primes* (2010). No longer the one indispensable country for every problem, it is, nonetheless, a key leader that can bring vast resources to bear in any cooperative effort. This is a world in which the United States will work alongside others — and in which others will sometimes work together without the United States — to deal with a wide range of persistent and emerging global problems and issues.

No country, not even the United States, can handle these challenges alone. The world with its many different, newly mobilized actors and interests is simply too large and too complex to be led by any one country. The issue is not primarily what some believe is the relative and absolute decline of America's power (of both the hard- and soft-power variety), but rather both the changing capabilities, attitudes and values of others, including non-state actors aspiring to participate in leadership, and a diminishing interest in and need for global leadership on the part of Americans. The world is indeed becoming a more crowded place at the top, but that is not necessarily a bad thing.

There is greater order, moreover, in this "messiness" than may first appear to be the case. Its disappointments notwithstanding, there is still value in the United Nations, including its conflict prevention abilities, and its Charter remains the basic rule book of international relations, which most countries view as being in their interests to respect. The Charter and the 500 multilateral treaties negotiated under UN auspices make the United Nations the central operating system of international relations. As former Secretary-General Kofi Annan has observed, the UN is the one "organization that has the power to convene the whole world under one roof" and "to sustain the norms that allow us to live in a peaceful way."

Beyond the United Nations, there is a wide variety of evolving multilateral approaches to deal with the collective action problems of a complex and globalized world that fall outside the purview the United Nations. These include the "new" and not-so-new minilateralism, sometimes informal, sometimes more structured, of global institutions and coalitions of the policy willing. They also include multi-stakeholder governance, such as in the case of the Internet, which will require its own solution and presents a unique challenge to international cooperation and entrepreneurial leadership by senior officials in international organizations who are instrumental in taking key policy initiatives forward.[2] There is also resurgent regionalism and improvised forms of security management — which are sometimes termed collective conflict management — to deal with new security challenges. Old-fashioned political leadership remains indispensable, but that leadership is likely to see "more hands on the steering wheel and more feet on the brake." In this reality, cooperation is more likely to be coaxed along than commanded.

2 One such example is the UN Millenium Development Goals (MDGs), where astute UN officials, including Louise Fréchette, John Ruggie, Mark Malloch Brown and others, conceived and catalyzed implementation of the MDGs. Inter alia, see David Hulme (2009). *The Millennium Development Goals (MDGs): A Short History of the World's Biggest Promise*. BWPI Working Paper 100, Brooks World Poverty Institute, University of Manchester, Manchester, UK, September. On entrepreneurial leadership in multilateral forums more generally, see Fen Osler Hampson (1995). *Multilateral Negotiations: Lessons from Arms Control, Trade, and Environment*. Baltimore, MD: Johns Hopkins University Press.

MULTILATERALISM AND MINILATERALISM

At its core, the concept of "multilateralism" centres on the collectively agreed norms, rules and principles that guide and govern interstate behaviour. Multilateral institutions are all based on the principles of generalized reciprocity, in which states agree to act cooperatively in common undertakings. But as G. John Ikenberry argues, there is not a "single logic," "fixed set of principles" or "practice" to the current liberal international order and the way it operates (2009). The postwar internationalism of the second half of the twentieth century, which was derived from former US President Woodrow Wilson's Fourteen Points and the regulatory principles of former US President Franklin Roosevelt's New Deal, is yielding to what Ikenberry refers to as a "post-hegemonic liberal internationalism" that is based on an expanding membership of non-Western states, post-Westphalian "principles" of sovereignty (as reflected in human rights and humanitarian law, and emerging doctrines such as the Responsibility to Protect) and an expanded set of rules and cooperative networks (2009).

This evolution is also apparent in the various ways different countries and regions approach the challenges of international governance. China's involvement in multilateral institutions, for example, is prefaced by a defensive desire to ensure its own sovereignty is not compromised and also by both Confucian and Taoist dispositions towards non-intervention and self-governance. Further, China is not working to overthrow the international system, but rather to exploit it. As Li Mingjiang argues, when it comes to matters of global governance and multilateralism, "China is likely to repeat what it has done in the East Asian regional multilateralism in the past decade: participation, engagement, pushing for cooperation in areas that would serve Chinese interests, avoiding taking excessive responsibilities, blocking initiatives that would harm its interests, and refraining from making grand proposals" (2011).

For optimal effectiveness, leadership in universal frameworks needs to be accompanied by "minilateral" efforts (Kahler, 1993). The number of participants in cooperative multilateral ventures varies, from the universal participation of the UN General Assembly to the "minilateralism" of the UN Security Council and the International Monetary Fund (IMF) executive board, with its weighted voting shares distribution, and the inherently exclusive Group of Seven/Eight (G7/G8) or Group of Twenty (G20) forums.[3] In minilateralism, cooperation is promoted and advanced through smaller group interactions that typically involve the most powerful actors in the international system, with the results then commended to and, under Chapter VII of the UN Charter, sometimes imposed on the world at large.

The G20, which is inherently minilateralist and has no formal global executive authority, has spurred the reform of the operations and membership of the Bretton Woods institutions. Even in the universal setting of climate change negotiations, recourse has often fallen to small, leading groups to negotiate outcomes acceptable to all. At the same time, a "G2" of the US and China is unlikely to emerge, at least in any overt sense, because just as the G8's membership base proved too narrow to deal with the complex, integrated challenges of the contemporary world, a G2 would likely prove even less capable of harnessing the diverse views of economically capable powers.

Notwithstanding the sometimes warranted criticism of the G20, its member countries have been effective in cooperating to stabilize financial markets, coordinate regulatory reform and launch a global economic stimulus (Drezner, 2012). In doing so, they have succeeded in averting grievous harm to the global economy, including quite possibly a global depression. The group has been engaged in re-engineering the financial system to prevent a recurrence of the crisis and to maintain the global flow of capital. It has put issues on the table that were once regarded as the exclusive province of sovereign governments, notably monetary policy, exchange rates and debt levels, thereby taking preliminary steps toward longer-term global macroeconomic governance. The G20 has, nevertheless, struggled thus far in addressing the highly political tasks of resolving the current account, trade and budget imbalances conundrum, the roots of which reach deep into the national economic and political philosophies of the world's largest economic players and touch their respective concepts of sovereignty.[4]

G20 leaders have promoted IMF reforms that will give developing countries greater influence in the organization. China has become the third-largest IMF shareholder, bypassing Germany as part of an overall six percent transfer of voting power to dynamic and under-represented economies. Some progress in reforming the IMF has been made, but a clear and widely shared view on the appropriate role and functioning of the Fund nevertheless remains elusive. In some respects, the Fund has progressed from acquiescing G8 views (especially US) to acquiescing G20 views, which is progress of a sort.

The obvious question is whether G20 countries can continue to provide the leadership the world needs to prevent economic crises or to achieve balanced, stable and sustainable global growth in a world of complex

3 On some of the practical challenges of multilateralism, see Thomas Wright (2009). "Toward Effective Multilateralism: Why Bigger May Not Be Better." *Washington Quarterly* 3, no. 2: 163–180.

4 See Barry Carin et al. (2010). *Making the G20 Summit Process Work: Some Proposals for Improving Effectiveness and Legitimacy*. CIGI G20 Paper No. 2, June.

financial and economic interdependencies. The G20 has stuck close to its self-prescribed economic and financial mandate because, undoubtedly, it will be judged primarily on its success in this domain. G20 leaders have to get the economic and financial issues right for everyone's sake, as well as the related reforms to the governing rules and regulations.

However, that does not mean the G20 should not take up any security challenges before the global economic "Shangri-La" emerges at last. The G20 has even been reluctant to contemplate security issues with major economic salience; but, sooner rather than later, G20 leaders will likely extend their leadership to a broader agenda — initially to issues that do closely connect international economics with foreign policy and international security (Jones, 2010). These include, notably, the world's most pressing hybrid issues such as the economic, energy and financial dimensions of climate change, food and energy security, transnational organized crime, cyber governance and security, and support for the political transformation of the Middle East and North Africa, all of which will have major economic dimensions and impact. To the extent that the practices of the G8 are relevant to the G20, the experience has been that when leaders come together the temptation is irresistible to take advantage of each other's presence to discuss the pressing issues of the day, whatever the agenda of the meeting may be that they are attending. It remains to be seen, however, whether the G20 will be a maxi-G8 or a mini-United Nations.

This minilateral group of the world's most powerful economies is unlikely to be a panacea for all that ails the world, especially given the G20's dysfunctional process. While the greater diversity in the membership of the G20 (relative to the G8) means there is less commonality of interest, and possibly regressive lowest-common-denominator agreements, there are offsetting advantages in terms of the breadth of support behind any agreement that is reached, and the capacity of the group to deliver on it. The G20 is a potentially important addition to those institutions that help nation-states govern relations between themselves in the age of globalization.

At the same time, the tension between exclusive and non-exclusive "clubs" is clearly growing as demands for democratic accountability deepen generally around the world and newly "empowered" states particularly chafe at the prospect of exclusion.[5] There is no clear way to square this circle and tensions abound, although give-and-take dialogue can help alleviate frictions. Invariably, minilateral arrangements are necessary to make international institutions work — notably in climate change negotiations — and sometimes exclusive clubs are more effective than inclusive ones, as the response to the financial crisis has demonstrated. The trend towards a greater role, voice and responsibility for the world's emerging powers is, nevertheless, evident in the dispute over UN Security Council enlargement, in IMF voting rights reform and especially in the G8 ceding much of its responsibility for steering the global economy to the G20 (Ruggie, 2003).

There is room and, indeed, a need for cooperative leadership at the regional and global levels by what might be called "Tier II" countries, essentially the non-nuclear G20 members and other influential, economically significant states with proven track records of constructive and innovative diplomacy, such as Australia, Brazil, Canada, Germany, Indonesia, Japan, Korea, Mexico, South Africa, Switzerland and Turkey. There is an emerging role for such "constructive powers" to identify emerging security issues and bring them to the appropriate organizations and institutions for deliberation and, where possible, disposition. Cooperation among this new, more-flexible, like-minded group is likely to be issue-based, but the common thread that will run through its deliberations is the need to cooperate to improve regional and global governance, and to support national efforts.

A further dimension of leadership is emerging, as the empowerment of "ordinary" citizens by electronic media advances. Rapid social mediatization and a pervasive, omnipresent information culture are rendering electorates both more informed and less trusting. As publics become more aware and tech savvy, they seem increasingly attracted to direct, rather than to representative, democracy. Democratic governments seem likely to find themselves progressively driven to more open governance practices and more open policy formulation, which will challenge hierarchical and responsible systems of government, nationally and internationally.

MULTI-STAKEHOLDER MULTILATERALISM

Multi-stakeholder governance is another feature of the evolving international system, especially in areas like the Internet, where state and non-state actors are involved in managing, maintaining and developing rules of behaviour for complex systems in which many different interests are involved.[6]

At the end of 2012, nations of the world will convene at the Persian Gulf port city of Dubai to renegotiate key provisions of the International Telecommunications

5 See, for example, Kevin Watkins and Ngaire Woods (2004). "Africa Must Be Heard in the Councils of the Rich." *International Herald Tribune*, October 2-3. Also see Ngaire Woods (2001). "Making the IMF More Accountable." *International Affairs* 77, no. 1: 83–100.

6 This discussion draws on Fen Osler Hampson and Gordon S. Smith (2012). "Internet Wars." *Diplomat and International Canada Magazine*, September-November.

Regulations, a UN treaty that governs the use of airwaves, but not, thus far, the Internet. The World Conference on International Telecommunications is shaping up to be a "battle royal" because some countries, including Brazil, China, India and Russia, want to bring the Internet under the control of the United Nations. They are opposed by the United States and many — although not all — Western nations, which tend to favour the status quo and a liberal, multi-stakeholder regime that is generally free of greater state control and serves the interests of many, albeit from an American base.

The issues on the table are complex, but they boil down to the following: granting states new powers of taxation over Internet usage; issues of privacy and whether governments should play a greater role in surveillance and monitoring of the Internet by acquiring access to the real names and identities of online users; and transferring management authority for the Internet from the Internet Corporation for Assigned Names and Numbers (known as ICANN), a private, multi-stakeholder body that currently oversees the use and operations of the Internet by, for example, coordinating the assignment of Internet domain names and user protocols, to the UN's International Telecommunications Union or a new intergovernmental authority.

The battle in Dubai for control over the Internet is likely to be a prolonged one, which will not end with the December meeting. Although the main protagonists in Dubai are nation-states, they are not the only actors with interests in what is shaping up to be a struggle of epic proportions.

The other actors in this global e-drama include: the major Internet providers (the top 20 companies that field 90 percent of the world's Internet traffic); movie studios, songwriters, publishers and other producers of artistic or intellectual content that can be exchanged and downloaded on the Internet; technology companies such as Google, AOL, eBay and Twitter who do business with those operating sites where "free" movies and songs can be uploaded; political activists; champions of free speech who populate the academic and the legal community; business and commercial interests of every stripe and variety who ply their wares on the Internet, including banks and credit card companies; hackers who challenge computer security systems for both good and bad reasons; criminal elements who exploit the Internet for their own shady ends; law enforcement agencies seeking to protect the public from Internet abuses such as child pornography; and ordinary citizens who have real concerns about their personal safety and right to privacy when they go online.

Many of these interests were mobilized in the so-called Stop Online Piracy Act, or SOPA wars, which marked "round one" in the current battle for the Internet. The US Congress Stop Online Piracy Act was an ill-fated attempt to lower the boom on Internet piracy that was costing Hollywood studios and the songwriting industry dearly. Congress retreated by shelving the legislation, not least because 2012 was a US election year. The highly successful lobbying campaign against the legislation by technology companies and their social media supporters, which mobilized millions of people, was too much for even the powerful motion picture lobby and Washington's skittish political class to bear.

A variant on the multi-stakeholder model is the Ottawa Process, which produced the anti-personnel landmines treaty of 1997. Canada marshalled interested states and civil society to ban the production, use, transfer and sale of landmines. Currently, there are some 160 states parties to the agreement and a number of others, including the US, who observe it.[7]

REGIONALISM AND PROBLEM-SOLVING SECURITY MANAGEMENT

In the realm of global security, there are two contemporary, emergent patterns of multilateral cooperation: resurgent regionalism and increasingly ad hoc or improvised, problem-solving forms of collective security and conflict management, which involve collaboration — sometimes loose and uncoordinated, sometimes more tightly scripted — among a broad constellation of different intergovernmental, regional, sub-regional and civil society actors.[8]

Regionalism is a trend characterized by the growing involvement of regional (and sub-regional) organizations in security and conflict management in their own neighbourhoods. This is the new reality of our times and is reflected in the greater role that regional and sub-regional organizations are playing in Sub-Saharan Africa, the Middle East, Latin America and the Asia-Pacific. Particularly since the end of the Cold War, regional entities have demonstrated a greater will and capacity for action. For example, although there is much that remains to be done, the African Union has developed its own capacities and structures for mediation and conflict prevention, and has mobilized resources in its early warning assessment systems, and prevention and response capabilities. So too have sub-regional entities in Sub-Saharan Africa, such as the Economic Community of West African States

7 For discussions of the political evolution of the anti-personnel landmines treaty see See Paul Heinbecker (2010). *Getting Back in the Game: A Foreign Policy Playbook for Canada*. Toronto: Key Porter Books; and Fen Osler Hampson et al. (2002). *Madness in the Multitude: Human Security and World Disorder*. Toronto: Oxford University Press.

8 The following discussion draws on the arguments presented in Chester A. Crocker, Fen Osler Hampson and Pamela Aall (eds.) (2011). *Rewiring Regional Security in a Fragmented World*. Washington, DC: United States Institute of Peace Press; see also Crocker, Hampson and Aall (2011).

(ECOWAS). In Latin America, the principles of sovereignty and non-intervention, which were the cornerstones of the inter-American system, have been relaxed and modified to allow the Organization of American States (OAS) to play a greater role in the defence of democratic principles and the advancement of human rights. The Santiago Declaration, incorporated in OAS Resolution 1080 of 1991, has served as the basis of OAS pro-democracy interventions in Peru, Haiti, the Dominican Republic, Guatemala, Paraguay and elsewhere.

In the Asia-Pacific, key Asian countries are not just playing more important roles and asserting their own interests globally; they are also shaping rules in existing regional institutions and building separate ones. At the same time, competing claims over the resources of the South China and East China Seas remain to be resolved, as does the eventual configuration of the Korean Peninsula, a major regional and global flashpoint along with the Asia subcontinent where there are significant and serious unresolved border issues between India and Pakistan, and Pakistan and Afghanistan.

The Association of Southeast Asian Nations (ASEAN), the ASEAN Regional Forum and the ASEAN Defence Ministers' Meeting are the key instruments of regional engagement and confidence building. Track-two processes, including the Pacific Economic Cooperation Council and the Council for Security Cooperation in the Asia Pacific, are also significant channels for promoting regional engagement on security issues.

In the case of the UN-sanctioned, NATO-led operation in Libya, regional organizations also played a significant role in galvanizing and legitimizing international actions. Condemning the Government of Libya's violent tactics against the uprisings, the Arab League suspended Libya's membership on February 22, 2011. The African Union also issued a strong denunciation of the Libyan government. Both statements were endorsed by the UN Security Council Resolution 1970, which objected to the Qaddafi government's actions, referred the case to the International Criminal Court and reminded the Libyan government of its responsibility to protect its citizens. On March 7, 2011, the Gulf Cooperation Council called for UN action, the next day the Organization of Islamic Cooperation called for the same, and on March 12, the Arab League asked the United Nations to "impose a no-fly zone against any military action against the Libyan people." A month later, in the face of further deterioration of the situation, the Security Council authorized member states to "take all necessary measures…to protect civilians" under Chapter VII of the UN Charter, and also established a no-fly zone and further sanctions.

Regional organizations playing a greater role in providing for peace and security is entirely consistent with the original conception of the United Nations and key provisions for collective security in the UN Charter. Those who framed the Charter originally foresaw a clear institutional link between the United Nations and regional arrangements. Although the Charter assigns key responsibility for international security to the UN Security Council (Chapter VII, Article 51), Chapter VIII of the UN Charter also looks forward to the "existence of regional arrangements or agencies for dealing with such matters relating to the maintenance of international peace and security as are appropriate for regional action." The resolution of regional disputes by regional organizations was foreseen by Articles 33 and 52 of the Charter, and the United Nations itself can refer disputes to regional organizations for mediation and arbitration (Article 52). Regional actors can also engage in collective self-defence in the event of an armed attack, pending action by the Security Council. The Charter has been interpreted flexibly with respect to Article 53, which requires regional organizations to seek prior authorization by the Security Council for enforcement actions. The Security Council, for example, gave its retroactive blessing to the military actions of ECOWAS in Sierra Leone, but it never formally sanctioned NATO's use of force in Kosovo or the "allied" invasion of Iraq. Indeed, in the latter case, it declined when invited to do so by Russia.

The emerging pattern of involvement by regional organizations in conflict management is the confluence of several factors: persistent demand for conflict management, especially of domestic armed conflict in recent decades; changes in the global security environment, notably the end of the Cold War, and the declining interest by most Western powers, with some notable exceptions (Iraq, Afghanistan, Kuwait), in regional conflicts that do not directly affect their economic and security interests; and the transformation of the international response to conflicts from peacekeeping to full-fledged combat missions.

The other major, general trend in global security is the emergence of problem-solving coalitions or what Crocker, Hampson and Aall refer to as collective conflict management (CCM) (2011). CCM describes an emerging phenomenon in international relations in which countries or institutions address potential or actual security threats by banding together to: diminish or end violent conflict; offer mediation or other assistance to a negotiation process or negotiated settlement; help resolve political, economic and/or social issues associated with the conflict; and/or provide monitoring, guarantees or other long-term measures to improve conditions for a sustainable peace.

CCM is related to, but distinct from, collective defence and collective security. The latter involves formal arrangements based on treaties ratified by the legislative bodies of the member states, binding on the signatories and relatively clear as to rights and responsibilities. Both collective defence and collective security arrangements involve long-term relationships among the members, formal decision-making structures and an expectation that action under the arrangement could be activated by a variety of threats, including ones unforeseen by the original treaty drafters. In contrast, CCM ventures are not necessarily the result of a formal treaty or membership in an organization, but can also be the consequence of an informal agreement to act jointly to resolve a conflict; they do not involve an enduring relationship among the collaborating organizations, but can be either ad hoc or part of a jointly improvised mission; they may be organized around a single conflict and be disbanded once that conflict is resolved; membership may include both official and non-official organizations; interventions undertaken by collective conflict management arrangements can occur even if the target country does not invite help (especially if only non-governmental organizations are involved).

An example of CCM is the Proliferation Security Initiative (PSI) launched by President George W. Bush in Krakow, Poland on May 31, 2003, in cooperation with 10 countries — Australia, France, Germany, Italy, Japan, the Netherlands, Poland, Portugal, Spain and the United Kingdom. Many other countries have since committed themselves to supporting the initiative. PSI participants have downplayed the concept of membership in the joint initiative, explaining that PSI is "an activity not an organization."[9] Nevertheless, the PSI is now endorsed by some 95 countries, whose act of adherence consists of officially subscribing to a set of principles. The PSI aims to detect and intercept weapons-of-mass-destruction materials and related finance, and its operation is described in official US statements as "a flexible, voluntary initiative geared toward enhancing individual and collective partner nations' capabilities to take appropriate and timely actions to meet the fast-moving situations involving proliferation threats." Emphasis is placed on "voluntary actions by states that are consistent with their national legal authorities and relevant international law and frameworks." The PSI has principles in lieu of a formal charter, and conducts operational and training activities rather than regularized meetings or summits. It does not have a headquarters or dedicated facilities, and no intergovernmental budget. Interestingly, President Barack Obama described the PSI shortly after taking office as "a durable international institution" (Obama, 2009).

Problem solving does not necessarily depend on the United States or other great powers to take the lead. The United States, for example, has strongly supported the efforts of one of its closest NATO allies, Canada, to secure greater levels of cooperation between Afghan and Pakistani government officials on cross-border management issues, but has not itself been in the driver's seat. The issues addressed include: the cross-border movement of insurgents; the absence of proper infrastructure and customs management at key, legal border crossing points (Waish-Chamam, Ghulam Khan and Torkham); smuggling to avoid customs; the illicit cross-border flow of narcotics; and illegal migration.

The five working areas of what is now referred to as the Dubai Process (after the Persian Gulf Emirate where the first meeting took place) include customs, counter-narcotics, managing the movement of people, law enforcement in border areas, and connecting government to people through social and economic development. The meetings are part of an internationally recognized process that promotes dialogue between Afghan and Pakistani officials to advance cooperation in each of these areas. Importantly, the process has engaged and mobilized a wide range of partners and stakeholders not only in the two countries, but also at the international level, including the US Border Management Task Force in Kabul and Islamabad, the UN Office on Drugs and Crime, International Security Assistance Force Regional Command (South), the World Bank, the UN Assistance Mission in Afghanistan, the UN High Commissioner for Refugees, the International Organization for Migration, other organizations working on border management and key donors such as Germany and Denmark.

The examples mentioned above are important illustrations of a new kind of multilateral, problem-solving approach to security in a post-9/11 world. These cooperative undertakings build on the traditions of collective defence and collective security. However, unlike collective defence and collective security, which involve formal obligations to undertake joint action in response to the actions of an aggressive state, these initiatives are voluntary and targeted at specific security problems. They also offer a different vision of multilateral cooperation: one that is not based on striking a formal consensus where each state has the right of veto (as in the European model), but rather on cooperation that emerges out of an informal process of consultation, and where final, decision-making authority continues to reside with national authorities (which is historically how the United States has approached many of its own international undertakings).

CONCLUSION

Cooperative ventures in today's world underscore the growing importance of new, issue-specific partnerships, of contemporary, even temporary, like-minded groups. Formal alliances seem less central in an age of global integration where major powers have not fought each other since the Sino-Indian conflict of 1962. Instead, new, informal partnerships in the realms of security, economics and global governance and international institutional innovation seem likely to emerge among countries that are not themselves "great powers" by the traditional definition, but that nonetheless have both compelling

9 From the US Department of State Proliferation Security Initiative, available at: www.state.gov/t/isn/c10390.htm.

strategic interests in a peaceful, prosperous world and the diplomatic and, sometimes, military capacity and political disposition to make a significant difference. Global governance and regional arrangements seem unlikely to be left exclusively to the permanent members of the UN Security Council.

It is not yet possible to be categorical about what the future holds for multilateralism in its different forms and guises, including the new "minilateralism" of institutions such as the G20, which to date are the best solution to the legitimacy/efficiency conundrum, combining inclusiveness and representativeness, albeit not universality, with capacity and effectiveness. We are also seeing the rise of problem-solving arrangements involving traditional players — the United Nations, powerful states and regional organizations — but in new partnership configurations to deal with some of the world's major new security challenges. Ways of thinking and acting established over generations are not modified quickly, and interests rarely change suddenly or as a factor of the institution in which they are addressed. Most basically, there is a greater diversity in political cultures and less common purpose in the world. It will take dispersed, issue-specific leadership in these new multilateral forums and cooperative ventures to maintain stability and order, and to advance progress. However, the bigger lesson, to use the old cliché, is that "nature abhors a vacuum," even in the case of global politics. For constructive and engaged powers, which generally tend to punch above their weight, there is a real opportunity in a messy world to provide leadership collectively or individually, or both. Narrow, issue-based multilateralism that focuses on coalitions of states who share similar interests is, therefore, not just a morally defensible project, it is practical, effective and, quite possibly, the path to the future.

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