HKU BUSINESS SCHOOL
港大經管學院

香港大學賽馬會
環球企業可持續發展研究所

COMMENTS ON "DOES SEGMENT DISCLOSURE CONSTRAIN CORPORATE POLLUTION"

Guojun HE

Professor of Economics and Management & Strategy, HKU Business School

Director, HKU-Jockey Club Enterprise Sustainability Global Research Institute

A Quick Summary of the Paper

- Transition to Green Debt:
  - A comprehensive global analysis of green debt (including green bonds and green loans), examining their growth, distribution across different firm sizes
  - Assesses the impact of green debt using an LP-DID setting

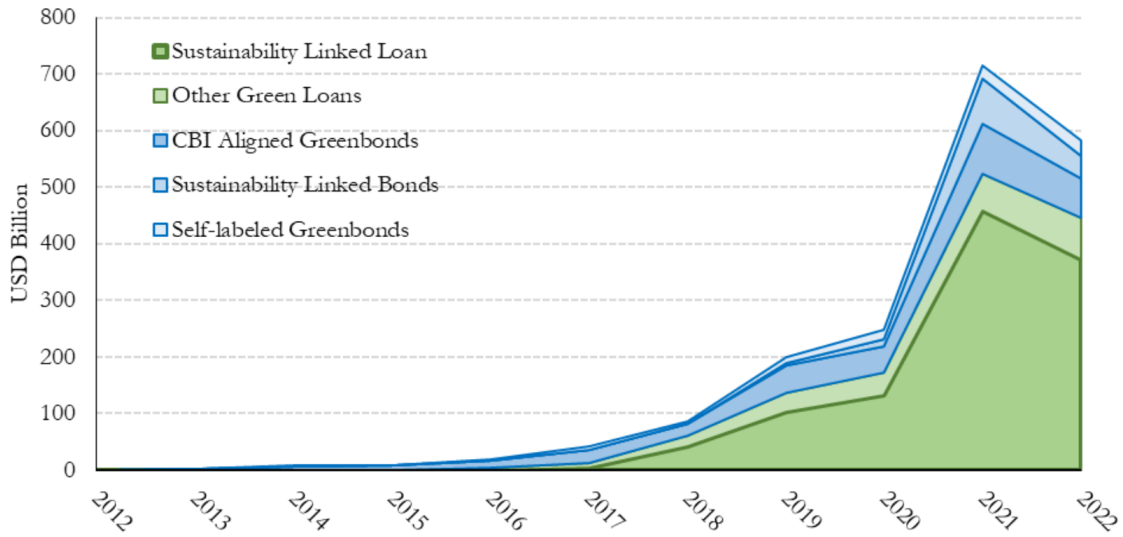
- Key Findings:
  - Large firms drive the green debt transition
  - Smaller firms have limited engagement in the green debt market
  - Green bonds expand total debt to support firm growth
  - Green loans often replace conventional debt and have a stronger impact on reducing CO2 emissions

What bothers me (a little)?

- What drives the surge in the issuance of green debt worldwide?
  - Increase in Sustainability Linked Loan
  - This might be caused by the introduction of the concept and the definition standardization
    - Introduction in 2017
    - The Sustainability Linked Loan Principles (SLLP), established in 2019

- Suggestion:
  - Explain the classification methodology and ensure consistency
  - Look into the details of green debt and loans and adopt a consistent definition

Share of green debt in total debt issued



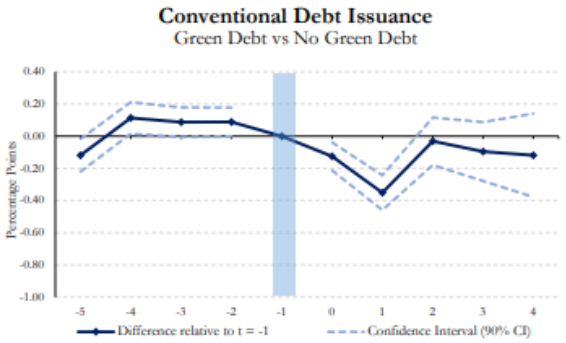
What bothers me?

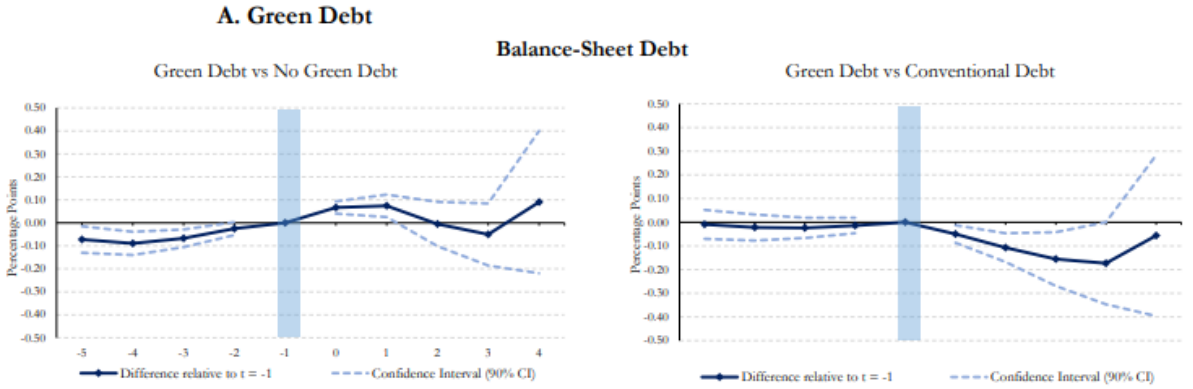
- The endogeneity of green debt issuance:
  - Green and conventional debt issuers are not quite comparable.
    - Size, income, total outstanding debt, income, CO2 emissions, and CO2-to-income ratio
  - Whether adopting green bonds or loans is also endogenous
    - Capital market vs. banks

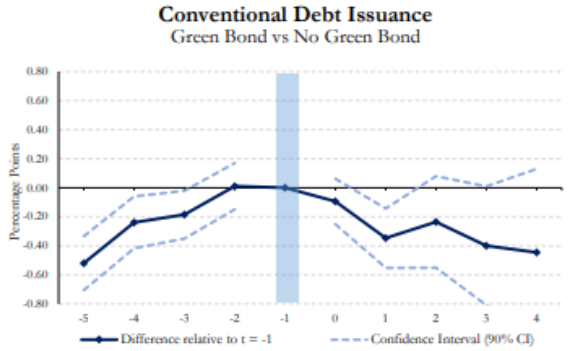
- Suggestion:
  - Providing more institutional details on green debt issuance, especially how firms would choose between green bonds and green loans
  - Try to find better identification strategies

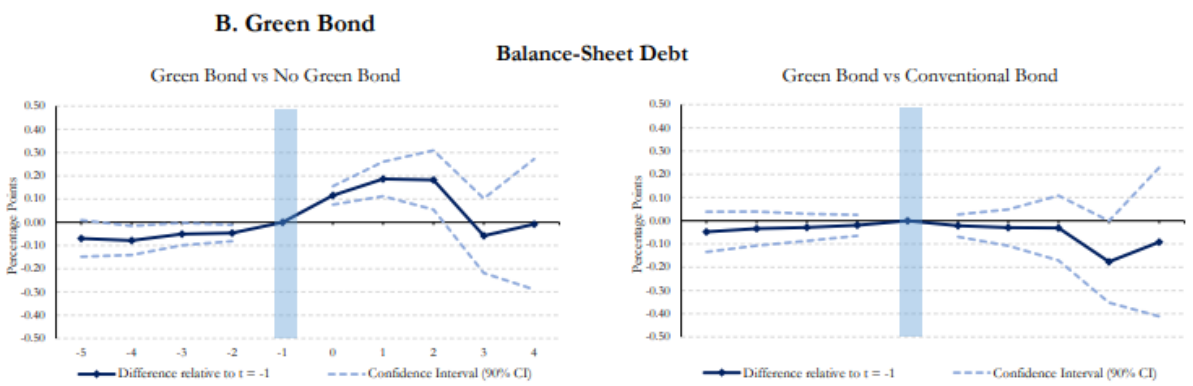
What bothers me?

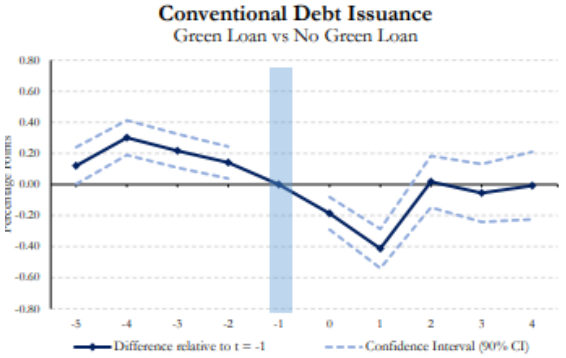
- The LP-DiD Setting

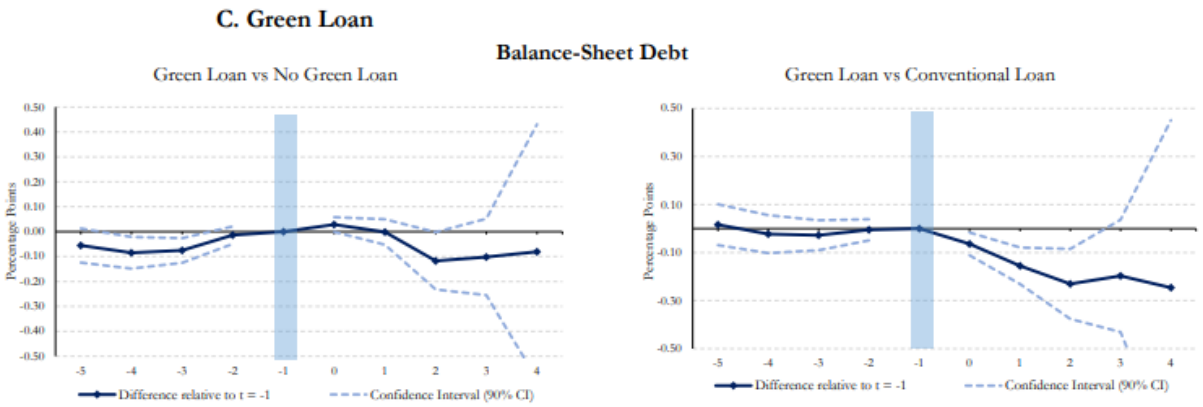










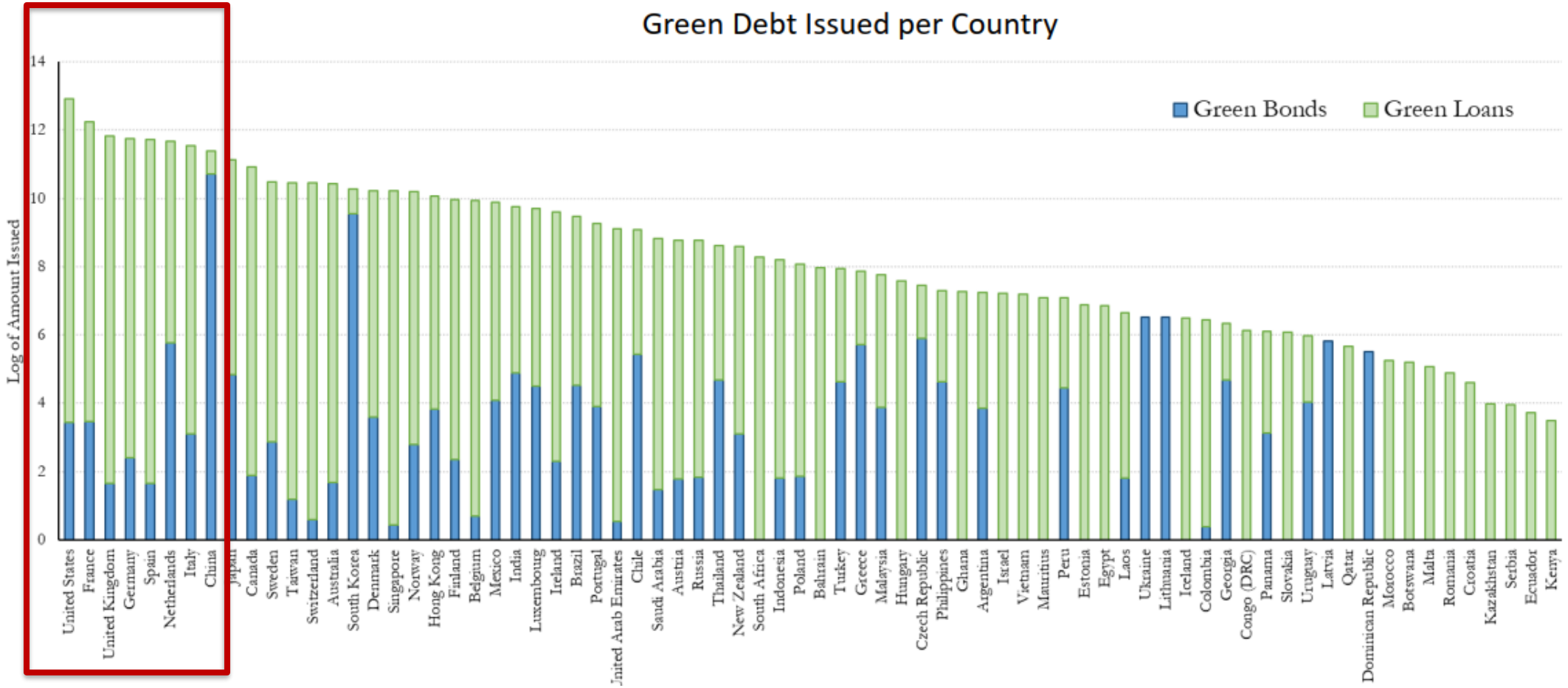


What bothers me?

- Can we conclude that green loans are more efficient?
  - Heterogeneity results cannot support this conclusion, as the "loan vs debt" decision is endogenous.
    - Project plan, purpose, approval requirements, funding sources
  - Significant regional differences in green debt adoption (EU/U.S. on loans vs. China's for bonds?).
    - US leads in green bond issuance (Statista,2025), but results show bonds issued by U.S < China?

- Suggestion:
  - Explore the channels through which green loans can achieve greater CO_2 emission reduction?
  - Green loans might be tied to performance-based conditions like sustainability-linked interest rates?
  - Monitoring or enforcement differences?
  - Country difference?
  - Investigate and clarify the mechanisms behind the higher environmental efficacy of green loans.

What bothers me?



Minor Suggestions

- Credibility of carbon data

- Sample representativeness from different data sources:
  - SDC, GOVSRCH, GBI, MSCI, LSEG, Worldscope
  - The origins of these data sources
  - What types of firms are represented in the dataset

- Typos and missing references:
  - Dube et al. (2023), etc.

- Clear figures and tables:
  - Show standard errors of coefficients in Tables 4-6
  - Figure 4, Panel C shows that shares of green loans and bonds could exceed the share of total green debt?