

MIND THE DEBT

External financing conditions for emerging markets were broadly favorable in 2019, despite the gloomier outlook for trade and global growth. Equity flows have suffered the most from the twists and turns of trade tensions, and a further escalation of tensions remains a serious risk for emerging and frontier markets. So far, falling rates in advanced economies have supported debt portfolio flows to emerging markets and a decline in external credit spreads, which has led to stretched valuations in some cases, particularly for lower-rated issuers. With private and public debt already high in some countries, easy financing conditions may encourage excessive buildup of debt, raising rollover and debt sustainability risks. For example, some overindebted state-owned enterprises (SOEs) may find it hard to maintain market access and service their debt without sovereign support. For frontier market economies, a growing reliance on external debt may increase the risk of debt distress. These risks may materialize in a significant growth slowdown or if an escalation of trade tensions sparks a sharp tightening of financial conditions.

External Factors Have Been the Dominant Drivers of Portfolio Flows

Lower rates and positive investor sentiment have supported asset prices and portfolio flows to emerging and frontier markets in 2019. Debt portfolio inflows rebounded for most of this year, led by strong inflows into hard currency bond markets (Figure 4.1, panels 1 and 2). Market pressures in Argentina have not led to notable spillovers to other lower-rated countries so far (Figure 4.1, panel 3), likely due to the small weight of Argentine bonds in the benchmark bond indices. Concerns about the economic outlook for emerging markets have intensified, however, as reflected in further downward revisions to the IMF 2019 growth forecasts (Figure 4.1, panel 4; Chapter 1). Growth concerns and rising trade tensions have weighed on

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investor sentiment, resulting in outflows from the local currency bond markets in August.

The key drivers behind the recent rebound in debt portfolio flows to emerging markets were the recovery in risk appetite and the sharp drop in US Treasury yields (Figure 4.1, panel 5).¹ Risk appetite rebounded after the global equity sell-off in late 2018, boosting demand for emerging market bonds by an estimated \$25 billion. Ten-year Treasury yields have declined by over 100 basis points so far this year, boosting inflows by some \$20 billion. In terms of domestic factors, however, sluggish growth has held back a more vigorous rebound in flows to emerging markets, excluding China.

Model estimates of capital flows-at-risk suggest that medium-term downside risks have moderated relative to the end of 2018, but remain elevated by historical standards (Figure 4.1, panel 6). The reduction in US Treasury yields is the key driver behind reduced downside risks to the debt portfolio flows in the medium term. This benign effect is partially offset by slower growth in emerging market economies and the decline in portfolio flows observed over the past year (captured in the model as the lagged dependent variable).²

Easy Financial Conditions Drove the Tightening in Bond Spreads

Emerging market sovereign external credit spreads tightened in 2019 (Figure 4.2, panel 1). Model estimates of credit spreads based on a panel of 65 economies (see Section 1 of Online Annex 1.1) suggest that two-thirds of the spread tightening since 2010—and most of the tightening in 2019—can be attributed to external factors, such as a rise in global risk appetite (Figure 4.2, panel 2).³

¹The underlying model estimates the drivers of quarterly portfolio debt flows to emerging markets, using push and pull factors consistent with the literature (see Koepke 2019 for a literature survey).

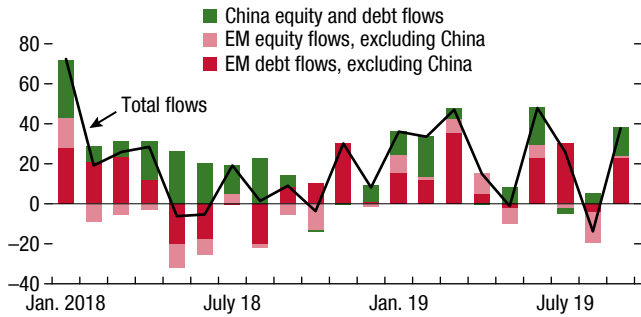
²For model details on capital-flows-at-risk, see Chapter 1 and Online Annex 1.1 of the October 2018 *Global Financial Stability Report* (GFSR).

³For model details see Section 4 of Online Annex 1.1 and the note of Figure 4.2.

Figure 4.1. Portfolio Flows to Emerging and Frontier Markets

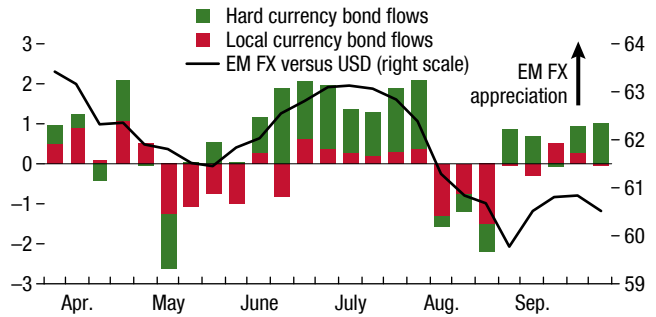
Portfolio flows to EMs have been reacting to the ebbs and flows of trade frictions and to the more dovish monetary policy outlook.

1. Balance of Payments Portfolio Flows to Emerging Markets (Billions of US dollars, monthly data)



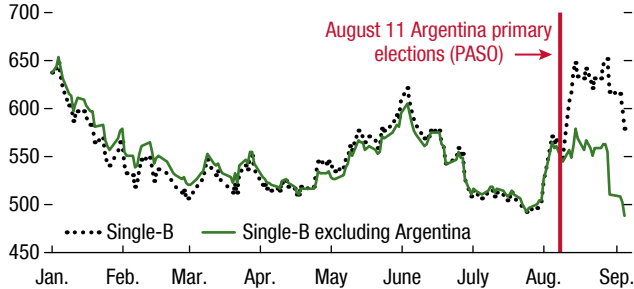
Fund flows into hard currency bonds have benefited the most from the sharp drop in global rates.

2. EPFR Fund Flows to Emerging Markets and Currencies in 2019 (Billions of US dollars; and index)



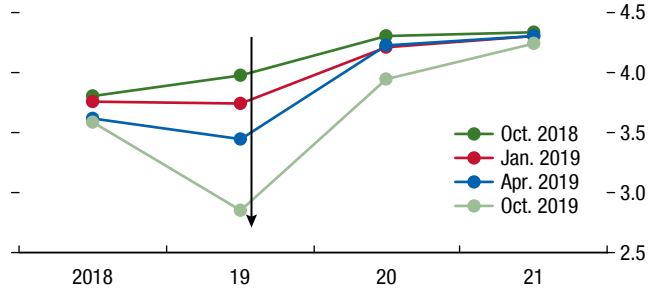
Spillovers from Argentina to other economies were limited.

3. EM Dollar Bond Spreads in 2019 (Basis points; based on the EMBI Global Diversified Index)



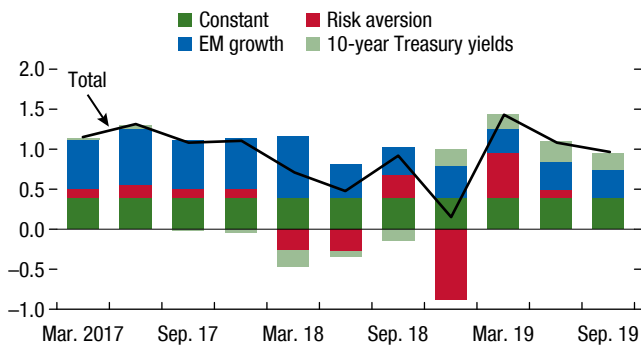
EM growth outlook has deteriorated, weighing on inflows.

4. IMF WEO Growth Forecasts for EMs, excluding China (Percent, year over year)



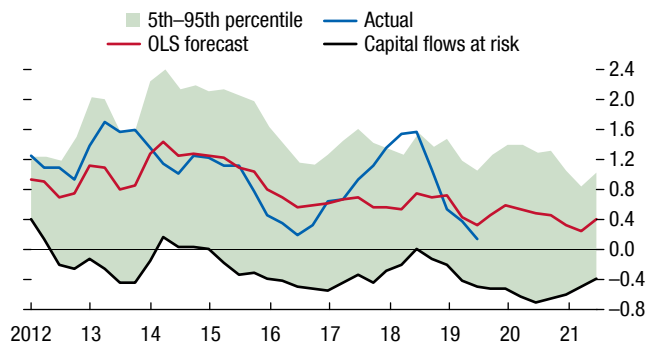
External factors have driven a rebound in flows so far this year.

5. Debt Portfolio Flows to EMs, excluding China: Estimated Contributions of Key Drivers (Percent of EM GDP, excluding China)



Capital flows at risk remain elevated by historical standards, despite some improvement in the medium-term outlook since end-2018.

6. Debt Portfolio Flows to EMs, excluding China: Actual and Estimated Quantiles of Flows in the Medium Term as of Q2:2019 (Four-quarter moving average, percent of EM GDP, excluding China)

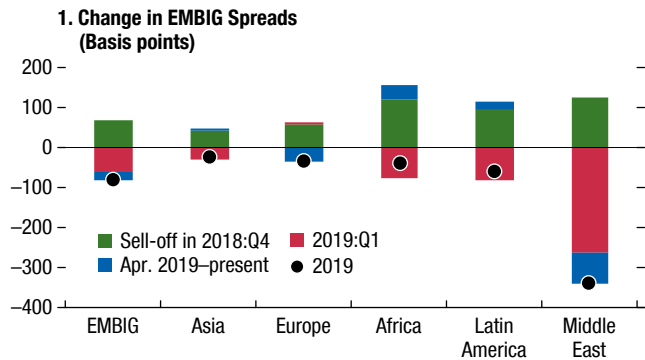


Sources: Bloomberg Finance L.P.; EPFR Global; ICE Bond Indices; IMF, World Economic Outlook database; Institute of International Finance; JPMorgan Chase & Co; and IMF staff calculations.

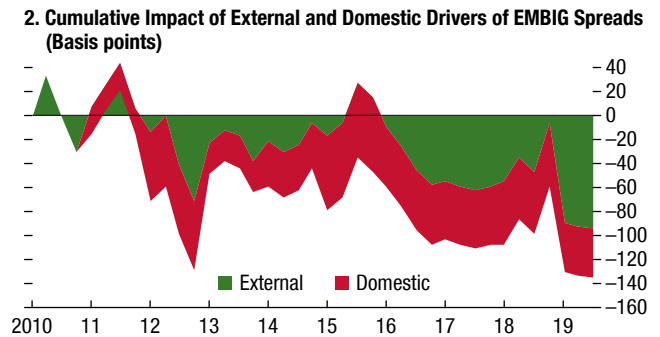
Note: In panel 5, the measure of risk aversion uses the US BBB-rated corporate bond spread over Treasuries from ICE. EM = emerging market; EMBI = JP Morgan Emerging Markets Bond Index; FX = foreign exchange; OLS = ordinary least squares; USD = US dollar; WEO = World Economic Outlook.

Figure 4.2. Emerging Market Hard Currency Bond Markets

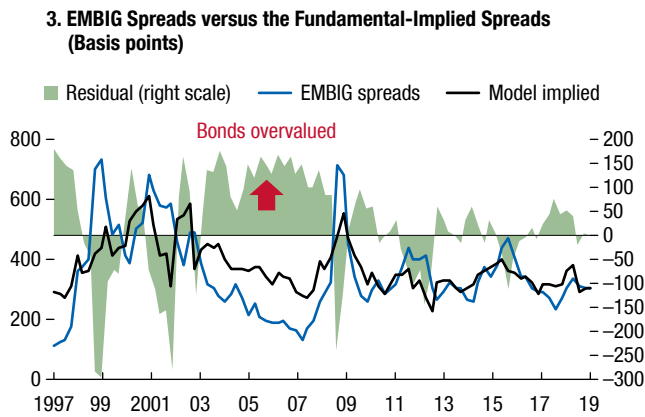
EMBIG spreads have continued to tighten in most EM regions since the beginning of the year ...



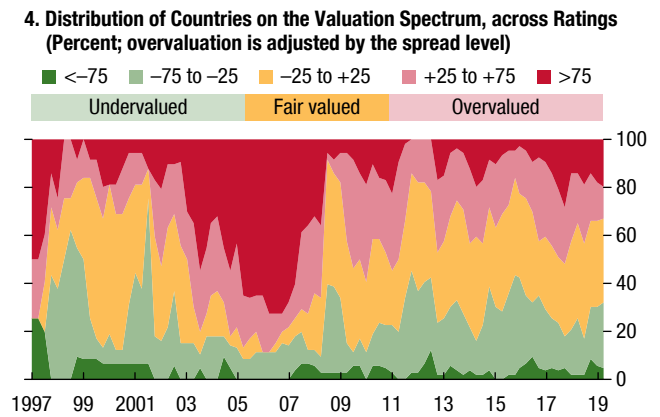
... driven largely by external factors, such as a rebound in global risk appetite in 2019.



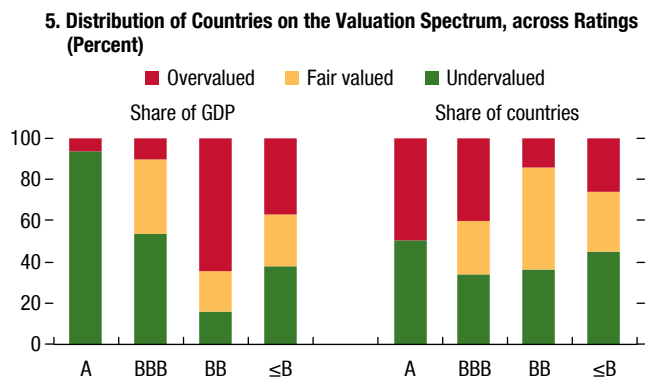
Overall, the EM dollar bond asset class appears to be fair valued ...



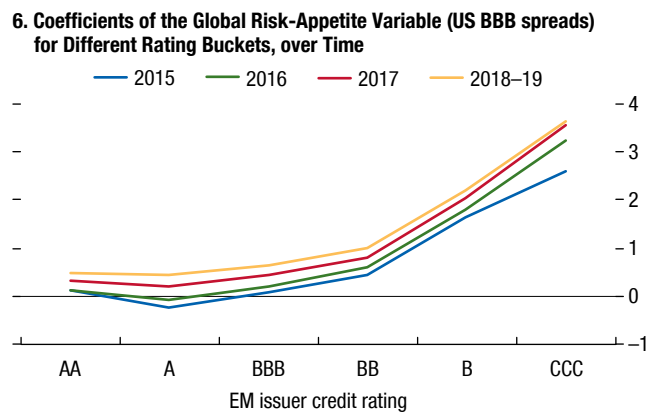
... but nearly one-third of countries are still overvalued.



Lower rated issuers generally appear to be more overvalued ...



... and increasingly more sensitive to changes in global risk appetite.



Sources: Bloomberg Finance L.P.; Haver Analytics; IMF, World Economic Outlook database; Institute of International Finance; Moody's; Standard & Poor's; and IMF staff calculations.

Note: The asset valuation model is based on domestic fundamentals and external risk sentiment. Domestic variables include foreign currency reserves, current account balance, external debt, net government bond issuance, real GDP growth, and inflation. External variables include growth forecasts and risk-appetite proxied by the US BBB corporate spread. The proxy for risk appetite sentiment is adjusted by the country rating. See Presbitero and others (2016) for a discussion of related literature. The addition of several new countries from the Middle East to the EMBIG drove the substantial movement in spreads for that region in panel 1. EM = emerging market; EMBIG = JP Morgan Emerging Markets Bond Index Global.

Credit spreads appear to be broadly in line with fundamentals, on average, but there is considerable overvaluation for some countries. IMF staff analysis suggests that median emerging market bonds are currently fairly valued relative to countries' economic fundamentals and financial conditions (Figure 4.2, panel 3). Nonetheless, there is considerable variation across countries, with bonds in more than one-third of countries estimated to be somewhat or significantly overvalued (Figure 4.2, panel 4).⁴ A sudden change in external conditions or other shocks could trigger large price adjustments that could tighten domestic financial conditions, especially in countries with significant vulnerabilities (see Chapter 1 of the October 2018 GFSR).

High-yield issuers appear to be more overvalued than investment-grade issuers. This includes half of the lowest-rated (B and lower) issuers, when weighted by GDP (Figure 4.2, panel 5), compared with only 8 percent of higher-rated (BBB and higher) issuers that are estimated to be overvalued. The overvaluation in lower-rated bonds may partly reflect the search for yield by global investors in the current low-rate global environment, which allowed many new issuers to tap international capital markets. Nonetheless, overvaluation is not unique to the current period and was prevalent in periods before the global financial crisis as well.

The sensitivity of credit spreads to external shocks has also risen. The changing investor base may have played a role, given that the exposure of emerging market economies to potentially “flighty” (Chapter 1 of the October 2018 GFSR) and benchmark-driven (Chapter 1 of the April 2019 GFSR) investors has been growing. A global stress episode could result in a sudden repricing of risk and lead to a swift exodus of such investors, which could cut off market access for lower-rated borrowers. Lower-rated bond issuers are more vulnerable to swings in global investor risk sentiment than higher-rated issuers, as suggested by analysis of spread sensitivity to global risk-aversion shocks (Figure 4.2, panel 6). For example, a 100 basis points increase in US BBB corporate spreads could widen spreads of B-rated emerging market bonds by more than 200 basis points, compared with only 50 basis points for A-rated emerging market issuers. This sensitivity has also been rising, reflecting the growing importance of external factors for emerging markets.

⁴Overvaluation was significantly more pronounced in 2006 and in April 2018 before the emerging market sell-off.

Continued Easy Financing Conditions Encourage More Borrowing

Whereas favorable external conditions have supported domestic financial conditions and provided an opportunity to boost productive capacity, the buildup of external debt has in many cases outpaced exports (Figure 4.3, panel 1). Median external debt has risen from 100 percent of exports in 2008 to 160 percent in 2019 (see also the April 2018 *Fiscal Monitor*). In some countries, this ratio has increased to more than 300 percent. A similar trend is observed in government debt, which is nearing 100 percent of GDP in some countries (Figure 4.3, panel 2). The creditworthiness of nonfinancial firms has been deteriorating (Figure 4.3, panel 3) in the face of rising corporate sector leverage (Figure 4.3, panel 4). Countries that have not addressed vulnerabilities during this favorable period will be at a higher risk of capital flow reversals and higher borrowing costs should global financial conditions suddenly tighten.

Overindebted State-Owned Enterprises Are a Growing Concern

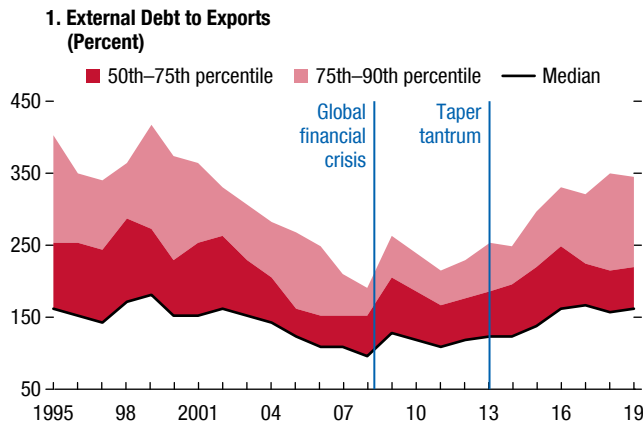
State-owned enterprise (SOE) debt accounts for a significant portion of total emerging market debt securities issued externally. As with other emerging market firms, many SOEs have taken advantage of the easy global financial conditions to significantly increase their debt over the past decade (Figure 4.4, panel 1). The debt issued by fully government-owned SOEs—which are included in the most widely followed emerging market sovereign bond index, the JP Morgan EMBI Global—comprises one-third of the entire emerging market sovereign hard currency bond universe. Further, if all SOEs, including those that are majority-owned by the government, were combined in the emerging market corporate indices they would make up half of corporate debt securities.⁵

The use of debt appears to have been less productive in many emerging market SOEs that have increased leverage but have become less profitable (Figure 4.4, panel 2). For the most part, large nonfinancial SOEs tend to fall within a few important sectors—mostly oil and gas, utilities, telecommunications, and metals and mining. Leverage has risen most notably in oil and gas SOEs, with consistent increases since the global financial crisis. Before the crisis, emerging market oil and gas SOEs had leverage ratios similar to those of

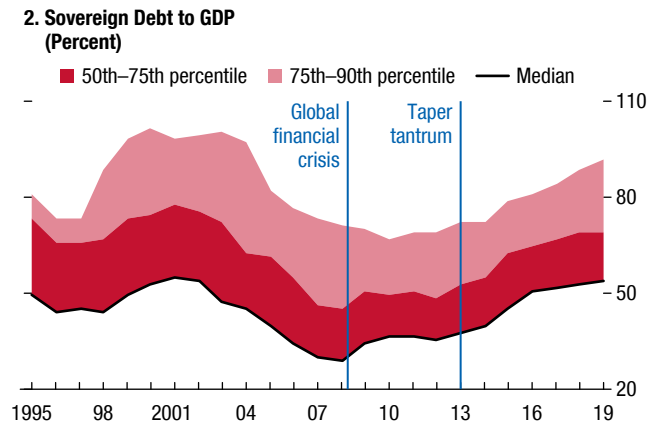
⁵Section 4 of Online Annex 1.1 lists the SOEs and criteria used for selection of SOEs in this chapter.

Figure 4.3. Rising Debt in Emerging and Frontier Markets

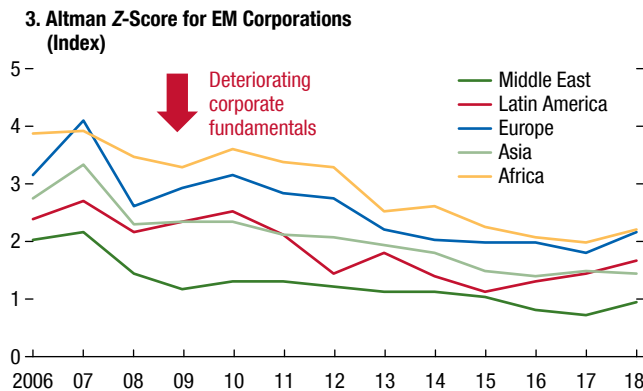
Benign financial conditions have contributed to a sharp rise in the external debt for emerging markets ...



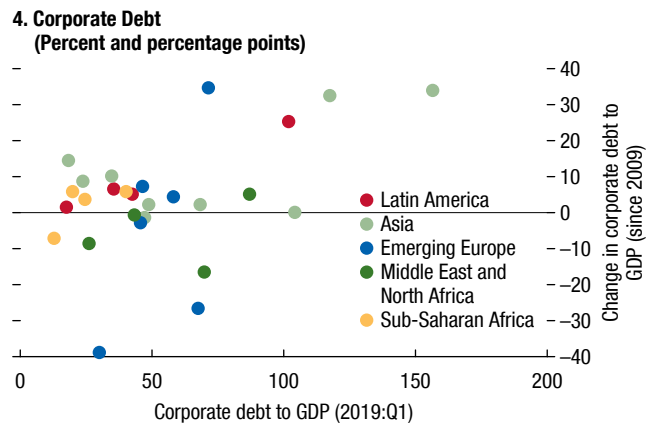
... along with a rise in the sovereign debt.



EM corporate fundamentals have also deteriorated in the last decade.



Corporate debt-to-GDP has risen in many emerging market economies.



Sources: Bloomberg Finance L.P.; IMF, World Economic Outlook database; Institute of International Finance; JPMorgan Chase & Co.; and IMF staff calculations. Note: Panels 1 and 2 include all the countries with external debt and included in JP Morgan emerging market indices. This sample is similar to the one used in Figure 4.2. In panel 3, the sample includes all the corporations included in the JP Morgan EMBIG Index. In panel 3, the Altman z-score gauges a firm's credit strength based on five financial ratios (profitability, leverage, liquidity, solvency, and sales to assets). EM = emerging market; EMBIG = JP Morgan Emerging Markets Bond Index Global.

major private oil and gas firms domiciled in advanced economies. However, whereas the average leverage of these private sector firms has remained stable over the past 15 years, emerging market oil and gas SOE leverage has nearly doubled. Despite the rise in leverage, many SOEs have experienced a sizable reduction in their profitability, with the median return on invested capital falling significantly since the financial crisis.

SOEs' rising debt burdens have led to deterioration in their creditworthiness. Since the financial crisis, the average rating of the SOE firms in the sample has deteriorated meaningfully, whereas their sovereign ratings have been on average stable (Figure 4.4, panel 3). Before the crisis, it was not uncommon for major SOEs to carry

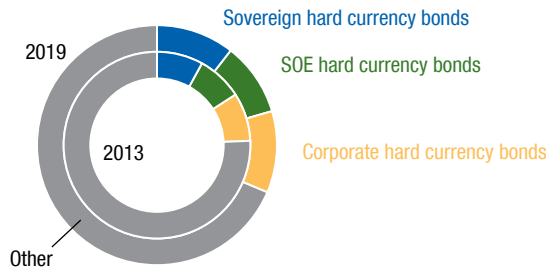
a better credit rating than their respective sovereigns. Although that is still the case for some firms, for the most part SOEs now generally trade wider than their sovereigns, and in many cases rating agencies assume an implied credit uplift from the sovereign to assign the SOE a higher rating than it would receive on a stand-alone basis. That said, most SOE spreads still trade very close to those of their sovereign (Figure 4.4, panel 4).

Market access and contingent liabilities of overindebted SOEs represent a growing concern in several emerging markets. Whereas only a few SOEs have an *explicit* guarantee from their sovereigns, investors in SOE debt often assume an *implicit* guarantee due to the importance of these firms to the economy.

Figure 4.4. Emerging Market State-Owned Enterprises

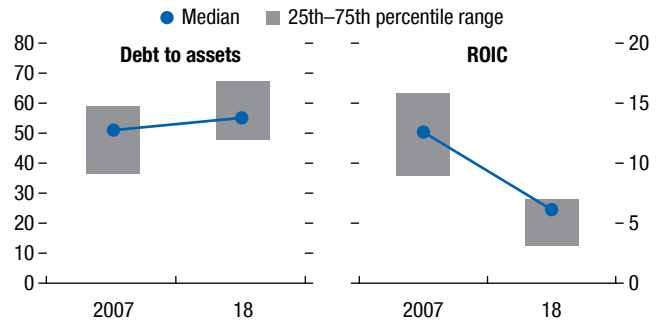
SOEs represent a significant share of all EM debt securities issued externally.

1. Outstanding EM Hard Currency Bonds by Type (As a share of total external debt)



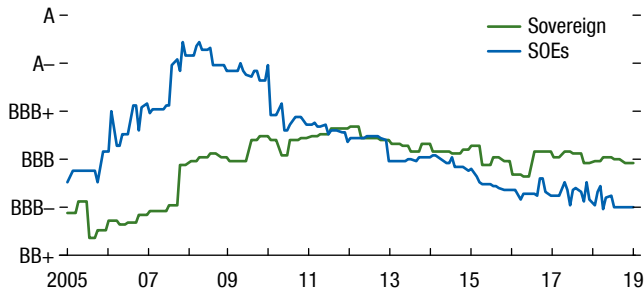
Favorable financing conditions have allowed SOEs to increase their leverage since 2007, but not their profitability.

2. Return on Invested Capital (Net Operating Profit to Invested Capital) and Leverage (Debt to Assets) (Percent)



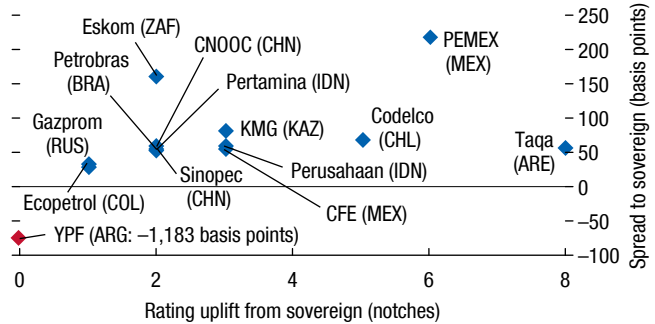
SOE credit ratings have deteriorated since 2007 and are now lower, on average, than the sovereign ratings.

3. Average Ratings of Major SOEs and their Sovereigns



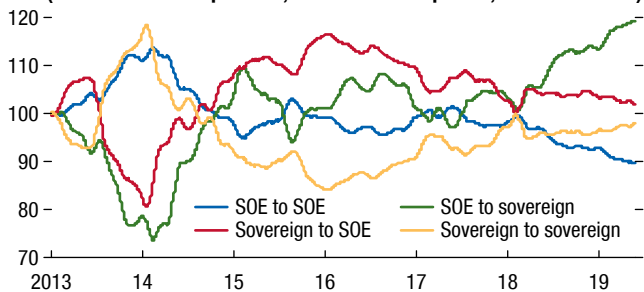
Most SOEs trade close to their sovereign spreads, including several that carry a credit uplift from the implicit guarantee.

4. Spread to Sovereign versus Rating Uplift



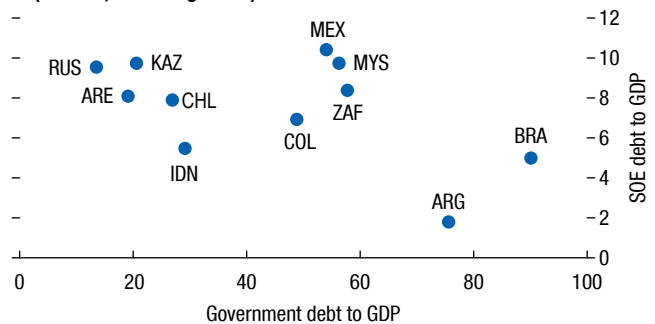
A shock to SOEs could spill over to sovereigns ...

5. Outward Spillovers between SOEs and Sovereigns (Index of outward spillovers, based on bond spreads, Jan. 2013 = 100)



... as some SOE debt is large compared with government debt.

6. Debt of Major SOEs versus Government Debt (Percent, excluding China)



Sources: Bloomberg Finance L.P.; company reports; Fitch; IMF, World Economic Outlook (WEO) database; JPMorgan Chase & Co.; Moody's; S&P Global Market Intelligence; and IMF staff calculations.

Note: For panel 3, the rating is the average among Fitch, Moody's, and S&P. For panel 5, the analysis shows the spillovers of all sovereigns and all SOEs (that is, not only the spillover between sovereigns and their own SOEs) and is based on the Diebold and Yilmaz (2012) methodology. The analysis also shows that some two-thirds of the spillovers from SOEs to sovereign are due to the sovereigns' own SOEs. In panel 6, WEO data are used for the general government debt to GDP. For some countries, such as Mexico, the data already incorporate the debt of entities such as CFE and PEMEX. Data labels in panels 4 and 6 use International Organization for Standardization (ISO) country codes. EM = emerging market; HC = hard currency; ROIC = return on invested capital; SOE = state-owned enterprise.

Historically, when sovereigns had to step in to support these firms, most were for implicit, rather than explicit, contingent liabilities (IMF 2016a). IMF staff analysis indicates that a widening in spreads in major SOEs can spill over to sovereign spreads (Figure 4.4, panel 5), and these spillovers have been rising in recent years, in contrast to the spillovers from sovereigns to SOEs.

With SOE debt rising, the potential implications of SOE financing challenges have become larger. Should these SOEs encounter financing difficulties and require sovereign support, it could have a significant impact on the government's fiscal position, particularly in countries with high debt (Figure 4.4, panel 6).⁶ The composition of the SOE investor base is also an important factor in avoiding loss of market access. Loss of investment-grade rating could potentially have a significantly larger impact on emerging market SOEs than on comparable firms in developed markets because the pool of available high-yield corporate investors is narrower.⁷

Debt Sustainability Remains a Concern for Some Frontier Markets

Frontier issuers have benefited from the more dovish stance of monetary policy globally. Yields on bonds of frontier markets⁸ have declined in 2019, recovering from their spike at the end of 2018 (Figure 4.5, panel 1). As in the case of emerging markets, the rally was driven largely by favorable external conditions rather than an improvement in domestic economic fundamentals, as the search for yield has intensified again this year.

Hard currency frontier bond issuance is poised to set a new record in 2019 barring a major shift in the global outlook and risk appetite. After a substantial spread widening and an issuance freeze in the second half of 2018, market access improved substantially in 2019 (Figure 4.5, panel 2). For some issuers, the outstanding debt stock is becoming an increasingly large share of available reserves. Over the past five years, outstanding hard currency debt of frontier markets has tripled to reach more than \$200 billion as of mid-2019. The stock

of hard currency bonds for the median frontier borrower has now grown to 7 percent of GDP and close to half of their gross reserves, compared with 3 percent of GDP and 20 percent of their reserves in 2014. The weaker upper quartile of frontier issuers, however, have increased their stock of debt to almost 140 percent of reserves.

New sources of financing have changed the composition of external debt and increased debt vulnerabilities. These changes include the following:

- *A rising share of commercial debt (primarily hard currency bonds):* Issuers are increasingly relying on commercial financing from banks, capital markets, and other private lenders (Figure 4.5, panel 3), partly as countries rise on the income scale. Although hard currency bond redemptions are estimated on aggregate to be low over the coming two years (Figure 4.5, panel 4), private external debt servicing costs (including interest payments) are set to continue rising, primarily because of rising debt servicing costs for hard currency bonds (Figure 4.5, panel 5). Over the coming years, several issuers across Africa (Angola, Gabon, Tunisia, Zambia) and Latin America and the Caribbean (Belize, Ecuador, Jamaica) will see future debt service obligations to the private sector rise substantially or remain elevated.
- *Non-Paris Club bilateral loans in lieu of traditional multilateral and Paris Club debt:* Non-Paris Club creditors, including China, have become the dominant source of official bilateral credit for many low-income developing countries (IMF 2018a). The total exposure of some of these creditors does not appear in government debt statistics, given that a large proportion of loans is to SOEs,⁹ and only a small share of issuers report debt outside of the central government. Some analysts (Kratz, Feng, and Wright 2019) note that China's approach to debt restructuring has led to a balanced outcome between lenders and borrowers. However, even following restructuring of such non-Paris Club claims, countries are still facing challenging debt dynamics, and the share of countries at high risk of debt distress has continued to increase (see Figure 4.5, panel 6). This highlights the need for enhanced creditor coordination between Paris Club and non-Paris Club creditors to ensure timely and more sustainable outcomes.

⁶The October 2018 *Fiscal Monitor* offers a comprehensive analysis of public sector balance sheets incorporating SOEs.

⁷For example, even though some large emerging market SOE investment-grade issuers are included in global investment-grade bond benchmarks, most global high-yield bond benchmarks do not include emerging market entities fully owned by the state.

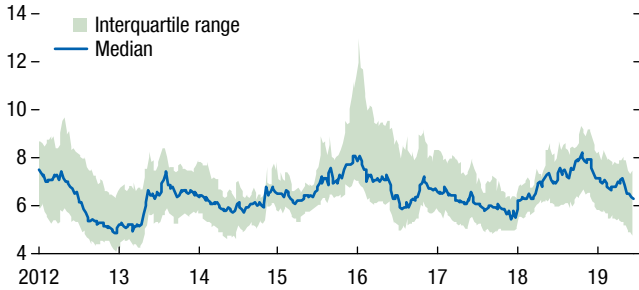
⁸Frontier issuers refer to low-income developing countries with international bond issuance as well as other non-investment-grade, infrequent sovereign bond issuers. Most of them are included in the JP Morgan Next Generation Emerging Markets index.

⁹According to IMF (2018b) three-quarters of low-income developing countries report only debt of the central rather than the general government and fewer than one in 10 countries report nonguaranteed debt of public corporations.

Figure 4.5. Frontier Bond Valuations, Issuance, and Debt Vulnerabilities

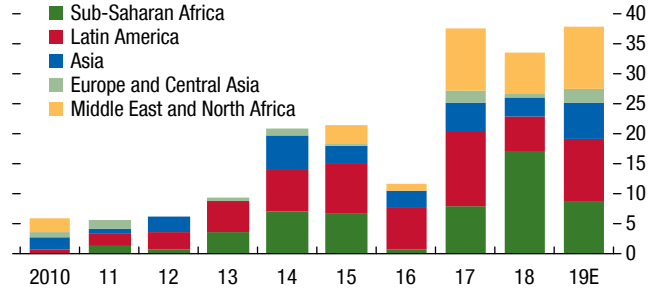
Favorable external conditions have allowed frontier issuers to fund themselves at attractive yields lately.

1. Dollar Bond Yields of Frontier Borrowers (Percent, secondary market)



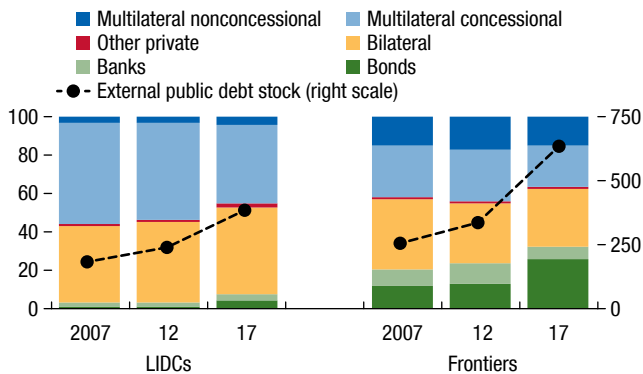
Reliance on hard currency debt issuance is set to reach a new high in 2019.

2. Hard Currency Debt Issuance for Frontiers (Billions of US dollars)



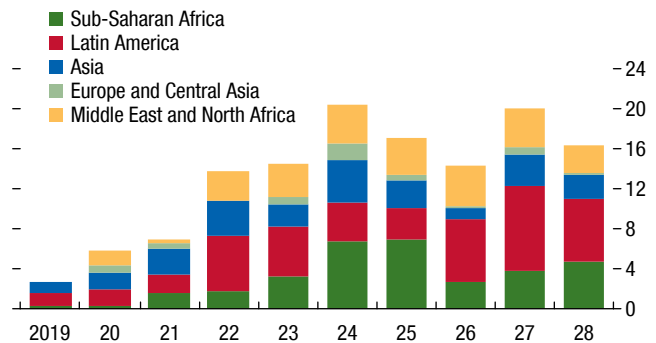
The composition of external debt has shifted toward a higher share for private sector debt, particularly for frontier markets.

3. Composition of External Public Debt of Frontier Markets (Share of total, average percent of GDP, left scale; billions of US dollars, right scale)



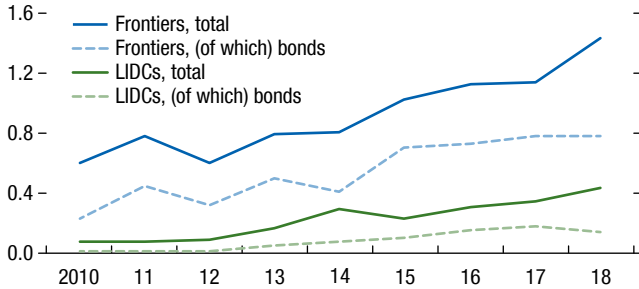
Rollover needs are low for many issuers in the coming years but are set to rise.

4. Hard Currency Debt Redemptions of Frontier Markets (Billions of US dollars)



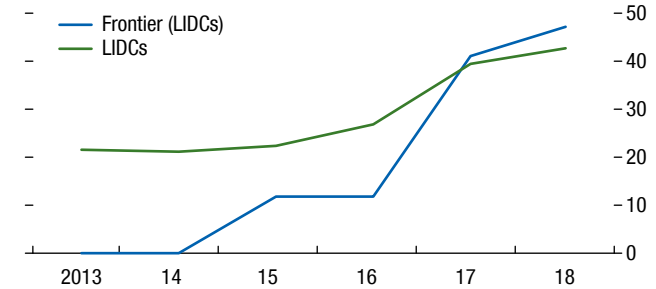
Bonds are driving the increase in private debt servicing costs.

5. External Public Debt Service to the Private Sector (Percent of GDP)



The share of countries at high risk or already in debt distress has increased since 2013.

6. Countries with High Risk of Debt Distress or in Debt Distress (Share of total, percent)



Sources: Bond Radar; World Bank; and IMF staff calculations.

Note: Frontier low-income developing countries (LDCs) are a subset of frontier market economies that have a risk rating using the Debt Sustainability Framework for Low-Income Countries. About 45 percent of frontier issuers had such a risk rating in the panel 6 example. In panel 2, 2019E is based on market analyst forecasts.

- *A high stock of debt backed by collateral:* Although there is a general lack of data on collateralization practices across countries, recent debt distress cases and new IMF programs (particularly in sub-Saharan Africa) have revealed instances of a high stock of commodity-linked loans from the private sector or through bilateral official lending. Some issuers (such as Ecuador and Egypt) and domestic banks have relied on repurchase agreements from international banks using sovereign debt as collateral at significant haircuts. Such types of arrangements can constrain issuer options in debt restructuring, lower recovery for unsecured creditors, and increase liquidity risks.¹⁰ Vulnerabilities linked to collateralized debt are further compounded by poor debt recording, monitoring, and reporting practices of many issuers (Group of Twenty 2018).

Rising external indebtedness has increased concerns about debt sustainability. The share of low-income developing countries assessed at high risk of debt distress or in debt distress under the IMF's debt sustainability framework (IMF 2018b) has doubled since 2013 to 43 percent (Figure 4.5, panel 6). Even for countries assessed at low or moderate risk of debt distress, debt servicing capacity has deteriorated. Debt sustainability concerns are more acute for frontier issuers, where reliance on external commercial debt and overall public indebtedness have risen even faster. For example, median public debt for low-income developing countries has risen by 13 percentage points of GDP since 2013 to about 46 percent of GDP in 2018. For frontier issuers, median debt has risen by close to 20 percentage points of GDP to about 55 percent.

Policies to Contain Excessive Buildup of Debt

The authorities in emerging market economies should maintain strong policy and institutional frameworks and rebuild policy space, where possible, to guard against rising global policy uncertainty and escalating trade tensions (see recommendations in Chapter 1 as well as Chapter 1 of the October 2018 and April 2019 GFSRs).

Easy external financing conditions could be a mixed blessing unless borrowers in emerging and frontier markets make financing decisions that are grounded

in medium-term debt management strategies. These decisions must be based on an assessment of costs and risks, and borrowed funds must be used efficiently to increase productive capacity. Issuers should avoid instruments with features that may aggravate financing constraints under downside scenarios. To further increase resilience to external shocks, policymakers should continue developing local bond markets and promoting a stable local investor base (IMF and World Bank 2016; October 2018 GFSR).

Given the growing debt of *state-owned enterprises*, countries should seek to improve their profitability, efficiency, and governance. SOEs should rely on well-designed business plans that set credible operational and financial targets. Government guarantees on new and existing debt for systemically important firms should be linked to credible business plans. New investment plans should be subject to full cost-benefit and feasibility analysis. Some overindebted or inefficient SOEs may benefit from enhanced cooperation with private firms to improve efficiency and gain access to new sources of financing. Finally, transparency and debt monitoring can be strengthened with more detailed disclosure of fiscal spending and guarantees related to SOEs, in line with IMF initiatives (Group of Twenty 2018; IMF 2014, 2016b, 2019).

For *frontier markets*, containing debt-related vulnerabilities should be their top policy priority. Countries with elevated debt sustainability risks should limit increases in nonconcessional external indebtedness to investment projects with credibly high rates of return. Safeguards can also be put in place to match the debt service profile with investment returns, and by including contingency features to deal with shocks. Countries also need to strengthen efforts to mobilize domestic resources, improve the efficiency of public expenditures, and strengthen management of public investment. Furthermore, to ensure that risks are detected and addressed in a timely manner, efforts should be made to strengthen public debt recording, monitoring, and reporting, and to build capacity to manage public debt. Finally, issuers should take advantage of the favorable external conditions to reduce their reliance on collateralized debt.

Creditors should emphasize timely resolution of debt distress cases underpinned by efficient creditor coordination processes to minimize the costs for both the issuer and creditors. Non-Paris Club creditors should consider the benefits of adopting sustainable lending rules, such as those endorsed by the Group of Twenty.

¹⁰For example, some of these loans require margin calls or have early termination clauses linked to the value of collateral.

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