

# Observations on Debt and Debt Management: Before, During and After the Covid-19 Pandemic

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This paper discusses the impact of the Covid-19 pandemic on global debt and on debt management practices, with a focus on the state of debt management prior to the pandemic, the responses of country authorities to the challenge, and how debt management is likely to change in the future.

## I. Introduction

Why debt and debt management during Covid? A casual reader might see both as synonymous, but the distinction between the two is important: as noted in the Revised Guidelines for Public Debt management (IMF-WB, 2014), the level of debt and a government's financing requirement are determined mainly by fiscal authorities responsible for expenditure, while decisions on how to manage that debt are delegated to a country's debt manager, who will make decisions on the strategy for managing the government's debt to raise funding at the lowest possible cost, consistent with a prudent degree of risk.

Nevertheless, the two are highly interrelated.<sup>1</sup> An effective debt

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1. See IMF-WB (2019) for a more detailed discussion on the inter linkages between a debt management strategy and the overall economic framework of a country.

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management strategy should be formulated in the context of a medium-term fiscal framework and relies upon effective co-ordination between debt managers and fiscal authorities. Further, reducing vulnerabilities embedded in a debt portfolio can have a macro critical role in ensuring debt sustainability, avoiding future economic crises, and mitigating the impact of exogenous shocks on an economy.

Whilst volumes could and have been written on the growth in debt in the twenty-first century and the global policy response to increasing debt vulnerabilities, this paper will provide some observations from a debt management perspective on how the change in financing requirements, and concomitant increase in debt stocks, as a result of Covid-19, have created new challenges for debt managers, and what the future might hold for debt management. Before doing so, it takes stock of debt and debt management prior to the crisis as this sets the tone for response that follows, and the evolution of debt management strategy in the future.

## **II. Before the Pandemic**

For large advanced economies (AEs), wartime could once have been considered the peak in sovereign borrowing. However, the fiscal interventions undertaken globally during the Covid-19 pandemic have eclipsed the borrowing of old. The pandemic has had a dramatic impact on financing requirements across all economies and resulted in major step-changes in debt levels regardless of a country's income level. In turn, this has required debt managers to adapt their financing strategies to be able to manage existing portfolio risks whilst meeting new financing challenges.

Prior to the start of the pandemic, the second decade of the twentieth century had seen dramatically higher sovereign debt levels: in April 2018, the IMF noted in its Fiscal Monitor that global debt was at all-time highs (as set out in Figures 1-3), 12 percent higher than at the peak in 2009, as the world grappled with the Global Financial Crisis (GFC). Of that growth, public debt had been the driver, reflecting the economic collapse and response to the GFC and the 2014 fall in commodity prices, but also rapid growth in expenditure in emerging markets (EMs) and low income countries (LICs).

Such high debt levels can create significant risks for sovereigns, particularly where their debt portfolio is subject to significant rollover risk, i.e. it has a short average time to maturity, requiring debt to be refinanced on a regular basis. For those countries that are only able to

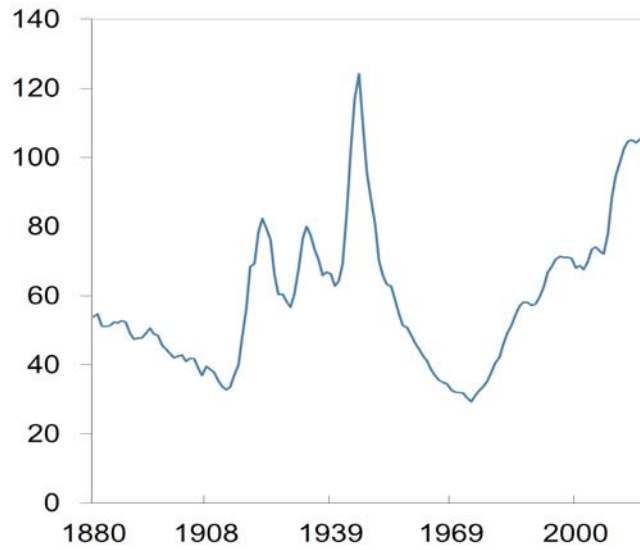


FIGURE 1.—Average Debt to GDP – Advanced Economies 1880-2018 (in percent)

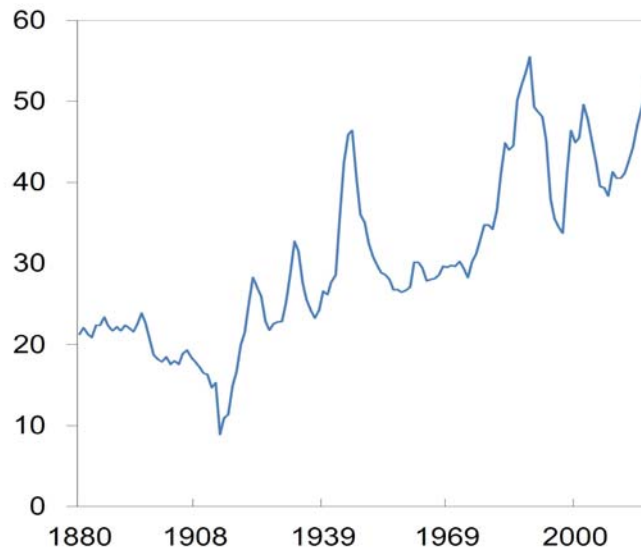


FIGURE 2.—Average Debt to GDP – Emerging Markets 1880-2018 (in percent)

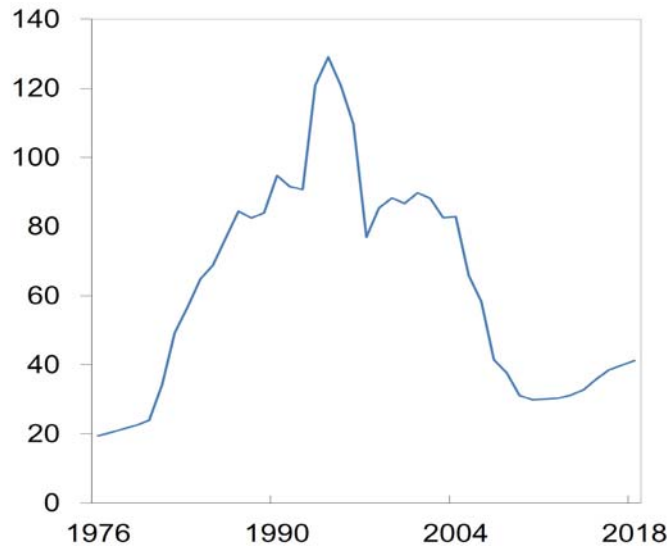


FIGURE 3.—Average Debt to GDP – Low Income Countries  
1976-2018 (in percent)

Source: IMF (2018)

borrow at relatively short maturities, the risk of tightening of market access is an ever-present in situations in which sentiment, risk appetite, or liquidity in global fixed income markets shifts unexpectedly. Moreover, high debt-to-GDP levels leave sovereigns exposed to large external shocks, such as the Covid-19 pandemic, which cause not only a spike in central government borrowing but can also result in the crystallization of explicit guarantees on the debt and other liabilities of state-owned enterprises, as well as the ‘calling’ of potential implicit guarantees in other sectors of the economy that may be too important to fail, such as the banking sector. Critically, high debt levels make it difficult to run countercyclical policies in times of crisis. Higher expenditure on debt interest and a lack of fiscal space for additional borrowing can crowd out an effective policy response to any crisis.

For low income countries (LICs), an additional challenge has been a move from concessional to market-based borrowing. While the Multilateral Debt Relief Initiative (MDRI) resulted in substantially reduced debt burdens in the early 2000s, it also created new

opportunities for countries to access international capital markets, as well as use new instruments, such as collateralized loans, for financing. With reduced access to concessional financing, these countries have either borrowed on commercial terms from new bilateral and plurilateral lenders, or gained market access and issued Eurobonds internationally, with a consequent increase in their cost of financing. These higher debt servicing costs have in turn been crystalized in higher borrowing requirements as deficits have not been reduced.

What has been the debt management response in the last decade as debt levels have grown since the GFC? In the context of higher levels of public debt and in the shadow of the crisis, a group of emerging market (EM) and advanced economy (AE) debt managers developed the Stockholm Principles (IMF, 2010) for managing sovereign risk and high levels of public debt. Those principles recognized the need for a robust framework to manage debt portfolio vulnerabilities, focused around three areas: a well-defined framework for debt management, encompassing contingent liabilities and facilitating flexible debt management responses; the importance of sound communication strategies; and a need for prudent debt portfolio risk management strategies. In turn, the Guidelines for Public Debt Management, first adopted in 2001 and amended in 2003, were revised in 2014 taking into account global experiences of greater debt issuance, larger cross border capital flows and more volatile investor behavior. Like the Stockholm Principles, these placed a greater emphasis on debt management accountability and information sharing, including communication with investors; better risk management, including stress testing; the use of Collective Action Clauses (CACs) to support the efficient resolution in sovereign debt restructurings; and a focus on developing domestic debt markets, diversifying investors, and flexibility in issuance programs, especially in times of crisis.

One of the lessons learnt during previous crises was the role that liquidity buffers could play in mitigating unexpected changes in financing requirements, a loss of market access, or managing the timing of cash inflows and outflows. To create a liquidity buffer, a debt manager can build up reserves by ‘over-borrowing’ in advance, investing the surplus in liquid assets, targeting a level for the buffer that might cover a certain amount of financing needs over time (or to meet average debt servicing obligations). However, buffers are not costless, given the cost of carry, where the cost of borrowing is likely to exceed any investment return. Any issuer has to assess the cost-risk tradeoff of such a buffer, including the benefit for their overall risk profile from

having this form of insurance. Cruz and Koc (2018) provide a useful summary of recent liquidity buffer practices among OECD members.

Another lesson learnt was the importance of improving market communication and investor relations (IR) as a means of maintaining market access. ESM (2016) sets out in detail the role that IR played in restoring and supporting market access for Cyprus, Ireland, Portugal, and Spain during and after the GFC. With particular relevance for Emerging Markets, the Institute for International Finance (IIF) has developed and implemented criteria for evaluating both IR practices and data dissemination in the context of its Principles for Stable Capital Flows and Fair Debt Restructuring, which were first agreed in 2004 (and expanded to all sovereign issuers on a voluntary basis in 2010). More broadly, the IIF's Principles have sought to serve as a framework for the effective crisis prevention and resolution, providing guidelines for both debtor nations and creditors on maintaining stable capital flows – and in that context seek to encourage effective policies, including data and policy transparency, as well as good faith negotiations in debt restructuring situations.

While AEs, and most EMs, have the capacity to take stock of the adequacy of their debt management policies, procedures, and processes, and seek to improve them, the challenge has been in supporting and developing debt management capacity in LICs, where debt vulnerabilities can have serious macroeconomic consequences. In this instance, the IMF and the World Bank have sought to improve capacity in debt management through technical assistance and training, with support of donors, including through the work of the Debt Management Facility (DMF) Trust Fund, a multi-donor trust fund that supports over 80 developing countries. According to the most recent retrospective of the DMF's work (DMF, 2018), debt management capacity has increased significantly over the past 10 years, particularly in governance, debt strategy development, and in borrowing and issuance, but significant gaps in debt management capacity remain. Understaffed and under-resourced debt management offices, as well as a lack of priority or recognition at senior levels of the importance of good quality debt management to mitigate vulnerabilities have made it difficult for debt management reforms to gain traction in a number of countries. And with debt levels rising further, it was evident that prior to the onset of the pandemic that there remained significant need for substantial debt management capacity building across LICs, particularly in fragile and conflict-afflicted states.

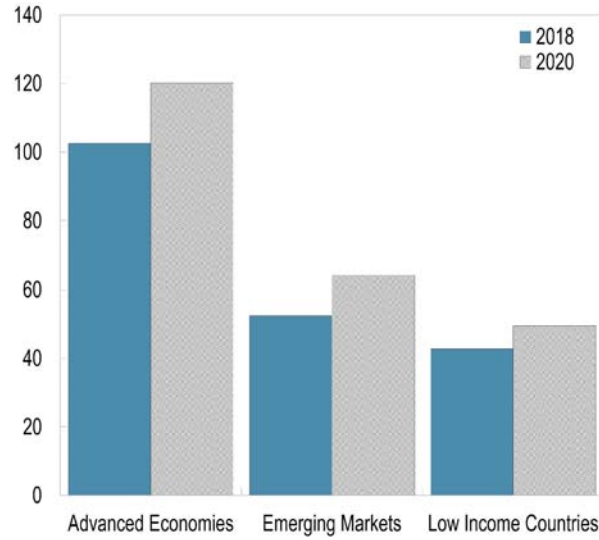


FIGURE 4.—The Impact on Debt-to-GDP of the Pandemic (in percent)

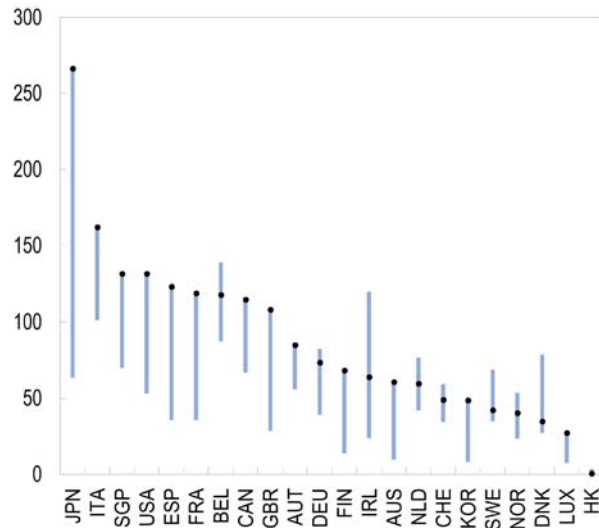


FIGURE 5.—Debt-to-GDP in Advanced Economies with Systematically Important Financial Sectors – 2020 vs the previous 30 years (in percent)

Source: IMF (2018). Estimated at October 2020.

### III. During the Pandemic

By March 2020 the global impact of Covid-19 on health, not only of individuals, but of the global economy, was becoming clear. The step change in financing requirements that the crisis created would result in debt managers needing to utilize every tool in their arsenal to meet their borrowing needs.<sup>2</sup> In developing a debt management crisis response, a number of countries could draw on lessons learnt during the GFC.

Among OECD countries, gross borrowing was \$18trn USD in 2020 (OECD, 2021), more than double the amount during the 2008 financial crisis. Overall, the impact of Covid-19 saw general government debt levels as a proportion of GDP jump by 17.6 percent in AEs, 11.9 percent in EMs and 6.7 percent in LICs, as set out in Figure 4. Among AEs with systematically important financial sectors, debt levels reached historical highs (Figure 5) in a number of countries.

The priority for many debt managers would be to seek to meet immediate liquidity needs. The rapid onset of the pandemic, and the need for a speedy response and effective support measures, had the effect of generating large near-term cash requirements for many sovereigns.<sup>3</sup> However, a need to raise large amounts of financing quickly can create a significant mismatch between the supply of government debt and investor demand, particularly where market sentiment turns immediately negative because of uncertainty about the nature and duration of a shock.

Near-term solutions to meeting a sharp increase in liquidity needs can include the use of liquidity buffers, as outlined earlier, or through the use of short-term instruments, such as Treasury bills. Unsurprisingly, given the nature of the crisis, a number of sovereigns would use their cash buffers to reduce their near-term financing needs, while Treasury bills would again have an important role to play in meeting an immediate liquidity crunch, as in the GFC.

As would be expected, for a number of sovereign debt managers, Treasury bills, which are used both for cash and debt management, can

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2. IMF (2020a). Debt Management Responses to the Pandemic. Discusses the expected response of debt managers to the pandemic in detail.

3. See IMF (2020c), Managing Fiscal Risks Under Fiscal Stress for a discussion of the range of support measures to respond to the Covid-19 outbreak. A full list of policy measures undertaken by governments can also be seen at: <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>



often be the most liquid sector of the domestic government bond market. For some LICs with underdeveloped domestic markets, they may be the only source of financing, while for EMs and AEs, they offer a potential immediate source of liquidity. For those countries with a more developed domestic market, their short residual life makes them a useful device for addressing sharp peaks in financing, distributing one peak into many in the future (if issuers are able to roll maturing bills into longer maturity instruments as they fall due.) However, the greater refinancing risk of bill issuance, particularly for those issuers without a developed domestic market, can mean that when bills fall due the issuer can face substantial refinancing challenges.

The risk that faced many debt managers in LICs and EMs was that the pandemic would cause a change in global market sentiment, with a resulting ‘flight to quality’ to AEs, who would see increased demand for government bonds given their safe haven status, while EMs and LICs would be faced with a shallow pool of investors and higher funding costs. The economic impact of Covid-19 would also take its toll on the creditworthiness of many borrowers among EMs and LICs: most downgrades occurred in Latin America and the Caribbean, and in sub-Saharan Africa, particularly among those countries with reliance on specific industries or commodity exports. For some, the burden of debt would become unsustainable, requiring debt restructuring. Argentina and Ecuador completed debt restructurings in 2020, while others, including Lebanon, Zambia would remain a work in progress. Whilst CACs have more recently provided some assistance in faster resolution of debt restructurings, other factors have started to complicate effective resolution, including the increasing complexity of the creditor structure and the use of collateralized debt and repos.

For those sovereigns unable to address their financing gaps through issuance, emergency facilities offered by official creditors and IFIs would also offer a lifeline. By end-March 2021, the IMF had providing financial assistance to 85 countries totaling \$107bn USD, including through the Rapid Credit Facility (RCF) and the Rapid Financing Instrument (RFI), which can provide emergency financing quickly in response to health disasters, as well as debt relief in the form of grants under the Catastrophe Containment and Relief Trust (CCRT) to 29 of the poorest and most vulnerable member countries. These financing sources supplemented financing available to countries under existing and new programs. As the crisis began to unfold, in March 2020 the IMF and World Bank also called on bilateral creditors to suspend debt

service payments, with the G20 responding through the creation of the Debt Service Suspension Initiative (DSSI), through which G20 bilateral official creditors would suspend debt service payments from 74 low and middle income countries that request a debt service suspension. In November 2020, the G20 agreed a Common Framework for Debt Treatments beyond the DSSI, for the G20 and Paris Club countries to coordinate on debt treatment for these countries: where debt is not sustainable to support a debt restructuring, or with countries with liquidity issues to defer debt service payments to ease financing pressures.

But what of the strategic debt management response? In general terms, for those borrowers with active domestic debt markets, changes in debt management approach as a result of the crisis could be broadly grouped in three categories: (i) changes in issuance strategy and techniques; (ii) market management; and (iii) support from central banks.

In terms of changes to issuance strategy, while large Treasury bill issuance was a useful immediate response to the crisis, there was a general move among issuers towards longer-maturity domestic bonds, where possible, to finance bulk of the increased financing requirement, consistent with reducing near-term refinancing risk. Countries also sought to expand their range of typical tenors issued beyond usual benchmark 5, 10 and 30-year maturity points. Financing plans, which once would have been set out in some degree of detail (in line with best practice), were now shortened, and given more flexibility in order to accommodate market uncertainty.

Some issuers, previously concerned about the use of syndications rather than auctions, increased their use during the crisis, recognizing that they can allow a sovereign to sell larger amounts of securities in a single operation and take pressure off primary dealers who do not have to warehouse and then on-sell securities to end-investors. As might be expected, issuers also sought, where possible, to accelerate funding programs, effectively pre-financing ahead of uncertain future market conditions, and increased their number of auctions in order to place a larger supply of bonds into the primary market. In addition to auctions and syndications, some countries turned to less transparent means to raise necessary financing – including tap sales, as well as private placements of securities.

As would be expected, adjusting the mix of securities sold was another means by which sovereigns could attempt to maximize their

potential financing in a challenging environment. The higher liquidity of conventional bonds, and potential longer-term inflation risk, would mean that some issuers with large inflation-linked bond programs would reduce issuance as a proportion of overall financing (such as Australia and the UK). However, the pandemic was also an opportunity for others to tap new markets, or sectors of the investor base. For example, EMs issued a record amount of ESG bonds in 2020 (\$13bn USD, or 6 percent of total issuance), including Egypt (green bond), Ecuador and Guatemala (social bonds, including Covid-19 bonds), as well as new domestic ESG bonds in Fiji, Mali, Nigeria and Thailand. Increasing retail issuance was another option for issuers, such as Indonesia, or in the case of Italy's new 10-year bond, 'BTP Futura' aimed at retail investors.

With debt managers always concerned about the risk of failed auctions (or moreover the potential signaling effects), the pandemic was an opportune time to relax auction rules for market participants, including increasing limits for individual bidders in auctions, and potentially allocating more than offered to competitive bids. For those markets with primary dealer systems, debt managers sought to make it easier for them to participate in the primary and secondary market, by increasing the amount of non-competitive allocations in auctions, widening bid-ask quoting obligations and reducing fees for securities lending. The period also provided an opportunity for debt managers to be more active with market management tools, using liability management operations to manage refinancing risks, retire illiquid securities, or support secondary market liquidity.

Central banks continued to play a key role in supporting bond markets in 2020, with government bond markets being a key beneficiary of ongoing quantitative easing. Despite the glut of government bond issuance in 2020, yields on marketable securities reached record lows, with asset purchases from central banks supporting financial markets and facilitating the overall absorption of this higher volume of debt issuance. This was particularly true in AEs. Central banks would also seek to enhance access and provide greater flexibility in repo facilities, a positive for market liquidity. However, there remained concerns about central bank financing in the context of the execution of central bank purchases in some countries, particularly where securities were bought directly in the primary market, or for those issuers looking to activate or increase a borrowing facility through the central bank (such as a Ways and Means account.)

#### IV. After the Pandemic

Where do we go from here? While the pandemic is not entirely under control, 2021 is expected to see a return to economic growth across most economies. However, as Breuer and Cohen (2020) note, the economic impact of COVID-19's economic shock has meant that about half of LICs and several EMs are in, or at high risk, of a debt crisis. Likewise, sovereign debt levels are expected to rise by about 17 percent of GDP in AEs; 12 percent in EMs; and 8 percent in LICs, compared to pre-pandemic expectations. However, financing projections are particularly uncertain, given the current balance of risks to the global economic outlook as a consequence of the uneven rollout of Covid-19 vaccines, the risk posed by future mutations of the virus, and the possibility that it will become endemic with corresponding impacts on healthcare and social expenditure.

The challenge for debt managers going forward will be threefold: (i) to re-assess the costs and risks posed by higher debt stocks, and develop new post-crisis medium-term debt management strategies on that basis; (ii) to consider whether Covid-related financing interventions align with best practice and should be sustained, or alternatively unwound; and (iii) to engage early with creditors where debt becomes unsustainable and a restructuring is likely to be necessary to restore debt sustainability.

As was the case after the GFC, the Covid crisis has caused a significant step-up in individual countries' debt stocks. Where the financing challenge has been met to date, the refinancing challenge will be faced by debt managers over years to come. The composition of debt portfolios, including their risk and cost characteristics will have dramatically changed – quite often for the worse. Higher refinancing risks are consistent across most issuers, and some will also face higher debt servicing costs going forward on larger debt stocks, particularly beyond the set of AEs who were beneficiaries of central bank interventions and flight-to-quality flows. These shifts in cost and risk will pose particular issues for debt managers which will need to be resolved in new debt management strategies in the medium term.

As discussed in the previous section, a number of countries also moved away from best practice in debt management when faced with inexorable increases in their financing requirements. Post-crisis, there

will be a need for an assessment of the new debt management policies and interventions that were undertaken during the crisis, and an unwinding of those that are inconsistent with good practice over the long term, for example the use of private placements with limited transparency, over-allocating securities at auctions, and the use of central bank financing.

This will also be a suitable opportunity for debt managers to undertake an evaluation of the debt portfolio risks that crystallized during the crisis and assess the adequacy of the debt management response. For those issuers that did not have liquidity buffers or used their liquidity buffers to manage a sharp increase in their near-term financing requirement, this is a suitable opportunity to consider their use going forward and the potential cost-risk tradeoff.

With the peak of crisis assumed to be over, some countries that have teetered on the brink of restructuring are likely to fall into debt distress. For example, at end-2020 over half of LICs with a Debt Sustainability Assessment (DSA) were in, or at high risk of debt distress, as can be seen in Figure 6.

For countries where public debt is no longer sustainable, it will be necessary for creditors, both official and otherwise, to work together to facilitate more efficient, and more effective, debt resolution. This includes the potential use of State Contingent Debt Instruments, discussed recently in Cohen et al. (2020). However, the IMF and other partners recognize the need for reforms to the international debt architecture to facilitate more effective debt resolution – a full discussion can be found in IMF (2020d).

In conclusion, debt vulnerabilities which existed before the crisis have been exacerbated, and the challenge to fiscal authorities, as well as debt managers, has never been greater. This has been acknowledged in the IMF-World Bank multipronged approach (MPA) to debt vulnerabilities which started in 2018 and has become more urgent in the context of growing debt risks in LICs and EMs in a post-Covid-19 world.<sup>4</sup> Strengthening debt management capacity building, improving debt transparency and institutions is now more important than ever.

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4. The MPA focuses on four pillars: strengthening debt transparency; supporting capacity building in debt management; tools for analyzing debt development and risks; and adapting the IMF and WB surveillance and lending to better address debt risks and promote debt crisis resolution.

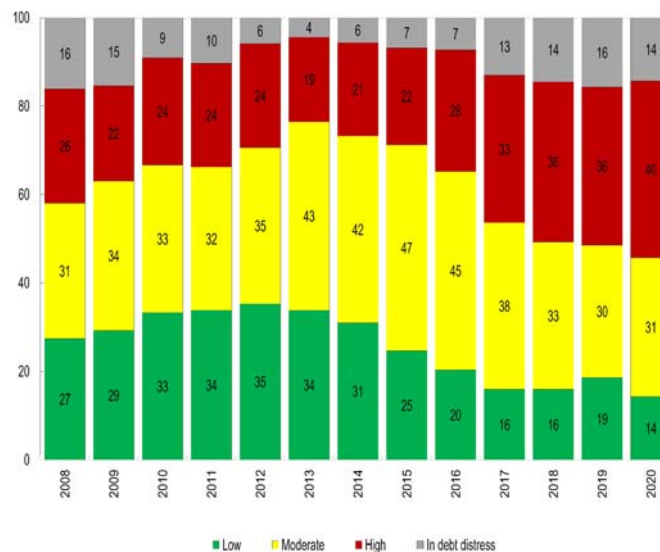


FIGURE 6.—Evolution of Risk of Debt Distress (in percent of LICs with DSAs)

Source: IMF LIC DSA database.

## References

- Cohen et al. 2020. The role of state-contingent debt instruments in sovereign debt restructurings. IMF staff discussion note, Washington, DC.
- Cruz, P. and Koc, F. 2018. The liquidity buffer practices of public debt managers in OECD countries. OECD working papers on Sovereign borrowing and public debt management, No. 9, OECD publishing, Paris.
- Debt Management Facility, 2018. 10 year retrospective 2008-2018. World Bank Group, Washington, DC.
- European Stability Mechanism. 2016. Accessing sovereign markets the recent experiences of Ireland, Portugal, Spain and Cyprus. Discussion paper series, No. 2. Luxembourg.
- Institute for International Finance, 2020. Principles for stable capital flows and fair debt restructuring. Report on implementation by the Principles Consultative Group.
- IMF, 2010. Guiding principles for managing sovereign risk and high levels of public debt.
- IMF, April 2018. IMF fiscal monitor: capitalizing on good times.

- IMF, 2020a. Debt management responses to the pandemic.
- IMF, October 2020. Global financial stability report: Bridge to recovery. Washington, DC.
- IMF, 2020c. Managing fiscal risks under stress. IMF, Washington, DC.
- IMF, 2020d. The international architecture for resolving sovereign debt involving private-sector creditors recent developments, challenges, and reform options. Washington, DC.
- IMF, April 2021. IMF fiscal monitor: A fair shot.
- IMF-World Bank, 2014. Revised guidelines for public debt management. Washington, DC.
- IMF, 2018. Developing a medium-term debt management strategy framework (MTDS): Updated guidance note for country authorities. Washington, DC.
- OECD, 2021. Sovereign borrowing outlook for OECD countries. OECD Publishing, Paris.