DATA GAPS AND NEEDS FOR SUSTAINABLE FINANCE RESEARCH

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DATA GAPS AND DATA NEEDS

• Where do “data gaps” come from?
• Data gaps
  • For investors
  • For researchers and policymakers
• Short-term solutions
WHERE DO DATA GAPS COME FROM?

1. **Complexity** of the problem involving climate risks and the economic response

2. **Incentives**: disclosures tend to be punished by markets (Bolton and Kacperczyk 2020) and targeted by regulators
   - Would not expect them to happen voluntarily
   - “Greewashing” (biased reporting) and “Leakage” (shift polluting activities out of the firm)

3. **Unclear target**: often unclear what “climate risks” even are, which affects what data gets produced
   - E.g., ESG scores widely disagree because it’s not clear what they are supposed to measure

4. **Uninformative markets**: we often can rely on markets to learn information, but in this all are symmetrically uninformed
   - Markets still useful, e.g. to learn long-term discount rates (Giglio et al. 2015)
DATA GAPS FOR INVESTORS

• Most fundamental question **for investors** is: which companies gain and loose from climate risks (transition / physical)?
  • I.e.: risk exposures

• Where are the largest **data gaps** in figuring them out?
  • Current emissions (especially Scope 3, which may affect firms via regulation and input/output)
  • Future emissions (endogenous to future regulation and the path of climate)
  • Other sources of exposures to risks (depend on business and industry, huge variation)
  • Access to data from integrated climate models (e.g., projections, scenarios that can speak to specific firms exposures)
  • Technology and R&D that can shield companies from climate risks
DATA GAPS FOR RESEARCHERS

• Task is harder for researchers and policymakers: need to go beyond the firm level and also think about general equilibrium effects and optimal policy

• Additional data gaps relevant for researchers/policymakers:
  1. Investor motivations
     • Why do investors care about climate risks?
     • Ethical consideration vs. risk-hedging considerations
  2. Anticipate firms’ response to climate policies (e.g., relocation)
  3. Allocation of emissions across the network (Scope 1 vs. 2/3)
  4. Systemic risk implications (e.g., interaction of financial externalities and climate exposures)
1. Standardization
   • Coordinate on measures of climate exposures (targets)

2. Information production requirements
   • Mandate disclosures

3. Verification of information
   • Private or public

4. International cooperation
   • Harmonize data reporting/collection across countries
   • Prevent leakage

5. Better integration/access to data from physical climate models