The Visible Hand when Revenues Stop: Evidence from Loan and Stock Markets during Covid19
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Abstract
We document that public interventions in the corporate sector during the Covid19 pandemic help firms access bank loans, cushion liquidity shortfalls, and boost their market valuations. We use firm-level data on Covid19-related news to trace firms’ liquidity shocks in several European countries, which differ in public spending for fiscal stimulus and debt guarantees to corporations. As market valuations rebound in spite of the deterioration of firms’ revenues, interventions drive a part of the disconnect between markets and the real economy. Remarkably, the financial sector internalizes part of the benefits of interventions targeting non-financial firms. To interpret these results, we lay out a moral hazard model of corporate borrowing and public interventions. The model suggests that interventions in the corporate sector are effective to mitigate incentive problems leading to credit market failures. Lenders benefit from loan guarantees as a compensation to finance firms with severe debt overhang problems.

Institutional Background and Data

Our lab:
- European countries differ in intervention amounts and types
  - Immediate support: firms receive cash injections they do not need to reimburse.
  - Guarantees and loans: guarantees on loans and additional loans/firms which have reinsurance in the future.
- Firm-level data on Covid19-related news to trace firms’ liquidity shocks
  - From S&P Market Intelligence: 2626 companies in Europe with “covid” or “coronavirus” related news between Feb 1 and Sep 22, 2020.
  - classified into “good” vs. “bad” news (including halt of operations news due to lockdowns).

Government Interventions as a Mediator for Covid19 Revenues Shock

Evidence of a Firm Borrowing Channel

Firm borrowing channel: we want to consistently estimate β in the following specification

\[ A_{bf} = \alpha_b + \beta X_{bf} + \epsilon_{bf} \]

where \( A_{bf} \) are the amount of new loans bank \( b \) grants to firm \( f \) between Dec 2019 and June 2020, \( \alpha_b \) are bank fixed effects, and \( X_{bf} \) is a proxy for the firm liquidity shock.

Instead, we have banks’ exposures to corporate sectors at the bank-country level:

\[ A_{b} = \alpha_b + \beta X_b + \epsilon_b \]

where \( \alpha_b \) is the difference in the bank’s exposure to country \( c \) between Dec 2019 and June 2020 (EBA) and \( X_b \) is the average bad news index of a firm in country \( c \).

Identification issue: despite the inclusion of \( X_c \), \( X_b \) might still correlate with omitted variables describing the corporate sector in country \( c \).

Granular Instrumental Variables (Gahbi and Kosjön, 2020) for \( X_b \): based on banks’ halt of operations news:

\[ H_{bf} = \sum w_{bf} X_{bf} \]

The second stage regression uses the instrumental variable \( H_{bf} \):

\[ A_{bf} = \alpha_b + \beta H_{bf} \]

Summary

After the outbreak of the Covid19 pandemic, stock markets have recovered almost completely, despite a continued deterioration of real economic indicators.
1. Public interventions (guarantees) boost market valuations of firms affected by liquidity shocks
2. Financial firms benefit from public interventions (guarantees) targeting non-financial firms
   - Supported by the firm borrowing channel: firm demand for bank credit reduces with immediate support, and increases with guarantees and loan support
   - Corporate debt guarantees compensate lenders to provide liquidity to firms with severe debt overhang problems.