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Navigating Corporate Risks Through Sustainability Reporting in German Firms

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Motivation

MaltaFiles enttarnen Steuervermeider

Drei deutsche Konzerne, ein Klingelknopf

Interne Dokumente belegen, dass DAX-Konzerne wie BMW, BASF und Lufthansa im großen Stil Tochtergesellschaften im Steuerparadies Malta unterhalten. Das wäre legal, wenn sie dort auch tätig wären. Doch daran gibt es Zweifel.

Von **Jürgen Dahlkamp**, **Christoph Winterbach**, **Gunther Latsch**, **Christoph Pauly** und **Jörg Schmitt**
20.05.2017, 07.21 Uhr

Subsidiaries in tax havens

Allegation of tax evasion

WELT Anmelden

WIRTSCHAFT

STELLENMARKT GELD MOTOR-NEWS KARRIERE DIGITAL SMART LIVING MITTELSTAND KÜNSTLICHE INTELLIGENZ

RAZZIA IN WOLFSBURG

Vorwurf der Steuerhinterziehung gegen VW

Von **Philipp Vetter**
Wirtschaftskorrespondent

Veröffentlicht am 15.11.2017 | Lesedauer: 3 Minuten

tagesschau Sendung verpasst?

Startseite ▸ Wirtschaft ▸ Ermittlungen: Hat VW Steuern hinterzogen?

Verfahren gegen VW

Ermittlung wegen Steuerhinterziehung

Stand: 24.11.2015 12:36 Uhr

Steuerhinterziehung - so lautet der neue Vorwurf der Ermittlungsbehörden gegen VW. Die Staatsanwaltschaft Braunschweig hat ein förmliches Verfahren eröffnet. Durch die Abgas-Manipulation waren die betroffenen Fahrzeuge in eine niedrigere Steuerklasse eingestuft worden.

Von Thorsten Hapke, NDR

Non-Financial Reporting

Social Responsibility

We aim to be an attractive employer for our workforce and a good partner for society. Reliability, trustworthiness and fairness are our watchwords – no matter whether we are talking to individual employees, negotiating with collective representative bodies, collaborating with regional partners in local infrastructure development projects, or cooperating with civil society initiatives and associations.

Our "Empower to transform" human resources strategy seeks to ensure that the Group, our brands and our workforce are well placed to adapt to the ever more rapidly evolving challenges of the networked digital world. Our human resources strategy is designed to he… the Volkswagen Group become a global leader in sustainable m… an enduringly profitable basis.

We want to be a good partner for society

We create added value for society

5

Einführung

Harald Krüger: „Die BMW Group kündigt Projekte nicht nur an, sondern setzt sie auch entschlossen um."

Herr Krüger, setzen Sie doch mal einen Tweet ab und beschreiben Sie in 280 Zeichen: Was bedeutet Nachhaltigkeit für Ihr Unternehmen?

Nachhaltigkeit heißt für uns Zukunftsfähigkeit – für die BMW Group und die Gesellschaft. Wir kennen die Herausforderungen und nehmen sie an. Wir entwickeln innovative Mobilitätslösungen und schaffen dadurch Mehrwert für Kunden, Unternehmen und Gesellschaft. #SustainableBMWGroup

The influence of tax payments on sustainability

World Bank Group (2024):

"Collecting taxes is the main way for countries to generate public revenues that make it possible to finance investments in human capital, infrastructure, and the provision of services for their people and businesses."

Business News Daily (2023):

"A Culture of Ethical Behavior Is Essential to Business Success"

But…

EY (2023):

"Financing the sustainable transformation The conversion of production processes and investments in new processes and technologies demand a great deal from companies in financial terms."

The association between sustainability reports and tax avoidance

CSR <u>increases</u> tax avoidance

- High costs of sustainability reporting
- Greenwashing
- Different incentives for tax planning and sustainability
- Insufficient regulation and control

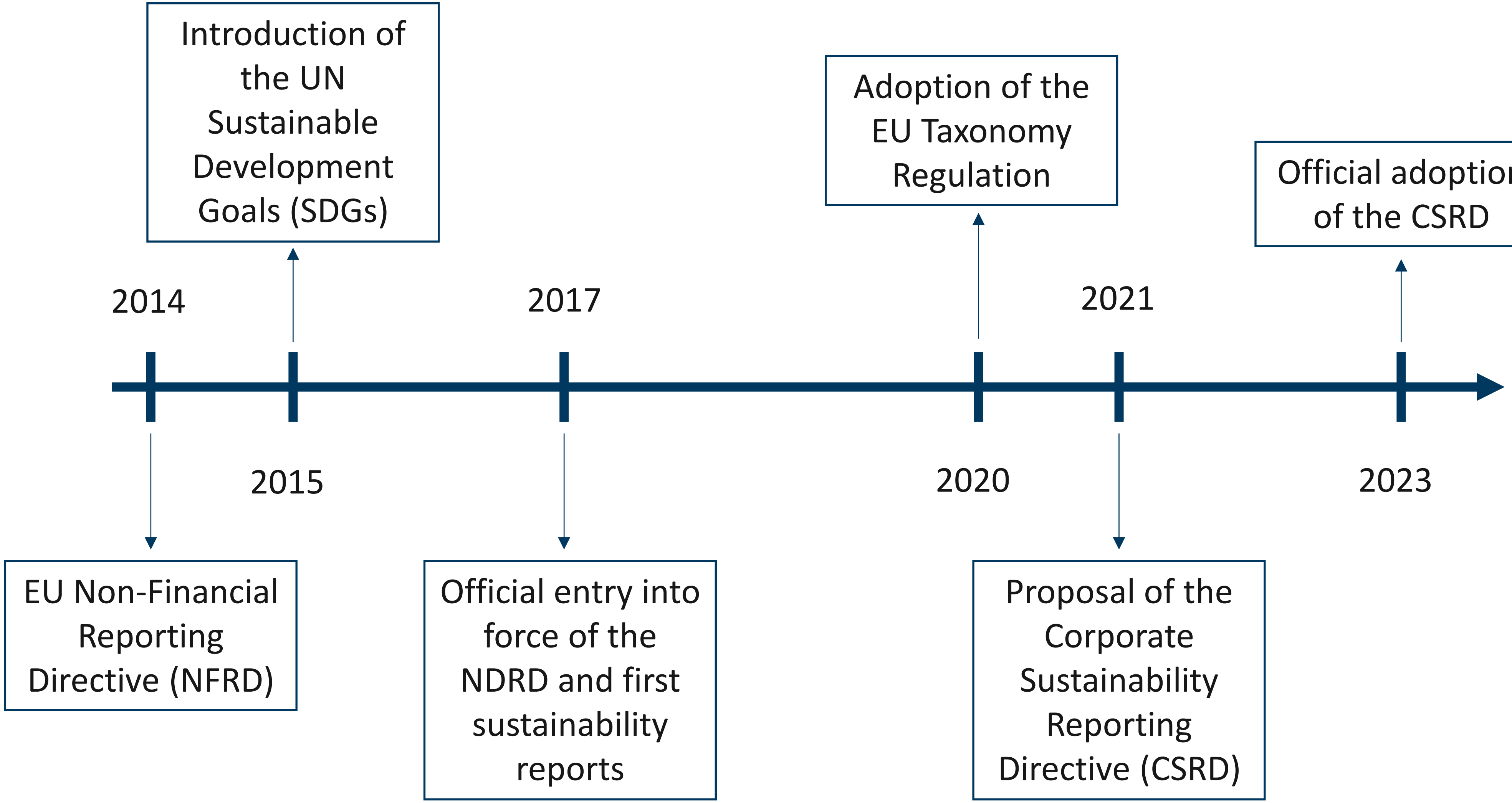
CSR <u>decreases</u> tax avoidance

- Long-term thinking
- Image and reputational risk
- Stakeholder considerations
- Regulatory pressure and transparency requirements

<u>Research Question:</u>

Do firms with a sustainability report engage in less aggressive tax planning compared to their peer groups?

Regulatory Background



Non-Financial Reporting Directive (NFRD)

Implementation

- NFRD effective from Dec 6, 2014; reporting began in 2017 for large firms
- In Germany enacted via "CSR-Richtlinie-Umsetzungsgesetz" on April 19, 2017

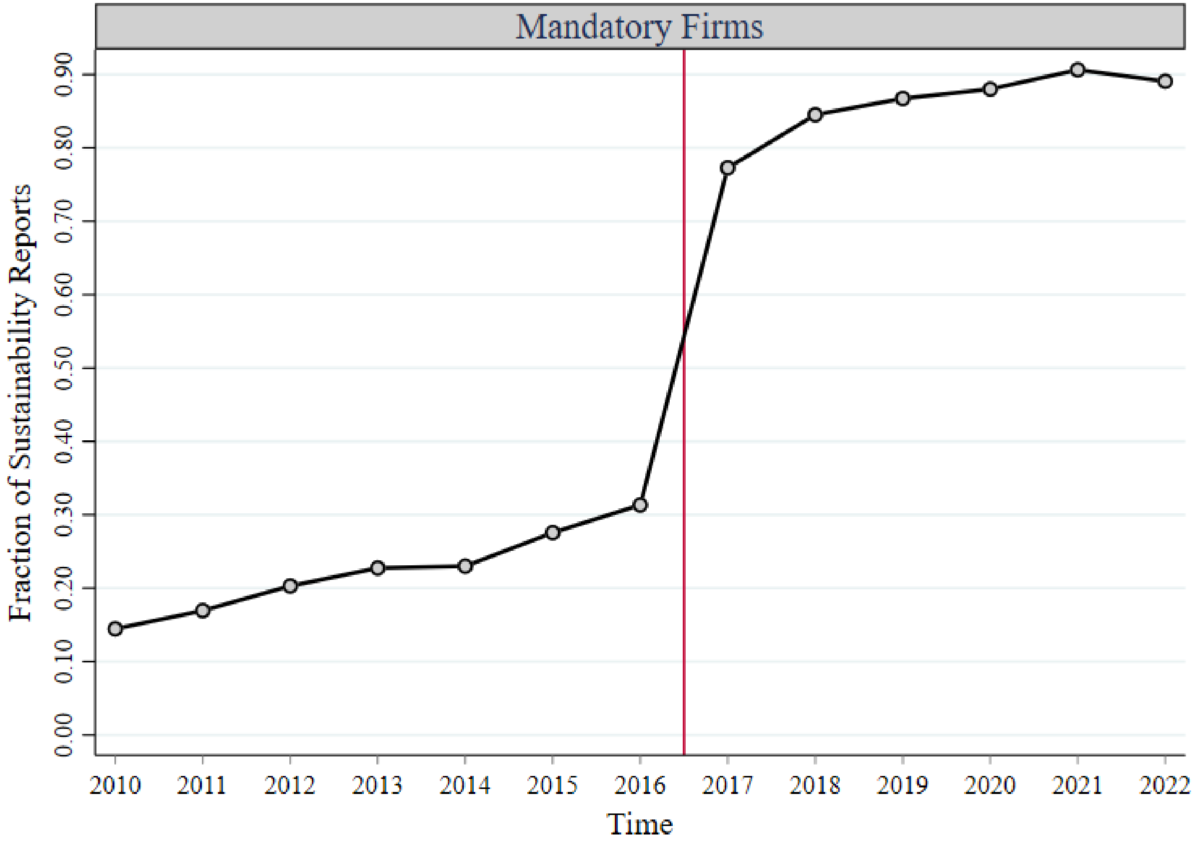
Requirements

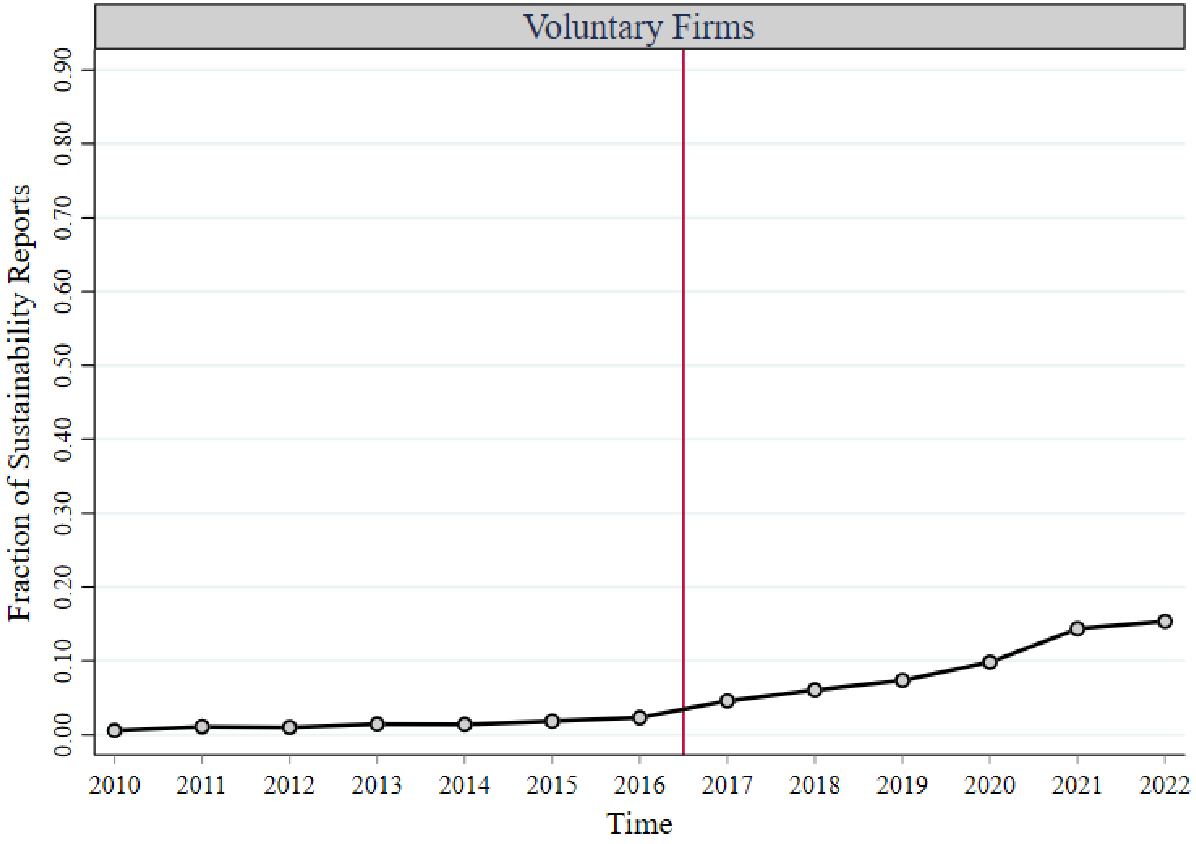
- Mandatory for Companies with
  - > 500 employees and either
  - > €20M balance sheet total or
  - > €40M turnover

Content

- environmental, social, employee issues
- human rights
- anti-corruption
- business model
- non-financial risks

Development of Sustainability Reporting





Sample Selection

Sample:	**1,543 observations**
	from 281 German firms
Sample period:	**2017 to 2022**
Data:	Average number of employees, board size, board meetings, existence of a sustainability report, emissions, other sustainability data:
	Hand-collected from publicly available annual and sustainability reports
	Financial Data:
	Retrieved from Refinitiv Eikon, cross-checked using available annual reports

Sample Selection

Criteria	Firm-years
Full sample: All Refinitiv Eikon (2017 and 2022)	3,484
- listed on the open market	(-925) = 2,559
- missing employee numbers	(-303) = 2,256
- Firms operating in the financial sector	(-106) = 2,150
- Loss firms	(-501) = 1,649
- missing values for controls	(-106) = 1,543

Literature overview

Mixed results for the relationship between tax avoidance and sustainability reporting

(Friese et al., 2008; Hoi et al., 2013; Ortas and Gallego-Álvarez, 2020)

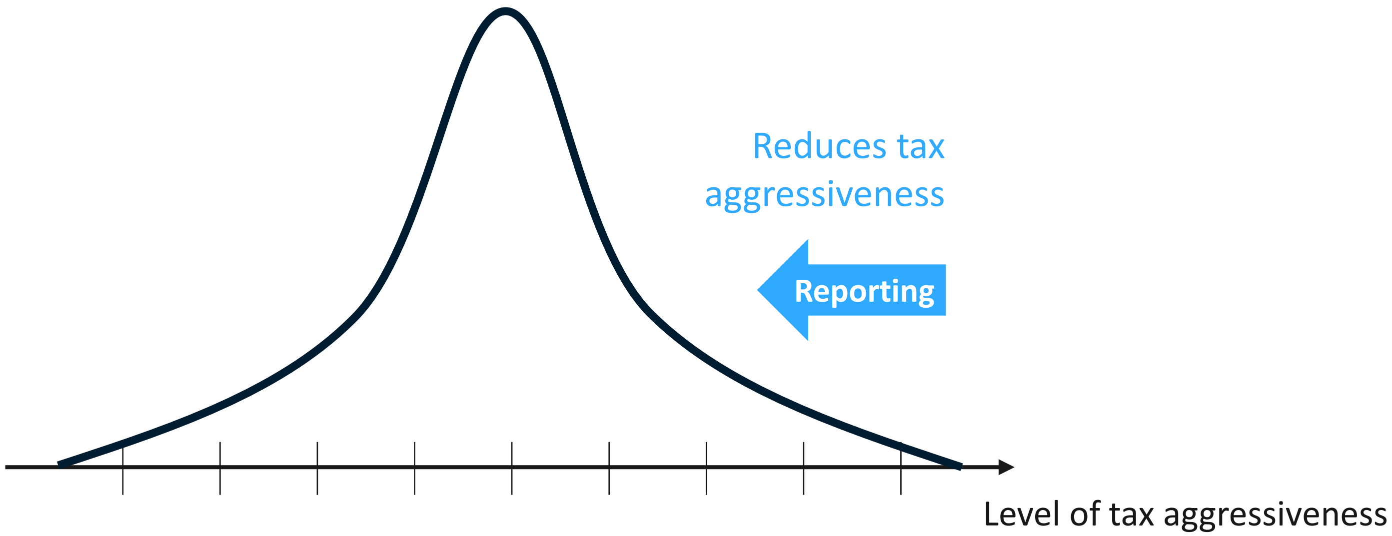
CSR <u>increases</u> tax avoidance

- + CSR as a front to disguise less scrupulous practices *(de Andrade et al., 2020)*
- + companies do not necessarily perceive tax avoidance as part of their CSR strategy *(Gulzar et al., 2018; Preuß and Preuss, 2017)*
- + companies may not understand the social role of taxes *(Hoi et al., 2013; Knuutinen, 2014)*

CSR <u>decreases</u> tax avoidance

- − CSR initiatives build reputation and show ethical behavior *(Moravcikova et al., 2015)*
- − responsible payment of taxes is seen as a direct contribution to society's well-being *(Dowling, 2014)*
- − Aggressive tax planning is contrary to the principles of CSR *(Lanis and Richardson, 2012)*

Linking Sustainability Reporting to Reduced Tax Aggressiveness



Companies with sustainability reports tend to exhibit less tax aggressiveness

H1: Firms with a sustainability report engage in less aggressive tax planning in the upper tail of the tax aggressiveness distribution compared to their peer groups.

Research Design

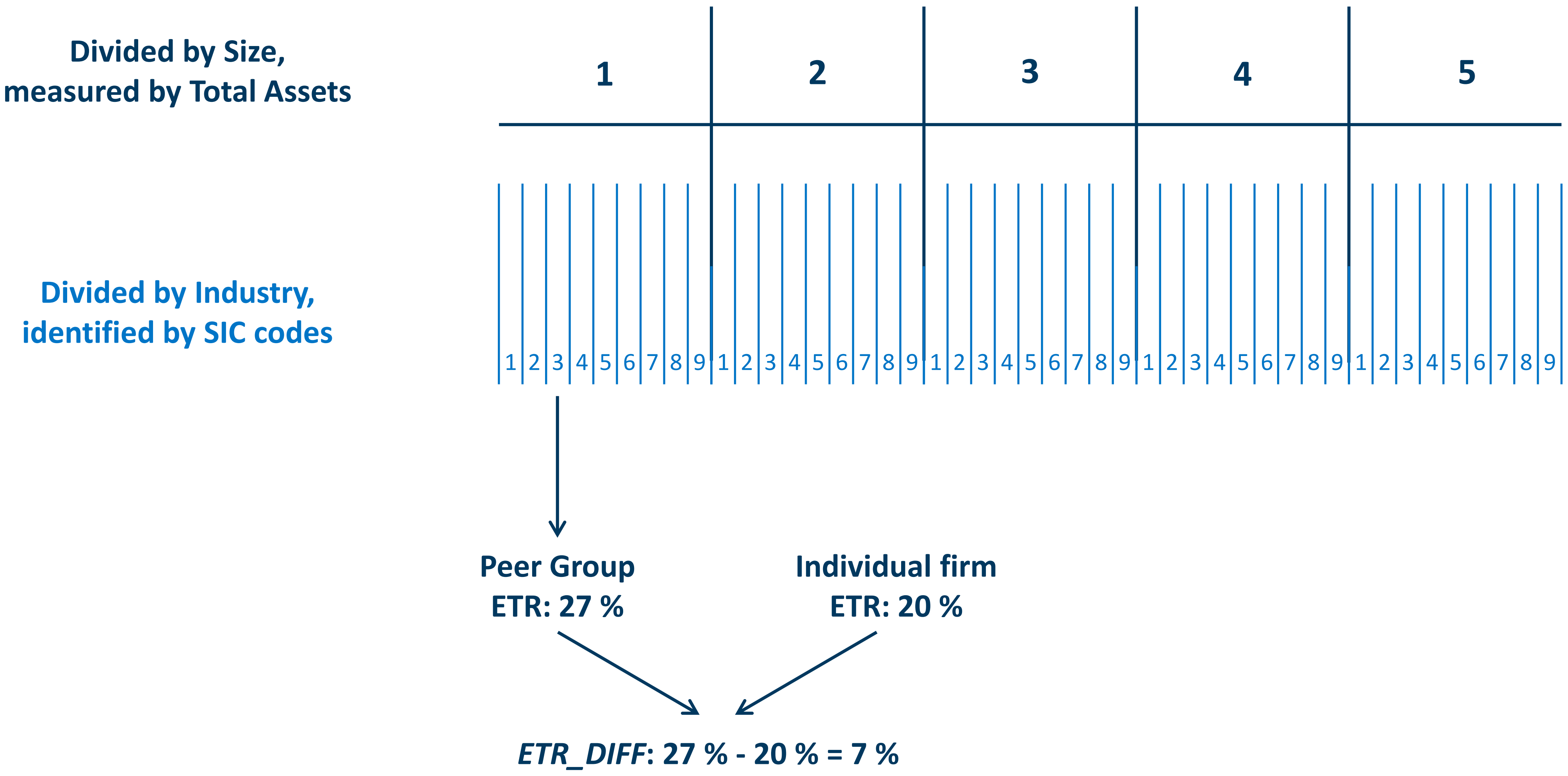
Hypothesis 1:

$$ETR\_DIFF_{i,t} = \beta_0 + \beta_1\ MAND\_REP_{i,t} + \beta_2\ ROA_{i,t} + \beta_3\ SIZE_{i,t} + \beta_4\ PPE_{i,t} + \beta_5\ INTAN_{i,t} + \beta_6\ LEV_{i,t} + \beta_7\ ATR_{i,t}$$

$$+ \beta_8\ CAPEX_{i,t} + \beta_8\ RD_{i,t} + YEAR\_FE + \varepsilon_{i,t}$$

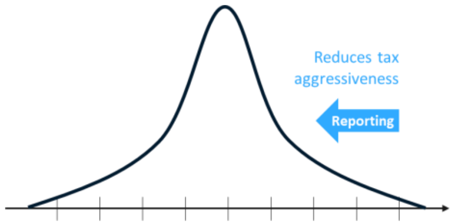
- *ETR_DIFF*: industry-size adjusted effective tax rate *(Balakrishnan et al., 2019)*
- *MAND_REP*: indicator variable for Sustainability Reporting
- Quantile regression to estimate effect in all parts of the distribution

Setup of *ETR_DIFF*



Main Results for Hypothesis 1

Regression of *ETR_DIFF* on *MAND_REP* (untabulated controls)

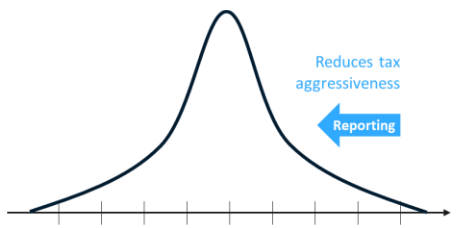


	Pred.	Coef.	*t*-stat
OLS		-0.011	-0.66
Quantile			
0.1		0.026	0.52
0.2		0.009	0.56
0.3		0.001	0.09
0.4		-0.009	-0.93
0.5		-0.021**	-2.24
0.6		-0.031***	-2.68
0.7	-	-0.059***	-4.02
0.8	-	-0.082***	-5.24
0.9	-	-0.045*	-1.88

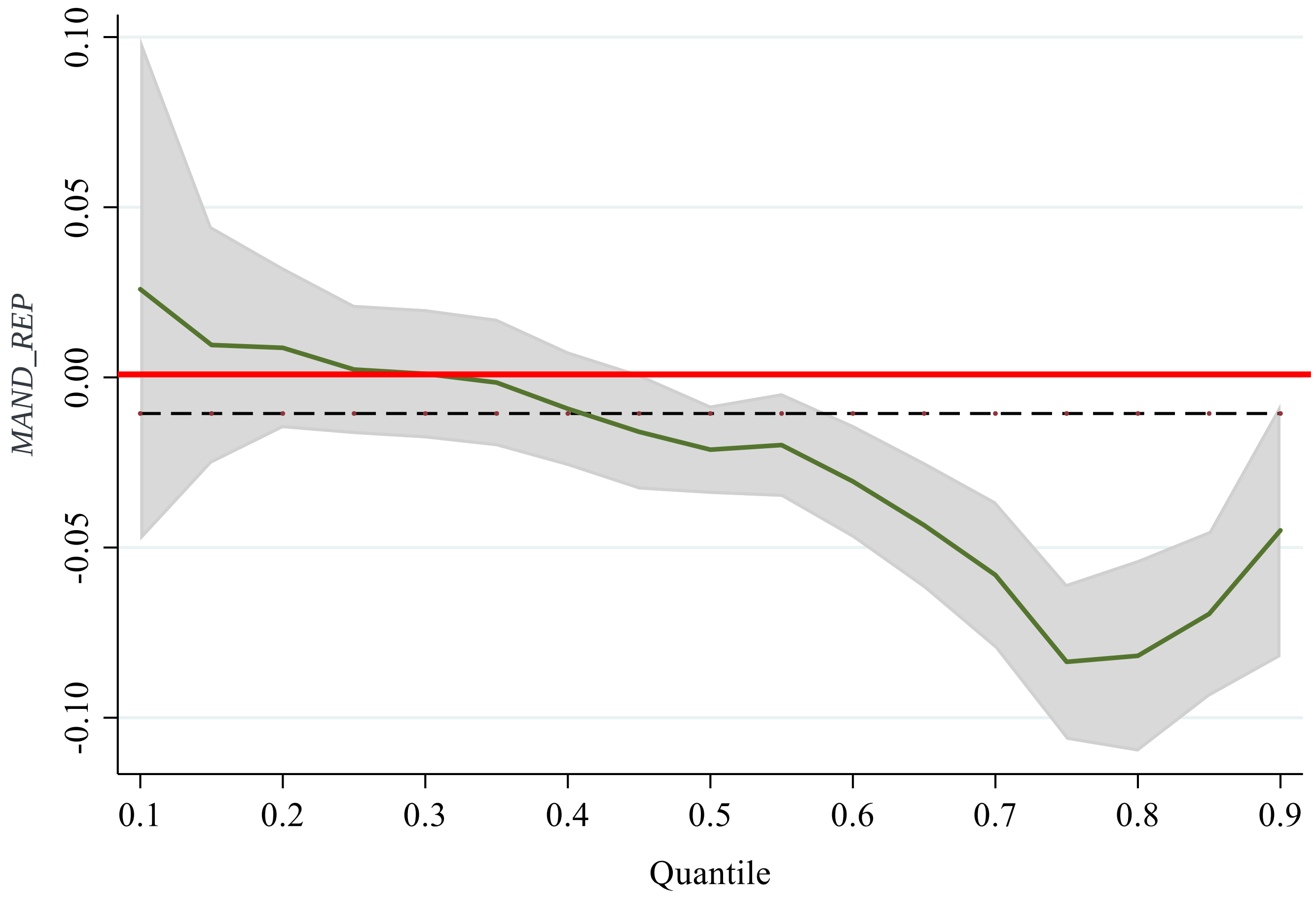
Significantly **negative** coefficients

We find that firms with sustainability reports show lower engagement in aggressive tax planning in the upper tail of tax aggressiveness distribution compared to their peers (i.e. firms without sustainability reports).

Main Results for Hypothesis 1



Coefficient estimates of *MAND_REP* at various quantiles

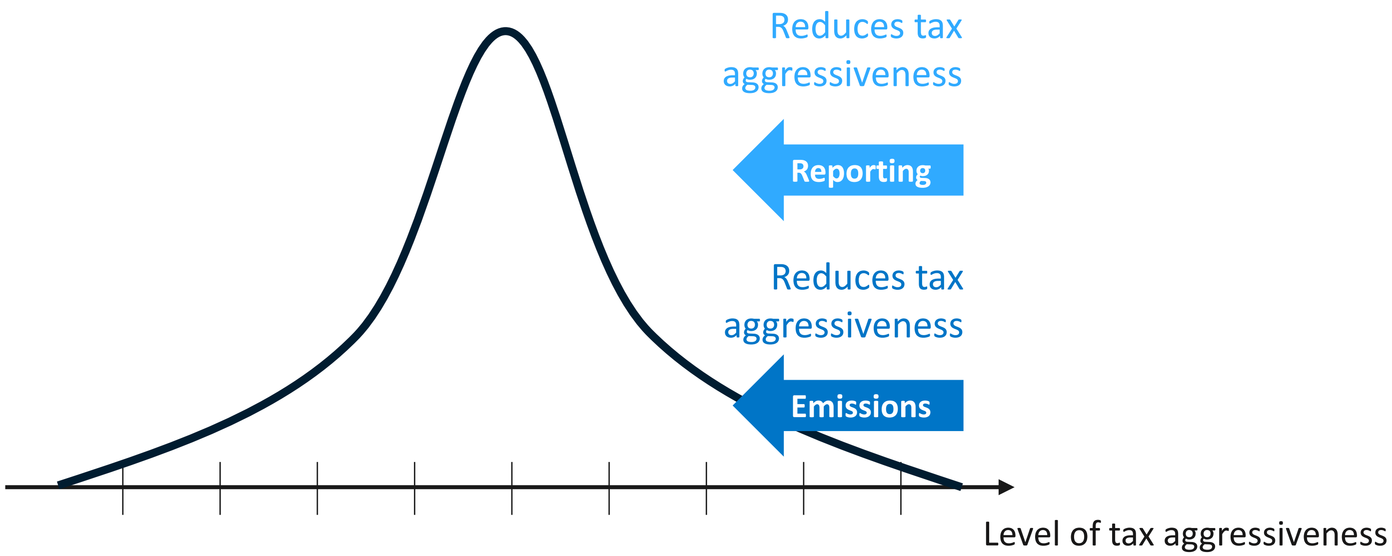


We find that firms with sustainability reports show lower engagement in aggressive tax planning in the upper tail of tax aggressiveness distribution compared to their peers (i.e. firms without sustainability reports).

What drives this effect?

- Positive **link between sustainability reporting and increased transparency** *(Kim and Im, 2017)*
- Firms that publish sustainability reports are generally more **transparent**, not only about their **environmental impact** but also in their **financial practices** *(Haji et al., 2022)*
- The **disclosure of CO_2 emissions** is a key component of sustainability reporting and reflects a company's **commitment to ethical and responsible behavior** across multiple dimensions *(Liu et al., 2023)*

What drives this effect?



Companies with relatively high CO_2 emissions tend to exhibit less tax aggressiveness

H2: Companies with relatively high CO_2 emissions engage in less aggressive tax planning in the upper tail of the tax aggressiveness distribution compared to their peer groups.

Scope Emissions

Scope 1

- Emissions from sources owned or controlled by the company
- **Drivers**: Energy Consumption, Process Emissions

Direct Emissions

Scope 2

- Emissions generated from the consumption of purchased energy
- **Drivers**: Electricity Consumption, Energy Efficiency

Indirect Emissions from Energy

Scope 3

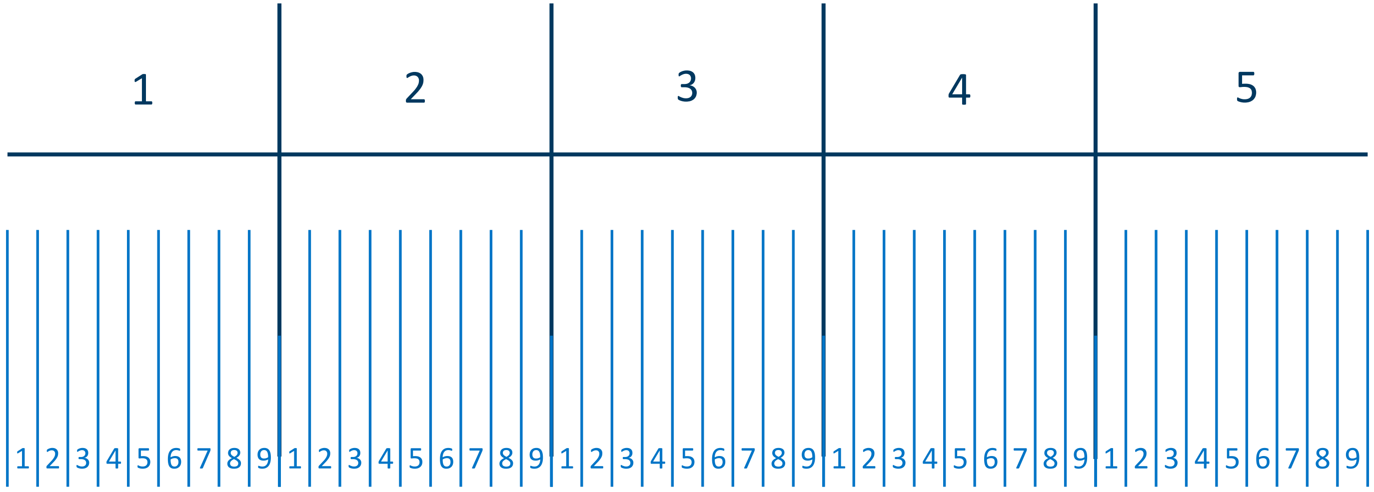
- Emissions that occur throughout the value chain
- **Drivers**: Supply Chain, Product Use, Waste Disposal

Other Indirect Emissions

Setup of Emissions Measure

Divided by Size, measured by Total Assets

Divided by Industry, identified by SIC codes



Peer Group
Scope 1 Emissions: 81,328 t CO_2

Individual firm
Scope 1 Emissions: 694,057 t CO_2

***MAND_REP_Scope1*:** 81,328 t CO_2 – 694,057 t CO_2 **= 612,729 t CO_2**

Median Split

MAND_REP_Scope1_low ***MAND_REP_Scope1_high***

Research Design

Hypothesis 2:

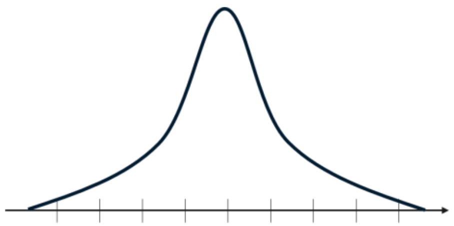
$$ETR\_DIFF_{i,t} = \beta_0 + \beta_1\ MAND\_REP\_Scope1\_low_{i,t} + \beta_2\ MAND\_REP\_Scope1\_high_{i,t} + \beta_3\ ROA_{i,t} + \beta_4\ SIZE_{i,t}$$

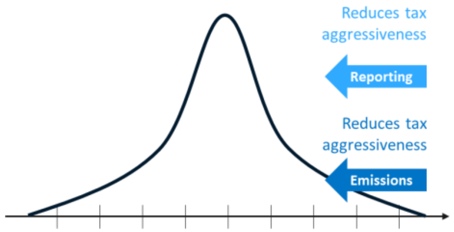
$$+ \beta_5\ PPE_{i,t} + \beta_6\ INTAN_{i,t} + \beta_7\ LEV_{i,t} + \beta_8\ ATR_{i,t} + \beta_9\ CAPEX_{i,t} + \beta_9\ RD_{i,t} + YEAR\_FE + \varepsilon_{i,t}$$

- *ETR_DIFF*: industry-size adjusted effective tax rate *(Balakrishnan et al., 2019)*
- *MAND_REP_Scope1_low*: indicator variable for Sustainability Reporting
- *MAND_REP_Scope1_high*: indicator variable for Sustainability Reporting
- Quantile regression to estimate effect in all parts of the distribution

Main Results for Hypothesis 2

Regression of *ETR_DIFF* on *MAND_REP, partitioned by Scope 1 Emissions* (untabulated controls)





	MAND_REP_Scope1_low			*MAND_REP_Scope1_high*		
	Pred.	Coef.	*t*-stat	Pred.	Coef.	*t*-stat
OLS		-0.003	-0.12		0.001	0.03
Quantile						
0.1		0.018	0.17		0.051	0.57
0.2		0.007	0.26		0.134	0.57
0.3		0.006	0.33		0.011	0.73
0.4		0.011	0.67		0.004	0.26
0.5		0.004	0.27		-0.003	-0.23
0.6		-0.008	-0.43		-0.013	-0.79
0.7		-0.035	-1.45	-	-0.046**	-2.16
0.8		-0.019	-0.82	-	-0.044**	-2.17
0.9		0.003	0.14	-	-0.052***	-2.70

Significantly **negative** coefficients

We find that firms with relatively high CO_2 emissions show lower engagement in aggressive tax planning in the upper tail of tax aggressiveness distribution compared to their peers (i.e. firms without sustainability reports).

Robustness tests

- *CASH_ETR* as an **alternative measure** for the dependent variable
- Test of **other drivers** of the observed effect (e.g. information within the sustainability reports)
- Inclusion of **voluntarily reporting** companies
- Inclusion of other **control variables** (e.g. governance)
- **Regression Discontinuity** Design (split at 500 employees)

Conclusion

- Firms **without** sustainability reports exhibit **more aggressive tax avoidance** than with firms **with** sustainability reports
- The effect can be observed in the **upper tail** of the tax aggressiveness distribution
- **Low-emission companies** show **no significant association** between sustainability reports and tax aggressiveness due to lower pressure.
- Companies with relatively **high CO_2 emissions** engage in **less aggressive tax planning** in the upper tail of the tax aggressiveness distribution than their peers

Appendix

Corporate Sustainability Reporting Directive (CSRD)

EU Start Date:

CSRD adopted in November 2022; effective from January 1, 2024, with gradual implementation.

Germany Implementation:

Must be integrated into national law by mid-2024, replacing NFRD framework.

Who Reports:

Applies to all large companies (≥€40M turnover, ≥€20M total assets, or ≥250 employees) and listed SMEs.

Report Content:

Must detail ESG issues per European Sustainability Reporting Standards (ESRS) for comparability and transparency.