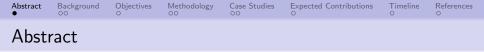# Constructing a Cross-Border Insolvency Dataset and Linking it to Climate Change

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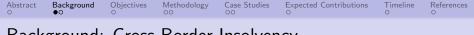
World Bank
Washington D.C., November 21, 2024

Abstract

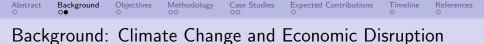- Aim: To construct a multi-country dataset on cross-border insolvency cases and explore its links with climate change.
- Build on the experience of creating the MREID dataset (Ahmad et al., 2023).
- Validate the approach using two case studies:
    - Water scarcity and tourism in Cancún, Mexico.
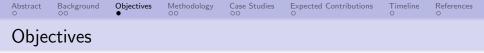   - Flood impacts in Valencia, Spain.

Background: Cross-Border Insolvency

- Cross-border insolvencies involve complex jurisdictional and creditor relationships.
- Lack of comprehensive data limits systematic study.
- Proposal builds on the MREID dataset:
  - Tracks multinational revenue, employment, and investment.
  - Published in USITC Economics Working Paper 2023–11-B.

Background: Climate Change and Economic Disruption

- Climate change increases economic vulnerabilities:
    - Extreme weather events disrupt industries.
    - Rising temperatures threaten resource availability.
- Vulnerable sectors (e.g., tourism, agriculture) face heightened insolvency risks.

Objectives

1. Construct a comprehensive dynamic, multi-country dataset on cross-border insolvency cases.
2. Investigate how climate change amplifies insolvency risks.
3. Validate findings with case studies in Mexico and Spain.

Methodology: Dataset Construction

- **Data Sources:**
    - Public insolvency filings, court records, and financial databases.
    - Environmental and climate vulnerability indices.
- **Variables:**
    - Jurisdiction, industry, firm size, creditor structure, climate metrics.
- **Framework:** Adapt modular structure of MREID.
- **Validation:** Cross-reference data with case studies and reports.

Methodology: Research Design

- **Hypothesis:** Climate change increases cross-border insolvency risks.
- **Analysis:** Correlate climate variables with insolvency rates.
- **Tools:** Econometric models ((Structural Gravity Equation) and case-specific analysis.

Case Study 1: Cancún, Mexico

- **Context:** Rising temperatures threaten water quality.
- **Data:** Census data, FDI in tourism, water quality and temperature trends.
- **Analysis:**
  - Link water scarcity to insolvency risks in tourism.
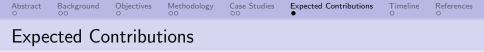 - Evaluate effects on foreign investor confidence.

Case Study 2: Valencia, Spain

- **Context:** Extreme floods disrupt local businesses.
- **Data:** Insolvency filings, meteorological and flood reports.
- **Analysis:**
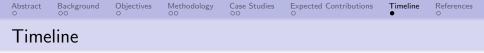 - Assess insolvency trends pre- and post-flood events.
  - Examine cross-border creditor implications.
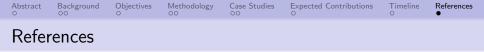
Expected Contributions

- Provide a scalable and replicable insolvency dataset.
- Offer insights into how climate change exacerbates insolvency risks.
- Support policymakers in designing interventions for vulnerable industries.

Timeline

- **Months 1–6:** Dataset design and preliminary data collection.
- **Months 7–12:** Analytical framework development and initial analyses.
- **Months 13–18:** Case study validation and dataset refinement.
- **Months 19–24:** Final report preparation and dissemination.

References

Ahmad, S., Bergstrand, J., Paniagua, J., and Wickramarachi, H. (2023), *"The Multinational Revenue, Employment, and Investment Database (MREID),"* USITC Economics Working Paper 2023–11-B.