

Corporate Social Responsibility and the Board of Directors

Philipp Krüger

(Toulouse School of Economics and University of Geneva)

PRI Academic Conference 2010 -

Råvarebygningen, Copenhagen Business School.

May 4th-6th, 2010

Research question

- What is the relationship between corporate social responsibility and corporate governance?
- Focus on the role played by the board of directors

Why would the board matter?

- An *Economist Intelligence Unit* survey¹ of 1200 senior executives finds:

*“In general, **high-performing companies** [in terms of value] **put a much greater emphasis on social and environmental considerations at [the] board level**, while [...] **poorly performing firms** are far more likely to have **nobody in charge** of sustainability issues.”*

¹Doing good: Business and the sustainability challenge, The Economist Intelligence Unit, 2008

Contribution of this paper

- Advances our understanding of whether and how “**ES**” is related to “**G**”
- **Main findings:**
 - (1) Firms with a higher fraction of inside directors show less irresponsible behavior
 - (2) Firms with a higher fraction of female directors show more responsible behavior
(only correlation, no causal relationship)

Introduction
Data
Empirical Analysis
Conclusion

Sample

- Data from Kinder Lydenberg and Domini
- Unbalanced panel (1999 to 2007): 2,417 publicly listed US firms
- Robustness check for S&P 500 = similar results

Event resulting in a negative KLD rating



1.) Event description:

In March 2006, the **Silicon Valley Toxics Coalition (SVTC)** targeted **Apple** for the **environmental impact of its products**. On the SVTC's 2005 Computer Report Card, Apple scored 17 points out of a possible 47. Apple's **weakest area** was **take-back of electronic waste/scrap**.

2.) Issue area: Environment

Event resulting in a positive KLD rating

1.) Event Description:

In October 2001, PNC was named by **Working Mother Magazine** as one of the “**100 Best Companies for Working Mothers**”.

2.) Issue area: Diversity



Positive and negative events have very different economic properties

- **Positive events (Strengths):**

- Result of a series of specific company actions
- Smooth process driven by small improvements
- Similar to building a reputation

- **Negative events (Concerns):**

- Result from **lack** of care or ethical standards
- Likely to be the consequence of negligence or insufficient monitoring / maintenance (not doing something)
- Happen suddenly (e.g. workplace safety accidents)
- Strongly related to **operational risks**

Introduction

Data

Empirical Analysis

Conclusion

Empirical Strategy

- Reduced form approach
- Instrumental Variable (IV) framework
- **Baseline Model:**
 - Year (a_t) and industry (s_j) dummies, lagged dependent variable ($y_{i,t-1}$), lagged control variables ($x_{i,t-1}$), lagged board characteristics ($b_{i,t-1}$)

$$Y_{it} = f(a_t, s_j, y_{i,t-1}, x_{i,t-1}, b_{i,t-1}) + e_{it}$$

Inside directors

- Inside director = current employee
- (1) Information/risk management hypothesis:**
Insiders well informed about the risks facing the company (more prudent; better risk managers)
→ fewer **negative events**
- (2) Entrenchment hypothesis:**
Social responsibility = source of private benefits (Managers enjoy being associated with a green company at the expense of shareholders; waste of money)
→ more **positive events**

Reduced form: Inside directors

	(1) Negative Events _(t)	(2) Positive Events _(t)
Percentage of inside directors _(t-1)	-0.4997*** (-3.23)	-0.2630 (-1.53)
Other board characteristics	YES	YES
Control Variables	YES	YES
Time Dummies	YES	YES
Industry Dummies	YES	YES
Observations	8684	8684
Pseudo R ²	0.335	0.385

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

- Fewer **Negative events** when higher fraction of insiders on the board of directors
- **Positive events not significantly** associated with percentage of inside board members

IV estimation: Inside directors

- CEO tenure = instrument for the fraction of inside directors (Hermalin and Weisbach (1998))
- Firms with a higher percentage of insiders subject to fewer negative events (robust to IV estimation)

	(1) Negative Events _(t)	(2) Negative Events _(t)
Percentage of inside directors _(t-1)	-0.500*** (-3.23)	-0.452*** (-2.63)
Residual from first stage regression _(t-1)		-0.531 (-0.53)
Lagged Dependent Variables	YES	YES
Control Variables	YES	YES
Other Board Characteristics	YES	YES
Time Dummies	YES	YES
Industry Dummies	YES	YES
Observations	8684	7389
Pseudo R^2	0.335	0.341
Standard Error	cluster	clustered bootstrap

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Reduced form: **Negative** events by issue area

- Companies with more insiders show fewer **community, employee** related and **environmental** concerns
- More support for **information/risk management** than **entrenchment hypothesis**

	(1)	(2)	(3)	(4)
	Community	Employee Relations	Diversity	Environment
Percentage of inside directors _(t-1)	-1.2190** (-2.23)	-0.4040* (-1.69)	0.0387 (0.06)	-0.8430** (-2.28)
Control Variables	YES	YES	YES	YES
Other board characteristics	YES	YES	YES	YES
Time Dummies	YES	YES	YES	YES
Industry Dummies	YES	YES	YES	YES
Observations	8684	8684	8684	8684
Number of Parameters	94	94	94	94
Standard Error	cluster	cluster	cluster	cluster

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Female directors

(1) Risk propensity hypothesis:

Experimental economics: Male and female managers show similar risk propensity/aversion

- no relationship between **negative events** and percentage of female directors

(2) Other regarding preferences hypothesis:

Women show more altruism in experiments

- Stronger female board presence → more **positive events**

Reduced form: Female directors

	(1) Negative Events _(t)	(2) Positive Events _(t)
Percentage of female directors _(t-1)	0.1054 (0.76)	0.9756*** (5.90)
Other board characteristics	YES	YES
Control Variables	YES	YES
Time Dummies	YES	YES
Industry Dummies	YES	YES
Observations	8684	8684
Pseudo R ²	0.335	0.385

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

- Consistent with experimental evidence
 - firms with more female directors subject to more **positive** events
 - no relationship for **negative** events

Reduced form: **Positive** events by issue area

- Community relations often related to charitable giving
- Companies with more female directors = better community relations
- Consistent with the experimental evidence that women tend to be more altruistic

	(1)	(2)	(3)	(4)
	Community _(t)	Employee Relations _(t)	Diversity _(t)	Environment _(t)
Percentage of female directors _(t-1)	1.3382*** (2.62)	0.1922 (0.52)	1.4336*** (6.73)	-0.3887 (-0.84)
Control Variables	YES	YES	YES	YES
Other board characteristics	YES	YES	YES	YES
Time Dummies	YES	YES	YES	YES
Industry Dummies	YES	YES	YES	YES
Observations	8684	8684	8684	8684

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Instrument for female directors

- Labor statistics from the state in which the company is headquartered
- ***Female Employment Population Rate*** =
Female workers in the state of the company's
headquarter / Total population of the state
- Instrument measures relative importance of
women in the workforce

IV estimation: Female directors

- Instrument is weak → Magnitude of coefficient estimates increases dramatically
- No strong support for causality running from more female directors to higher social

	(1) Positive Events _(t)	(2) Positive Events _(t)	(3) Positive Events _(t)	(4) Positive Events _(t)	(5) Positive Events _(t)
Percentage of female directors _(t-1)	0.976*** (5.90)	4.137 (1.61)	4.524* (1.89)	6.429* (1.68)	6.873* (1.96)
Residuals from first stage _(t-1)		-3.169 (-1.22)	-3.464 (-1.42)	-3.990 (-1.05)	-4.299 (-1.23)
2SLS	NO	YES	YES	YES	YES
Lagged Dependent Variable	YES	YES	YES	NO	NO
Control Variables	YES	YES	YES	YES	YES
Other board characteristics	YES	YES	NO	YES	NO
Time Dummies	YES	YES	YES	YES	YES
Industry Dummies	YES	YES	YES	YES	YES
Observations	8684	8660	8660	8660	8660
Pseudo R ²	0.385	0.386	0.384	0.257	0.253
Number of Parameters	94	95	88	94	87
Standard Error	cluster	cluster	cluster	cluster	cluster

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Introduction
Data
Empirical Analysis
Conclusion

Conclusion

- **Positive** and **negative** dimension of social responsibility should be studied separately
- Fewer **negative** events when directors have a **strong company affiliation**
- Greater need to understand the role played by company insiders
 - Not all insiders are entrenched in the agency sense.
 - Do some insiders have long-term oriented incentives?
 - Is this a risk story? Insiders more prudent (operational) risk managers?
- Companies with more female directors show more **pro-social** behavior (no causal relation)

**Thank you for
your attention!**