

Global Financial Architecture and the International Monetary Fund

Multilateral institutions have hitherto worked in two ways. One approach is the quasi-legal one followed by the World Trade Organization (WTO), which regulates trade between participating countries. The WTO bases its actions on a set of agreements that limit barriers to trade. These agreements have been signed and ratified by member governments after long and arduous negotiations. The WTO has a dispute-resolution process aimed at enforcing participants' adherence to the agreements, and because the rules are relatively clear, adherence can be judged in a quasi-legal setting. A second approach, one that is far less effective because of the nature of the task, is the way the IMF goes about international macroeconomic management and coordination: essentially through a process of exhortation that fails to move anyone except those who need the Fund's money. The problem here is that the rules of the game are not clear at all. When does a pattern of actions by a country create global harm? When the Fed cuts interest rates to the bone, and thus sets off a global wave of risk taking, do countries elsewhere have the right to protest?¹

Raghuram G. Rajan, former IMF Chief Economist

This chapter is divided into two parts. We will first review the role the International Monetary Fund (IMF) has played over the past few decades in managing financial crises and suggest possible areas for reform. We will then review the background to the 2008–2009 global financial crisis and analyze many of its implications, particularly the sharp increase in the burden of public debt that was a consequence of the crisis. We do this partly because we think there is a high likelihood that the next financial crisis will be fiscal in nature (more precisely, fiscal policies that trigger instability in the global financial system), but also because our current financial system has a number of vulnerabilities that pose a major threat to financial stability and economic prosperity and could, in a crisis, interact in highly destabilizing, destructive ways with other aspects of our governance system. The UN Charter

¹ Rajan, Raghuram. 2010. *Fault Lines: How Hidden Fractures Still Threaten the Global Economy*, Princeton, NJ, Princeton University Press, p. 210.

clearly introduced the concept of economic and social development as a key responsibility of the international community, and two of the leading UN agencies, the IMF and the World Bank, are very much at the center of implementing the UN's mandate in this area. The first part of this chapter will focus on the IMF because of the central role the organization plays in the management of the global monetary system, a system whose weaknesses were dramatically revealed during the 2008–2009 financial crisis. We will present several proposals for reforms aimed at improving the global financial architecture.

THE IMF AT THE CENTER

A number of questions have been raised over the past few decades (perhaps beginning with the 1997–1998 Asian financial crisis) about the IMF's approach to crisis management in emerging markets and other economies (e.g., Greece in 2010), the chief characteristic of which seems to be large-scale improvisation and ad hoc arrangements with at times costly social and political repercussions. The IMF has found itself in the middle of many of these episodes, and questions about its effectiveness have been raised each time; indeed, some have argued that the organization is no longer needed in an environment of largely floating exchange rates. It is clear, however, that because today's world is one of closely integrated markets, in which linkages are becoming increasingly complex, an institution that will have sufficient resources to deal with more frequent and recurrent episodes of financial instability, and that will help to cushion or prevent the effects of future crises, is indispensable. Some ideas follow on the sort of reforms that could make the world's only "financial peacekeeper" a more effective crisis manager.

As presently structured, the IMF falls far short of the role played by central banks in national economies. Like a national central bank, it can create international liquidity through its lending operations and the occasional allocations to its members of Special Drawing Rights (SDRs), its composite currency. Thus, as Richard Cooper has pointed out,² the IMF already is, in a limited sense, a small international bank of issue. As has often been seen, beginning with the Mexican crisis in 1994–1995, the Fund can also play the role of "lender of last resort" for an economy experiencing debt-servicing difficulties. But the amount of support it can provide has traditionally been limited by the size of the country's membership quota, and there is obviously an upper limit on total available resources; as of March 2010, the IMF's "lending capacity" was equivalent to SDR 715 billion (or around US\$1 trillion) consisting primarily of IMF quotas and multilateral and bilateral arrangements that the IMF has negotiated with member countries and institutions to provide so-called second and third lines of defense, to supplement quota resources.³

² Cooper, Richard N. 1984. "A Monetary System for the Future," *Foreign Affairs*, Fall, pp. 20–30.

³ Since the late 1990s the IMF has been forced to substantially relax its long-standing parameters that established the extent of a country's access to Fund resources. Following the onset of the

While this sum may seem large, in early 2019 it was equivalent to about 3 percent of cross-border claims of Bank of International Settlements (BIS) reporting banks, 0.4 percent of total global debt and 1.2 percent of world GDP. It is, hence, a relatively modest sum, adequate to deal with a handful of crises in a few middle-income countries but, as we will argue, possibly a puny amount in the middle of a global financial crisis.⁴ Furthermore, in the absence of additional progress in currently frozen negotiations on a quota increase, it is expected that more than half of the total IMF firepower will be gone by 2021.

Beyond the issue of the adequacy of resources, there are other serious structural flaws in its lender-of-last-resort functions. To begin with, its regulatory functions are extremely rudimentary. Its members are sovereign nations that are bound, in theory, by the Fund's Articles of Agreement, but the institution has no real enforcement authority, other than some limited functions through the "conditionality" it applies to those countries using its resources. In particular, the Fund has no authority to enforce changes in policies when countries are engaged in misguided or unsustainable policy paths but are otherwise not borrowing from the Fund – this was the case with the Asian countries in 1997. What little enforcement authority the IMF does have is sometimes eroded when the country in question has a powerful sponsor, who may try to persuade the Fund and its managers to exercise leniency or "turn a blind eye" if policies appear to be going awry. Contrast this situation with that of a typical national central bank, which has enormous leverage vis-à-vis the commercial banks under its jurisdiction when making resources available to them, particularly in the midst of a crisis. The IMF simply does not have an analogous authority at the international level in relation to the countries that are eligible to use its resources.

There are a number of possible ways to deal with these shortcomings. One proposal put forward in the early 2000s was to create an International Financial Stability Fund, to supplement IMF resources. This would be a facility that could be financed by an annual fee on the stock of cross-border investment; a 0.1 percent tax could generate, according to Edwin Truman, a former Assistant Secretary at the US

Asian financial crisis in 1997 there have been a growing number of examples of "large access" IMF programs, such as Korea in 1997–1998, Turkey in 2000–2001, Uruguay in 2001 when the country received the equivalent of 16 percent of GDP, a similar program for Greece in 2010 and more recently Argentina, receiving almost 13 times its quota in 2018.

⁴ In recent years there has been a proliferation of "windows" or facilities through which these resources are made available to member countries. Currently, in addition to the more traditional Stand-by Arrangements (SBA) and the Extended Fund Facility (EFF), the IMF also offers a Flexible Credit Line (FCL) introduced in 2009, very much in response to the crisis; a Precautionary and Liquidity Line (PLL) introduced in 2010, also against the background of the crisis; an Extended Credit Facility (ECF); an Exogenous Shocks Facility – High Access Component (ESF–HAC); a Rapid Financing Instrument (RFI); a Rapid Credit Facility (RCF); and a Stand-by Credit Facility (SCF), among others, all with differing eligibility criteria and terms. In 2016 the IMF approved an FCL for Mexico in the amount of US\$88 billion, or about 700 percent of its IMF quota; one upper middle-income country and one facility, accounting for a sizable share of total IMF firepower.

Treasury, some US\$25–30 billion per year, which could then be used over time to create a US\$300 billion facility.⁵ Using more updated figures and shifting the focus from cross-border investments to foreign exchange transactions, we saw in Chapter 12 on the development of new funding mechanisms for the UN that a relatively small Tobin-like tax could generate some US\$600 billion annually, some of which could be used to strengthen the IMF's lending capacity. This would partly address the issue of the adequacy of IMF resources and would partially delink its lender-of-last-resort functions from the cumbersome, sometimes heavily politicized periodic allocations of national currencies, in the context of its quota reviews, that currently form the basis of IMF liquidity growth. An alternative and possibly more promising approach would give the Fund the authority to create SDRs as needed, as most national central banks can, to meet the calls of would-be borrowers. The IMF Articles envisaged the SDR to ultimately emerge as the “principal reserve asset” in the global economy. There is at the moment about US\$280 billion outstanding in SDRs, or less than 0.4 percent of world GDP; thus the SDR has not fulfilled the promise that it held at the time of its creation. A national central bank does not seek the approval of parliament to make liquidity available to the financial system in the middle of a financial crisis; in most countries such attributes are already embedded in the existing legal framework. Hence the compelling need to overhaul and simplify the system under which the Fund may issue SDRs under exceptional circumstances, such as during times of crisis.⁶

When this idea was first put forward, in the early 1980s, concerns were raised about the possibly inflationary implications of such liquidity injections; however, international inflation was a serious problem at that time in ways that it clearly is not today, and measures could be introduced to safeguard against this. Furthermore, the size, integration and complexity of financial markets today dwarfs what we had in the 1980s, and the costs of an unresolved systemic crisis today are too high to even contemplate. This, of course, would involve giving the Fund considerably more leverage vis-à-vis the policies of those countries willing to have much larger potential access to its resources. Nobody questions the right of central banks to have a major say over the prudential and regulatory environment underlying the activities of the commercial banks under their jurisdiction; it is seen as a legitimate counterpart of its lender-of-last-resort functions. A much richer Fund would, likewise, have to have much stronger leverage and independence.

This says nothing, however, about the kinds of policies that the IMF advocates and whether these are generally welfare enhancing or not. A number of emerging

⁵ Truman, Edwin M. 2001. “Perspectives on External Financial Crises,” Institute for International Economics, December.

⁶ Regular SDR allocations to supplement the systemic demand for “owned reserves” were also periodically recommended by some IMF members to enhance the role of the SDR. The IMF could also encourage the use of the SDR as a unit of account – invoicing of international trade in commodities, for instance, or for use in balance of payments statistics.

market crises in recent years (e.g., Asia in 1997, Russia in 1998, Turkey and Argentina in 2001, Greece in 2010 and thereafter, to name a few) have generated heated debates as to whether the IMF is part of the problem, part of the solution or a bit of both. Whatever the justice of these respective positions, it is clear that giving the Fund potential access to a much larger volume of resources would have to be accompanied by significant internal reforms, both in terms of the content of the policies it advocates, as well as its internal management. Both areas have received scant attention since 2009, with the focus having largely been on the types of facilities through which resources are made available and the bureaucratic underpinnings of each.

It is becoming increasingly clear, however, that at least some of the instances of unsuccessful intervention by the IMF since the late 1990s may reflect less a lack of resources and more old fashioned policy mistakes, arising from the Fund's own intellectual biases, its particular views as to what makes for good economic policy and the vagaries of its internal decision-making processes, which suffer from a number of flaws.⁷ Thus, if the Fund is to be given more of the functions of a lender of last resort, then it needs an expanded philosophy, bringing into the center of its programs (and its conditionality) the kinds of concerns and policies that, so far, it has only tended to espouse in theory. In public speeches the Fund's top managers speak of transparency, social protection, good governance and "high quality growth," but, by and large, they have not yet managed to incorporate these laudable aims into IMF program design.⁸ Indeed, it is becoming increasingly evident that only programs perceived as meeting actual needs and as being just and equitable in their objectives can hope to engage the commitment of citizens of countries around the world upon whom successful implementation ultimately depends. By this yardstick, most IMF programs yield distressingly disappointing results. Not surprisingly, the Fund has often found itself at the center of ineffective programs, blamed for the failure of its policy prescriptions.

A recent example will be useful to illustrate this point. Its financial power and the widely acknowledged professionalism of its staff notwithstanding, the IMF's *Global Financial Stability Report* of April 2006 set out an enthusiastic vision of the wonders of efficient financial markets:

⁷ To take an example, in Russia the IMF disbursed some US\$22 billion of debt between 1992 and 1999, with a mixed record of reforms at best. Indeed, six years of IMF involvement imploded in August 1998 with debt default and the collapse of the ruble. Simultaneously the Russian population endured a more pronounced decline in living standards than was warranted by the elimination of some of the distortions of the central plan, undermining public support for market-oriented reforms and, as Anne Applebaum convincingly argues, fueling the resentments and populism that are in full evidence today. Applebaum, Anne. 2018. "A Warning from Europe," *The Atlantic*, October, pp. 53–63.

⁸ And, under the leadership of Christine Lagarde, the former IMF managing director, they also gave growing attention to gender equality, climate change and the dire consequences of corruption.

There is growing recognition that the dispersion of credit risk by banks to a broader and more diverse group of investors . . . has helped to make the banking and overall financial system more resilient . . . The improved resilience may be seen in fewer bank failures and more consistent credit provision . . . It is widely acknowledged, meanwhile, that holding of credit risk by a diverse multitude of investors increases the ability of the financial system as a whole to absorb potential shocks . . . Beyond risk diversification, the unbundling and active trading of risk, including through credit derivative markets, seem to have created an efficient, timely, and transparent price discovery process for credit risk . . . All these structural changes, taken together, have made financial markets more flexible and resilient. As former U.S. Federal Reserve Chairman Alan Greenspan said: “These increasingly complex financial instruments have contributed to the development of a far more flexible, efficient, and hence resilient financial system than the one that existed just a quarter-century ago.”⁹

While, after the 2008–2009 global financial crisis several years later, the IMF was in the forefront of critical assessments of what had gone wrong, one could argue that it was too late. The damage had been done. This led many critics to argue that we don’t need an IMF that will act as a cheerleader for conventional wisdom, or that will see its role mainly in terms of buttressing the interests of its largest members. Ideally, we need an IMF that will admonish, alert, caution, illumine and, in general, protect its membership – and thereby the global economy – from flawed thinking, from unwarranted faith – in this particular case – in the self-correcting nature of financial markets or in the ability of credit derivatives to “provide valuable information about credit conditions and increasingly set the marginal price of credit.”¹⁰

In response to a question raised by Queen Elizabeth during a visit to the London School of Economics about how economists had failed to anticipate the crisis, a group of them sent her a letter saying: “In summary, your majesty, the failure to foresee the timing, extent and severity of the crisis and to head it off, while it had many causes, was principally a failure of the collective imagination of many bright people, both in this country and internationally, to understand the risks to the system as a whole.”¹¹

⁹ International Monetary Fund. 2006. *Global Financial Stability Report*, Washington DC, pp. 1, 51.

¹⁰ “The IMF’s ability to correctly identify the mounting risks was hindered by a high degree of groupthink, intellectual capture, a general mindset that a major financial crisis in large advanced economies was unlikely, and incomplete analytical approaches . . . Bilateral surveillance of the US economy failed to warn the authorities of the pertinent risks and policy weaknesses. The IMF often seemed to champion the US financial sector and the authorities’ policies, as its views typically paralleled those of the US Federal Reserve” is how the Fund’s Independent Evaluation Office put it in an assessment made of the organization’s role in anticipating the global financial crisis. See “Watchdog Says IMF Missed Crisis Risks,” *Financial Times*, February 10, 2011.

¹¹ “Queen Told how Economists Missed the Financial Crisis,” *Daily Telegraph*, July 26, 2009.

Easing the task of evolving new paradigms of intervention, a wealth of illuminating material already exists in the field. A perusal of Sen's *Development as Freedom*,¹² for instance, provides a compelling list of the ingredients for a successful approach to economic development, making clear to the reader that fiscal austerity is not the sole remedy available. Indeed, as former UK Chancellor of the Exchequer Gordon Brown noted in the middle of a wave of emerging market crises in 2001, the assumption that "just by liberalizing, deregulating, privatizing and simply getting prices right, growth and employment would inevitably follow" has "proved inadequate to meet the emerging challenges of globalization."¹³ Eighteen years later this assessment remains broadly on target.¹⁴

A broadening of the policy content of Fund programs, to meet the challenges of Sen's much wider vision of successful development, to be credible, would need to be accompanied by a structural reorganization, whereby the Fund's shareholders assigned it a greater measure of intellectual independence, making it at the same time more accountable for the consequences of its decisions. It would seem desirable to separate the Fund's surveillance activities from its decisions in respect of lending, so that glaring conflicts of interest might be avoided. Gordon Brown's call for a "more transparent, more independent and, therefore, more authoritative" Fund is certainly a step in the right direction, and his call for new approaches to sovereign debt restructuring and the implementation of code standards for fiscal, monetary and other policies, to diminish the likelihood of future crises, remains relevant, notwithstanding the progress made in these areas in recent year. In these discussions the focus should overwhelmingly shift to crisis prevention rather than crisis resolution.

But even an updated set of policy prescriptions is unlikely to suffice without corresponding reforms in the internal workings of the organization aimed at improving its effectiveness, representativeness, legitimacy and accountability. As a preliminary measure, the international community might finally break with the convention adhered to since the IMF's creation, which establishes that its managing director must be European. (A similar recommendation applies to the World Bank, whose president has traditionally been a US citizen). The organization is too important and

¹² Sen, Amartya. 1999. *Development as Freedom*. Oxford, Oxford University Press.

¹³ Speech given by Chancellor of the Exchequer Gordon Brown to the Federal Reserve Bank of New York, November 16, 2001.

¹⁴ Many IMF staff and country authorities might not necessarily object to this more expansive view of the Fund but might ask: "with what instruments will these additional concerns be addressed by the Fund?" The experience with cross-conditionality in Fund programs has been mixed, with too many conditions sometimes being counterproductive. In this respect the issue of "the Fund's comparative advantage" in dealing mainly with macroeconomic issues often arises. But, in our view, given the integrated nature of the global economy and the interactions between seemingly purely macroeconomic issues and other factors outside the traditional Fund mandate (e.g., the environment, income inequality), the solution may not be to stick to its traditional comparative advantage, but to expand its expertise and engagement beyond, for instance, analyzing issues of fiscal policy sustainability.

its mistakes too socially costly for the nationality of the candidate for managing director to be the determining factor in assessing suitability for the job.

The unseemly negotiating process that is entered into every few years as efforts are once more set in motion to locate the most suitable candidate from a specific country is inherently offensive to the peoples of those countries who have had to endure the rigors of IMF austerity, not to mention that it exemplifies the very inefficiency that IMF officials are quick to condemn in dealings with the Fund's member countries. (The practice reflects the position of the economic powers emerging from World War II and could not be justified under the ethical principles and best-practice management codes of the world of today.) Another desirable reform along these lines would be to accord the Managing Director a non-renewable fixed term of service, thereby freeing him or her from the conflict that may otherwise result between the interests of those who hold the appointment in their hands, and the countries which it is his/her mission to serve: in this way, the MD may never feel pressured to place personal interest above the function of the office.¹⁵

On this question of the controlling interest in the organization, it may be noted that the salaries of the Fund's MD and of its entire staff (as well as other administrative expenditures) are financed precisely by the interest paid by taxpayers in countries (mainly in the developing world) that are users of Fund resources. Whereas IMF lending operations have no budgetary implications for members such as the United States and the European Union – indeed, they earn a return on their SDR reserve assets – borrowing countries can end up paying billions of dollars in interest charges on previous Fund loans. Such a circumstance alone, one would think, might go some way to counter the existing notion that, because the large shareholders “contribute” more to the organization, they are in some manner

¹⁵ In a piece in the *Financial Times* published in 2009, Jorge Castaneda, Mexico's former foreign minister, and Augusto López-Claros made the following proposal: “Let's do away with the job of the MD and replace it with a Supreme Management Council, a group of nine wise men and women appointed for life (or until a suitable retirement age). Think of all the benefits. First, they would not be beholden to the interests of the richer members and would operate with independence of mind and the interests of the international community at heart. Second, as members retired they would be replaced with younger blood and the council would thus become a repository of decades of relevant experience on the issues that matter for management of the global economy. Contrast this with the present system where each new MD has to spend a couple of years catching up before the pressures of work or other factors tempt them to bail out. Both Horst Köhler and Rodrigo Rato – the two preceding MDs – left before the expiration of their five-year terms. Nine members working in a spirit of consultation, not worried about the length of their tenure, would bring more mental firepower to the job than an individual. Unanimous decisions would be favoured but, as needed, majority voting would do. Instead of having central bank governors and finance ministers nominate their own favourite peers, the council could be filled via international recruitment. Such a system would go a long way towards strengthening the much-diminished credibility of the IMF, at a time when that scarce asset is most in need.” “Nominate Nine Wise Men and Women to Restore IMF's Credibility,” *Financial Times*, May 4, 2009.

entitled to oversee its operations as well, particularly since they, in any event, already have the largest voting shares at the IMF Board.

This leads to a second observation: namely, that increasingly there is a tendency for the markets, borrowers and other economic agents to view the Fund as subservient to its main shareholders, a proxy of G7 foreign policy or, worse, as has been noted by some scholars, “a branch of the US treasury” or, more recently, in the context of the euro crisis, the European Central Bank.¹⁶ Such a perception is deeply damaging to the organization’s ability to act effectively. It encourages countries to gauge their relationship with the IMF in terms of short-term political advantage rather than lasting economic gain.

The present organizational structure has implications too for the Fund staff, who cannot under the present regime be held accountable for policy miscalculations. Deprived of full freedom to make intellectually independent assessments, inasmuch as the controlling influence rests with the large shareholders, who, as indicated, may be answerable to various “strategic” (meaning political) interests of their own, they are constrained to represent themselves merely as executors – not a role calculated to enhance their standing with their counterparts in the Fund’s member countries. And to the extent that they are viewed by the countries concerned as mere functionaries, their ability to act more generally as advocates for change will be impaired.

Emerging from the 1944 Bretton Woods Conference at which both the IMF and the World Bank were created, John Maynard Keynes expressed the view that: “As an experiment in international cooperation, the conference has been an outstanding success.”¹⁷ The world has changed beyond recognition in the meantime, and, with the emergence of one global economy, the case for an institution that will help further the cause of international cooperation and be identified with the promotion of economic policies supportive of improved efficiency and equity has only become stronger. Conditions now seem propitious for the convocation of a global conference of heads of state to consult upon the policy and institutional requirements for a more stable world financial system in the era of globalization. How to promote better ownership of programs, and how to engage more effectively in the decision-making process with the countries most affected by such crises, are clearly two central questions that would need to be addressed. Indeed, the time may be fast approaching for a new “Bretton Woods” conference aimed at turning the two premier development organizations into more flexible and effective instruments for the promotion of global welfare.

¹⁶ See Krugman, Paul. 2002. “Argentina’s Crisis Is a U.S. Failure,” *International Herald Tribune*, January 21.

¹⁷ See López-Claros, A. “Sixty Years after Bretton Woods: Developing a Vision for the Future.” http://augustolopezclaros.com/wp-content/uploads/2018/06/BrettonWoods_RomeSummary_Jul2004_A4.pdf?x28456.

THE 2008–2009 FINANCIAL CRISIS AND WHAT IT SAID ABOUT THE
WORLD'S FINANCIAL SYSTEM

The world's financial system unraveled very quickly after the collapse of Lehman Brothers in September 2008, the rescue of AIG and other interventions in the United States and Europe. A large increase in uncertainty linked to sharp swings in risk, as banks witnessed a collapse in the value of their assets, raised questions about the solvency of major participants in the global financial markets. As market volatility surged there was a shift to high-quality assets, with yields on liquid government securities falling quickly. The virtual disappearance of credit led to rapid and chaotic attempts to reduce debt levels and the sale of liquid assets at rapidly declining prices precipitated a downward spiral in equity markets worldwide. At the outset of the crisis there was short-lived optimism that emerging markets would be spared the worst effects of the crisis. But emerging markets were hit as well, highlighting, convincingly, the highly integrated nature of global financial markets.¹⁸

Initially many felt that a combination of a strong reserve position and low exposure to toxic assets would shelter them from the crisis, but as financing dried up they came under heavy pressure as well. Particularly hard hit were countries that had relied heavily on foreign investments or debt to finance large current account deficits; there was a sharp reversal of capital inflows. In the first year of the crisis gross capital flows plunged by about 90 percent. In parallel to these financial market developments, there was a vast synchronized collapse of international trade, which exceeded that seen following the crisis of 1929, reflecting the close integration of global supply networks. In the United States unemployment rose by some 8 million people and, by 2015, more than 9 million homes had been lost to foreclosures. There seems to be fairly broad agreement as well, as recently noted by *The Economist*, that the crisis “turbocharged today’s populist surge, raising questions about income inequality, job security and globalization.”^{19,20}

¹⁸ For a detailed account of the crisis, see the April 2009 issue of the IMF’s World Economic Outlook. International Monetary Fund. 2009. *World Economic Outlook: Crisis and Recovery*, April, Washington, DC.

¹⁹ *The Economist*, lead editorial, September 8, 2018.

²⁰ *The Financial Crisis Inquiry Report* (2011) issued by the National Commission on the Causes of the Financial and Economic Crisis in the United States stated: “We conclude this financial crisis was avoidable. The crisis was the result of human action and inaction, not of Mother Nature or computer models gone haywire. The captains of finance and the public stewards of our financial system ignored warnings and failed to question, understand, and manage evolving risks within a system essential to the well-being of the American public. Theirs was a big miss, not a stumble. While the business cycle cannot be repealed, a crisis of this magnitude need not have occurred. To paraphrase Shakespeare, the fault lies not in the stars, but in us.” https://archive.org/stream/355893-the-financial-crisis-inquiry-report-jan-2011/355893-the-financial-crisis-inquiry-report-jan-2011_djvu.txt.

The authorities took extraordinary measures intended to stabilize markets, including: massive provision of liquidity, the takeover of several institutions perceived to be weak, the extension of deposit insurance, the introduction of legislation in the United States to use public funds to buy troubled assets from banks, the infusion of capital to the banking system which, *de facto*, turned the US and other governments into major shareholders of large portions of the banking system, and the announcement by the United States of an US\$800 billion package to directly stimulate borrowing by homebuyers and small businesses, among others. Between December 2007 and October 2010 the Federal Reserve provided temporary swap lines to a group of 14 central banks amounting to some US\$4.5 trillion. This was part, according to IMF estimates, of the US\$12 trillion in interventions in the immediate aftermath of the crisis.²¹ In addition, prodded by the IMF, the authorities also announced large programs of fiscal stimulus that were expected to lead to a huge jump in public indebtedness over the next several years.²²

There are several reasons why we should worry about the remarkable increases in public debt that followed the crisis. One has to do with the constraints on government policy that high levels of debt normally imply. With debt levels in many developed and advanced countries in excess of 100 percent of GDP, governments are less able to invest in education, infrastructure and other productivity-enhancing areas, to say nothing of moving to a lower-tax environment. This leads to reduced “fiscal space” – also entailing a crowding out of private investment – and undermines economic growth. High debt service becomes an important constraint on the ability of governments to respond to pressing social and other needs, including possibly responding to other unforeseen crises in the future. For example, in the case of the US, a recent Congressional Budget Office (CBO) study (2018) shows that the federal government may soon pay more annually to service debt interest payments than on the military or Medicaid. The federal deficit is rising more quickly due to recent tax cuts, and rising interest rates make borrowing to finance such a deficit more expensive. The government may see an erosion in its capacity to complete mundane tasks such as infrastructure repair or its ability to respond to emergencies

²¹ See the 2010 paper by Stijn Claessens and his colleagues at the IMF, which identifies more than US\$12 trillion of interventions in the advanced economies alone, including capital injections, purchases of assets and lending by the treasury, guarantees, liquidity provisions by central banks and upfront government financing. Claessens, Stijn, Giovanni Dell’Ariccia, Denis Igan, and Luc Laeven. 2010 “Lessons and Policy Implications from the Global Financial Crisis.” IMF Working Paper, WP/10/44, Washington, DC.

²² Even the IMF, the world’s traditional guardian of sound public finances, came out strongly in favor of fiscal loosening, arguing through its Managing Director that “if there has ever been a time in modern economic history when fiscal policy and a fiscal stimulus should be used, it’s now” and that it should take place “everywhere where it’s possible. Everywhere where you have some room concerning debt sustainability. Everywhere where inflation is low enough not to risk having some kind of return of inflation, this effort has to be made.” Press briefing by Dominique Strauss-Kahn, IMF Managing Director, November 15, 2008, available at www.imf.org/external/np/tr/2008/tr08115.htm.

such as a recession. According to the CBO, interest payments will hit US\$390 billion in 2019 – 50 percent higher than in 2017 – and are on track to hit US\$900 billion within a decade, a figure that highlights the geopolitical implications of high public debt. Faced with onerous budget constraints, the United States may no longer be able to underwrite the global security arrangements that have underpinned half a century of buoyant economic growth. In such scenarios, instead of worrying about reforms aimed at boosting productivity, governments increasingly have to worry about debt dynamics, market sentiment, credit ratings and where the money will come from to deal with the next crisis.²³

Nor are emerging markets exempt from the risks associated with high debt. The level of debt that is regarded as prudent in emerging markets – about 40 percent of GDP – is generally considerably lower than in the advanced economies, with their much deeper financial markets and better track records of debt management. Emerging markets tend to have lower revenue ratios; they sometimes are more dependent on financing by nonresidents and have a much more uneven history of debt defaults. According to the IMF, countries such as Brazil, India, Pakistan, Poland, Turkey and Thailand, among others, already have debt levels above 40 percent of GDP, sometimes substantially so.

Second, in a large number of the bigger economies there are unfavorable demographic trends that are resulting in the aging of populations. Increases in life expectancy combined with declining fertility will have systemic implications for the sustainability of pension systems and the ability of governments to remain faithful to the key elements of the social contract. In some countries (e.g., Italy) unfunded pension liabilities exceed 100 percent of GDP, raising questions about the sustainability of pension systems and the likely need to significantly increase the retirement age as a way of propping up their financial position. The cost of pensions, health care and other social benefits is projected to rise rapidly over the next several decades. In the United States, for instance, 78 million people were born between 1946 and 1964 (the “baby boomers”) and this cohort started retiring in 2011. In France and Germany pension and health spending by 2050 is expected to be well above the 17 percent of GDP registered in 2000.

But there is more. Climate change will be a feature of the global environment in the years ahead (see Chapter 16). Increases in sea levels could well require heavy investments in infrastructure, such as sea barriers. As many regions become drier,

²³ In *This Time Is Different: Eight Centuries of Financial Folly* (Princeton, NJ, Princeton University Press, 2009, p. 292) Carmen Reinhart and Kenneth Rogoff state: “All too often, periods of heavy borrowing can take place in a bubble and last for a surprisingly long time. But highly leveraged economies, particularly those in which continual rollover of short-term debt is sustained only by confidence in relatively illiquid underlying assets, seldom survive forever, particularly if leverage continues to grow unchecked. This time may seem different, but all too often a deeper look shows it is not.”

outlays for irrigation networks and other investments to deal with water scarcity will be needed. In some cases it may be necessary to resettle populations no longer able to live in low-lying areas; roughly 1.2 billion people live within 100 km of the shore. The increasing incidence of extreme weather events (such as we saw in the summers of 2017–2018 in the Caribbean and the southern United States) will also require budgetary outlays that will, by definition, be difficult to plan for. To the extent that weather-related catastrophes put a dent in economic growth, there will be adverse repercussions for government revenue as well, putting additional pressures on budget deficits.

The risk, obviously, is that markets will not wait until a government is insolvent before significantly increasing the costs of borrowing. In 2010 we saw how systematically destabilizing the prospect of default by a small country such as Greece could be; how losses of confidence in the debt-carrying capacity of the country can, through an increase in risk premia, dramatically reduce the government's room for fiscal maneuver. The point here is that the fiscal consequences of climate change and population aging could at some point interact with financial markets in highly destabilizing ways, which could significantly worsen an already difficult fiscal situation. To make matters worse, there has also been a huge increase in private sector indebtedness since 2009. According to the Institute of International Finance's July 2018 *Global Debt Monitor*:

The global debt mountain topped \$247 trillion in Q1 2018, with the non-financial sector accounting for \$186 trillion of that. Global debt-to-GDP exceeded 318% in Q1 2018—the first quarterly increase since Q3 2016. Borrowers reliant on variable-rate debt are most at risk—especially non-U.S. borrowers hit with higher USD funding costs. EM USD refinancing risk is also on the rise: almost \$1 trillion in USD-denominated bonds/syndicated loans matures by end-2019.

There are credible economists (Nobel laureates even) who argue that the global financial system is inherently unstable, that there is no guarantee that it will not crash in the future as a result of abuse, misbehavior or other factors unrelated to those that caused the last crisis. Robert Shiller, a leading observer of financial markets and one who issued repeated warnings about the real estate bubble in the United States, thinks that “capitalist economies, left to their own devices, without the balancing of governments, are essentially unstable.”²⁴ There is no certainty, thus, that we will not again face what we saw in 2008: the sharp contraction of equity markets as a result of sales of liquid assets at rapidly collapsing prices and the drying up of credit lines to financial and non-financial institutions, all of it followed by growing unemployment, falling incomes and a widening of budget deficits. What makes this a nightmare scenario is that the ability of governments to prevent an

²⁴ Shiller, Robert. 2009. “A Failure to Control the Animal Spirits,” *Financial Times*, 9 March.

economic depression through a variety of interventions, such as those deployed in 2008–2009, will be very much a function of the health of their own finances and their being on a sustainable path. Absent this, what is left is the Latin American scenario of the 1980s: debt default and potentially very high inflation and a lost decade of growth, except that this time around the impact would be global and highly destabilizing. The point here is that there is no guarantee that the financial system might not itself become a wholly independent source of pressure on government resources, increasing the vulnerability of already strained long-term budgets.

The sooner we return to cautious management of the world's public finances, the sooner will we be in a position to respond effectively to the crises that, surely, will remain a feature of our economic landscape for years to come. More importantly, sound public finances empower governments to move away from day-to-day cash management in the middle of a crisis, to more proactive policies aimed at boosting the quality of education, improving infrastructure and spending more in competitiveness-enhancing areas.

The question that all of these recent developments raise is: can we immunize the global economy against a future crisis? And what is the role of regulation, and the kinds of monitoring mechanisms that are developed by organizations such as the IMF? This is a vast subject, and here we will be brief. We begin by outlining some problems and possible solutions.

Our model of financial regulation before the crisis was misconceived. Loan brokers had few incentives to assess risk that they sold on to others more realistically. Investors relied too heavily, in assessing asset quality, on sometimes optimistic analyses by credit rating agencies, who were themselves sometimes plagued by conflicts of interest. Regulation and supervision were too focused on firms and not sufficiently mindful of systemic risk. The shadow banking system – investment banks, mortgage brokers, hedge funds – were (and remain) lightly regulated by numerous agencies sometimes working at cross purposes. The assumption was that only deposit-taking institutions needed to be regulated and supervised, thereby encouraging “financial innovation” in the rest of the system (what investor Warren Buffet referred to as “financial weapons of mass destruction”), which, the thinking went, would act under a regime of self-imposed market discipline. Obviously, the system had (and still has) a huge amount of moral hazard built in.

On the consumers' side, it is known that financial markets intrinsically suffer from informational asymmetries and overall imbalances of power between individuals and financial institutions. Market failures allow the transfer of risk to consumers during the rent-seeking transactions performed by financial service providers. The financial crisis showed that the lack of regulatory frameworks that required transparency in the delivery of financial products and the sound assessments of consumers' affordability and suitability, among others, contributed to inflating wildly those intrinsic risks. As a result, irresponsible lending practices characterized by the mis-selling of subprime mortgages, complex financial

products and promotion of over-indebtedness were pointed to as the main causes of the financial collapse.²⁵

We need to move to a system where, as noted by the IMF, “all activities that pose economy-wide risks are covered and known to a systemic stability regulator with wide powers.”²⁶ This would include investment banks, special investment vehicles selling collateralized debt obligations (CDOs) and insurance companies selling credit default swaps. Disclosure obligations within this broader circle should then allow the authorities to determine relative contributions to systemic risk and to differentiate the scope of necessary prudential oversight. For instance, one could discourage the emergence of mega-institutions, via capital ratios that increase with the contribution to systemic risk. Unfortunately, the crisis brought about a sharp increase in the concentration of the financial system.²⁷ It would also be desirable to mitigate pro-cyclical behavior, for instance by raising minimum capital requirements during periods of economic expansion and reducing them during periods of contraction or slowdown. A similar approach could be taken for leverage – introduce a supplementary leverage ratio for banks, to discourage excessive borrowing, which at times can border on recklessness, as we saw in the period leading to the 2008–2009 crisis. There is also a need to reform the system of incentives for employee compensation, making it more risk based and consistent with the long-term objective of sustainably maintaining the firm. Or we could delink compensation from annual results and link it more to medium-term return on assets.²⁸

The IMF’s call for greater transparency about techniques, characteristics and other dimensions of valuation of complex financial instruments, more information about the over-the-counter derivatives markets and clearing arrangements in ways that make it possible for regulators to aggregate risks for the system as a whole is a

²⁵ Melecky, Martin and Sue Rutledge. 2011. “Financial Consumer Protection and the Global Financial Crisis,” MPRA Paper 28201, University Library of Munich, Germany.

²⁶ International Monetary Fund. 2009. “Initial Lessons of the Crisis,” Washington DC, p. 3.

²⁷ According to a JP Morgan Chase 2015 study on the financial crisis, “Since 1992 the total assets held by the five largest U.S. banks has increased by nearly fifteen times! Back then, the five largest banks held just 10 percent of the banking industry total. Today, JP Morgan alone holds over 12 percent of the industry total, a greater share than the five biggest banks put together in 1992. Even in the midst of the global financial crisis, the largest U.S. banks managed to increase their hold on total bank industry assets. The assets held by the five largest banks in 2007 – \$4.6 trillion – increased by more than 150 percent over the past 8 years. These five banks went from holding 35 percent of industry assets in 2007 to 44 percent today.” <http://theeconomiccollapseblog.com/archives/tag/jpmorgan-chase>.

²⁸ According to *The Economist* (September 8, 2018), “The salaries for high-ups remain phenomenal. In 2017 AIG’s new boss, Brian Duperreault, was paid \$43 million, Mr. Dimon \$29.5 million, Goldman Sachs’ Lloyd Blankfein \$24 million and Bank of America’s Brian Moynihan \$23 million.” The total compensation of these four bankers thus exceeds by 61 percent the total annual budget contributions received from the UN budget by UN Habitat, UNHCR (the Refugee Agency) and UN Women, three important UN agencies doing vital work in a number of areas.

sensible recommendation. Central banks need to broaden their definition of “financial stability” from an often exclusive concern with stabilizing inflation to looking at asset price increases, credit booms and debt. This is to avoid the buildup of huge risks that escape the notice of the supervisory authorities, particularly in the shadow banking system. It matters a great deal whether a boom is associated with high borrowing. For instance, the dotcom bubble of the late 1990s was associated with limited indebtedness and thus its bursting had limited impact on economic growth. In the latest crisis, asset price declines greatly affected the balance sheets of financial institutions.

In addition, consumer protection needs to be a focus of the strategic plan of every central bank. The assessment of risk should go beyond financial stability to also pay prominent attention to societal risks related to inadequate practices from regulated entities. A step beyond would be setting the agenda to include financial inclusion efforts to enable access to the financial services to the 1.7 billion unbanked individuals around the globe.²⁹

WHAT ABOUT THE INTERNATIONAL MONETARY SYSTEM?

Beyond building a better regulatory framework that addresses many of the vulnerabilities revealed by the 2008–2009 financial crisis, there are other reforms that are very important and that pertain to other aspects of the operation of the international monetary system. We will address three aspects of this vast subject: (1) the need for reforms in the area of multilateral peer review of national policies – also known as “surveillance”; (2) aspects of the management of global liquidity and risks stemming from the absence of a lender of last resort for the international monetary system; and (3) the governance of the international monetary system and the extent to which flaws in the system are undermining the credibility of the system itself by providing perverse incentives for some countries to create competing structures.

Surveillance

The problem here, as noted earlier, is that the IMF has very little real leverage to influence the policies of countries not borrowing from it. The process of surveillance is deeply asymmetric. The Fund is able to extract numerous concessions (mainly from developing countries) as part of its loan negotiations, with all of them, at least in theory, intended to improve the policy framework and make it more sustainable. However, it is usually the bigger countries that do not borrow that pose systemic risks to the global economy, as we saw during the last crisis. The IMF

²⁹ On this, see Findex 2017: <https://globalfindex.worldbank.org/>.

may feel strongly that a systemically important country is pursuing unsustainable economic and financial policies, but it has no effective way to induce the country to change course. The question here is: what to do?

One option would be to amend Article IV of the IMF Articles of Agreement (“Obligations Regarding Exchange Arrangements”) to broaden the focus to all policies that have an impact on stability of the global economic, monetary and financial system. The IMF already assesses a broad range of economic and financial policies among its members, but it could be more forceful in the public identification of policies that are a danger to the stability of the global financial system. On the general obligations of IMF members, Article IV (Section 1) states:

Recognizing that the essential purpose of the international monetary system is to provide a framework that facilitates the exchange of goods, services, and capital among countries, and that sustains sound economic growth, and that a principal objective is the continuing development of the orderly underlying conditions that are necessary for financial and economic stability, each member undertakes to collaborate with the Fund and other members to assure orderly exchange arrangements and to promote a stable system of exchange rates. In particular, each member shall: (i) endeavor to direct its economic and financial policies toward the objective of fostering orderly economic growth with reasonable price stability, with due regard to its circumstances; (ii) seek to promote stability by fostering orderly underlying economic and financial conditions and a monetary system that does not tend to produce erratic disruptions; (iii) avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members; and (iv) follow exchange policies compatible with the undertakings under this Section.”

And specifically on the issue of surveillance, it states: “the Fund shall oversee the international monetary system in order to ensure its effective operation, and shall oversee the compliance of each member with its obligations under Section 1 of this Article.³⁰ The 2008–2009 crisis was obviously, as already noted, a glaringly painful example of the Fund failing in the oversight role entrusted to it in Article IV, with dramatic consequences for global economic welfare.

IMF members could also amend Article VI (“Capital Transfers”) to give the IMF jurisdiction over capital account transactions, to monitor, assess and discuss capital flows with members. This would appear to be necessary given the magnitude of capital flows today and the influence that these have on exchange rate movements

³⁰ The requirements for Amendments of the Articles are specified in Article XXVIII. It states in part: “When three-fifths of the members, having eighty-five percent of the total voting power, have accepted the proposed amendment, the Fund shall certify the fact by a formal communication addressed to all members.”

(and hence the real economy), which by now dwarf by several orders of magnitude those linked to current account flows, such as merchandise trade and service-related transactions.

One way to make the surveillance process more symmetric would be for the IMF to adopt norms on such variables as current account deficits, real exchange rates, capital inflows and outflows, changes in the composition of reserve assets, inflation, budget deficits and debt levels, to name a few, and establish thresholds that, if breached, would trigger consultations and various remedial actions. Candid assessments of policy failures in systemically important countries should be made public. In practice these norms would reward countries that stayed within them by, for instance, giving them automatic qualification to various liquidity facilities. As part of this system, punitive measures against countries in breach of them, such as financial penalties, waiving of voting rights, and depriving them of their share of SDR allocations could be contemplated, quite independently of whether the country in question was or was not using the Fund's resources. Obviously, it is not enough to have voluntary or so called indicative norms.

The EU has tried these at various times through, for instance, the introduction of Maastricht criteria for levels of public indebtedness, or the Stability and Growth Pact for other, mainly fiscal, variables brought about in the late 1990s that were supposed to steer members' policies within acceptable thresholds. In the absence of meaningful penalties, however, countries simply violated the rules with glaring impunity. Given the dire real economy costs of globally systemic crises, pure volunteerism clearly will not work. In this respect, we are proposing to bring into management of the global financial system the same kind of binding mechanisms that we are advocating in the area of peace and security. It is more sensible to complement the creation of, for instance, a United Nations International Peace Force to ensure that the UN is actually able to deliver on its peace and security responsibilities, with international monetary arrangements that provide adequate insurance against systemic financial crises, the impact of which can be devastating, impoverishing and politically calamitous.

In this respect, it would also be desirable to develop globally consistent exchange rate norms, bearing in mind countries' key structural characteristics. Under enhanced surveillance practices, there would be stricter review of policies that contribute to volatility in foreign exchange markets. This is an issue that has acquired particular importance in recent decades because sharp swings in exchange rates, delinked from economic fundamentals, can be very destabilizing for market participants, especially the business community. Exchange rate volatility makes it very difficult for businesses that now operate at the global level in respect of the markets for their products and their sources of supply to assess costs and to plan for the future in the context of a globalized economy. We are also of the view that it would be worthwhile to consider the introduction of a Tobin-like tax as a stabilizing mechanism to dampen speculation. As noted in Chapter 12, the revenue thus

generated could be an important source of development finance and could also go some way to buttress IMF resources.

Global Liquidity

The aim of reform in this area is to turn the IMF into a global lender of last resort, ready to act in a rules-based way, as opposed to the ad hoc arrangements that have characterized policy interventions in times of crisis, such as the 2008–2009 financial crisis. Some might argue that the global economy already has a lender of last resort: the US Federal Reserve; and the temporary liquidity swap arrangements that were introduced in 2008 did much to prevent the collapse of the financial system in countries desperately in need of dollar credits.³¹ While indeed very clearly helpful, such arrangements were ad hoc and were limited to 14 central banks (not including those of China, Russia and India), with the choice dictated by the US monetary authorities, presumably involving an element of “national interest” criteria, such as the exposure of US banks to those countries. For those countries lucky enough to be part of this lifeline it was greatly beneficial, but not otherwise. This is obviously not ideal; no individual IMF member, no matter how powerful, should have to play the role of lender of last resort to the global economy. More worryingly, it is not clear that such interventions would work in a future crisis, since US legislators might wish to interfere and politicize the process (in a way that did not happen in 2008 because the Federal Reserve acted with great discretion), depriving it of its first and most important attribute, which is speed and automaticity.

In any case, reforms in this area should also introduce protections to limit moral hazard. The idea is to put in place well-funded crisis financing mechanisms available to all IMF members as an alternative to precautionary reserve accumulation, which is what countries have done in recent decades in a very substantial way. There are enormous inefficiencies in the accumulation of war chests denominated in hard currencies as a way of providing a protective barrier during periods of market volatility. There is an interesting analogy here between the need for reserve accumulation in the international financial system and the absence of collective security mechanisms, where almost 200 independent countries worldwide feel the need to

³¹ Two additional aspects worth keeping in mind are: (1) The United States established the Exchange Stabilization Fund (ESF) in the 1930s enabling credit line support to crisis-hit foreign governments. The US Federal Reserve can also provide currency swaps to foreign central banks through its System Open Market Account (SOMA). During the 2008 financial crisis resort to SOMA was intensive, and more than US\$500 billion was provided to foreign central banks at the height of the crisis. Activation of the US Treasury’s ESF and the Fed’s SOMA does not require US congressional approval and (2) important new mechanisms of last resort liquidity supplementation (LORs) have also appeared in the system; i.e., China increased its currency swap line to Argentina to US\$20 billion in 2018, and other regional reserve supplementation agreements were augmented in the EU and Asia–Chiang Mai, among others. (We are indebted to our colleague Guillermo Zoccali for bringing these facts to our attention.)

equip their respective armies and put in place various security establishments that end up involving excessive defense spending. As part of its efforts to improve global liquidity management, the IMF should be allowed to mobilize additional resources by: tapping capital markets, issuing bonds dominated in SDRs, doing emergency SDR allocations under considerably more streamlined procedures, and expanding its program of loan/swap arrangements with key central banks and, as noted previously, allocate regularly SDRs to supplement the demand for “own reserves.”³²

Governance

Unlike the United Nations, both the World Bank and the IMF were established with a system of weighted voting within their governance structures. There is no evidence that the one country–one vote system adopted for the General Assembly at the San Francisco Conference in 1945 was ever contemplated at the Bretton Woods Conference that launched these organizations in 1944. Weighted voting has served them well, has contributed to boosting their credibility, and has been reflected in the importance and attention that their large shareholders have given to their operations. Voting shares have been updated from time to time, but with the rapid pace of economic growth in emerging and developing countries such as India and China in recent years, a sizable gap has emerged between the relative weight of particular countries in the global economy and their voting share within the IMF governance structure. The gap has been particularly glaring in the case of China, whose voting power is less than 7 percent (compared with 17.5 percent for the United States), even though by 2018 the GDP gap had virtually disappeared and China was well on its way to overtaking the United States as the world’s largest economy.³³

Quota shares at the IMF are allocated by a formula that captures aspects of each member country’s position in the world economy at a particular moment in time.³⁴

³² At the time of writing there is a fairly intense debate in the media and policy-making circles about the emergence of new digital currencies and this, in turn, raises the question of the role the IMF might play in the future in the evolution of such new forms of money. Facebook and several dozen corporate partners have proposed the introduction of the Libra, to be pegged to a basket of currencies and to be fully backed by safe assets. It is outside the scope of this chapter to analyze the case for such initiatives. At present a number of concerns have been raised about possible volatility in the value of such currencies, how they would co-exist with other forms of digital payment, issues of privacy and the extent to which these currencies might serve as a conduit for money laundering, tax evasion and other forms of malfeasance. The related question of whose responsibility (and how) it would be to monitor and regulate an activity that presumably would involve some 200 sovereign states is equally important.

³³ Indeed, on a PPP basis, China has already overtaken the United States.

³⁴ The so-called Calculated Quota Shares (CQS) are determined by the formula:

$$CQS = (0.5 * Y + 0.3 * O + 0.15 * V + 0.05 * R)$$

where Y is a blend of GDP estimated at market exchange rates and PPP rates, O is an openness measure defined as the annual average of the sum of current payments and current receipts over a five-year period, V is the variability of current receipts and net capital flows, and R is the

This quota, in turn, establishes the country's subscription (its maximum financial obligation to the IMF), voting power within the Fund and access to Fund financing.³⁵ GDP is given the largest weight in the determination of a country's quota as it captures its ability to contribute to the Fund, linking it to a measure of its size and influence in the global economy. In this respect, the Calculated Quota Share (CQS) formula reflects some of the spirit of the current formulas used to determine countries' contributions to the UN budget and our own proposals for newer and better UN funding mechanisms. The openness metric reflects a member's integration with the global economy, an important metric that attempts to measure its stake in global economic and financial stability. The variability measure is intended to be a proxy for a member's vulnerability to balance of payments shocks and subsequent need for the Fund's assistance. Finally, reserves are also an indicator of a country's ability to contribute to the Fund. Quotas are supposed to be reviewed every five years by the IMF's Board of Governors. Changes to members' quotas must be approved by an 85 percent majority vote.

The figure below shows, on the left-hand side, for a group of ten selected countries the voting shares in 2019 following the update that was done in 2010, based on 2008 data. While, at the time of writing, quotas had not been updated since 2010, this has not prevented the IMF staff from preparing a variety of illustrative simulations using more recent data and under different assumptions. There seems to be broad-based support within the IMF membership to drop the variability measure on the occasion of the next quota review and to allocate its weight to the other variables. The figure on the right-hand side shows quota shares under one such simulation, in which all of the 15 percent weight currently allocated to the variability metric is allocated to the GDP blend, with GDP at market exchange rates assigned a weight of 39 percent and purchasing power parity (PPP) GDP a weight of 26 percent. In this simulation China's quota rises from 6.4 percent to 11.4 percent, and India's rises from 2.7 percent to 3.4 percent. While the US quota falls from 17.4 percent to 15.7 percent, there are drops in the shares of other advanced economies as well.³⁶

12-month average over one year of international reserves (foreign exchange, SDR holdings, the Fund's reserve position and gold). The formula also imposes a so-called compression factor by raising the CQS that fall out from the above calculation to the n th power, where n is typically set at 0.95. The purpose of this ad hoc arrangement is to reduce somewhat the dispersion of quota shares among the IMF's 189 members.

³⁵ According to the IMF, "Member country voting power at IMF is calculated by aggregating quota-based votes and basic votes. The total number of basic votes are divided equally among all members. Thus, the allocation of basic votes ensures a minimum voting power for all members." Thus, for instance, while the quota share of the United States is 17.46 percent, its voting power is 16.52 percent. International Monetary Fund, *Governance and the IMF—Evaluation Update 2018*, Independent Evaluation Office of the International Monetary Fund, Washington DC, p. 6.

³⁶ For illustrative purposes we have done a simulation using GDP and population shares weighted equally as the criteria for the determination of quota shares. We are not necessarily

Serious consideration should also be given to lowering voting thresholds for important decisions from 85 percent (which effectively gives the United States veto power since it is the only country among the IMF's 189 members with a voting share in excess of 15 percent) to something like 60 percent, as being more consistent with sound democratic principles.

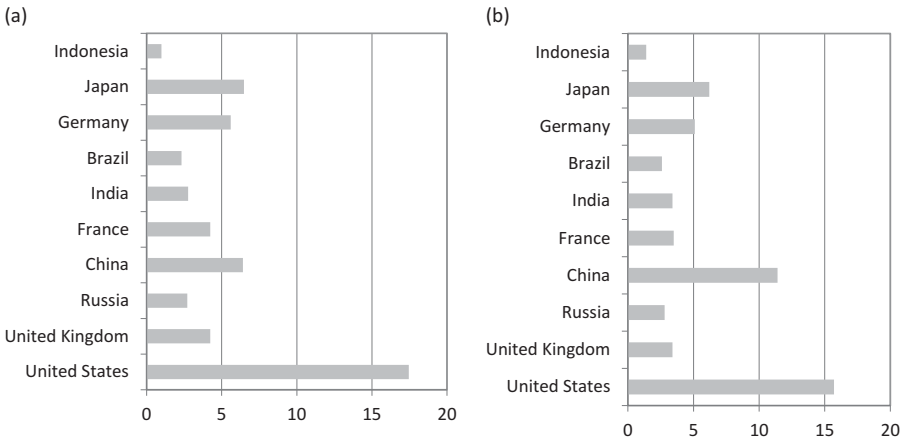


FIGURE 15.1 (a) Current voting shares in IMF: selected countries (%). (b) Alternative voting shares in IMF: selected countries (%).

In respect of other internal governance reforms we find the recommendations made by former IMF Managing Director Michel Camdessus to be a sensible set of proposals, moving the IMF in the right direction.

In a lecture delivered a few years after leaving the Fund, the former IMF Managing Director outlined an ambitious reform agenda for IMF governance. He identified three values that, in his view, the IMF and other international financial institutions must embrace if they are to tackle successfully global economic challenges: (1) good governance, including transparency, openness, and accountability; (2) public ownership of policies, and (3) partnership between developing and developed countries. Camdessus recommended replacing the International Monetary and Financial Policy Committee (IMFC) with the Council, a formal decision-making body. Major strategic decisions would be transferred from the Executive Board to the Council. Working on the basis of staff analysis and Board deliberation, the Council, argued Camdessus, would be the ideal place for a global membership to discuss policies to address systemic issues. Camdessus ... also called for strengthening

recommending that shares be determined using these two factors (important as they are), but do wish to highlight the fairly dramatic changes in voting shares implied by this exercise, with China, the United States, India and Indonesia emerging as the IMF's largest shareholders, in that order.

surveillance by submitting preliminary conclusions of staff missions to broader public debate before transmission to the Executive Board. On Management, the main recommendation was to change the rules and practices that govern the selection of the Managing Director. Europe and the US should renounce the nomination ‘privilege’, and the process should be open to all candidates.³⁷

In this chapter we have focused on some of the reforms that may be needed in coming years to better prepare the IMF to confront the challenges and risks associated with the emergence of a fully integrated global financial system in which, as of this writing, its two largest shareholders are engaged in an escalating trade war. The global financial crisis in 2008–2009 and its after effects, not only raised fundamental questions about the sustainability of an economic system based on various combinations of liberal democracy and the market but it also was a powerful catalyst for the emergence of various forms of populism and a questioning of the benefits of multilateralism and international cooperation which have been at the basis of economic growth during the past half a century.

The global financial system today is more fragile than it was in 2007, on the eve of the last crisis. Dealing with the next global financial crisis in the context of sharply reduced fiscal space, when the traditional responses to managing downturns (such as reducing interest rates, unleashing fiscal stimulus) will largely no longer be there as weapons in the arsenal of policymakers will clearly be a crucial challenge for the world’s largest economies. There is no doubt in our minds that the IMF will be forced to play a central role in crisis management during the next global financial implosion. Whether the organization is ready and empowered, with the appropriate instruments at its disposal is a highly consequential question. If our proposals for reform appear somewhat ambitious, it is because the stakes are remarkably high, both in terms of the social and economic costs associated with a preventable global financial crisis, but also in terms of the IMF’s future reputation and public perceptions of its role in contributing to establish a solid foundation for a sustainable economy.

³⁷ Quoted in “Background Document 4: External Recommendations for IMF Governance Reform,” for the Independent Evaluation Office Report: *Governance of the IMF: An Evaluation*. 2008. The full text of the speech by Michel Camdessus is contained in: “International Financial Institutions: Dealing with New Global Challenges,” Washington, DC, Per Jacobsen Foundation. An argument can be made that moving away from such nomination “privileges” should be done in respect of all international organizations, as part of a systemic effort to set aside nationality considerations in favor of experience, competence and merit in the appointment of the leadership of all such agencies.