



# Statistical data needs on sustainable finance for central banks

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# Introduction

- How to apprehend the sustainability notion: definition vs taxonomy.  
LU taxonomy version (Section 1)
- Sustainable database needs and the role of central banks (CB):  
Some European experiences.  
LU sustainable bonds (Section 2)
- Recommendations for CB database users  
Repository and international cooperation (Section 3)

## Section 1 Definition vs Taxonomy (1/2)

### ➤ Definitions

- a- Pricewaterhouse Coopers Consultant (2013)
  - b- Höhne et al.(2012)
  - c- United Nations Environment Programme (UNEP)
- etc.

Why should we condense the complexity of a variable into a unique definition (Lindenberg, 2014)?

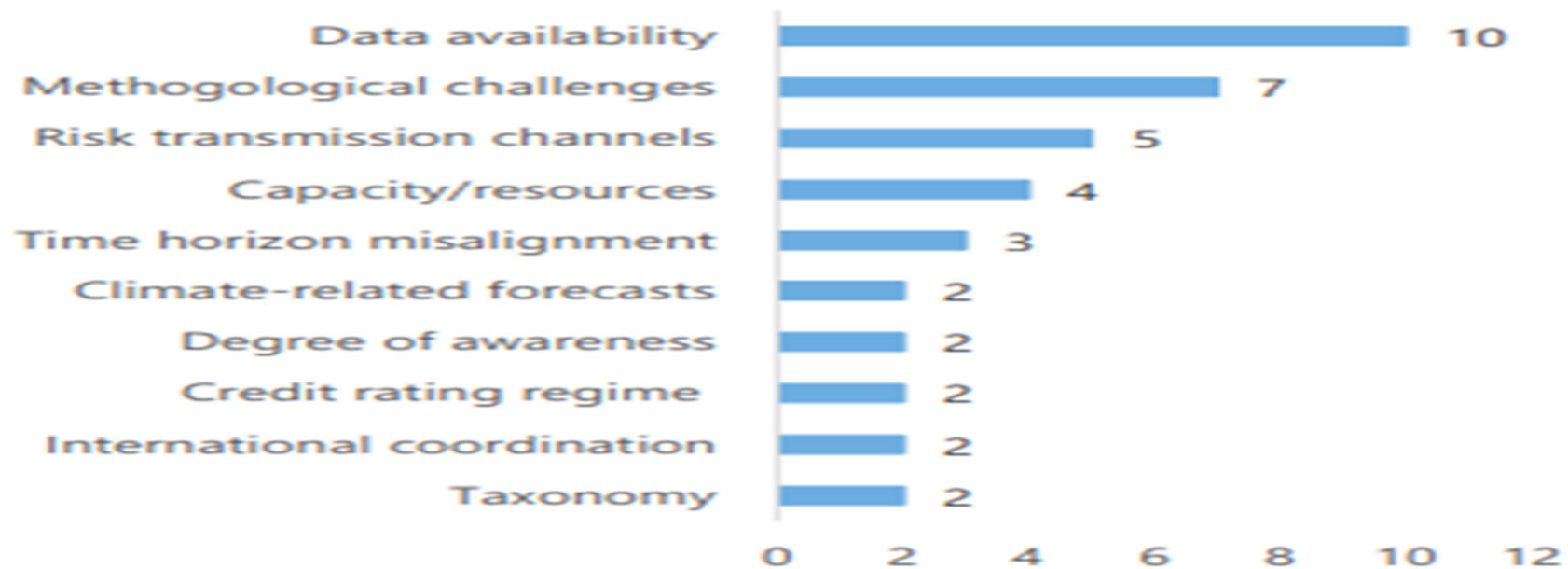
## Section 1 Definition vs Taxonomy (2/2)

- Taxonomy sample for EU, FR, **LU** and NL (based on OECD works)

|  | LU<br>Definit<br>ions | EU<br>Taxono<br>my | France<br>Definit<br>ions | Netherla<br>nds<br>Definitio<br>ns |
|--|-----------------------|--------------------|---------------------------|------------------------------------|
| <b>Sources</b>                                       |                       |                    |                           |                                    |
| Sovereign Green Bond                                 | X                     |                    | X                         | X                                  |
| Green loans definitions in legislation <sup>45</sup> | X                     | X                  | X                         | X                                  |
| <b>Incentives</b>                                    |                       |                    |                           |                                    |
| Interest rate incentives                             | X                     |                    | X                         | X                                  |
| Tax incentives or subsidies                          | X                     |                    | X                         | X                                  |
| Monetary incentives policy/collateral                |                       |                    |                           |                                    |
| <b>Objectives</b>                                    |                       |                    |                           |                                    |
| Social objectives included                           | X                     | X                  | X                         |                                    |
| Climate change adaptation                            | X                     | X                  | X                         | X                                  |
| Climate change mitigation                            | X                     | X                  | X                         | X                                  |
| Water and marine protection                          | X                     | X                  | X                         | X                                  |
| Pollution prevention and control                     | X                     | X                  | X                         | X                                  |
| Waste and recycling                                  | X                     | X                  | X                         | X                                  |
| Ecosystems/Biodiversity                              | X                     | X                  | X                         | X                                  |
| <b>Sectors covered</b>                               |                       |                    |                           |                                    |
| Nuclear*   | X                     | ?                  |                           |                                    |
| Gas with emissions threshold                         | X                     | X                  |                           |                                    |
| Clean fuel   | X                     |                    |                           |                                    |
| Clean Coal (supercritical)                           | X                     |                    |                           |                                    |
| Hydro  | X                     | X                  | X                         | X                                  |
| Solar  | X                     | X                  | X                         | X                                  |
| Wind   | X                     | X                  | X                         | X                                  |
| Biofuels (biogas, biomass)                           | X                     | X                  |                           | X                                  |
| Power Transmission and distribution                  | X                     | X                  | X                         | X                                  |
| Energy efficiency                                    | X                     | X                  | X                         | X                                  |
| Green buildings/energy efficiency in buildings       | X                     | X                  | X                         | X                                  |
| Private passenger transport                          | X                     | X                  | X                         | X                                  |
| Public passenger transport                           | X                     | X                  | X                         | X                                  |
| Freight rail   | X                     | X                  | X                         | X                                  |
| Waterborne transport                                 | X                     | X                  | X                         |                                    |
| Water infrastructure                                 | X                     | X                  | X                         | X                                  |
| Clean water supply                                   | X                     | X                  | X                         |                                    |

## Section 2- Sustainable database needs and the role of central banks: European initiatives (1/2)

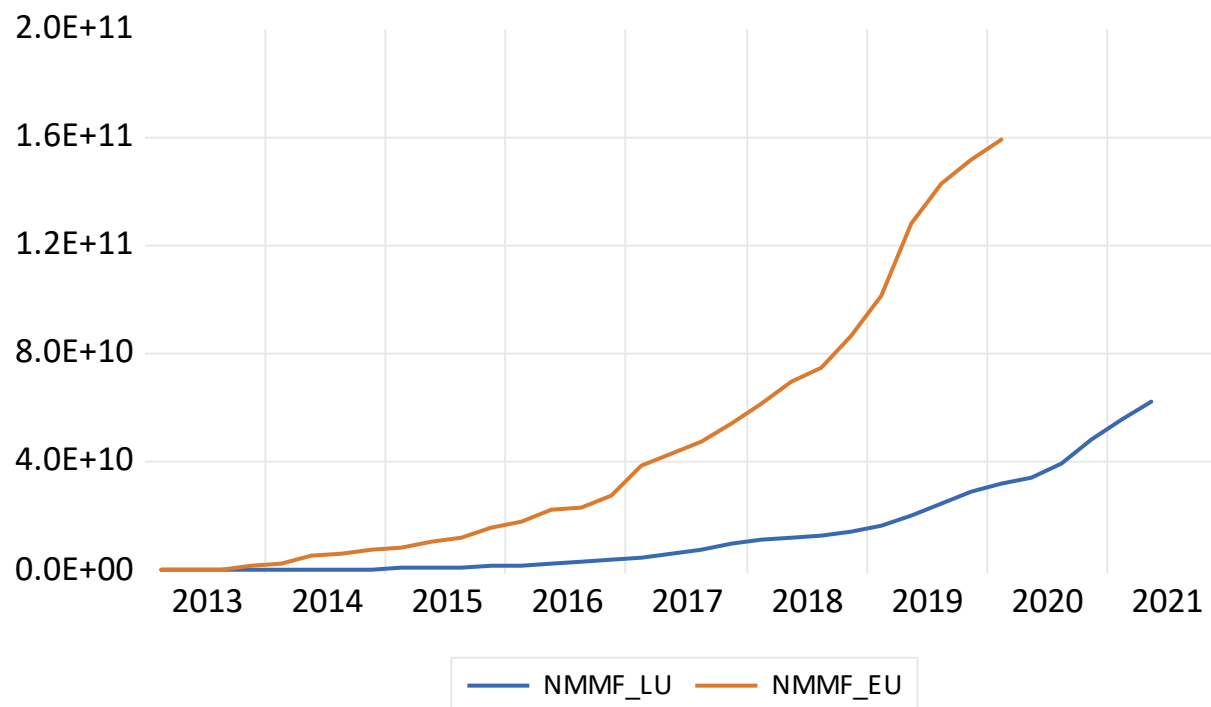
### ■ EU Surveys



Source: Basel Committee

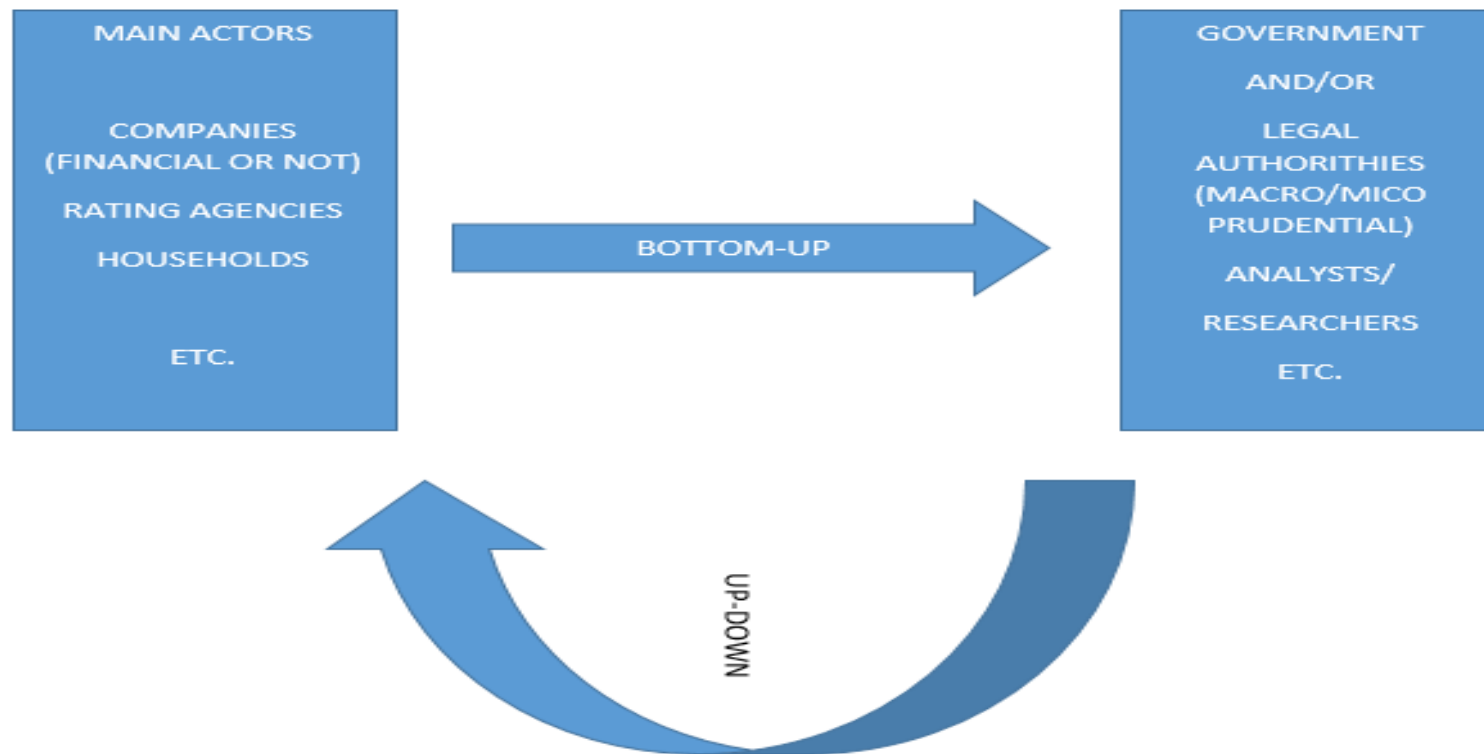
## Section-2- Sustainable database needs and the role of central banks: European initiatives (2/2)

- European and Luxembourg Sustainable bond holdings time series (Quarterly frequency, from 2013Q1 to 2021Q1, billion Euro)



## Section-3- Recommendations for CB database users (1/3)

- Bottom-up and top-down approaches



## Section-3- Recommendations for CB database users (2/3)

### ■ Dashboard vs Repository (i.e. Catalogue)

| Tools                | Pros   | Cons   |
|----------------------|--|--|
| Dashboard            | <ul style="list-style-type: none"><li>• Time saving approach for the producer</li><li>• Smart and customisable presentation</li><li>• Data and Graphs easily implemented and automated</li><li>• Synthetic approach (Presentation of key indicators for specific topics)</li><li>• Drill rapidly into details</li><li>• Real time approach</li><li>• For all users</li></ul> | <ul style="list-style-type: none"><li>• Limited information</li><li>• Lack of realism</li><li>• Limited objective</li><li>• Not flexible in case of information volatility (ex. Short term exogenous shocks)</li></ul> |
| Repository/Catalogue | <ul style="list-style-type: none"><li>• "Exhaustive" approach</li><li>• Real time approach</li><li>• Easily automated for the update step</li><li>• For all users</li></ul>  | <ul style="list-style-type: none"><li>• Time consuming approach (short-term implementation step)</li><li>• Overabundance of information /Too much information kills information</li></ul>                              |




# Section-3- Recommendations for CB database users (3/3)

- Orderly roadmap for a comprehensive and reliable data catalogue

| Recommendations                                     | Phase 1   | Phase 2   | Phase 3                             |
|---|---|---|-------------------------------------|
| <b>R1</b><br>Collaboration                          | Mandate an International Authority to endorse the role of leader<br><br>Main actors for the collaboration:<br>BIS,IMF, OECD, WB, Eurostat, <u>Eurosystem</u> statistical Directorates and National ESS etc. | academics institutions, Governmental and non-governmental organizations | Commercial providers                |
| <b>R2</b><br>Risks data priority                    | Transition risks  | Physical risks  | Other risks                         |
| <b>R3</b><br>Data quality control and harmonization | Collect information data (granular and aggregated)  | Involve experts in the informational content analysis                   | Provide labels of quality to users. |

# Conclusions

- The role of CB is crucial as data producers and data users given their missions and their historical backgrounds.
- Data lacuna, lack of quality and long term/historical time series unavailability are obstacles to the CB missions.
- Climate change is global therefore international cooperation is required.  
“If you want to go fast, go alone; if you want to go far, go together” (African proverb).
- Inclusion in the data collection of the digitalisation and the artificial intelligence (IA) sectors since 1/ they are energy consuming and 2/ they play (and will play) an important role for the data collection today (and tomorrow).



Thanks for your attention. For any questions and/or suggestions, do not hesitate to contact us at  
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