Measuring the development of French labeled funds and their contribution to the sustainable financing of the economy

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Motivation

- Are labeled funds more "environmentally-friendly" than non-labeled funds ?
- In France, two labels created in 2015: the *Investissement Socialement Responsable (ISR)* (best in class approach), and *Greenfin* (opt-out approach).
- In March 2021, the assets under management of the french labeled funds was about 399 billions euros

Overview

Data

Internal Banque de France database covering the balance sheets of all UCITS licensed and registered in France.

ESCB securities-by-securities database: the Centralized Securities Database (CSDB).

Three samples corresponding to different types of funds.

- The first one corresponds to the labeled funds.
- The second sample relates to unlabeled mutual funds using in their names a word related to the sustainability lexical field.
- The last sample corresponds to all the other funds, unlabeled and without any word related to the sustainability lexical field in their names

Portfolios' carbon footprint score

Carbon intensity score by portfolios at each period:

$$Portfolio\ score_{i,t} = score_i \times \frac{security_{i,t}}{total\ net\ assets_{i,t}} \tag{1}$$

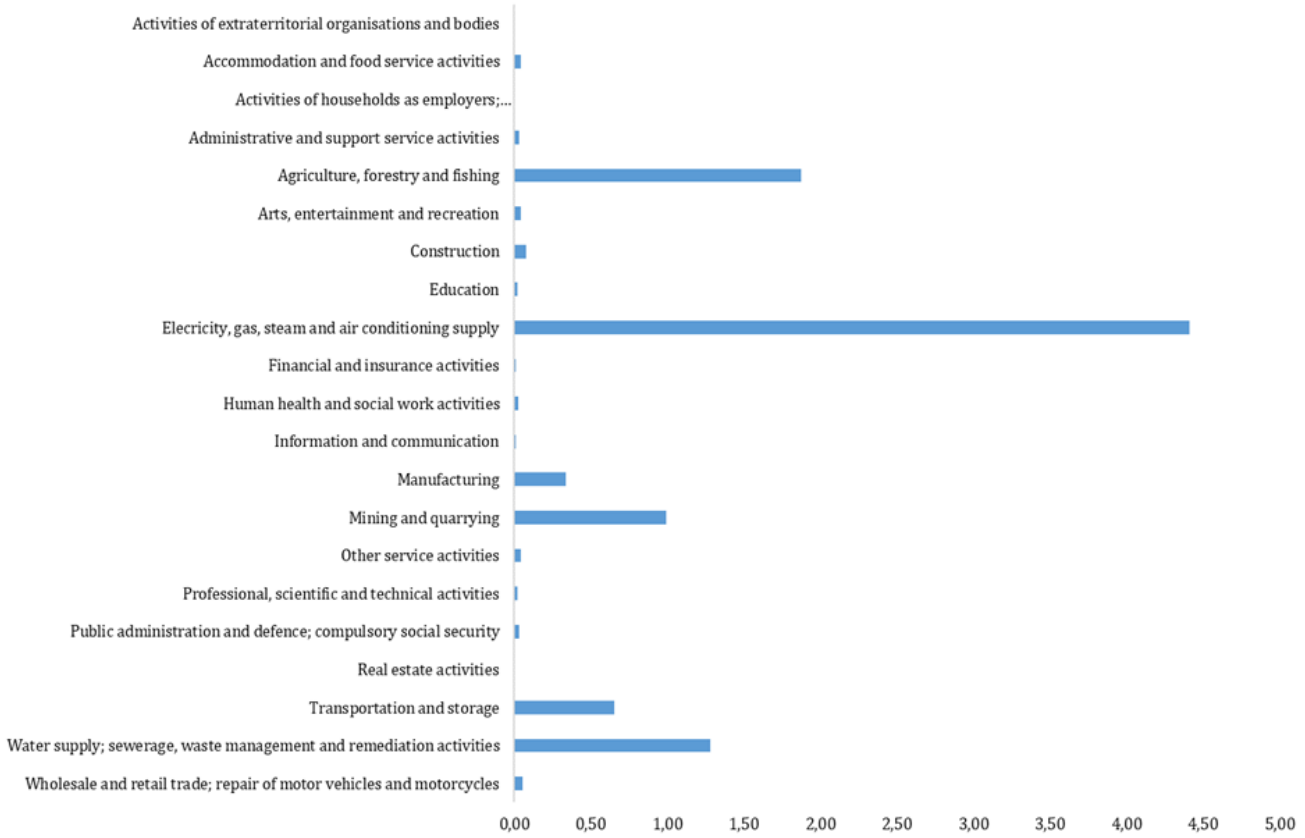
To construct an absolute score of carbon intensity by level-1 NACE sector.

- GHG emissions – expressed in CO_2 equivalent – by level-1 NACE sectors within the EU-28 from 2008 to 2019.
- Second, gross value added (in volume) per level-1 NACE sectors for the EU-28.
- Carbon intensity metrics by economic sector: expresses the average amount of CO_2-eq needed to produce a unit of value added.

$$Score_i = \frac{\left(\sum_{t=2008}^{2019} \frac{CO_2eq_{i,t}}{(\sum_{i=1}^{n} CO_2eq_{i,t})}\right)}{\left(\sum_{t=2008}^{2019} \frac{VA_{i,t}}{(\sum_{i=1}^{n} VA_{i,t})}\right)} \times 10 \tag{2}$$

Portfolios' carbon footprint score

Thanks to this method, we obtain an ordinal scale of level-1 NACE sectors according to their carbon intensity.



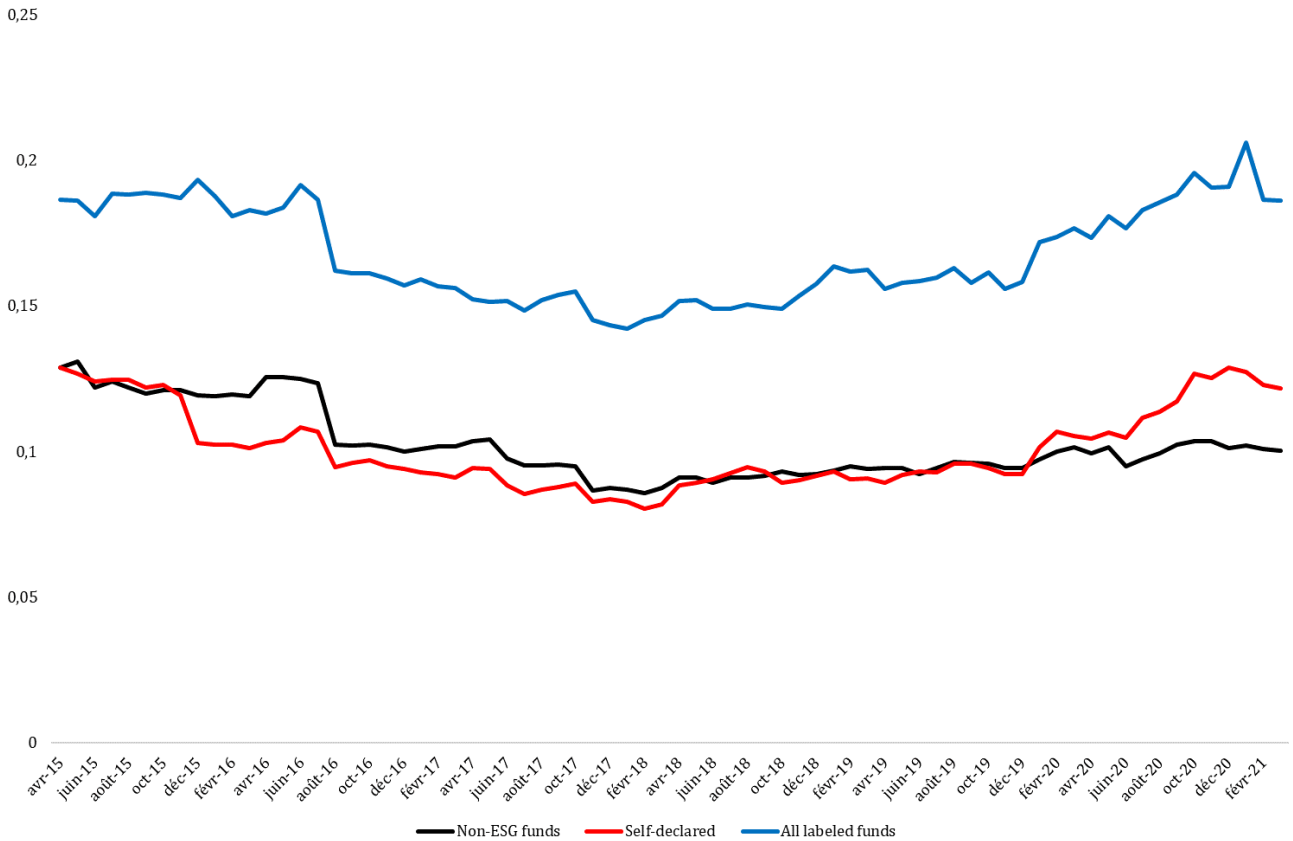
Green content of portfolios

To assess the green content of funds portfolios we use two different proxies:

- First, we use the share of securities issued by NACE sectors covered by the green taxonomy.
- Another proxy to assess the green content of portfolios, is to look at the share of GB. This method captures the final destination of the financial flows. However, it creates at the same time a sampling bias.

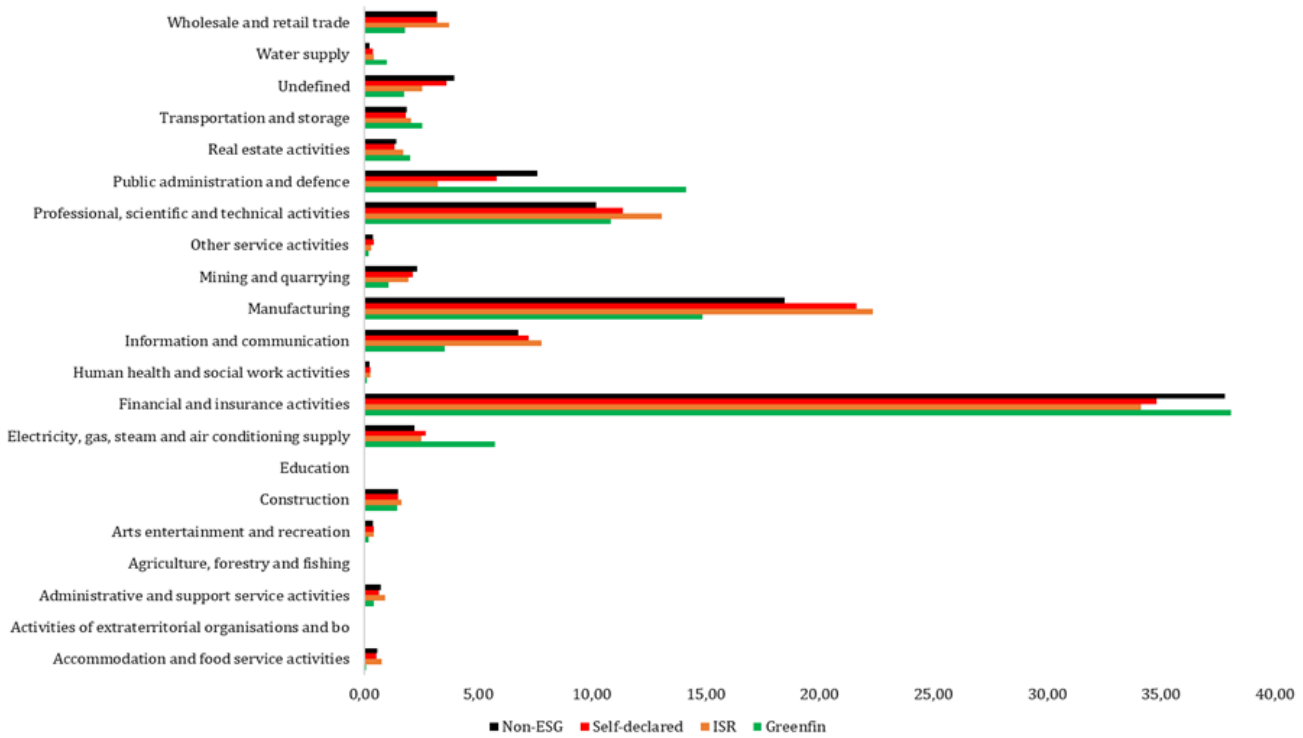
Portfolios' carbon footprint score

Labeled funds have, on average, a higher carbon footprint than the two other samples.



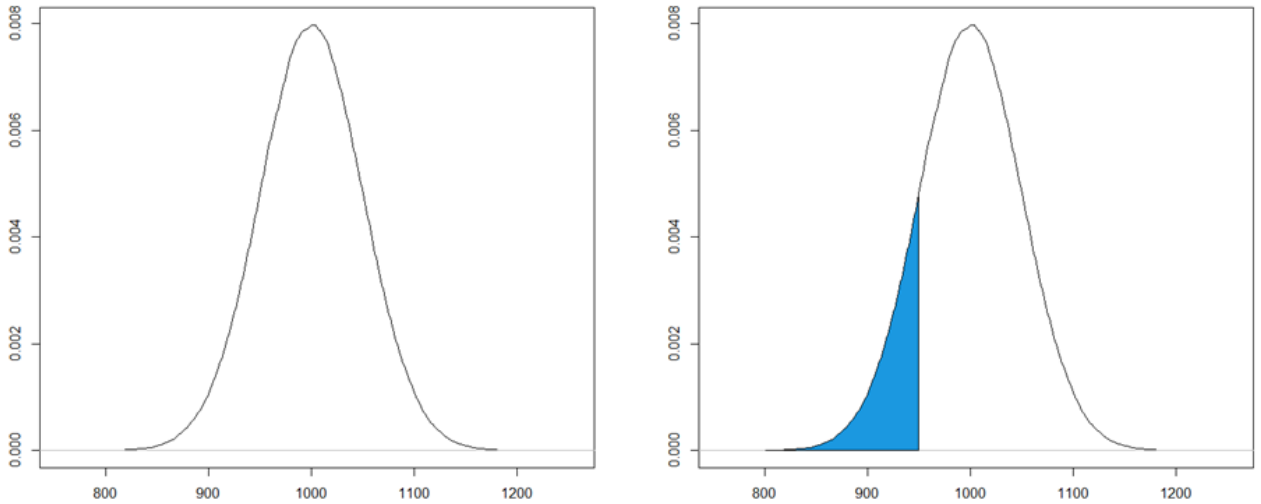
Portfolios' structure

The average portfolios structure per categories of funds explain partly the counter-intuitive results.



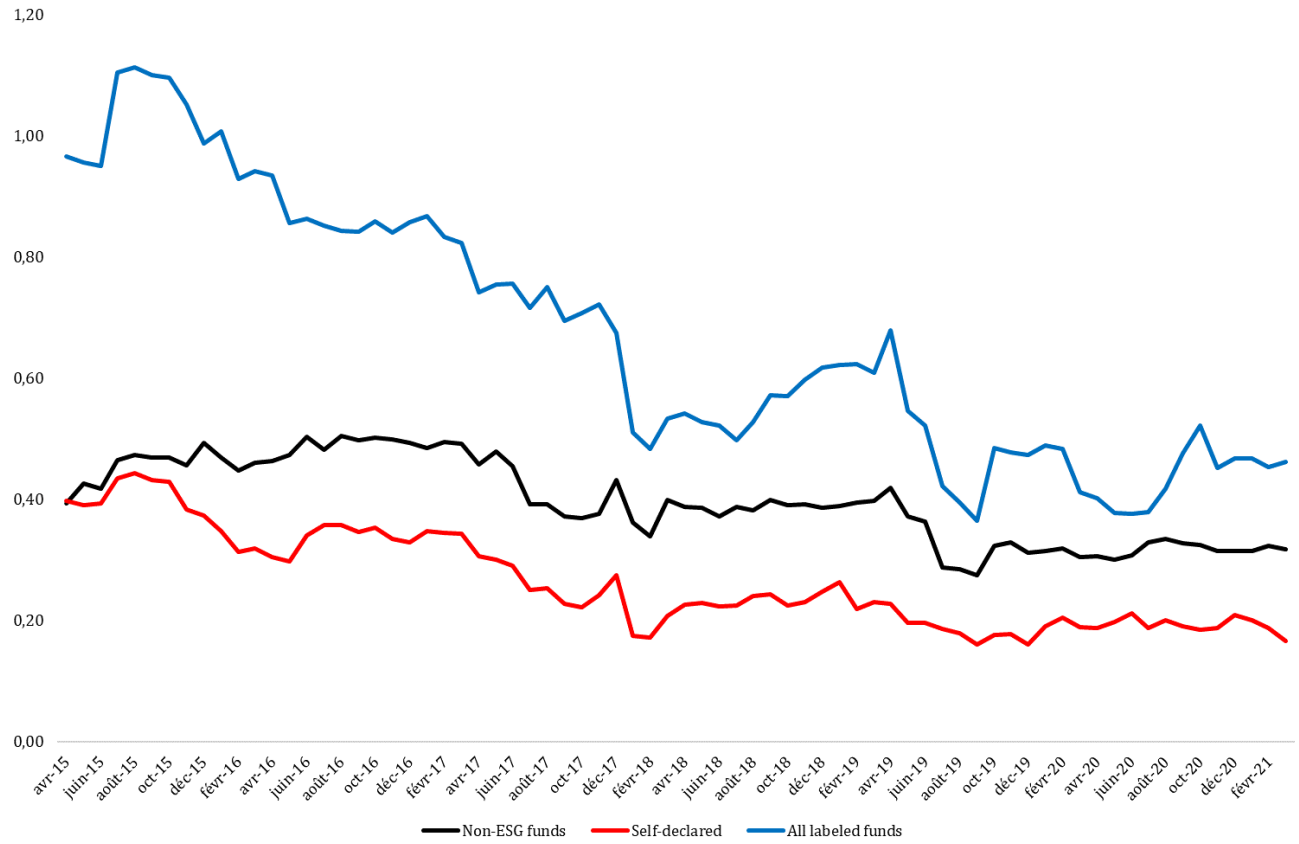
The shortcomings of the carbon footprint score

The counter-intuitive results also arise from an intrinsic bias of our method, specifically the lack of granularity of the NACE sectors does not allow taking into account the opt-out or best in class or best in universe approaches of the labeled funds.



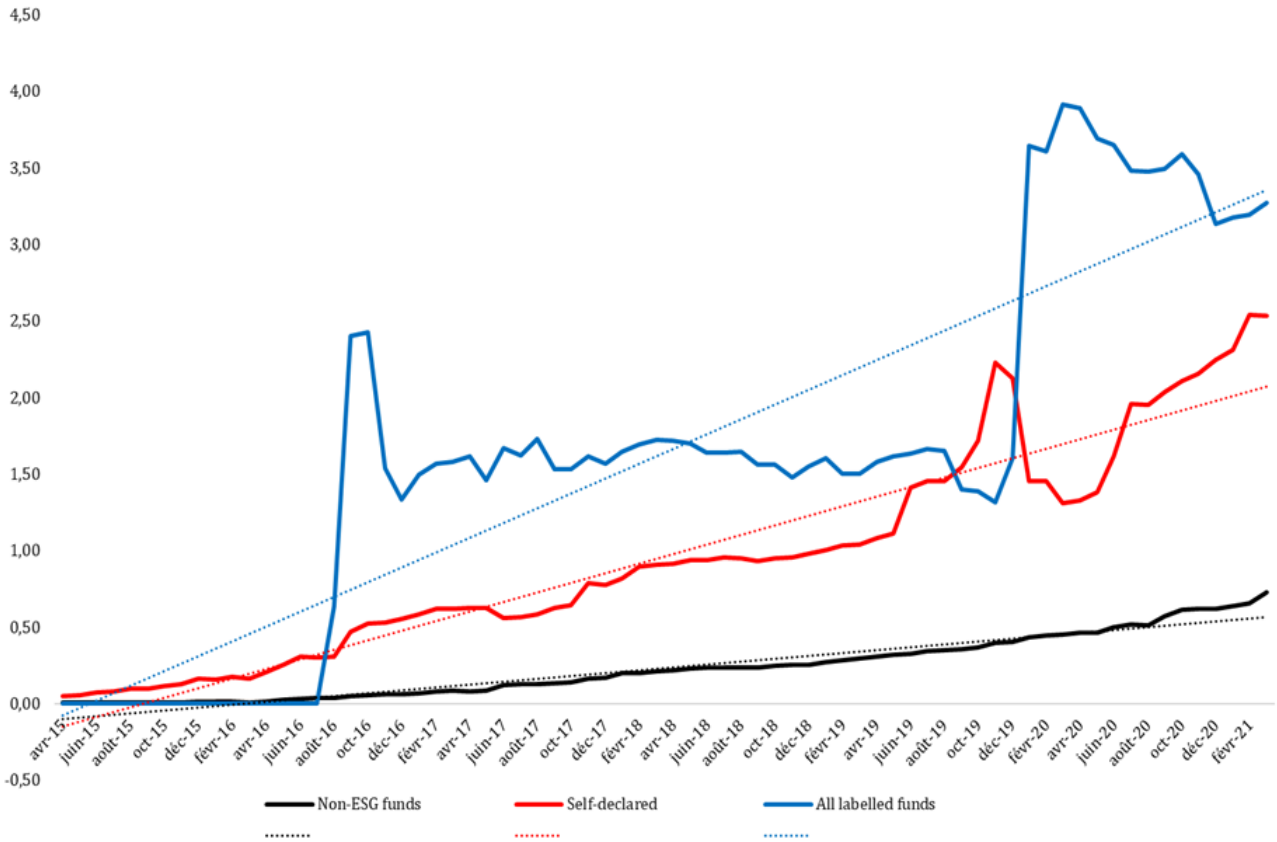
Share of securities by sectors covered by the EU taxonomy

Labeled funds have a higher share in the their portfolios of securities issued by sectors covered by the taxonomy; difficult to interpret given the low share of securities in portfolios.



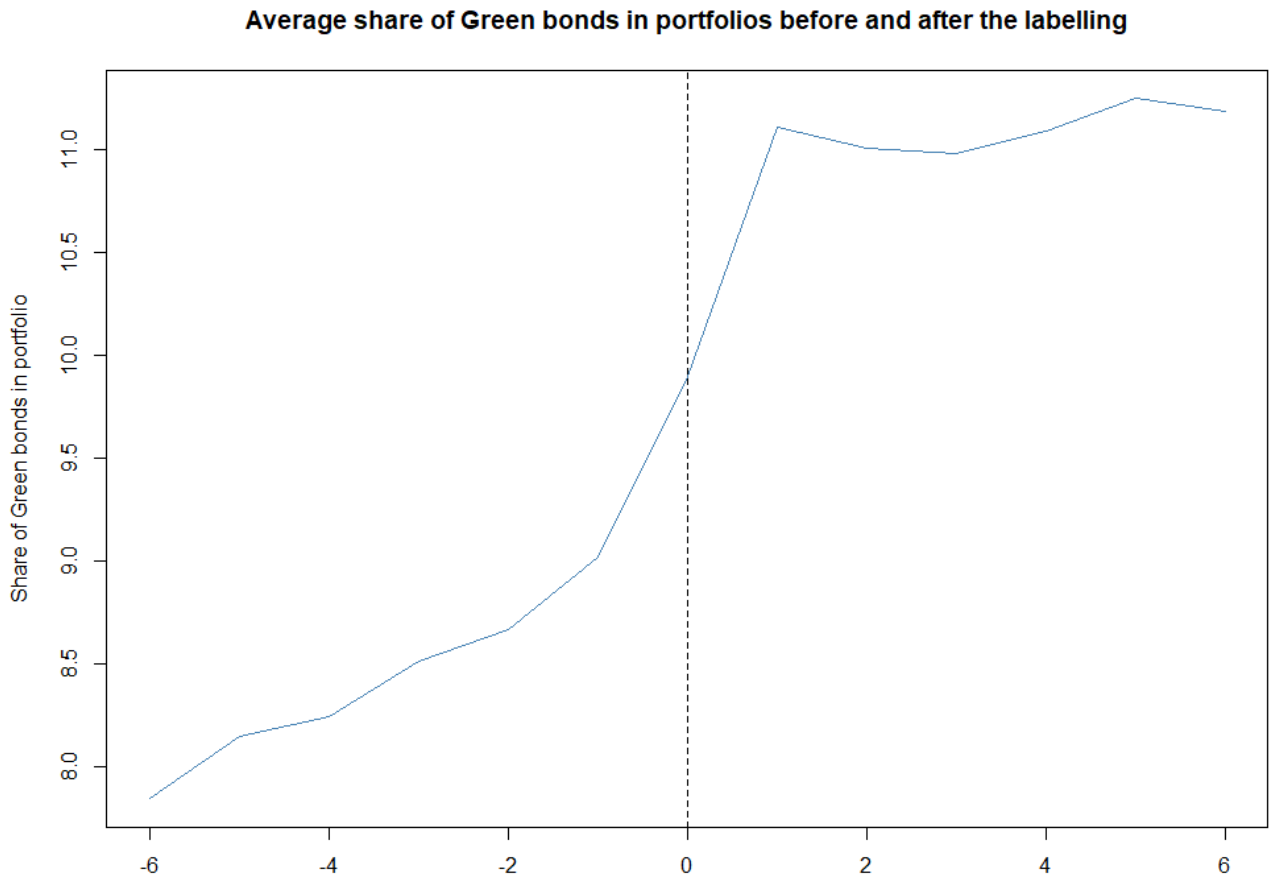
Share of Green Bonds in portfolios

Labeled funds have more, on average, GB in their portfolios than self-declared funds, and the latter have more GB than the Non-ESG funds. The trend is steeper for labeled funds than for self-declared funds and the trend of the latter is steeper than the Non-ESG funds.



Is there a label effect?

Up to 6 months before the labeling the share of GB in funds' portfolios is steadily growing, but the trend becomes less steep once the funds is labeled. There is on average more GB in newly labeled funds portfolios than before the labeling.



Is there a label effect?

We estimate the specifications (3) and (4). The coefficient β indicates by how much the share of GB changes, on average, once the funds have been labeled.

$$Y_{i,t} = \beta \times Event_{i,t} + \alpha_i + \varepsilon_t \tag{3}$$

$$Y_{i,t} = \beta \times Event_{i,t} + \alpha_i + \delta_t + \varepsilon_t \tag{4}$$

Table 2: Panel Data Regression

	Individual fixed effects	Individual and time fixed effects
Event	2.526***	3.344***
	(0.305)	(0.778)
Observations	1,014	1,014
R^2	0.959	0.959
Adjusted R^2	0.956	0.955
Residual Std. Error	4.849 (df = 937)	4.859 (df = 926)
F Statistic	284.292*** (df = 77; 937)	247.819*** (df = 88; 926)

Notes: Values in brackets are the standard errors. signif. codes: 0.01 *** 0.05 **0.1 *.

Concluding remarks

- The findings of this paper on French mutual funds suggest that level-1 NACE appears to be too broad a level of analysis to be used to precisely assess the carbon footprint of mutual funds' portfolios.
- Our work highlights the needs for granular data at the entity-level to precisely estimate not only the carbon footprint of financial institutions, but also the effectiveness of public policies contributing to climate change mitigation.
- Meanwhile, our work suggest that using granular data at the securities level allows to overcome some aforementioned shortcomings. In our opinion, looking at the GB share in portfolios is a good proxy to assess the green content of an investment strategy.

Thank you for your attention