CoCo Bond Issuance and Bank Funding Costs
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Discussion
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General Impression and Discussion

- The paper provides valuable insights on how investors react to CoCo issue announcements.
- It uses the most comprehensive dataset to date.
- My comments focus on suggestions for
  - refining the model.
  - extending the empirical analysis.
Comments on the Model

1. The model assumes that after a very large bank asset decline, MC CoCos convert to new equity while the bank’s initial shareholders are wiped out.
   - Implies CoCos promise to convert to a fixed market value of equity and are senior to initial shares.
   - But actual MC CoCo contracts tend to convert to a fixed number of new shares, so initial shares have value whenever CoCos do.¹

2. Correlations between returns on the bank’s assets and CoCos can depend on conversion terms:
   - CoCo values are negatively (positively) related to asset values if conversion favors CoCo investors (shareholders), which is the case when \( \alpha > \alpha_C \) (when \( \alpha < \alpha_C; \lambda < 1 \)).²

3. When conversion terms favor initial shareholders (e.g., PWD and most MC), correlations between returns on the bank’s assets and equity are:
   - positive for high asset values.
   - may be negative for asset values just above the trigger.\(^3\)

4. The model assumes that following conversion, if total equity is below the minimum regulatory requirement, subordinated debt and possibly senior debt are written down/swapped to replenish equity to the minimum:
   - violates strict priority since most CoCos are junior (AT1).
   - more realistically, equityholders must raise new capital or be wiped out (PONV).
   - subordinated/senior debt written down only at PONV.

\(^3\)Pennacchi and Tchistyi (2015).
Comments on the Empirical Analysis

1. The paper tests the statistical significance of CoCo announcement window abnormal returns (of CDS or equity) for a series of binary subsamples. (e.g., PWD vs MC or GSIB vs non-GSIB).
   
   > useful, but separate binary comparisons could suffer from omitted variable bias.

2. So, also regress cumulative abnormal returns from CoCo issue \( i \) at date \( t \), \( CAR_{i,t} \), on a vector of CoCo and bank characteristics, \( X_{i,t} \), and time (year) dummies, \( \alpha_t \):

\[
CAR_{i,t} = \alpha_t + \beta X_{i,t} + \varepsilon_{i,t}
\]

3. Since the data contains each CoCo’s credit spread, $GSP_{i,t}$, it would be valuable to understand how investors price CoCos as a function of CoCo terms and bank characteristics (including the bank’s rating), $Y_{i,t}$:

$$GSP_{i,t} = \alpha_t + \beta Y_{i,t} + \varepsilon_{i,t}$$

4. What might explain the findings that when the CoCo trigger is high:

- MC announcements produce negative CDS spread changes and negative equity $CAR$’s?
- PWD announcements produce insignificant CDS spread changes and positive equity $CAR$’s?
A Rational Explanation

- High trigger MC CoCos have more chance to convert before the PONV and be least unfavorable to CoCo investors since the stock price at conversion may be significant. As a result
  - they create less risk-shifting incentives, have low coupons, and best protect senior debt (explaining CDS spread declines).
  - debt overhang implies that the improvement in senior debt comes at the expense of equity (explaining negative CAR’s).\(^4\)

- High trigger PWD CoCos (especially with 100% WDs) are most likely to impose losses on CoCo investors. As a result
  - they create high risk-shifting incentives, have high coupons, and least protect senior debt (explaining little change in CDS spreads).
  - their high coupons maximize the bank’s tax shield and could improve shareholders’ equity (explaining positive CAR’s).

\(^4\) Albul, Jaffee, and Tchistyi (2013).
Conclusions

- The paper provides important documentation that CoCos are not homogeneous instruments.

- CoCos need to be properly designed to best protect bank debtholders and to reduce the likelihood of bank financial distress.

- Regulatory policy should encourage the types of CoCos endorsed by theoretical and empirical research.