INTRODUCTION
As the US economy rebounds amid elevated inflationary pressures and Europe grows at a rapid clip, an uneven global rebound looms. Although emerging-market and developing economies (EMDEs) generally retain good access to global capital markets for now, their relatively slow pace of vaccination against SARS-CoV-2, the virus that causes COVID-19, will continue to hamper their economic recoveries and strain their public finances—already stretched owing to the fiscal pressures of the pandemic over the past year and a half. Higher interest rates in the rich countries, particularly the United States, could tip EMDEs into liquidity and even solvency crises. The likelihood of crises is higher if advanced-economy central banks move abruptly, surprising markets. Global policymakers should prepare now by enhancing mechanisms for providing liquidity to EMDEs and, in cases of insolvency, for restructuring their sovereign debts. Perhaps even more important, the scope for uneven recovery can be limited if rich countries make an all-out effort to deliver vaccines globally and enhance less prosperous countries’ infrastructures for getting shots into arms.
IN THE INITIAL CRISIS PHASE, EMDEs’ PERFORMANCE EXCEEDED EXPECTATIONS

EMDEs showed unexpected resilience in the face of the global financial crisis of 2008–09 and the more recent COVID-19 crisis. True, growth in these countries slowed sharply—and in most turned negative in 2020, as figure 1 shows—but the full-scale financial meltdowns of previous crises were largely avoided, contrary to initial fears.

Figure 1
Global growth patterns since 1991

Buttressing EMDEs’ comparative resilience to the COVID-19 shock was a suite of policy measures that mirrored many pursued in the advanced economies. These measures included not only interest rate cuts but also quantitative easing, macroprudential easing, and direct credit support.¹

EMDEs got an external assist, however, from the strong macroeconomic support measures that advanced economies deployed, notably the aggressive easing measures of advanced-economy central banks, especially the US Federal Reserve. Figure 2 shows that as the gravity of the pandemic and its global nature sunk in across the world in March 2020, there was an unprecedented flight

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¹ Several chapters in English, Forbes, and Ubide (2021) highlight EMDE responses to the COVID-19 shock; notably the overview chapter by Céspedes and De Gregorio (2021). In Obstfeld (2014), I contrasted Asian economies’ responses to the late 1990s regional crisis with those seen in the global financial crisis a decade later. Most elements I highlighted in the latter paper have generally continued to serve EMDEs well (although as I describe below, outside of emerging and developing Europe, public debt-to-GDP ratios began to deteriorate around 2012 even before the global pandemic).
of portfolio capital from EMDEs.\textsuperscript{2} Widespread debt crises seemed inevitable. However, the “cardiac arrest” in capital flows abruptly turned around and became an unprecedented inflow surge as Fed action stabilized financial markets and pumped massive liquidity support into the US, and global, economies. Since the third quarter of 2020, capital flows to EMDEs have been volatile in both directions.

**Figure 2**

*Portfolio capital inflows for 18 emerging-market and developing economies, January 1995–January 2021*

The sharp responsiveness of capital inflows staved off disaster in the spring of 2020 but also warns of how exposed EMDEs remain to the vicissitudes of global risk sentiment. Right now, with growth having accelerated in the United States and Europe and with their central banks increasingly worried about inflation and moving ever closer to less accommodative policies, the prospect of an uneven global rebound poses a threat to EMDEs and, thus, to the sustainability of global recovery. We should not assume that EMDEs are out of the woods—or, as some have argued in light of their strong policy response to the pandemic so far, that the woods have been cleared away.

\textsuperscript{2} The illustrative data in figure 2 report portfolio equity and debt inflows to 18 EMDEs as classified by Morgan Stanley Capital International (and thus, including Korea).
SLOW VACCINE ROLLOUTS AND HIGHER DEBTS THREATEN RECOVERY

One major cause of uneven global recovery is the slow pace of the COVID-19 vaccine rollout in much of the developing world. Figure 3 illustrates the disparities as of this writing (mid-September 2021). Relatively higher vaccine coverage in the United States and the European Union has supported their faster economic recoveries and brought monetary policy tightening closer. In addition, prolonged disease in less prosperous countries is likely to have greater scarring effects, harming future growth rates that were in any case declining secularly in the decade after the rebound from the global financial crisis, even apart from China (see figure 1). Finally, vaccine coverage statistics alone do not tell the whole story. Widespread use of vaccines that appear less effective against the Delta variant of SARS-CoV-2, such as Sinovac, as well as ineffective and inconsistent nonpharmaceutical interventions, have been problematic. Alongside pandemic concerns, the certainty of bigger and more frequent climate-related shocks is especially worrisome for lower- and middle-income countries.

Figure 3
Percent of population fully vaccinated against COVID-19, as of September 20, 2021

With a longer period of slower and more variable growth possibly looming, EMDE debt-to-GDP ratios have moved sharply higher. In the pandemic slowdown, revenues fell (often even as a share of GDP), while governments had to spend more on fiscal support and health. Figure 4 shows the evolution of general government debt relative to GDP in less prosperous (left axis) and richer (right axis) economies. Sustainable debt ratios are expected to be lower in the former group, given lower fiscal capacity (e.g., owing to informality or inefficient revenue mobilization), but even so, debt rose in most regions in the years leading up to the pandemic, prior to taking a discrete upward jump in 2020.
While it is hazardous to generalize across EMDE regions—clearly, the 2014 fall in oil prices had a big impact in the Middle East and Central Asia—several factors drove the rise in sovereign debt ratios after the early 2010s. First, rapid growth during the global boom preceding the global financial crisis, having flattered fiscal sustainability metrics, also generated pressures for new government spending commitments. Second, global capital markets eagerly financed such commitments given the very low interest rates in advanced economies.

Figure 4
General government debt-to-GDP ratios, 2001–2020

While sovereign debt burdens in EMDEs still remain far lower than in the advanced economies, percentage increases in debt-to-GDP ratios for 2020 in EMDEs are comparable to those that took place in advanced economies (see figure 5).

These higher debt levels make EMDEs more vulnerable to advanced-economy interest rate hikes—especially if these occur, as now seems likely, when EMDE growth rates remain subdued. Even though most of these debts in many EMDEs are denominated in domestic currency, a related challenge, most closely related to tightening by the Fed, will come from a strengthening of the US dollar, insofar as this will be associated with a downturn in the global financial cycle.

Source: IMF (2021a).
Figure 5
Percent increases in general government debt-to-GDP ratios, 2001–2020

CHALLENGES OF THE GLOBAL FINANCIAL CYCLE AND A STRONGER US DOLLAR

As explained by Rey (2013), the global financial cycle refers to the synchronized movements in asset prices, commodity prices, capital flows, and leverage that have buffeted EMDEs and are often driven by shifts in US monetary policy and financial conditions. As of this writing, the world economy looks to be in an expansive phase of the cycle. But this is likely to change as the Fed and the European Central Bank (ECB) tighten.

Figure 6 shows the close relationship between EMDE growth and an indicator of the global financial cycle proposed by Miranda-Agrippino and Rey (2020). The indicator, denoted $GFC_y$, is estimated as a single global factor that explains more than 20 percent of the common variation in a large global sample of equity, corporate bond, and commodity prices.\(^\text{3}\) Evidently, movements in $GFC_y$ closely track movements in EMDE output, pointing to likely causal links between the two variables.

One central regularity, highlighted in Bruno and Shin (2015) and subsequent papers, is the close link between the effective nominal dollar exchange rate and global financial conditions, with a stronger dollar dampening international banking activity, leverage, asset-price arbitrage, and capital flows globally.

\(^{3}\) The factor is estimated based on dollar asset prices, but according to the online appendix of Miranda-Agrippino and Rey (2020), its general behavior is robust to estimation based on assets’ local-currency prices.
Unsurprisingly, the dollar’s nominal effective exchange rate is highly negatively correlated with the GFCy indicator of Miranda-Agrippino and Rey, such that dollar strength coincides with a more contractionary level of the cycle. Figure 7 illustrates this negative correlation in monthly data. A stronger dollar can reflect tighter monetary conditions in the United States, but it also tends to reflect higher global risk aversion that raises the demand for dollar assets (with risk aversion, in turn, possibly reflecting shifts in anticipated or actual Fed policy). Dollar strength thus is a powerful common factor driving both the global financial cycle and the EMDE business cycle.

The dollar affects EMDE activity through several channels, but two key channels are a strong dollar’s negative association with global trade volume growth (figure 8) and real commodity prices (figure 9). In both of these figures, the dollar’s nominal exchange rate is a trade-weighted average rate against seven industrial-country trading partners whose currencies are used relatively widely internationally. When the dollar appreciates against the major currencies, EMDE currencies may depreciate against the dollar by less than those major currencies owing to official intervention to smooth the exchange rate (sometimes called “fear of floating”) or in the extreme, a dollar peg (for example, Saudi Arabia). Moreover, commodity prices are much more volatile than exchange rates: Dollar commodity prices typically fall proportionally more when the dollar strengthens than do the real commodity prices in figure 9 are converted into real terms via the US GDP deflator. So measured, real commodity prices are highly correlated with dollar commodity prices. As the text points out, however, lower dollar commodity prices likely mean lower real profits (in terms of their own consumption baskets) for EMDE commodity exporters.
dollar prices of advanced-country foreign currencies (which is why the scale of the vertical left-hand axis in figure 9 is so much larger than the right-hand axis). These patterns imply that when the dollar strengthens against advanced trade partners, the accompanying fall in commodity prices will likely reduce the profits of EMDE commodity exporters as a share of domestic income.$^5$

Figure 7
The global financial cycle indicator ($GFC_y$) versus BIS broad nominal US dollar index, 1994–2019

The patterns in figures 8 and 9 suggest that increases in US interest rates and the dollar’s value, coming in an environment where EMDEs continue to struggle with the pandemic amid historically high levels of public (not to mention private) debt, will likely pose economic challenges.$^6$ A sharp reversal of capital inflows, associated with crises in some countries, could result. This adverse scenario is most likely if the Fed were to shift gears abruptly, perhaps because it suddenly finds itself behind the curve on inflation.

5 Let $E_{lc}/$ be the local-currency price of the US dollar, let $P_{comm}^{w}$ be the world dollar price of commodities, and let $P_{GDP}^{lc}$ be the local GDP deflator in terms of domestic currency. Then the price of commodities in terms of exporter GDP equals $E_{lc}/P_{comm}^{w}/P_{GDP}^{lc}$. A compact way to summarize the argument in the text is this: When the dollar appreciates by $x$ percent in nominal effective terms against other advanced-country currencies, $E_{lc}/$ may well rise by less than $x$ percent while $P_{comm}^{w}$ will tend to fall by more than $x$ percent, both factors together resulting in a fall in the relative price $E_{lc}/P_{comm}^{w}/P_{GDP}^{lc}$.

6 Céspedes and De Gregorio (2021) highlight how EMDE governments were able to keep domestic credit growing during the early stages of the pandemic, in contrast to the experience of the global financial crisis. While this credit expansion was an essential support to economies in the lockdown phase of the crisis, it could leave financial vulnerabilities in its wake. The same point applies to the macroprudential easing measures undertaken early on. See also chapter 2 in IMF (2021b).
Figure 8

Trade growth (percent)  US dollar appreciation (percent)

Source: International Monetary Fund, World Economic Outlook database, April 2021; Federal Reserve Economic Data (FRED), dollar exchange rate series TWEXMANL, trade-weighted based on goods trade with major-currency trading partners (euro area, Canada, Japan, United Kingdom, Switzerland, Australia, and Sweden).

Figure 9
Nominal US dollar appreciation and growth in real commodity prices, 1993–2018

Commodity price growth (percent)  US dollar appreciation (percent)

Source: See figure 8.
A specific vulnerability, pointed out by Sachdeva and Harvey (2020) and the International Monetary Fund (IMF 2021b), is that much of the debt recently issued by EMDE governments resides on the balance sheets of private domestic banks rather than central banks—contrasting with the extensive take-up of government debt by the Fed and the ECB. In a capital-flow sudden stop, the result could be a “doom loop” of bank-sovereign distress. Figure 10, drawn from IMF (2021b), shows the ownership distribution of total sovereign debt issuances from January 2020 through January 2021 for a sample of 12 emerging-market economies. For this group of countries, about half of new sovereign debt issuance ended up on domestic bank balance sheets.

Figure 10
Who holds EMDEs’ sovereign bond issuance?
domestic sovereign bond holdings (billions of US dollars)

The figure also suggests that for some countries, most if not all of sovereign issuance during the pandemic—not to mention the net sale of sovereign debt by foreign holders—was financed from domestic funding sources. Sometimes domestic saving rose during the pandemic as consumption fell, but these increases are likely to be temporary, putting further strain on public finances when the reversal occurs. The gross financing needs of low- and middle-income countries—the fiscal deficit plus maturing government debt—show the

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7 The countries are Brazil, Colombia, Mexico, Indonesia, Malaysia, Ukraine, Turkey, Thailand, South Africa, Poland, Hungary, and Romania.
magnitude of the problem. For 2021, the IMF projects these needs at double-digit percentages of GDP for a wide range of EMDEs.  

POLICY IMPLICATIONS OF PERSISTENT EMDE VULNERABILITY

Nearly two decades ago, Reinhart, Rogoff, and Savastano (2003) highlighted how “debt intolerant” EMDEs might experience market stress at far lower sovereign debt levels than those that advanced economies can easily support. In the half-decade after they wrote, debts fell relative to GDP in the buoyant macroeconomic conditions leading up to the global financial crisis, but have since returned near the levels of the early 2000s and in some regions (notably Latin America) have surged beyond (figure 4). While it is true that real interest rates have fallen over this entire period while EMDE inflation performance and central bank expertise have improved markedly, social and political tensions remain salient in many countries and complacency about public debt would be unwise.  

Moreover, the financial impact of global capital-market shocks differs between EMDEs and advanced economies, as Kalemli-Özcan (2019), among others, has documented. Whether the shock is an unexpectedly sharp Fed tightening or a rise in global risk aversion, the effects will likely be more destabilizing for the public finances of EMDEs.

One clear policy implication is that EMDEs have an especially big stake in the Fed engineering a smooth withdrawal from the current exceptional stimulus, avoiding abrupt big surprises in messaging or actions.

A second is that enhancing the liquidity available to EMDEs will be useful. The recent $650 billion allocation of Special Drawing Rights (SDR) by the IMF is an important step in that direction, and it could be leveraged if richer countries are encouraged to lend SDR to a broader range of potential recipients through the proposed Resilience and Sustainability Trust. The IMF’s board should also reconsider the pandemic support facility proposal of Fisher and Mazarei (2020).

Third, we should be ready for more solvency challenges for EMDEs, implying an increase in the frequency of restructuring needs. The G20 Common Framework for Debt Treatments beyond the DSSI (Debt Service Suspension Initiative) is an important step, especially because it includes China, but it needs strengthening.

Finally, rich countries can help to reduce the unevenness of the global rebound if they sharply accelerate their efforts to supply poor countries with vaccines and to invest in those countries’ infrastructures for getting vaccine doses into arms. The budgetary cost of an all-out effort would be small compared with the fiscal support already disbursed since early 2020 (see Agarwal and Gopinath 2021). Continuing disease in poor regions is a direct threat

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8 See table A24 in IMF (2021a). I am indebted to Adnan Mazarei for this reference.
9 That is also the message of Blanchard, Felman, and Subramanian (2021) and Mauro and Zhou (2021).
10 One salient difference for EMDEs is the prevalence of debts denominated in external currencies, notably dollars. The burden of such debts can rise sharply when the dollar appreciates against local currency, leading to financial distress. Even in a country where currency mismatch has declined as an aggregate phenomenon, it can still have important effects when it is primarily the rich who hold foreign-currency assets while foreign-currency debts are concentrated among poorer households with higher marginal propensities to consume out of wealth. On the case of Uruguay, see Zhou (2021).
even to highly-vaccinated countries, as COVID-19 pockets are effectively labs for the creation of new variants of SARS-CoV-2. Indeed, the current pandemic shows that we need even more: a cooperative effort to build a permanent global public health infrastructure that will be robust against future pathogens. In an interdependent world, no one is safe until everyone is safe.

REFERENCES


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