Climate Regulatory Risks and Corporate Bonds

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Comments by
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ABCDE 2024
July 9-10

THE WORLD BANK
This paper

- Effects of climate regulatory risk on corporate bonds
- Initial results
  - Bonds issued by firms with weaker environmental profiles have higher yield spreads and lower ratings
  - Differences larger for firms in states with stricter environmental regulations
- Paris agreement and variation across U.S. states with different enforcement
  - Credit ratings decrease
  - Bond spreads increase
  - Results larger for firms exposed to stricter regulatory enforcement
- Complementary evidence and interpretation
  - Merton model changes are driven by a change in the volatility
  - Interpretation of the accord, greater climate regulatory risk
  - Credit rating agencies and investors react to climate regulatory risk
  - Insurance companies (longer horizons) reduce holdings of treated bonds, while mutual funds (shorter horizons) maintain or increase holdings
Comments

- Very nice paper
  - Raises new issues related to climate risks
  - Several interesting results
  - Leads to potential avenues for new research, some highlighted here

- Overall comments
  - Long and mature paper measuring climate regulatory risks for firms’ bonds
  - Very valuable contribution to the literature
  - It provides a useful benchmark estimate going forward
  - Main contribution is on the empirical side
  - Will focus on some high-level issues and further work, given time constraints

- Specific comments on context and way forward
  1. Climate risks
  2. Empirical analysis
1. Climate risks

- Climate risks at the firm level: shocks to economic activity
  - Supply side: physical, technology, production capacity
  - Demand side: consumption of products, investor demand for brown/green
  - Regulatory side: new production rules

- Regulatory risk
  - Costs
    - Related to mitigation efforts
    - Transition risks/adjustment costs: new technologies, taxes, fines, bans
    - Uncertainty about more regulation in the future
  - Benefits
    - More sustainability even at the local level
    - Clearer rules
1. Climate risks

- Big picture questions
  - How large is the regulatory risk vs. other climate risks (supply and demand risks)?
    - Why should we focus more on regulatory risk than on the others?
  - How to disentangle the regulation from the demand side?
    - Regulation can reflect consumer and investor preferences
    - Even changes in the demand side over time
  - Are all the effects negative?
    - Short-term vs. long-term effect on the environment
    - Mitigation efforts and regulatory uncertainty lead to short-term costs
    - But might be beneficial in the long term for the environment
    - The long-term effects could be felt even at the local level
    - How are treated and control groups affected?
2. Empirical analysis

• Diff-in-diff estimates
  • Paris agreement
  • U.S. good case for identification
  • But other countries could be interesting as well, particularly given their size and heterogeneity
    • Europe

• Firm-level effects
  • Greenium: brown vs. green bonds
  • Bonds vs. other types of financing
  • Within firms
2. Empirical analysis

- Outcomes: ratings vs. spreads
  - Possible feedback loop
  - Disentangling the impact of each
  - Consistency of the results
- Volatility increase
  - Ex-ante, unclear if the Paris agreement would increase/reduce regulatory risk
  - What drives the increase in volatility?
  - Is it more regulatory uncertainty?
- Investors
  - Mutual funds vs. pension funds
    - What is expected given their horizon?
    - Shouldn’t the longer-term investors benefit the most?
  - Why is the composition of investors important?
  - Distinguish between the composition and size of the investor base
Thank you!