

**U N I K A S S E L**  
**V E R S I T Ä T**

# What do we really measure?

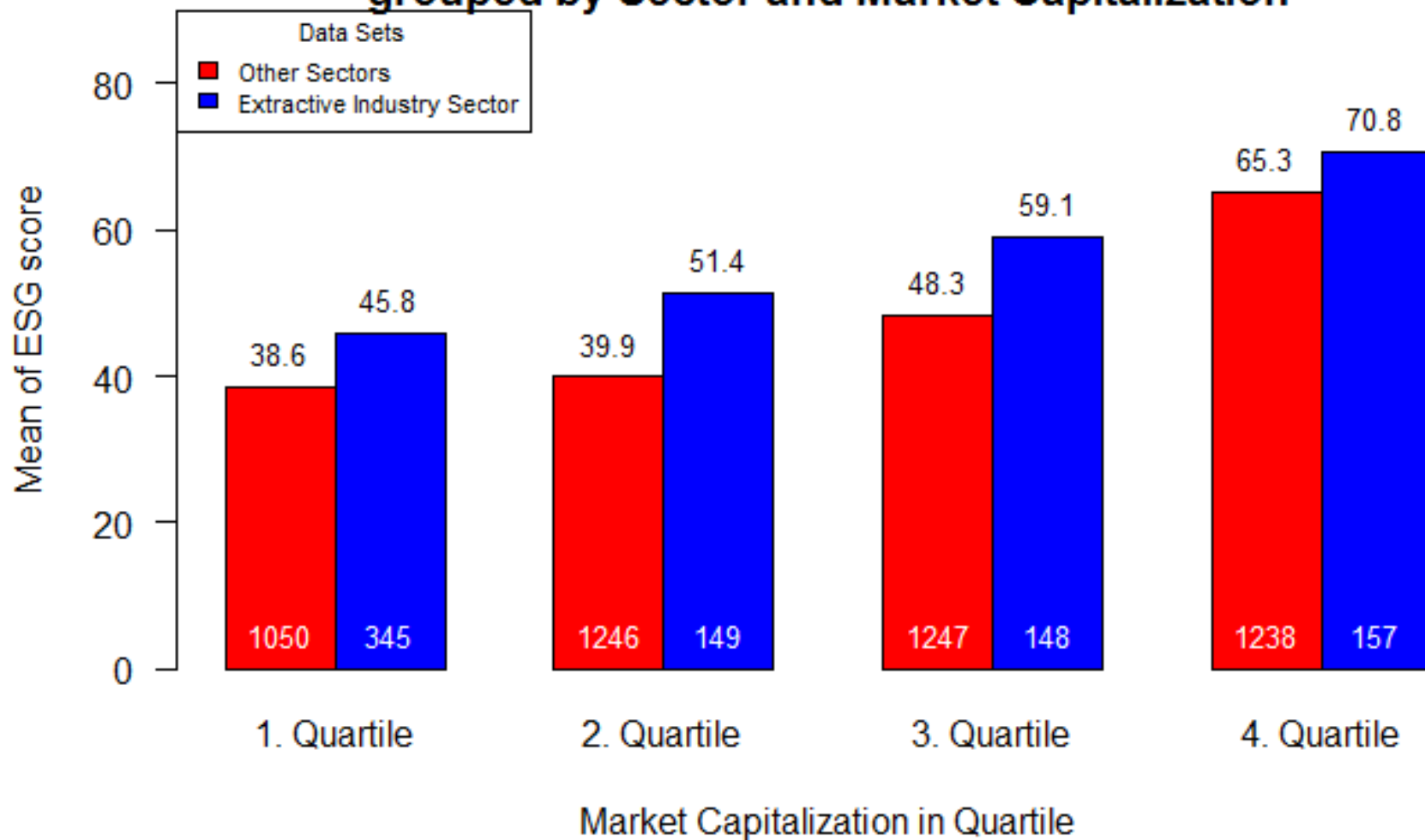
The role of non-content related data for the ESG score of a company  
Samuel Drempetic, Christian Klein, Bernhard Zwergel



PRI Academic Network Conference 2017  
Dr. Bernhard Zwergel

Fachgebiet für BWL, insbes. Unternehmensfinanzierung  
Prof. Dr. Christian Klein

## ESG score in 2015 grouped by Sector and Market Capitalization

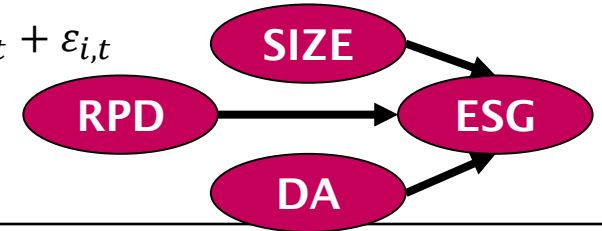


## What we can say about the data base of CSP?

- Companies with good ESG scores and rankings have offences in the ESG context. (Entine 2003, Seele&Chesney 2016)
- ESG ratings are not convergent in their results. (Chatterji et al. 2014)
- Every company can be in any sustainable index. It only depends on the ESG rating agency, that you choose. (Hawkins 2004)
- Missing standardization: (State Street Global Advisors 2017)
  - How can ESG performance across companies be compared?
  - Barrier for investors to use sustainable measures as investment criteria.

$$ESG_{i,t} = \alpha + \beta_1 Size_{i,t-1} + \beta_2 DA_{i,t} + \beta_3 RPD_{i,t} + \beta_4 ControlVariables_{i,t} + \varepsilon_{i,t}$$

Resources for Providing ESG Data (RPD)  
Data Availability (DA)



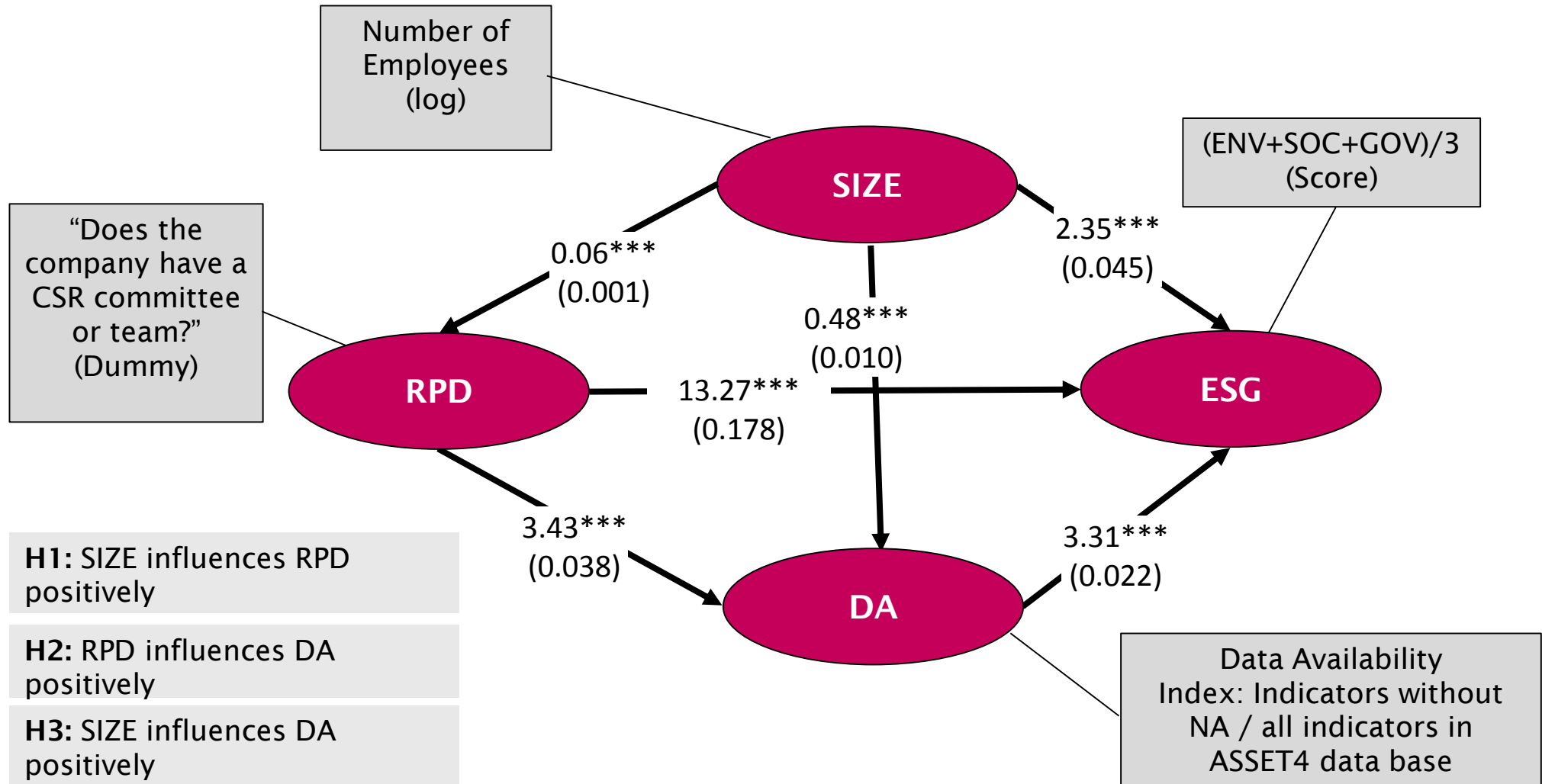
	Variable	Description
ESG	ESG	Environmental, Social and Corporate Governance Pillar of ASSET4 (without Economic)
SIZE	EMP	Number of Employees (lag and log)
SIZE	TA	Total Assets (lag and log)
SIZE	MCAP	Market Capitalization (lag and log)
DA	Data Availability	Index; Number of Indicators without NA (not available) to Number of Indicators in total of ASSET4; percent
RPD	SusRepNG	Dummy; “Does the company publish a separate sustainability report or publish a section in its annual report on sustainability?” (minus dummy variable GRI)
RPD	GRI	Dummy; “Is the company's sustainability report published in accordance with the GRI guidelines?”
RPD	Committee	Dummy; “Does the company have a CSR committee or team?”

	ESG Score								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	pooled		random effects			fixed effects			
EMP	1.880***			2.545***			1.942***		
MCAP		2.925***			2.482***			1.360***	
TA			2.383***			2.644***			2.118***
DA	2.721***	2.729***	2.979***	1.526***	1.576***	1.640***	0.835***	0.847***	0.836***
Committee	9.689***	9.543***	9.054***	5.249***	5.543***	5.158***	3.871***	4.041***	3.878***
SusRepNG	9.453***	9.550***	8.886***	7.442***	7.453***	7.359***	7.010***	6.979***	7.013***
GRI	12.640***	11.599***	10.418***	10.160***	10.042***	9.741***	9.728***	9.659***	9.696***
Control Variables (EPS, ROIC, Leverage, OPM, Income Country, ISO_140XX) ... ..									
Constant	-186.94***	-214.82***	-225.22***	-106.57***	-124.47***	-131.47***			
N	27,969	27,969	27,969	27,969	27,969	27,969	27,969	27,969	27,969
Adj. R <sup>2</sup>	0.682	0.690	0.690	0.455	0.455	0.456	0.318	0.319	0.319
F Statistic	5,003.56***	5,185.57***	5,193.38***	1,925.03***	1,923.59***	1,933.37***	1,414.86***	1,416.04***	1,416.17***

**H4: DA influences ESG positively**

**H5: RPD influences ESG positively**

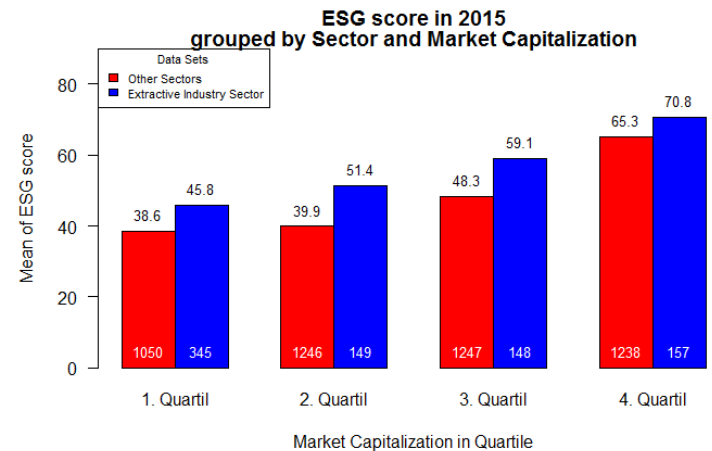
**H6: SIZE influences ESG positively**



## Discussion

Size, data availability (DA) and resources for providing ESG data (RPD) have a great impact on ASSET4 ESG scores

- Larger companies have more resources (e.g. institutionalized reporting) for providing data and are under greater third party scrutiny
  - higher data availability in ASSET4
  - higher ESG score (independent of the value of the variable)



Finally we cannot answer empirically, whether

- larger companies are more sustainable (compared to smaller companies) or whether
- smaller companies are at a disadvantage with Asset4 ratings

At the end of the day: What do we really measure?

**Thank you for your attention!**