Market-Based Green Firms

by Konrad Adler, Oliver Rehbein, Matthias Reiner and Jing Zeng

Discussion of the paper
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Outline

Research question

> The paper proposed a m**arket-based** measure of firms' **greenness**.

The paper is very topical

> “There is **no Plan B**, because there is **no Planet B**.”

Ban Ki-moon, UN Secretary-General, September 2014

In a nutshell

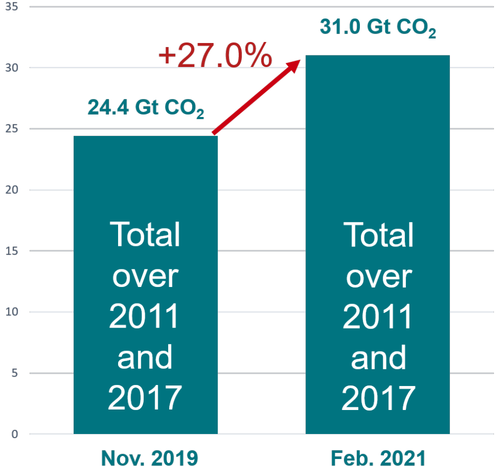
Key facts:

- $\boxed{6}$ = events
- $\boxed{\text{Abnormal returns}}$ = method
- $\boxed{\text{Climate risk}}$ = focus
- $\boxed{\text{2015–2019}}$ = time period

Outline

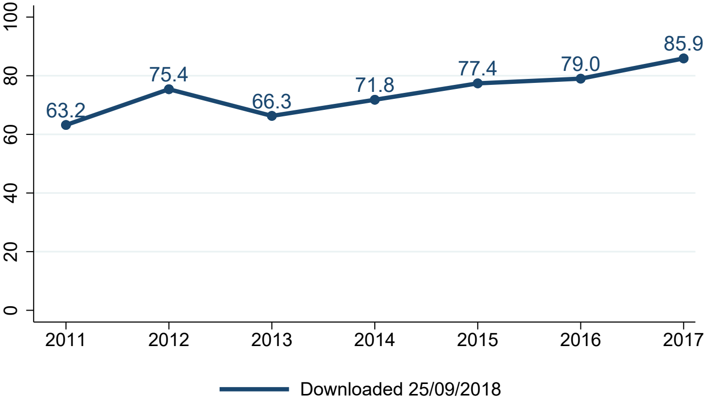
Comment #1: CO_2 data used in your paper

Between the two downloads in 11/2019 and 02/2021, **44% of carbon emission observations** (**Scope 1 CO_2 emissions**) have in some way been altered (Berg, Fabisik, and Sautner (2020)).



Comment #2

Comment #2: ESG rating used in your paper



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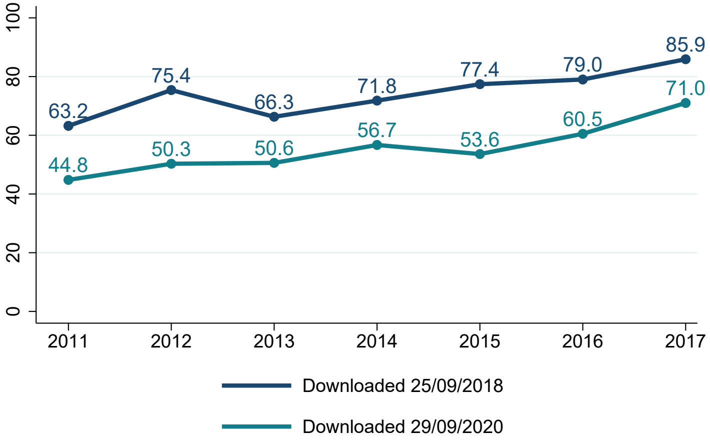

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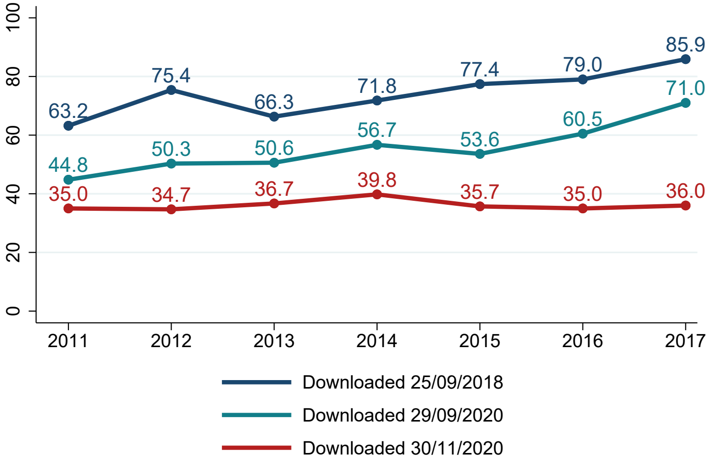
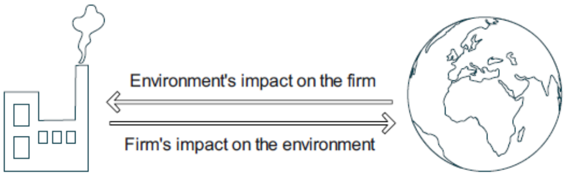


Comment #3

Comment #3: On the materiality

> **Double materiality** is an extension of the key accounting concept of materiality of financial information.

- According to double materiality is not just climate-related impacts on the company that can be material but also impacts of a company on the climate – or any other dimension of sustainability, for that matter (often subsumed under ESG label).



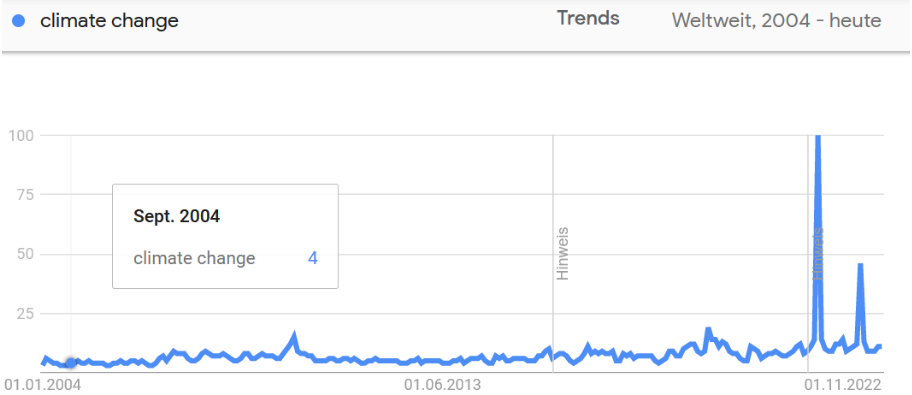
Comment #4

Comment #4: Future of “brown” firms

> “Hence, the Paris Agreement constitutes increased risk for companies with large CO_2 or equivalent emissions as new climate policies could render their business models unprofitable or lead to sunk costs due to stranded assets.”

Comment #5

Comment #5: Time period 2015-2019



Comment #6

Comment #6: Which risk?

Risks of climate change

Climate change poses two types of risk to financial institutions.

Physical risks

Damage and loss caused by, for example, extreme drought, storm and flooding.

Transition risks

Losses due to, for example, the declining value of investment in carbon-intensive businesses.

Climate risks include transition risks and physical risks

> **Transition risk** is defined as the financial risk associated with the transition to a low-carbon economy.

Examples: Policy changes (e.g., carbon tax), new technology, shifts in consumer preferences (e.g., boycott)

> **Physical risk** is defined as the financial losses due to extreme weather events and climate disasters.

Examples: Flooding, sea level rise, wildfires, droughts and storms

Thank you for your attention!