Do Firms Cater to Corporate QE? Evidence from the Bank of Japan’s Corporate Bond Purchases during the COVID-19 Pandemic

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Summary
- In response to the COVID-19 crisis, the Federal Reserve and the Bank of Japan (BOJ) conducted massive purchases of corporate bonds maturing in 5 years or less.
- In Japan, but not in the U.S., some firms catered to this demand shock by shortening the maturity of new bond issues.
- BOJ became a much more significant buyer in the target corporate bond segment than did Fed.
- As the debt maturity can affect the rollover risk and investment, this paper has important policy implications.

Motivation
- Many central banks launched large-scale purchases of corporate bonds (i.e., corporate QE) during the COVID-19 crisis.
- One interesting feature: Maturity eligibility criteria
  - ECB: ≤ 3Y (primary & secondary)
  - Fed-Treasury: ≤ 4Y (PMCCF) & ≤ 5Y (SMCCF)
  - BOJ: ≤ 5Y ➔ ≤ 5Y (secondary only)
- Research Question: Do firms cater to corporate QE?
- Theoretical framework: Greenwood et al. (2010)
- Existence of “preferred-habitat” investors
- Limited arbitrage capital ➔ Violation of the expectations hypothesis
- Prediction: Sharp changes around the threshold
  - Firms face a trade-off: Catering to high demand vs. Deviating from target mat.
  - Greater deviation from target mat. ➔ Higher cost
  - Therefore, if the firm’s target maturity is...
    - ≤ 5Y, target mat. selected
    - slightly exceeding 5Y, mat. shortened to 5Y (or 3Y)
    - largely exceeding 5Y, target mat. selected
- US data suggest: No
  - Boyarchenko et al. (2020): “[T]he existence of the facility does not distort issuance decisions, with issuers not changing maturity of issued bonds to target SMCCF eligibility.”
- As the debt maturity can affect the rollover risk and investment, this paper has important policy implications.

Timeline
- BOJ had existing purchase cap of ¥3.2T (2013–)
  - March 16, 2020: BOJ: First announcement
    - Additional cap: ¥1T
    - Max remain. mat. 3Y
- April 27, 2020: BOJ: Second announcement
  - Additional cap: ¥1T ➔ ¥7.5T
  - Max remain. mat. 3Y ➔ 5Y

Purchase Caps - Japan vs. the US

Maturities of New Bond Issues - Japan vs. the US

<table>
<thead>
<tr>
<th>Maturities (years)</th>
<th>Pre-period</th>
<th>QE1 period</th>
<th>QE2 period</th>
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<td>Total</td>
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<td>5</td>
<td>40</td>
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</tr>
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</table>

Maturities increased during COVID-19 crisis.

Interpretation:
From “pre-period” to “QE2-period”, the probability of the mat. bin. of (5,7]Y being chosen decreased by 10.7 percentage point (from 17.7% to 7.0%).

References

Policy Implications and Contributions
- This paper is important for policymakers because firms’ debt maturity choice can affect rollover risk and investment ➔ financial stability.
- Related paper: Galema & Lugo (2021)
  - ECB’s lax mat. eligibility criterion ➔ Lengthened maturity
  - This paper can also be viewed as a test of the “gap-filling theory” of Greenwood et al. (2010).