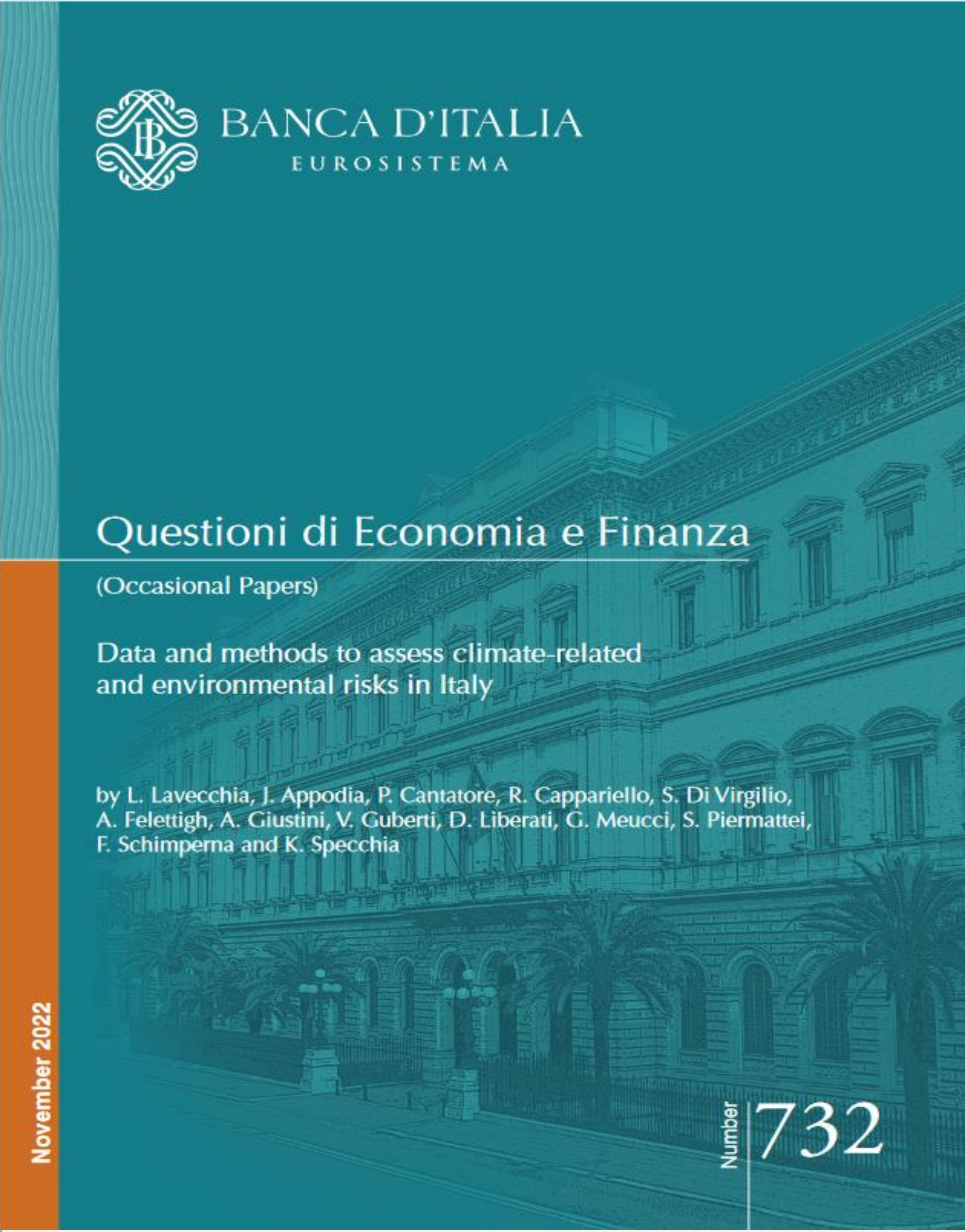


Data and methods to evaluate climate-related and environmental risks in Italy

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1. The data required for economic and financial analysis of climate risks

- Pressure from stakeholders to commit to Net zero; align firms' performances to climate benchmarks
- Define mitigation/adaptation plans
- Measure and manage physical and transition risks
- Decline climate scenarios

3. The available data

A quantitative assessment of the impact of climate and environmental risks on the financial system requires accessible and available data.

National and international organizations play a pivotal role in collecting the information and making it available for monitoring both physical and transition risks relating to the financial system and the micro and macroeconomic impacts of climate change, as well as to the transition to a new sustainable economy. This is a prerequisite to identifying and understanding climate and environmental risks.

From official statistical sources and other public resources	Eurostat' environmental accounts (AEA, PEFA, EW-MFA, EGSS, env taxes, EPEA); EU-ETS transaction log; Emergency Events Database (EM-DAT); E-PRTR; IMF and NGFS dashboards; Carbon monitor and GRACED; OpenStreetMap; ESTOFEX and ESWD; ISPRA; MITE; ARERA; NFR Observatory; Istat
Risk indicators	JRC Risk Data Hub, Agri4Cast, EM-DAT
Sustainable finance	UNEP-FI, Borsa Italiana, LSE, Euronext
Data on climate scenarios	NGFS (e.g. NGFS IIASA Scenario Explorer), MERIDA, CMCC

4. The available but not accessible data

- ☐ The Sistema informativo integrato (SII) by Acquirente Unico
- ☐ Sistema Informativo sugli Attestati di Prestazione Energetica (SIAPE) by ENEA

- **The sustainable data gap is concentrated :**
 - By theme: energy (use, prices, expenditure), for HHs and firms; GHG emissions; climate scenarios data; nat-cat insurance protection gap on properties.
 - By regulations: Pillar 3, CSRD;
 - By firm size: micro and SMEs.

Introduction

Assessing the sustainable data gap

Monitoring climate-related (and environmental) financial risks requires high quality and highly granular data. However, these are scarcely available, except for little data on a small number of counterparty firms. This paper sheds light on the sustainable data gap in Italy, with a special focus on the climate and environmental components. First, we take stock of the data needs arising from firms' transition plans, commitments to net zero, and financial analyses, as well as those stemming from international, European and national regulations, and from supervisory requirements. Second, we map the existing and available data regarding climate, energy, greenhouse gas (GHG) emissions, climate-related financial risks, as well as existing but inaccessible data. Finally, we identify any missing data, highlighting the areas that are most affected by the data gap.

Research questions

- What are the data requirements regarding climate change and sustainable finance?
- What data are already available?
- Where is the sustainable data gap in Italy?

2. The data required by supervisors

	Ante 2022	2022	2023	2024	2025	2026	
		Disclosure ESG as defined in the NFRD		Disclosure ESG as defined in the CSRD/EFrag schemes			
		Large listed undertakings, banks, insurances (relevant Public interest entities - PIEs)		Relevant PIEs	Relevant PIEs and large non-listed undertakings	(As 2023) + listed SMEs, small and non-complex credit institutions and captive insurance undertakings	
Scope							
Taxonomy Reg.							
NFCs within the NFRD/CSRD's scope		• % of Capex, Opex, turnover from taxonomy eligible activities.	• % Capex, Opex, turnover from taxonomy aligned and taxonomy eligible activities.				
Banks within NFRD/CSRD's scope		• % Total assets from taxonomy eligible activities.	• Green Asset Ratio (GAR) for lending and debt assets from firms covered by the NFRD/CSRD, computed according to the Capex and turnover from taxonomy aligned activities; % of guarantees from taxonomy aligned activities.				• % revenues from services different from lending from taxonomy aligned activities and GAR from trading activity
Insurances within NFRD/CSRD's scope		• % Total assets from taxonomy eligible activities. • % Total non-life insurance gross premiums written from taxonomy eligible underwriting insurance activities	• % Total assets from taxonomy aligned activities. • % Total non-life insurance gross premiums written from taxonomy aligned underwriting insurance activities				
Pillar 3							
Large Institution		• Quantitative and qualitative disclosure of ESG risks		• Integration of quantitative disclosure with the Green Asset Ratio (GAR).			
All banks				• Integration of quantitative disclosure with the Banking Book Taxonomy Alignment Ratio (BTAR), scope 3 GHG emissions and alignment metrics.			
Pillar 2/3				• Extension of Pillar 3 to all banks			
Insurances		• Identify any material exposure to climate change risks and, where relevant, assess the impact of climate change scenarios on their business (in the ORSA Report and public disclosure)					
Insurances		• Investments broken by NACE code, data on taxonomy eligible activities, on carbon footprint and green bonds. Data on nat cat risk impact underwriting and on taxonomy eligible insurance activities					

5. CONCLUSION

The sustainable data gap to be bridged by financial intermediaries is especially wide.

Data provided by third parties are granular but broadly limited to large public corporations; moreover, the information provided is of lower quality and is less comparable than that produced by the official statistical authorities.

- The financial system is trying to do its part **but the lack of data is harming the transition and protection against physical climatic risks**;
- **High-quality** granular data required for: internal analysis, commitments, and regulations;
- Several **public** sources might be exploited to fill the gap;
- Still, the sustainable data gap persists (energy, GHG emissions, Pillar 3/CSRD, SMEs, insurance protection gap, reconstruction Costs);
- Need to foster cooperation/coordination among institutions and stakeholders (more to come).

This work provides a first review of the data needs and a selected collection of the public resources available, to partially meet such needs. It is also a first attempt at identifying the existing sustainable data gap, leaving to future works the identification of specific proposals to reduce the data gap

•Contents

1. The data necessary for the economic and financial analyses of climate risks

- The analysis of climate risks for firms
- Business transition plans and the use of climate scenarios

2. The data necessary for financial intermediaries to respond to requests from supervisors .

- The general framework
- Disclosure requirements
- The European taxonomy of sustainable investments
- Pillar 3 disclosure requirements
- Insurance specific surveys

3. Available data

- Statistical sources on environmental phenomena
- Risk indicators
- Green Finance
- Climate scenarios

4. Available but not accessible data

5. Conclusions

Bibliography

2.1. IVASS Monitoring of risks from natural catastrophes and sustainability.

Monitoring is aimed at collecting hard evidence (by October 2022), in line with objective no. 2 of IVASS' Strategic Plan for 2021-2023 and with the commitments undertaken on the COP 26 Finance Day, for the purposes of:

- i) analysing, at micro and macroprudential level, the possible impacts of transition risks and physical risks on insurance undertakings;
- ii) identifying potential material elements of vulnerability in terms of system and financial market stability;
- iii) monitoring the level of insurance penetration at national level;
- iv) assessing the alignment of national regulations with European legislation;
- v) effectively guiding sustainable finance work in a national and international context.

Documents: some references

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