

Corporate bond issuance over financial crises: A global perspective

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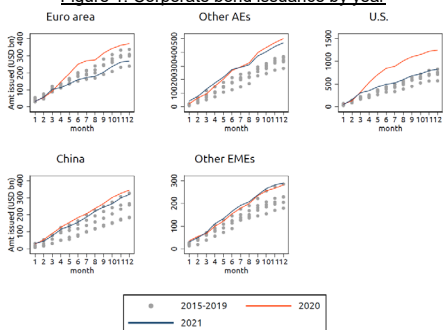
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Abstract

We use a merged global data set of security-level corporate bond issuance and firm-level financial statement data to show that, in contrast to earlier periods of financial stress, during the COVID pandemic nonfinancial firms around the world were more likely to issue bonds than over preceding years. We explore the characteristics of firms that issued bonds, as well as examine the post-pandemic evolution of firm financial ratios, and find that in advanced economies resilience in bond issuance during COVID was driven by less risky firms, as predicted by existing theories. In contrast, during COVID we do not observe a shift to larger or less risky issuers in emerging economies. We explore potential channels that explain corporate bond issuance patterns, including central bank intervention and supply of capital.

Introduction

Figure 1: Corporate bond issuance by year



Corporate bond issuance boomed in 2020 (red lines) and 2021 (blue lines) globally compared to 2015 to 2019 (gray lines). We are one of the first to document these patterns outside of the U.S. (Halling et al., 2020; Becker and Benmelech, 2021).

In this paper, we ask three related research questions:

1. Is the COVID pattern typical relative to other periods of financial stress? No; issuance decreased in past episodes (in line with e.g. Erel et al., 2012).
2. How risky were bonds issued during COVID? In advanced economies (AEs), COVID bonds were safer than normal times; local currency issuance in emerging economies (EMEs) was *not safer*.
3. Why did bond markets behave differently during COVID? Monetary policy support partially drove resilience in the corporate bond market.

Empirical strategy

Refinitiv's corporate bond issuance data matched to Worldscope's firm financial statement data; final sample of 80,375 bonds totaling \$25.8 trillion issued by 6,058 firms (full universe of 60,421 unique non-financial firms from 45 countries). Analysis of firm-month bond issuance in three stress periods:

- COVID pandemic: March to June 2020
- Taper tantrum: May 2013 to April 2014
- Global financial crisis: December 2007 to June 2009

Regression specification:

$$y_{i,t} = \alpha + \beta * COVID + \delta * TT + \gamma * GFC + \eta_i + \varepsilon_t$$

$y_{i,t}$: bond issuance behavior (propensity to issue, amount issued, number of bonds issued), bond characteristic (time to maturity, rating status), or firm characteristic (size, leverage, profitability).

COVID was different in terms of issuance behavior

Unlike previous periods of stress, firms in COVID in all regions more likely to issue bonds than in normal times; increase is economically large.

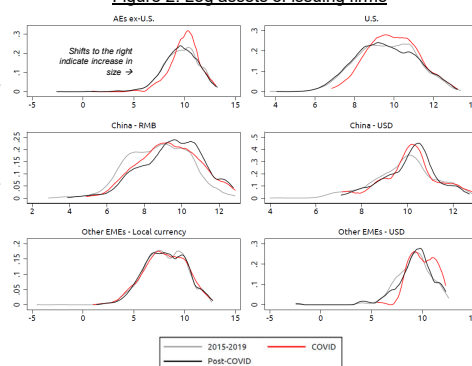
Table 1: Corporate bond issuance propensity during stress periods

| Sample: | Euro area | Other AEs | U.S. | China | Other EMEs |
|-------------------------|--------------------------|---------------------------|--------------------------|--------------------------|---------------------------|
| Dependent variable | Issuer dummy | Issuer dummy | Issuer dummy | Issuer dummy | Issuer dummy |
| Mean | 0.94% | 0.40% | 0.88% | 0.88% | 0.49% |
| COVID pandemic | 0.00640*** (0.00156) | 0.00121** (0.000480) | 0.0129*** (0.000863) | 0.00807*** (0.00137) | 0.00278*** (0.000798) |
| Taper tantrum | 0.00204*** (0.000512) | 0.000628* (0.000319) | 0.000253 (0.000521) | -0.00495*** (0.00152) | -0.0133*** (0.000321) |
| Global financial crisis | -0.000608 (0.00126) | -0.000721** (0.000337) | -0.00167** (0.000799) | -0.00982*** (0.00173) | -0.00168*** (0.000438) |

EME issuance was not less risky during COVID

While AE issuers and EME USD issuers during COVID (red lines) are larger than in prior years (gray lines), EME local currency issuers during COVID are no different than in non-stress times.

Figure 2: Log assets of issuing firms

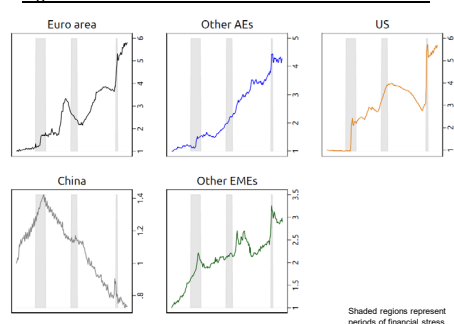


Policy support during COVID bolstered issuance

COVID saw unprecedented policy stimulus from central banks and governments, including programs targeting corporate markets.

The size of central banks' balance sheets (as a % of GDP) increased rapidly during COVID, even compared to the GFC. During the taper tantrum, central bank balance sheets did not expand rapidly, even in EMEs.

Figure 3: Central bank balance sheets as a % of GDP



Conclusion

- Corporate bond issuance globally soared during COVID, in contrast to previous episodes of stress
- Financing conditions were supported by unprecedented monetary and fiscal support
- Easy access to bond markets may have helped firms maintain investments and employment, but may have also facilitated survival of riskier firms
- Leverage and interest coverage ratios are potentially concerning in EMEs, especially given current interest rate environment

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Sources and References

Sources:
Figure 1: Refinitiv Workspace. Figure 2: Worldscope and Refinitiv Workspace. Figure 3: Haver.

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