Global Development Policy Center

Building Back a Better Global Financial Safety Net

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Boston University | Global Development Policy Center

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The Global Development Policy (GDP) Center is a University-wide center at Boston University in partnership with the Frederick S. Pardee School for Global Studies and the Vice President and Associate Provost for Research. The GDP Center conducts interdisciplinary research to advance policy-oriented research for financial stability, human well-being, and environmental sustainability across the globe.

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EXECUTIVE SUMMARY

Kevin P. Gallagher[1] and Haihong Gao[2]

The year 2021 is the second year of the most important decade of the century where drastic reductions in carbon dioxide emissions and inequalities in a manner that raises standards of living is paramount to the survival of the world's people and planet earth itself. Yet, 2020 saw the biggest economic downturn since the Great Depression, and pushed upwards of 124 million people into extreme poverty. 2020 was also the hottest year on record, triggering forest fires, hurricanes, droughts, and other extreme events that accentuated the economic shock the COVID-19 pandemic brought to the world economy.

In this context, many emerging market and developing countries started the decade desperate for liquidity and in fear of default. Even more will face a debt overhang that could take more than a decade to recover from. This is to be the decade where the world realizes the Sustainable Development Goals and raises the ambitions of the Paris Climate agreement, not one that is characterized by human suffering and economic instability.

The COVID-19 pandemic and associated economic crisis put great stress on the so-called Global Financial Safety Net (GFSN). The GFSN is comprised of Central Bank swap lines from key currency issuing nations, the International Monetary Fund (IMF), regional financing arrangements (RFAs), along with other central bank bilateral swap lines, individual countries' foreign reserve holdings and capital flow management measures, and a loose ad-hoc system for sovereign debt restructuring.

Resulting from a number of formal and informal workshops throughout 2020 and 2021 this report spells out the following proposals that should be high on the agenda of the International Monetary Fund, G20, RFAs and in national capitals as the world community works to combat the COVID-19 virus, protect the vulnerable, and mount a green and inclusive recovery:

Specific to the IMF and the RFAs, the common recommendations made were the need to:

- Issue more IMF Special Drawing Rights (SDRs) and expand the use of them through the IMF;
- Establish a multilateral swap facility at the IMF;
- Increase quota-based resources at the IMF with associated governance reforms;

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- Increase the resources, geographic coverage, and coordination of the Regional Financial Arrangements;
- Initiate debt restructuring and relief initiatives that work toward a broader sovereign debt restructuring regime;
- Reform the emergency financing such that they are counter-cyclical;
- Coordinate on capital flow management measures.
- Address macro-critical climate risks in IMF programming

When the crisis hit both the IMF and the United Nations Conference on Trade and Development (UNCTAD) separately estimated that immediate liquidity needs for emerging market and developing countries would be upwards of 2.5 trillion dollars, Yet, outside of those countries that gained access to swap lines from the Federal Reserve Bank of the United States, the GFSN fell short of having the financing needed for these countries, nor does it have an adequate tool kit to prevent and mitigate the COVID-19 shock and those that will follow.

Advanced economies with key currencies have been able to mount bold fiscal and monetary responses in the trillions of dollars, but emerging market and developing countries largely lack such options. In the midst of capital flight, exchange rate depreciation, volatile commodity prices, and ensuing recession, many emerging market and developing countries have had to pay back international creditors at the expense of addressing their essential needs in a time of crisis. In Latin America—the region hit hardest by the pandemic economically—the United Nations estimates many countries are deploying 30 to 70 percent of government revenue just to service debt.

Meanwhile, sovereign credit rating downgrades in 2020 surpassed the peaks in all previous economic crises. Standard and Poor's downgraded upwards of 60 countries in 2020 and gave negative outlooks (which often lead to downgrades) for 31 more. Six countries — Argentina, Chad, Ecuador, Ethiopia, Belize, Lebanon, Suriname, and Zambia defaulted on their debt since early 2020, with Argentina and Ecuador having to restructure.

The nature of debt in the 21st century is quite complex. During debt crises of the 1980s and 1990s, most debt by developing countries was owed to a handful of Western governments and international institutions that could gather under the auspices of the Paris Club to renegotiate debt workouts. Early in 2020, there was a chorus of voices calling for new liquidity and debt relief for emerging market and developing countries, from IMF managing director Kristalina Georgieva, to the President of the People's Bank of China, European leaders, the United Nations, and outside experts. These calls fell in three categories—a major issuance of the IMF's 'Special Drawing Rights' (SDRs), debt relief, and new concessional finance. SDRs are international monetary assets issued by the IMF analogous to the way central banks issue currency, and can be sold or used for payments to other central banks and international financial institutions.

The G20 fell short in endorsing a new SDR allocation or new capital for international financial institutions as they had during the 2008 global financial crisis. Nonetheless, multilateral development banks and the IMF did pledge to mobilize their existing balance sheets and the IMF launched a fundraising appeal for the 'Catastrophe Containment and Relief Trust' that would allow certain low-income countries to pay back debts to the IMF.

And the G20 did respond on debt relief by establishing a 'Debt Service Suspension Initiative' (DSSI) that allows 73 low income countries to defer a portion of their debt payments through mid-2021. But close to half of the eligible countries would not participate, as they feared credit rating agencies would cut their access to further credit. For those countries that have participated, China has suspended the most payments thus far, engaging with over 23 countries and suspending just over $2 billion in payments. Realizing that some countries will need more than simply debt suspension, the G20 created a 'Common Framework' that goes beyond the DSSI whereby DSSI eligible countries can negotiate restructuring on a case-by-case basis. At this writing, Chad, Ethiopia, and Zambia have announced their intent to enter this scheme.

A number of times over the course of 2020 we convened a series of formal and informal workshops that led to a number of immediate analysis and proposals to the G20, IMF, and GFSN more broadly to help countries across the world cope with the worst stages of the virus and conduct more fundamental reforms in the intermediate term. Toward the end of 2020 we convened a diverse group of scholars and practitioners to fill out these proposals. They are from the centers and institutes, including the Institute for World Economics and Politics at the Chinese Academy of Social Sciences, the Global Development Policy Center at Boston University, the Center for Social and Economic Progress in India, the Center for International Finance Studies at Central University of Finance and Economics in China, and the Centre for Sustainable Finance at SOAS in the UK.

This report collects a number of more in-depth articulations of those proposals that are specific to the recommendations for the IMF and the RFAs. Liqing Zhang and Wen Qi from Center for International Finance Studies at Central University of Finance and Economics in China outline the some of the channels through which financial instability went global under the COVID-19 crisis and outline a broad set of avenues for mitigation. Jose Antonio Ocampo, a professor at the School for International and Public Affairs at Columbia University, and former finance minister and co-chair of the central bank in his native Colombia outlines the need for a new allocation of IMF Special Drawing Rights (SDRs) and how the use of SDRs could be expanded throughout the world economy. Edwin Truman, senior fellow at the Mossavar-Rahmani Center for Business and Government at Harvard's Kennedy School and former senior official in the United States Department of the Treasury outlines the need for and design options of a multi-lateral currency swap facility through the IMF. Rakesh Mohan, Director of the Center for Social and Economic Progress in India specifies the need for and implications of increasing quota-based resources at the IMF with associated governance reforms. Isabel Ortiz, also from the Initiative for Policy Dialogue at Columbia University and former Director of the Social Protection Department at the United Nations' International Labor Organization (ILO) and colleague Matthew Cummins note the record of past IMF emergency financing and show how they should abandon socially harmful procyclical programs in favor of counter-cyclical recovery programs that protect the poor.

In addition to these proposals to reform the IMF, Aizong Xiong and Haihong Gao, both from the Institute for World Economics and Politics at the Chinese Academy of Social Sciences analyze the extent to which RFAs have played a role in the COVID-19 crisis and note ways that RFAs could be expanded and more coordinated. Xiaofen Tan, Center for International Finance Studies at Central University of Finance and Economics in China shows the role that capital flow volatility has played during the COVID crisis and outline routes for capital flow management in emerging market and developing countries. Finally, for those countries that face insolvency and debt distress Ulrich Volz, Director of the Centre for Sustainable Finance at SOAS in the UK summarizes a proposal for a global debt relief facility that links debt relief to a green and inclusive recovery. Edwin Truman closes the report with lessons that the restructurings of the late 20th century might be for current restructuring efforts. The last chapter is a forward looking one, also by Volz. Volz demonstrates how climate change is a global macro-critical issue and proposes how climate change should be mainstreamed across IMF activities.

The COVID-19 pandemic has greatly exposed the gaping holes in the GFSN. With a global recovery in sight, international policy coordination is much needed in face of possible short-term shocks and the long-term challenges. These detailed proposals go a step forward in helping policy makers identify and design pathways that will help the GFSN increase its scale and scope, reform its program, and gain better legitimacy and coherence moving forward.

CHAPTER 1

ADDRESSING FINANCIAL RISK IN EMERGING MARKET AND DEVELOPING COUNTRIES IN THE COVID-19 ERA

Liqing Zhang[3] Wen Qi[4]

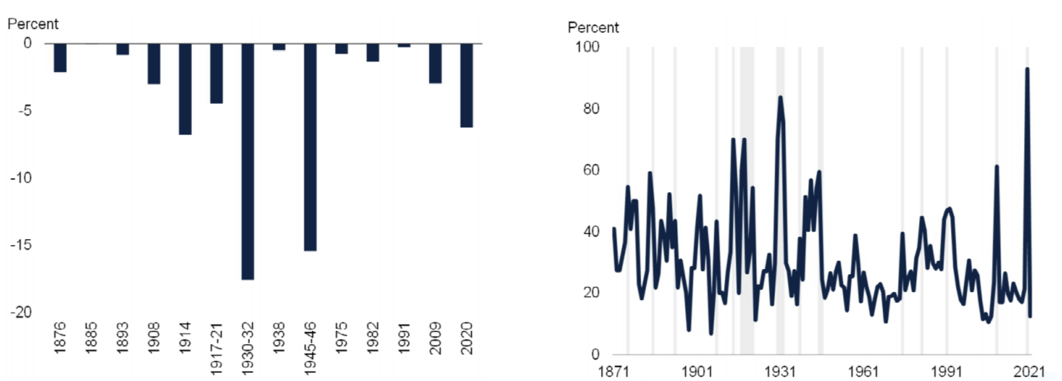
THE PANDEMIC AND ITS IMPACT ON THE GLOBAL ECONOMY

The coronavirus pandemic has triggered the most severe global recession since the great depression in 1929-33. In terms of the extent of decline of GDP per capita growth, the ongoing recession is the fourth-worst one over the past 150 years. More surprisingly, it has been the worst since 1870 in terms of the number of economies in recession. (Figure 1). The latest estimation that appeared in the World Economic Outlook (October report) indicates that the world output is expected to decline by 4.4 percent in 2020. Among various countries, the advanced economies may suffer even worse, with a contraction of 5.8 percent on average, while the emerging market economies are to decline by 3.3 percent. Nevertheless, the situation in emerging market economies is vastly diverse. The output contraction may reach around 10 percent in many economies in Latin America and Africa, much worse than the East Asian economies, where only a slight decline may happen.

Figure 1: Economic Recession Triggered by COVID-19: A Historical Comparison

A: Global Per Capita GDP Growth

B: Economies in Recession



Note: Data for 2020-21 are forecasts. Shaded areas refer to global recessions.

A: For multi-year episodes, the cumulative contraction is shown. The per capita growth contraction in 1885 was less than -0.1 percent.

B: Figure shows the proportion of economies in recession, defined as an annual contraction in per capita GDP. Sample includes 183 economies, though the sample size varies significantly by year.

Source: World Bank, 2020

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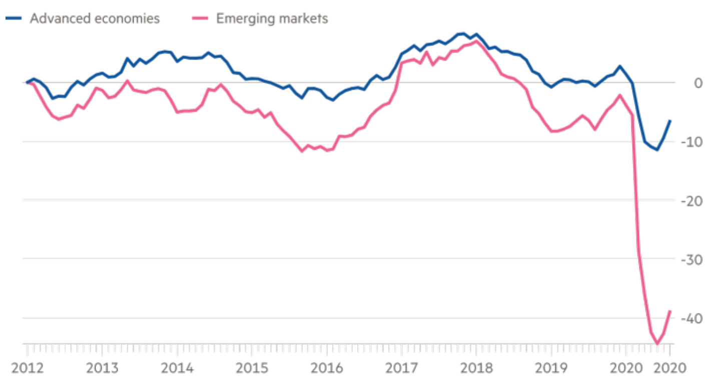
However, over the past three months, while the growth in advanced economies appeared to start recovering though weak and fragile, a rapid increase of the confirmed cases in emerging market economies (excluding China), especially India, Brazil, and Russia, have made the outlook of growth in the emerging market world quite gloomy. The newly issued Brookings FT tracking index clearly showed such a picture. The latest WEO by IMF made a similar projection, in which the growth rate of GDP in emerging market economies excluding China was downward adjusted to -5.7 percent from -5.0 percent in June.

Figure 2: Tracking Indexes for the Global Economic Recovery (TIGER)



Source: Brookings Institution and Financial Time.

Note: The index compares indicators of real activity, financial markets, and confidence with their historical averages for the global economy and individual countries, capturing the extent to which data in the current period is normal.

It seems that the second wave of the pandemic has already come, and the problem is how long it will last. An early report issued by a team in Harvard T. H. Chan School of Public Health warns that the pandemic of COVID-19 is very likely to outbreak intermittently in the coming five years (Kissler et al., 2020). Unless all the outbreak countries maintain social distance regulation for at least one year, the next outbreak could be more severe than the last one. Thus, full recovery of the global economy remains pessimistic, particularly for those emerging market economies.

FINANCIAL RISKS IN THE EMERGING MARKET ECONOMIES IN THE PANDEMIC

The most important financial risk in many emerging market economies is the debt problem. Due to the deep recession caused by the pandemic, many private corporates, especially small and medium enterprises (SMEs), have suffered from short-of-cash and liquidity problems. Some of them have fallen into the solvency trap. The debt problem corporates are facing has largely transmitted to the banking system, so the nonperforming loan ratio has rapidly risen in some countries. Meanwhile, the decline of tax revenue and the increasing economic stimulus have led to government debt problems in many emerging market economies. According to an estimate made by Absolute Strategies, at least 37 percent of the emerging market government bonds linked to JP Morgan's index is likely to face default over the next year[5]. In late March 2020, IMF Managing Director Kristalina Georgieva confirmed over

[5] https://www.ft.com/content/c16f83c5-3444-4c78-afea-fa72c4b9c09c

90 member countries had approached to IMF for seeking financial support, and the estimated the gross external financing needs of emerging-market and developing countries at US $2.5 trillion[6].

The sovereign debt has become a grave concern. According to Georgieva's statement, IMF can only afford US $1 trillion financial support, nearly 40 percent of the requirements. In late March, together with the World Bank Group President David Malpass, she called for a suspension of scheduled debt payments to official creditors by low-income countries through the end of 2020. The Group of Twenty (G20) ministers and governors endorsed their call on April 15 and proposed that private creditors grant the same treatment. Many economists from academia called for a quick debt standstill or reduction, not only for low-income countries but also for middle-income countries (Bolton et al., 2020; Eichengreen, 2020; Stiglitz and Rashid, 2020).

It is uncertain how quickly these calls can be transformed into action. Most likely, it will take time. After all, a broader consensus needs to be reached among borrowing countries, private creditors, debtors, and probably international financial organizations. During the 1980's international debt crisis, it took almost seven years from the onset of the crisis in Mexico over one weekend in August 1982 to the announcement by US Treasury Secretary Nicholas Brady in March 1989 of a plan to facilitate the reduction in stocks of debt to international banks (Truman, 2020).

The second financial risk comes from the spillover effect of financial market volatility and the policy response in advanced economies, especially that of US monetary policy. In mid-March, due to the unprecedented crash of the US stock market followed by the dramatic increase of the VIX, the US dollar significantly appreciated against other main currencies and triggered nearly US $100 billion portfolio capital flight from emerging market economies, leading to dramatic currency depreciation in main emerging market economies. As a quick response, the Fed announced a series of liquidity support measures in late March, including unlimited quantitatively expansionary monetary policies. Owing to the new round of QE, the main US stock index rebounded in the following months and the US dollar came to depreciate significantly. The continuous decline of the US dollar index has pushed massive portfolio investment into some emerging market economies, such as China and Korea, bringing their currencies into strong appreciation. Probably because of the severe Pandemic situation in Latin America, the Fed's QE shock did not affect this area too much. In contrast, Brazil, Chile, and Argentina have been suffering from currency depreciation.

Looking forward, emerging market economies are facing two possible external shocks. One, it seems that the second wave of Pandemic has come in many countries, including the EU and US, which will certainly hurt the economic recovery and be very likely to trigger a global stock market crash again. Given that the Nasdaq composite and S&P 500 have continuously reached the historical peak while the economic recovery has been so weak and fragile, any negative shock may cause the bubble to burst. If it happened, the dollar could appreciate again in the short run, pulling portfolio investment in emerging market economies back to the US immediately and triggering a new wave of currency depreciation in these economies.

Two, since mid-March 2020, under the unprecedented QE, the size of the Fed balance sheet has been expanded to over $7 trillion from about $4 trillion. Some observers believe that it may reach around $10 trillion at the end of this year. There is a wide consensus that it is unsustainable. Once the pandemic comes to an end someday in the next year or after 2021 and the US economy returns

[6] https://www.imf.org/en/News/Articles/2020/04/03/tr040120-transcript-background-briefing-conference-call-imf-resources-strategy-help-combat-covid-19

to normal, the Fed will withdraw the unprecedented QE policy. Such a switch is very likely to cause a similar financial turmoil in emerging market economies just as it happened in late 2015. In short, as the periphery, emerging market economies' financial stability is still largely affected by the monetary policy in the United States, mainly through the capital inflows and outflows.

The third financial risk comes from any big mistakes in domestic policy response. For dealing with the pandemic and economic recession, many emerging market economies have been implementing extremely expansionary monetary and fiscal policies. The recession caused by the pandemic is not only a demand shock but also a supply shock, so the economic recovery could be more difficult than a single demand shock and may take longer period. Unlike the United States, emerging market economies are much more fragile if they fail to make the right decision in response. Any overreaction in monetary or fiscal expansion may cause serious inflation and currency substitution. Eventually, capital flight and currency crisis may become unavoidable.

HOW TO DEAL WITH THE INCREASING FINANCIAL RISKS?

Strengthening a sufficient global financial safety net is very much important in recent times. Actions should be taken at four frontiers: globally, regionally, bilaterally, and nationally.

At the global level, it is urgent and necessary for the IMF and World Bank Group to mobilize more financial resources to help deal with the challenges created by the pandemic. In addition to the traditional facilities, it would make great sense for the IMF to initiate a new round of SDRs allocation, at least valued at US $500 billion. As mentioned early, with the existing financial resources, the IMF can only afford 40 percent of the requirement. During the financial crisis in 2009, with the support of the G20 London Summit, IMF successfully made a general SDR allocation at an amount of US $250 billion, which greatly released the financial stress in many countries, especially those in emerging markets. It is deadly important to do it again during the ongoing pandemic. Since the depth and width of the recent economic recession is much more severe than the 2009 financial crisis, the scale should be at least doubled. According to the PIIE's estimation, a US $500 billion general SDR issue would allocate US $22 billion to 76 of the world's poorest countries and boost their combined international reserves by more than nine percent (and 22 of these countries by more than 20 percent). That is far more than the US $14 billion debt standstill agreed by G20[7]. If the allocation can be done not based on the assignment of quota; the poor countries could get even more.

Meanwhile, under the G20 framework, more policy coordination and financial cooperation should be pushed forward. In addition to the cooperation in the area of public health, particularly the development of vaccines for COVID-19, further debt relief for the poorest countries, and more debt suspension or reschedule for the middle-income countries. It is equally important for the main economies to get better coordination in macroeconomic policies, particularly in monetary policies, to reduce the speculative capital flows.

At the regional level, more effort should be done since the global resources are so insufficient. On July 21, after an intense negotiation among the member countries, the European Commission unveiled a EUR750 billion plan to help the European Union recover from the COVID-19 pandemic. Since April, both Asian Development Bank and Asian Infrastructure Investment Bank have announced several

7 https://www.piie.com/blogs/realtime-economic-issues-watch/imfs-special-drawing-rights-rescue#_ftn*

recovery facilities for helping those member countries in crisis. For better dealing with the macro-financial risks, it is necessary to strengthen the liquidity support facility, such as CMIM and other similar resources. Each financial crisis is a catalyst for improving and expanding regional financial integration. Since COVID-19 is an exogenous supply shock, it should help simplify or fully remove the conditionality requirements in some cases.

At the bilateral level, currency swap can play an important role, in complement to or substitute for the global or regional arrangement to some degree. One of the privileges for the bilateral arrangement is without conditionality. Since the last global financial crisis in 2009, both United States and China have been active in making bilateral currency swap work for some crisis countries. During the current pandemic, more contributions should be made by these two large economies.

At the national level, first, keeping reasonably expansionary monetary and fiscal policies is needed. In the low or even negative interest rate period, compared with the ease monetary policy, fiscal policy could be more important in responding to the economic recession caused by the pandemic. Providing cash subsidies to low-income people, giving tax reductions to SMEs, and encouraging banks to lend should be more helpful in many cases.

Second, it is very important to strengthen the financial regulatory framework, especially after the pandemic is under control. It is normally true that the banking sector will become very much fragile in the wake of any deep economic recession. In many cases, a banking crisis often follows an economic crisis. For those countries with low or negative interest rates, the ROE of the banking sector could be even worse and therefore the financial risks could be higher after the enormous loss occurred during the pandemic.

Third, it is also very much vital to carefully manage the cross-border capital flows. During and after the pandemic, the global financial circle, basically dominated by the US monetary policy, could be very volatile. Using macro-prudential policies, capital control if necessary, to avoid the surge of capital inflows and outflows should be extremely important. Having a relatively flexible exchange rate is a good choice for those advanced emerging market economies. However, a fully flexible exchange rate or so-called clean floating could be going too far away for most of the emerging market economies if not all, because the significant appreciation or depreciation may cause more market volatility through the balance sheet effect rather than the expected autonomy of monetary policies. For getting the exchange rate manageable, it will be necessary for most of the emerging market economies to maintain sufficient foreign exchange reserves for self-insurance purposes.

Bibliography

Bolton, P., Lee B., Gourinchas P., Gulati M., Hsieh C., Panizza U., and Weder di Mauro, B. (2020) Born out of Necessity: A Debt Standstill for Covid-19. *Policy Insight* 103 (April). Washington: Centre for Economic Policy Research.

Eichengreen, B. (2020) Managing the Coming Global Debt Crisis. *Project Syndicate* (May 13). Available at: https://www.project-syndicate.org/commentary/managiing-coming-global-debt-crisis-by-barry-eichengreen-2020-05?barrier=accesspaylog (accessed on October 2, 2020).

Kissler, S. M., Tedijanto, C., Goldstein, E., Grad, Y. H., & Lipsitch, M. (2020) Projecting the transmission dynamics of SARS-CoV-2 through the post-pandemic period. *Science*, 368(6493), 860-868.

Stiglitz, Joseph, and Hamid Rashid. (2020). A Global Debt Crisis Is Looming: How Can We Prevent It? *Project Syndicate* (July 31). Available at: https://www.project-syndicate.org/commentary/how-to-prevent-looming-debt-crisis-developing-countries-by-joseph-e stiglitz-and-hamid-rashid-2020-07 (accessed on September 5, 2020).

Truman, Edwin M. (2020), Forthcoming. Lessons from the 1980s: Sovereign Debt Relief in the Global Pandemic. *PIIE Working Paper*. Washington: Peterson Institute for International Economics.

World Bank (2020), *Global Outlook, Pandemic, Recession: Global Economy in Crisis*. Washington D.C.

CHAPTER 2

TRANSFORMING SPECIAL DRAWING RIGHTS FOR INTERNATIONAL COOPERATION

José Antonio Ocampo[1]

Last year the world celebrated the 75th anniversary of the Bretton Woods conference that created the International Monetary Fund (IMF). It also coincided with the 50th anniversary of the inclusion of the Special Drawing Rights (SDRs) in the IMF Articles of Agreement, a decision that had been adopted two years before in the annual meetings that took place in Jamaica.

SDRs are the only true global monetary instrument, and it is backed by all IMF members. The change in the IMF's Articles of Agreement envisioned it as "the principal reserve asset in the international monetary system." But the SDRs have turned out to be one of the most underutilized instruments of international cooperation. A more active use of this tool would significantly strengthen the IMF's role as the center of the global financial safety net. In particular, issuing SDRs during crises can play a very important countercyclical role, similar to how expansionary monetary policies meet that function at the national level.

This document analyzes the way SDRs have been used since their creation and proposes a reform agenda to place them at the center of the global monetary system. After a brief discussion of the origins of this instrument, I analyze how it has been used over the past century and discuss the proposals for reform that have been on the table and how to use it to enhance international cooperation to manage the COVID-19 crisis.

ORIGINS OF THE SDRS

The idea of a global currency goes back to Keynes's *bancor*, the unit of account of an International Clearing Union that he proposed as the central instrument of international monetary cooperation to be adopted after the Second World War. His proposal was aimed at correcting the essential deficiency that he perceived in *all* international monetary systems that had existed up to then, and particularly in the gold standard: the asymmetric adjustment problem that they generated, as deficit countries were forced to adjust during crises, as they generally lacked adequate external financing or adequate

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reserves, whereas surplus countries did not face similar pressures. In his view, this asymmetry was the source of a global contractionary bias during crises (Keynes, 1942-43).

The debates of the 1960s had, however, a different rationale for the creation of a global currency. The basic problem was created by the use of a national currency (the United States dollar), convertible into gold as agreed at Bretton Woods, as an international currency. The major issue, which came to be known as the Triffin dilemma, following the work of Robert Triffin (1961, 1968), was that if the deficits that the country issuing that currency became large enough, they could generate a run against it. In his view, the system was, therefore, inherently unstable.

The specific problem that that system faced in the 1960s was the loss of gold reserves of the United States Federal Reserve, as countries changed part of their dollar reserves for gold. The discussions focused on ways to create an adequate supply of world liquidity free from the potential instabilities generated by the Triffin dilemma. However, the expectation that the SDRs would become the major global reserve asset was frustrated by a series of development that took place after the 1971 decision of the United States to unilaterally eliminate the convertibility of dollars for gold, which led to a *de facto* transition to an international monetary system based on a fiduciary dollar, although open to competing currencies. These events marked the impossibility of restoring exchange rate parities among major currencies and the significant increase in the supply of dollars to the international market associated with the two oil shocks of the 1970s, the gradual liberalization of the capital accounts led by the United States, and the tendency of this country's current account deficits to increase without the restrictions associated with the convertibility of dollars into gold.

THE EVOLUTION OF THE SYSTEM

SDRs are defined by the IMF as an "international reserve asset". However, although countries receive interest on the holding of SDRs, they also have to pay interest on the allocations they receive. In this sense, SDRs are both an asset and a liability, and perhaps should be best considered as a credit line which can be used unconditionally by the holder—i.e., an unconditional overdraft facility. This is a legacy of the debates of the 1960s, when France, against the view of most countries (including the United States) opposed the idea of creating a pure reserve asset and preferred to launch a "drawing" facility similar to the traditional IMF credit lines (Solomon, 1982).

According to existing rules, the IMF makes general allocations of SDRs following three criteria: (i) a *long*-term need, (ii) of a *global* character, and (iii) with the purpose of *supplementing* existing reserve assets. Five-year-period reviews are undertaken to decide whether there is such a need.

So far there have been four SDR allocations. The first was done in 1970-72 for a total amount of SDR 9.3 billion, the second in 1979-81 for SDR 12.1 billion, the third in 1997 for 21.4 billion, and the fourth in 2009 for SDR 161.2 billion, equivalent to the US $250 billion. The third only became effective in 2009, as it was part of a reform aimed at equalizing the benefits to new (those that joined after the previous SDR allocations) with old Fund members, and only became effective when the related changes in the Articles of Agreement were approved by the United States Congress in June 2009. Interestingly, although allocations are made according to long-term needs, the 2009 allocation was argued on *counter-cyclical* grounds (IMF, 2009), and was part of a broader package adopted by the Group of 20 in London in April of that year to manage the 2008-2009 North Atlantic financial crisis[2]

[2] I will refer to the 2008-2009 crisis as the North Atlantic and not as the global financial crisis because, although it had global effects, it centered in the United States and Western Europe.

(G20, 2009). Interestingly, the previous allocations, of 1979-1981 and 1997, also coincided with the world economic crisis.

As the SDR allocations are made according to IMF quotas, they are much larger for high-income countries. Table 1 shows that in 1970-72 they received 74 percent of total allocations, while middle-income countries got 16 percent and low-income countries only about ten percent[3]. The distribution improved slightly over time in favor of emerging and developing countries. In 2009, the share of middle-income countries rose to 30 percent, but that of low-income countries fell to eight percent. Among high-income countries, there has also been a rising share of non-OECD members.

Table 1: SDR Allocations by Level of Development (in millions of SDRs)

	Allocations (in million SDRs)			Share in total allocations		
	1970-72	1979-81	2009	1970-72	1979-81	2009
High-income: OECD	6,796	7,906	108,879	73.6%	65.8%	59.6%
United States	2,294	2,606	30,416	24.8%	21.7%	16.6%
Japan	377	514	11,393	4.1%	4.3%	6.2%
Others	4,125	4,786	67,070	44.7%	39.8%	36.7%
High-income: non-OECD	17	127	3,588	0.2%	1.1%	2.0%
Gulf countries	0	78	2,057	0.0%	0.7%	1.1%
Excluding Gulf countries	17	49	1,531	0.2%	0.4%	0.8%
Middle-income	1,488	2,730	54,173	16.1%	22.7%	29.6%
China	0	237	6,753	0.0%	2.0%	3.7%
Excluding China	1,488	2,493	47,420	16.1%	20.7%	26.0%
Low-income	933	1,254	16,095	10.1%	10.4%	8.8%
Total allocations	9,234	12,016	182,734	100.0%	100.0%	100.0%

Source: Author estimated based on IMF data and on World Bank classifications by level of development in 2020.

SDRs are "central bank money" since essentially only central banks accept them as means of payment and private parties are not allowed to hold them under current rules. SDRs can be used to pay the IMF and they can be used by a few other international organizations such as the Bank for International Settlement and multilateral development banks. Since they cannot be utilized by the private sector, they cannot be used to intervene in the foreign exchange market; therefore, they have to be converted into the currency needed to undertake those interventions.

Transactions using SDRs are bilateral agreements between participant countries, after which the IMF records the operations. But if a country that wants to sell SDRs does not find a buyer, the IMF can designate members with strong external positions to exchange SDRs for freely usable currencies, up to the point where the holdings of the excess holdings of the buying country are equal to twice their original allocation. This mechanism is essential to maintain the liquidity of the SDRs, but there has been no need to use it for several decades. This means that the "market" for SDRs has worked well,

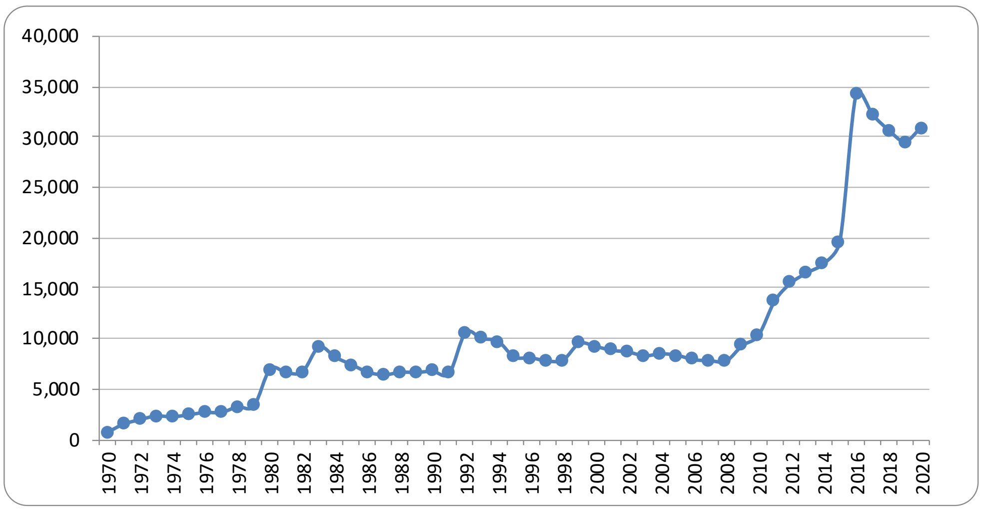
[3] For comparative purpose over time, I use the World Bank classification of countries by income level of 2000.

thanks to a group of countries that have been willing to increase their holdings of SDRs and operate, in a sense, as "market makers".

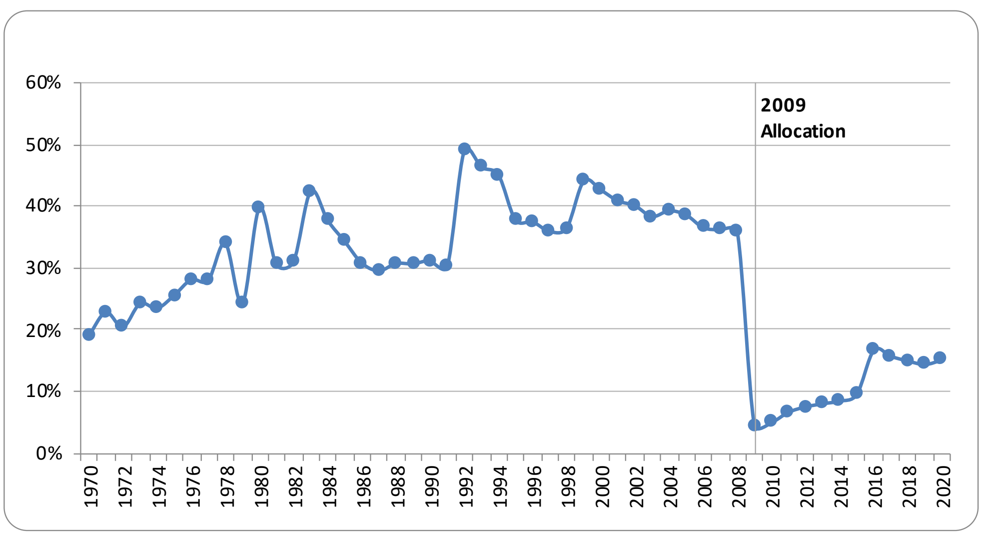
Figure 1 shows net SDR drawings by IMF members, estimated as the sum of the absolute value of all net SDR positions of individual countries. It indicates that the use of SDRs has grown over time, with accelerations coinciding with periods of global financial stress. They include the United States dollar depreciation of the late 1970s, the Latin American debt crisis, the crisis of the European exchange rate mechanism in the early 1990s, the series of crises in emerging economies in the late 1990s and early 2000s; and the North-Atlantic financial crisis. As a proportion of total allocations, there was an upward trend during the first decades of their existence and fluctuated since the early 1980s between 30 and 50 percent of total allocations. That share fell substantially with the large 2009 allocations, but the upward trend has returned since then.

Figure 1

A. Total Net Drawings of SDRs (in millions of SDRs)



B. Total Net Drawings as Percent of Total Allocations



Source: Author estimates based on IMF data. Net drawings are estimated as the difference between allocations and holdings of SDRs of individual countries.

Table 2 shows the net SDR holdings of countries according to their levels of income at the peak years of net drawings and in 2019 and September 2020 (the latest information available). Interestingly, high-income OECD countries excluding Japan have been large users of SDRs, a fact that indicates that they are an important reserve asset even for the richest countries of the world. Such net use takes place during international crises but is still small relative to the large size of allocations they receive. Japan has been mostly on the buyer side of the market. In turn, although as a group, high-income non-OECD countries have generally been net buyers of SDRs, there are important exceptions, particularly over the past decade.

Table 2: Net SDR Holdings by Level of Development (in millions of SDRs)

A. Net Holdings (in mil.SDRs)									
	1980	1983	1992	1999	2009	2011	2016	2019	Sept. 2020
High-income: OECD	-3,203	-3,178	-4,233	0	995	-1,945	-8,287	-1,073	-1,470
United States	-1,996	-100	1,285	2,639	1,563	479	1,046	1,384	1,438
Japan	640	957	-96	1,044	1,090	576	1,169	1,582	1,845
Others	-1,847	-4,035	-5,422	-3,683	-1,658	-3,000	-10,502	-4,039	-4,752
High-income: non-OECD	-34	54	139	41	335	240	-550	-502	-497
Gulf countries	-23	28	122	-9	116	120	-384	-375	-371
Excluding Gulf countries	-11	27	17	51	219	120	-166	-127	-125
Middle-income	-1,190	-1,808	-2,203	-1,033	-689	-3,717	-13,515	-11,508	-12,689
China	-42	83	68	303	990	732	197	1,056	944
Excluding China	-1,148	-1,891	-2,271	-1,336	-1,679	-4,450	-13,712	-12,564	-13,632
Low-income	-1,016	-1,925	-2,144	-1,928	-3,928	-4,926	-7,272	-9,964	-8,410
Total net drawings	-6,918	-9,105	-10,510	-9,455	-9,232	-13,658	-34,143	-29,462	-30,884
Total allocations	17,381	21,433	21,433	21,433	203,984	203,985	204,158	204,110	203,882
B. Net Holdings as % of allocations									
High-income: OECD	-26.5%	-21.6%	-28.8%	0.0%	0.8%	-1.6%	-6.7%	-0.9%	-1.2%
United States	-49.4%	-2.0%	26.2%	53.9%	4.4%	1.4%	3.0%	3.9%	4.1%
Japan	88.6%	107.3%	-10.8%	117.1%	8.9%	4.7%	9.5%	12.9%	15.0%
Others	-55.6%	-100.7%	-135.3%	-91.9%	-7.2%	-13.0%	-45.6%	-17.5%	-20.6%
High-income: non-OECD	-41.4%	37.7%	96.5%	28.6%	9.5%	6.8%	-15.7%	-14.3%	-14.1%
Gulf countries	-67.9%	35.1%	155.2%	-11.9%	5.4%	5.6%	-18.0%	-17.5%	-17.4%
Excluding Gulf countries	-23.2%	40.9%	26.3%	77.1%	15.9%	8.7%	-12.0%	-9.2%	-9.1%
Middle-income	-36.3%	-42.9%	-52.2%	-24.1%	-1.2%	-6.3%	-22.9%	-19.5%	-21.6%
China	-37.0%	35.1%	28.8%	127.9%	14.2%	10.5%	2.8%	15.1%	13.5%
Excluding China	-36.3%	-47.5%	-57.1%	-33.0%	-3.2%	-8.6%	-26.4%	-24.2%	-26.3%
Low-income	-57.5%	-88.0%	-96.8%	-87.0%	-22.1%	-27.7%	-40.6%	-55.6%	-47.5%

Note: (-) sign indicates net drawings, (+) sign indicates net holdings. The numbers are the totals of each income group in millions of SDRs.

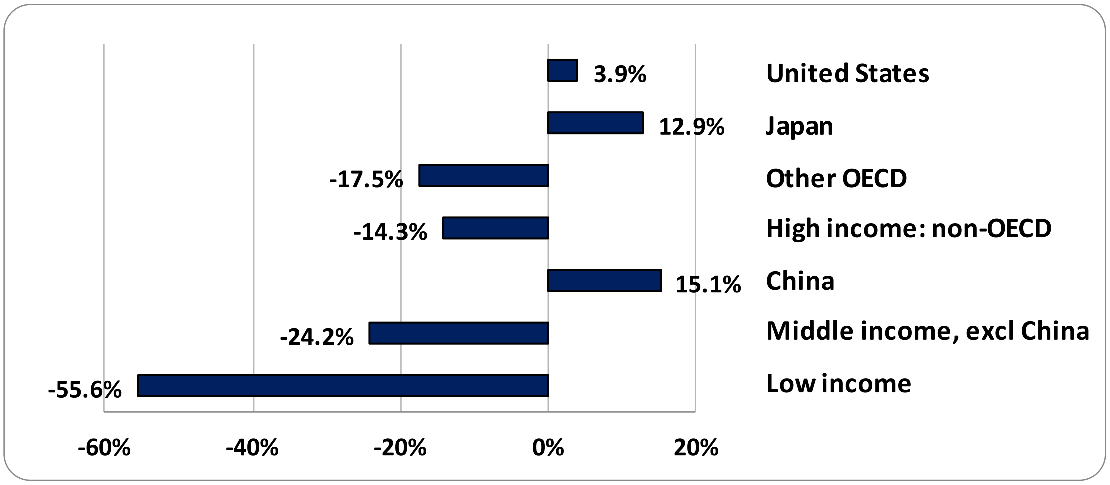
Source: Author estimates based on IMF data and World Bank classifications by level of development in 2000. Net holdings or drawings are the difference between allocations and holding of SDRs.

In any case, emerging and developing countries tend to use their SDR holdings more frequently. According to Table 2, middle-income countries have had significantly large net drawings in all peak years. China has been the exception, drawing its SDR allocations only in 1980, and accumulating SDRs since then. In turn, SDR drawings relative to allocations have been highest for the low-income countries, which drew more than 80 percent of their SDRs before the 2009 allocation. After that large allocation, low- and middle-income countries have renewed their active use of SDRs.

An analysis of net drawings and net purchases by individual countries indicates that it is predominantly the high-income countries and oil-rich middle-income countries which sold and bought large amounts of SDRs during peak periods (Erten and Ocampo, 2013, Table 9.4). Among these, the United States was the largest user of SDRs in 1980 followed by the United Kingdom, Australia, and Canada. The United Kingdom was the largest seller until 2010. On the buyer side, the most important countries are Japan, Germany, Belgium, and Saudi Arabia. China joined the group of net buyers in 1999.

Figure 2 presents a summary picture of these patterns in 2019, according to the net holdings relative to the allocations countries have received. China, Japan, and the United States were the most important net holders. In turn, low- and middle-income countries, excluding China, were the most important net users, with over half and close to a fourth of their allocations, respectively. As a group, both OECD and non-OECD high-income countries are also net users, though in smaller amounts relative to their allocations; this reflects the fact that these groups include countries on both sides of the market.

Figure 2: Net Holdings of SDRs as Percentage of Allocations, 2019



Source: Table 2

Three major conclusions can be derived from this analysis. The first is that, despite their low share in allocations, low and middle-income countries tend to use their holdings more frequently for their balance of payments needs. Therefore, a different system of allocations that takes into account this fact would have positive development implications; I return to this issue in the next section. Second, SDRs are an important reserve asset for developed countries, as reflected in their dominant role on both the buyer and seller sides. Finally, however, the market is small, as at their peak in 2016 net drawings only reached slightly over SDR 34 billion, a small proportion of global reserves.

REFORMING THE SYSTEM

The issues that a reform of the SDR system must meet are different today from what they were when this instrument was created.[4] The inadequate provision of international liquidity, which was at the center of debates surrounding the creation of SDRs, is no longer an important topic, except during major international crises. If anything, the fiduciary dollar standard has exhibited an expansionary bias due, as I previously indicated, to the broad liberalization of capital flows and the large United States current account deficits that have taken place since the mid-1970s. However, this underscores the fact that, as Triffin emphasized in the 1960s and was also pointed out by the Chinese central bank governor when the 2008-2009 North Atlantic crisis stroke,[5] the world still needs a more "orderly supply" of international money. Other problems that received attention in the 1960s also continue to be significant or are even more important today, particularly the need for active use of SDRs as a counter-cyclical policy instrument that provides liquidity to emerging and developing countries during international crises. This is also associated with global equity issues.

The initial allocations of SDRs in 1970-1972 were equivalent to 9.5 percent of the world's non-gold reserves (Williamson, 2009). That proportion fell to low levels in the following decades. Before 2009, they represented an insignificant 0.5 percent of world non-gold reserves. That allocation brought the stock of SDRs to approximately 5 percent, still a very modest amount.

An ambitious reform should move to a fully SDR-funded IMF, which would complement the also desirable move towards a multi-currency international monetary system. In relation to the IMF, this implies that it would operate as a quasi-world central bank, with three basic advantages: (i) sharing seigniorage; (ii) delinking the creation of international reserve assets from any particular national or regional currency, thus overcoming the Triffin dilemma; and (iii) helping manage international liquidity in a counter-cyclical way.

Proposals for SDR allocations in recent years have followed two different approaches. The first is issuing SDRs in a counter-cyclical way, thus avoiding issuance (or even destroying those previously made) during boom periods, and concentrating them in periods of world financial stress (United Nations, 1999; Camdessus, 2000; Ocampo, 2002). The second approach proposes regular allocations of SDRs reflecting additional world demand for reserves (Stiglitz, 2006, ch. 9; IMF, 2011). The two approaches can be combined, if regular allocations –e.g., every five years, following IMF practices— are made contingent on global monetary conditions, with the IMF Board deciding when they are made effective.

Proposals of new SDR allocations by different analyses and the IMF staff indicate that, given the global demand for reserves, annual issuances in the order of $200-400 billion a year would be reasonable.[6] Although this size of allocations would contribute to the diversification of reserves, SDRs would still represent a small share of reserve holdings. For example, the IMF (2011) estimated that an annual allocation of US$200 billion would increase the share of SDRs in total reserves to only about 13 percent in the 2020s.

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[4] See good summaries of the debates of the 1960s in Solomon (1982) and Triffin (1968). An interesting contrast between the role of SDRs then and now is provided by Clark and Polak (2004), Williamson (2009) and Erten and Ocampo (2013).

[5] According to his statement at the time: "an international reserve currency should first be anchored to a stable benchmark and issued according to a clear set of rules, therefore to ensure orderly supply; second, its supply should be flexible enough to allow timely adjustment according to the changing demand; third, such adjustments should be disconnected from economic conditions and sovereign interests of any single country" (Zhou, 2009).

[6] See Erten and Ocampo (2013), Table 9.5, for a summary of estimates.

The most important element of the reform would involve moving to a fully SDR-based IMF with a clear counter-cyclical purpose. This would involve counter-cyclical *allocations* of SDRs, which would generate "unconditional" liquidity, together with counter-cyclical IMF *financing*, made entirely in SDRs, that provide "conditional" liquidity to countries facing balance of payments crises.

One possibility would be the mechanism proposed by Jacques Polak (1979; 2005, chs. 7-8) more than three decades ago: IMF lending during crises would be done creating new SDRs, but such SDRs would be automatically destroyed once such loans are paid for. The alternative which I have suggested (Ocampo, 2017, ch. 2) would combine the allocations of SDRs with the lending capacity of the Fund, treating those SDRs not used by countries as deposits in (or lending to) the IMF that can be used by the institution to lend to countries in need. This mechanism would allow the IMF Board to exercise an active counter-cyclical function, by determining how much of those SDR "deposits" could be used by the IMF to finance its programs, thus allowing a larger amount to be lent during crises but reducing those amounts during booms. This would complement the counter-cyclical way the allocations are made, as previously indicated.

A crucial advantage of either proposal is that they would solve the recurrent problem of guaranteeing the resources available to the IMF during crises. Note, in this regard, that the traditional solution has been to allow the IMF to borrow from member states under different modalities. But this mechanism is problematic, as it is not truly multilateral and, as Kenen (2001) pointed out some time ago, it gives excessive power to the countries providing the financing. This mechanism is thus suboptimal to quota increases and both are, in turn, sub-optimal relative to a fully SDR-based IMF along the lines outlined.

This reform requires a change in the IMF Articles of Agreement. Crucial in this regard is the elimination of the division between the "general resources" and the SDR accounts of the Fund (Polak, 2005, part II), which severely limits the use of SDR allocations by countries and makes it impossible to finance IMF lending using SDR allocations. Furthermore, one particular advantage of an SDR-based IMF is that it would eliminate the need for the Fund to manage a multiplicity of currencies, only a fraction of which can be used for IMF lending.

The reform could be mixed with a new formula to distribute SDRs, aimed at correcting a basic inequity of the current international monetary system: the fact that emerging and developing countries must accumulate large amounts of foreign exchange reserves as "self-insurance" to mitigate both the effects of boom-bust cycles in international finance and the incomplete nature of the global financial safety net (Ocampo, 2017, ch. 2). The reform could be done by including the demand for reserves as an additional criterion in SDR allocations, alongside IMF quotas, or the level of development of countries. Williamson (2010), for example, has proposed that these countries would receive 80 percent of SDR allocations and the remaining 20 percent would be allocated to industrial countries. This would follow the proposal made by a Group of Experts convened by UNCTAD in the 1960s (UNCTAD, 1965) to include a "development link" in SDR allocations. A complementary policy would be allowing the IMF to buy bonds from multilateral development banks with the SDRs not utilized by member states, which would then finance emerging and developing countries' demands for long-term finance.

Let me add that several of important analysts (Cooper, 2010; Eichengreen, 2011; Padoa-Schioppa, 2011) have suggested that any ambitious reform of the SDR should also embrace the private use of this global currency. This could include using SDRs to denominate private or government bonds or as a unit of account in commercial transactions (for example, in commodity transactions). However, even aside from the fact that this imposes additional demands on the reform of the system, the private use of SDRs could generate problems of its own, particularly speculative changes in the demand for this global reserve asset. It would also generate strong opposition to a reform of the system by the current issuers of currencies that are used internationally, particularly by the United States. This means that these additional uses are possible, but the major role of the SDRs would continue to be as a reserve asset managed by the IMF (see in this regard the analysis of the IMF, 2018).

Therefore, although the reforms in the rules for the allocation of SDRs and their private use would be desirable, they are not essential. As underscored above, the crucial reform is moving towards a fully SDR-based IMF with a clear counter-cyclical objective.

USING THE SDRS DURING THE COVID-19 CRISIS

This counter-cyclical objective is the basic argument to make a major allocation of SDRs as part of the international policies to manage the COVID-19 crisis. It would be a similar decision to that adopted in 2009 to manage the North Atlantic financial crisis. The magnitude should be larger. Together with additional colleagues, we proposed a $500 billion allocation in March (Gallagher, Ocampo and Volz, 2020a; see also 2020b). The allocation could be larger, as other policymakers and analysts have proposed. However, it should not exceed the total amount of the IMF quotas (about $650 billion) because then it would then require the approval of the United States Congress[7], which would significantly delay its implementation.

The decision to make a major SDR issue was vetoed by the United States during the Spring Meetings of the Bretton Woods institutions in April 2020, despite the broad support that it had, including from the European countries, the other major holders of IMF quotas. It was again excluded from the G20 Finance Ministers' proposals during the annual meetings of the Bretton Woods Institutions in October, again because of the views of the United States[8]. The basic argument of the United States Treasury Secretary was that close to 70 percent of the resources would go to G20 countries, the majority of which did not need them to tackle the crisis (Mnuchin, 2020). There were behind-the-scenes geopolitical concerns, associated with the benefits that the allocation would have for countries with which it has a strong disagreement—thus breaching the "doctrine of economic neutrality" that should characterize these decisions. It should be added that this was a break with the support of the United States for SDRs during their creation in the 1960s and for the large 2009 allocation[9]. Given the nature of this instrument, SDRs will not create a major problem for the dominance of the United States dollar in international payments. Surprisingly, India supported the view of the United States but later changed its stand in favor of the proposal. The proposal is still on the table and it may get the approval of the incoming Biden Administration.

Although somewhat less than two-fifths of the SDR issues would benefit emerging and developing countries, it is also true that this is the only participation that these countries have in the "seigniorage" associated with the issue of international money–the privilege enjoyed by the United States, the Eurozone and, to a lesser extent, other developed countries and China. These countries are also subject to boom-bust cycles in access to international finance. Because of liquidity and financing issues, they have not been able to adopt the aggressive expansionary macroeconomic policies put in place by

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[7] The current rule is that approval is necessary when the SDR allocation received by the United States is larger than its IMF quota.

[8] See G-20 (2020), p. 8, footnote 1.

[9] The support has been weaker at other times, and probably explains in part the lack of emissions during other periods.

developed countries during the current crisis. So, even with current allocation criteria, the issue of SDRs would be good for emerging and developing countries. The benefits would be considerable for many low-income countries (Collins and Truman, 2020).

To make better use of new SDRs and those that have not been used by countries, a special fund could be created to allow those SDRs to be lent to the IMF to fund its facilities (Gallagher, Ocampo and Volz, 2020a; 2020b). These could also use them to support other programs in favor of emerging and developing countries, such as increasing official development assistance or capitalizing or buying bonds from multilateral development banks.

It is true that, although the tendency in the use of SDRs has been positive during the COVID-19 crisis, the amounts involved have been small (Figure 2 and Table 2). The same is true of IMF lending: up to the end of October, 95 countries had received IMF support, for a total of $101.4 billion, but only $49.5 billion excluding the Flexible Credit Lines approved for three Latin American countries (Colombia, Chile, and Peru), which operate as a contingency arrangement and may not be disbursed. This is much less than the estimates at the start of the crisis that the IMF would need about one trillion dollars to finance its programs. However, the need for resources would increase if the crisis lasts more than it was originally expected, if the United States Federal Reserve starts to unwind its stimulus, which has been behind the large dollar liquidity (probably an unlikely scenario at the time of writing this paper), and if there is an increasing number of debt crises in the developing world. And, in any case, SDRs are an asset of central banks with additional features, particularly the implicit backing of countries for additional borrowing from international markets.

It is worth adding that, to contribute to the provision of international liquidity, the United States Federal Reserve relaunched its swap lines with other central banks, following a practice that had already been put in place during the 2008-2009 North Atlantic financial crisis. However, only four emerging economies have access to this mechanism: Brazil and Mexico in Latin America, and the Republic of Korea and Singapore in East Asia (the latter are still classified as emerging, but are already high-income countries). The use of this facility reached its peak in May 2020, at lower levels than those that it did after the collapse of Lehman Brothers in September 2008, and has been falling since June. A new mechanism was the creation of a repo instrument, which allows the Federal Reserve to buy Treasury Bonds which countries want to sell; this support, however, only benefits countries with large amounts of foreign exchange reserves.

Finally, a major issuance of SDRs during the current crisis should be the beginning of a deep discussion on the role of this instrument in the international monetary system, following the proposals that have been on the table and that I summarized in the previous section. Notably, the principle should be set that they should be issued in much larger amounts, in a counter-cyclical way, and should become the major instrument, or even the only one, that the IMF uses to finance its programs. The possibility of changing the allocation rules should also be on the table, as well as its possible use by private agents. These reforms would lead to more active use of one of the most underutilized instruments of international economic cooperation.

Bibliography

Camdessus, M. (2000) "An Agenda for the IMF at the Start of the 21st Century". Remarks of the Managing Director of the IMF at the Council on Foreign Relations, 1 February. New York: IMF External Relations Department. Available at: https://www.imf.org/external/np/speeches/2000/020100.htm.

Clark, P.B., and J.J. Polak (2004) International Liquidity and the Role of the SDR in the International Monetary System. *IMF Staff Papers*, 51(1): 49–71. [Reproduced in Polak (2005: chapter 9).]

Collins, C., and E. M. Truman (2020) *IMF's special drawing rights to the rescue*. Peterson Institute for International Economics (PIIE). Available at: https://www.piie.com/blogs/realtime-economic-issues-watch/imfs-special-drawing-rights-rescue

Cooper, R. (2010) *Does the SDR Have a Future*. Available at: http://scholar.harvard.edu/cooper/publications/does-sdr-have-future.

Eichengreen, B. (2011) *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System*. New York: Oxford University Press.

Erten, B., Ocampo J.A. (2013) Building a Stable and Equitable Global Monetary System. In J.A. Alonso, G.A. Cornia, and R. Vos (eds), *Alternative Development Strategies for the Post-2015 Era*. New York: Bloomsbury, chapter 9.

G20 (Group of 20) (2009) *The Global Pact for Recovery and Reform*. London Summit, 2 April. London: G20. Available at: http://www.cfr.org/financial-crises/g20-global-plan-recovery-reform-april-2009/p19017

G20 (2020) *Communiqué, G20 Finance Ministers and Central Bank Governors Meeting*, 14 October. Available at: https://g20.org/en/media/Documents/FMCBG percent20Communiqu percentC3 percentA9_English_14October2020_700pm.pdf

Gallagher, K.P., Ocampo J.A., Volz, U. (2020a) "It's time for a major issuance of the IMF"s Special Drawing Rights". Available at: https://ftalphaville.ft.com/2020/03/20/1584709367000/It-s-time-for-a-major-issuance-of-the-IMF-s-Special-Drawing-Rights/, March 20th

Gallagher, K.P., J.A. Ocampo and U. Volz (2020b) Special Drawing Rights: International Monetary Support for Developing Countries in Times of the COVID-19 Crisis. *Economist Voice.* Available at: https://www.degruyter.com/document/doi/10.1515/ev-2020-0012/html

IMF (International Monetary Fund) (2009) *Review of the Adequacy of and Options for Supplementing Fund Resources*, Finance, Legal, and the Strategy, Policy, and Review Departments, January.

IMF (2011) *Enhancing International Monetary Stability–A Role for the SDR?,* Strategy, Policy, and Review Department, January.

IMF (2018) *Considerations on the Role of the SDR*. Policy Paper, April.

Kenen, P. (2001) *The International Financial Architecture: What's New? What's Missing?* Washington DC: Institute for International Economics.

Keynes, J.M. (1942–43) The Keynes Plan. Reproduced in J.K. Horsefield (ed.) (1969), *The International Monetary Fund, 1945–1965: Twenty Years of International Monetary Cooperation*. *Volume III: Documents*. Washington, DC: International Monetary Fund, pp. 3–36.

Mnuchin, S. (2020) *U.S. Treasury Secretary Steven T. Mnuchin's Joint IMFC and Development Committee Statement.* United States Department of the Treasury, 16 April [online] https://home.treasury.gov/news/press-releases/sm982.

Ocampo, J.A. (2002) "Recasting the International Financial Agenda". In J. Eatwell and L. Taylor (eds), *International Capital Markets: Systems in Transition*. New York: Oxford University Press, chapter 3.

Ocampo, J.A. (2017). *Resetting the International Monetary (Non)System.* Oxford and Helsinki: Oxford University Press and UNU-WIDER.

Padoa-Schioppa, T. (2011) "The Ghost of Bancor: The Economic Crisis and Global Monetary Disorder". In J.T. Boorman and A. Icard (eds), *Reform of the International Monetary System: The Palais Royal Initiative*. New Delhi: SAGE Publications, chapter 6.

Polak, J.J. (1979) "Thoughts on an International Monetary Fund based Fully on SDR". Pamphlet Series 28. Washington, DC: International Monetary Fund.

Polak, J.J. (2005) *Economic Theory and Financial Policy: Selected Essays of Jacques J. Polak, 1994–2004*, edited by J.M. Boughton. Armonk, NY: M.E. Sharpe.

Solomon, R. (1982) *The International Monetary System, 1945–1981*. New York: Harper and Row.

Stiglitz, J.E. (2006) *Making Globalization Work*. New York: W.W. Norton and Company.

Triffin, R. (1961) *Gold and the Dollar Crisis* (revised edition). New Haven, CT: Yale University Press.

Triffin, R. (1968) *Our International Monetary System: Yesterday, Today and Tomorrow*. New York: Random House.

UNCTAD (United Nations Conference on Trade and Development) (1965) *International Monetary Issues and the Developing Countries: Report of the Group of Experts*. New York: United Nations.

United Nations (1999) "Towards a New International Financial Architecture". *Report of the Task Force of the Executive Committee on Economic and Social Affairs of the United Nations*, 21 January. Geneva: United Nations. Available at: http://www.un.org/esa/ffd/economicgovernance/EC-ESA_Financial percent20Architecture_1999.pdf

Williamson, J. (2009) "Understanding Special Drawing Rights (SDRs)". Policy Brief PB09-11, June. Washington, DC: Peter G. Peterson Institute for International Economics. Available at: http://www.iie.com/publications/pb/pb09-11.pdf.

Williamson, J. (2010) The Future of the Reserve Syste". *Journal of Globalization and Development*, 1(2): Article 15.

Zhou X. (2009). *Reform the International Monetary System*. Beijing: People's Bank of China. Available at: http://www.maxwell.syr.edu/uploadedFiles/exed/sites/pgppm/Program_Readings/11-10, percent20Brown_Reform percent20the percent20International percent20Monetary percent20System.pdf

CHAPTER 3

CENTRAL BANKS AND THE GLOBAL FINANCIAL SAFETY NET

Edwin M. Truman[1,2]

Banks are where the money is.

— Attributed to Slick Willie Sutton, explaining why he robbed banks.

In a financial crisis, liquidity is scarce. In a domestic crisis, the central bank's role is to satisfy liquidity demands. The global financial safety net (GFSN) lacks a systemic liquidity component. In global financial crises, no central bank is mandated to play this role. At the global level, the International Monetary Fund (IMF) is at the core of the GFSN, but the Fund cannot expand its balance sheet without limit.[3] In a serious crisis, this constraint may become binding.

In this policy analysis, I describe how to relax this constraint on the IMF by drawing on national central banks to supply short-term liquidity and thereby conserve the longer-term lending capacity of the Fund. I first review the state of play on central banks' lending to other central banks. I then outline three possible structures for how central banks can augment the IMF's resources in a crisis. In the following section, I provide answers to some subsidiary questions about such structures and how it would strengthen the GFSN. I conclude by discussing why any such proposal is a difficult sale.

My key points are:

1) Establishing a mechanism through which central banks augment IMF lending is theoretically quite simple.

2) The global financial system today has eleven swap networks or equivalent arrangements in which well over half of the members of the IMF with almost 90 percent of global GDP participate to some degree.

3) These mechanisms are not linked together or, in most cases, to the IMF, and do not individually offer the scale of support that is needed in a global liquidity crisis.

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[2] I have benefitted from the advice, comments, and support of C. Randall Henning, Patrick Honohan, Tianlei Huang, Gary Hufbauer, Rakesh Mohan, John Murray, and Maurice Obstfeld in preparing this analysis.

[3] If an 85 percent weighted majority of the IMF's members approve, the IMF can allocate Special Drawing Rights (SDR) without limit. However, SDR allocations expand the balance sheets of the monetary authorities that receive them, not the balance sheet of the Fund itself.

4) A central-bank-financed mechanism supporting the IMF not only would help to stabilize the international financial system in a global crisis, but also would augment the Fund's own limited resources.

5) The key feature of such a mechanism is that the liquidity assistance that it can offer is temporary. This feature should attract those who worry that increasing the resources of the IMF and similar institutions would contribute to moral hazard.

THE STATE OF PLAY

When governmental borrowers need access to international liquidity (funds denominated in foreign currency) in a global financial crisis, they have three basic options.

I. A government can draw on its foreign currency reserves. However, reserves are finite and governments in recent decades have been reluctant to dip into them too deeply, out of fear that doing so will trigger a run on their currency, lead to an unwelcome tightening of money market conditions, and/or constrain access to international financial markets.

II. A government can apply to the IMF for assistance; but as noted above, the IMF's financial resources are limited and an individual country's access to various facilities is limited both in the size of its access and/or comes only with policy conditions that generally are not welcome.

In the context of the Coronavirus pandemic, the IMF has four principal instruments through which it can provide funds quickly to members: rapid credit facility, catastrophe containment and relief trust, rapid financing instrument, and the short-term liquidity line (SLL). Each tool is limited in scale of access and/or eligibility. The first two are for low-income members. The third is primarily for them. The fourth requires ex ante policy conditionality in the form of approval of current policies and offers funds for 12 months up to only 145 percent of a country's quota.

Members can also apply for IMF programs which under the Fund's exceptional access policy may be to provide large amounts of financial support, but access to such resources comes with policy conditions and is not granted on demand. Before a crisis, a member can qualify via ex ante policy conditionality for a flexible credit line (FCL) for a renewable period of one or two years, and it can draw on that line in an emergency. Only a handful of countries have established FCLs, and they tie up the IMF's future commitment capacity. At present, four members have FCLs (Chile, Colombia, Mexico, and Peru) at an average of 6.75 times their quotas. As of October 30, 2020, those commitments tied up 78 percent of IMF commitments and 45 percent of IMF credit outstanding plus commitments. The four members account for less than three percent of IMF quotas. Colombia has indicated an intention to draw on its FCL, which would be a first.

III. A country's central bank may be eligible to apply to another country's central bank to draw on a swap line or similar arrangement—Table 1.

The Federal Reserve has established liquidity swap lines with 14 other central banks and established a temporary repo facility for foreign and international monetary authorities (FIMA) to implement overnight repurchase transactions to liquify their holdings of US securities. The Federal Reserve swap lines cover a large part of the global financial system in terms of GDP but only 32 countries can access the network, including the 19 countries that use the euro via the European Central Bank (ECB). [4] The

[4] Countries that may potentially draw on the Federal Reserve had 28 percent of 2019 global GDP on a purchasing-power-parity basis; source IMF *World Economic Outlook database*, April 2020.

FIMA facility adds liquidity to the financial system as a whole because it allows a foreign central bank to easily mobilize its holdings of US government securities.[5] However, as with the first option, it does not add to the global stock of international reserves.[6]

Some other central banks offer facilities that allow other central banks to liquify their foreign currency reserve assets in the first central bank's currency. Panetta and Schnabel (2020) describe the ECB's swap lines with three European Union (EU) partners and the PBoC and its Eurosystem repo facility (EUREP) for non-euro area central banks.

Other governments and central banks also have established ad hoc or permanent swap or swap-type facilities.[7] The largest arrangement in terms of the number of participants is the network of swap arrangements of the People's Bank of China (PBoC) which has 54 partners, including the ECB through which it reaches an additional 19 countries. The Chiang Mai Initiative Multilateralization (CMIM) has a short-term liquidity (swap-type) feature and a longer-term regional financial arrangement, but it has never been activated.[8]

Table 1: Available Financing from Major Swap-type Arrangements

Arrangement	Number of Participants	Size (USD billions)
Federal Reserve Swaps	32 (1)	420 (2)
Peoples Bank of China Swaps	54 (1)	511
Chiang Mai Initiative Multilateralization	13	322
Japan (Bank and Finance Ministry)	8	184
European Central Bank Swaps	4	130
Contingent Reserve Arrangement	5	100
North American Framework Arrangement	3	9
Latin American Reserve Fund	8	7
Eurasian Fund for Stabilization and Development	5	5
Arab Monetary Fund	3	5
South Asian Association for Regional Cooperation	8	2
TOTAL	**143**	**1,605**

Sources: Bank of Japan[9], Federal Reserve Bank of New York[10], European Central Bank (2018), Panetta, Fabio and Isabel Schnabel (2020), and Stubbs et al. (2021).
(1) Includes the 19 members of the euro area.
(2) Sum of the maximum access for central banks with limited access.

[5] As of November 2020, use of the FIMA repo facility has been small, but its existence has helped to stabilize the system.

[6] During the global financial crisis of 2008-2009, drawings on the Federal Reserve swap line by the ECB exceeded the total foreign exchange reserves of the European System of Central Banks. So far in 2020, the peak total amount outstanding on the Federal Reserve swap network was $449 billion at the end of May.

[7] The US Treasury has a standing swap agreement with Mexico as part of the North American Framework Agreement and historically has established temporary swap agreements with many countries.

[8] See Henning (2020) for information on the regional financial arrangements more broadly.

[9] https://www.boj.or.jp/en/intl_finance/cooperate/index.htm/

[10] https://www.newyorkfed.org/markets/international-market-operations/central-bank-swap-arrangements

From a systemic perspective, these arrangements have four drawbacks.

First, they are not globally integrated. Leaving aside a few small bilateral arrangements, the eleven networks include 143 partners in 104 countries with 89 percent of global GDP. Sixty-five countries are covered by the six largest networks with at least $100 billion in resources or total potential drawings.

Second, the size of potential drawings is small for all except the Federal Reserve swap lines and a few of the PBoC swap lines. For example, Brazil can draw $60 billion from the Federal Reserve, about $25 billion from the PBoC, $18 billion from the BRICS' Contingent Reserve Arrangement, and $22 billion from the IMF's SLL.[11]

Third, some countries, primarily in Sub-Saharan Africa, are left out. Only Nigeria and South Africa participate in any type of arrangement. Columbia and Peru are among the countries that are covered by some type of arrangement, but not one of the big six.

Fourth, advocates of an increase in central bank international financial assistance in support of the GFSN do not agree about the objective. For some, the principal objective is to provide a financing alternative only available with economic policy adjustments under the aegis of the IMF. For others, the objective is to respond to temporary shocks and to buy some time before determining whether changes in economic policies will be necessary. This distinction is crucial for how we think about central bank international financial assistance and the GFSN, the participants, and in particular the potential drawing countries.

CENTRAL BANK SUPPORT FOR THE GFSN: THREE STRUCTURES

Central bank support for the GFSN and the IMF at its center can take many forms. Below, I outline three structures. Each involves two basic components: (a) central banks because they can print money, and (b) the IMF because it cannot print money and needs to temporarily augment its lending capacity.

SHORT-TERM CENTRAL BANK LOANS TO THE IMF

In a highly structured approach, a group of central banks alone or governments with, or backing their central banks would commit to providing unlimited financial resources to the Fund in fixed proportions agreed on in advance upon receiving a request from the IMF.[12] The process for triggering the Fund's access to central bank support for short-term lending to members would also be agreed to in advance between the Fund and each central bank. That agreement should cover the global financial conditions that would need to prevail before the network could be activated and the procedure that would be followed to trigger the facility. The simplest procedure would be for IMF management to inform the executive board that the pre-agreed conditions had been met and for the board to vote to confirm management's recommendation.

[11] Korea can draw about $55 billion on its PBoC swap line, but only $6 billion from the non-conditional component of the CMIM. To date, the peak of its outstanding drawings on its Federal Reserve swap line was $18.8 billion in May and June. Singapore can draw about $45 billion on its PBoC swap line, and only $3.6 billion on the CMIM. It has not drawn on the Federal Reserve. The ECB can draw about $55 billion on its PBoC line, but this is not very large relative to the ECB's recent peak outstanding drawings on the Federal Reserve of $145 billion in early June.

[12] The amount can be unlimited because the central banks are supplying their own currencies and should be because the objective is to supply all the liquidity needed in an environment where the demand is uncertain. Rationing defeats the purpose.

Realistically more than a simple weighted majority vote should be required, but less than 85 percent where one member can block activation. Alternatively, or in addition, each participating central bank would have to agree to activate its participation.

The criteria for IMF members to access the facility would also need to be set in advance. The presumption would be that (a) those drawing on the network were facing a common short-term liquidity problem, (b) they would be able to repay the IMF within a year, and (c) if they could not do so, they would enter into a longer-term adjustment program with the Fund in a size that would cover, their outstanding liability to the central-bank supported facility and, thus, to the lending central banks.

On the assumption that a group of principal members of the IMF agreed to this approach, its principal procedural disadvantage is that an act of the US congress would be required in advance for the Federal Reserve to participate. Other central banks might also need formal government approval. Under US law, no US entity can lend to the IMF without congressional authorization. In principle, the Federal Reserve could commit to a parallel lending scheme. In doing so, it would lose the principal advantage of this approach for central bank lenders which is that the central bank has a claim on the Fund rather than on the country drawing on the facility.

One can think of this approach as providing a liquidity supplement to the new arrangements to borrow (NAB). It would involve a smaller number of central banks than the 38 countries that participate in the NAB which is used to augment quota resources supporting IMF programs.

CENTRAL BANK COOPERATION

A looser structure could also be considered. In Truman (2011), I outlined a three-key approach to addressing liquidity problems in a global crisis.

The first key would be held by the IMF. Based on objective, pre-agreed on criteria, the IMF would declare a need for additional global liquidity to support the stability of the international financial system and recommend that central banks consider providing liquidity to other countries via their central banks.

The second key would be held by the group of central banks that had previously established a global cooperative framework in the form of a global swap network. Participation in the network would be predetermined by the central banks based, for example, on the independence of the central bank partners and assessments of the stability of their financial systems. The central banks would meet and, using their own criteria, would agree or not with the IMF that there was a global need for liquidity that could and should be met by activating the network. The criteria used by the central bankers should be transparent, but they might differ from those used by the IMF. For example, they might give greater emphasis to financial conditions and the risk of global inflation. The presumption would be that all the major central banks would participate.

The third key would be held by each individual central bank (or pair of central banks) deciding to respond to the decisions of the IMF and the central banks as a group with a specific swap operation or sequence of operations. Importantly, no central bank would be required to activate the third key. Would national central banks come under pressure to use their third key? Certainly, but those pressures are there already. An approach of this type would establish the global context for an activation of a global swap network for those countries deserving of assistance.

Individual central banks would remain free to extend swap credit on a bilateral basis. However, those operations should be transparent.

LOOSE AD HOC LINKS TO THE IMF

Central bank swap drawings are not necessarily concessional or without conditions. Some swap-type arrangements today may explicitly or implicitly be linked to the IMF. Schenk (2020) reports that an IMF backstop of swap drawings was common in the 1960s. I can attest to the fact that several times since 1970 when a foreign central bank drew on the Federal Reserve, the drawing was conditioned on an understanding that if the country could not repay, it would commit to going to the Fund to obtain a program.[13]

The CMIM is linked to the Fund in that drawings beyond 30 percent of the country's credit line must be in support of an IMF program. In the case of the European Stability Mechanism (ESM), which does not currently do short-term lending, countries that borrow from it are expected to approach the Fund for support at the same time, but in principle having an IMF program is not required.

[13] Three instances in my experience were with the United Kingdom in 1976, Mexico in 1982, and Mexico in 1994. In the first two cases, the developments forced the country to go the Fund almost immediately. In the third case, Mexico did not draw, but it drew in early 1995 and went to the Fund for assistance as well.

Central banks, individually, and/or collectively could agree that repayments of drawings on their swap lines should be linked to a commitment by the drawing central bank to establish a program with the IMF to ensure repayment within 12 months.

SUBSIDIARY QUESTIONS

Collaborative central bank support of the GFSN raises a number of questions subsidiary to its basic structure, such as what is its purpose, which countries should benefit, which central banks should participate, and how does it fit with other elements of the international financial architecture? In this section, I outline my thinking on five aspects of this proposal.

PURPOSE

The proposed framework has three purposes.

First, help to stabilize the international financial system in a crisis.

Second, complement the IMF's other lending tools, most of which require policy adjustment programs or are based on ex ante conditionality.

Third, augment the IMF's own financial resources in a crisis. Central bank financing is generally short-term. For example, swap drawings are normally for 90-day or three-months maturity and can be rolled over three times for a maximum total effective maturity of one year. The tool is intended to address a country's short-term liquidity problem that is expected to be reversed. If the central bank is not able to liquidate its drawings in 12 months, the presumption is that the country's problems are deeper than a lack of access to short-term liquidity. In that case, the country's financial obligation would switch from the central bank, or central banks, that advanced the funds to a regular IMF lending program.

Some argue that the IMF already has its Short-term Liquidity Line (SLL) and that it is not necessary to pull the central banks into such operations. However, drawings on the SLL are limited to 145 percent of a member's quota, and no member has yet used the facility. On the other hand, three of the four EMDE with access to a Federal Reserve liquidity swap line, where access is on average 3.6 times access to the SLL, have drawn on the Federal Reserve in 2020.[14] The peak amounts outstanding to the central banks of Korea and Singapore have at times exceeded what would be available from the IMF. Put the other way, if the IMF committed to lend to the four countries 5.22 times their quotas on average, it would tie up 30 percent of the Fund's current lending capacity.

Creating a link between central bank lending to the IMF would allow the IMF to concentrate its finite financial resources on longer-term lending and economic policy support programs. For example, if Colombia actually draws on its FCL, it will not only be drawing down on a commitment that the IMF has already provided for in its assessment of its lending capacity, but it will be further reducing that capacity if Colombia's $2.9 billion quota is still included it the Fund's financial transactions plan, as it was for the period ending on October 31, 2019.

[14] The exception is Brazil.

A widespread financial crisis involves significant uncertainty about future developments and central banks are not in the business of making long-term loans or advances. Therefore, it is important to link any central bank financing to an IMF backstop. The Fund can, in effect, replace the central banks. If, after three rollovers of a drawing, the country cannot repay its swap drawing, it would have previously committed to establish an IMF-supported program of economic policy reforms and the IMF would have to amend its policies on exceptional access to allow it to lend larger amounts than the normal one-year limit of 145 percent of quota and multi-year limit of 435 percent of quota.

The intense phase of most global financial crises generally persists for no more than six months. The intense phase of the global financial crisis lasted from early October 2008 through March 2009. However, it is reasonable to expect that many of the countries drawing on the central-bank-IMF GFSN would be able to repay within a year because the peak of the crisis would have passed. Therefore, they would not have to draw on the IMF's quota and long-term borrowed resources. The central banks would have effectively supplied those resources.

ELIGIBILITY TO BORROW

Eligibility to draw on the central banks could be set several ways. My preference would be for a comprehensive pre-qualification approach (Truman 2010). Comprehensive pre-qualification would work as follows:

Every member of the IMF is obligated to have an annual Article IV consultation and review of its economic and financial policies by the IMF staff and executive board. As an integral part of these reviews, the IMF staff would state whether the country should over the period before the next consultation be eligible to draw on the swap facility if it were activated. In principle, the criteria could be weaker than those applied to eligibility for an FCL because those involve actual commitments of IMF funds for a period of 24 months that is often extended, rather the 90-day loans that potentially can be rolled over, but with a maximum maturity of 12 months. Critics object that use of the pre-qualification approach would turn the Fund into a rating agency, undercut its role as a trusted advisor, and discourage countries from approaching the central banks and the Fund. In my view, the best advice has teeth.

Alternatively, the Fund could commit in advance to apply its FCL criteria or its PLL criteria to qualify potential recipients.[15] A third approach would be for the Fund to establish the criteria at the time the central banks were called upon to support the GFSN. This would allow the Fund to take account of any special circumstances at the time. One very conservative approach would be to limit drawings to those countries that are included in the current financial transactions plan. One benefit of even such limited eligibility is that it would give confidence to those members included in the plan to remain in it.

In the third, less IMF-centric structure, the central bank participants could set their own criteria.

CENTRAL BANK PARTICIPATION

Central bank participation, of course, should be voluntary. But the objective should be to maximize participation by the major central banks. One difference between the first two principal structures outlined above is that in the first approach of lending to and through the Fund, governments necessarily will be more involved in whether their central bank should participate. In contrast, in a facility

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[15] Henning (2016) proposed that central banks provide swaps to countries that qualify for the FCL, on the reasoning that the Fund was well placed to assess creditworthiness and could be drawn upon if necessary, to redeem drawings.

organized by the central banks themselves, the members could set the criteria for membership and the basis for sharing calls on the facility.

One criterion for presumptive central bank participation could be whether the central bank itself issues a "freely usable currency" as defined in the IMF articles of agreement.[16] At present, the IMF has determined that only the five currencies in the SDR basket meet this definition—euro, UK pound, US dollar, yen, and yuan. This is an anachronism. Many other currencies should be classified as freely usable. One guide to identifying those currencies is the triennial BIS (2019) over-the-counter foreign exchange turnover survey.[17] Central banks whose currencies account for more than 2 percent of turnover could be designated. On this basis, six additional currencies would be treated as freely usable in order of their turnover data: Australian dollar, Canadian dollar, Swiss franc, New Zealand dollar, Swedish krona, and Korean won. Including these six central banks and treating the ECB as a single institution, a total of 11 central banks would participate in the facility. The currencies of those central banks are part of 89 percent of all foreign exchange transactions. Each currency's share of the total might also be used as its share in financing the first two types of collective structures.[18]

CURRENCY DENOMINATION

Logically, each of the central banks participating in the first two structures should provide their own currencies through the facility.[19] Moreover, as reported by McDowell (2019) for the PBoC and Panetta and Schnabel (2020) for the ECB, one central bank motivation for establishing swap or similar arrangements is to promote the international role of its currency. Realistically, most of the countries drawing on the facility in a crisis today are likely to want US dollar liquidity. Moreover, foreign exchange markets at the time might not be as liquid as they normally are allowing for easy currency conversion. Therefore, the country drawing on the swap facility should be allowed to request US dollars or any other freely usable currency. Based on the experience in the 2008-2009 global financial crisis and the March-April phase of the Coronavirus pandemic, it is most likely that the request would be for US dollars. If a participating central bank does not want to reduce its own holdings of US dollars, the Federal Reserve should agree to allow the central bank to draw on its liquidity swap line for this purpose. All except one of the 10 other central banks suggested earlier as participants in the swap facility have liquidity swap lines with Federal Reserve. The exception is the PBoC which currently has more than adequate reserve holdings to facilitate conversion into dollars.

TRANSPARENCY

Transparency is important for central bank operations in support of the GFSN. Today, we lack comprehensive information about many central bank swap arrangements. In general, of the central bank

[16] Article XXX (f) defines a freely usable currency that "the Fund determines (i) is, in fact, widely used to make payments for international transactions and (ii) is widely traded in the principal exchange markets."

[17] In the survey, the sum of participations is 200 percent to take account of the fact that two currencies are involved in each transaction.

[18] On this basis, for example, the US share would be 50 percent, the euro share would 18 percent, the Canadian share 3 percent, and the Korean share 1 percent.

[19] Logically, any country whose currency has been defined as freely usable should be expected to meet IMF requests to participate in its lending operations by providing its own currency rather than supplying US dollars out of its reserves. The IMF's procedure in this area is another anachronism. It dates from the period immediately after World War II when foreign exchange markets were impeded by controls and substantially less liquid and the concern was that the country drawing on the Fund would not receive fair value in its drawing. The IMF should adopt a multi-currency approach in its lending operation to encourage less international reliance on the US dollar.

parties to such arrangements, at least one, put out a press release when a line is established. However, the announcement sometimes does not provide a figure for any limit on outstanding drawings on the line, much less information on any other terms. Drawings are often not reported as well.

Central banks are more transparent today than in the past and the IMF is as well. However, more can and should be done if the central banks are going to be effective in supporting the GFSN.

At one end of the transparency spectrum is the Federal Reserve. The Federal Reserve Bank of New York provides daily data on outstanding amounts of drawings on a weekly basis along with data on the size of Federal Reserve swap lines. At the other end of the spectrum is the PBoC. Scholars must search central bank websites for announcements of PBoC swap arrangements and their size is sometimes not revealed. For example, McDowell (2019) scoured central bank websites for information. He learned that the PBoC has swap lines with Georgia and Nepal but could not find information on their size.

As with borrowings from central bank discount windows, a case can be made that the regular provision of data on swap drawings is an unwelcome signal that the drawing country is in financial trouble. When many central banks are drawing or have drawn, the stigma is less. Ten of the 14 participants in the Federal Reserve swap network have drawn since early March. In this context, there is safety in numbers.[20]

The IMF also is less transparent than it should be about its financial operations. For example, the Fund's "quarterly" report on financial transactions dated August 1, 2020 and covered the two-quarter period ending October 31, 2019. If the IMF and the central banks of its members were to establish arrangements in support of the GFSN, transparency about those operations would be important for the participating central banks and the public in all participating countries.

CONCLUDING REMARKS

The design of a structure through which the major central banks could augment the resources of the IMF and strengthen the GFSN by providing short-term liquidity in a crisis is not complicated. The hurdles are political not technical.

On the one hand, central banks are less engaged with the IMF at the policy level than they were before the collapse of the Bretton Woods system in the 1970s. Their mandates do not explicitly include the objective of *international* financial stability. Central banks do have an interest in international financial stability, but they may be reluctant to enhance the IMF's role at the center of the GFSN.

On the other hand, some central banks see their swap lines as supporting the international role of their currencies. For the Federal Reserve the causality is reversed: because of the international role of the dollar, the Federal Reserve has twice in a period of 13 years activated a swap network of substantial scale to help stabilize the global financial system as well as its own financial system. During the global financial crisis and the euro debt crisis, the Federal Reserve's justification of its actions on the basis of the importance of international financial system stability to economic recovery encountered domestic

[20] This was not always the case. In the 1970s and 1980s, the Federal Reserve sometimes granted phantom swap lines where the funds were locked up at the Federal Reserve Bank of New York and any drawings were reported with a lag of one to four months in reports of the managers of the accounts.

political criticism. The sale might be easier in the future if the Federal Reserve were participating with other central banks in a global structure focused on the IMF at the center of the GFSN.

We already have multiple swap or swap-type networks; many countries participate in more than one. However, they are not linked, most are small, and a substantial number of countries are left out.

Central bank reinforcement of the GFSN in cooperation with the IMF would not only help to stabilize the international financial system but would also temporarily augment the Fund's own limited resources.

Bibliography

BIS (Bank for International Settlements) (2019) *Triennial Central Bank Survey: Foreign Exchange Turnover in April 2019 (September)*. Basel, Switzerland: Bank for International Settlements.

CGFS (Committee on the Global Financial System) (2011) *Global Liquidity: Concept, Measurement, and Policy Implications*. Basel, Switzerland: Bank for International Settlements (CGFS Paper 45).

Edwin, T. (2011) Three Evolutionary Proposals for Reform of the International Monetary System, *Remarks delivered at the Bank of Italy's Conference in Memory of Tommaso Padoa-Schioppa*. Available at: https://www.piie.com/commentary/speeches-papers/three-evolutionary-proposals-reform-international-monetary-system (Accessed: 29 September 2020).

Henning, C. R. (2015) The Global Liquidity Safety Net: Institutional Cooperation on Precautionary Facilities and Central Bank Swaps, Centre for International Governance Innovation.

Henning, C. R. (2020) Regional Financial Arrangements and the International Monetary Fund: Sustaining Coherence in Global Financial Governance. *CIGI Special Report*. Waterloo, Ontario: Centre for International Governance Innovation.

McDowelll, D. (2017) The (Ineffective) Financial Statecraft of China's Bilateral Swap Agreements, in *Development and Change*. (50), pp. 122–143.

Panetta, F. and Schnabel, I. (2020) *The Provision of Liquidity through the ECB's swap and Repo Operations. The ECB Blog*. Available at: https://www.ecb.europa.eu/press/blog/date/2020/html/ecb.blog200819~0d1d04504a.en.html (Accessed: 30 September 2020).

Schenk, C., R. (2020) *Central Bank Cooperation and US Dollar Liquidity: What Can We Learn from the Past?* (Per Jacobsson Lecture at the Bank for International Settlements).

Strengthening the Global Financial Safety Net (2018). Frankfurt, Germany: European Central Bank (Occasional Paper Series, 207).

Stubbs, T. *et al.* (2020) *World Development*.

CHAPTER 4

IMF QUOTA REFORMS AND GLOBAL ECONOMIC GOVERNANCE: WHAT DOES THE FUTURE HOLD?

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SUMMARY

The world is on the cusp of an epochal change in global economic power, not seen during the past 200–250 years since the start of the industrial revolution. The center of gravity of the global economy is shifting back towards Asia from the North Atlantic. The pace of change that has taken place since the turn of the century is remarkable. This transformation is not yet reflected in the framework of global economic governance, where there is little substantive change in the governance structures of the international financial institutions, such as the International Monetary Fund and the World Bank. They continue to be dominated by the US and Europe. As emerging and developing economies (EDEs) continue to gain in economic size in the coming years relative to the advanced economies encompassing the United States and Europe, and China in particular, the challenges facing global economic governance will intensify greatly.

This paper examines issues related to the potential for quota reforms in the IMF in the future. The paper documents the increasing imbalances between economic weights of dynamic EDEs and advanced economies, and their quota shares and voice in the governance of the IMF. It raises the question of whether the current lack of change will gradually make the IMF increasingly unrepresentative, and hence lacking in effectiveness in the future as the key institution devoted to providing a global financial safety net (GFSN).

The paper reviews the troubled history of quota reforms in the recent past. The 14th Quota Review, approved in 2010 in the wake of the North Atlantic financial crisis, was finally implemented in 2016; the 15th review, which should have been completed in 2015, was concluded with no change in 2019; and the 16th review is not slated to be completed until 2023, and unlikely to be put into effect before 2025. Thus, the quota shares and hence weight in governance of the IMF will be 20 years out of date at that time. For the IMF to be effective and credible it is essential that its governance structure, as

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[2] I would like to express my deepest appreciation to my longtime collaborator and co-author, Muneesh Kapur, for invaluable help in collating and updating all the data in this paper, and for insightful comments. The tables and charts were originally compiled for our joint 2015 paper (Mohan and Kapur, 2015). They have all been updated for this paper.

[3] I am grateful for very helpful comments received from Kevin Gallagher, Randall Henning, Maurice Obstfeld, Jose Antonio Ocampo, Y V Reddy, Hector Torres and Edwin Truman.

reflected in respective quota and vote shares, follows the changing composition of the global economy on a continuous basis as intended by its articles of agreement.

First, as China approaches or even surpasses the United States in its share of global GDP at market exchange rates its quota share would have to be of a magnitude similar to that of the United States. Second, the share of the European Union countries, including that of the UK, will have to be reduced significantly. Third, as other dynamic EDEs like India also gain in global GDP share, so should their quotas increase. Fourth, the role of other EDEs, particularly low-income countries, in governance of the IMF also needs to be enhanced. One way of doing this would be to increase allocation of the basic votes which every country gets regardless of size.

The strategy for obtaining agreement by the United States to such a quota review would be enhanced if the US quota share does not fall below 15 percent, thereby retaining veto power whenever a super majority is required in IMF decision-making. The existing quota formula will need revision to accomplish this: essentially the role of GDP would need to be increased, and that of openness reduced.

Thus, there is a confluence of interest between the emerging economic powers and the United States. So the challenge for EDEs is how to get the United States in their corner. It is only if the US agrees that there can be any possibility of the EU and Japan agreeing on the kind of quota reform proposed here. A carrot and stick approach would be needed: EDE support for formula changes that preserve US quotas above the 15 percent threshold on the one hand; and threat of competing arrangements like the CMIM (Chiang Mai Initiative)/AMF (Asian Monetary Fund) and BRICS CRA (Currency Reserve Arrangement) gaining in strength on the other. Given the potential resources available in Asia and the BRICS, the latter can indeed be a credible course of action. The European Stability Mechanism (ESM) is already well resourced so that EU countries will now seldom need IMF resources. If the AMF is established along with strengthening of the BRICS CRA, the United States will be left stranded in the IMF. So it would be in its interest to pursue this course of action.

Such an agreement would require great enlightenment, statesmanship and wise diplomacy on all sides. In view of the vastly increased geopolitical tensions in both economic and political spheres, the likelihood of such an approach cannot be deemed to be high at this time, though the change in US administration gives some cause for optimism.

If this is not done the international monetary system and the GFSN will then essentially be a fragmented one, and the role of the IMF in global economic governance will be reduced and of a different character.

INTRODUCTION

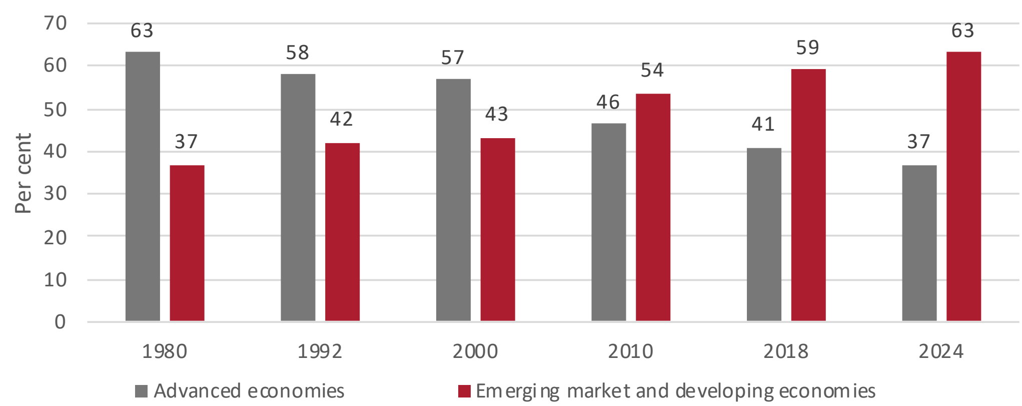
The world is on the cusp of an epochal change in global economic power, not seen during the past 200–250 years since the start of the industrial revolution. What is remarkable is the pace of change that has taken place since the turn of the century.

After more than 200 years, the center of gravity of the global economy is shifting back towards Asia from the North Atlantic. Yet little evidence of this change is reflected in the framework of global economic governance, where we see hardly any substantive change in the governance structures of the international financial institutions, such as the International Monetary Fund and the World Bank. The current system still reflects the economic power structure as it emerged after World War II, but which was updated through inclusion of Japan and Germany as they recovered from the ravages of that War. *The international financial organizations remain dominated by the advanced economies (AEs)*[4] *particularly the G7*[5], even as they have been losing their relative economic share, particularly over the last couple of decades.

The global economic structure was broadly stable from 1945 until the turn of the millennium. The advanced economies' share in global GDP was around 60 percent (on purchasing power parity (PPP) basis) throughout that period though there were changes in relative weights among the advanced economies themselves, particularly related to the postwar rise of Germany and Japan. Change has gathered pace since 2000, with economic weight shifting from the North Atlantic to Asia. This is expected to accelerate further over the next couple of decades. So, changes in global economic governance will have to be more substantive than the current incremental change envisaged.

What is remarkable is the pace of change that has been experienced since 2000, with the share of AEs falling rapidly to just over 40 percent now, and the share of emerging market and developing economies (EDEs) increasing correspondingly from 40 to 60 percent (on PPP basis) over the same period[6]. Furthermore, the G7 countries' share has fallen from 44 to 30 percent, with the share of the BRICS[7] countries rising from 19 to 33 percent over the same period, dominated, of course, by the rise of China. The share of the European Union countries has correspondingly fallen from 24 per cent to 16 percent. As we look ahead, current IMF projections are that the share of BRICS will increase further to 37 percent as that of the G7 falls to 27 percent in 2024[8] (Figure 1). Barring unforeseen circumstances, this pace of relative change will continue into the foreseeable future, with obvious implications for the need for very significant changes in the governance framework of the global economy in general, and of the IMF in particular.

Figure 1a: Share in Global GDP (PPP Basis): AE and EMDE



Source: World Economic Outlook Database, October 2019, IMF.

4 The classification for AEs and EDEs used throughout this paper is from the IMF World Economic Outlook, October 2019 database.

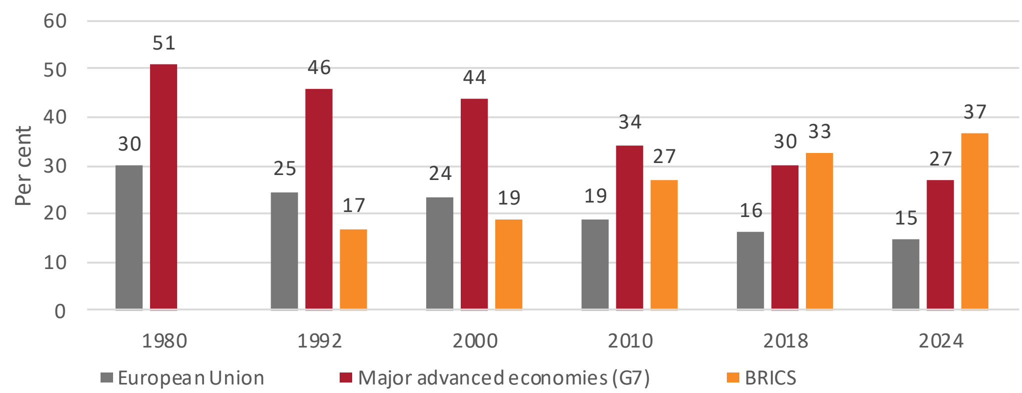
5 The Group of Seven (G7) consists of the seven largest advanced economies in the world: Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

6 Much of this change has been dominated by the high growth exhibited by Asian countries, particularly China.

7 An informal grouping of Brazil, Russia, India, China, South Africa.

8 As projected by the IMF in 2019. The impact of COVID-19 could possibly alter this projection but it is still too early to conjecture the direction of change that might occur.

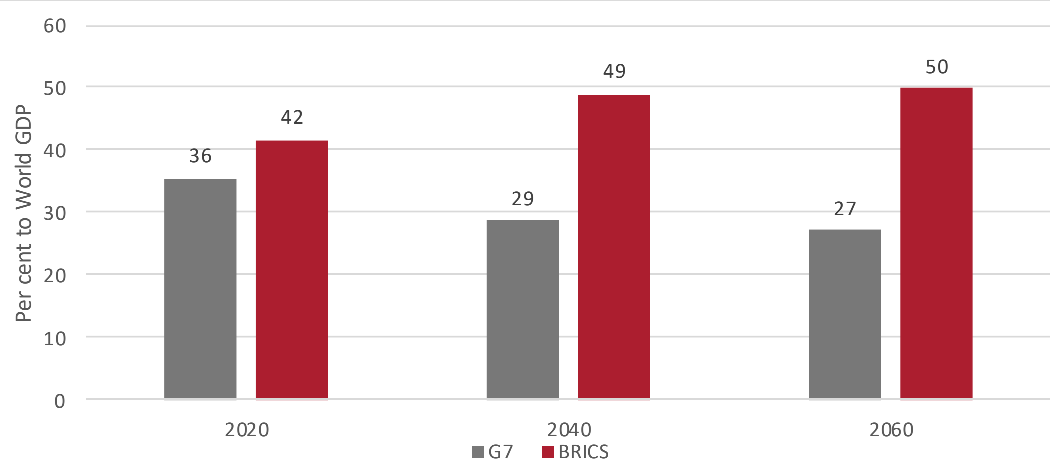
Figure 1b: Share in Global GDP (PPP Basis): Major Groups



Source: World Economic Outlook Database, October 2019, IMF.

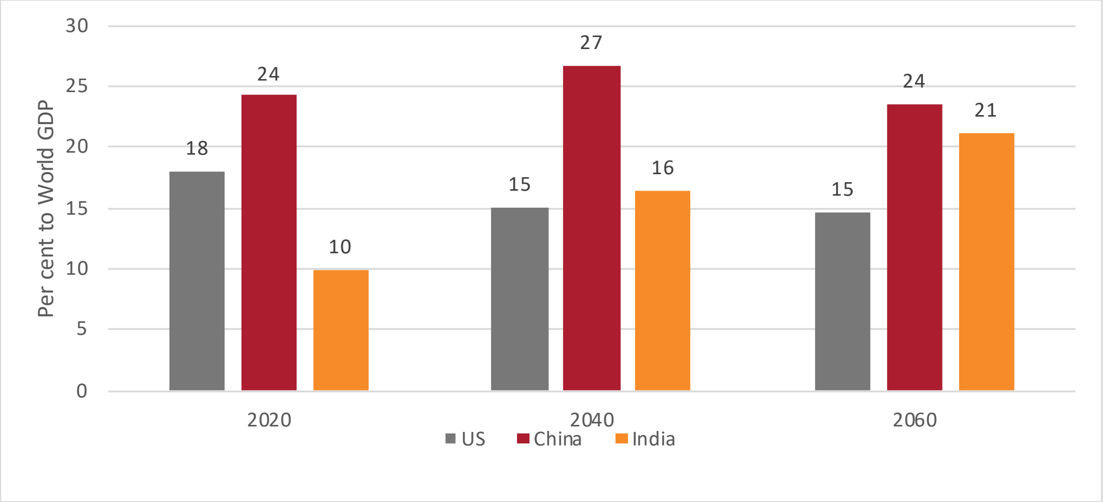
This constitutes a remarkable transformation in the structure of the global economy in a very short period of historical time. Such a pace of change is probably unprecedented in human economic history. It is no surprise then that the existing global economic power and governance structure is finding it difficult cope with this phenomenal change. "The intimate links between the rise and fall of great powers and the international monetary and financial system is what makes studying the latter so fascinating" (Gourinchas and others, 2019). The last time that such a change took place was at the beginning of the 20th century. Britain was the leader of the world economic system until around World War I and the British pound sterling was the operative global currency as the US dollar is now. It took almost 30 years, and two World Wars, when the United States clearly took over leadership of the global economic system and currency (Kindleberger and Aliber, 2005). This change in the prevailing hegemon was anything but orderly and did not take place quickly. As China's economy continues to gain in size relative to the United States in the coming years, and possibly even surpasses it (at market exchange rates) within the coming decade, the challenges facing global economic governance will intensify greatly (Figure 2). Our collective objective must be to engineer a transition this time that is not as disruptive.

Figure 2a: Projected Structure of the Global Economy: G7 and BRICS



Source: Long-term Baseline Projections, Economic Outlook No. 103 (July 2018), OECD.

Figure 2b: Projected Structure of the Global Economy: US, China and India



Source: Long-term Baseline Projections, Economic Outlook No. 103 (July 2018), OECD.
Note: Data in Figure 2 are based on potential output in USD at constant 2010 PPP.

The reluctance exhibited collectively by advanced economies to accept broader governance changes, despite these momentous economic shifts, is illustrated by the five-year delay in ratification of the 14th Review of IMF Quotas by the United States Congress. The voting and quota structure of the IMF cannot be changed without an affirmative vote from the United States since such a vote requires a super majority in the IMF, which gives the United States an effective veto[9],[10]. This quota reform was approved by the IMF's Board of Governors in 2010, but it finally came into effect as late as January 2016. This reform doubled the IMF's quota resources, and brought in some changes in its voting and quota structures. Thus, the 2016 change reflected economic data as they existed 11 years earlier in 2005. Given the rapid change in the global economic structure during this period, the 2016 quota reform was already obsolete when it came into effect.

The creation of new institutions led by emerging and developing economies, particularly by the BRICS countries, such as the AIIB[11], and the BRICS New Development Bank (NDB) and Currency Reserve Arrangement (CRA)[12], is indicative of these countries' dissatisfaction with the current slow pace of change in global economic governance. However, these institutions were initiated when there was

[9] The Fund's Articles require that a resolution involving changes in quotas should be approved by the Board of Governors with 85 percent super majority of the total voting power. This has not always encountered difficulty since the US executive can concur to the Board of Governors' resolutions without congressional approval. However, the Board resolutions have also included another requirement – the participation threshold. The new quotas can become effective only if they are ratified by a specified majority of members. This participation threshold has been set as a means of pressuring members to respond quickly and, perhaps more importantly, of ensuring that the increases take effect simultaneously and hence avoid temporary shifts in voting power. Though there was no participation threshold stipulated in some reviews, e.g. the fifth review, this threshold has usually been kept quite high – typically 70-75 percent, and as high as 85 percent in two instances at US insistence. It provides an additional controlling lever to the country with the highest quota share, i.e., the US. The effectiveness of the quota increases has indeed been held up then by the delayed ratification by the US: the 7th and 8th reviews and the recent 14th review.

[10] This congressional blockage was ironic because the US was the principal architect of the 2010 accord in the IMF board of governors. The US has 17.4 percent of IMF quota shares and 16.5 percent vote share and therefore has an effective veto whenever important decisions require a 'super-majority' of 85 percent.

[11] Asian Infrastructure Investment Bank was founded in 2016 under China's leadership.

[12] 30 percent of maximum access allowed for each country can be availed of with just an agreement of the CRA. If resources needed exceed this limit the country is mandated to have an IMF program.

greater cohesiveness among the BRICS countries. With the emergence of recent tensions between India and China it remains to be seen whether such cooperation in the economic sphere will continue in a similar manner.

The emerging economies' demand for better representation must also be seen against the backdrop of the North Atlantic financial crisis that originated with US sub-prime mortgage market troubles in mid-2007. The crisis led to stagnation and weakness in the mature economies, with the recovery being very slow for over a decade after the crisis, whereas emerging economies recorded stronger growth until recently. The ongoing change in economic weight between AEs and EDEs therefore accelerated. The ultimate impact on the current COVID-19 pandemic on these relative economic weights is too early to assess. As of now, the pandemic impact has been better contained in East and Southeast Asia, so this trend is unlikely to be reversed.

More recent developments in the geopolitical sphere and in the structure of the global economy are contributing to the severe challenges in reforming the global economic governance system, and the IMF in particular. Until recently, say 2015, the rise of the Chinese economy was being successfully assimilated in the global economic system. China's accession to the World Trade Organization (WTO) in 2001 was widely welcomed and enabled by the incumbent economic powers. It seems that their expectation was that as China got assimilated into the global economy it would increasingly become more market oriented domestically and also move towards a democratic polity. The view now is that both expectations appear to have been belied. In any case, this enabled the rapid enhancement of China's participation in global trade with its rapid ascent to becoming the largest trading nation in the global economy within 20 years. China also became the dominant recipient of foreign investment in the world. The Chinese economy is therefore totally enmeshed within the global economy now. Chinese officials have also gained in prominence among the leadership teams of the IMF[13] and the World Bank in recent years. Furthermore, agreement was reached to include the Renminbi in the Special Drawing Rights (SDR) basket of currencies in 2016, indicating acceptance by the incumbents of China as a global economic power.

Since then, however, it seems that China's approach to the world has changed and so has the world's perception of China, particularly in the United States. As the economic weight of China approaches that of the United States, as their remarkable progress in technology reaches frontiers in many different areas, and as they demonstrate their military power increasingly, the country is perceived to be much more of a threat and competitor. In Asia itself the perception of China as a threatening power has also been exacerbated by its geopolitical aggressive actions in the South China Sea and at the Indian border. These developments are leading to an increased perception that China's interest in propping up the current global multilateral system is waning.

Until recently, there was a great deal of cooperation among the EDEs led by the BRICS countries on issues of global economic governance. With the economies of Russia, Brazil and South Africa slowing in recent years, their voice in international discussions has diminished. Although the Indian economy continued relatively high growth until 2018, it has also shown signs of a slowdown that could possibly extend to the medium-term. With the recent border conflict between India and China, and increasing Brazil/China and US-Russia tensions, the role of BRICS as a relatively credible pressure group for governance reforms in the IMF and otherwise has also diminished. Within Asia, India's reluctance

[13] By informal agreement one of the four deputy managing directors of the IMF is now nominated by the government of the People's Republic of China. A recent CEO of the International Finance Corporation (IFC) was also a Chinese national.

to join the RCEP[14] trade agreement also reduces the possibilities of active cooperation among Asian countries.

The enhanced competition and conflict between the US and China on the one hand, and reduced cooperation among the EDEs and the BRICS on the other, pose very serious challenges to significant and meaningful global economic governance reform in the coming years. Clearly, the prospects of reaching some degree of consensus in reforming quotas and governance in the IMF, and of the international monetary system (IMS) overall, have therefore become much more difficult to achieve in the coming years. Unless this happens, however, particularly a much-enhanced role for China in recognition of its emerging economic weight, credibility of the IMF and other global institutions will be in question.

This paper is focused on the reforms needed in governance of the IMF if it is to remain a key player in the IMS. This is only one element of the changes needed in overall global economic governance in the years to come.

THE ROLE OF THE IMF IN THE INTERNATIONAL MONETARY SYSTEM

Governance of the IMF cannot be discussed fruitfully without placing it in the context of the IMS. The objective of the IMS is to contribute to stable and high global growth while fostering price and financial stability. As outlined in the Articles of Agreement that established it, the IMF is required to exercise oversight of the IMS. The obligations of member countries are to direct economic and financial policy towards these ends; to foster underlying economic and financial conditions needed to achieve orderly economic growth with reasonable price stability; and to avoid manipulation of exchange rates while following compatible exchange-rate policies. Thus, the IMF as a multilateral institution has a very specific mandate to ensure the stability and effective operation of the IMS. In order for it to do this effectively, overall credibility of the institution is of the most importance, and hence its governance arrangements.

What has been the performance of the IMS? As detailed in an earlier joint paper (Mohan, Patra and Kapur, 2013; henceforth MPK), the performance of the IMS in the post Bretton Woods period has been mixed. Although the period of the Great Moderation, from the early 1980s until the North Atlantic Financial Crisis (NAFC) in 2008-09, is generally believed to have been successful in terms of low and stable inflation and high growth, it is also characterized by a higher incidence of instability and financial crises. The frequency of banking and currency crises was higher during this period by historical standards.[15] In fact, the incidence of banking and currency crises in the whole post Bretton Woods period (1973-2010) was higher than other previous periods during the preceding century. "Arguably, the post Bretton Woods IMS of flexible/floating exchange rates, freer capital flows and the practice of independent monetary policy has not brought financial stability to the global economy". So all has not been well with the IMF's superintendence of the IMS[16].

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[14] The Regional Comprehensive Economic Partnership (RCEP) is a proposed free trade agreement in the Indo-Pacific region between the ten member states of the Association of Southeast Asian Nations (ASEAN), namely Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam, and five of ASEAN's FTA partners—Australia, China, Japan, New Zealand, and South Korea.

[15] See Pp 6-7 and Table 2 in Mohan, Patra and Kapur, 2013.

[16] Jose Antonio Ocampo (2017) has therefore characterized it as a "non-system".

As MPK observe[17], almost every feature of the IMS has been showing stresses. First, the system of floating exchange rates has seen greater volatility in exchange rates since the collapse of the Bretton Woods system, and exchange rates are seldom seen to reflect fundamentals. Moreover, there are now many different exchange rate arrangements with the practice of more and more managed floats as opposed to free floats. Second, the free flow of cross-border capital flows has not brought the expected benefits to the global economy. They have often been subject to excess flows and sudden stops resulting in financial instability and destabilization of exchange rates (CGFS, 2009). Third, the interconnection of financial markets along with free capital flows contribute to the enhanced possibility of contagion across countries leading to global financial instability. Fourth, as a consequence, many countries have resorted to higher accumulation of foreign exchange reserves: both with the precautionary motive and as safe assets supporting their respective currencies. This has given rise to a higher demand for US treasuries as the ultimate safe asset, though there has been moderation in growth of reserves in recent years. Expectations of the emergence of the Euro as an alternative reserve currency have so far been belied. Although the weight of the Renminbi remains low and it cannot be seen as an active reserve currency in the near future, it is possible that it could start assuming such a role if China's capital account becomes more open along with its capital market. However, the world will have difficulty in coping with more than dominant reserve currency.

According to most current projections[18], much of global economic growth over the next couple of decades will come from EDEs, particularly from Asia. As the relative weight of the United States economy falls and that of Asia, particularly China, rises, it remains to be seen whether it would be possible for the US dollar to continue its role as the global reserve currency. Is there a possibility that the global demand for safe assets might outstrip the supply of US treasuries in the foreseeable future? The sharp increase in fiscal deficits and public debt in the US (and other AEs), first after the 2008 NAFC and even more sharply now post-COVID, the supply of US treasuries is likely to remain sizable now for at least some more years. Could there be a significant shift in the denomination of world trade transactions away from the US dollar? With continued increase in investment levels in Asia and hence demand for financial resources and intermediation, would Asian capital markets in Singapore, Hong Kong, Shanghai, Shenzhen and Mumbai begin to rival those in New York and London? Will the US Federal Reserve be able to continue its impressive role as the global lender of last resort as it has so ably demonstrated during the NAFC and now in the ongoing COVID crisis? Can we expect to confront the horns of the Triffin dilemma again, even if perhaps in a different form (Gourinchas and others, 2019; Bordo and Macauley, 2018)?

Each of these problems in the IMS need to be addressed in the coming years, giving rise to consideration of what the role of the IMF can and should be in the future.

As the emerging economies grow individually and collectively, and as international financial markets become more interconnected, resolution of financial and balance of payment crises now need ever larger magnitudes of international resources to fund the global financial safety net: witness the size of bailouts that had to be organized for relatively small European countries such as Ireland, Portugal, Cyprus and Greece (in addition to Spain) during the NAFC and its fallout. The resources available with the IMF had to be supplemented by European resources: in fact, the IMF was the junior partner in these programs in terms of resources. A well-resourced European Stability Mechanism (ESM)[19]

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[17] Pp 40-41 in MPK.

[18] e.g. McKinsey Global Institute (2018); OECD (2018).

[19] The ESM has a capital of €700 billion, of which over €80 billion is paid in; its lending capacity is €500 billion, of which €410

has emerged to take care of such problems that may arise in the future in Europe. European countries may therefore have little need for the IMF as a significant source of resources in times of crisis. In the current COVID crisis, for example, the ESM, along with the European Investment Bank (EIB), the European Central Bank (ECB) and the European Commission itself have been collectively active in providing relief to its member countries with no demand for IMF resources[20].

Similarly, the Chiang Mai Initiative (CMIM) also has substantive potential resources (about $240 billion) for addressing crises in Asia, but it has so far not been used[21]. In fact, the behavior of Asian countries during the NAFC reflected, to a certain degree, a lack of confidence in IMF governance. They observed the very differential behavior of the IMF with regard to policy conditionality applied to European countries during the NAFC in contrast with what was done with Asian countries during the Asian financial crisis (AFC) of the late 1990s. Whereas much of policy conditionality imposed during the AFC involved both fiscal and monetary tightening, it was the opposite during the NAFC; moreover ,the IMF packages for Asian countries were seen to be of limited size relative to those provided in the NAFC. As a consequence, countries like South Korea and Indonesia preferred utilizing various bilateral arrangements and the swap facility of the US Fed[22] during the NAFC rather than accessing IMF or CMIM resources. They also avoided the CMIM facilities because, beyond certain amounts, they involve linkage to IMF programs and policy conditionality. When the idea of the "Asian Monetary Fund" was mooted at the time of the AFC it was opposed strongly by the advanced economies and the IMF as well. There was no such opposition to the ESM when that was set up during the NAFC.

All these issues give rise to the perception among EDEs of a lack of evenhandedness on the part of the IMF and its dominant AE members. This is then related to the issue of appropriate governance of the IMF, the magnitude of its quota resources and their composition.

As of now, these Regional Financial Arrangements (RFAs) do expect to rely on the IMF's staff for designing program, and may still need supplemental IMF resources as necessary. If crises break out in other parts of the world, there will be even greater need for the IMF to function effectively in its role in preserving financial stability and as a lender of last resort. To perform effectively, the Fund must have adequate permanent quota resources to retain and enhance its credibility and legitimacy. So it is essential that its quota resources are increased regularly, commensurate with the expanding size of the global economy and financial markets. Moreover, such regular quota reviews would also ensure that the emerging powers get their rightful share in the IMF's governance, extending its evolution since 1950.

CONTOURS OF DESIRABLE IMF QUOTA REFORMS

For the Fund as a whole, quotas are expected to provide a durable and sufficient magnitude of funds for lending to members as and when the need arises. Each member's quota determines its voting

billion is still available (During the NAFC it lent almost € 110 billion to program countries, along with another € 180 billion that were committed by the EFSF). In the current COVID crisis, it has announced the availability of up to € 240 billion as part of the European program of "Rescue Funds", but there has been no request for the funds so far.

[20] https://www.esm.europa.eu/content/europe-response-corona-crisis

[21] The Chiang Mai Initiative still does not have an adequate institutional framework giving rise to suggestions for transforming it into an "Asian Monetary Fund". E.g. in Kawai, 2015.

[22] Only South Korea could access the US Fed swap facilities, not Indonesia.

power as well as its borrowing capacity, and hence the contentious nature of decision-making related to quotas.

A comprehensive history of the evolution of quotas and governance at the IMF is available in a previous co-authored paper (Mohan and Kapur, 2015). So a brief recap is sufficient here. At its founding the IMF was intended to be inclusive in its membership so that it could manage the global economic monitoring system effectively. It started with 40 members: the Axis powers[23] were originally excluded; and then, as a result of the Cold War almost all socialist countries, led by the Soviet Union were also not members. So it was anything but inclusive through most of its history. It became truly global with universal membership only in the 1990s after the fall of the Iron Curtain: it now has 189 member countries.

Although, from the beginning, the allocation of quotas has been intended to be based on formulae, in practice actual quotas have emerged from complex bargaining between member countries during each review. Until the 1990s, although the formal decision-making regarding enhancement and allocation of quotas in each review rested with the IMF Executive Board and approval by its Board of Governors, effective bargaining and resolution essentially took place in the G7.

Decisions on IMF governance and the use of IMF resources can no longer be made in the cozy clubs of the G7 and G10[24] as they were in the past: some of the action has already shifted to the G20, which effectively brokered the 14th Review agreement led by the United States. However, now even the G20 seems to have been ineffective as seen from the 15th and 16th reviews.

The formulae used have changed three times[25] since the IMF's inception, becoming increasingly complicated over time until the 14th review. The current formula agreed to by the IMF board in 2008 is perhaps the simplest in the IMF's history, even if it may still suffer from serious flaws.[26],[27]

From the inception of the IMF, its Articles of Agreement mandate quota reviews to be undertaken at intervals not exceeding five years. Until recently they have indeed been undertaken relatively regularly even though the process has generally not been smooth. Each review entails decisions on two issues: the expansion of total quota resources and their allocation to member countries. In principle, the expansion of resources should bear some relationship to overall expansion in the global economy and global trade; and the reallocation of quotas should reflect the changing economic weight of countries over time. Discussions on both these issues have usually been contentious, often leading to delays.

In order to avoid the extreme delay experienced in the ratification of the 14th Review, consideration needs to be given to injecting some automaticity in the mandated five yearly quota reviews. There has been a breach of this in both letter and spirit, as reflected in the 15th review ending after delays without any progress on quotas as well as formula. The deadline for the 16th review has already been extended from 2020 to 2023, notwithstanding the Articles being very clear on no extension.

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23 Germany, Italy, Spain and Japan.

24 Now defunct.

25 1962/63, 1983, 2008. See Table 2 in Mohan and Kapur (2015) for details.

26 See table 2, pp. 18/19 in Mohan and Kapur, 2015, for details of changes in the formulae used over time.

27 The current quota formula is a weighted average of GDP (weight of 50 percent), openness (30 percent), economic variability (15 percent), and international reserves (5 percent). For this purpose, GDP is measured through a blend of GDP—based on market exchange rates (weight of 60 percent) and on PPP exchange rates (40 percent). The formula also includes a "compression factor" that reduces the dispersion in calculated quota shares across members. https://www.imf.org/external/np/exr/facts/pdf/quotas.pdf

Advanced economies (AEs) have generally tended to resist significant expansion of IMF quota resources, whereas EDEs have favoured relatively larger increases in each review. US administrations often encounter difficulty obtaining Congressional approval, as they did in the recent 14th Review. Thus approvals for significant expansion of IMF quota resources have usually come in the presence of international economic and financial crises, or from unusual pressure applied by the IMF management and the rest of its membership. It can be said, in general, that potential debtor countries have been more interested in increasing IMF quota resources than the creditor countries. The doubling of IMF quotas in the 14th review, finally implemented in 2016, took place in light of the NAFC when some of the advanced economies themselves became debtors. This expansion took place more than 15 years after the previous one in 1999 (Table 1).

Table 1: General Reviews of Quotas

Review of Quotas	Board of Governors' Adoption of Resolution	Increase in Quotas (Percent)				Entry into Effect
		Equi-proportional	Selective	Ad hoc	Overall [1]	
First Quinquennial	March 8, 1951	0	0	0	0	n.a.
Second Quinquennial	January 19, 1956	0	0	0	0	n.a.
1958/59	February 2, 1959	50.0	0.0	10.7	60.7	April 6, 1959
	April 6, 1959 [2]					
Third Quinquennial	December 16, 1960	0	0	0	0	n.a.
Fourth Quinquennial	March 31, 1965	25.0	0.0	5.7	30.7	February 23, 1966
Fifth General	February 9, 1970	25.0	0.0	10.4	35.4	October 30, 1970
Sixth General [3]	March 22, 1976	variable	variable	variable	33.6	April 1, 1978
Seventh General	December 11, 1978	50.0	0.0	0.9	50.9	November 29, 1980
Eighth General	March 31, 1983	19.0	28.5	0.0	47.5	November 30, 1983
Ninth General	June 28, 1990	30.0	20.0	0.0	50.0	November 11, 1992
Tenth General	January 17, 1995	0	0	0	0	n.a.
Eleventh General	January 30, 1998	33.75	6.75	4.5	45.0	January 22, 1999
Twelfth General	January 30, 2003	0	0	0	0	n.a.
Thirteenth General	January 28, 2008	0	0	0	0	n.a.
2008 Reform [4]	April 28, 2008	0.0	0.0	11.5	11.5	March 3, 2011
Fourteenth General	December 15, 2010	0.0	60.0	40.0	100.0	January 26, 2016
Fifteenth General	February 13, 2020	0.0	0.0	0.0	0.0	n.a.

Note: n.a. = not applicable; no increase proposed.

1. Equi-proportional increase: Distributed to all members in proportion to existing quota shares.
   Selective increase: Distributed to all members in proportion to calculated quota.
   Ad hoc increase: Distributed to a subset of countries based on agreed criteria.
2. The February 1959 resolution provided for an equiproportional increase of 50 percent and special increases for three members. The resolution adopted in April 1959 provided for special increases for 14 additional members.
3. The quota shares of the major oil exporters were doubled with the stipulation that the collective share of the developing countries would not fall. Different increases applied to different groups of countries and individual countries' increases within groups varied considerably.
4. The Executive Board approved the 2008 Reform on April 28, 2008, which provided ad hoc quota increases for 54 countries. The 11.5 percent includes the 2006 ad hoc increases or four countries: China, Korea, Mexico, and Turkey.

Source: IMF Financial Operations, International Monetary Fund (2014); IMF website, 2020

The consequence is that IMF resources have not kept up as a proportion of either global GDP or global trade volumes (Figures 3 and 4). With globalization and increasing interconnectedness of financial and capital markets, the magnitude of rescue packages has been increasing in times of crisis. Hence the falling share of IMF quota resources contributes to reduction in the credibility and effectiveness of the IMF. There have been delays in quota reviews and also in their implementation: there have been significant lags between the approval of reviews by the IMF's Board of Governors and the date of their effectiveness (Table 2). Such delays have meant that the IMF gets the resources it needs somewhat late in relation to its needs. This has necessitated increased reliance on borrowed resources: earlier on the General Arrangement to Borrow (GAB) and now on the New Arrangement to Borrow (NAB), supplemented by Bilateral Borrowing Arrangements (BBA) in recent years after the NAFC.[28] If, instead, IMF quota resources were to be enhanced by magnitudes similar to the various arrangements to borrow there would be consequent significant reallocation of quotas, which will inevitably increase the shares of the dynamic EDEs at the expense of AEs, particularly European countries.

Figure 3: IMF Quota Resources (% to Respective GDP at Market Exchange Rates)

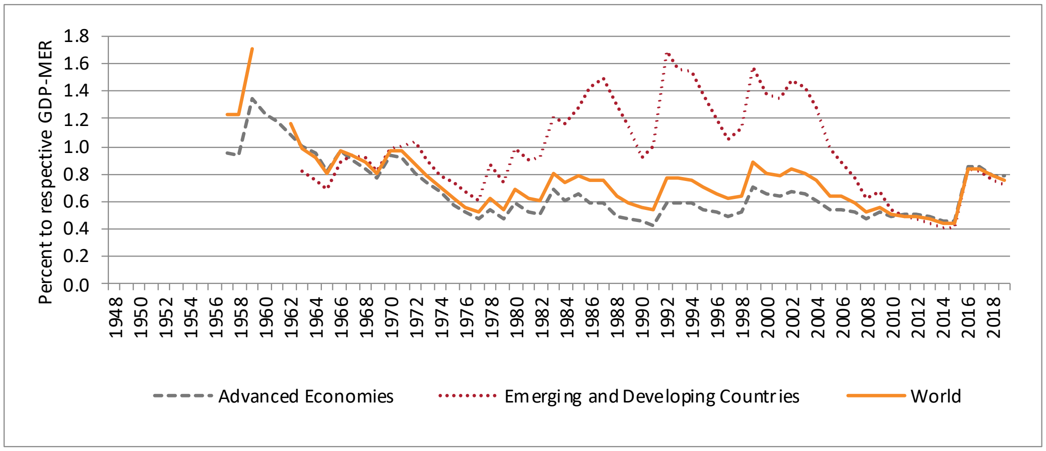
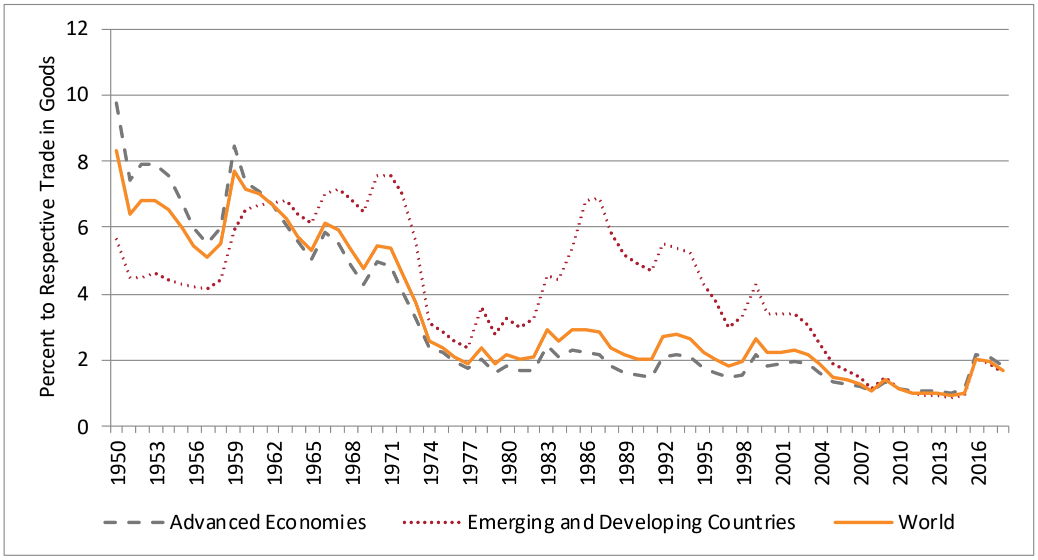


Figure 4a: Quotas and World Trade in Goods



[28] https://www.imf.org/en/About/Factsheets/Where-the-IMF-Gets-Its-Money#:~:text=2016%20Bilateral%20agreements&text=Bilateral%20Borrowing%20Agreements%20serve%20as,financing%20needs%20of%20its%20members. Accessed on August 20, 2020.

Figure 4b: Quotas and World Trade in Goods and Services

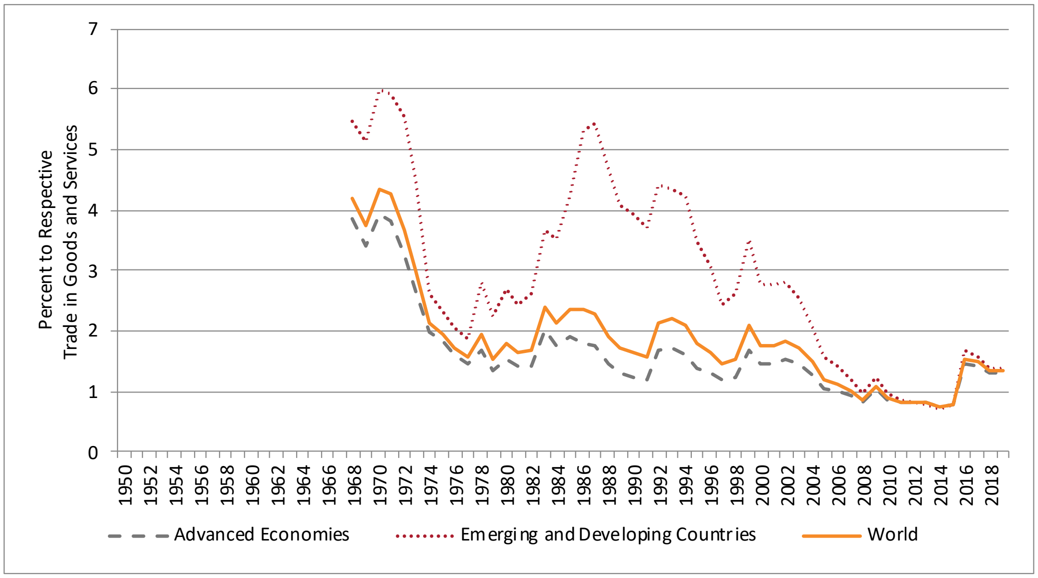


Table 2: General Reviews of Quotas: Implementation Lags, Participation Threshold and US Quota Share

Review of Quotas	Board of Governors' Adoption of Resolution	Lag between the effective date and the date approved by the Board of Governors (days)	Participation Threshold (Percent)	Effectiveness tied to an amendment in the Articles of Agreements? (b)	US Quota Share (end-Dec) (c)
First Quinquennial	March 8, 1951	n.a.	n.a.		31.7
Second Quinquennial	January 19, 1956	n.a.	n.a.		29.0
1958/59	February 2, 1959	63	75		28.4
	April 6, 1959				
Third Quinquennial	December 16, 1960	n.a.	n.a.		27.0
Fourth Quinquennial	March 31, 1965	329	66.6		25.0
Fifth General	February 9, 1970	263	0		23.1
Sixth General	March 22, 1976	740	75	Yes	22.5
Seventh General	December 11, 1978	719	75		21.2
Eighth General	March 31, 1983	244	70		20.2
Ninth General	June 28, 1990	867	70-85 (a)	Yes	19.7
Tenth General	January 17, 1995	n.a.	n.a.		18.3
Eleventh General	January 30, 1998	357	85		18.3
Twelfth General	January 30, 2003	n.a.	n.a.		17.5
Thirteenth General	January 28, 2008	n.a.	n.a.		17.1

Review of Quotas	Board of Governors' Adoption of Resolution	Lag between the effective date and the date approved by the Board of Governors (days)	Participation Threshold (Percent)	Effectiveness tied to an amendment in the Articles of Agreements? (b)	US Quota Share (end-Dec) (c)
2008 Reform	April 28, 2008	1039		Yes	17.1
Fourteenth General	December 15, 2010	1868	70	Yes	17.1

Note:

(a): 85 percent until the end of 1991 and 70 percent thereafter.

(b): Effectiveness tied to an amendment in the Articles of Agreement, which need 85 percent of total voting power.

(c) : US quota share is given for the year preceding the date of Board of Governors' resolution.

n.a. = not applicable.

Source: IMF (2014e); International Financial Statistics, IMF; de Vries (1976, 1985); Boughton (2001, 2012).

Additional Notes:

Sixth review tied to 2nd amendment of the Articles

Ninth review tied to 3rd amendment of the Articles

2008 Reforms tied to the entry into force of the 'Voice and Participation' amendment of the Articles

At present, the total quota resources of the IMF amount to SDR 477 billion (US $651 billion), which are supplemented by NAB of SDR 182 billion (US $249 billion) and BBA of SDR 318 billion (US $434 billion)[29]. The NAB resources are slated to double SDR 365 billion (US $500 billion) by early 2021. There has also been agreement on the framework to begin a new round of bilateral borrowing which will become effective at the beginning of 2021 and will then extend to end 2023, with a possible extension of one year.[30] Thus, quota resources are already and will remain less than half of total IMF resources. The availability of such large borrowed resources through generous contributions of the membership demonstrates that the need for adequately resourced IMF is recognized by its larger members. It therefore serves to provide a degree of perceived stability to the IMS along with a certain degree of complacency in regard to the availability of liquidity if needed. On the other hand, however, such availability of resources reduces the pressure for enhancement of permanent quota resources and, consequently, the reapportionment of quotas and associated changes in voice and representation that would otherwise accrue to the fast-growing emerging market countries, particularly China. These borrowing arrangements serve to enhance the resources available to the IMF, thereby promoting financial stability in the world. However, the participant countries do not receive any additional votes or quotas as a consequence of these contributions. Many of the larger EDEs, including China, have made contributions to these arrangements.

Until the 1980s the pace of change in the distribution of global GDP was relatively slow as between AEs and EDEs, and their share in IMF quotas was broadly consistent with their GDP shares. This is despite the Asian economic miracle which started in the 1970s and gathered pace in the 1980s and beyond. There was little palpable change in the EDEs overall economic weight in the world, increasing from around 30 percent in the mid-1960s to just over 40 percent by 2000 in terms of global GDP (PPP basis), since the initial economic weight of these countries was small. The 1990s increase was

[29] The NAB and BBA currently have 40 participant countries each.

[30] https://www.imf.org/en/News/Articles/2020/03/31/pr20123-imf-executive-board-approves-framework-for-new-bilateral-borrowing-agreements. Accessed August 24, 2020.

partially accounted for by the addition of all the former socialist countries IMF's membership.[31] It is in the 1990s, and accelerating after 2000, that their share in global GDP began to increase whereas their quota share did not keep pace accordingly. There has been a dramatic increase in their share of global GDP since 2000 from just over 40 percent to about 60 percent now in PPP terms, and a doubling from about 20 percent in 2000 to about 40 percent in MER terms. Over the same period the EDE share in IMF quotas has remained relatively stagnant increasing from around 35 percent in 2000 to just 39 percent now, even after the 14th review which was finally implemented in 2016 (Table 3). The underrepresentation of EDEs in IMF quota distribution and hence in governance is therefore becoming more and more stark by the day.

The advanced economies have effectively been dragging their feet on governance changes over the past couple of decades just as the weight of EDEs in global GDP started increasing rapidly (Table 4). There was no significant expansion in total IMF quotas from 1998 until the 14th Review (2010) implementation in 2016. Redistribution of quotas can only take place when there is an overall expansion of IMF quota resources. Countries retain their existing quotas through each review, and it is only the incremental expansion that is subjected to the distribution formula that is agreed to in the

Table 3: Emerging and Developing Economies: GDP and Quota Shares

Item	1948	1959	1966	1970	1978	1980	1983	1992	1999	2011	2016	2020
Share in global GDP (PPP basis)												
EDEs	n.a.	n.a.	30.8	32.3	36.1	36.9	36.4	42.2	42.8	54.7	58.1	60.3
EDEs plus 8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	45.3	57.5	60.8	62.9	63.3
Share in global GDP (market exchange rates basis)												
EDEs	n.a.	n.a.	26.5	25.6	22.9	24.2	22.9	16.4	19.7	36.6	38.7	40.9
EDEs plus 8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	21.8	39.3	41.6	43.7
Share in IMF Quota												
EDEs	22.4	21.9	26.6	28.0	33.5	35.1	34.5	36.0	35.5	36.6	38.8	38.8
EDEs plus 8	22.4	21.9	26.9	28.3	34.1	35.7	35.2	37.0	37.5	39.5	42.4	42.4
Memo:												
Member Countries	43	67	103	113	134	138	143	171	182	187	188	189

Notes:

"EDEs plus 8" adds the following 8 countries to the IMF WEO's current classification of EDEs: Czech Republic, Estonia, Korea, Latvia, Malta, Singapore, Slovak Republic and Slovenia. These eight countries are included in the group of EDEs in the quota papers, but are considered as "advanced economies" in the WEO/IFS classification.

The years in the table are in which the quota increases under the general/ad hoc reviews became effective.

Data for 2020 are IMF projections.

Source: World Economic Outlook Database (October 2019), IMF; International Financial Statistics, IMF; Mohan and Kapur (2015).

[31] In market exchange rate (MER) terms, their weight actually fell from just over 25 percent in the mid-1960s to about 20 percent around 2000.

Table 4: Agreed Changes in IMF Quotas

Year	Number of IMF Members	Proposed Quotas	Change in Proposed Quotas					
			New Members [1]		General Review	Ad hoc and Other	Total [2]
			Number	Quotas			
1944 [3]	40	7,514	40	7,514	0	0	0
1950	49	8,037	10	650	0	(2) [4]	523
	(1)	(125)	0	0	0		
1955	58	8,751	10	837	0	2 [4]	714
	(1)	(125)	0				
1959	69	14,640	11	405	5,329	157 [5]	5,890
1965	102	20,932	34	757	4,792	793	6,292
	(1)	(50)	0	—	—		
1970	116	28,776	14	204	7,394	246	7,844
1976	133	38,976	17	445	9,755	—	10,200
1978	141	59,606	8	140	19,839	650	20,629
1983	146	89,236	5	394	28,177	1,060	29,631
1990	154	135,215	10	1,017	45,082	—	45,978
	(2)	(121)					
1998	183 [6]	212,029	31	12,737	65,803	40	76,814
	(2)	(1765)					
2001	183	213,711	0	0	0	1,682 [7]	1,682
2006 [8]	184	217,528	1	8	0	3,809	3,817
2008 [8]	185	238,328	1	28	0	20,772	20,800
2010	188	477,024	3	184	238,512	0	238,696

Notes:

1. Countries that withdrew from membership or whose memberships were conferred to successor countries are shown in parentheses.

2. As of the dates of adoption of Board of Governors' resolutions proposing adjustments in members' quotas. Total change in proposed quota equals quota increases for new members, plus increases under General Quota Reviews, as well as ad hoc and other increases.

3. Excluding Australia, Haiti, Liberia, New Zealand, and the U.S.S.R., which did not join the IMF at the time of the Bretton Woods Agreement, and including increases agreed for Egypt, France, the Islamic Republic of Iran, and Paraguay shortly after the IMF began operations.

4. The quota of Honduras was reduced at its request for 1948 but was restored to the original amount in 1951.

5. Includes SDR 121 million of special allocations for countries with small quotas.

6. Includes the Federal Republic of Yugoslavia, which had not yet succeeded to IMF membership. On December 20, 2000, the Executive Board of the IMF determined that the Federal Republic of Yugoslavia had fulfilled the necessary conditions for membership.

7. Ad hoc increase for China.

8. The Quota and Voice Reform was implemented in two rounds. In 2006, initial ad hoc quotas increases were agreed for four of the most out of line members (China, Korea, Mexico, and Turkey). This was followed by a second round of ad hoc quota increases for 54 members that were agreed to in 2008.

Source: IMF Financial Operations, IMF (2014) review. Hence there is a built-in hysteresis in quota shares and hence voice and representation in the governance of the IMF. The increase in EDE weight is of course dominated by that of China (Table 5). The share of China in global GDP on PPP basis has already surpassed that of the United States. If current trends continue, as they are likely to, China's GDP at market exchange rates is also likely to exceed that of the United States within the next decade.

Table 5: GDP and Quota Shares: Country-wise

	Share in GDP-PPP in 2019 (%)	Share in GDP-MER in 2019 (%)	Share in Actual Quota in 2019 (%)	Share in Calculated Quotas in 2016 (%)
China	19.3	16.3	6.4	12.9
United States	15.1	24.8	17.5	14.7
India	8.0	3.4	2.8	3.2
Japan	4.1	6.0	6.5	5.1
Germany	3.1	4.5	5.6	4.9
Russia	3.1	1.9	2.7	2.4
Indonesia	2.6	1.3	1.0	1.3
Brazil	2.4	2.1	2.3	2.2
United Kingdom	2.2	3.2	4.2	3.6
France	2.2	3.1	4.2	3.1
Mexico	1.9	1.5	1.9	1.7
Italy	1.7	2.3	3.2	2.3
Turkey	1.7	0.9	1.0	1.2
Korea	1.6	1.9	1.8	2.0
Spain	1.4	1.6	2.0	1.7
Canada	1.3	2.0	2.3	2.0
Saudi Arabia	1.3	0.9	2.1	1.6
Iran	1.0	0.5	0.8	0.7
Egypt	1.0	0.3	0.4	0.5
Thailand	1.0	0.6	0.7	1.0
Australia	1.0	1.6	1.4	1.4

Note:
1. Countries are ranked according to their share in GDP-PPP in 2019 (as per World Economic Outlook Database, October 2019).
2. Calculated quota shares for 2016 (the latest available year) are based on the 2008 (existing) quota formula.
3. GDP-PPP: GDP on Purchasing Power Parity basis; GDP-MER: GDP on Market Exchange Rates basis.

Source: World Economic Outlook Database (October 2019), IMF; IFS, IMF.

The problem of further reform of governance in the IMF has now been compounded by the standstill agreed to in the 15th review completed in 2019.[32] First, as a consequence of the unprecedented delay in implementation of the 14th review until 2016, the 15th review could not be conducted in 2015 as it should have been according to the five-year review schedule: it was finally concluded in 2020. Second, the 16th Review should in fact have been completed this year in 2020: it is now scheduled to be conducted in 2023. It is then unlikely for an agreement on the 16th Review to be reached before 2025 and, going by past patterns, for implementation to take place much before 2027. The quota distribution resulting from the 14th Review was based on 2005 economic data will therefore stand until around 2027.[33] By then it will be out of date by 20 years or more, thereby accentuating the governance imbalance immensely.

As illustrated in Table 5, if the 14th Review quota formula is applied to 2016 data, China's calculated quota share (CQS) would already be 12.9 percent, about double its actual current share of 6.4 percent (IMF, 2018).[34] Moreover, the share of the United States on this basis would have fallen to 14.7 percent, that is less than the 15 percent it needs to retain its veto power in the IMF with respect to major decisions, such as quota reviews, which require a super majority of 85 percent. If the 15th Review had not resulted in a standstill, and if it had retained the 14th Review formula, this would probably have been the consequence. The share of the G7 would have fallen, as of the AEs as a whole. Correspondingly, the share of the BRICS countries would have risen, along with EDEs as a whole. In that event, no consensus could be reached and the 15th Review exercise was effectively shelved. Instead, it was agreed to double the NAB in order to keep the IMF adequately resourced. Presumably the advanced economies were not ready to accept the consequences of a proper review at this time for obvious reasons.

After the failure of the 15th Review, the IMF's Board of Governors (BOG) has, however, given the following direction to its executive board:

> *"The Sixteenth General Review of Quotas under Article III, Section 2(a), will continue beyond December 15, 2020 and shall be concluded no later than December 15, 2023. In this context, the Executive Board is requested to revisit the adequacy of quotas and continue the process of IMF governance reform, including a new quota formula as a guide, and ensure the primary role of quotas in IMF resources. Any adjustment in quota shares would be expected to result in increases in the quota shares of dynamic economies in line with their relative positions in the world economy and hence likely in the share of emerging market and developing countries as a whole, while protecting the voice and representation of the poorest members." (IMF, 2020)*

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[32] https://www.imf.org/en/News/Articles/2020/02/13/pr2050-imf-board-of-governors-approves-a-resolution-on-quota-reviews

[33] This makes the strong assumption that there will indeed be an agreement for an increase in quotas as well as a new quota formula. The possibility of this review going the way of the 15th Review cannot be ruled out at present.

[34] The IMF seems to have slowed down in releasing data on the annual quota updates/reviews to the public. For example, as of September 2020, we have CQS based on 2016 data, whereas CQS based on 2018 data should have become available by now. Second, the IMF is now releasing somewhat limited data compared with earlier releases. The typical comprehensive Board paper, rich in analytics, was not released along with the data for 2016. The excel file gives only country-wise data and no information is provided on group-wise shares. For individual researchers it is a tedious exercise to compile these aggregates, which are more insightful. Both the lack of the data and the analytical note constrain an analysis by the outside public/experts and perhaps takes the issue away from limelight and reduces outside pressure for IMF governance reforms.

The directions from the BOG, therefore, do enjoin the Board to:

1. Assess the adequacy of the quotas.
2. Ensure the primary role of quotas in IMF resources.
3. Evolve a new quota formula.
4. Increase the shares of dynamic economies.
5. Protect the voice and representation of the poorest members.

It remains to be seen, however, whether it will be possible for the IMF Executive Board to comply with these directions in both letter and spirit within the next three years. What are the key problems that are likely to arise?

First, the enhancement of total quota resources would have to be very significant if the second objective is to be realized. If the NAB and the BBA are to be eliminated in order to restore the primary role of quotas in IMF resources, the quotas would need to be more than doubled, as they were in the 14th Review[35]. Expansion of quotas has always been resisted by the advanced economies, particularly by the United States Congress.

There is little reason to expect any change in this regard in the years to come. Because of the economic ravages wrought by COVID-19, budgets of all countries, AEs and EDEs alike, have been severely extended increasing their debt GDP ratios beyond previous levels. Economic recovery from the current severe crisis is currently unpredictable; and so is the restoration of national budgets to some degree of normalcy by 2023. So the appetite of national legislatures to agree to a significant increase in the IMF quotas, and hence their contributions, is likely to be low by the time the 16th Review is conducted. It is notable that, during the NAFC, when the new debtor countries were largely the AEs, relatively quick agreement took place to double quota resources in the 14th Review, although its implementation was severely delayed. This time, despite the crisis being truly global, there has been no inclination to take any action on the IMF's quota resources. Instead, agreement has been reached to double the NAB and continue with the BBA thereby preserving the status quo as far as governance is concerned. With Europe having become almost self-sufficient in terms of a financial safety net through the establishment of the ESM, and the recent agreement to activate the European Commission for providing relief to its member countries, the demand for IMF resources has come almost exclusively from EDEs. So the vast majority of debtor countries are once again EDEs.

Second, the United States is unlikely to accept its quota share falling below the 15 percent threshold. It will be difficult to avoid this if the 14th review quota formula is persisted with. In fact, application of 2016 data to CQS already shows the US quota share falling to 14.7 percent (Table 5). Thus if 2022 data are used in the 16th Review it is likely that the US share will fall even further. This would suggest that the CQS formula will again need to be revisited in the 16th Review as directed by the Board of Governors. Judging from past experience such a review will be extremely contentious and it will not be easy to arrive at a consensus. More on this below.

Third, increasing the share of EDEs will mainly result in a very substantial increase in the share of China. The CQS applied to 2016 data already shows China's share will increase to 12.9 percent. Application

[35] With the proposed doubling of NAB to SDR 365 billion, and assuming the maintenance of BBA at least at its current level of SDR 318 billion, the share of quotas in total IMF resources will fall to around 40 percent in 2021.

of 2022 data will no doubt increase this further. As of now, China has already begun recovery from the COVID crisis much faster than the rest of the world. It is therefore possible that the increase in its economic weight in the world could even accelerate by 2022, thereby implying an even greater increase in its quota share if the 14th Review formula is applied. As commented earlier, apart from resistance from advanced economies, particularly the United States, there could now be emergence of similar resistance from other EDEs since many have already slowed down: the differential impact of the current crisis on EDEs is, however, difficult to assess at present.

It is also possible that other EDEs may be somewhat wary of China's dominance in global economic governance. There has not yet been much experience of China assuming such leadership in global governance fora. Hence, even if many of the EDEs may not be satisfied with the current governance structure of the IMF, it is possible that they may prefer predictability of the current arrangements rather than venturing into uncertainty regarding a larger Chinese role. The recent border clash between India and China and the consequent actions by India in terms of economic and trade restrictions on China would cast into doubt future cooperation between these two largest EDEs, and on constructive cooperation within the BRICS. Some would even argue that the BRICS grouping is now approaching obsolescence as China has sped away in economic terms from the rest. Similar issues may cloud the willingness of other Asian countries as well in terms of acceptance of Chinese leadership. Thus achievement of consensus among EDEs themselves will be problematical in the 16th Review.

Fourth, the main losers in such a reform will be the EU countries (including the UK) and Japan, all of whom wield outside influence in the IMF board. Specifically, Japan will have to yield its current second position to China in terms of quotas and votes.

Fifth, the ongoing COVID crisis has now plunged the global economy into a deep recession and increased uncertainty with regard to its future evolution. With the economies of the lowest-income countries in sub-Saharan Africa and elsewhere taking a substantial hit due to the COVID crisis, increasing their voice and representation through quota enhancements could become that much more challenging, once again suggesting a significant change in the quota formula. Even before the emergence of this latest crisis, emerging economies were no doubt experiencing a significant slowdown, some due to the downturn in oil and commodity prices, and others due to the surfacing of unaddressed structural problems. As of now it is too early to say when the global economy will return to some degree of normality. It remains to be seen which segments of the global economy will suffer more and which will recover faster. Until now, Asian countries have exhibited a lower impact of COVID, which suggests the probability of a faster recovery, particularly by China.

Sixth, when the global economy does return to a path of sustained growth, which is certainly feasible given appropriate policy responses and fading of the virus, it is likely that emerging markets will resume a growth path which is in excess of that of the AEs. The economic growth of BRICS countries, particularly China and India, should then continue to be higher than that of the AEs for the foreseeable future. They will then continue to acquire larger economic weight because of their population size and higher growth, despite relatively low per capita incomes. Their demand for increased voice and representation in the IMF and other fora for global economic governance can therefore be expected to continue to increase in the foreseeable future.

The IMF and its member countries therefore have their work cut out for arriving at some degree of mutual agreement as they approach the 16th Review. With the current voice and representation through quota shares being based on the members' economic weights in 2005, the 16th Review will undoubtedly involve a very significant change in the current governance framework as it gets updated to at least the 2022 global economy data. It would probably involve the largest change since the IMF's inception. The decisions taken in this review will therefore determine the IMF's future for quite some time to come.

DIFFERENT MODUS OPERANDI FOR THE FUTURE?

As a response to the 2008-09 financial crisis, and now the COVID crisis, all advanced economies, the United States, the United Kingdom, the Eurozone and Japan, have practiced so called unconventional, excessively accommodative monetary policies for an extended period. Interest rates have been near zero in all these jurisdictions for almost 10 years. Although these policies did succeed in staving off a depression, economic recovery was slow. Just as the global economy was approaching some degree of normality, the COVID crisis hit early in 2020. In response, another bout of accommodative monetary policies and even more expansionary fiscal policies have been put in motion in all the leading economies of the world, and other jurisdictions have followed suit.

The excessively accommodative monetary policies and associated low interest rates had already led to much greater borrowing by both public and private sectors worldwide since the NAFC. Hence large debt overhangs have emerged in advanced economies and emerging markets alike. The increase in debt globally has already been larger, faster, and more broad-based since the NAFC than in the previous three waves (Kose and others, 2020). The COVID response will only serve to accentuate this trend even further with exploding debt GDP ratios in AEs and EDEs alike. Along with the widespread ongoing trade disruption, this should thus be seen as a leading indicator for the enhanced probability of financial crises occurring in the near and medium term. Moreover, financial globalization is unlikely to be reversed with new possibilities of cross-border contagion.

Since March 2020, 70 members, including many low-income countries, have received financial support under the two instruments[36] created to address urgent financing needs that may arise from natural disasters. This support has so far not needed to be large and amounts to about US $29 billion. "This financial assistance does not have traditional IMF conditionality and phasing of disbursements over time, although countries still undertake policy commitments to address their difficulties, and governance commitments about how those resources are to be spent." [37] More countries also benefited from IMF support through other channels, including augmentations under existing programs, up to about US $70 billion.

Thus, although many countries have benefited from the availability of resources from the IMF during this crisis there has, as yet, not been excess demand for funds from the IMF, since most of these countries have been small. Since the pandemic is still continuing to spread in many countries it is possible that greater financial stress may occur in the months and years to come. This could arise from increasing defaults by non-financial companies which could then put stress on the financial sectors of some countries, and possible cross-border contagion. In addition, although there is an ongoing multilateral attempt to restructure/reduce the debt of poor countries, consensus is yet to be achieved (Watkins, 2020). Furthermore, even as private creditors of poor country sovereign debt

[36] Rapid Credit Facility and Rapid Financing Instrument

[37] https://blogs.imf.org/2020/11/16/imf-lending-lifeline-addressing-urgent-financing-needs-brought-on-by-the-pandemic/ Accessed November 21, 2020.

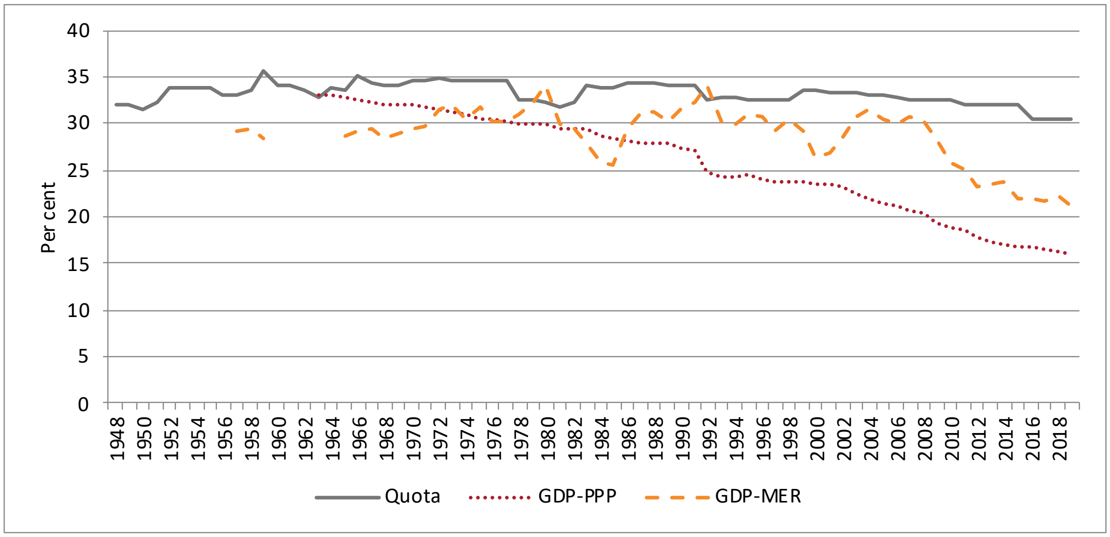
have increased in recent years there is little indication of their participation in such debt relief efforts. So we have not yet seen the full impact of COVID-19 on possible demand for IMF resources.

Consequently, at the current juncture there is an even greater need for the IMS and the International Monetary Fund within it to be seen to be effective and credible. Thus, it needs to be adequately resourced and to exhibit enhanced and credible governance.

For it to regain credibility and effectiveness, the IMF's governance structure clearly has to become more inclusive. The US needs to retain its leadership role, in its own as well as in the wider international interest. European countries remain overweight, with the 'advanced Europe' group (European Union, Norway and Switzerland) taking a third of board seats, and more than a third of board voting power. The relative constancy of their quota shares is striking, since their share in GDP has been falling consistently (Figure 5). The European Union share (including the UK) of global GDP is now just over 16 percent (PPP basis) or 21 percent (MER basis).

The key governance change in the IMF will therefore involve a significant reduction of the quotas of European countries, and Japan, and associated reduction in the seats that they occupy in the IMF board, along with a corresponding increase in the share of EDEs and of the United States.

Figure 5: European Union: Share in World GDP and Quota



Furthermore, the Bretton Woods institutions since inception have been headed by European nationals in the IMF and US nationals in the World Bank. This pattern has continued for more than seven decades now. Thus, nationality has turned out to be the guiding criterion to head the Bretton Woods organizations and nationals of other countries, irrespective of their merit, have been excluded from the process. This must be corrected. Other institutions such as the World Trade Organization have already shown the way; there is no reason why the Fund in coming years cannot find procedures that could result in the same outcome.

The way forward could include a wider rearrangement of the international monetary system with corresponding changes in the evolving role of the IMF.

As already noted, the various RFAs, particularly the ESM and CMIM, now collectively have potential resources that could exceed those of the IMF. If the CMIM transforms itself to becoming the Asian Monetary Fund (AMF) with an appropriate institutional structure, it could perform the same role in Asia as the ESM is already doing in Europe. It would be strengthened further if South Asia, particularly India, are also included in the CMIM/AMF. Furthermore, the US Federal Reserve has acted as an effective lender of last resort to selected central banks through their swap facilities during the NAFC and now in the COVID-19 crisis. In the current crisis, they have expanded their range of facilities with a new repo facility for central banks that are not eligible for their swap facilities. In addition, there has been an increasing range of bilateral swap facilities being offered by central banks to selected counterparts that have emerged in different parts of the world. The speed of these facilities is usually much faster than those provided by the IMF, with generally lower conditionality and lack of perceived stigma. The IMF is no longer the only source of funding for many countries in times of stress. All of these developments suggest a potential reduced role of the IMF in the IMS.

The IMF is obviously aware of these developments and has been seeking a greater coordinating role, though without significant success so far (IMF, 2017, 2018a). In the same vein, Ted Truman is proposing a multilateral swap mechanism through which the major central banks can use their foreign exchange reserves to stretch the resources of the International Monetary Fund and thereby strengthen the GFSN. In any case, EDEs have also been following external management policies that involve accumulation of precautionary foreign exchange reserves that then enhance their ability to maintain financial stability, maintain their own policy independence, while reducing their need to resort to external financing in times of need.

Overall, the global financial safety net has therefore changed significantly over the last 10 to 15 years with a range of different facilities becoming available in addition to those of the IMF in the event of financial crises occurring.

There are two possibilities going forward. We could emerge with a range of institutions essentially in competition with the IMF for the kind of role it performs in the IMS, either on a regional basis or among a group of like-minded countries. The second is for the IMF to coexist with such entities but evolve a coordinating role for itself. If the IMF is to evolve into a somewhat different role as a coordinator of these different facilities, along with operating its own, the need for reforming its governance assumes even greater importance, for these different institutions accept such a role. It would need to reflect better the changing global economic composition, with EDEs getting appropriate recognition and role in its governance along with enhanced quota allocations. Only then can we expect acceptance of such an enhanced role in global economic governance. What could be the key ingredients of such a change? Very clearly, reviews of IMF quotas and governance need to be more radical – with significant implications for overall quota and voting shares.

First, as China approaches or even surpasses the United States in its share of global GDP at market exchange rates its quota share would have to be of a magnitude similar to that of the United States. Second, the share of the European Union countries, including that of the UK, will have to reduce significantly. At present, whereas the GDP shares of the United States and the European Union are broadly similar at both the PPP[38] and MER[39] bases, their quota shares in the IMF are totally inconsistent. After the 14th Review, the quota share of the United States is 17.4 percent, while that of the

[38] About 16-17 percent each.

[39] About 22-24 percent each.

European Union (including the UK) is still as high as 30.4 percent. Third, the quota share of BRICS countries would have to increase significantly. There is a similar imbalance between the economic weights of the BRICS countries and the European Union. Whereas the BRICS share in global GDP is similar to that of the United States and European Union on an MER basis, it is already much higher than both on PPP basis, at almost double that of the United States (Table 6). Fourth, the role of other EDEs, particularly low-income countries, in governance of the IMF also needs to be enhanced. One way of doing this would be to increase allocation of the basic votes which every country gets regardless of size. In addition, as the number of board seats that European countries have today reduces, consistent with reduction in their quota shares, the number of board seats allocated to EDEs can then be increased. At present the whole of sub-Saharan Africa has only two board seats in the IMF: at a minimum, this number must be increased to three, as it already has in the World Bank.

Table 6: GDP and Quota Shares: Growing Imbalance

Country/ Region	2008 Reform Quota Share	14th Review (2010) Quota Share	2016 Data Update		
			Calculated Quota Share	GDP (PPP) Share	GDP (MER) Share
US	17.7	17.4	14.7	15.8	23.9
European Union	32.0	30.4	26.9	17.0	22.6
BRICS	11.5	14.8	21.2	31.6	22.9

Source: Updated IMF Quota Formula Variables - July 2018, IMF.

US AND CHINA SHOULD JOINTLY LEAD REFORMS

The kind of changes proposed above, both in the nature of the international monetary system as a whole and the role of the IMF within it, and in the transformation of relative quota shares, will be extremely contentious and hence difficult to implement. On the one hand, it will require a certain degree of enlightened leadership, while on the other will need a spirit of compromise from all sides. As well put by Hector Torres[40] in the context of WTO reform, "Only trust can pave the way for WTO reform": the same applies to the IMF.

It remains to be seen whether the upcoming change in the US administration will lead to the resumption of a constructive role of the United States in multilateral organizations and overall IMS arrangements. The incoming president elect has already indicated his intention to re-engage in the Paris Accord on climate change. There is little indication at present whether there would be a significant change in the style of engagement with China. What would be desirable is a new form of engagement that recognizes China's legitimate role in the global economy and consequently in global economic governance institutions like the IMF, while also understanding the increasingly competitive nature of the relationship. Such an engagement would have to be based on some degree of mutual trust with a common objective of promoting global economic and financial stability on a sustainable basis.

Whereas there needs to be an overhaul of global economic governance, giving a greater role to emerging economic powers, it is still necessary for the US to retake leadership in the IMF and in global

[40] Torres (2020), p.2. Hector Torres has served as an Executive Director on the Board of the IMF.

economic governance, but now it will need to indicate that it is willing to share it with a resurgent China. At the same time China will also have to demonstrate its interest in preserving a rules-based multilateral IMS, to both the United States, and equally to EDEs who may be uncomfortable with some of the actions of a more assertive China.

US financial markets continue to be the most dominant in depth and efficiency – and the dollar is still the world's dominant reserve currency and is likely to remain so for the foreseeable future. US leadership of the IMS and hence of international institutions remains of great value. It is important that, among the advanced economies, the US retains its dominant position. The Bretton Woods institutions owe their founding to US vision after the Second World War. Although the economic weight and role of the emerging economic powers in the global economy is increasing, they still have some way to go in the kind of institutional development that would be needed for assuming leadership roles in IMS, underlining the importance of maintaining US leadership.

As already noted, what is remarkable is that, in addition to the under-representation of the BRICS, and of China in particular, the country that is most underrepresented in the IMF, in relation to its share in global GDP, is the US[41]. Thus correction of this striking imbalance in favor of the US is essential to preserve US leadership in the IMF and overall in global economic governance. The chances of obtaining congressional approval for future radical quota reviews would also be enhanced if such a correction is done so that there is no imminent probability of the US quota share falling below 15 percent. The existing quota formula will need revision to accomplish this: essentially the role of GDP would need to be increased and that of openness reduced. With such a revision, the share of both the United States and China will increase, with the latter approaching that of the United States, or exceeding it over the next decade or so. If an appropriate correction is carried out in this manner, it would both postpone by some years the prospect of the US quota share dropping below the important 15 percent threshold, and enable China to also approach this threshold over some period of time. The 16th Review should also then establish the principle and procedure to implement subsequent 5 yearly reviews on an automatic basis.

It would also better reflect the changing composition of the global economy on a dynamic basis, with the emerging economic powers getting better representation along with the United States. On this matter there is a confluence of interest between the emerging economic powers and the United States. So the challenge for EDEs is how to get the United States in their corner. It is only if the US agrees that there can be any possibility of the EU and Japan to agree to the kind of quota reform proposed here. Perhaps a carrot and stick approach would be needed: EDE support for formula changes that preserve US quotas above the 15 percent threshold on the one hand; and threat of CMIM/AMF and BRICS CRA strengthening on the other. Given the potential resources available in Asia and the BRICS, the latter can indeed be a credible course of action. The ESM is already well resourced so that EU countries will now seldom need IMF resources. If the AMF is established along with strengthening of the BRICS CRA, the United States will be left stranded in the IMF. So it would be in its interest to pursue this course of action.

Such an agreement would require great enlightenment, statesmanship and wise diplomacy on all sides. In view of the vastly increased geopolitical tensions in both economic and political spheres, the

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[41] As may be seen (Table 6), the respective GDP shares (on PPP basis) of the US, the EU and BRICS countries are of similar order of magnitude, but the US quota share is the least. This is even more pronounced if GDP shares are taken at market exchange rates.

likelihood of such an approach cannot be deemed to be high at this time, though the change in US administration gives some cause for optimism.

The consequence of the absence of such progress would essentially mean the withering of the IMF as the key institution responsible for the international monetary system. We would then observe an increasing number of regional and other arrangements for the maintenance of financial stability, just as we have observed the emergence of a potpourri of trade arrangements with the weakening of the World Trade Organization over the past decade.

This would be a pity since this would result in fragmentation of the insurance that the IMF can provide on a global basis, and would be particularly disadvantageous for the countries left out of the regional arrangements.

The international monetary system and the GFSN will then essentially be a fragmented one, and the role of the IMF in global economic governance will be reduced and of a different character.

Bibliography

Bordo, Michael D. and Robert N. McCauley (2018) *Triffin: Dilemma or Myth?* NBER Working Paper No 24195. Cambridge, Mass. National Bureau of Economic Research. Available at: https://www.nber.org/papers/w24195.pdf

Committee on the Global Financial System (2009) *Capital Flows and Emerging Market Economies*. CGFS Papers No 33. Basel: Bank for International Settlements (BIS). Available at: https://www.bis.org/publ/cgfs33.pdf

Gourinchas, Pierre-Olivier, Helene Rey and Maxime Sauzet (2019) *The International Monetary and Financial System.* Cambridge, Mass. National Bureau of Economic Research. NBER Working Paper 25782. Available at: http://papers.nber.org/tmp/30985-w25782.pdf

International Monetary Fund (2017) *Collaboration Between Regional Financing Arrangements and the IMF.* Washington D.C. International Monetary Fund: IMF Policy Paper. Available at: https://www.imf.org/en/Publications/Policy-Papers/Issues/2017/07/31/pp073117-collaboration-between-regional-financing-arrangements-and-the-imf

International Monetary Fund (2018a) *The Exchange of Documents Between the Fund and Regional Financing Arrangements*. Washington D.C. International Monetary Fund: IMF Policy Paper. Available at: https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/01/16/pp120617exchange-of-documents-between-imf-and-rfas

International Monetary Fund (2018b) *Updated IMF Quota Data—July 2018*. Washington D.C. International Monetary Fund. Available at: https://www.imf.org/external/np/fin/quotas/2018/0818.htm

International Monetary Fund (2020) *Fifteenth and Sixteenth General Reviews of Quotas—Report of the Executive Board to the Board of Governors*. Washington D.C. International Monetary Fund. Available at: https://www.imf.org/en/Publications/Policy-Papers/Issues/2020/02/13/Fifteenth-and-Sixteenth-General-Reviews-of-Quotas-Report-of-the-Executive-Board-to-the-Board-49049

Kawai, Masahiro (2015) *From the Chiang Mai Initiative to an Asian Monetary Fund.* ADBI Working Paper No 527. Tokyo: Asian Development Bank Institute. Available at: https://www.adb.org/sites/default/files/publication/160056/adbi-wp527.pdf

Kindleberger, Charles P. and Robert Z. Aliber (2005) *Manias Panics and Crashes: A History of Financial Crises*. Hampshire: Palgrave Macmillan.

Kose, M. A., Nagle,P., Ohnsorge, F., Sugawara N. (2020) *Global Waves of Debt:* Causes and Consequences. Washington D.C.: World Bank. Available at: http://pubdocs.worldbank.org/en/377151575650737178/Debt-Chapter-1.pdf

McKinsey Global Institute (2018) *Outperformers: High-Growth Emerging Economies and The Companies That Propel Them*. Available at: https://www.mckinnot sey.com/~/media/McKinsey/Industries/Public percent20and percent20Social percent20Sector/Our percent20Insights/Outperformers percent20High percent20growth percent20emerging percent20economies percent20and percent20the percent20companies percent20that percent20propel percent20them/MGI-Outperformers-Full-report-Sep-2018.pdf

Mohan, R., Patra M.D., and Kapur M. (2012) *The International Monetary System: Where Are We and Where Do We Need to Go?* IMF Working Paper No 13/224. Washington DC: International Monetary Fund. Available at: https://www.imf.org/external/pubs/ft/wp/2013/wp13224.pdf

Mohan, R., Kapur M. (2015) *Emerging Powers and Global Governance: Whither the IMF?* IMF Working Paper No 15/219. Washington DC: International Monetary Fund. Available at: https://www.imf.org/external/pubs/ft/wp/2015/wp15219.pdf

Ocampo, J.A. (2017) *Resetting the International Economic (Non) System.* Oxford: Oxford University Press.

OECD (2020) *Economic Outlook: Statistics and Projections* (database) «Long-term baseline projections, No. 103». Available at: https://stats.oecd.org/viewhtml.aspx?datasetcode=EO103_LTB&lang=en

Torres, H.R. (2020) *International Institutional Architecture: Could it be Saved?* Berlin: Friedrich Ebert Stiftung. Available at: http://library.fes.de/pdf-files/iez/16385.pdf

Truman, E. (2020) "Design of an IMF Based Swap Network". Boston University: Paper presented at the Workshop on the Global Financial Safety Net., Boston University, Global Development Policy Center

Watkins, Kevin (2020) "Delivering Debt Relief to the Poorest". *Finance and Development.* Fall 2020. Available at: https://www.imf.org/external/pubs/ft/fandd/2020/08/debt-relief-for-the-poorest-kevin-watkins.htm

CHAPTER 5

ABANDONING AUSTERITY: FISCAL POLICIES FOR INCLUSIVE DEVELOPMENT

Isabel Ortiz and Matthew Cummins[1]

Over the last decade, IMF's fiscal advice to governments has combined social expenditure cuts and reforms, accompanied by regressive consumption taxes and short-term revenues from privatization. This chapter presents the evidence and argues that it is time to abandon austerity measures with negative social impacts. Instead, governments can and must identify fiscal space through progressive policies to finance inclusive and sustainable development.

THE AUSTERITY DECADE 2010-22

Since 2010, countries around the world have been implementing fiscal policies aimed at reducing spending, with limited emphasis on increasing revenue. This approach, commonly referred to as fiscal austerity, minimizes public policies and the role of government in society. By 2021, fiscal austerity had become the "new normal," impacting 5.6 billion people or 72 percent of the world population. However, as we will present, it does not need to be this way; there are policy alternatives.

Analysis of government public expenditure trends, based on IMF fiscal projections for 189 countries contained in the October 2020 *World Economic Outlook* database (IMF, 2020), shows two distinct phases of spending patterns since the onset of the global financial crisis in 2007. In the first phase (2008-09), most governments introduced fiscal stimulus programs and ramped up total spending to promote employment and protect their populations from the negative impacts of the crisis. Overall, 136 countries expanded spending during 2008 and 2009 by an average annual increase of 3.2 percent of GDP, with only 50 countries contracting public expenditure (Figure 1). The same occurred in 2020, the COVID-19 pandemic made 164 governments expand public spending by an average of 3 percent of GDP, with generally positive impacts on the population.

In 2010, however, governments started to reverse course in a second phase of the crisis that institutionalized austerity as the new norm –with the only exception of 2020. As depicted in Figure 1, the

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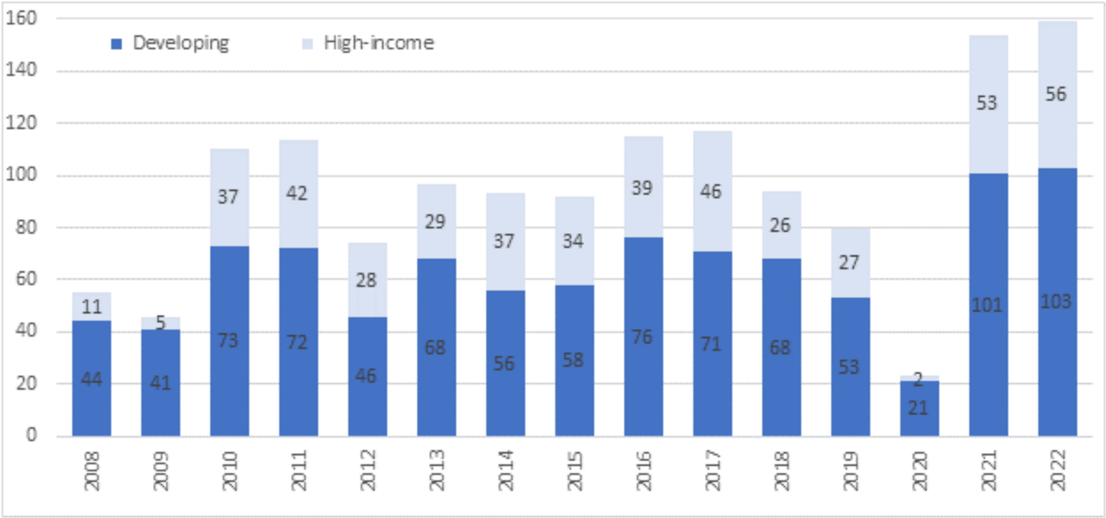
fiscal contraction phase (2010-22) is characterized by a majority of countries cutting expenditure as a percentage of GDP. This includes three shocks in which austerity deepens, the first occurring in 2010-11, the second taking hold during 2016-17, and the third is projected to commence in 2021 (Ortiz & Cummins, 2019).

In recent years, an alarming number of countries adopted excessive spending cuts. Overall, 24 governments reduced expenditure to below pre-crisis levels (i.e. the average values during 2005-07), including many countries with large human development needs such as Angola, Bhutan, Burundi, Congo (Rep.), Djibouti, Egypt, Eritrea, Guyana, Honduras, Iran, Iraq, Jamaica, Jordan, Lebanon, Liberia, Malawi, Mauritania, Moldova, Nigeria, Sudan, Swaziland, Tunisia, Tuvalu, and Yemen (Ortiz and Cummins, 2019). Developing countries have great needs for public investment in all sectors, and should be expanding their national budgets, not contracting them.

Figure 1: Number of Developing and High-income Countries Contracting Public Expenditure as a Percentage of GDP, 2008-2022



Source: Authors' analysis based on IMF (2020).

In perspective, the macroeconomic and fiscal choices made by most governments over 2010-19 were alarming. Nearly US $10 trillion was allocated to the financial sector; around US $2.4 trillion was used for fiscal stimulus plans while just US $0.24 trillion was provided in ODA to help developing countries. Another US $0.75 trillion—more than triple the amount of ODA—was assigned to the IMF to support developing countries (IMF, 2010c; Ortiz & Cummins, 2019). While trillions were given to bail out the financial sector, the costs of adjustment were thrust upon populations in most places.

Regarding the IMF, its advice underwent a major change, supported by the OECD and the G-20, to encourage "fiscal consolidation" or austerity policies. Two IMF Board papers approved in February 2010—"Exiting from crisis intervention policies" and "Strategies for fiscal consolidation in the post-crisis world"—called for large-scale fiscal adjustment "when the recovery is securely underway" and for structural reforms in public finance to be initiated immediately "even in countries where the recovery is not yet securely underway" (IMF, 2010a; IMF, 2010b). Reforms of universal pension and health entitlements were called for accompanied by "strengthened safety nets" for the poorest (IMF, 2010a, pp. 15-32). On the composition of fiscal adjustment, it was advised that most could come from (a) unwinding the previously adopted fiscal stimulus packages; (b) reforming pension and health entitlements to reduce the long-term financial obligations of the state by way of avoiding "a rise in spending as a share of GDP" (IMF, 2010a, p. 16); (c) containing other spending, by means such as eliminating subsidies; and (d) increasing tax revenues, often focused on regressive consumption taxes or value-added taxes (VAT). The Fund's fiscal consolidation or austerity agenda soon became mainstream policy advice in several international organizations and a majority of countries after 2010.

A review of 779 IMF country reports published between February 2010 and August 2019 shows that six main policies were considered by governments worldwide to consolidate budgets and two measures to boost budget revenues (Ortiz et al., 2015; Ortiz & Cummins, 2019). These included:

(i) **Wage bill cuts or caps** in 103 countries, reducing or freezing the salaries and number of public-sector workers who provide essential services to the population, including education, health, and social workers, which tends to adversely impact the delivery of public services (UNICEF, 2010; Ambrose and Archer, 2020).

(ii) **Reducing subsidies** (fuel, food, agriculture) in 102 countries, despite periods of high food and energy prices. When basic subsidies are withdrawn, food and transport costs increase and can become unaffordable for many households; higher energy prices also tend to contract employment-generating economic activities (ILO, 2017; Ortiz and Cummins, 2019).

(i) **Pension and social security reforms** in 86 countries, cutting benefits and eroding public systems. Typical reforms include raising contribution rates, increasing eligibility periods, prolonging the retirement age and/or lowering benefits, and structural reforms moving towards private systems, despite the failure of pension privatization in earlier decades. As a result, future pensioners are expected to receive lower benefits (ILO, 2014 and 2017; ITUC, 2019).

(ii) **Rationalizing and narrow-targeting welfare ("safety nets")** in 84 countries, often by revising eligibility criteria and targeting the poorest, which is a de facto reduction of social protection coverage. In most developing countries, the so-called middle classes have very low-incomes, and targeting the poor increases their vulnerability. Rather than targeting more and scaling down social assistance to achieve cost savings over the short term, there is a strong case for scaling up and building social protection systems for all (Allston, 2018; Kidd et al., 2017; Mkandawire, 2005).

(iii) **Labor flexibilization reforms** in 81 countries, such as revising minimum wages downward, limiting salary adjustments to cost of living standards, decentralizing collective bargaining, and increasing the ability of enterprises to fire employees. Labor market reforms are aimed at increasing competitiveness and supporting businesses; however, in a context of economic slowdown, they generate labor market "precarization" and depress workers' incomes (van der Hoeven, 2010; ILO, 2019)

(iv) **Reforming health care systems** in 44 countries, including raising fees and co-payments for patients as well as introducing cost-saving measures in public healthcare centers. Here, the main risk is that populations are excluded from receiving critical assistance just when needs are greatest (Karanikolos et al., 2013; Mladovsky et al., 2012; Kentikelenis, 2017).

(v) **Increasing consumption taxes or VAT** on basic goods and services in 100 countries to raise revenues, which contracts economic activity and is regressive (i.e. the poorest households pay a significantly higher share of their income).

(vi) **Privatizations** in 59 countries and strengthening public-private partnerships (PPPs) in 60 countries. Sales proceeds produce short-term revenue, but also long-term losses given the lack of future state income. Additional privatization risks include layoffs, tariff increases, and unaffordable and/or low-quality basic goods and services. With regards to PPPs, they are often promoted as a solution for countries under fiscal constraints but often result in higher user fees and poorer quality of services (Hall, 2010 and 2012; Eurodad, 2018; PSI, 2015 and 2018).

Austerity policies inflicted severe damage on populations. Women were particularly affected. Income inequality grew, , generating more rich and more poor. Millions were pushed into poverty by the jobs crisis and by the regressive austerity policies (Forster et al, 2019; Oberdabernig, 2013; Thomsom et al, 2017; UNWOMEN, 2015). Citizens challenged these approaches. For instance, courts in Latvia (2010), Romania (2010), and Portugal (2013) declared austerity cuts unlawful and unconstitutional and forced social benefits to be restored (ILO 2014, OHCHR 2013). Regrettably, as shown in Figure 1, austerity was most severe in developing countries where legal actions were not taken. The UN (2016 and 2019) and CESR (2018) argue that, according to standards of international law, both States and international financial institutions may be held responsible for complicity in the imposition of economic reforms that violate human rights.

In 2020, COVID-19 had a devastating impact on all countries. The weak state of public health systems —overburdened, underfunded, and understaffed from the previous decade of austerity—had left countries prone to healthcare failures, with catastrophic effects for the poorest populations (Stubbs et al., 2021). In Sub-Saharan Africa, for instance, the number of extreme poor increased by around 50 million, which is the biggest change in at least 40 years (Cummins, 2020). The World Bank (2020) estimates that 150 million additional people will have fallen into extreme poverty by 2021.

Governments, in response, adopted extraordinary measures to cope with the coronavirus pandemic. This included enforcing quarantines, expanding emergency public health services, and launching fiscal stimulus plans to protect people and jobs. While the IMF has supported many countries with urgent financing, this has resulted in increased debt and fiscal deficits. This will almost certainly usher in a new wave of austerity.

Even though emergency funding and development gaps remain vast, especially in poorer countries, analyses of IMF country reports and fiscal projections show that as many as 154 countries are projected to begin a process of fiscal consolidation in 2021 (and 159 by 2022, as shown in Figure 1), to free-up resources to stabilize debt levels and meet debt service (Eurodad, 2020; Oxfam, 2020). As in the previous decade of adjustment, these measures will disproportionately impact vulnerable populations: revenues will be increased through consumption taxes for two-thirds of countries for which data are available, while government spending will be below pre-pandemic levels in around half of the countries. Fourteen countries, including Barbados, El Salvador, Lesotho, and Tunisia, are likely to freeze or cut public sector wages and jobs, which could mean lower quality healthcare services and fewer nurses, doctors, and community workers in countries already short of healthcare staff (Oxfam, 2020).

FISCAL POLICIES FOR INCLUSIVE DEVELOPMENT

The policies described above are core to the so-called "Washington Consensus," applied during the 1980s-2000s (Table 1). The term was coined by John Williamson in 1989 to describe a standard set of policy measures prescribed to developing countries at the time by IFIs and the U.S. government. The first nine items are the foundational 1980s policies described by Williamson (2004), while the remaining items are "second-generation improvement" additions in recent times (Rodrick, 2006). Note that there is a significant divergence between papers produced by the research departments and staff of the IFIs (often exploring new frontiers), and the official stance in loan programs and country advice contained in article IV consultations – table 1 is based on the latter.

There is a widespread agreement on the failures of the Washington Consensus. Defenders and detractors alike agree that the policy agenda aimed at minimizing the state and promoting free markets did not deliver expected results. Studies abound on the negative impacts in developing countries in the 1980s and 1990s, which included higher infant mortality, greater morbidity, and lower education outcomes (e.g. Cornia, Jolly and Stewart, 1987) as well as slower economic growth (e.g. Birdsall and Fukuyama, 2011; Rodrik, 2006; Stiglitz, 2008).

So, why is the world still considering the Washington Consensus? Mostly because of austerity and the influence of the IFIs: Countries constrained by debt and deficits are told to adopt austerity instead of identifying new funding sources or fiscal space. Once budgets are contracting, governments start looking at policies that minimize the public sector and support the role of the private sector; generally, with the support of the IFIs advice and lending. However, other policies could and should be adopted that will lead to social and economic progress.

Now is the time for governments to make investments that would help restore full employment and promote long-term growth. The United Nations development agenda is consensus-based on various conferences and summits over the last decades. The agenda encompasses issues ranging from social inclusion and decent work to sustainable development and finance. It is grounded on country ownership of national development strategies that integrate social, economic, and environmental policy, along with enabling frameworks that promote peace and conflict prevention, good governance, and human rights. The agenda further addresses systemic issues, such as the differential impact of globalization and inequalities among and within countries (Table 1). These policies, agreed by all United Nations member states, are key for inclusive development.

Table 1: Orthodox Washington Consensus Policies vs. the UN Consensus on Development for All

Orthodox Policies - Washington Consensus	Development for All Policies - UN Consensus
1. Fiscal discipline and expenditure cuts	Public economic and social investments for development; expand governments' fiscal space
2. Redirect public expenditures such as subsidies (except for defense and the financial sector) to support economic growth with some targeted pro-poor expenditures	Redirect only regressive expenditures, such as defense or subsidies to large corporations
3. Tax reform, expanding broad-based consumption taxes, and minimizing others	Taxation for development purposes, with attention to needed redistribution
4. Financial sector liberalization	Making finance work for real economic growth, adequate regulation and taxation, selective capital controls to avoid financial volatility
5. Trade liberalization and export-led growth	Free trade not priority, industrial/technology policy to support the growth of employment-generating domestic industry before (selective) trade liberalization under adequate global agreements
6. Openness to foreign direct investment	FDI with knowledge transfer, proper taxation and decent working conditions, including global supply chains
7. Privatization and promotion of the private sector, including through PPPs (characterized as efficient)	Public services for all; supplementary private services for those with higher incomes
8. Deregulation	Adequate regulation

Orthodox Policies - Washington Consensus	Development for All Policies - UN Consensus
9. Secure property rights	Secure Human Rights and other international standards (eg labor standards)
10. Minimize the state (epitomized as a source of inefficiency and corruption, which crowds-out the private sector)	Building state capacity to promote development, growth, and equity through active promotion of development policies
11. Flexible labor markets	Decent work agenda
12. Independence of Central Banks and inflation targeting	Accommodating macroeconomic framework; employment targeting instead of exclusive focus on inflation targeting
13. Minimal social safety nets	Universal social protection systems, including public social insurance and social protection floors, with adequate benefit levels
14. Targeted poverty reduction and microcredit schemes	Universal policies, for all
15. Pension reform, including privatization; reducing tax wedge/social security contributions leading to private saving schemes	Equitable and sustainable public pension systems with adequate benefits (income security) per international standards
16. Commercialization of social services, cost-recovery, and user fees (minimal social policies)	Focus on expansion of coverage of services, ensuring quality services for all
17. Ad hoc attention to inequality, gender, and vulnerable populations	National dialogue with trade unions, employers as well as with CSOs, Parliaments; ensure that policies respond to the rights of all citizens including women and other social groups. Building peace, social cohesion, and political stability

Sources: Adapted from Williamson, 2004; Rodrik, 2006; Ortiz & Cummins, 2019; Stiglitz, 2008; UN, 2008.

ABANDONING AUSTERITY: FINANCING ALTERNATIVES

Fiscal consolidation or austerity measures are being used as a trojan horse to reduce public policies, arguing that universal public health and other development policies are not affordable or that government expenditure cuts are inevitable. This is simply not true; there are alternatives, even in the poorest countries. There is a wide variety of options to expand fiscal space and generate financing resources.

The following financing options are supported by policy statements of both the UN (see ILO, UNICEF, and UNWOMEN in Ortiz et al. 2017 and 2019) as well as the IFIs. Many governments around the world have been applying them for decades, showing a wide variety of revenue choices as well as creativity to address critical investment gaps.

1. **Increasing tax revenues:** This is the principal channel for generating resources, which is achieved by altering tax rates—e.g. on corporate profits, financial activities, property, imports/exports, natural resources—or by strengthening the efficiency of tax collection methods and overall compliance. Given the increasing levels of inequality, it is important to adopt progressive

taxes, taxing those with more income; consumption taxes should be avoided as they are generally regressive and contrary to social progress. Many governments are increasing taxes to achieve greater social investment. For example, Bolivia, Mongolia, and Zambia are financing universal pensions, child benefits, and other schemes from mining and gas taxes; Ghana, Liberia, and the Maldives have introduced taxes on tourism to support social programs; and Brazil introduced a tax on financial transactions to expand social protection coverage. Wealth taxes are being proposed in many countries as a best policy to cope with the COVID-19 pandemic.

2. **Expanding social security coverage and contributory revenues, for social protection:** Increasing coverage and therefore the collection of social insurance contributions is a sustainable way to finance social protection, freeing fiscal space for other social expenditures. Social protection benefits linked to employment-based contributions also encourage formalization of the informal economy; remarkable examples can be found in Uruguay's Monotax, Brazil's SIMPLES, Argentina, Tunisia, and many others have demonstrated the possibility of broadening both coverage and contributions by formalizing and protecting workers in the informal economy.

3. **Borrowing or restructuring existing debt:** This involves active exploration of domestic and foreign borrowing options at low cost, including concessional, following careful assessment of debt sustainability. For example, South Africa issued municipal bonds to finance basic services and urban infrastructure. For countries under high debt distress, restructuring existing debt may be possible and justifiable if the legitimacy of the debt is questionable and/or the opportunity cost in terms of worsening deprivations of the population is high. In recent years, more than 60 countries have successfully re-negotiated debts, and more than 20 have defaulted or repudiated public debt, such as Ecuador, Iceland, and Iraq which invested debt servicing savings to social programs.

4. **Eliminating illicit financial flows:** Estimated at more than ten times the size of all ODA received, a titanic amount of resources illegally escapes developing countries each year. To date, little progress has been achieved, but policymakers should devote greater attention to cracking down on money laundering, bribery, tax evasion, trade mispricing, and other financial crimes that are both illegal and deprive governments of revenues needed for social and economic development.

5. **Re-allocating public expenditures:** This is the most orthodox approach, if implemented, it must be replacing high-cost, low-impact investments with those with larger socio-economic impacts, eliminating spending inefficiencies, and/or tackling corruption. For example, Costa Rica and Thailand shifted military spending to finance universal health services.

6. **Using fiscal and central bank foreign exchange reserves:** This includes drawing down fiscal savings and other state revenues stored in special funds, such as sovereign wealth funds, and/or using excess foreign exchange reserves in the central bank for domestic and regional development. Chile, Norway, and Venezuela, among others, pursued these strategies to increase socio-economic investments.

7. **Lobbying for aid and transfers:** This requires engaging with different donor governments or international organizations to ramp up North-South or South-South transfers. Despite being much smaller than traditional volumes of ODA, bilateral and regional transfers can boost social investments and warrant attention.

8. **Adopting a more accommodating macroeconomic framework:** This entails allowing for higher budget deficit paths and/or higher levels of inflation without jeopardizing macroeconomic stability. A significant number of developing countries have used deficit spending and more accommodative macroeconomic frameworks during the global financial and economic crisis to attend to pressing demands at a time of low growth and to support socio-economic recovery.

Each country is unique, and all options should be carefully examined, including the potential risks and trade-offs, and considered in national social dialogue. National tripartite dialogue, with government, employers, and workers as well as with civil society, academics, Parliaments, and development partners, is fundamental to generate the political will to exploit all possible fiscal space options and avert austerity. Given the importance of public investments for human rights and inclusive and sustainable development, governments should be expanding budgets for a better tomorrow.

Bibliography

Alston, P. (2018) *The International Monetary Fund and its impact on social protection.* Report of the Special Rapporteur on extreme poverty and human rights. UN Human Rights Council A/HRC/38/33, Geneva, United Nations.

Ambrose, S. and Archer, D. (2020) *Who cares for the future: finance gender-responsive public services,* Johannesburg: Action Aid.

CERS. (2018) *Assessing Austerity: Monitoring the Human Rights Impacts of Fiscal Consolidation*, New York: Center for Social and Economic Rights.

Cummins, M. (2020) *COVID-19: A Catastrophe for Children*. Dakar and Nairobi: UNICEF West and Central Regional Office and UNICEF Eastern and Southern Africa Office.

Eurodad. (2017) *Unhealthy conditions: IMF loan conditionality and its impact on health financing*, Brussels: Eurodad.

Eurodad. (2018) *History RePPPeated: How Public-Private Partnerships are Failing*, Brussels: Eurodad.

Eurodad. (2020) *Arrested Development: International Monetary Fund lending and austerity post Covid-19.*, Brussels: Eurodad.

Forster, T., Kentikelenis, A., Reinsberg, B., Stubbs, T., & King, L. (2019) How structural adjustment programs affect inequality: A disaggregated analysis of IMF conditionality, 1980–2014, *Social Science Research*, *80*, 83–113.

Hall, D. (2010) *Why we need public spending*, London: University of Greenwich.

Hall, D. (2012) *Re-municipalising municipal services in Europe*, London: University of Greenwich.

ILO. (2014) *World Social Protection Report 2014-15*, Geneva: International Labour Organization.

ILO. (2017) *World Social Protection Report 2017-19*, Geneva: International Labour Organization.

ILO. (2019) *World Employment and Social Outlook 2019*, Geneva: International Labour Organization.

IMF. (2010a) *Exiting from crisis intervention policies*, Washington, D.C.: International Monetary Fund.

IMF. (2010b) *Strategies for fiscal consolidation in the Post-Crisis world,* Washington, D.C.: International Monetary Fund.

IMF. (2010c) *Financial sector taxation, IMF's Report to the G-20,* Washington, D.C.: International Monetary Fund.

IMF. (2020) *World Economic Outlook, October 2020: A Long and Difficult Ascent*, Washington, D.C.: International Monetary Fund.

ITUC. (2019) *Adequacy and Sustainability of Pensions in the Context of Demographic Ageing,* Brussels: International Trade Union Confederation.

Karanikolos, M., Mladovsky, P., Cylus, J., Thomson, S., Basu, S., Stuckler, D., Mackenbach, J.P., McKee, M. (2013) *"Financial crisis, austerity, and health in Europe"*, in The Lancet, Vol. 381, Issue No. 9874, pp. 1323–1331

Kentikelenis, A. (2017) Structural adjustment and health: A conceptual framework and evidence on pathways, *Social Science & Medicine*, *187*, 296–305.

Kidd, S., Gelders, B., Bailey-Athias, D. (2017) Exclusion by design: An assessment of the effectiveness of the proxy means test poverty targeting mechanism. Extension of Social Security Working Paper No. 56 (Geneva: ILO).

Mkandawire, T. (2005) Targeting and universalism in poverty reduction, Social Policy and Development Program Paper No. 23 (Geneva: UNRISD).

Mladovsky, P., Drivastava, D., Cylus, J., Karanikolos, M., Evetovits, T., Thomson, S., McKee, M. (2012) *Health policy responses to the financial crisis in Europe* (Copenhagen: WHO).

Oberdabernig, D. (2013) Revisiting the effects of IMF programs on poverty and inequality, *World Development*, *46*, 113–142.

OHCHR. (2013) *Report on austerity measures and economic, social and cultural rights, presented to ECOSOC*, Substantive Session of 2013, Geneva, 1–26 July, E/2013/82. Geneva: Office of the High Commissioner for Human Rights.

Ortiz, I., Cummins, M., Capaldo, J. & Karunanethy, K. (2015) *The Decade of Adjustment: A Review of Austerity Trends 2010-2020 in 187 Countries*, Geneva and New York: International Labour Organization, the South Centre and Initiative for Policy Dialogue.

Ortiz, I. Cummins, M. & Karunanethy, K. (2017) *Fiscal space for social protection: Options to expand social investments in 187 countries*, Geneva: International Labour Organization.

Ortiz, I. Chowdhury, A., Duran-Valverde, F., Muzaffar, T. & Urban, S. (2019) Fiscal space for social protection: A Handbook for Assessing Financing Options, Geneva: International Labour Organization.

Ortiz, I. & Cummins, M. (2019) *Austerity: The New Normal – A Renewed Washington Consensus 2010-24,* New York, Brussels and London: Initiative for Policy Dialogue, International Trade Union Confederation, Eurodad, Public Services International, Bretton Woods Project.

Oxfam. (2020) *IMF paves way for new era of austerity post-COVID-19*, Nairobi: Oxfam.

PSI. (2015) *Why PPPs don't work: The many advantages of the public alternative,* Greenwich: PSI and University of Greenwich.

PSI. (2018) *Privatization Watch*, Ferney Voltaire: Public Services International.

Rickard, S. J., & Caraway, T. L. (2019) International demands for austerity: Examining the impact of the IMF on the public sector. *Review of International Organizations*, *14*(1), 35–57.

Rodrik, D. (2006) Goodbye Washington Consensus, Hello Washington Confusion? *Journal of Economic Literature* Vol. XLIV (December 2006), pp. 973–987.

Stiglitz, J. (2008) "Is there a Post Washington Consensus Consensus?", in N. Serra and J. Stiglitz (eds.) *The Washington Consensus reconsidered: Towards a new global governance.* (Oxford: Oxford University Press).

Stubbs, T., Kring, W., Laskaridis, C., Kentikelenis, A., & Gallagher, K. (2021) Whatever it takes? The global financial safety net, COVID-19, and developing countries. *World Development*, *137*, 105171.

Thomson, M., Kentikelenis, A., & Stubbs, T. (2017) "Structural adjustment programmes adversely affect vulnerable populations: A systematic-narrative review of their effect on child and maternal health. *Public Health Reviews*, *38*(1), 13.

UN (2008) *Policy Notes for National Development Strategies*, New York: United Nations.

UN (2016) *Report E/C.12/GBR/CO/6 of the UN Committee on Economic, Social and Cultural Rights (CESCR), International Covenant on Economic, Social and Cultural Rights, 58 Session*. Geneva: United Nations.

UN (2019) *UN Human Rights Council Report A/74/178. Responsibility for complicity of international financial institutions in human rights violations in the context of retrogressive economic reforms.* Report of the Independent Expert on the effects of foreign debt and other related international financial obligations of States on the full enjoyment of all human rights, particularly economic, social and cultural rights, Geneva: United Nations.

UNICEF (2010) *Protecting salaries of frontline teachers and health workers*, New York: UNICEF.

UNWOMEN (2015) *Progress of the world's women 2015-2016: Transforming economies, realizing rights*, New York: UNWOMEN.

Van der Hoeven, R. (2010) "Labor markets trends, financial globalization and the current crisis in developing countries", UNDESA Working Paper No. 99, New York: United Nations.

Williamson, J. (2004) "A Short History of the Washington Consensus." Paper for the conference From the Washington Consensus towards a new Global Governance, Barcelona: CIDOB.

World Bank. (2020) *Poverty and Shared Prosperity 2020: Reversals of Fortune*, Washington D.C.: The World Bank Group.

CHAPTER 6

REGIONAL FINANCIAL ARRANGEMENTS AND IMF COORDINATION: AN ASIAN PERSPECTIVE

Aizong Xiong and Haihong Gao[1,2]

COVID-19 pandemic has caused heavy blows to the global economy and financial stability. There is an urgent need to further strengthen global financial safety nets, with a view to alleviating the insufficient international liquidity caused by the pressure from balance of payments and financial market turbulences in many countries (especially emerging markets and developing countries). After the outbreak of the pandemic, the IMF has provided large sums of financial support through existing and new lending facilities and debt relief to its member states. The RFAs have also vigorously assisted their member states affected by the shock of the pandemic. This brief policy review begins with evaluation of some of the policy responses from the IMF and RFAs during the pandemic. On this basis, it provides suggestions for further cooperation between the IMF and RFAs from the Asian perspective.

RESPONSES FROM THE IMF AND RFAS UPON THE OUTBREAK OF THE COVID-19 PANDEMIC

THE IMF'S PANDEMIC RESPONSE

Emergency financing: In early March 2020, Kristalina Georgieva, Managing Director of the IMF, announced that the IMF would offer US $50 billion to low-income and emerging market countries, which might receive support through the Rapid Financing Instrument (RFI) and the Rapid Credit Facility (RCF). As the pandemic spread all over the world, in early April, the IMF decided to raise the annual access limits from 50 percent to 100 percent of the member states' quota for the RCF and RFI, and raised the Emergency Financing Toolkit from US $50 billion to US $100 billion.

Adjusting existing lending arrangements: Since late March 2020, considerations have been given to both new lending arrangements and existing lending arrangements of the IMF, with a view to satisfying the member states' need to cope with the shock of the pandemic.

New financing instruments: On April 15th, the IMF Executive Board approved the establishment of the Short-Term Liquidity Line (SLL) to further strengthen the global financial safety nets. The SLL is

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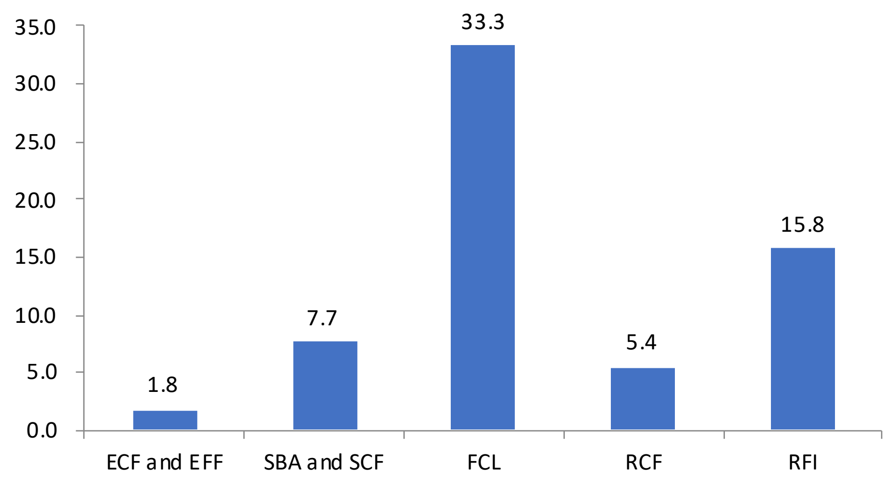
[2] The authors would like to thank the insightful comments of Randall Henning, William Kring, Kevin Gallagher and other attendees at Workshop of "Reforming the Global Financial Safety Net: Financial Instability, Global Pandemics, Climate Change, and Sustainable Development" on October 19-20, 2020.

for countries with very strong policies and fundamentals and it can provide a member state with up to 145 percent of its quota. The SLL is a prevention tool to minimize the risk of shocks evolving into deeper crises and spilling over to other countries.

Debt relief: The IMF, through the Catastrophe Containment and Relief Trust (CCRT), has provided eligible countries with upfront grants to reduce their maturing debts owed to the IMF and free up resources to help these countries respond to the pandemic.

By the end of August 2020, the IMF had provided 101 loan arrangements to 80 countries with a total amount of SDR 63.89 billion, in which emergency financing accounted for 57.8 percent, coupled with a total of SDR 1.83 billion to 28 countries for debt relief.

Figure 1: The IMF's Lending Arrangements to Member States for Responses to COVID-19 (SDR Billion)



Source: IMF, 2020.

RFAS' PANDEMIC RESPONSE

Europe: On May 15, 2020, the Board of Governors of the European Stability Mechanism (ESM) approved the establishment of Pandemic Crisis Support in response to the shock of the pandemic. Under this instrument, the ESM could provide a total of EUR240 billion in loan support to member states, with a view to meeting their direct and indirect health financing needs and to address and prevent liquidity shortages caused by the COVID-19 crisis.

Asia: To further strengthen the prominent role of the CMIM in the East Asian regional financial safety net, East Asian countries have amended the CMIM Agreement and its Operational Guidelines. Such amendment enhanced the flexibility on supporting periods of the CMIM IMF linked portion, and strengthened the coordination mechanism with the IMF.

Middle East: The Arab Monetary Fund (AMF) has provided loan support to Sudan, Jordan, Morocco, Tunisia, and other members through existing or new lending facilities.

Latin America: On May 25, the Board of Directors of the Latin American Reserve Fund (FLAR) approved a debt program leveraging its credit resources up to a total of US $6.8 billion, which represents a 60 percent increase from before the decision. Meanwhile, the FLAR Board of Directors approved the creation of an exceptional credit line to help member states better cope with COVID-19-inflicted problems related to balance of payments through flexible and timely disbursements.

COMPARISON OF RESPONSES MADE BY THE IMF AND THE RFAS

Firstly, in the wake of the pandemic outbreak, only the AMF provided assistances to its member states, despite a series of countermeasures taken by the RFAs. In contrast, countries are still more likely to turn to the IMF for loans—and less likely to seek assistance from the RFAs.

Secondly, overall, countries have received far more loans from the IMF than they could possibly get from the RFAs (Table 1). For example, Jordan received 21.8 times more loans from the IMF than from

Table 1: Selected Developing Countries Drawings from the IMF and Maximus Access Limits from the RFAs (SDR Million) (as of the end of August 2020)

Country	Actual Drawings from the IMF	Maximus Access Limits from the RFAs
Asia		CMIM
Myanmar	258.4	424.4
Middle East		AMF
Djibouti	31.8	1.8
Egypt	5,800.7	346.5
Jordan	1,217.9	58.5
Mauritania	115.9	54.2
Somalia	292.4	29.4
Tunisia	545.2	75.8
Central Asia		EFSD
Armenia	128.8	856.5
Kyrgyz	177.6	197.7
Tajikistan	139.2	131.8
Sub-Saharan Africa		BRICS CRA
South African	3,051.2	7,072.65
Latin American		FLAR
Bolivia	240.1	470.8
Colombia	7,849	907.1
Costa Rica	369.4	907.1
Ecuador	469.7	470.8
Paraguay	201.4	452.6
Peru	8,007	907.1

Notes: 1USD = 0.707265 SDR; 1AAD=3SDR.

Sources: IMF, ARMO, AMF, EFSD, FLAR, 2020.

the AMF. Egypt obtained 12.8 times more loans from the IMF than the AMF. Loans received by some countries from the IMF far exceeded the maximum amount they could receive from the RFAs. Colombia and Peru, for example, have respectively received 8.7 times and 8.8 times more loans from the IMF's Flexible Credit Line (FCL) than from the FLAR. The rapid credit resources, which Kyrgyzstan and Tajikistan have access to from the IMF, are nearly equal to or exceed the maximum credit line available to them from the Eurasian Fund for Stabilization and Development (EFSD).

Thirdly, with the exception of a few lending arrangements, most of the loans, which countries have received from the IMF, are emergency financing mechanisms, which can meet the needs of member states faster. By contrast, it may take a longer time for them to apply for loans from the RFAs—which may be one of the reasons why most countries are reluctant to apply for assistance from the RFAs.

The major regional financial arrangements include the Arab Monetary Fund (AMF), the BRICS' Contingent Reserve Arrangement (CRA), the Chiang Mai Initiative Multilateralization (CMIM), the Eurasian Fund for Stabilization and Development (EFSD), the Latin American Reserve Fund (FLAR), as well as RFAs in the European Union such as the Balance of Payments (BoP) Assistance Facility, European Financial Stabilization Mechanism (EFSM), European Financial Stability Facility (EFSF), and European Stability Mechanism (ESM). The countries we selected are developing countries which borrowed from the IMF and are also members of RFAs.

CHALLENGES FACING RFAS – THE CMIM CASE

FACTORS DRIVING HOW A COUNTRY CHOOSES AMONG DIFFERENT LAYERS OF GLOBAL FINANCIAL SAFETY NETS (GFSNS)

Confronted with the shock of the pandemic, the RFAs failed to play their designated roles. Myanmar became the first CMIM member state to apply for assistance from the IMF, receiving emergency financing support of US $365 million on June 26th, 2020. Although Indonesia did not apply for a loan from the IMF, it needed a US $60 billion repurchase facility with the New York Federal Reserve to help deal with a dollar shortage caused by the pandemic outbreak— but it did not apply to the CMIM for help. Why didn't Myanmar and Indonesia seek help from the CMIM? The possible reasons include the following:

Firstly, the size of available financial resources from the CMIM is relatively small. The maximum amount of loans available to Myanmar from the CMIM was US $600 million, of which the IMF-delinked portion was only US $240 million. The Government of Myanmar initially wanted to apply for US $700 million from the IMF, which exceeded the maximum amount the CMIM could provide to Myanmar. The maximum loan Indonesia could obtain from the CMIM was US $22.76 billion, which was higher than its loan from the IMF (100 percent Quota), but was far lower than its repurchase facility from the US Federal Reserve.

Table 2: Comparison for the Resources Obtained from the Different Layers of the GFSNs (USD Million)

Country	CMIM		IMF (100% Quota)	Repurchase facility with the US Federal Reserve
	Maximum Arrangement Amount	IMF-D-linked Portion (40%)		
Indonesia[3]	22,760	9,104	6,572.4	60,000
Myanmar	600	240	730.7	-

Note: 1USD = 0.707265 SDR.
Sources: AMRO, IMF, Bank Indonesia, 2020.

Secondly, the response from the CMIM was relatively sluggish. In early April 2020, the Government of Myanmar began planning to seek emergency financing support from multilateral mechanisms such as the IMF. At the spring meeting of the IMF and ASEAN Central Bank Governors and Finance Ministers on April 24, the Governor of the Central Bank of Myanmar said that the bank was preparing to request loan schemes of RCF and RFI from the IMF. The proposal to apply to the IMF for loans was approved by the Myanmar Parliament on May 26th. Since then, the IMF team has held discussions with Myanmar's authorities. On June 16th, the Union Minister of Planning, Finance and Industry, and Governor of the Central Bank of Myanmar presented the Letter of Intent to the Managing Director of the IMF. On June 26th, the Executive Board of the IMF approved the loans to Myanmar. If calculated from the time when the loan application was approved by the Myanmar Parliament, it took the IMF one month to complete its lending to Myanmar.

Table 3: Timeline for the IMF's Lending to Myanmar

Myanmar Timeline	April 24, 2020	Governor of the Central Bank of Myanmar (CBM) U Kyaw Kyaw Maung said the CBM is preparing applications for RCF and RFI of the IMF.
	May 26, 2020	Myanmar Union Parliament approved a proposal to obtain US $700 million in loans from the IMF.
IMF Timeline	May 27–June 1, 2020	IMF team held discussions with Myanmar authorities by teleconference.
	June 12, 2020	Myanmar submitted the Letter of Intent for the loan to IMF.
	June 16, 2020	The Staff Report for the Executive Board's consideration was completed.
	June 26, 2020	IMF Executive Board approved a disbursement of US $356.5 million to Myanmar.

Sources: IMF, 2020.

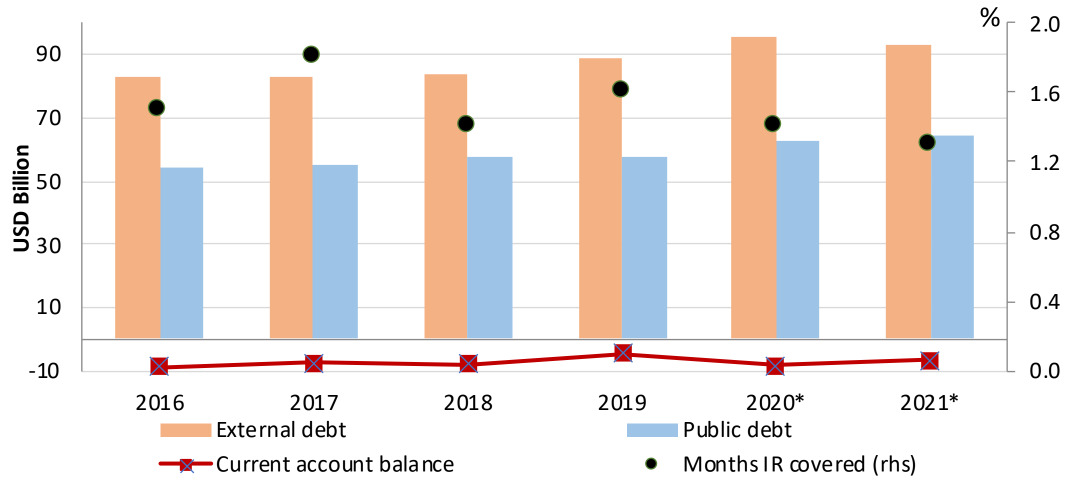
[3] Indonesia has also executed bilateral currency swap agreements with China, Japan, South Korea and Singapore.

TREMENDOUS LIQUIDITY ASSISTANCE DEMANDS FROM ASEAN IN THE POST-PANDEMIC ERA

ASEAN economies are still exposed to pressures from balance of payments, and it is still possible for the CMIM to be activated. From the perspective of the changes in international reserves, most ASEAN countries were under great pressure from February to April 2020. But such pressures began to ease in most countries since then, except for Laos and Brunei, which failed to turn the tide. Of these, Brunei is highly dependent on oil and natural gas, and its economic and financial vulnerability will be subject to the impact of the international energy market. Low oil prices will have spillover effects on Brunei's external balances and the robustness of its domestic banking sector (AMRO, 2020d). The situation in Laos is worse. According to AMRO estimates, Laos' fiscal revenues have fallen sharply, while its public debt is estimated to rise from 57.5 percent of its GDP in 2019 to 62.4 percent in 2020 and further up to 64.4 percent in 2021. Due to slumping exports, tourism revenues, and remittances, Laos' current account deficit rose from 4.5 percent of its GDP in 2019 to 8.3 percent in 2020 and is expected to reach up to 6.9 percent in 2021. Laos' total official reserves have also significantly fallen, estimated to decline to US $917 million in 2020, covering only 1.4 months of imports of goods and services. Laos' total external debt has risen from 88.9 percent of its GDP in 2019 to 95.6 percent in 2020 (Figure 2). According to an estimation by the World Bank, Laos' external debt servicing burden (interest and principal) is expected to exceed US $1.2 billion in 2020 (World Bank, 2020).

Will Laos and Brunei turn to the CMIM for help when they are confronted with liquidity pressures? If Laos and Brunei seek help from the IMF emergency financing mechanism, they can get SDR 105.8 million and SDR 301.3 million respectively (100 percent quota). If they seek help from the CMIM, they can get a maximum loan of US $300 million, and the IMF- delinked portion is US $120 million (Table 4). If the CMIM's slow decision-making process is taken into account, Laos and Brunei may still regard the IMF as the first choice.

Figure 2: Laos' BoP and Public Debt



Source: AMRO, 2020c.

Table 4: Comparison of Resources Obtained from the CMIM and IMF (USD Million)

Country	CMIM		IMF
	Maximum Arrangement Amount	IMF-Delinked Portion (40%)	Quota (100%)
Brunei	300	120	426.0
Lao PDR	300	120	149.6

Note: 1USD = 0.707265 SDR.
Sources: AMRO, IMF, 2020.

SUGGESTIONS ON THE REFORM OF THE RFAS AND COOPERATION WITH THE IMF—FROM THE PERSPECTIVE OF THE CMIM

IMPROVEMENT OF THE CMIM LENDING TOOLKITS

Currently, RFI and RCF loans, offered by the IMF to ASEAN+3, amount to US $36.97 billion. In case of emergency needs, the IMF's help is likely to become their first choice. In comparison, the CMIM emergency lending facilities are still missing. In order to strengthen lending adaptability and efficiency of the CMIM, we recommend that the CMIM should set up an emergency financing mechanism under the CMIM IMF de-linked portion. This instrument mainly targets short-term or temporary liquidity shortages in member economies when they are hit by external shocks. References can be given to RFI and the RCF of the IMF and the Short-term Liquidity Facility of the AMF.

INSTITUTIONAL INTEGRATION OF AMRO AND CMIM

Currently, the AMRO and CMIM remain institutionally separate. Without CMIM institutional linkage, it is difficult for AMRO to enhance its surveillance up to the level of policy advice. There are different levels of surveillance from basic data exchange, peer pressure, and due diligence to policy advice. In the absence of the CMIM lending policy, the AMRO's policy advice can only remain a research outcome. We recommend that the decision-making body of the CMIM and AMRO be integrated. This would require a change in both the CMIM and AMRO agreements. The experience of the Asian Infrastructure Investment Bank (AIIB) can be used to transform the CMIM Executive Level Decision Making Body (ELDMB) into the AMRO's non-resident Board of Directors with the responsibility for execution-level issues of the CMIM. In the meantime, the CMIM Ministerial Level Decision Making Body (MLDMB) should be converted into the Board of Governors of AMRO (the Executive Committee of AMRO is dissolved), which will be responsible for deciding on the fundamental issues of the CMIM. All of these are conducive to improving the decision-making efficiency of the CMIM and AMRO.

LENDING COOPERATION BETWEEN THE CMIM AND IMF

The example of Myanmar indicates that the IMF has not fully met the financing needs of Myanmar. In the absence of other alternative external resources, the CMIM can and should be one of the defense lines of financial safety for Myanmar. The amended CMIM Agreement and the Operating Guidelines

stress that the CMIM's financing conditions should be further updated to echo the IMF's support programs. In the case of co-financing by the CMIM and IMF, the reviews and disbursements should be consistent with each other. The attempt to co-finance can be first carried out in the CMIM IMF delinked portion. Currently, the CMIM should develop a financing instrument matching the IMF's emergency financing mechanism to secure consistency with the IMF. In addition, the Indonesian case proves that some East Asian economies still have doubts about the relief from the IMF. For this reason, we suggest that the CMIM imports other financial mechanisms (such as bilateral currency swaps and multilateral development banks) in the joint assistance from CMIM and the IMF, just as bailout programs for Thailand, South Korea, Indonesia and other countries did during the Asian Financial Crisis. Henning (2020) suggests that Indonesia and its ASEAN+3 partners can activate the delinked portion of CMIM, and then take into account the cooperation with multilateral development banks and bilateral currency swap. This will be helpful to avoid the stigmatization effect of the IMF, but the surveillance capabilities of CMIM/AMRO still need to be improved.

SURVEILLANCE COOPERATION BETWEEN THE AMRO AND IMF

The strengthening of surveillance cooperation is conducive to improving surveillance capabilities of AMRO. Further engagement of AMRO is also conducive to increasing ownership for the use of CMIM funds. We suggest that the CMIM member countries should be encouraged to apply for the IMF's Policy Coordination Instrument (PCI), and countries with the PCI can draw from the CMIM if they are confronted with a crisis. With the gradual increase in experience, AMRO/CMIM should put forward their own lending conditions and conduct joint relief efforts with the IMF.

Bibliography

AMRO (2020a) *AMRO Annual Consultation Report Brunei Darussalam – 2019*.

AMRO (2020b) *AMRO's 2020 Annual Consultation Report on Lao PDR*.

AMRO (2020c) "ASEAN +3 Global Value Networks", *ASEAN+3 Regional Economic Outlook (AREO) 2020*.

AMRO (2020d) *The Amended Chiang Mai Initiative Multilateralization (CMIM) Comes into Effect on 23 June 2020*.

Henning, C. R. (2020) Regional Financial Arrangements and the International Monetary Fund: Sustaining Coherence in Global Financial Governance. *CIGI Special Report*. Waterloo, Ontario: Centre for International Governance Innovation.

IMF (2020) Myanmar: Requests for Disbursement Under the Rapid Credit Facility and Purchase Under the Rapid Financing Instrument. *IMF Country Report* 20/215.

World Bank (2020) *Lao PDR Economic Monitor*.

CHAPTER 7

THE GLOBAL FINANCIAL CYCLE AND CROSS-BORDER CAPITAL FLOWS

Mengwei Yu[1], Xiaofen Tan[2]

WHAT IS THE GLOBAL FINANCIAL CYCLE?

Over the past decades, financial markets have become progressively more integrated internationally, leading to the emergence of a cross-border co-movement of financial conditions. Rey (2013) first summarizes this phenomenon and formally proposes the concept of "the global financial cycle". According to the existing literature, the concept of the global financial cycle is not clearly defined, the global financial cycle is also called global financial conditions, global financial risk, global risk aversion, or global financial shocks in some literature (Avdjiev et al., 2017; Obstfeld et al., 2017; Bonciani and Ricci, 2018).

If a country's capital flows are mainly driven by the global financial cycle, the country is more likely to experience sudden surges and stops in capital inflows not related to domestic fundamentals. In addition to amplifying the fluctuations of a country's capital flows and financial cycles, the global financial cycle may also increase the volatility of a country's economic cycle if the global financial cycle is not aligned with a country's specific macroeconomic conditions. For example, if a loose global financial condition coincides with a country's economic prosperity, this unsynchronized situation may lead to excess capital inflows to this country, which would lead to asset price bubbles and excess credit creation. As the literature illustrates, asset price bubbles and excessive credit growth are the best predictors of crisis (Gourinchas and Obstfeld, 2012; Schularick and Taylor, 2012). Under the current complex international situation, researching the impact of the global financial cycle on cross-border capital flows is particularly important. The literature has found that capital flows are mainly driven by global factors in stress periods (Fratzscher, 2012; Forbes and Warnock, 2012; IMF, 2020). IMF (2020) finds that the COVID-19 pandemic leads to unprecedented capital outflows in emerging markets, which are mainly caused by a sharp increase in global risk aversion and uncertainty.

WHAT DRIVES THE GLOBAL FINANCIAL CYCLE?

Regarding the drives of the global financial cycle, most literature emphasizes the spillovers of US monetary policy (Rey, 2013; Miranda-Agrippino and Rey, 2015; Passari and Rey, 2015; Jordà et al., 2019). The international transmission of US monetary policy can be realized via multiple channels

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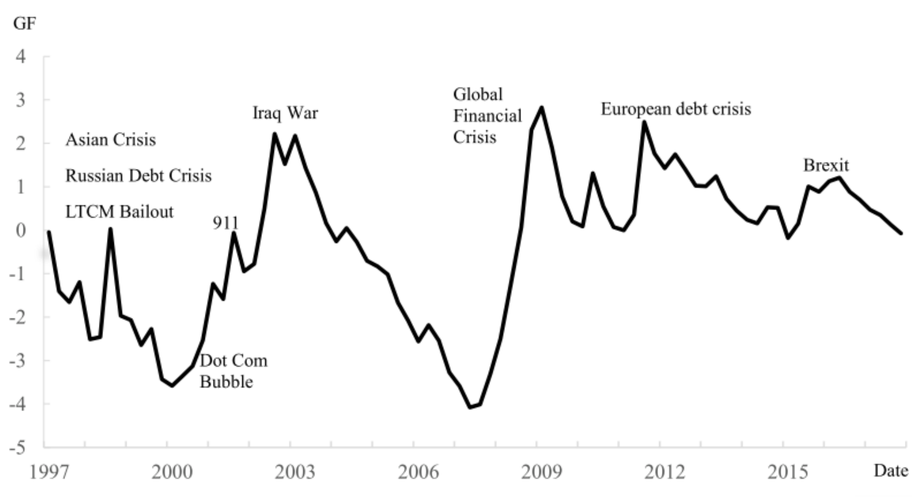
given that the dollar is widely used in international trade, international securities issuance, foreign exchange transactions, and international reserves and that it occupies a dominant position in the international monetary system (Goldberg and Tille, 2008; Miranda-Agrippino and Rey, 2015). Moreover, the US monetary policy affects global risk appetite directly (Bekaert et al., 2013; Bruno and Shin, 2015; Lee et al., 2019; Jordà et al., 2019). Jordà et al. (2019) demonstrate that the observed equity price synchronization after 1990 is mainly due to risk premiums synchronization, and US monetary policy has come to play an important role as a source of risk premiums synchronization. In contrast to most of literature that has emphasized the prominent role of US monetary policy, Lodge and Manu (2019) find that the broader global environment plays a larger role than US monetary policy in driving the global financial cycle. Moreover, Habib and Venditti (2019) find that financial shocks, which can be interpreted as exogenous changes in the risk-taking by the financial sector, matter more than US monetary policy shocks.

HOW TO MEASURE THE GLOBAL FINANCIAL CYCLE?

Since the global financial cycle is an unobservable variable, there are generally two methods of selecting proxy variables for the global financial cycle in the literature: direct method and indirect method (Cerutti et al., 2019). The direct method refers to the selection of directly observable variables related to the global financial cycle, such as the VIX (Rey, 2013; Avdjiev et al.,2017). However, some researchers argue that the VIX may not be a suitable option since it measures the implied volatility of S&P 500 index options, leaving it more of a reflection on the financial conditions in the US instead of the global financial cycle (Bonciani and Ricci, 2018; Scheubel et al., 2019). The indirect method refers to the adoption of a dynamic factor model or principal component analysis to extract global factors from global financial variables (Miranda-Agrippino and Rey, 2015; Bonciani and Ricci, 2018). Following the indirect method, we use principal component analysis to extract a global factor from 42 major stock market indexes as a proxy variable of the global financial cycle. This global factor is similar to VIX and mainly reflects global risk aversion and uncertainty, but it captures overall conditions in global financial markets. Figure 1 shows the relationship between the global factor we extracted and several critical risk events. It can be seen that the global factor can reflect changes in global risk and uncertainty.

Figure 1: Global Factor and Critical Risk Rvents



Using the global factor as a proxy variable for the global financial cycle, we find that the tightening of global financial conditions reduces gross capital inflows significantly, and the impact exists for the sub-items of capital inflows, namely FDI, portfolio equity, portfolio debt, and banking loans. In the 2008 global financial crisis, banking loans were extremely sensitive to the global financial cycle. And after the 2008 financial crisis, portfolio debt flows become more sensitive to the global financial cycle compared with pre-crisis.

WHY DOES THE GLOBAL FINANCIAL CYCLE AFFECT CAPITAL FLOWS TO ALL COUNTRIES UNEQUALLY?

There exist high levels of heterogeneity in countries' sensitivity to the same global shock. For example, although many emerging economies experienced outflows during the sudden and unexpected deterioration in global financial conditions related to the COVID-19 pandemic, some were much more affected than others (IMF, 2020). So how to explain this heterogeneity? Or why are some countries' gross capital inflows more sensitive to the global financial cycle than others? We evaluate this heterogeneity at the macro level and micro level respectively.

EXPLANATION AT THE MACRO-LEVEL IN RECIPIENT COUNTRIES

We find that macroeconomic and institutional fundamentals in recipient countries could explain this heterogeneity. Economic prosperity (with relatively high economic growth and interest rates) dampens the sensitivity to the global financial cycle. And higher levels of capital account liberalization and financial development both amplify the sensitivity to the global financial cycle. The effect of the global financial cycle is magnified under fixed exchange rate regimes compared with more flexible regimes (though not necessarily fully flexible). At present, China's capital account liberalization and financial development are at relatively low levels. Therefore, it could be expected that as financial development progresses, the impact of the global financial cycle on China's cross-border capital inflows will be further enhanced.

EXPLANATION AT THE MICRO-LEVEL IN RECIPIENT COUNTRIES

When a country faces huge external shocks, policymakers may not be able to make rapid adjustments in macroeconomic and institutional fundamentals, but they can dynamically and prudently monitor the composition of international investors. Additionally, differentiated regulatory policies could be applied to those more pro-cyclical international investors, thereby alleviating the negative impact of external shocks. Based on the above reasons, we also answer the question from the micro perspective of investor composition in international investment funds.

Why do we need to pay attention to capital inflows in the form of international investment funds? After the 2008 global financial crisis, the scale of asset managers has surpassed that of the banking sector (Zhu, 2019). Correspondingly, the transmission of global liquidity has evolved from global banks to asset managers (Shin, 2013). The relative importance of cross-border banking loans to emerging markets is also declining, and asset managers such as international investment funds have increasingly become an important channel through which cross-border capitals flow into emerging markets.

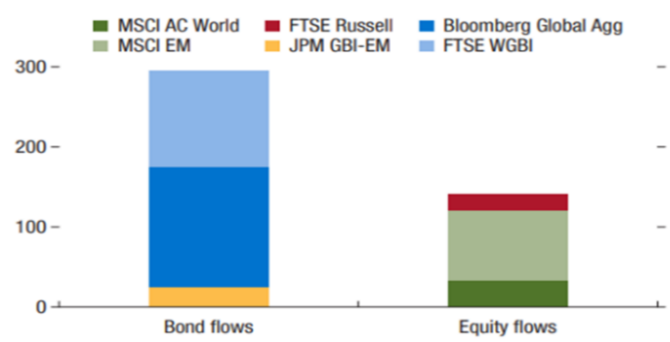
Based on the EPFR fund-level data, we find that funds' flows in emerging markets are pro-cyclical, and there is heterogeneity among different types of funds. ETFs and benchmark-driven funds are highly sensitive to the global financial cycle. By summing up the fund-level data to the country-level, we also find that a country relying more on ETF investors and benchmark-driven investors is more sensitive to the global financial cycle. An investment fund is "benchmark driven" if its portfolio allocation across countries is guided by the country weights in a benchmark index. Benchmark-driven flows to emerging markets can be highly sensitive to global factors, this is because benchmark-driven investors tend to treat emerging markets as an asset class, so they focus primarily on factors that affect the whole emerging markets, rather than on individual country-specific fundamentals (Arslanalp and Tsuda, 2015; IMF, 2019a). The reason why ETFs are more sensitive to the global financial cycle is that ETFs have a high proportion of benchmark-driven investors. Furthermore, the high liquidity of ETFs make them particularly attractive to short-term investors (Sushko and Turner, 2018). Short-term investors tend to pay less attention to macroeconomic and institutional fundamentals in recipient countries and correspondingly are more affected by global factors (Nier et al., 2014; Da and Shive, 2018).

WHAT DOES THIS MEAN FOR CHINA?

As China is embarking on the next stage of integration into global financial markets with the inclusion of Chinese stocks and bonds in several global benchmark indexes, benchmark-driven investors are becoming important drivers of China's portfolio inflows. According to IMF (2019a), the gradual inclusion of China's A-shares in MSCI and FTSE equity indices may drive more than US $150 billion cross-border capital flow into China. Also, the renminbi-denominated government bonds and policy bank bonds joining the Bloomberg Barclays Global Aggregate Bond Index starting in 2019 could bring US $150 billion additional inflows to China. Overall, in the next two to three years, China can expect to see benchmark-driven portfolio inflows of as much as US $450 billion, or three percent to four percent of GDP (IMF, 2019b).

China's sensitivity to the global financial cycle is currently lower than other emerging market economies in terms of portfolio flows, especially portfolio debt flows. This is in line with the fact that foreign participation in China's bond market is not as large as others (Cerutti and Obstfeld, 2018). So it is expected that further liberalization in China's capital market would probably enhance its sensitivity to the global financial cycle.

Figure 2: Potential Additional Inflows to China from Index Inclusions (Billions of US dollars)



Source: JP Morgan Chase & Co; IMF Staff Estimates
Note: Bloomberg Global Agg = Bloomberg Barclays Global Aggregate; EM = emerging market; EMBIG Div = JPMorgan Emerging Market Bond Index Global Diversified; FTSE = Financial Times Stock Exchange Group; JPM GBI-EM = JPMorgan Government Bond Index-Emerging Markets; MSCI AC World = MSCI All Country World Index; WGBI = World

FACING THE GLOBAL FINANCIAL CYCLE: POLICY RESPONSES AND SUGGESTIONS

In the context of international financial integration, financial closure cannot be isolated from the global financial cycle. As the degree of financial openness increases, a country would be more closely connected to the world, and thus more vulnerable to external shocks. However, even if there is no direct trade and financial connection, the global financial cycle could still be transmitted through risk premiums. Therefore, China should adhere to reforms and opening-up and focus on promoting high-level two-way opening of capital account and financial market. At the same time, to prevent itself from external shocks, policymakers could respond from the following aspects.

First, strengthen the monitoring and analysis of cross-border capital flows. Policymakers must not only pay attention to the scale of cross-border capital flows but to the structure of capital flows as well. Portfolio debt flows and banking loans are of greater importance to financial stability and have to be monitored carefully.

Second, pay more attention to asset managers. After the 2008 crisis, global liquidity has entered the second phase, and the global banks have increasingly given way to asset managers. Therefore, policymakers need to pay attention to the scale and investor composition of portfolio inflows and establish controls for investors who are highly sensitive to the global financial cycle, such as ETFs and benchmark-driven investors, if necessary.

Third, boost economic growth and improve the resilience of the economy. Sound macroeconomic fundamentals and reasonable institutions can help a country absorb external shocks. Specifically: (1) Adopt sustainable and stabilizing macroeconomic policies to enhance economic and market resilience; (2) Open up capital account gradually and impose capital controls when necessary; (3) Improve the flexibility of exchange rate, though not necessarily fully flexible.

Fourth, monitor domestic credit growth and leverage. The most dangerous outcomes can the inappropriately loose global financial conditions cost to a country are excess credit growth and asset price bubbles. Therefore, a sensible policy option is to monitor domestic credit growth and leverage directly, and adopt countercyclical macro-prudential measures. For example, in boom times, loan-to-value ratios and debt-to-income ratios can be used to restrict lending and keep asset prices in check.

Fifth, mitigate policy spillovers of center countries. Since the center country's monetary policy is one of the sources of the global financial cycle, central banks of center countries should enhance communication with the market and improve the transparency of their policies to reduce the negative global spillovers.

Finally, countries should strengthen international cooperation and coordination of policies, actively participate in global financial governance, and establish a stronger global financial safety net to absorb external shocks.

Bibliography

Arslanalp, S. and Tsuda, T. (2015) "Emerging Market Portfolio Flows: The Role of Benchmark-Driven Investors", *IMF working paper*, 15.

Avdjiev, S., Kalemli-Ozcan, S. and Servén, L. (2017) "Gross Capital Inflows to Banks, Corporates and Sovereigns", *NBER Working Paper*.

Bekaert, G., Hoerova, M. and Duca, M. L. (2013) Risk, Uncertainty, and Monetary Policy, *Journal of Monetary Economics*, 7(60), p. 771~788.

Bonciani, D. and Ricci, M. (2018) "The Global Effects of Global Risk and Uncertainty", *ECB Working Paper*.

Bruno, V. and Shin, H. S. (2015) Capital Fows and the Risk-taking Channel of Monetary Policy, *Journal of Monetary Economics*, 71, p. 119~132.

Cerutti, E., Claessens, S. and Rose, A. K. (2019) "How Important is the Global Financial Cycle? Evidence from Capital Flows", *IMF Economic Review*, 67(1), pp. 24–60.

Cerutti, E. and Obstfeld, M. (2018) "China's Bond Market and Global Financial Markets", *IMF Working Paper*.

Da, Z. and Shive, S. (2018) Exchange Traded Funds and Asset Return Correlations, *European Financial Management*, 24, pp. 136–168.

Forbes, K. J. and Warnock, F. E. (2012) Capital Flow Waves: Surges, Stops, Flight, and Retrenchment, *Journal of International Economics*, 88(2), p. 235~251.

Fratzscher, M. (2012) Capital Flows, Push Versus Pull Factors and the Global Financial Crisis, *Journal of International Economics*, 88(2), p. 341~356.

Goldberg, L. and Tille, C. (2008) Vehicle Currency Use in International Trade, *Journal of International Economics*, 76, p. 177~192.

Gourinchas, P. O. and Obstfeld, M. (2012) Stories of the Twentieth Century for the Twenty-First, *American Economic Journal: Macroeconomic*, 4(1), p. 226~265.

Habib, M. M. and Venditti, F. (2019) "The Global Capital Flows Cycle: Structural Drivers and Transmission Channels", *ECB Working Paper*.

International Monetary Fund (2020) *Markets in the Time of COVID-19*, p. 47~65.

International Monetary Fund (2019b) *China Deepens Global Finance Links as It Joins Benchmark Indexes*. Available at: https://blogs.imf.org/2019/06/19/china-deepens-global-finance-links-as-it-joins-benchmark-indexes/.

International Monetary Fund (2019a) *Vulnerabilities in a Maturing Credit Cycle*.

Jordà, O. *et al.* (2019) "Global Financial Cycles and Risk Premiums", *IMF Economic Review*, 67(1), p. 109~150.

Lee, S. J., Liu, L. Q. and Stebunovs, V. (2019) *Board of Governors of the Federal Reserve System International Finance Discussion Papers*.

Lodge, D. and Manu, A. S. (2019) "EME Financial Conditions: Which Global Shocks Matter?", *ECB Working Paper*.

Miranda-Agrippino, S. and Rey, H. (2015) "US Monetary Policy and the Global Financial Cycle", *NBER Working Paper*.

Nier, E. W., Saadi-Sedik, T. and Mondino, T. (2014) "Gross Private Capital Flows to Emerging Markets: Can the Global Financial Cycle Be Tamed?", *IMF Working Paper*.

Obstfeld, M., M. and Qureshi, M. S. (2017) "A Tie That Binds: Revisiting the Trilemma in Emerging Market Economies", *IMF Working Paper*.

Passari, E. and Rey, H. (2015) Financial Flows and the International Monetary System, *The Economic Journal*, 125(584), p. 675~698.

Rey, H. (2013) *Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence*, p. 285~333.

Scheubel, B., Stracca, L. and Tille, C. (2019) "The Global Financial Cycle and Capital Flow Episodes: a Wobbly Link?", *ECB Working Paper*.

Schularick, M. and Taylor, A. M. (2012) *Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870-2008*, 102(2), p. 1029~1061.

Shin, H. S. (2013) *The Second Phase of Global Liquidity and Its Impact on Emerging Economies*. Federal Reserve Bank of San Francisco.

Sushko, V. and Turner, G. (2018) "The Implications of Passive Investing for Securities Markets', *BIS Quarterly Review*.

Zhu, Z. (2019) *Global Crisis Always Starts with Liquidity*. Available at: http://finance.sina.com.cn/zt_d/endanger10y/.

CHAPTER 8

AVOIDING TOO LITTLE, TOO LATE: DEBT RELIEF FOR A GREEN AND INCLUSIVE RECOVERY[1]

Ulrich Volz

INTRODUCTION

The COVID-19 crisis has been a significant setback for global development. In October 2020, the World Bank estimated that the pandemic "could push up to 40 million people into extreme poverty" in Africa alone in 2020, "erasing at least five years of progress in fighting poverty" (Zeufack et al., 2020: 1). Public debt—which was already unsustainable in many developing countries before COVID-19—is increasing rapidly and constraining government responses to the health, social, and economic crises caused by the pandemic. The ability of many developing nations to mobilize resources has been hampered due to severe economic contractions,. Many are using 30 percent to 70 percent of what little government revenue to service debt payments (Bárcena, 2020). Indicative of a looming debt crisis, there have been more credit rating downgrades for emerging markets and developing countries in 2020 than in all previous crises over the past 40 years. According to the International Monetary Fund (IMF), almost half of low-income developing countries were at high risk of debt distress or in debt distress at the end of September 2020 (IMF, 2020a). This analysis does not comprise middle-income countries, many of which are also under severe strain. Many emerging markets and developing economies are facing serious obstacles in obtaining the fiscal space to combat the virus, protect the vulnerable, and mount a green and inclusive recovery.

While developed countries have been able to respond forcefully to the crisis—through fiscal policy, loans and loan guarantees to businesses, and quantitative easing policies—the responses of emerging markets and developing countries have been on average much smaller. For many of them, calls for "building back better" ring hollow unless they receive international support to do so. Without a resolute global debt relief effort, the goals set out by the international community in the 2030 Agenda for Sustainable Development and the Paris Agreement on climate change will not only be missed, but the progress made to date will be lost.

The Group of 20 (G20) were swift to act in the early months of the crisis by establishing the Debt Service Suspension Initiative (DSSI). Since its inception in May 2020, debt service payments worth around US $5 billion have been suspended for more than 40 of the 73 eligible low-income countries. The standstill under the DSSI has provided some breathing space; however, it does not address the core problems. It does not lead to a net reduction of debt, and it does not involve private creditors, who are holding large chunks of developing-country debt. Acknowledging that debt suspension will not suffice for several countries, in November 2020 the G20 and Paris Club countries agreed on a

[1] This chapter draws from a report by the Debt Relief for Green and Inclusive Recovery Initiative (Volz et al., 2020).

Common Framework for Debt Treatments. This proposes a reduction in overall debt levels on a case-by-case basis for those DSSI countries deemed to have unsustainable debt. This move is yet another welcome step in the right direction by the G20 but falls short on three counts. First, there are several middle-income countries, including small island developing states, that may experience unsustainable debt that should be eligible for relief. Second, the Common Framework lacks a mechanism for meaningful private creditor involvement and fails to address the problem that participating nations fear lasting stigmatization among creditors if they move first. Third, the new framework lacks a commitment by creditors and debtor countries alike to align newfound fiscal space with globally shared climate and development goals.

A coordinated, global effort involving all creditor groups is needed to provide substantial debt relief—not just suspension—to a broad set of low- and middle-income countries in need to provide the space necessary to fight the virus and put together green and inclusive recovery. Debt relief has to be part of a broader agenda for enabling green and inclusive recoveries in countries around the world. A debt relief effort of the appropriate scale should be coupled with a new and ambitious allocation of SDRs (Gallagher et al., 2020) and significant new capital mobilized from development finance institutions to provide the fiscal space for emerging markets and developing countries to adopt sustained counter-cyclical responses to the crisis. To achieve a just transition, large and sustained increases in public investment will be necessary.

This chapter will make the case for an ambitious agenda for tackling the debt crisis and providing countries with the fiscal space for sustainable crisis responses. Section 2 will briefly review the worsening public debt situation in emerging markets and developing countries. Section 3 will discuss the nexus between climate vulnerability, debt sustainability, and sovereign risk. Section 4 will then outline a proposal for debt restructuring that facilitates a green and inclusive recovery. Section 5 will conclude.

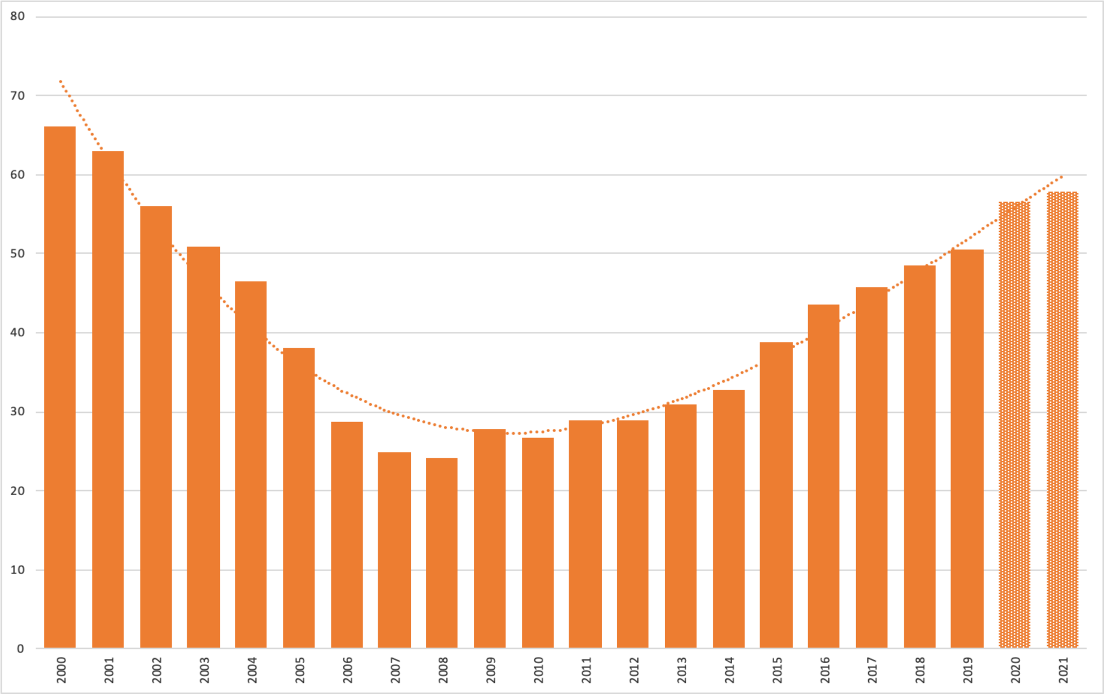
THE LOOMING DEBT CRISIS

The COVID-19 pandemic is precipitating a long-brewing debt crisis in the developing world. When the pandemic hit, developing country debt had already reached problematic levels. In 2019, their private and public external debt—the most unstable component of the national debt and the hardest to manage—passed US $8 trillion (at current exchange rates), an increase of 125 percent since the global financial crisis. Of this, at least US $5.8 trillion will be still outstanding in 2021 and 2022, requiring approximately US $1.2 trillion in principal and interest payments. The IMF (2020b) projects the sovereign debt-to-GDP ratio in advanced economies to rise by 20 percentage points—to about 125 percent of GDP by the end of 2021—while emerging market and developing economies are projected to see an increase of more than ten percentage points, to about 65 percent of GDP.

The IMF (2020b) estimates that the ratio of public debt service costs to government tax revenue will exceed 30 percent in 29 percent of low-income developing countries in 2020 and in 33 percent of these countries in 2021. Among emerging markets, 71 percent of countries face a ratio of public debt service costs to government tax revenue greater than 30 percent in 2020, and 73 percent in 2021. In other words, instead of being able to support their people to weather the crisis and invest in a sustainable recovery, governments are required to repay their creditors.

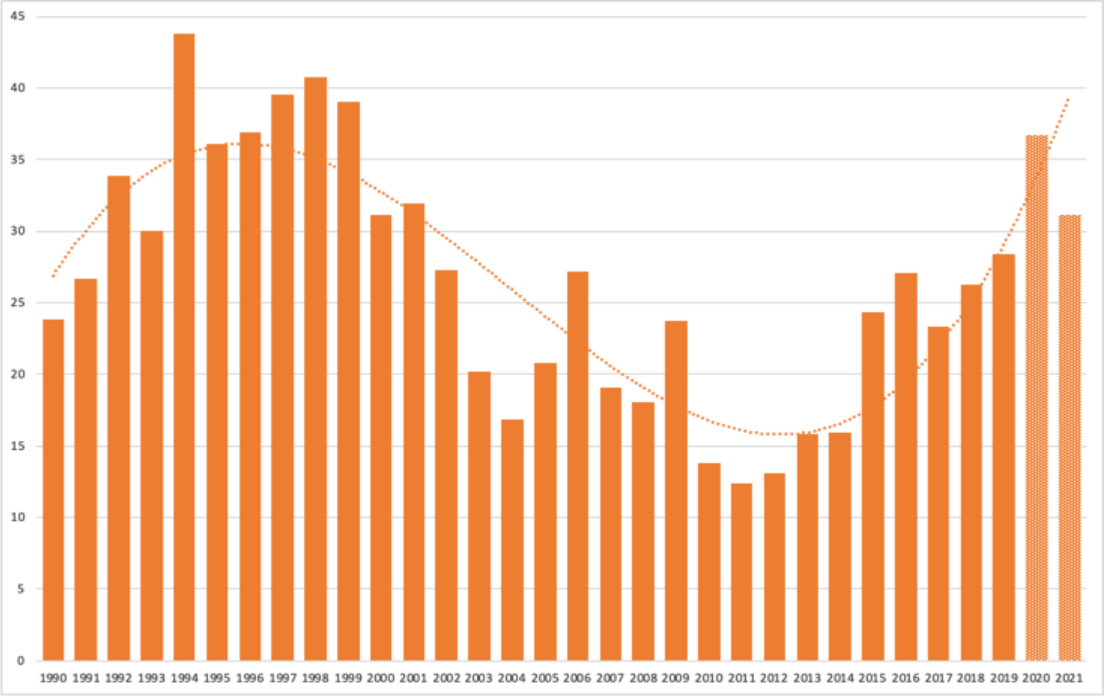
Figure 1 shows the significant increase in government gross debt of sub-Saharan African countries as a share of GDP over the last decade. According to IMF estimates, the total external debt service of sub-Saharan African countries as a percentage of exports of goods and services will reach similar levels in 2020 as during the mid-1990s (Figure 2) when the international community decided that it was time to deliver debt relief to heavily indebted countries.

Figure 1: General Government Gross Debt of Sub-Saharan African Countries as a Percentage of GDP



Source: Compiled with data from the IMF's World Economic Outlook Database, October 2020

Figure 2: Total External Debt Service of Sub-Saharan African Countries as a Percentage of Exports of Goods and Services



Source: Compiled with data from the IMF's World Economic Outlook Database, October 2020

CLIMATE VULNERABILITY UNDERMINES DEBT SUSTAINABILITY AND WORSENS THE SOVEREIGN RISK

Climate change can have a material impact on sovereign risk through direct and indirect effects on public finances (Volz et al., 2020b). Perversely, the impacts of climate change are the greatest in countries that contributed the least to anthropogenic global warming. For many climate-vulnerable countries, a rapid scaling-up of investment in climate resilience is a matter of life and death. Regrettably, the most exposed developing countries are those that are struggling the most to finance adaptation and resilience. They are often most impacted by climate-related macro-financial risks. Both governments and corporations are now facing a climate risk premium on the cost of capital (Buhr et al., 2018; Beirne et al., 2020; Kling et al., 2021).

Low- and lower-middle-income economies show the highest propensity to be negatively impacted by climate hazards. As they now have often worrying public debt profiles, these economies are likely to face the economic and social costs of climate change while also grappling with the fallout from the COVID-19 pandemic. It should be noted that the debt-carrying capacities of poorer countries tend to be much lower than those of richer countries.

Governments must climate-proof their economies and public finances or potentially face an ever-worsening spiral of climate vulnerability and unsustainable debt burdens (Volz et al., 2020b). There is a danger that vulnerable developing countries will enter a vicious circle in which greater climate vulnerability raises the cost of debt and diminishes the fiscal space for investment in climate resilience. As financial markets increasingly price climate risks, and global warming accelerates, the risk premia of these countries, which are already high, are likely to increase further. The impact of COVID-19 on public finances risks reinforcing this vicious circle.

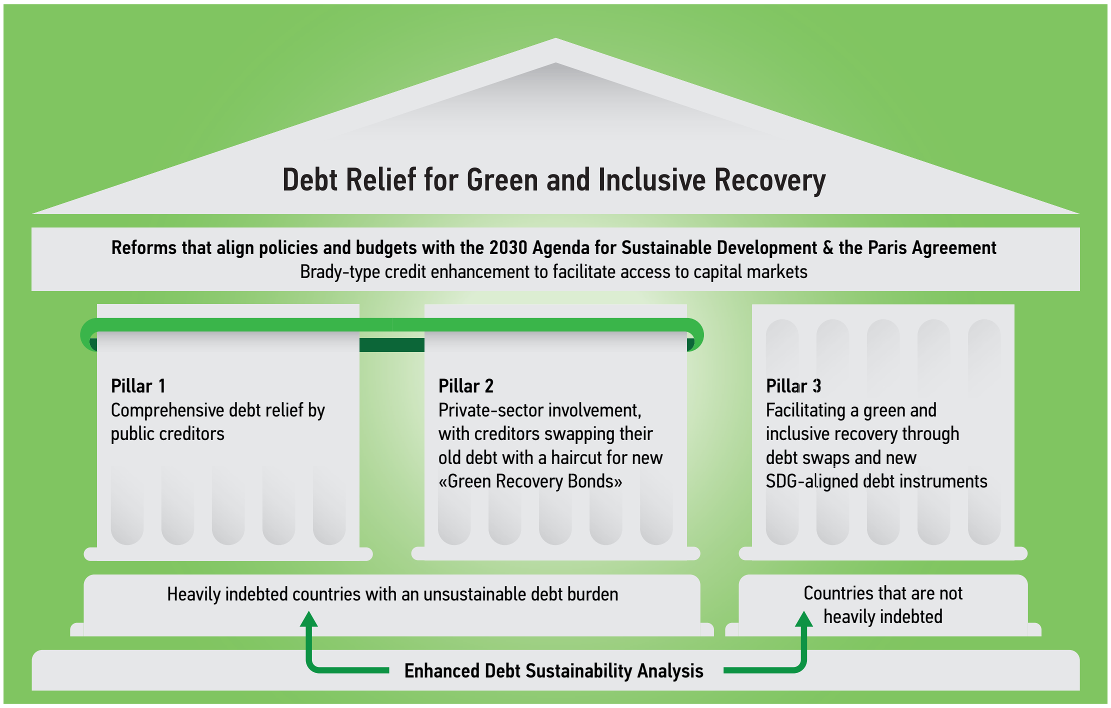
International support for increased investments in climate resilience and mechanisms to transfer financial risks is urgently needed and could help these countries enter a virtuous circle. Greater investments in resilience could reduce both vulnerability and the cost of debt, providing these countries with extra room to scale-up investments to tackle the climate challenge.

A PROPOSAL FOR DEBT RESTRUCTURING THAT FACILITATES A GREEN AND INCLUSIVE RECOVERY

As discussed at the outset, the G20 Common Framework for Debt Treatments will not suffice to tackle the problem. This is a systemic problem, thus a global and systemic response is needed. The international community, and the G20 in particular, need to agree on an ambitious agenda for tackling the debt crisis and providing countries with the fiscal space for sustainable crisis responses. The G20 need to be bold, and they need to act now. Past experience tells us that delaying the response to debt crises leads to worse outcomes and higher costs. Doing too little too late will be costlier, for both debtors and creditors. The international community only agreed to a comprehensive initiative – the Heavily Indebted Poor Countries (HIPC) Initiative—after more than two decades of repeated piecemeal debt rescheduling and progressively increasing debt reductions. Postponing inevitable sovereign debt restructurings caused prolonged underinvestment in health, education, and infrastructure, and it resulted in lost decades with increased unemployment and poverty for the mostly African and Latin American countries suffocated by debt.

A new architecture is needed to provide debt relief while ensuring that the relief is calibrated towards attacking the virus, protecting the vulnerable, and staging a green and inclusive economy. We hence developed a proposal for a Debt Relief for a Green and Inclusive Recovery (Volz et al., 2020a): an ambitious, concerted, and comprehensive debt relief initiative that should be adopted on a global scale to free up resources to support recoveries sustainably, boosts economies' resilience, and fosters a just transition to a low-carbon economy. The proposal consists of three pillars and aims at achieving maximum creditor and debtor participation.

Figure 3: Three Pillars of Debt Relief for a Green and Inclusive Recovery Proposal



Source: Volz et al. (2020a).

Under Pillar 1, comprehensive debt relief would be granted by public creditors to eligible heavily indebted countries with an unsustainable debt burden—analogous to, but improving upon, the HIPC Initiative model. These countries would receive debt relief on their bilateral and multilateral debt to provide the fiscal space for investment in health and social spending to fight the pandemic and in climate adaptation. Governments receiving debt relief would need to commit to reforms that align their policies and budgets with the 2030 Agenda for Sustainable Development and the Paris Agreement.

Eligibility should be a function of debt sustainability, which should be determined in a Debt Sustainability Assessment (DSA) carried out by the IMF and the World Bank, with inputs from other institutions. It is important to highlight that the current DSA-frameworks are not fit for purpose and need to be significantly overhauled. Importantly, DSAs need to be based on realistic assumptions and account for climate risks. If a DAS asserts that the sovereign debt of a country is of significant concern, the G20 should coordinate with all bilateral and multilateral creditors about a debt restructuring, and the IMF should make its programs conditional on a sovereign debt restructuring involving private creditors.

Debtor countries that seek bilateral haircuts will be required to seek commensurate relief from private creditors, and incentives need to be designed to ensure that private creditors grant such relief. Lending by multilateral development banks and humanitarian assistance will continue to flow, but on the condition that it is not used to pay private creditors. Debt owed by multilateral institutions would only be restructured for IDA-eligible countries. To safeguard the preferred creditor status of multilateral institutions, their losses would need to be financed by bilateral contributions, the proceeds from gold sales, or the issuance of new Special Drawing Rights (SDRs).

Under Pillar 2, the same group of eligible countries would be granted debt relief by private creditors. Private creditors participating in the debt restructuring would swap their old debt holdings with a haircut for new "Green Recovery Bonds." As in the case of the restructuring of publicly held debt under Pillar 1, debtor governments should commit to aligning their policies and public budgets with the goals of the 2030 Agenda for Sustainable Development and the Paris Agreement. Where possible, a significant portion of the reduced debt service burden from the debt relief by private creditors should be used by governments for spending on a green and inclusive recovery.

Any new debt issued by countries participating in the Debt Relief for Green and Inclusive Recovery Initiative could receive Brady-type credit enhancement – suitably adapted to current circumstances – in exchange for committing to dedicating receipts to SDG-aligned spending items. Such a credit enhancement mechanism would help countries undergoing debt restructuring under the Debt Relief for Green and Inclusive Recovery Initiative to continue to have access to international capital markets.

Under Pillar 3, countries that are not heavily indebted, but have reduced fiscal space due to COVID-19, could participate in debt-for-climate swaps. For these, such swaps would facilitate raising climate ambitions in the form of additional actions or investments in climate adaptation or mitigation. Moreover, this could be complemented by an incentive scheme for the issuance of (new) sustainability-aligned sovereign debt.

For any of these transactions, an independent third party would need to oversee the implementation and monitor the fulfillment of the government's obligations under the arrangement and measure their impact.

The proposal is aimed at providing developing countries the fiscal space at a critical time to address the three crises they are facing: the health and social crisis, the debt crisis, and the climate and environmental crisis. It is important to address these systematically. Efforts aimed at climate mitigation or adaptation cannot be successful if the social dimension is ignored. The recovery must be green, economically inclusive, and socially just. Debt relief needs to be coupled with policies that are aimed at a just transition. To ensure that the recovery is both green and inclusive, investments in sustainable infrastructure and targeted support of key industries are essential, alongside investments in people and innovation to ensure that such a transition generates full employment, decent work, and opportunities for new economic activity.

While debt relief will be crucial for many countries, it will not suffice. Debt relief has to be part of a broader agenda for enabling green and inclusive recoveries in countries around the world. A debt relief effort such as the one proposed should be coupled with a new and ambitious allocation of SDRs and significant new capital mobilized from development finance institutions. This will provide the fiscal space for emerging markets and developing countries to adopt sustained counter-cyclical responses to the crisis.

CONCLUSION

The world is at a critical juncture. While trying to recover from the pandemic and provide vital social services to their people, countries need to urgently invest in both climate change adaptation and mitigation. For developing countries, most of which are highly vulnerable to the physical impacts of climate change, the ability or not to undertake crucial investments in climate adaptation and resilience will determine their future development success. A lack of climate resilience will undermine development progress and make the achievement of the SDGs impossible. Likewise, high debt burdens stifling investment in key areas including health and education will undermine the prospects of achieving the 2030 Agenda for Sustainable Development, which has already been set back by the pandemic.

Contrary to outdated economic wisdom, there is no trade-off between choosing a sustainable recovery and economic progress. Fiscal policy can be devised to simultaneously stabilize the economy and public finances while furthering sustainable development (Estevão, 2020). In its latest *World Economic Outlook* report from October 2020, the IMF (2020b, 93) highlights that "the goal of bringing net carbon emissions to zero by 2050 in each country can be achieved through a comprehensive policy package that is growth-friendly (especially in the short term)". Indeed, recent evidence suggests that green projects can generate more employment and deliver higher short-term returns per dollar spent, compared to conventional fiscal stimulus (Hepburn et al., 2020; Unsworth et al., 2020; We Mean Business, 2020).

The lesson from previous debt crises is very clear: doing too little, too late to address solvency problems will only increase the cost of resolving a debt crisis (Guzman et al., 2016). In the face of the impending climate crisis, the world cannot afford a lost decade of development. Countries share common but differentiated responsibilities in combating the climate crisis. Without large-scale debt relief and efforts aimed at facilitating green and inclusive recovery, the international community can abandon its hopes of achieving the 2030 Agenda for Sustainable Development and the Paris Agreement. The lives and livelihoods of current and future generations hang in the balance.

Bibliography

Bárcena, A. (2020) *Remarks at the meeting of finance ministers convened by the United Nations Deputy Secretary-General and the finance ministers of Canada and Jamaica*, September 8. https://www.un.org/en/pdfs/Statements%20from%20the%20Meeting%20of%20the%20Ministers/Organisations/ECLAC.pdf.

Beirne, J., Renzhi, N., and Volz, U. (2020) *Feeling the heat: Climate risks and the cost of sovereign borrowing*. ADBI Working Paper 1160. Tokyo: Asian Development Bank Institute.

Buhr, B., Volz, U., Donovan, C., Kling, G., Lo, Y., Murinde, V., and Pullin, N. (2018) *Climate change and the cost of capital in developing countries*. Geneva and London: UN Environment, Imperial College London and SOAS University of London.

Estevão, M. (2020) Climate-smart fiscal policy can foster a lasting economic recovery. *One Earth* 3, 273–76.

Gallagher, K., Ocampo, J.A., and Volz, U. (2020) Special Drawing Rights: International Monetary Support for Developing Countries in Times of the COVID-19 Crisis. *The Economists' Voice* 17(1), 20200012.

Guzman, M., Ocampo, J.A., and Stiglitz, J.E. (eds., 2016) *Too Little, Too Late: The Quest to Resolve Sovereign Debt Crises*. New York, NY: Columbia University Press.

IMF (2020a) "Update on the Joint IMF-WB Multipronged Approach to Address Debt Vulnerabilities." IMF Policy Paper. Washington, DC: International Monetary Fund.

IMF (2020b) *World Economic Outlook*. Washington, DC: International Monetary Fund.

Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., and Zenghelis, D. (2020) Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?. *Oxford Review of Economic Policy*, 36(S1), S359–S381.

Kling, G., Volz, U., Murinde, V., and Ayas, S. (2021) The impact of climate vulnerability on firms' cost of capital and access to finance. *World Development* 137, 105131.

Unsworth, S., Andres, P., Cecchinato, G., Mealy, P., Taylor, C., and Valero, A. (2020) "Jobs for a strong and sustainable recovery from Covid-19". CEP Covid-19 Analysis Paper No. 10. London: London School of Economics and Political Science.

Volz, U., Akhtar, S., Gallagher, K.P., Griffith-Jones, S., Haas, J., and Kraemer, M. (2020a) *Debt Relief for a Green and Inclusive Recovery: A Proposal*. Berlin, London, and Boston, MA: Heinrich-Böll-Stiftung; SOAS, University of London; and Boston University.

Volz, U., Beirne, J., Ambrosio Preudhomme, N., Fenton, A., Mazzacurati, E., Renzhi, N., and Stampe, J. (2020) *Climate change and sovereign risk*. London, Tokyo, Singapore, and Berkeley, CA: SOAS University of London, Asian Development Bank Institute, World Wide Fund for Nature Singapore, and Four Twenty Seven.

We Mean Business (2020) *Assessment of green recovery plans after Covid-19*. https://www.wemeanbusinesscoalition.org/wp-content/uploads/2020/09/Report-Green-Recovery.pdf.

Zeufack, A. G., Calderon, C., Kambou, G., Kubota, M., Catalina, C. C., Korman, V. (2020) Charting the Road to Recovery, Africa's Pulse, No. 22 (October), Washington, DC: World Bank.

CHAPTER 9

SOVEREIGN DEBT RELIEF IN THE GLOBAL PANDEMIC: LESSONS FROM THE 1980S[1]

Edwin M. Truman[2]

The coronavirus pandemic and an unprecedented global recession have triggered fears of a debt crisis requiring massive intervention by international financial institutions as well as debt restructuring by private and official creditors. In late March 2020, the International Monetary Fund (IMF) estimated the gross external financing needs of emerging-market and developing countries at US $2.5 trillion. More than 100 members approached the IMF for assistance. As of early September, more than 30 members were exploring possible IMF-supported programs of financial and economic adjustment. In March, World Bank Group President David Malpass and IMF Managing Director Kristalina Georgieva called for a suspension of scheduled debt payments to official creditors by low-income countries through the end of 2020. The Group of Twenty (G20) ministers and governors endorsed their call on April 15 and proposed that private creditors grant the same treatment.

Many outside observers are calling for even more urgent action, including more quickly arranged debt relief. Bolton et al. (2020); Gelpern, Hagan, and Mazarei (2020); and Gelpern (2020a, 2020b) have called for a debt standstill of both interest and principal payments at least through the end of 2021, not only for low-income countries but also for middle-income countries. Eichengreen (2020), Stiglitz and Rashid (2020), IMF First Deputy Managing Director Geoffrey Okamoto, and World Bank President Malpass, among others, have invoked the 1980s debt crisis as a cautionary tale, contending that unnecessary delay in arranging for external debt stock reduction will worsen the economic downturn in these troubled countries.

What does the experience of the 1980s teach us about today's crisis? The answer is more complicated than some suggest. Yes, it took almost seven years from the onset of the crisis in Mexico over one weekend in August 1982 to the announcement by US Treasury Secretary Nicholas Brady in March 1989 of a plan to facilitate the reduction in stocks of debt to international banks. But the reasons for the delay are instructive. Understanding them can help policymakers appreciate the subtleties of the impending debt crisis.

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[1] This Policy Brief is based on a working paper (Truman forthcoming), a draft of which was delivered at the D-DebtCon 2020 virtual conference, held September 10. I thank conference participants for their many useful comments as well as Lewis Alexander, Lee Buchheit, James Boughton, William Cline, Barry Eichengreen, Stewart Fleming, Anna Gelpern, Thomas Glaessner, Sean Hagan, Randall Henning, Patrick Honohan, Nancy Jacklin, Stephen Kamin, Maggy King, Clay Lowery, Maurice Obstfeld, Larry Promisel, Catherine Schenk, Jeffrey Shafer, Tracy Truman, Nicolas Véron, Mark Walker, Steve Weisman, Anna Wong, and Jeromin Zettelmeyer for their comments, suggestions, and encouragement on previous drafts; and Laurie DeMarco and Eva Zhang for their technical guidance.

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I draw two lessons for today, based on my ring-side experience throughout the earlier period:

The initiation of debt relief will require a broad consensus among four groups: the borrowing countries, their foreign creditors, the authorities of the countries in which those creditors are located, and international institutions. Reaching consensus takes time.

Implementation of the consensus framework will be case by case because of differences in the political and economic circumstances of each country, which will militate against simple replication for different countries and against implementation for all borrowers at the same time. Any framework will not be self-implementing. While the call for rapid action is understandable, applying a one-size-fits-all approach will not be possible.

There is no consensus today on how to address countries' pandemic-related debt problems other than the IMF–World Bank Debt Service Suspension Initiative (DSSI) for low-income countries, which currently offers only temporary liquidity relief for the balance of 2020. Based on the experience of the 1980s, a reduction in principal of foreign private debt for countries is unlikely before 2022 at the earliest.

Any viable framework will require not only that the economic situations of many borrowing countries worsen, as they will, but also that a major borrower press for substantial relief. A request for that relief will have to be supported by financial inducements, most likely backed by the IMF, other international financial institutions, and the major countries, to overcome market disincentives discouraging borrowers. Those disincentives principally involve ratings downgrades, which would reduce, or raise the price of, market access for the borrowing countries in the future. The authorities in those countries will have to conclude that the current benefits of debt reduction today outweigh the potential future costs of having done so. Once having decided to opt for debt reduction, it must be substantial enough to raise the value of the remaining debt. Against this background, implementation of a framework for debt reduction by many countries will stretch over several more years.

CONTEXT

Table 1 presents data on the gross external debt of and international bank claims on 17 major developing-country borrowers and the year of each country's first IMF program in the 1980s.[3] Figure 1 presents trends in economic growth during the period. It shows that growth in the dozen Latin American countries in the group of 17 plunged in 1981, was negative in 1982, and even more negative in 1983. Global growth was minuscule in 1982, after two years of below-average growth. The growth outlook today is worse than it was in 1982, for both advanced and less advanced countries, as well as highly uncertain.

US consumer price inflation was 6.1 percent in 1982 but declining. The average rate of inflation for 11 of the 12 Latin American borrowers was more than 35 percent in 1980 and 1981, more than 45 percent in 1982, and 75 percent in 1983.[4]

The borrowing countries were heavily reliant on expensive net capital inflows. The US prime rate remained in double digits until mid-1985. The average current account deficit for 10 of the 12 Latin American countries was 5.0 percent of GDP in 1980, 8.9 percent in 1981, and 7.3 percent in 1982. [5]

[3] The 17 countries, 12 of which were in Latin America, were the focus of the Baker Plan. Political pressures led to the addition of Costa Rica and Jamaica to the original list of 15 countries.

[4] The source (IMF World Economic Outlook Database, April 2020) does not provide data for Argentina.

[5] The source (IMF *World Economic Outlook Database*, April 2020) does not provide data for Uruguay. Venezuela was in current account surplus.

Their gross external debt increased by 150 percent between 1977 and 1982, from $118 billion to $296 billion.[6]

The external debt positions of many emerging-market and developing countries were problematic before the coronavirus pandemic shock. A World Bank study (Kose et al. 2020) on global waves of debt focuses on a fourth wave, which began after the global financial crisis of 2008. Domestic government debt and private international debt are larger components of the total than in the waves of the 1970s, 1990s, and first decade of the 21st century.

The banking systems in the advanced countries are in better shape, however. Figure 2 shows the evolution of exposures to the 17 major borrowers during the 1980s by the nine largest banks and all other US banks. At the end of 1982, the exposure of the nine was 194 percent of their capital. In contrast, in March 2020, the seven largest US banks had exposures to all nonadvanced countries, excluding banking centers, equal to 83 percent of capital; the exposure of all other US banks was 23 percent (FFIEC 2020).

The IMF is also better equipped financially in 2020 than it was in 1982. Today it has about US $1.4 trillion in gross financial resources. In 1982 its resources were about US $80 billion. They were raised to US $130 billion in 1983.

International trade is now ten times higher than it was in 1982. World GDP (on a purchasing power parity basis) is now about eight times higher (IMF 2020). Before the August 1982 Mexican weekend, the IMF was already actively lending (Table 1). In March 2020, the IMF had US $155 billion in current commitments to 21 members, including five (Argentina, Colombia, Ecuador, Mexico, and Morocco) that were among the 17 major borrowers in the 1980s.

Table 1: Gross External Debt, International Bank Claims, and Dates of Issuance of Brady Bonds and First IMF Programs of 17 Heavily Indebted Countries, 1982–93

Country	First IMF program	Gross external debt (billions of dollars)				International bank claims (billions of dollars)				Brady bonds issued
		1982	1985	1989	1993	1982	1985	1989	1993	
Argentina	1983	43.6	50.9	65.3	74.5	22.2	29.0	32.4	30.4	1993
Bolivia	1986	3.3	4.8	4.1	4.2	0.7	0.6	0.3	0.4	a
Brazil	1983	93.0	106.1	111.4	132.7	56.1	76.9	70.8	69.0	1994
Chile	1983	17.3	20.4	18.0	20.6	10.4	14.3	9.1	10.0	None
Colombia	1985b	10.3	14.2	16.9	17.2	5.5	6.5	6.6	7.6	None
Costa Rica	1982	3.6	4.4	4.6	3.9	0.7	0.8	1.1	1.2	1990
Côte d'Ivoire	1981	8.9	9.6	14.1	19.1	2.9	2.9	3.3	2.2	1998
Ecuador	1983	7.7	8.7	11.3	14.1	4.1	5.2	4.6	3.2	1995
Jamaica	1981	2.8	4.1	4.6	4.3	0.5	0.7	0.7	0.5	None
Mexico	1983	86.1	96.9	93.8	118.0	59.03	74.5	70.1	69	1990

[6] These data are from the World Bank's international debt statistics, https://databank.worldbank.org/reports.aspx?source=international-debt-statistics.

Country	First IMF program	Gross external debt (billions of dollars)				International bank claims (billions of dollars)				Brady bonds issued
		1982	1985	1989	1993	1982	1985	1989	1993	
Morocco	1982c	12.5	16.5	21.6	21.4	3.6	4.8	5.2	5	Noned
Nigeria	1987	13.0	19.6	32.0	32.5	7.0	9.1	7.4	4.1	1992
Peru	1982c	10.7	12.9	18.6	20.3	5.2	5.6	4.1	3.2	1997
Philippines	1983	24.4	26.6	28.7	35.3	8.3	13.4	9.6	6.6	1992
Uruguay	1985	2.6	3.9	5.2	7.3	1.2	2.0	2.0	2.7	1991
Venezuela	1989	32.2	35.3	32.4	37.5	22.7	25.8	24.1	17.4	1991
Yugoslavia	1981	19.9	22.5	19.1	11.3e	9.3	10.5	7.5	3.9	None
Total		392.1	457.3	501.7	574.3	219.4	282.6	259.1	236.3	

IMF = International Monetary Fund

a. Had a debt buyback in 1988.

b. Did not have an IMF program. Program with World Bank was monitored in part by IMF.

c. Programs approved before the Mexican weekend, August 1982.

d. Negotiated a Brady arrangement but did not meet conditions for issuance of bonds.

e. Excludes Croatia, Macedonia, and Slovenia.

Sources: International Monetary Fund, Transactions with the Fund, country pages; Boughton (2012, 414-415); Cline (1995, tables 2.1 and 2.8); Das et al. (2012).

DEBT RELIEF IN THE 1980S

The 1980s Latin American crisis unfolded in three phases:

The concerted lending phase (August 1982–October 1985).

The Baker Plan phase (from its unveiling at the IMF/World Bank Annual Meetings in Seoul in 1985 until March 1989).

The Brady Plan phase (starting with US Treasury Secretary Brady's announcement of his debt reduction plan in March 1989 and continuing until the mid-1990s).

Debt relief broadly defined was central to each phase. In the first phase, debts to international banks were rescheduled, which provided immediate cash flow relief. However, the present value of this debt increased, because interest margins were raised. Moreover, in the concerted lending phase, banks were required to make new loans to major borrowers proportional to their existing exposures as a condition for IMF approval of country programs. In the later part of the first phase and the second phase of the crisis, multi-year rescheduling agreements were negotiated. The first, by Mexico in September 1984, involved a stretching out of maturities, a lower interest rate, and a resulting modest reduction in the present value of its debt. [7]

In the second phase, borrowing countries employed a range of techniques, such as buybacks at below par and debt-equity swaps at discounts, that reduced the stock of debt.

[7] Frequently, the interest rate was repegged to the London Interbank Offered Rate (Libor), which was 100 basis points lower than the US prime rate previously used, and the margin was reduced to 13/16ths, compared with 150 basis points and higher.

In the third phase, two items were added to the menu of options for bank creditors: (a) securitization of the written-down principal of the debt while maintaining something close to a market interest rate (par bonds) and (b) the present-value-equivalent of option (a), in which the securitized principal remained intact but the interest rate was substantially below the market rate (discount bonds). These "Brady bonds" were normally backed by 30-year US Treasury zero-coupon bonds, and a portion of the interest payments was guaranteed by funds held in escrow. In this phase, banks also had a third option of continuing to supply new money.

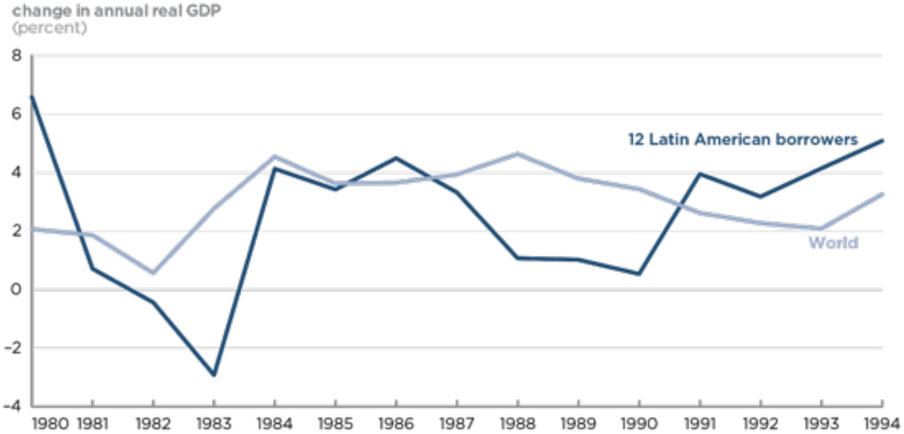
Although several commentators, most prominently Peter Kenen (1983), called for collective action to reduce the stock of debt early in the crisis, there was no appetite for such an approach among the principal parties.

The borrowing countries were wary of jeopardizing their access to bank financing, which they expected would resume quickly. In December 1982, Brazil's interim minister of the economy, Carlos Viacava, told the US authorities that Brazil expected to be back in the market within a year.

The international commercial banks were opposed to reducing the principal amounts of the claims on the major borrowers, fearing contagion to other borrowing countries that would substantially erode their limited capital (see Figure 2). Their authorities and the IMF shared these concerns.[8] They did not consider an immediate write-down of bank claims, in part because of concerns about the stability of the global banking system. Avoiding this risk was implicit in the approach taken. These shared concerns about financial stability were instrumental in persuading the major central banks, supported by their governments, to establish short-term bridge loans for several of the major borrowing countries.

The initial debt strategy was predicated on the view that the borrowing countries faced a liquidity crisis compounded by macroeconomic imbalances. With appropriate adjustment policies, the borrowing countries would resume growth and regain access to international financial markets. Analysts, including some who were later critical of the debt strategy, supported this approach and also pointed to the revival of global growth (see Figure 1) as helping borrowers grow out of their crises (Cline 1983, Cooper and Sachs 1985, Dooley et al. 1983).

Figure 1: Annual Real GDP Growth, 1980-94



Note: Aggregates use purchasing power parity (PPP) weights.

Source: Author's calculation based on data from IMF, World Economic Outlook Database, 2020

[8] De Larosière (2018) reports that during the Mexican weekend, he convinced Finance Minister Silva Herzog that Mexico should not default on its debt to commercial banks. However, this option was not discussed with US officials.

However, voluntary financing did not return to the affected countries. Concerted bank lending to Latin America was US $13.3 billion in 1983 and $15.5 billion in 1984, but voluntary financing, so-called spontaneous lending, declined from US $1.9 billion in 1983 to US $0.6 billion in 1984 (IMF 1990).

These developments motivated the Baker Plan. It emphasized structural change (for example, liberalization of foreign investment regimes and privatization) rather than fiscal adjustment; set a target for banks to lend US $20 billion over the next three years to the 17 countries identified with the initiative; and called for increased lending of US $10 billion by the World Bank and the Inter-American Development Bank to these countries over the same period.

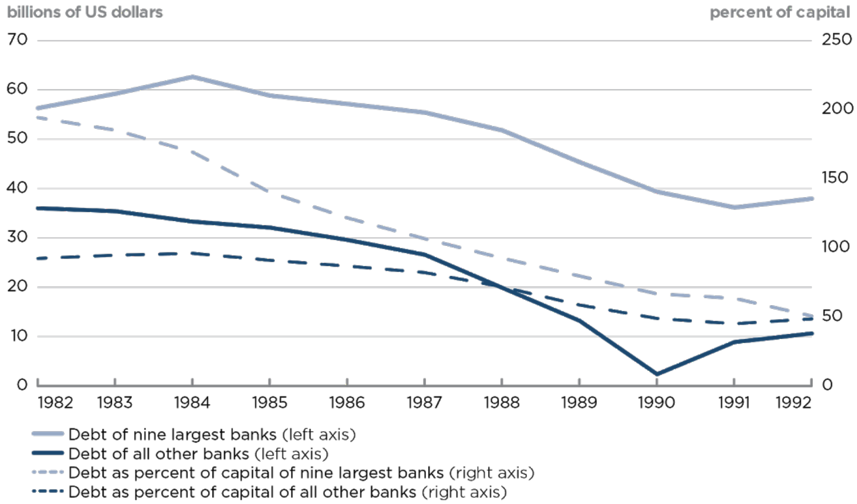
In late 1985, none of the four principal parties to the strategy supported debt stock reduction. In June 1986, Jeffrey Sachs (1986), who had supported the concerted lending approach, argued that the earlier optimism had been unjustified. He advocated a new approach, including a substantial debt stock reduction for some countries.

In January 1987, Michel Camdessus replaced Jacques de Larosire as managing director of the IMF. On his departure, de Larosire suggested that a change in the strategy toward bank claims was needed.

Thinking at the IMF began to change, although staff views were divided (Boughton 2001). Michael Dooley (1986), who also had supported the initial debt strategy, wrote that an overhang of external debts with face values that were more than their current secondary market values was a disincentive to foreign and domestic investment and, therefore, growth (see also Dooley 1989). Although the empirical foundation of his argument was weak (Cline 1995), his paper was very influential.

By 1987, as it became clear that the Baker Plan was not going to achieve its objectives and the capital positions of the major banks had improved (see Figure 2), analysts within the official sector began to think about debt stock reduction. At the Federal Reserve Board, we analyzed Plan B involving such relief. We also actively considered a Plan C, which would have drawn on Article VIII(2)b of the IMF charter as a mechanism by which the IMF could permit the imposition of controls on debt payments in support of a member that needed leverage over its bank creditors, including debt relief.

Figure 2: Exposure of US Banks to 17 Heavily Indebted Countries, 1982-92



Source: Author's calculation based on Cline (1995, tables 2.10 and 2.11)

Debt sales in the secondary market increased as banks added to their reserves and unilaterally wrote down the value of their claims on their books and on reports to their regulators. Several small-scale initiatives effectively reduced the principal amount of some countries' debts. In 1987, Mexico, without objection from the official sector, offered to exchange up to US $20 billion in face value of its debt for marketable bonds backed by 20-year US dollar zero-coupon bonds. The bank's response to the offer was disappointing with a take up of only US $3.7 billion in claims, at a discount of 30 percent, compared with an expected 50 percent discount (Boughton 2001). In early 1988, Bolivia retired about a third of its bank debt at 11 cents on the dollar in a buyback.

Meanwhile, proposals for systematic debt stock reduction surfaced in the United States. Plans by Senator Bill Bradley (1986) and Congressman John LaFalce (1987) were motivated in part by the fact that the slow growth of the borrowing countries was hurting US exports.

Japanese Finance Minister Kiichi Miyazawa proposed to the Group of Seven in June 1987 that an exit bond be included in the menu of options, with the principal amount of the debt secured by a zero-coupon bond purchased by the borrower, with the financial assistance of the official international financial institutions and carrying a reduced interest rate. At the IMF Annual Meeting, in Berlin in September 1988, US Treasury Secretary Brady, who had replaced Baker, expressed "skepticism [about] proposals that may appear to conform to the basic principles of the debt strategy, but which in practice produce only an illusion of progress. . . [and build] political opposition among taxpayers in creditor countries" (IMF 1988, 46). He was particularly critical of any use of funds from international institutions or governments to finance debt reduction and bank bailouts. As 1988 was a US presidential election year, the US administration wanted to distance itself from potential calls to use official funds to finance debt forgiveness for domestic borrowers, such as farmers and local governments.

After the US election, the stage was set for a systematic approach to reducing the face value of bank claims on borrowing countries. Secretary Brady's plan, announced March 10, 1989, contained four key elements:

A portion of IMF and World Bank loans would be used to help collateralize the principal amounts of new instruments with US Treasury zero-coupon bonds and partial interest guarantees.

IMF and World Bank lending would also be used to help countries buy back their debts at a discount.

The commercial banks should waive the sharing and negative pledge clauses in their agreements to permit individual debt reduction operations.

The IMF should modify its policy of not lending to members while they are in arrears to their bank creditors to reduce the leverage of banks in their negotiations with borrowers.

The Brady Plan was not immediately implemented. Country negotiations with bank creditors often dragged on for months. In 1989, agreements in principle were announced with Costa Rica, the Philippines, Mexico, and Venezuela. However, the first Brady bonds were not issued until January 1990, by Mexico. Only 9 of the 17 beneficiaries of the Baker Plan completed Brady packages over the next five years—two each in 1990 (Costa Rica and Mexico), 1991 (Uruguay and Venezuela), and 1992 (Nigeria and the Philippines) and one each in 1993 (Argentina), 1994 (Brazil), and 1995 (Ecuador) (see Table 1).

Reduction of the principal value of international bank claims on borrowing countries became an accepted component of the debt strategy only when the four principal relevant parties achieved a consensus on its desirability. Borrowing countries began to press to reduce the stock of their debts, with Mexico once again leading the pack. The balance sheets of international bank creditors had strengthened, and many creditors were anxious to put their exposure to the borrowing countries behind them. The key international institution, the IMF, had revised its thinking. In the end, the United States embraced debt stock reduction.

How consequential was the delay in incorporating debt stock reduction in the debt strategy? It could have occurred earlier—possibly in 1986, probably in 1987—if the shifts in the IMF's views and the position of Japan and, most importantly, the United States had come earlier. However, I am skeptical that rolling out the Brady Plan or its equivalent two years earlier would have had a significant effect on growth in the borrowing countries in 1988 and 1989, given the lags in implementing Brady packages, which in part were linked to not meeting associated policy commitments to the IMF.

LESSONS FROM THE 1980S

Substantial sovereign debt relief requires a consensus among four groups: the borrowing countries, their foreign creditors, the countries in which those creditors are located, and the international financial institutions, principally the IMF. In the absence of a bankruptcy mechanism, the four parties must solve a coordination problem. Their consensus need not be complete, but it must start with the key borrowing countries and receive political support from important creditor countries and institutions.

The Debt Service Suspension Initiative (DSSI) response to the coronavirus pandemic illustrates the relevance of this lesson. To date, no borrowing country has stepped forward to ask for the suspension of debt payments from private creditors. One reason why is the reputational disincentive for the country's leaders. But the major disincentive is that the rating agencies are likely to downgrade the country's bonds, accelerating and prolonging the country's loss of market access. To seek a temporary suspension of debt payments to private foreign creditors, a borrowing country must conclude that such a restructuring would be in its medium-term interest. If instead it decides to tough it out, and the tsunami hits, the economic and financial damage will be greater than it would have been had the country restructured earlier. These choices are not easy.

Advocates of debt stock reduction must also recognize that borrowing countries today have more diverse crisis strategies than they did in the 1980s. Bolton et al. (2020) cite Mexico as a potential beneficiary of the DSSI. However, restructuring its debt to private creditors would not fit Mexico's strategy. In the global financial crisis, Mexico sought and received a flexible credit line commitment from the IMF; that commitment has been renewed. After the Asian Financial Crisis in the late 1990s, the strategies of several of the principal emerging-market and developing countries have been to build cushions of international reserves.

Also relevant is the fact that a larger number of countries have substantial liabilities today. Once a framework is agreed to, it will therefore take time to fully implement it.

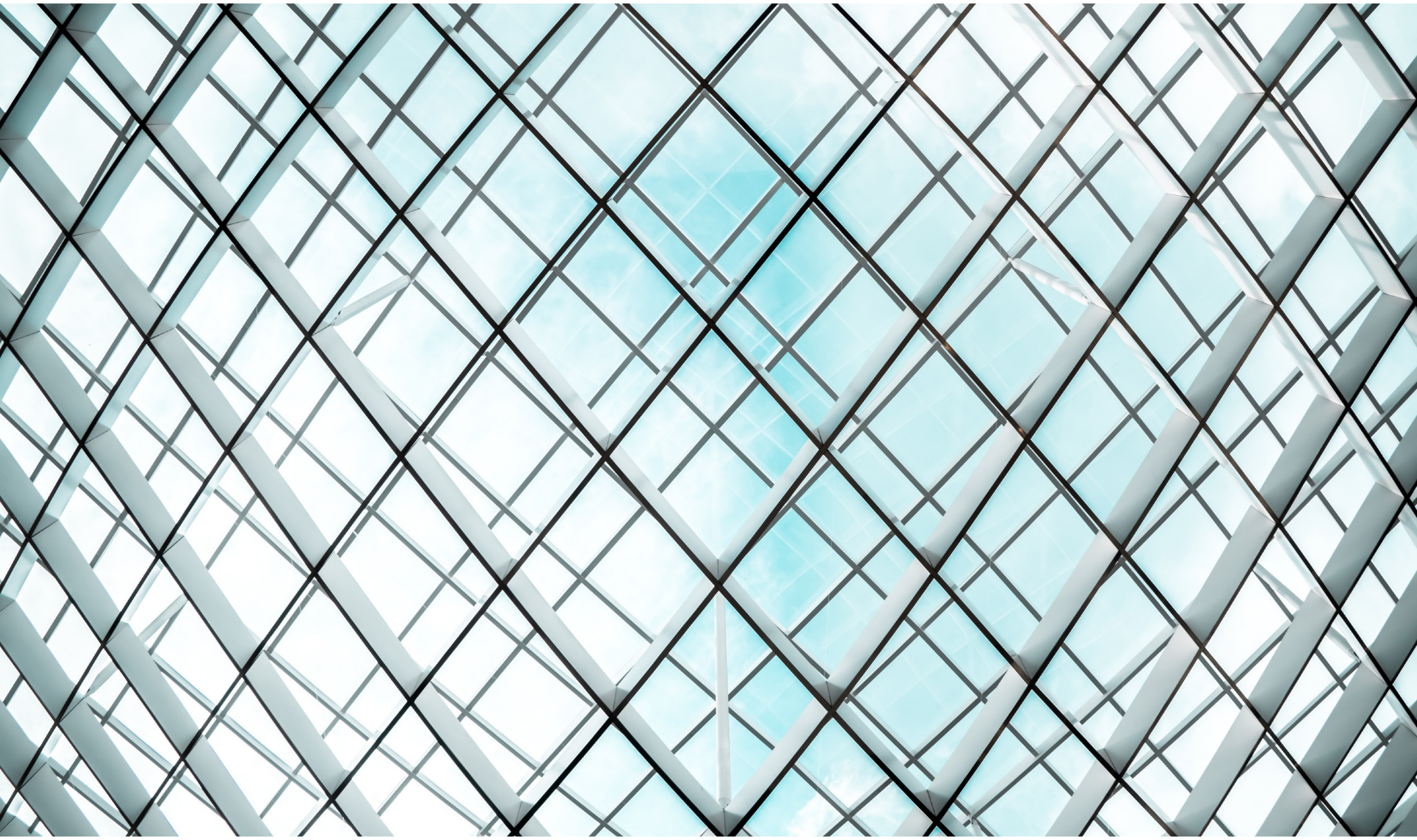
In the 1980s, each major borrowing country had a bank advisory committee, often with overlapping bank representatives. Over time, the overlapping membership on many such committees facilitated consensus among the creditors. The representatives had to balance the financial interests of their institutions against the need to manage the crisis in the interests of all parties. After seven years, they became more efficient in reaching consensus. Today, with more lenders, leadership is more complex. The Institute of International Finance played a coordinating role in the restructuring of Greek debt in

2012. It has been tapped to do so, including private creditors in the DSSI. In the Greek case, success was achieved on the second try. The jury is still out on the DSSI.

One challenge today is that international banks are no longer the dominant players in the external debt arena that they were in the 1980s, making up only 4 percent of emerging-market commercial debt in 2018. However, banks are important lenders to low-income countries, and mechanisms for coordinating bank lenders are out of date (Liu, Savastano, and Zettelmeyer 2020). Sovereigns are also no longer the only entities in countries that issue external financial obligations.

The IMF and other international financial institutions played an important role in the 1980s and will do so in future crises, but their role is limited to prodding their member countries to act and responding to initiatives from members if they propose them.

Once consensus is achieved, the IMF and the multilateral development banks need adequate financial resources to support initiatives. In 1982 and 2007, at the outbreak of the global financial crisis, the IMF's resources were initially insufficient. Its resources were built up in both cases. The IMF is now much better positioned financially, at least as of today, to provide financial incentives for countries to seek debt stock reduction. This will help them overcome the disincentive from rating agencies' downgrades. Alternatively, the major countries will need to strong-arm the rating agencies to refrain from downgrades.



The second lesson from the 1980s follows from the first: Implementation of any debt stock reduction will be gradual and made on a case-by-case basis. Small borrowing countries will not be pathbreakers. Every borrowing country's economic and financial circumstances differ, along with their political circumstances. Countries going through political transformations, as Argentina and Brazil did in the 1980s, will have less time and political space to devote to debt renegotiation.

Two features of the global economic and financial environment in 2020 favor the facilitation of a systemic approach to debt stock reduction. First, borrowing countries face a common external shock. The external financial impacts differ across countries, but the pandemic affected every country at roughly the same time, even though some countries were more and others less prepared. This simultaneity should help the four parties reach a consensus about how best to respond to the potential need to restructure sovereign debt. The process will take time, however.

Second, considerations of the financial stability of creditors and the financial systems of the host countries' lenders are a less prominent concern than they were in 1982.

In October 2020, achieving debt relief that results in a substantial reduction in the present value of claims on a broad swath of emerging-market and developing countries, middle-income as well as low-income, is a lower priority than it was in March and April. In the context of low global interest rates and ample global liquidity, several major borrowing countries have maintained or regained access to international credit markets. The global persistence of COVID-19 and the likelihood that the global recession will extend well into 2021 may shift priorities again, however.

Many observers are optimistic about growth prospects in the advanced countries and expect positive spillovers to emerging-market and developing countries. I am less optimistic. If my pessimism turns out to have been well-founded, debt relief will again rise to the top of the global policy agenda. When it does, policymakers, their advisers, and analysts should remember the lessons of the 1980s. Debt stock reduction, if it occurs, will not be achieved quickly by many countries at the same time and will have to be subsidized.

Bibliography

Bolton, P. *et al.* (2020) Born out of Necessity: A Debt Standstill for Covid-19, *Policy Insight* 103 (April). Washington: Centre for Economic Policy Research.

Boughton, J. M. (2001) *The Silent Revolution: The International Monetary Fund 1979–89*. Washington: International Monetary Fund.

Boughton, J. M. (2012) *Tearing Down Walls: The International Monetary Fund 1990–99*. Washington: International Monetary Fund.

Bradley, B. (1986) *A Proposal for Third World Debt Management*.

Cline, W. R. (1983) International Debt and the Stability of the World Economy, *Policy Analyses in International Economics* 4 (September). Washington: Institute for International Economics.

Cline, W. R. (no date) *International Debt Reexamined*. Washington: Institute for International Economics.

Cooper, R. N. and Sachs, J. D. (1985) "Borrowing Abroad: The Debtor's Perspective", in Smith, G. N. and Cuddington, J. T. (eds) *International Debt and the Developing Countries*. Cuddington: World Bank.

Das, U. S., Papaioannou, M. G. and Trebesch, C. (2012) *Sovereign Debt Restructurings 1950–2010: Literature Survey, Data, and Stylized Facts*. Washington: International Monetary Fund (IMF Working Paper 12-203 (August)).

De Larosière, J. (2018) *50 Years of Financial Crises*. Paris: Odile Jacob.

Dooley, M., Helkie, W. and Underwood, J. (no date) An Analysis of External Debt Positions of Eight Developing Countries through 1990, *International Finance Discussion Paper* 227 (August). Washington: Board of Governors of the Federal Reserve System.

Dooley, M. P. (1986) *An Analysis of the Debt Crisis*. Washington: International Monetary Fund (IMF Working Paper 86-14 (December).).

Dooley, M. P. (no date) "Market Valuation of External Debt", in Frenkel, J., Dooley, M., and Wickham, P. (eds) *Analytical Issues in Debt*. Washington: International Monetary Fund.

Eichengreen, B. (2020) Managing the Coming Global Debt Crisis, *Project Syndicate*. Available at: https://www.project-syndicate.org/commentary/managiing-coming-global-debt-crisis-by-barry-eichengreen-2020-05?barrier=accesspaylog (Accessed: 2 October 2020).

FFIEC (Federal Financial Institutions Examination Council). (2020) *Country Exposure Lending Survey and Country Exposure Information Report* (March). Available at https://www.ffiec.gov/E16.htm (accessed on September 5, 2020).

Gelpern, A. (2020) *Now That Everyone Is on the Standstill Bandwagon . . . Where to? Part I*. Credit Slips, April 20. Available at https://www.creditslips.org/creditslips/2020/04/now-that-everyone-is-on-the-standstill-bandwagon-what-next-part-i.html (accessed on July 19, 2020).

Gelpern, A. (2020) *Now That Everyone is on the Standstill Bandwagon . . . Where to? Part II.* Credit Slips, April 20. Available at https://www.creditslips.org/creditslips/2020/04/now-that-everyone-is-on-the-standstill-bandwagon-what-next-part-ii.html (accessed on July 19, 2020).

Gelpern, A., S. Hagan, Mazarei. A. (2020) Debt standstills can help vulnerable governments manage the COVID-19 crisis. *Realtime Economic Issues Watch* (April 2). Washington: Peterson Institute for International Economics: Available at https://www.piie.com/blogs/realtime-economic-issues-watch/debt-standstills-can-help-vulnerable-governments-manage-covid (accessed on July 19, 2020).

IMF (International Monetary Fund) (1988) *Summary Proceedings Annual Meeting 1988*. Washington.

IMF (1990) *International Capital Markets: Developments and Prospects*. Washington.

IMF (2020) *World Economic Outlook Database*, April. Washington.

Kenen, P. B. (1983) Third World Debt: A Bailout Plan for the Banks. *New York Times*, March 6.

Kose, M. A., P. Nagle, Ohnsorge, F., and Sugawara, N. (2020) *Global Waves of Debt: Causes and Consequences*. Washington: World Bank.

LaFalce, J. (1987) *Third World Debt Crisis: The Urgent Need to Confront Reality* (March 5). Washington. Congressional Record 4891-4896. Available at https://www.govinfo.gov/content/pkg/GPO-CRECB-1987-pt4/pdf/GPO-CRECB-1987-pt4-4.pdf (accessed on October 5, 2020).

Liu, Y., Savastano, M., Zettelmeyer, J. (2020) *The International Architecture for Resolving Sovereign Debt Involving Private-Sector Creditors: Recent Developments, Challenges, and Reform Options* (September 23). Washington: International Monetary Fund.

Sachs, J. (1986) Managing the LDC Debt Crisis. *Brookings Papers on Economic Activity* 2: 397–431. Washington: Brookings Institution.

Stiglitz, J., Rashid, H. (2020. *A Global Debt Crisis Is Looming: How Can We Prevent It?* Project Syndicate (July 31). Available at https://www.project-syndicate.org/commentary/how-to-prevent-looming-debt-crisis-developing-countries-by-joseph-e-stiglitz-and-hamid-rashid-2020-07 (accessed on September 5, 2020).

Truman, E. M. Forthcoming. *Lessons from the 1980s: Sovereign Debt Relief in the Global Pandemic*. PIIE Working Paper. Washington: Peterson Institute for International Economics.

WTO (World Trade Organization). (2020) *World Trade Statistical Review*. Geneva. Available at https://www.wto.org/english/res_e/statis_e/wts2020_e/wts20_toc_e.htm (accessed on September 5, 2020).

CHAPTER 10

THE IMF AND THE MACRO-CRITICALITY OF CLIMATE CHANGE

Ulrich Volz

INTRODUCTION

> *"At the IMF we recognize that the climate actions we take in our institution and globally are paramount for our future. We have embraced climate in everything we do."*
>
> — Kristalina Georgieva, December 2020

The International Monetary Fund (IMF) has only recently started to acknowledge that climate change may be a "macro-critical" factor, that is, crucial to the achievement of macroeconomic and financial stability, which is at the core of the Fund's mandate. In 2015, the IMF identified climate change as an "emerging structural issue". In November 2015, then Managing Director Christine Lagarde recognized that "[t]he Fund has a role to play in helping its members address those challenges of climate change for which fiscal and macroeconomic policies are an important component of the appropriate policy response" (Lagarde 2015: 1). Upon assuming office in October 2019, the IMF's new Managing Director, Kristalina Georgieva, acknowledged the centrality of climate change for the Fund's work: "The criticality of addressing climate change for financial stability, for making sure that we can have sustainable growth, is so very clear and proven today, that no institution, no individual can step from the responsibility to act. For the IMF, we always look at risks. And this is now a category of risk that absolutely has to be front and center in our work" (IMF 2019). Since then, she has reiterated the importance of climate change for the IMF's mandate countless times.

While things clearly have started moving at the IMF, for the time being, the rhetoric from the Fund's leadership has not yet been matched by actions that would reflect the importance and urgency of the climate challenge. At the operational level, the IMF has been slow-moving to integrate climate change in its frameworks and policies. Internally, Georgieva has run into reluctance to her request to mainstream climate change. Some have argued that climate change is macro-critical only for a subset of the IMF's member countries – mostly small island developing states, and that, in any case, the Fund does not have sufficient expertise in this area.[9] Moreover, the Fund's work has primarily focused on physical risks.

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[9] The Fund's role in responding to the climate threat has been also held back by the stance on climate of its largest shareholder, the United States. However, upon assuming power in January 2021, the Biden administration has made climate policy a priority and committed to "develop a strategy for how the voice and vote of the United States can be used in international financial institutions, including the World Bank Group and the International Monetary Fund, to promote financing programs, economic

Drawing on previous work,[10] this chapter will spell out why both physical and transition impacts of climate change are absolutely macro-critical and need to be front and center in the Fund's work, to paraphrase Kristalina Georgieva. Importantly, the Fund should not treat climate-related macro-financial risks as being material only for small island developing states or climate-vulnerable developing countries more broadly. While these are particularly exposed to the physical impacts of climate change and lack the resources to scale up investment in climate adaptation and resilience, larger middle-income and advanced economies are by no means exempt from the physical and transition impacts of climate change and the macro-financial risks these entail.

The chapter is structured as follows. Section 2 will outline why climate change is macro-critical and needs to be integrated in the Fund's operational work, comprising surveillance, technical assistance and training, and emergency lending and crisis support. Section 3 will highlight key areas for the IMF to support its membership in better managing and mitigating climate-related risks. Section 4 concludes.

THE MACRO-CRITICALITY OF CLIMATE CHANGE

Climate change can affect an economy and public finances – and thus debt sustainability and sovereign risk – in multiple ways.[11] To start with, extreme weather events, such as storms, floods and heat waves, can have dire consequences both in terms of human suffering and fatalities, as well as economic impact. Extreme examples for damaging climate hazards include Hurricane Maria, which caused an estimated damage equaling 260 percent of Dominica's GDP in 2017, and Hurricane Ivan which in 2004 destroyed around 150 percent of Grenada's GDP. Historically, climate-related disasters have inflicted the most damage on small, disaster-prone countries (Cantelmo et al. 2019), but they can also afflict larger economies, such as Thailand, which suffered losses equivalent to 11 percent of GDP from floods in 2011. Disaster-prone countries face significantly higher public debt than countries that are less susceptible to disasters (Cabezon et al. 2015; Munevar 2018), and natural disasters have in the past been contributing factors to sovereign debt defaults (Moody's 2016, 2020).[12]

Importantly, climate-related disasters – the frequency and intensity of which will increase due to climate change – can have grave fiscal impacts. Table 1 provides an overview of the different fiscal risks stemming from climate-related disasters, following the IMF's classification of macroeconomic risks and contingent liabilities. Macroeconomic risks related to natural disasters and extreme weather include risks of a disruption of economic activity, which may adversely affect tax income and other public revenues and increase social transfer payments (e.g. Schuler et al. 2019); changes to commodity prices that could affect revenue or increase spending via fossil fuel or food subsidies; effects on inflation and interest rates through supply or demand shocks; and exchange rate effects (e.g. Farhi and Gabaix 2016). Contingent liabilities include the physical damage of public assets and public spending for humanitarian crisis and public health emergency, among others. Bova et al.'s (2019)

stimulus packages, and debt relief initiatives that are aligned with and support the goals of the Paris Agreement" (The White House 2021: g2).

[10] I particularly draw on Volz (2020), Volz and Ahmed (2020), and Volz et al. (2020).

[11] See Volz et al. (2020) for a comprehensive analysis of the transmission channels through which climate change can distress public finances and amplify sovereign risk.

[12] Hurricane Ivan prompted Grenada's sovereign debt restructuring during the period 2004–2006 (Moody's 2016; Asonuma et al. 2018). The Dominican Republic's sovereign debt restructuring in 2005 was also partly due to damage caused by hurricanes in the two preceding years (Moody's 2016).

analysis of contingent liability realizations in a sample of 80 advanced and emerging economies for the period 1990–2014 showed that natural disasters (including geophysical events) are one of the most important sources of contingent liabilities, the realization of which can be a substantial source of fiscal distress. Overall, it is clear that climate hazards pose a significant risk to sovereign debt sustainability through both macroeconomic and contingent liability risks. Despite the complexities involved in modeling these risks, it is crucial for fiscal sustainability analysis to incorporate climate disaster scenario analysis. Risk projections of disaster losses and their fiscal implications need to include changes to exposure and vulnerability under different climate pathways (Bouwer 2011).

Table 1: Climate-Related Fiscal Risk Factors and Illustrative Climate Change Channels

Risk factor	Climate change channels
Macroeconomic risks	
Economic growth (GDP or industry-level growth)	Drought, excessive rainfall, storms, etc. cause shocks to economic growth by disrupting agriculture, fishing, mining, tourism, transport, hydropower, insurance, etc., and affect revenue and spending
	Reduced income tax revenue if climate hazards affect workers' health and productivity, employment, and output
	Payouts for unemployment insurance and other social protection schemes differ from the planned level
	Extreme weather events in other countries can potentially boost the demand for exports or affect commodity prices
Trade	Changes and disruptions to trade affect customs duty collection
Commodity prices	The increased severity and likelihood of extreme weather events in large producers increase the volatility of world commodity prices
	For extractives exporters: the government revenue differs from the expected level
	Changes in agricultural prices may affect domestic farm and food subsidy spending
Interest rates	Shortages in food or energy supply, among others, may cause inflation spikes
Exchange rates	A disaster may cause devaluation of the currency and increase external debt service costs
	Government procurement spending on imports differs from expectations
Contingent liabilities	
Physical damage of public assets	Destruction of government buildings or damage to public infrastructure through climate-related disasters
	Unexpected spending on the repair and reconstruction of government buildings and other public assets

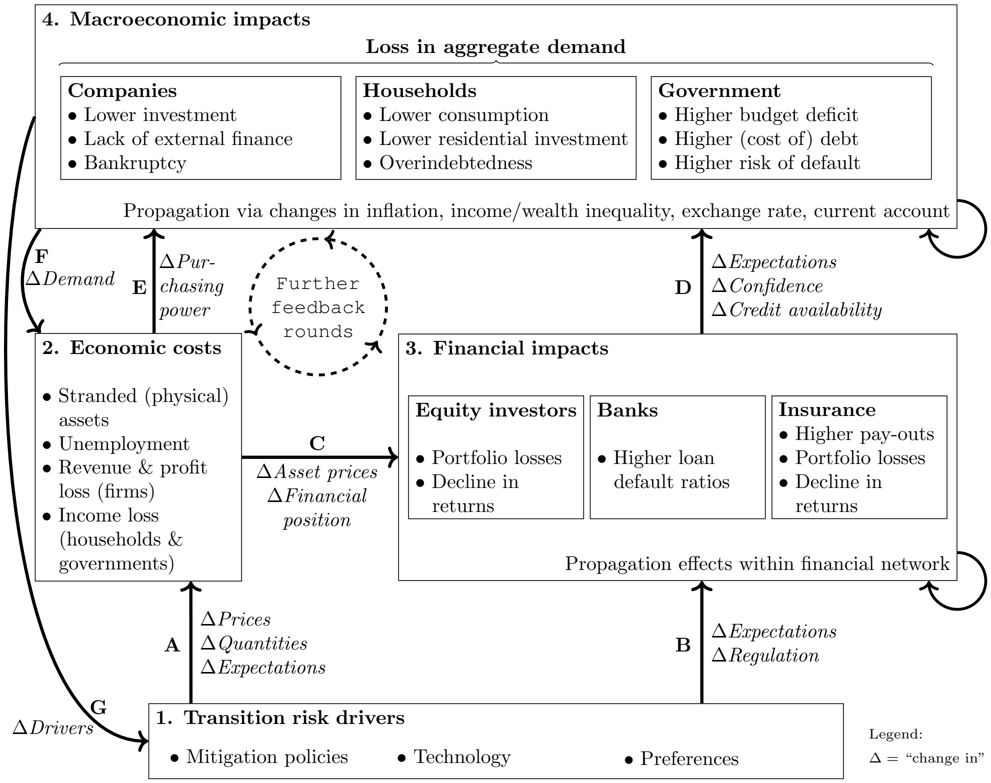
Risk factor	Climate change channels
	Unexpected relief and recovery spending; possible spending to cover private sector losses (including, for example, government-run fire, flooding, and crop insurance)
State-owned enterprises (SOEs)	SOEs suffer losses due to damage or lost revenue resulting from operation disruptions from extreme weather events; increased costs for carbon-intensive operations
	Sovereign loan guarantees are called
	Expectation that the government will cover SOE losses
Public–private partnerships (PPPs)	Infrastructure PPPs suffer damage or losses from extreme weather events
	Contractual obligations (for example, service-level guarantees)
	Expectation that the government will cover losses if the project fails
Humanitarian crisis and public health emergency	Changing climate and increased severity and likelihood of extreme weather events may affect the spread of vector-borne diseases, deaths from heat events, etc.
	Increased health spending
	Emergency relief and aid social safety net
Judicial awards	Courts may determine that governments are liable for climate adaptation measures

Source: Volz et al. (2020), in part drawing from Schuler et al. (2019, Table 4.1).

In addition to acute hazards, chronic physical effects from climate change, such as temperature increases, changing precipitation patterns, rising sea levels and worsening water stress, can also have significant impact on productivity, output, employment, financial stability, and public finances. Moreover, economies are exposed to transition risks resulting from international climate policies, technological change, and changing consumption patterns. These can have destabilizing effects on the economy and the financial system, with negative feedback loops (Figure 1).

The physical and transition impacts of climate change can cause aggregate supply and demand shocks. Table 2 shows different types of supply- and demand-side shocks that may result from either physical or transition climate impacts. Among others, climate change can cause supply shocks by interrupting production; damaging the capital stock and infrastructure; diminishing the output in the agriculture, forestry, and fishing industries; and disrupting transport routes and value chains and causing input shortages. It is important to highlight that supply-side shocks can also be caused by the transition to a low-carbon economy (McKibbin et al. 2017). In particular, climate policies can lead to stranded assets and stranded technology (Bos and Gupta 2019; Semieniuk et al. 2021). There are risks that structural change of an economy away from high-carbon and toward low-carbon sectors will render parts of the workforce unemployed if the sectors that previously employed them cease. If work skills are not transferable to other industries, this could lead to problem from "stranded workers" or migration.

Figure 1: Low-carbon Transition Risks



Source: Semieniuk et al. (2021).

Table 2: Macroeconomic Impacts of Climate Change

		Physical impacts		Transition impacts
		From extreme weather events	From gradual global warming	
Demand	Investment	Damage to household and corporate balance sheets causes reduction of investment	Changes to household and corporate balance sheets affect investment	Effects on household and corporate balance sheets Growing demand for responsible investment Public investment push ("green new deal") "Crowding out" from climate policies

		Physical impacts		Transition impacts
		From extreme weather events	From gradual global warming	
	Consumption	Loss of income and damage to household balance sheets reduce consumption	Effects on household income Wealth effects due to changes in property prices Effects on corporate balance sheets Effects on public finances	"Crowding out" from climate policies Changes of consumption patterns because of a shift in preferences or taxation (e.g. carbon taxes) Shifts in demand from migration or political instability Wealth effects due to share and bond prices Effects on public finances
	Trade	Disruption to import/export flows due to climate disasters	Changes to patterns and volumes of trade	Distortions from asymmetric climate policies Changes to patterns and volumes of trade
Supply	Labor supply	Loss of hours worked due to climate hazards	Loss of hours worked due to extreme heat Labor productivity effects of climate change Migration effects	"Stranded labor" Migration effects
	Natural capital		Loss of arable land, biodiversity loss, water stress	Climate policies may constrain/restrict the use of land or ecosystem services
	Energy, food, and other inputs	Food and other input shortages (e.g. through supply chain disruptions)		Changes to the energy supply through decarbonization policies and new renewable energy sources
	Capital stock	Damage due to extreme weather	Loss of productive assets Diversion of resources from productive investment to mitigation capital	Stranded assets Diversion of resources from productive investment to adaptation capital
	Technology	Diversion of resources from innovation to reconstruction and replacement	Diversion of resources from innovation to adaptation capital	Technology may become stranded Uncertainty about the rate of innovation and adoption of low-carbon technologies

Source: Volz et al. (2020), based on the taxonomy of Batten et al. (2018).

Like supply shocks, demand-side shocks can originate from both physical and transition impacts. Extreme weather events can reduce household income and wealth and therefore private consumption. Furthermore, damage to corporate balance sheets can lead to a reduction of investment. However, after the initial stage of loss, natural disasters are typically followed by a period of recovery, during which the rebuilding of infrastructure and production sites and the replacement of stocks give a temporary boost to investment and consumption (IMF 2016). Extreme weather events can also affect the international demand for goods and services. Furthermore, slow-onset changes to global warming can lead to structural economic changes, which may affect the aggregate demand through effects on household income (e.g. income from farming or fishery), wealth effects (e.g. through changes in property prices), effects on corporate balance sheets, or effects on public finances. Global warming may also exert an impact on investment through effects on household and corporate balance sheets. Last but not least, global warming can influence the patterns and volume of trade.

Climate policies aimed at advancing the transition to a low-carbon economy, changes in consumer preferences, and technological advancement can have a significant impact on domestic and foreign demand as well as investment. A global transition to a low-carbon world economy would imply a falling demand for carbon-intensive goods and services, which could contribute to the stranding of assets. Structural changes of the economy could also affect private investment through effects on household and corporate balance sheets (e.g. the growth or demise of different industries) or a growing demand for sustainable investment. Supply shocks could originate, for example, from changes in commodity prices or energy and technological innovation.

It is now widely recognized that the various macro-financial impacts of climate change can pose a material risk to the stability of individual financial institutions and the financial system at large (NGFS 2019). Moreover, empirical evidence shows that climate vulnerability affects the cost of debt, both for sovereigns and corporates, with potentially significant effects for macroeconomic development and public finances (Buhr et al. 2018, Beirne et al. 2020, 2021; Kling et al. 2018, 2021). As the key international organization overseeing the stability of the world economy and the global financial system, the IMF will need to play an important role in analyzing and monitoring these risks, and in supporting its membership to design and implement policies to mitigate and manage macro-financial risks arising from climate change.

KEY AREAS FOR THE IMF TO SUPPORT ITS MEMBERSHIP IN BETTER MANAGING AND MITIGATING CLIMATE-RELATED RISKS[13]

In recent years, the IMF has stepped up its analytical work on climate change. Since 2016, the number of publications and events with substantial reference to climate change have increased steadily (Volz 2020). However, in its operational work – comprising surveillance, technical assistance and training, and emergency lending and crisis support – the IMF has been lagging behind to address climate-related macro-financial risks. At the country level, the IMF has only recently begun to address climate change in some of its Article IV consultations with its member countries: until 2018, only very few Article IV reports per year included substantial references to climate change (Volz 2020).[14]

[13] This section draws from Volz (2020) and Volz and Ahmed (2020), which provide a much more comprehensive discussion of possible IMF action regarding climate.

[14] Volz (2020) categorizes Article IV reports which show at least ten references to 'climate change', 'climatic', 'climate risk' and/or 'climate-related' or provide at least one whole paragraph, box or section on the topic as making "substantial reference"

A large increase was recorded in 2019, when 27 Article IV reports had substantial references to climate change.[15] However, in the vast majority of Article IV consultations, climate change and climate-related macroeconomic and fiscal risks have not yet played a role. Other surveillance activities at the country level, including Financial Sector Assessment Programs (FSAPs) and Debt Sustainability Analyses (DSAs), both of which the Fund conducts jointly with the World Bank, have also failed to systematically examine climate-related risks.[16] Similarly, in its regional and global surveillance and monitoring operations, climate change has thus far had little presence, except for several thematic chapters in flagship reports. As part of its technical assistance work, the Fund has conducted Climate Change Policy Assessments for just six countries: the Seychelles (June 2017), St. Lucia (June 2018), Belize (November 2018), Grenada (July 2019), the Federated States of Micronesia (September 2019), and Tonga (June 2020).

Going forward, the IMF ought to systematically integrate climate risks into its analytical and operational frameworks. Particularly, the macro models currently used by the Fund are not fit for purpose as they do not consider climate risks. The Fund's macro models need to be significantly enhanced so they can be used to identify the main sources of macroeconomic and fiscal risks and assess the exposures of the private and public sectors to climate-related risks. Enriching the analytical frameworks by using science-based climate risk metrics and methods such as climate stress-testing and climate-financial pricing models for assessing climate-related risks will provide a basis for designing tailored measures to mitigate such risks, while addressing potential trade-offs on sustainable development and inequality.

Following up on various public announcements, the IMF should introduce a mandatory section on climate risks in Article IV consultations with all its member countries. A consistent and systematic treatment of climate risks in Article IV consultations will facilitate better management and mitigation of macro-financial risks through governments and enhance the recognition of such risks by the financial sector. For this reason, the IMF should also incorporate a mandatory section on climate-related financial risks in FSAPs. Scenario-based assessment of all sources of vulnerability for the macroeconomy, the financial system, and public finances is needed for all member countries, addressing both physical and transition risks (Bos and Gupta 2019, Volz et al. 2020).

A key area where the Fund needs to systematically integrate climate risk analysis is debt sustainability analysis. As mentioned, at the moment, the joint World Bank-IMF DSA frameworks do not consider climate-related risks in a systematic way, and in the majority of DSAs, climate is not analyzed. DSAs also ignore investment needs in climate adaptation to reduce climate vulnerability, which is having adverse effects on the sovereign cost of capital and can amplifies sovereign risk (Buhr et al. 2018, Volz et al. 2020). DSAs therefore need to be improved to account for climate-related risks and crucial investment needs in adaptation. This is fundamental for identifying debt vulnerabilities early on, so that debt problems can be addressed and potential debt restructuring can be avoided. Importantly, climate-sensitive DSAs should also be rolled out to middle-income countries. Given the looming debt crisis in the Global South, reforming DSAs ought to be a priority.

to climate change.

[15] A few country studies on climate-related risks were conducted outside of Article IV consultations, including an analysis of enhancing resilience to natural disasters in St. Lucia (Cantelmo et al. 2019) and an analysis of transition risks in Norway (Grippa and Mann 2020).

[16] An exemption was the latest Debt Sustainability Analysis that was carried out for Somalia as part of the Enhanced Heavily Indebted Poor Countries Initiative in 2020, which did include a simulation of a climate shock scenario (IMF 2020).

The Fund can also play an important role by supporting climate vulnerable countries in climate-proofing public finances through technical assistance and capacity building. Through climate vulnerability assessments, the Fund can help finance ministries identify potential risks on the expenditure and revenue side (Volz et al. 2020). Last but not least, the Fund ought to consider options for extending its emergency financing toolkit, especially for climate-vulnerable countries (Volz and Ahmed 2002). For instance, it should explore the possibility of raising access under its existing catastrophe financing facilities (the Rapid Credit Facility and the Rapid Financing Instrument), and convert these facilities into grants, particularly for low-income countries. The IMF could also explore options for creating a new climate disaster facility that would be linked to an issuance of Special Drawing Rights, which would benefit only countries hit by climate disasters.

CONCLUSION

Climate change is macro-critical and hence needs to be mainstreamed across the IMF's operations. Forward-looking physical and transition risks need to be systematically incorporated into the Fund's macro models. Article IV consultations for all member countries should include an analysis of climate risks. Likewise, DSAs and FSAPs need to be substantially revamped to be fit for examining climate-related macro-financial risks.

Moreover, as the guardian of the global financial system, the IMF also needs to play a crucial role in "making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development", as stipulated in Article 2.1c commitment of the Paris Agreement. The IMF is in a unique position to support finance ministries, central banks, and supervisors in climate-proofing their budgets and economies and in mainstreaming sustainability practices in financial decision making.

Bibliography

Asonuma, T., Li, M.X., Papaioannou, M.G., Thomas, S., Togo E. (2018) Sovereign Debt Restructurings in Grenada: Causes, Processes, Outcomes, and Lessons Learned, *Journal of Banking and Financial Economics* 2(10), 67–105.

Batten, S., Sowerbutts, R., Tanaka, M. (2018) "Climate Change: What Implications for Central Banks and Financial Regulators?", in: B. Caldecott, ed., *Stranded Assets and the Environment*. London: Routledge.

Beirne, J., Renzhi N., Volz U. (2020) "Feeling the Heat: Climate Risks and the Cost of Sovereign Borrowing", *ADBI Working Paper* No. 1160. Tokyo: Asian Development Bank Institute.

Beirne, J., Renzhi N., Volz U. (2021) Bracing for the Typhoon. Climate Change and Sovereign Risk in Southeast Asia, *Sustainable Development*. Forthcoming.

Bos, K., Gupta, J. (2019) Stranded Assets and Stranded Resources: Implications for Climate Change Mitigation and Global Sustainable Development, *Energy Research & Social Science Review* 56, 101215.

Bouwer, L.M. (2011) Have Disaster Losses Increased Due to Anthropogenic Climate Change?, *Bulletin of the American Meteorological Society* 92, 39–46.

Bova, E., Ruiz-Arranz, M., Toscani, F.G., Elif Ture H. (2019) The Impact of Contingent Liability Realizations on Public Finances, *International Tax and Public Finance* 26(2), 381–417.

Buhr, B., Volz, U., Donovan, C., Kling, G., Lo, Y., Murinde, V., Pullin, N. (2018) *Climate Change and the Cost of Capital in Developing Countries*, London and Geneva: Imperial College London; SOAS University of London; UN Environment.

Cabezon, E., Hunter, L., Tumbarello, P., Washimi, K., Wu, Y. (2015) "Enhancing Macroeconomic Resilience to Natural Disasters and Climate Change in the Small States of the Pacific". *IMF Working Paper* No. 15/125. Washington, DC: International Monetary Fund.

Cantelmo, A., Bonato, L., Melina, G., Salinas, G. (2019) "Policy Trade-Offs in Building Resilience to Natural Disasters: The Case of St. Lucia", *IMF Working Paper* No. 19/54, Washington, DC: International Monetary Fund.

Farhi, E., Gabaix, X. (2016) Rare Disasters and Exchange Rates, *Quarterly Journal of Economics* 131(1), 1–52.

Grippa, P., Mann, S. (2020) "Climate-Related Stress Testing: The Transmission of Transition Risks in Norway", *IMF Working Paper* No. 20/232, Washington, DC: International Monetary Fund.

IMF (2016) "Small States' Resilience to Natural Disasters and Climate Change – Role for the IMF", *IMF Policy Paper*, November 4, Washington, DC: International Monetary Fund.

IMF (2019), "Can Central Banks Fight Climate Change?", *IMF Seminar Event*, Annual Meetings 2019, October 16, Washington DC, URL: https://meetings.imf.org/en/2019/Annual/Schedule/2019/10/16/imf-seminar-climate-change-and-central-banks.

IMF (2020) "Somalia: Enhanced Heavily Indebted Poor Countries (HIPC) Initiative-Decision Point Document", *IMF Country Report* No. 20/86, Washington, DC: International Monetary Fund.

Kling, G., Lo, Y.C., Murinde V., Volz, U. (2018) "Climate Vulnerability and the Cost of Debt." *Centre for Global Finance Working Paper* No. 12/2018, London: SOAS University of London.

Kling, G., Volz, U., Murinde V., Ayas, S. (2021) The Impact of Climate Vulnerability on Firms' Cost of Capital and Access to Finance, *World Development* 137, 105131.

Lagarde, C. (2015) *The Managing Director's Statement on the Role of the Fund in Addressing Climate Change*, 25 November, Washington, DC: International Monetary Fund.

McKibbin, W.J., Morris, A.C., Panton, A., Wilcoxen P. (2017) "Climate Change and Monetary Policy: Dealing with Disruption", *Climate and Energy Economics Discussion Paper*. Washington, DC: Brookings Institution.

Moody's (2016) "Caribbean Sovereigns. The Silent Debt Crisis", *Sector In-Depth*, February 5. New York, NY: Moody's Investors Service.

Moody's (2020) Sovereign Defaults Series: The Causes of Sovereign Defaults, *Sector In-depth*, August 13. New York, NY: Moody's Investors Service.

Munevar, D. (2018) “Climate Change and Debt Sustainability in the Caribbean. Trouble in Paradise”, *Background Paper for Intergovernmental Group of Experts on Financing for Development*, 2nd Session. Geneva: United Nations Conference on Trade and Development.

NGFS (2019) *A Call for Action. Climate Change as a Source of Financial Risk*. Paris: Central Banks and Supervisors Network for Greening the Financial System.

Schuler, P., Edgard Oliveira, L., Mele, G., Antonio M. (2019) “Managing the Fiscal Risks Associated with Natural Disasters”, in: M.A. Pigato, ed., *Fiscal Policies for Development and Climate Action*. Washington, DC: World Bank, pp. 133–154.

Semieniuk, G., Campiglio, E., Mercure, J.-F., Volz, U., Edwards N. (2021) Low-carbon Transition Risks for Finance, *WIREs Climate Change* 12(1), e678.

The White House (2021) *Executive Order on Tackling the Climate Crisis at Home and Abroad*, January 27. URL: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/

Volz, U. (2020) *Climate-proofing the Global Financial Safety Net*, mimeo, London: SOAS University of London.

Volz, U., & Ahmed S.J. (2020) *Macrofinancial Risks in Climate Vulnerable Developing Countries and the Role of the IMF – Towards a Joint V20-IMF Action Agenda*. London, Rotterdam, and Bonn: SOAS Centre for Sustainable Finance, Global Center on Adaptation, and Munich Climate Insurance Initiative.

Volz, U., Beirne, J., Ambrosio Preudhomme, N., Fenton, A., Mazzacurati, E., Rhenzi N., Stampe J. (2020) *Climate Change and Sovereign Risk*, London, Tokyo, Singapore, and Berkeley, CA: SOAS University of London, Asian Development Bank Institute, World Wide Fund for Nature Singapore, and Four Twenty Seven.

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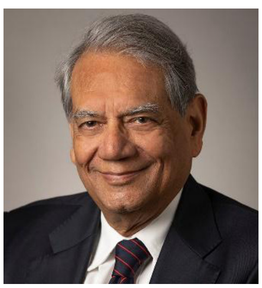

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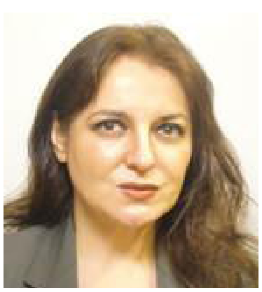

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