*11th Biennial IFC Conference*

# Post-pandemic landscape for central bank statistics

## Session 3.B – Environmental Statistics

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*The views expressed in them are those of their authors and not necessarily the views of the BIS or Deutsche Bundesbank.*

# Session on sustainable finance: Five papers covering different ground

→ All contributions address very relevant policy questions and come up with tangible findings

- **ESG indicators**
  - Micro database on ESG indicators for Spanish firms (Fernández-Rosillo)
  - Materiality of ESG factors in financial markets / statistics (Slovik & Azman)
- **Carbon footprint / Emission profiles**
  - Carbon footprint of loan books of Spanish banks (Maza)
  - Emission profiles of green ETFs (Yalcin-Roder et al)
- **Climate risk**
  - Forward-looking physical risk indicators at sectoral and country level (Fehr / Triebskorn)

# Findings of recent IFC report (2021) & focus of the five studies

- **Findings**
  - *The demand for sustainable finance data is growing,* especially on: physical risk, emission trading, energy use / pricing, climate targets (emission footprint, volumes, ESG ratings)
  - *The availability of sustainable finance statistics is growing*, driven by various stakeholders, including central banks and public sector institutions, but also private stakeholders
  - *Yet, there are important data gaps*, eg granular firm-level data and forward-looking indicators, owing to a lack of standardisation (frameworks / taxonomies at the international level)
- **Recommendations**
  - Intensify identification of data needs to pursue policy work
  - Cooperation between traditional & new stakeholders to close gaps
  - Central Banks to lead in improving data use

# Overarching questions to answer

- Motivation: Establish meaningful standardised high-quality (granular) data needed to:
  - Measure exposures to climate change and climate risk *(→ all five studies)*
  - Gauge materiality of potential implications of climate change on the economy and financial stability (*→ all five studies, to a different extent*)
  - Evaluate impact (eg scenario analysis for the transition phase and longer-term) *→ very challenging, subject to international work (NGFS, FSB)*
  - Design policy measures, eg to facilitate investment in ESG financial assets and/or to mitigate financial stability issues

    *→overarching finding: need to close data gaps and to improve data quality*

# ESG indicators: where do we stand? (Fernández-Rosillo)

- Status quo for ESG indicators for firms, based on data from Spain:
  - Gaps in scope, standardisation and format (not all data in electronic format)

  → *At this stage it is very difficult to establish consistent data at the firm level*
- Potential solutions to deal with data gaps and quality:
  - Identify key data needs → 120 ESG indicators by Fernández-Rosillo
  - Use Machine Learning and Natural Language Processing to establish high quality data, based on a structured research design → Fernández-Rosillo had to cut down to 39 indicators

  →First best solution: Need more comprehensive ESG regulation, ideally at the international level, with a broad scope of market participants → *takes time*

  → *Question to presenter(s): what is second-best solution for the near-term?*

# ESG indicators: where do we stand? (Slovik & Azman )

- Study suggests that ESG assets have reached a systemically-relevant share
  - ESG share for: Debt securities >10%; for: Mutual funds and ETF: 7%; E dominates (green bonds)
  - Milestones suggest further growth in ESG assets
    - Majority of largest US firms issue sustainability reports
    - ESG factors integrated into financial markets through signatories of Investment Principles for Responsible Investment, suggesting further growth of ESG financial assets
- Need for two types of indicators:
  - Risk perspective (ESG impact on risk profile, performance)
  - Sustainability perspective (Impact of investment decisions on sustainability)

→ *Ultimate risk is based on both dimensions*

→ *Question to presenter(s): Do you suggest to augment credit risk approaches? If so, how?*

# Carbon footprint of Spanish loan books (Maza)

- Seminal study (no internationally agreed methodology), proposing potential indicators to be used to assess transition risks
- Relevant indicators:
  - Carbon footprint in the economy: Emissions per production unit, with indirect effects (Input-Output table), at sectoral level (NACE) and aggregate series
  - Carbon footprint of loan books: computed based on the share of loans to different sectors, normalised by the average carbon footprint in the economy
  - *Action needed: use more granular data to improve estimates*

→*Questions to presenter(s):*

  - *How can the carbon footprint of the loan books be linked to financial stability considerations? (stress test?; are there mitigants – eg higher prices for loans, short(er) loans, more capital)*
  - *How difficult would it be to run an international analysis of this kind?*

# Emission profile of green ETFs (Yalcin-Order et al)

- *Analysis of differential investment strategy of self-proclaimed ESG ETFs*
  - *Finding: self-proclaimed ESG ETFs reduce emissions through a "sustainable sectors strategy", while they are not necessarily choosing "best in class" assets per sector*
  - *Policy proposals: improve data availability and transparency, both at the company and fund level*
- *Information gap: difficult to assess whether self-proclaimed ESG ETFs are more sustainable*

  *→Questions to presenter(s):*
  - *Is your sample representative?*
  - *Is "best in class" selection impeded by a lack of data and/or too costly at this stage or what else could be the issue? → ie will better data alone do the job?*

# Climate risk (Fehr and Triebskorn)

- *Objective: construct forward-looking physical climate risk indicators, which have been identified as a gap (NGFS, IFC)*
- *Use of vendor data suggests:*
  - *Lack of data in general, variation across providers, differences in definitions, inconsistencies over time*
- *Policy proposal*
  - *Short/Medium-term: CBs in a good place to construct physical risk data by combining climate-related data with financial data from vendors → eg for DGI-3*
  - *Longer-term: add more granular information on physical risks*

*Questions to presenter(s):*

- *Why do you think that we need much more time to run more meaningful analyses?*