Climate Policy and Banks' Portfolio Allocation

Giovanni Covi, Maren Froemel, Dennis Reinhardt, Nora Wegner

Discussion by Seho Kim (Danmarks Nationalbank)

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Research question

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  - Implication for financial stability
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  - Implication for financial stability
  - Depending on their response, the transition can be accelerated or slowed
- This paper's strategy
  - Combine UK banks' regulatory large exposure data with climate policy stringency
  - **Exploit their exposures to countries with different climate policy stringency**

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   - At the extreme, highly exposed banks ***increase*** lending to brown sectors

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3. Other countries' climate policies create spillovers in lending
   - E.g., when the U.S. tighten policy, banks increase brown lending to the U.K.

   If climate policy is not **coordinated**, climate-finance leakage occurs

Comments overview

1. Measuring transition risk exposure
2. Measuring climate policy stringency
3. Some minor comments

Comments 1: Measuring transition risk exposure

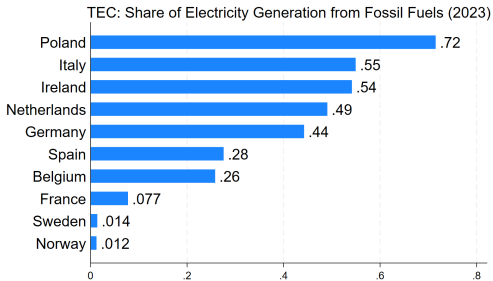
- To compute TEC (and TAC),

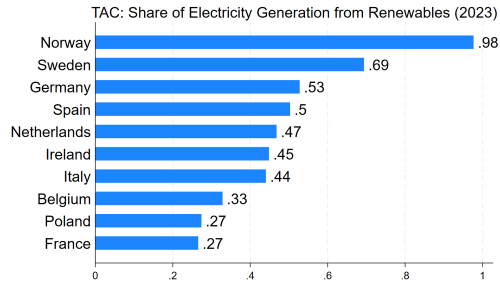
$$TEC_{b,j,t} = \sum_k TEC_k \times EXP_{b,k,j,t}$$

- Banks exposed to the same industries have the same TEC, regardless of country
- E.g., TEC/TAC rationale for electricity production sector Alessi and Battiston (2022)
  - TEC: Share of the production of electricity from fossil fuels
  - TAC: Share of the production of electricity from renewable sources

Comments 1: Measuring transition risk exposure

- TEC and TAC for major European countries in 2023





- Huge heterogeneity in the “true” TEC and TAC
  - The interpretation of changes in exposure should be done with care
  - Lower TEC/CPRS $\neq$ lower “true” transition risk exposure

Comments 1: Measuring transition risk exposure

- **Suggestion 1**: S&P Trucost Environmental data
  - A global firm-level dataset covering 20,000 companies
  - Includes Scope 1, Scope 2, and Scope 3 GHG emissions
  - Easily accessible through WRDS and mergeable with Compustat Global
  - Aggregate the data by country, sector, and year $\Longrightarrow$ measure of exposure

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- **Suggestion 2**: Check robustness using "true" TEC/TAC
  - For some industries, you can find actual data which follows the TEC/TAC rationale

Comments 2: Measuring climate policy stringency

- CCPI climate policy index
  - Performance rating by climate and energy policy experts within each country
  - $\sim$ 450 experts for 63 countries + EU (CCPI 2025)
- Caveats
  1. In many countries, there are only 1-2 experts, and there is turnover over the years
     $\Rightarrow$ Since this paper uses $\Delta CCPI_j$, dynamic consistency is important
  2. How should we quantitatively interpret a one-unit increase in CCPI?
     $\Rightarrow$ A one-unit increase in Norway could be different from a one-unit increase in Korea

Comments 2: Measuring climate policy stringency

- **Suggestion**: to use a quantitatively interpretable, objective measure
- World Bank Carbon Pricing Dashboard (WB CPD)
  - Information about carbon taxes and emissions trading systems around the world
  - Carbon price, coverage, and government revenue from carbon pricing
  - Period: 1990- & Coverage: 82 jurisdictions
- Government revenue from carbon pricing to GDP would be useful
- The policy coverage of the CCPI is much broader than that of the WB CPD

Minor comments

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   - Dataset focuses on large exposures $\Rightarrow$ large multinationals as counterparts
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   - **Suggestion**: drop the manufacturing sector and check robustness

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3. Lower TEC share: reallocation or capital outflow?
   - Shifts to low-TEC sectors or capital outflows reduce TEC share
   - Strict climate policy $\Longrightarrow$ capital outflows?
   - **Suggestion**: Run the same regressions using the CPRS ratio

In a nutshell

- Great contribution to an important area of research!
- I believe tightening the measurement would improve the paper
- I hope my comments are helpful

Thank you!

References I

Alessi, Lucia and Stefano Battiston, "Two sides of the same coin: Green Taxonomy alignment versus transition risk in financial portfolios," *International Review of Financial Analysis*, 2022, *84*, 102319.