



Corporate Borrowing in Emerging Markets: Fairly Long Term, but Only for a Few

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It is generally believed that firms in emerging markets rely on shorter-term instruments than firms in advanced economies. In recent years, firms in emerging market economies have substantially increased the amount of debt raised in global bond and syndicated loan markets, triggering concerns about their exposure to rollover risks. However, new evidence examined in this policy brief shows that emerging market firms have been using these markets to borrow long term, possibly diminishing the risks associated with higher debt levels and foreign currency financing. Challenging the conventional wisdom, large firms from emerging markets have issued bonds and syndicated loans at maturities similar to those issued by firms from advanced economies. These findings have implications for understanding the sources of short-termism in emerging markets, the actual risks emerging economies face from rising levels of corporate borrowing, and the policy measures that might help firms that cannot borrow long term.

Debt issuance by firms in emerging markets has expanded at a very fast pace since the early 1990s. The total amount of debt issued through domestic and cross-border bonds and syndicated loans increased nearly 30-fold in emerging markets between 1991 and 2014 (figure 1). This growth has been faster than that in equity markets and traditional bank financing.

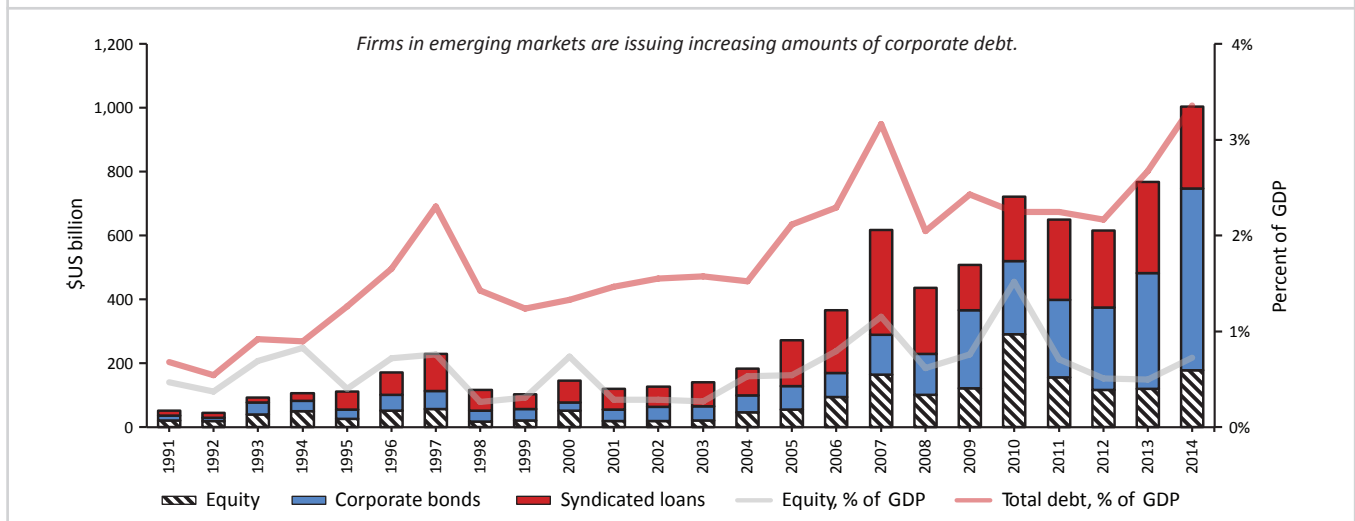
Although the increase in the level of corporate debt financing can be associated with important benefits to firms from emerging market economies, such as the financing of growth opportunities, this trend has also raised several concerns. Recent studies have discussed the perils associated with the recent debt expansion in emerging markets, especially after the global financial crisis. Most of the attention has been centered on the rising levels of corporate leverage and the foreign currency exposure of the newly issued debt because both can lead to corporate and systemic vulnerabilities.

The rapid growth in debt borrowing has raised policy concerns because financial crises in emerging markets are usually preceded by high levels of corporate leverage (Mendoza and Terrones 2008; Schularick and Taylor 2012; Herwadkar

2017). Moreover, increasing foreign currency exposure can exacerbate debt burdens (measured in domestic currency) in the event of sudden exchange rate depreciations, if such debt is not properly hedged (Acharya et al. 2015; McCauley, McGuire, and Sushko 2015; Caballero, Panizza, and Powell 2016; *The Economist* 2015, 2016; Alfaro et al. 2017). Fluctuations in the value of the foreign currency debt, mostly denominated in U.S. dollars, can also influence the credit cycle in the borrowing country through other mechanisms. For example, U.S. dollar depreciations can reduce the net worth of domestic firms with currency mismatches in their balance sheets, tightening their financial conditions (Bruno and Shin 2015). These concerns are compounded by the perception that a large proportion of the current foreign currency borrowing by emerging market countries has been used to accumulate cash and short-term instruments in domestic currency (Bruno and Shin 2017).

In addition, interest rate risks can aggravate currency risks. The recent growth in emerging market corporate debt has occurred amid unprecedentedly loose global financial conditions, with historically low levels of interest rates. As global financial conditions tighten, the debt-servicing burden of

Figure 1. Firm financing, selected emerging market economies, 1991-2014



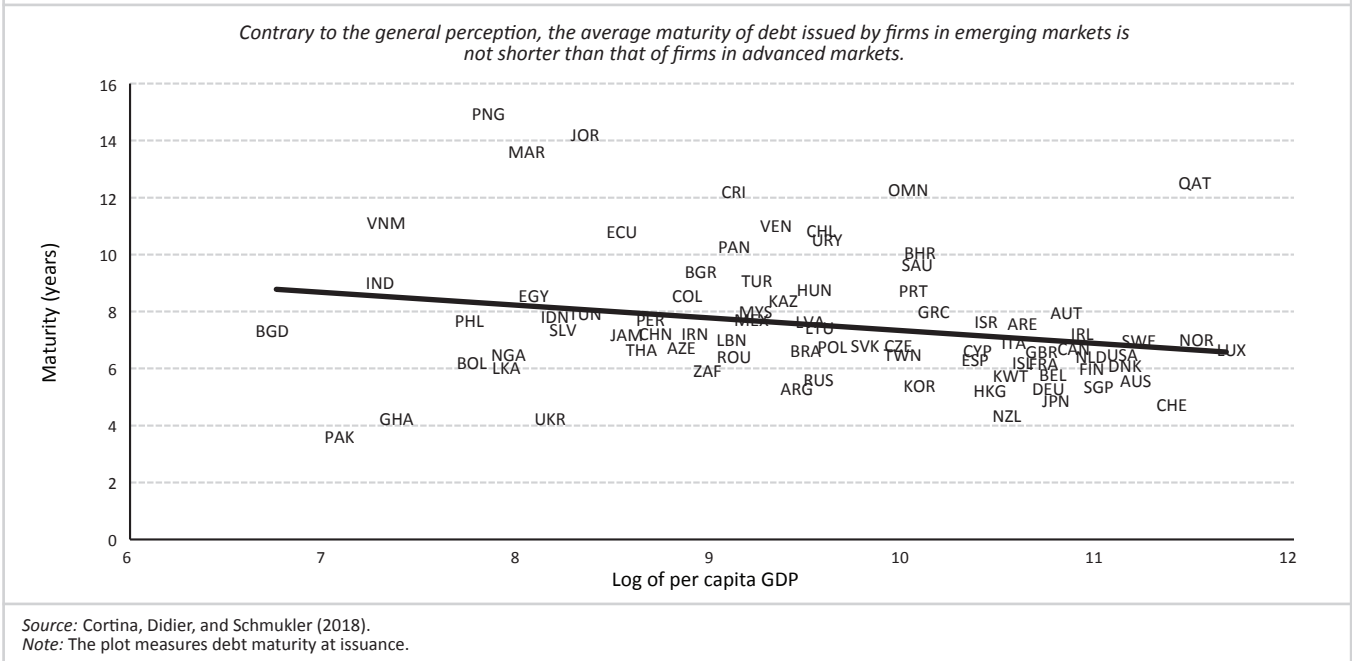
Source: Authors calculations based on data from Thomson Reuters SCD Platinum.
Note: U.S. dollar amounts are in 2011 dollars. This figure shows the total amount raised per year in equity, corporate bond, and syndicated loan markets by nonfinancial corporations from 37 emerging market economies. Total debt is the sum of the amount raised through corporate bonds and syndicated loans, both domestic and cross-border.

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Figure 2. Debt maturity by country, 1991–2014 averages



corporate debt contracted at variable rates will increase, as well. This burden could be intensified by local currency depreciations, which are typically associated with rising global interest rates (IMF 2015).

Less attention has been devoted to the rollover risks associated with the maturity structure of the newly acquired debt. The general perception, rooted in earlier academic research, is that debt raised by emerging market firms is short term. Long-term debt has the obvious advantage of allowing issuing firms to finance large investments that take time to mature and to reduce the rollover risks associated with tighter credit markets (Brunnermeier 2009; Jeanne 2009; Raddatz 2010; Beltratti and Stulz 2012). By contrast, when firms rely on short-term debt, they can experience tighter financial constraints during credit crunches, leading to significant effects in the real economy (Almeida et al. 2011). Although the maturity structure is a risk-sharing outcome between debtors and creditors, much of the policy discussion has focused on the need to understand the extent and causes of “short-termism,” as well as on the

possibilities of lengthening debt maturity when firms are exposed to rollover crises (G20 2013; Giovannini et al. 2015; World Bank 2015; Beck 2016).

Despite the numerous discussions, evidence on the actual maturity of firms’ liabilities and where long- and short-term debt originates is still scant. Most of the empirical literature is based on the so-called “short-term” and “long-term debt” (less than and more than one year) gathered from firm-level balance sheet information. These studies find that the ratio of long-term debt (with maturities greater than one year) to total liabilities is typically lower in emerging markets than in advanced economies (see, for example, Demirgüç-Kunt and Maksimovic 1999; Fan, Titman, and Twite 2012).

New evidence on debt maturity

Contrary to the established view based on balance sheet information, new evidence from transaction-level data shows that the increasing reliance of emerging market firms on debt markets has been associated with long-term maturities, possibly

Figure 3. Debt maturities in bond markets: Cumulative distribution functions, 1991–2014

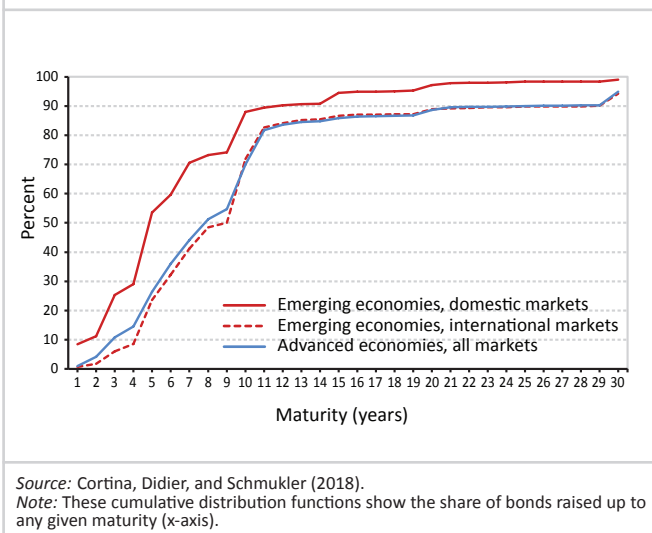
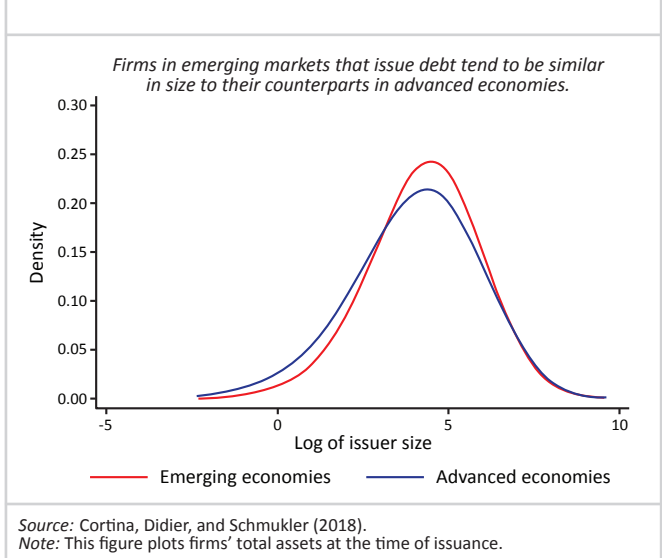


Figure 4. Size distribution of issuing firms, 1991–2014



diminishing the risks associated with higher debt levels and foreign currency financing (Cortina, Didier, and Schmukler 2018).

Data on the universe of domestic and international bond and syndicated loan issuances (from Thompson Reuters' SDC Platinum) for the 1991–2014 period show that a select group of nonfinancial sector firms from emerging markets have been raising debt in these markets at maturities slightly longer than those used by firms from advanced economies. The average maturity of debt at issuance is, if anything, shorter in countries with higher GDP per capita and higher private credit-to-GDP ratios (figure 2). The (value) weighted average maturity of the debt issued by firms from emerging economies is 7.3 years, while for advanced economies it is 6.2 years. This new evidence is at odds with the general perception that emerging market firms tend to borrow debt at shorter maturity terms than firms in more advanced economies do.

This surprising finding masks, however, substantial differences in the composition of debt issued in different credit markets. For instance, emerging market firms issue substantially larger amounts of debt abroad, at significantly longer maturities, than in domestic markets (figure 3). Bond issuances by firms from emerging markets have an average maturity of 9.6 years when issued abroad, contrasting with an average maturity of 6.6 years when issued domestically. Firms from advanced economies issue both domestic and international bonds at maturities similar to those obtained by firms from emerging markets in international markets (that is, about 9 to 10 years).

But only a select group of large corporations in emerging markets have access to these relatively long-term markets. In fact, the size of the typical firm issuing this type of debt is similar in both emerging and advanced economies (figure 4), even though some studies have shown that emerging market firms are usually smaller (Bento and Restuccia 2017). Zeroing in on small borrowers, among the bottom quantiles of the firm size distribution (FSD) of debt issuers (comprised largely of domestic issuers), emerging market firms are even larger than those from

advanced economies, including when comparing firms within the same industries. Given the dearth of small firms from emerging markets, the smallest borrowers in bond and syndicated loan markets are thus predominantly from advanced economies.

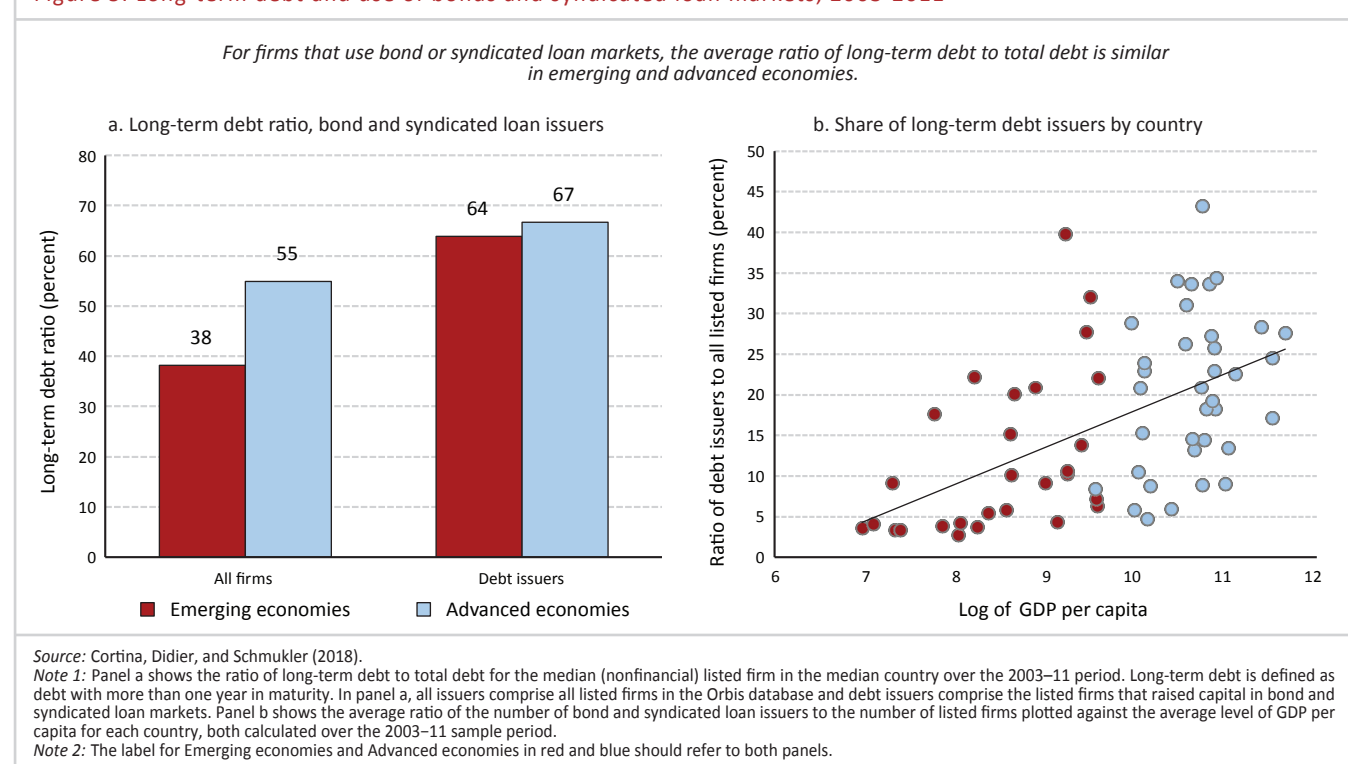
Reconciling balance sheet and transaction-level evidence

The short-termism in emerging markets' debt observed in firm balance sheet data is partly explained by a lower proportion of firms using bond and syndicated loan financing, which are longer term than other debt instruments.

To reach this conclusion, this research matched the transaction-level data on bond and syndicated loan issuances with balance sheet information over the 2003–11 period for listed firms from Bureau van Dijk's Orbis dataset (Cortina, Didier, and Schmukler 2018). The analysis then compares the ratio of long-term debt to total liabilities between emerging and advanced economies for all listed firms in the sample, for debt issuers (defined as firms tapping bond or syndicated loan markets at least once during the sample period), and for other firms (those using neither bonds nor syndicated loans during the sample period, but with debt in their balance sheets from other sources). In other words, the analysis distinguishes between firms obtaining financing from bond and syndicated loan markets and firms relying only on other debt sources.

When considering the universe of listed firms, those from emerging markets hold a lower share of long-term debt to total debt, on average, than those from advanced economies, in line with the findings in the literature using balance-sheet data. However, the average ratio of long-term debt to total debt across firms becomes similar across emerging and advanced economies when considering only the subset of firms that use bond or syndicated loan markets (figure 5, panel a). These patterns are consistent with the findings using transaction-level data presented earlier. Moreover, they indicate that debt instruments other than bonds and syndicated loans are relatively shorter term and are used more intensively in emerging markets. In fact,

Figure 5. Long-term debt and use of bonds and syndicated loan markets, 2003-2011



there is a positive correlation between the share of firms using bond and syndicated loan markets and GDP per capita (figure 5, panel b).

Overall, these patterns suggest that differences in debt maturity between firms from emerging and advanced economies stem, at least in part, from differences in their relative use of bond and syndicated loan markets, and not from differences in the maturity at issuance of these debt instruments. The results indicate that a greater proportion of firms from emerging economies rely on other shorter-term debt instruments.

Conclusion

Emerging market economies have actively participated in the expansion of debt markets that has occurred since the 1990s. The increasing amount of debt issued by emerging markets over the years has been raised by large firms at the longer end of the maturity spectrum, reducing the risks associated with higher debt levels and with rollover and foreign currency financing. But the trade-offs of different types of financing (notably, debt versus equity) and of different types of debt deserve more attention going forward.

The patterns presented here suggest that debt short-termism in emerging markets is rooted in certain areas. One source is domestic bonds, which firms from emerging markets issue at shorter maturities than when they issue in international markets. Those domestic bonds are also shorter term than those issued by advanced economy firms when they raise capital through bond markets. Another source lies in more traditional bank loans or other types of debt, on which smaller firms rely. These other debt instruments not only seem to be shorter term for both emerging and advanced economies, but they also represent a larger fraction of debt financing in emerging economies because a larger proportion of firms from emerging markets do not use bond or syndicated loan markets. Consequently, these patterns suggest that these firms would have fewer alternatives when

seeking long-term external finance to realize investment opportunities, thus possibly making them more credit constrained and vulnerable.

A first-order issue for future research is whether smaller firms are unable or unwilling to tap longer-term financing in emerging markets. If long-term finance is indeed not available for deserving firms (a problem in the supply side of funds), policy makers could focus on broadening access to long-term capital markets to firms beyond the selected group of large corporations that already tap those markets. In fact, the evidence shows a shorter-term maturity profile and a larger average firm size for firms issuing debt in domestic bond markets in emerging markets than their counterparts in advanced economies, suggesting that local bond markets might indeed be relatively underdeveloped in emerging markets.

Policies aimed at reducing the transaction costs associated with the issuance process and at increasing the participation of different types of investors could expand the number of firms able to access capital markets, with positive spillover effects on secondary markets. Another way to facilitate smaller, lower-rated firms to issue securities in capital markets could be to develop capital markets specialized in small and medium enterprises (SMEs), innovative instruments (such as minibonds), and securitization (Borensztein et al. 2005; Giovannini et al. 2015). But those solutions still need to be considered more thoroughly and tested.

Overall, the message from this research and policy brief is that considering the composition of debt instruments and firms is key when analyzing the overall debt maturity structure across countries. Debt composition is also important to try to understand the determinants of short-termism, the risks in emerging economies from corporate borrowing, and the optimal policy measures that can contain risks and provide adequate financing to those firms that lack it.

References

- Acharya, V., S. Cecchetti, J. De Gregorio, S. Kalemli-Ozcan, P. Lane, and U. Panizza. 2015. "Emerging Economy Corporate Debt: The Threat to Financial Stability." VoxEU.org.
- Alfaro, L., G. Asis, A. Chari, and U. Panizza. 2017. "Corporate Balance Sheets in Emerging Markets: A Comparison of the Global Financial Crisis and the Asian Financial Crisis." VoxEU.org.
- Almeida, H., M. Campello, B. Laranjeira, and S. Weisbenner. 2011. "Corporate Debt Maturity and the Real Effects of the 2007 Credit Crisis." *Critical Finance Review* 1 (1): 3–58.
- Beck, T. 2016. "Long-term Finance in Latin America. A Scoreboard Model." Discussion Paper IDB-DP-476, Inter-American Development Bank, Washington, DC.
- Beltratti, A., and R. Stulz. 2012. "The Credit Crisis around the Globe: Why Did Some Banks Perform Better?" *Journal of Financial Economics* 105 (1): 1–17.
- Bento, P., and D. Restuccia. 2017. "Misallocation, Establishment Size, and Productivity." *American Economic Journal: Macroeconomics* 9 (3): 267–303.
- Borensztein, E., M. Chamon, O. Jeanne, P. Mauro, and J. Zettelmeyer. 2005. "Sovereign Debt Structure for Crisis Prevention." IMF Occasional Paper 237, International Monetary Fund, Washington, DC.
- Brunnermeier, M. 2009. "Deciphering the Liquidity and Credit Crunch 2007–2008." *Journal of Economic Perspectives* 23 (1): 77–100.
- Bruno, V., and H. S. Shin. 2015. "Cross-border Banking and Global Liquidity." *Review of Economic Studies* 82 (2): 535–64.
- . 2017. "Global Dollar Credit and Carry Trades: A Firm-level Analysis." *Review of Financial Studies* 30 (3): 703–49.
- Caballero, J., U. Panizza, and A. Powell. 2016. "Foreign Currency Corporate Debt in Emerging Economies: Where Are the Risks?" VoxEU.org.
- Cortina, J. J., D. Didier, and S. Schmukler. 2018. "Corporate Debt Maturity in Developing Countries: Sources of Long- and Short-termism." *The World Economy*. Also available as [Policy Research Working Paper 8222](#), World Bank, Washington, DC.
- Demirgüç-Kunt, A., and V. Maksimovic. 1999. "Institutions, Financial Markets, and Firm Debt Maturity." *Journal of Financial Economics* 54 (1): 295–336.
- Economist. 2015. "The World Economy: Pulled Back In." November 14.
- . 2016. "Emerging Market Debt: The Well Runs Dry." March 5.
- Fan, J., S. Titman, and G. Twite. 2012. "An International Comparison of Capital Structure and Debt Maturity Choices." *Journal of Financial and Quantitative Analysis* 44 (1): 23–56.
- G20 (Group of 20). 2013. "Long-term Investment Financing for Growth and Development." Umbrella Paper.
- Giovannini, A., C. Mayer, S. Micossi, C. di Noia, M. Onando, M. Pagano, and A. Polo. 2015. "Restarting European Long-Term Investment Finance: A Green Paper Discussion Document." Centre for Economic Policy Research, London.
- Herwadkar, S. 2017. "Corporate Leverage in EMEs: Did the Global Financial Crisis Change the Determinants?" BIS Working Paper 681, Bank for International Settlements, Basel.
- IMF (International Monetary Fund). 2015. "Corporate Leverage in Emerging Markets, A Concern?" Chapter 3 in the October 2015 *Global Financial Stability Report*. Washington, DC: International Monetary Fund.
- Jeanne, O. 2009. "Debt Maturity and the International Financial Architecture." *American Economic Review* 99 (5): 2135–48.
- McCauley, R., P. McGuire, and V. Sushko. 2015. "Global Dollar Credit: Links to U.S. Monetary Policy and Leverage." *Economic Policy* 30 (82): 187–229.
- Mendoza, E. G., and M. E. Terrones. 2008. "An Anatomy of Credit Booms: Evidence from Macro Aggregates and Micro Data." NBER Working Paper 14049, National Bureau for Economic Research, Cambridge, MA.
- Raddatz, C. 2010. "When the Rivers Run Dry: Liquidity and the Use of Wholesale Funds in the Transmission of the U.S. Subprime Crisis." Policy Research Working Paper 5203, World Bank, Washington, DC.
- Schularick, M., and A. M. Taylor. 2012. "Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870–2008." *American Economic Review* 102 (2): 1029–61.
- World Bank. 2015. *Global Financial Development Report 2015–2016. Long-term Finance*. Washington, DC: World Bank.