Briefing Paper

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Emerging-market debt in the COVID-19 pandemic

Two proposals to help prevent the next crisis

Summary

- The COVID-19 pandemic has raised concern about the risk of sovereign debt crises in emerging economies. Although most concern has centred on foreign-exchange-denominated debt, governments could also encounter financing difficulties when seeking to borrow externally in their own currencies.
- To reduce the risks around foreign-currency debt, policymakers and regulators should increase their focus on emerging economies' external balance sheets. In particular, the IMF's metric for assessing reserve adequacy (ARA) should play a bigger role in determining whether countries can take on additional liabilities.
- A number of emerging economies also face a more challenging international market for their local-currency debt. If external demand for such bonds remains weak, this could push up local-currency bond yields and increase the risk of these countries accumulating more foreign-currency debt to finance their spending needs.
- One way to address this would be to promote the issuance of GDP-linked bonds. This would boost investor returns in periods of higher economic growth, while reducing issuers' debt servicing costs in periods of lower growth. Emerging economies can't launch such a market on their own, however: developed countries will first need to establish the viability of such instruments by issuing GDP-linked bonds themselves, or provide high-level sponsorship of the idea.

David Lubin

Introduction

The COVID-19 pandemic has induced considerable concern about the risk of sovereign debt crises in emerging economies. Most of this concern has centred on the foreign-exchange-denominated debt of emerging markets and developing countries, given that countries such as Angola, Chad, Ethiopia and Zambia are in the process of seeking external debt relief from official and private creditors. Some observers have suggested there is a visible risk of a systemic crisis. In April 2020, for example, Carmen Reinhart and Kenneth Rogoff recommended that all countries with a sovereign credit rating below AAA should be offered a moratorium on external debt payments.[1]

This briefing paper argues two points. The first is that while nervousness about an immediate global crisis of *foreign-exchange-denominated* debt currently seems unwarranted, there are good reasons to think that the conditions for such crises could easily build up over the next few years. In order to reduce those risks, policymakers and regulators should intensify their focus on emerging economies' external balance sheets. Put bluntly: the risk of future debt crises can only really be reduced by limiting the accumulation of net foreign-currency-denominated external debt. **The IMF's metric for assessing reserve adequacy (ARA)[2] should be placed at the centre of analyses of whether a country can take on additional foreign-currency liabilities.**

The second point is that some emerging economies could face problems related to *local-currency-denominated* public debt well before they face problems related to foreign-currency-denominated external debt. This is particularly the case in countries where local bond yields are very high relative to expectations of future GDP growth. To address this threat to domestic solvency, **the issuance of state-contingent liabilities – in the form of GDP-linked bonds – should be considered a priority.**

Addressing risks related to foreign-exchange-denominated debt

The reason why foreign-exchange-denominated debt is not currently a systemic problem for emerging economies is that the increase in net external indebtedness in recent years has been nowhere near as dramatic as the gross increase in such countries' debt, since foreign-exchange reserves (which sit on the asset side of a country's external balance sheet) have also increased. Moreover, debt service ratios – the amount of a country's export earnings that must be devoted to payments on foreign-exchange-denominated debt – are historically low.

1 Reinhart, C. M. and Rogoff, K. (2020), 'Suspend Emerging and Developing Economies' Debt Payments', Project Syndicate, 13 April 2020, https://www.project-syndicate.org/commentary/suspend-emerging-and-developing-economies-debt-payments-by-carmen-reinhart-and-kenneth-rogoff-2020-04.
2 IMF (2020), 'Assessing Reserve Adequacy', https://www.imf.org/external/datamapper/ARA/index.html.

Table 1. Two external debt indicators

	Debt service ratio (%)		Reserves/total external debt (%)	
	Lower-middle-income countries	Low-income countries	Lower-middle-income countries	Low-income countries
2019	11.8	6.8*	53.0	18.6**
2010	8.8	4.6	82.4	55.6
2000	17.4	8.7	23.6	8.7
1990	27.0	20.9	4.3	3.8

* 2016 figure. ** 2018 figure.
Source: World Bank International Debt Statistics, accessed via Haver Analytics.
Note: Lower-middle-income countries are defined as those with per capita gross national income (GNI) of between $1,036 and $4,045; low-income countries are those with per capita GNI below $1,036. Definitions at Serajuddin, U. and Hamadeh, N. (2020), 'New World Bank country classifications by income level: 2020–2021', World Bank Data Blog, 1 July 2020, https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2020-2021.

Table 1 illustrates these points. Low-income and lower-middle-income countries have indeed seen an increase in their net external debt, denominated in foreign exchange, and in their debt service ratios during the past 10 years. But understood in a longer historical context, these indicators of debt-carrying capacity are still quite healthy compared to 20 or 30 years ago when debt problems really were acute.

These facts should not encourage complacency, but should focus policymakers' minds on limiting the further accumulation of net external debt, rather than leaping to debt restructuring as an immediate solution regardless of absolute need (given also the potential negative consequences of debt restructuring, which can affect a country's ability to finance itself in the future). Before considering how limiting the build-up of debt could be achieved, it is worth outlining the 'push' and 'pull' factors that drive potentially unsustainable external debt accumulation.

'Push' factors

The overwhelmingly important 'push' factor that directs dollar-denominated debt capital to emerging and developing countries is US monetary policy. Historically, when policy is loose enough to turn inflation-adjusted interest rates in the US negative, this tends to provoke a 'search for yield' mentality among financial institutions, which makes lending to emerging economies attractive.

This kind of behaviour was emphatically behind the build-up to the developing-country debt crises of the 1980s, since the inflation shock of the 1970s pushed real interest rates in the US into negative territory for a considerable period. Simply put: developing countries' accumulation of external debt during 'good' years (i.e. when borrowing costs are low) can mean that they subsequently find themselves with unpayable debts when an external shock materializes. In the early 1980s, this shock took the form of dramatic monetary tightening overseen by Paul Volcker, the chair of the US Federal Reserve, together with a global recession that

eviscerated developing countries' ability to earn foreign exchange by exporting. By the mid-1980s, the value of developing-country debt in default was equivalent to more than 2 per cent of global GDP.[3]

A similar surge in capital inflows, for similar reasons, was evident in the early 1990s, and this was at least a proximate cause of Mexico's late-1994 'Tequila Crisis'.

Real US interest rates, both short- and long-term, are currently negative and are likely to stay so for a considerable time. Although the US Fed has not formally adopted 'yield curve control', which would place explicit ceilings on US bond yields, it is tempting to argue that a *de facto* regime of yield curve control now exists in the US and will remain in place for some time, ensuring that the *push* factor for capital flows to emerging economies remains strong. One reason for this, above all, is to reduce the cost of servicing the now very large stock of US public debt. In 2020 the US government's debt/GDP ratio will likely have exceeded 125 per cent, and will rise further in future years. With so much public debt, interest rate repression will be a necessary tool to avoid fears that US public debt dynamics could spiral out of control.

The inevitable arithmetic behind debt crises in emerging economies is that the probability of crisis grows when the increase in external liabilities outpaces that in external assets.

This push factor already helps to explain why international portfolio managers' demand for dollar-denominated bonds issued by emerging-market borrowers has been so high. Gross bond issuance in emerging markets exceeded $800 billion in 2020, an increase of over 10 per cent on 2019. Similar trends are evident in early 2021. While it is true that most of these bonds were sold by relatively creditworthy borrowers, it is also the case that even sub-investment-grade borrowers have reasons to be optimistic about their ability to access international capital markets.

That optimism explains why so few low-income countries applied for debt service relief last year under the G20's Debt Service Suspension Initiative (DSSI). If governments feared losing access to international capital markets, their incentive to seek relief through the DSSI – or its successor, the G20's 'Common Framework' – would be high. But the opposite is currently true for most emerging economies, with the 'push' factor of negative real US interest rates giving many of them easy opportunities to borrow. The point is this: a debt crisis can't happen so long as borrowers have access to financing. And emerging-market borrowers, by and large, have that access for now.

3 Beers, D. and de Leon-Manlagnit, P. (2019), *The BoC-BoE sovereign default database: what's new in 2019?*, Staff Working Paper No. 829, 27 September 2019, https://www.bankofengland.co.uk/working-paper/2019/the-boc-boe-sovereign-default-database-whats-new-in-2019.

'Pull' factors

One of the main reasons for emerging economies' continued access to financing is that their net dollar debt position these days is relatively healthy, a point also illustrated in Table 1. This is largely the legacy of the crisis decades of the 1980s and 1990s. Since fragile dollar balance sheets were the underlying cause of financial instability in that period, emerging and developing countries have, for the most part, made it a priority in the past two decades to ensure that their external liabilities didn't rise disproportionately above their external assets (which for the most part consist of foreign-exchange reserves). That helps to explain why Table 1 shows a long-term rise in the ratio of reserves to total public and private external debt since the 1990s and 2000s – notwithstanding the past decade's decline.

Another 'pull' factor that will make dollar borrowing attractive to policymakers in emerging economies is that servicing external debt hasn't, in recent years, absorbed a disproportionate share of export revenues (again, see Table 1). This fact will give countries confidence that they have 'space' to increase their foreign-exchange borrowing. According to data from the rating agency Moody's, the debt service ratio for relatively uncreditworthy countries in the single B rating category was 16.5 per cent in 2019, below the previous five years' average rate of 19.8 per cent. For more creditworthy borrowers with higher ratings, the 2019 debt service ratio was only 14.8 per cent, roughly unchanged compared to the recent past.

This increased desire to borrow in dollars will be reinforced by two additional factors. The first is that a number of emerging economies seem to have a diminishing ability to borrow internationally in their own currencies. In recent years, countries such as Brazil, Mexico and South Africa have seen declines in the share of their governments' local-currency bonds that are owned by foreign investors. Because the willingness of foreign investors to buy these bonds is likely to depend on perceptions of the issuers' economic growth prospects, external demand for local-currency bonds in these countries may be weak for a considerable time.

Instead, the affected governments may well need to rely more on borrowing in foreign currencies, particularly in view of a second factor, which is that, at least for now, belt-tightening economic policies are infeasible for a combination of humanitarian and political reasons. In other words, the 'pull' factors encouraging rising levels of net external debt boil down to a combination of relatively strong dollar balance sheets and heavy public sector borrowing needs, the latter of which will be difficult to meet by relying purely on borrowing in domestic currency.

To sum up, then, emerging and developing countries will face growing risks of over-indebtedness in dollars. Policymakers, regulators, credit rating agencies and investors need to be aware of these risks now in order better to identify any worrying trends in borrowing. As the next section explores, one way of fostering this awareness would be to widen implementation of two current measures of external balance sheet risk: a policymaker's 'rule of thumb' ratio originally formulated in response to emerging-market crises in the 1990s; and an IMF framework that has developed that rule into a more comprehensive indicator of foreign reserve adequacy.

The central role of reserves: the 'Guidotti rule' and the IMF's reserve adequacy measure

By 1999, as emerging-market currency and debt crises had firmly established themselves as a phenomenon, Pablo Guidotti, then Argentina's deputy finance minister, proposed a simple rule of thumb for policymakers in emerging markets. The rule, reiterated by US Fed Chair Alan Greenspan in a speech that spring, was that 'countries should manage their external assets and liabilities in such a way that they are always able to live without new foreign borrowing for up to one year'.[4] In other words, usable foreign-exchange reserves should exceed scheduled amortizations of foreign-currency debts during the following year on the conservative assumption that a country is simply unable to borrow abroad for that long.

Two features of the Greenspan-Guidotti rule, as it became known, are noteworthy. The first is that it shifted attention away from the idea that the adequacy of a country's foreign-exchange reserves should be solely assessed by reference to how many months of imports they can cover. In a world of highly mobile capital, focusing instead on a country's external *balance sheet* was a more sophisticated approach to the task of assessing a country's reserve adequacy. The second feature of the Greenspan-Guidotti rule was its simplicity and intuitive appeal, which made it considerably more useful than it might have been had it been analytically complex.

The Greenspan-Guidotti rule was of immense importance in focusing policymakers' attention on the need to keep *net* dollar liabilities at manageable levels.

In recent years, the IMF has developed an ARA framework that adds three variables to the original Greenspan-Guidotti ratio (which related short-term external debt to foreign-exchange reserves). These variables respectively consist of the level of foreign-exchange reserves relative to (a) the M2 measure of money supply, (b) exports, and (c) liquid foreign liabilities that aren't captured in the stock of short-term foreign-exchange-denominated debt.

The IMF is to be commended for creating a more sophisticated framework for assessing the adequacy of countries' reserves. The important task of the next few years, while debts accumulate in part as a result of the fiscal impact of the COVID-19 pandemic, should be to place that framework at the centre of financial stability assessments: not just those conducted by the IMF itself, but also those used by international bodies such as the Financial Stability Board (FSB).

Under the current framework, the IMF's reserve adequacy assessment generates a 'recommended' level of foreign reserves for each country, and the Fund's advice is that reserves at 100–150 per cent of this recommended level generally qualify as adequate. At the end of 2019, any countries that were relatively creditworthy satisfied this condition. For example, for countries rated between BB- and BB+ on the Standard & Poor's rating scale, the median level of reserves was 114 per cent

4 Board of Governors of the Federal Reserve System (1999), 'Remarks by Chairman Alan Greenspan: Currency reserves and debt', World Bank Conference on Recent Trends in Reserves Management, Washington, DC, 29 April 1999, https://www.federalreserve.gov/boarddocs/speeches/1999/19990429.htm.

of the recommended threshold. Ensuring that the reserve metric stays above 100 per cent should be a central objective of policymaking in such countries, and multilateral institutions need to make very clear the importance of this principle for financial stability.

Less creditworthy borrowers, for example those rated below BB-, typically have more trouble meeting the reserve adequacy threshold. Among these countries, the median level of reserves in 2019 was only 84 per cent of the IMF's recommended level. Their access to international borrowing on commercial terms will necessarily be heavily constrained, both by IMF advice and FSB assessments, and by the development of an analytical culture among market participants that hopefully places more emphasis on the essential role of strong dollar balance sheets in preventing future external debt crises.

The inevitable arithmetic behind debt crises in emerging economies is that the probability of crisis grows when the increase in external liabilities outpaces that in external assets. Limiting the rise in *net* external debt, therefore, should be the focus of policymakers and regulators.

Addressing risks related to public domestic-currency debt

The temptation for emerging and developing countries to borrow in dollars in the coming years will be accentuated by their limited ability to keep on borrowing internationally in their own currencies. In many economies, including systemically important ones such as Brazil and South Africa, the willingness of international portfolio managers to own local-currency-denominated debt has been heavily constrained in recent years. This has resulted in a sharp fall in the share of local-currency-denominated public debt owned by foreign investors. In Brazil, for example, the share of domestic public debt owned by foreigners has fallen from over 20 per cent in 2015 to less than 10 per cent in 2020.[5]

This relative aversion on the part of international portfolio managers towards the local-currency debt markets of a number of emerging economies remained an important theme in 2020, thanks to the pandemic-related rise in public debt/GDP ratios in countries such as Brazil and South Africa. Funds that invest in emerging-market local-currency bonds saw large outflows, resulting in strong upward pressure on bond yields in the worst-affected countries. Although some central banks in emerging markets introduced asset-purchase initiatives to help contain the rise in bond yields, these central banks generally lack the capacity of their developed-country counterparts to buy bonds and suppress yields. For most emerging economies, this kind of activity would create a risk of capital outflows, since central bank bond purchases would normally raise fears of inflation or financial instability.

5 Brazilian National Treasury, via Haver Analytics.

The economic effects of the pandemic have led to huge increases in the stock of public sector debt in emerging economies – which has risen, as a share of GDP, by around 9 percentage points on average[6] – threatening a vicious circle of self-reinforcing debt and growth dynamics. First, the pandemic-induced global recession is causing debt/GDP ratios to rise, and countries' risk profiles thus to deteriorate. That deterioration is leading foreign investors to buy fewer local-currency bonds, which pushes up the yields on those bonds. For countries such as Brazil, South Africa and Mexico, real bond yields are currently very high relative to real GDP growth rates. High domestic yields make it more difficult for economies to recover. In turn, subsequently weak growth rates entrench market participants' concerns about public finances, pushing yields even higher.

To date, domestic insolvency in emerging economies has not featured much in regulators' analyses of financial stability risks. The incidence of default on domestic-currency debt in emerging markets is low: the Bank of Canada-Bank of England Sovereign Default Database records only 31 countries as having defaulted on domestic debt obligations between 1960 and 2017.[7] Because a government can ultimately print the currency in which its local debt obligations are denominated, inflation is usually considered to be a more convenient path to follow than default.

For countries such as Brazil, South Africa and Mexico, real bond yields are currently very high relative to real GDP growth rates.

This may not always remain true, however: inflating one's way out of unpayable debt will tend to impose the greatest cost on the poor, who are least able to protect themselves against the ravages of inflation. So it is as well to begin today to try to limit the build-up of domestic insolvency risks in a world characterized by weak growth, high public debt, and limited foreign investor appetite for emerging-market local-currency bonds.

The most reliable way to do this would be for policymakers and regulators to return to the subject of GDP-linked bonds. Debate about these kinds of instruments has been building for a number of years,[8] but the potential appeal of GDP-linked bonds has been greatly enhanced by the context of rising debt/GDP ratios in emerging economies.

It is important to bear in mind that the inclusion of GDP-linked bonds as part of a government's normal funding cycle is quite different from the use of GDP-linked recovery warrants, which have been issued in connection with debt restructurings in countries such as Argentina and Greece. In those cases, investors are promised a pay-off if the level of GDP reaches agreed thresholds; such warrants should therefore be thought of as an asymmetric reward for creditors in exchange

6 IMF (2021), *Fiscal Monitor Update, January 2021*, https://www.imf.org/en/Publications/FM/Issues/2021/01/20/fiscal-monitor-update-january-2021.
7 Beers and de Leon-Manlagnit (2019), *The BoC-BoE sovereign default database: what's new in 2019?*, Appendix A.
8 See, for example, Benford, J., Ostry, J. D. and Shiller, R. (eds) (2018), *Sovereign GDP-Linked Bonds: Rationale and Design*, London: CEPR Press, https://voxeu.org/content/sovereign-gdp-linked-bonds-rationale-and-design.

for their agreement to provide debt relief. In contrast, if GDP-linked bonds were to become part of a country's normal funding cycle, the transaction would be more symmetrical: high-growth periods would deliver gains to creditors when borrowers could most afford it, while low-growth periods would allow borrowers to enjoy debt service costs lower than might otherwise be the case.

The proposition is straightforward. A fund manager might be reluctant to buy a government's securities if the yield on those securities is too high, since a high yield might be understood to signify an unacceptable default or inflation risk. But by issuing securities today with the promise of growth-related increases in coupon payments, a government can ensure that both debtor and creditor benefit. The creditor has the expectation of rising coupon payments in the future, while the issuing government benefits from lower debt service obligations in the short term, which helps to break the cycle described above. By making room for more rapid growth, the introduction of GDP-linked bonds might catalyse an increase in foreign demand for domestic debt securities issued by emerging-market governments.

To establish GDP-linked bonds as a normal part of market practice for emerging economies will almost certainly require one of two steps: that governments in developed countries first establish the viability of such instruments by issuing GDP-linked bonds themselves; or that advanced economies, at the very least, provide high-level sponsorship of the idea. A precedent here can be found in the use of collective-action clauses in emerging-market Eurobond contracts in the early 2000s. It was the enthusiastic endorsement of collective action clauses by the US government's then undersecretary of the Treasury for international affairs, John Taylor, that made it possible for Mexico to issue a bond with a collective-action clause in 2003. Within months, collective-action clauses became standard for emerging-market issuers.[9]

Conclusion

Policymakers, regulators and market participants need to be clear that emerging economies face two distinct kinds of risks associated with their public debt burdens: i) risks associated with the build-up of foreign-currency debt; and ii) risks associated with possibly unpayable domestic-currency debt.

It is never wise to encourage an excessive build-up of debt in a currency you can't print, and so the IMF's reserve adequacy metric should be used to advise countries on when to stop borrowing in dollars. Capital market participants – and, indeed, developing countries themselves – are fortunate that the IMF has already provided a framework from which warning signals about excessive debt build-up can be generated. Policymakers in emerging economies should never lose sight of the fact that weak external balance sheets create risk. As a result, therefore, their macro policies should pay heed to reserve adequacy indicators such as those of the IMF. In addition, it would be particularly helpful if the FSB's Standing Committee

9 See Gelpern, A. and Gulati, M. (2013), 'The Wonder Clause', *Journal of Comparative Economics*, Vol. 41, pp. 367–85, https://ssrn.com/abstract=2332296.

on Assessment of Vulnerabilities – whose members are senior central bank and finance ministry officials – would make frequent and explicit reference to the need to be aware of these risks.

At the same time, GDP-linked securities can help to revive foreign investor demand for bonds issued in emerging economies' own currencies if the structure of those securities makes it more likely that these countries will be able to grow. Right now, there are countries whose growth vulnerabilities are being worsened by steep domestic yield curves and very high real long-term interest rates. Offering the equity-like characteristics of GDP-linked securities could help reduce the risk of a vicious circle in which high real interest rates, weak growth and high levels of public debt perpetuate themselves.

About the author

David Lubin is the head of emerging-market economics at Citi, and an associate fellow in the Global Economy and Finance Programme at Chatham House.

His book, *Dance of the Trillions: Developing Countries and Global Finance* (Brookings Institution Press/Chatham House, 2018), examines what makes money flow from high-income countries to lower-income ones; what makes it flow out again; and how developing countries have sought protection against the volatility of international capital flows. The *Financial Times* selected it as one of the best economics books of 2018.

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About this series

This briefing paper is part of a series being published by Chatham House's Global Economy and Finance Programme under the project 'Rebuilding International Economic Cooperation'. The recent election of Joe Biden as US president raises the prospect of a renewed push to find multilateral solutions to global economic problems, coordinated by the G7 and G20 in 2021 and beyond. But the mechanisms of the past won't simply snap back into place. The extent of common ground needs to be established; trust needs to be rebuilt; and technical solutions to problems found.

This project seeks to support that process by putting forward practical, collaborative, politically viable solutions to some of the economic challenges the world currently faces. The papers are authored by independent economic policy experts from the private sector, academia and think-tanks, often with a public policy background. Each paper addresses a specific problem, made more acute by the COVID-19 pandemic, where international economic cooperation can make a significant difference.

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Cover image: An exterior view of the building of the International Monetary Fund in Washington, DC, 27 March 2020.

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