

# Firms' Responses to a Sustainability Reporting Reform

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**Conclusion: Firms forced to produce a sustainability report benefit somewhat financially but don't improve sustainability outcomes.**

1. **Compliance:** Big (treated) firms do comply with the reform
2. **Financials:** Some financial benefits from having a sustainability report
3. **Sustainability:** Little or no improvements in sustainability outcomes

**Policy Implications:** No financial harm to firms from SR, potential climate benefit, but data on non-reporters needed for accurate evaluation.

## Overview of This Policy Evaluation

- **Research Question:** Does transparency (about sustainability activities) lead to better financial and sustainability outcomes?
- **What I do:** Evaluate a Swedish reform that forces big firms to produce a Sustainability Report (SR)
- **Difficult to measure:** How to measure compliance with no central register? How to measure outcome that is only available for treated?
- **Methods and Data:** Difference-in-Differences, Swedish firms (two samples: all firms w 10+ employees and only listed firms), 2002–2021
- **Contributions:** Measuring Sustainability Report = Proxied by availability of sustainability data among listed firms.

### 1. High Compliance as Measured by Proxy

Among listed firms, big (treated) firms more likely to have SR post-reform

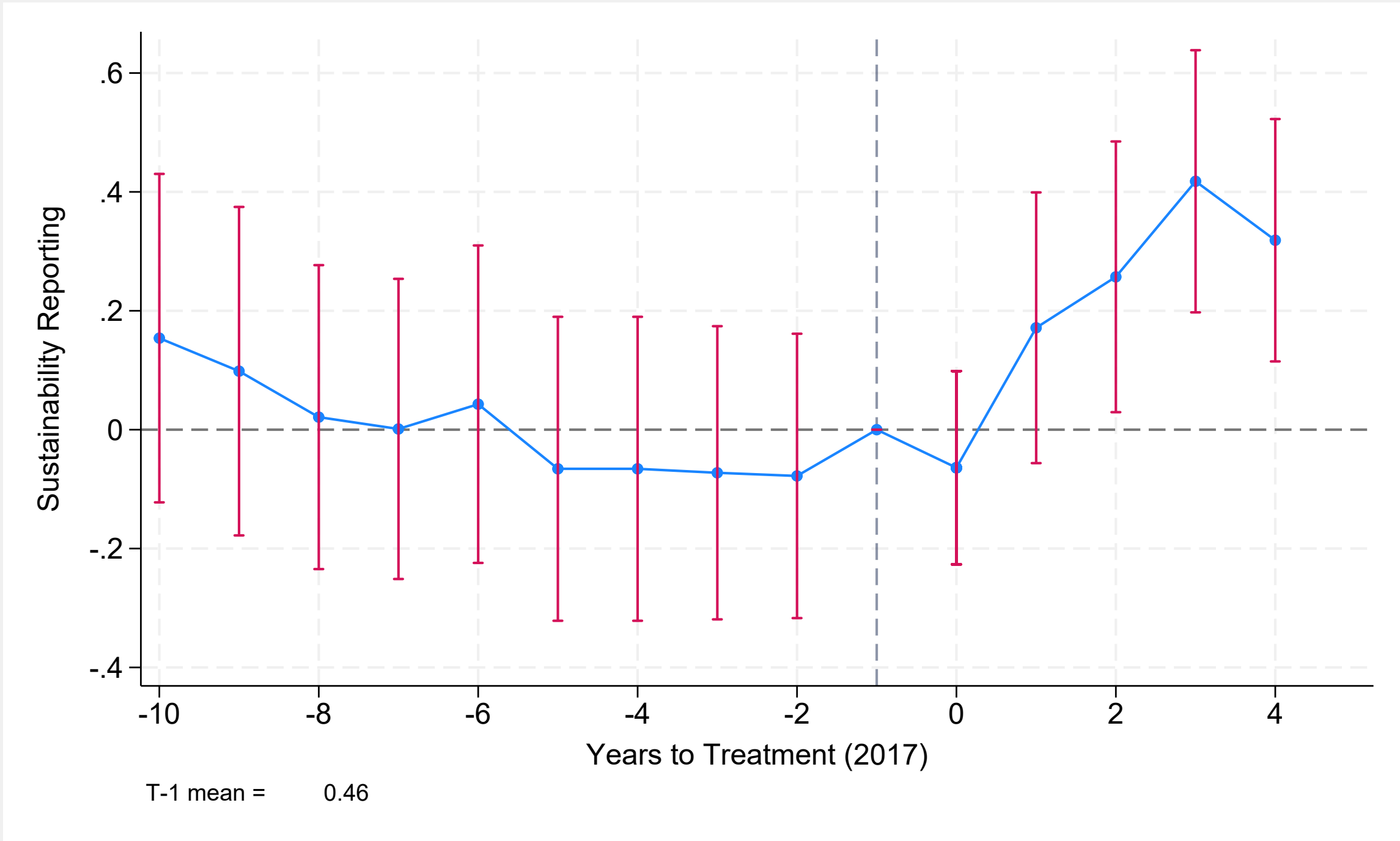


Figure 1. Event-study Diff-in-Diff for compliance with sustainability reporting reform

### 2. Treated Firms Benefit Slightly Financially from Having Sustainability Reports

	Net Turnover per Employee	Value-Added per Employee
Treated	264.0** (86.50)	-195.9 (184.3)
Post Treatment	302.5*** (9.556)	77.93*** (5.524)
Treated x Post Treatment	284.0** (96.57)	317.8 (198.7)
Constant	169.9*** (6.934)	47.18*** (2.603)
N	662300	662300
R <sup>2</sup>	0.0183	0.00190

Table 1. Difference-in-Differences for Financial Outcomes

Dependent variables measured in thousands of USD. Sample: firms with >10 employees, years 2002–2021. Year and firm fixed effects, clustering at firm-level. Robust standard errors in parentheses.

### 3. No Difference in Sustainability Targets or Outcomes

No effect on mandatory reporters for targets or outcomes regarding **CO2 emissions** 🏠, **electricity usage** 💡, **water usage** 💧.

#### The Specifics

All Swedish firms that in the past two accounting years **fulfill at least two** of the following criteria must comply with the law, starting in the financial year 2017:

- **Many Employees** 🧑: 250+ employees
- **Own a lot** 🏠: Balance sheet over 175 million SEK (17 million EUR)
- **Sell a lot** 🏠: Net turnover over 350 million SEK (35 million EUR)

Big firm = 1 if (🧑 + 🏠) or (🧑 + 🏠) or (🏠 + 🏠)

## In Four Pictures



## Exploratory: Heterogeneity in Responses

### Should we worry about Greenwashing?

Yes, if big (treated) and small (control) listed firms' Sustainability Reports (SR) would differ systematically in their propensity to greenwash. Otherwise, potential differences post-reform *may* be attributed to actual improvements in sustainability among treated firms.

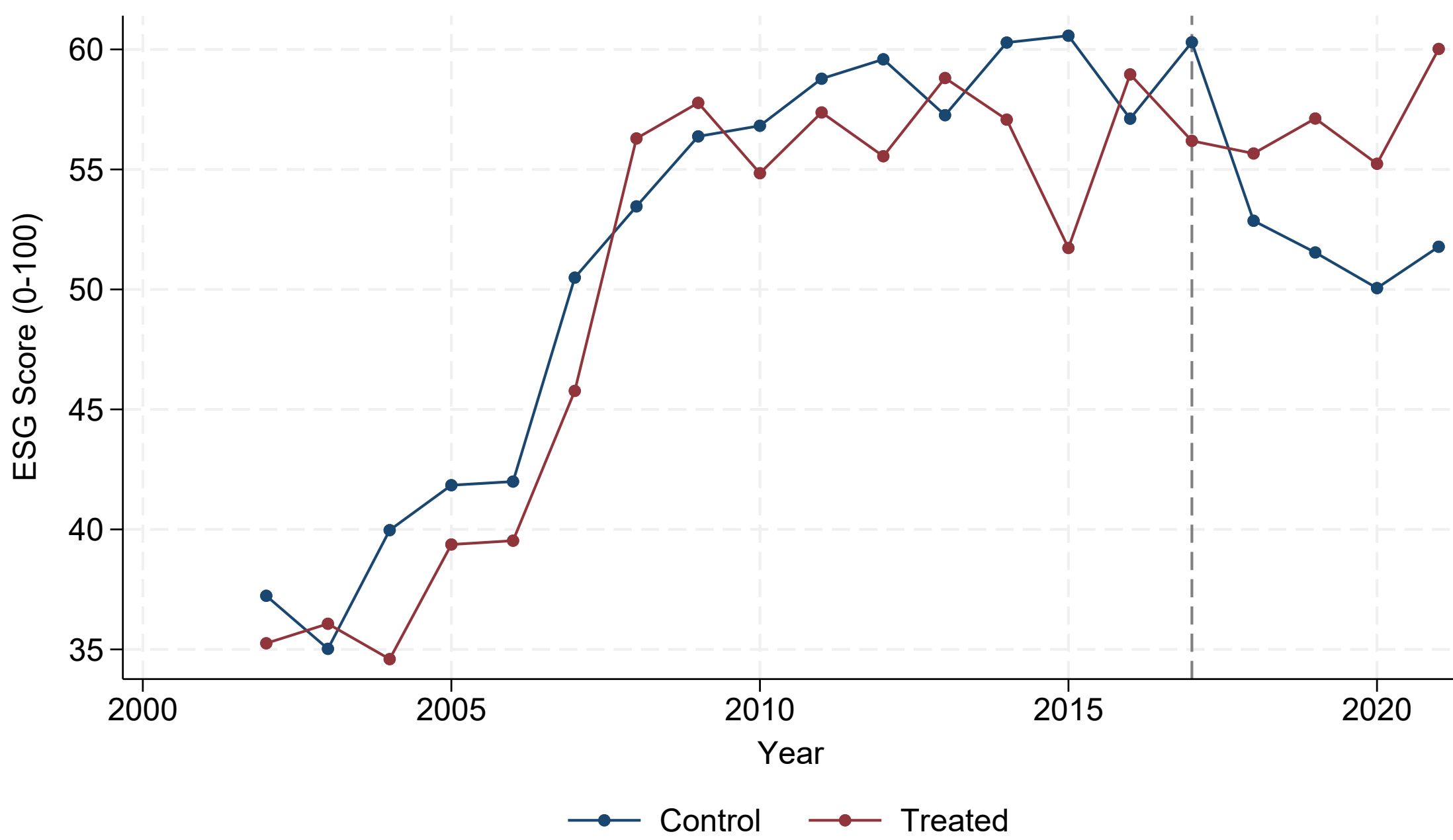


Figure 2. Raw data on ESG score by treatment status among listed firms

### Old firms perform better, but new firms catch up

Multiple interpretations: Firms become more sustainable the longer they report, or they learn how to report "better". Difficult to distinguish the above from each other and from potential survivorship bias.

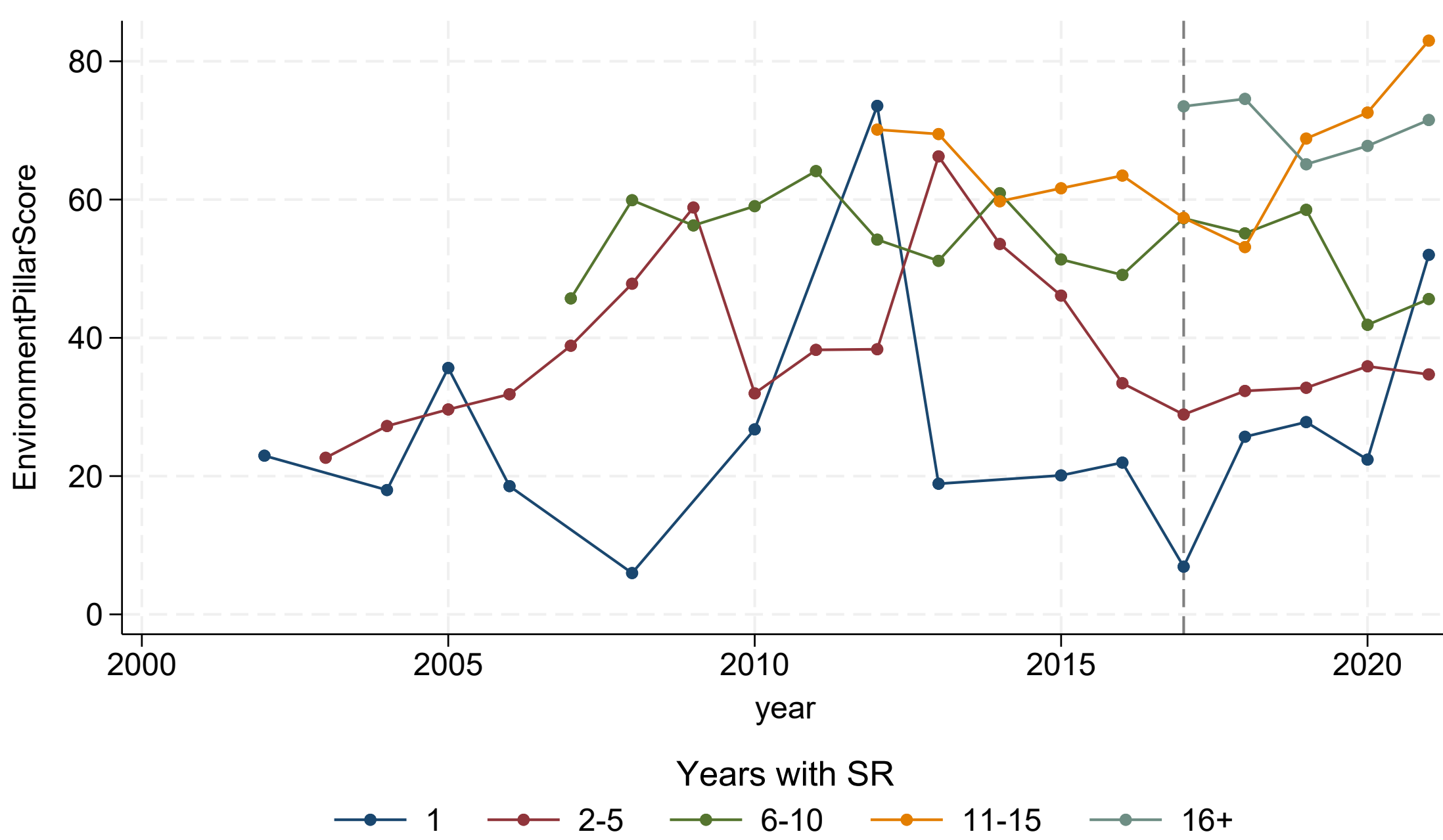


Figure 3. Raw data on ESG score by how many years the firm has had a Sustainability Report

## Give it a Guess!

1. These two industries had the greatest number of big firms in 2017: 🏠 + 🏠
2. These three industries had the greatest share of big or treated firms in 2017: 🏠 + 🏠 + 🏠
3. Between 2008 and 2020, how much did CO2 emissions decrease in Sweden? Answer in kilotonnes or percent! (For reference, in year 2008 = 56,000 kilotonnes)
4. Would you a priori have expected positive, null or negative effects on financial outcomes from having a sustainability report?



Scan the QR-code to reveal the answers, additional results, robustness checks and an alternative RD approach.