



‘Corporate Governance and Performance The REIT Effect’

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Extra-financial information is getting popular...

...but is it profitable?

After tech-boom, Enron c.s., investors have become more and more interested in extra-financial information, like corporate governance.

...but is it profitable?

- ❑ Gompers, Ishii and Metrick (2003)
 - ❑ Democracy outperforms dictatorship by 8.5% annually (1990 – 1999)
- ❑ Drobetz, Schillhofer and Zimmerman (2004)
 - ❑ Trading strategy based on governance survey Germany leads to annualized return of 12% (1998 – 2002)
- ❑ Core, Guay and Rusticus (2006)
 - ❑ Criticize GIM and find reversal of performance trading strategy based on governance
- Klapper and Love (2004); Durnev and Kim (2005)
 - ❑ Relationship governance – performance is strongest in least investor-friendly countries

Why research corporate governance in REITs?

Distinct characteristics REIT structure

- Why governance in property companies?
 - Institutionalization of the real estate sector
 - Direct vs. indirect investments
 - 50% of real estate investments indirect
 - REIT has become major legal trust structure
 - 32 countries have REIT structure, most introduced in last 5 years

- The characteristics of REITs...
 - Tax exempt
 - 90% payout rule
 - 75% income out of real estate or real-estate related assets
 - 5-50 rule, at least 100 shareholders
 - Takeover market functions differently

- ...lead to a distinct institutional setting

- How does this affect governance – performance relation?

Contributions of this paper

Use of rich governance index (CGQ)

1. First study for real estate industry to use governance index instead of single governance mechanisms
 - Complete proxy for governance

2. Analysis not restricted to real estate sector
 - Results for complete ISS universe
 - Two control samples

3. Performance measured in three ways
 - Firm value – Tobin's Q
 - Operating performance – ROA, ROE, FFO
 - Long-run equity performance – Carhart (1997) four-factor model



Data (I)

ISS-CGQ data widely used in industry

- Corporate Governance Quotient Index (CGQ) provided by Institutional Shareholder Services
 - Objective, aggregate and comprehensive governance measure
 - Widely used in investment industry (NAREIT, recent real estate mergers)
 - Relatively new in academic research (Brown and Caylor 2006)

- CGQ index is aggregation of 61 issues, covering 4 categories
 - 1) Board of directors
 - 2) Audit
 - 3) Anti-takeover provisions
 - 4) Executive and director compensation

- Index available in aggregate and 4 sub indices

- Score relative to peers in a) index, and b) industry



Data (II)

Real estate scores remarkably well on governance

- Time period: 2003 – 2005
- Complete universe: 4950 – 5260 companies
- REIT universe: 216 – 228 companies

Governance Ratings Per Industry (2005)

<i>Top-5</i>	<i>CGQ</i>	<i>SD</i>
Real Estate	64.8	28.6
Utilities	63.1	28.2
Banks	60.2	26.7
Pharmaceuticals & Biotechnology	56.7	26.0
Insurance	54.5	28.2
<i>Bottom-5</i>		
Hotels, Restaurants and Leisure	46.4	27.5
Telecommunication Services	42.4	27.1
Household & Personal Products	41.0	26.2
Food Beverage & Tobacco	38.0	30.1
Media	35.6	29.8

Firm valuation: methodology

- Corporate governance and firm value: Tobin's Q
 - Forward-looking; incorporates intangible value of governance
- Model (1) $Q_{it} = \alpha_i + \beta_1 CGQ_{it-1} + \gamma_{it} X_{it} + \varepsilon_{it}$
- X_{it} contains
 - Size – log(assets)
 - Past performance – ROE
 - Capital structure – debt/equity ratio
 - Age
- Model applied to
 - Complete universe: industry-adjustment of Q
 - REIT universe
- Pooled setup, year dummies
- Median (least-squares deviation) regression to reduce influence outliers

Firm valuation: results complete universe

Significant but small effect of governance on firm value

- Results confirm findings existing literature (CGQ data: Brown and Caylor 2006; IRRC: GIM, Core et al. 2006; CLSA: Klapper and Love 2005, Durnev and Kim 2005)
- 1pt increase in CGQ Index implies 0.5% in Q

	<i>Complete sample: Industry-Adjusted Q</i>				
Intercept	7.79E-03 (0.84)	1.25E-02 (1.02)	1.44E-02 (1.40)	1.26E-02 (0.75)	1.03E-02 (0.94)
Gov Index	6.71E-04 (8.37) ***				
Audit Index		4.93E-03 (2.59) **			
Compensation Index			5.28E-03 (3.13) ***		
Takeover Index				2.51E-03 (1.12)	
Board Index					0.01 (6.83) ***
n	11589	11589	11589	11589	11589
Pseudo-R ²	0.57%	0.65%	0.65%	0.64%	0.71%

* (**) (***) indicates significance at 10% (5%) (1%) level

Regressions corrected for time and control variables (not reported in table)

Firm valuation: results REIT universe

Governance has no influence on firm value

- Results contrary to complete sample and existing literature, confirm substitution hypothesis: investors do not seem to value corporate governance in REITs...
- ...but compensation structure is important

	<i>REIT Sample: Tobin's Q</i>				
Intercept	1.143 (10.59) ***	1.213 (12.11) ***	1.122 (11.34) ***	1.141 (8.31) ***	1.169 (11.54) ***
Gov Index	4.18E-04 (0.59)				
Audit Index		-0.01 (-0.89)			
Compensation Index			0.03 (2.02) ***		
Takeover Index				4.79E-03 (0.31)	
Board Index					-4.19E-03 (-0.32)
n	509	509	509	509	509
Pseudo-R ²	5.38%	5.40%	5.78%	5.32%	5.31%

* (**) (***) indicates significance at 10% (5%) (1%) level

Regressions corrected for time and control variables (not reported in table)

Operating performance: complete universe

Results statistically and economically significant

- Corporate governance and operating performance
 - ROA, ROE, NPM and sales growth

- Model (2) $Oper.Perf_{it} = \alpha_i + \beta_1 CGQ_{it-1} + \gamma_{it} X_{it} + \varepsilon_{it}$
 - X_{it} contains book-to-market ratio

- Results not only confirm, but add to existing finance literature

<i>Complete Sample: Industry-Adjusted Operating Performance</i>				
	ROE	ROA	NPM	Salesgrowth
Intercept	-5.165 (-24.42) ***	-1.376 (-15.19) ***	-0.024 (-14.68) ***	-1.743 (-5.55) ***
Gov Index	0.027 (9.76) ***	5.69E-03 (4.84) ***	2.35E-04 (11.23) ***	-4.07E-03 (-1.00)
n	11589	11589	11589	11589
Pseudo-R ²	1.79%	1.18%	0.06%	1.01%

* (**) (***) indicates significance at 10% (5%) (1%) level

Regressions corrected for time and control variables (not reported in table)

Operating performance: REIT universe

Results statistically and economically insignificant

- Operating performance – governance relationship has not been studied in real estate sector hitherto
- In line with substitution hypothesis, higher corporate governance rating does not improve operational performance of REITs...
 - ...as managerial freedom is perked due to legal restrictions
 - ...which explains lack of relationship between firm value and governance

<i>REIT Sample: Operating Performance</i>				
	ROE	ROA	FFO growth	NPM
Intercept	5.163 (5.34) ^{***}	4.646 (14.46) ^{***}	-0.341 (-1.85) [*]	0.150 (4.72) ^{***}
Gov Index	-0.019 (-1.24)	-0.002 (-0.48)	-0.002 (-0.87)	0.000 (-0.44)
n	509	509	509	509
Pseudo-R ²	0.59%	1.94%	0.65%	0.22%

* (**) (***) indicates significance at 10% (5%) (1%) level

Regressions corrected for time and control variables (not reported in table)

Control sample: firms with high CRE-ratio

Result may be driven by real estate, not structure

- Contrasting findings between complete sample and REIT sample might indicate REIT effect...
- ...but Gertler and Hubbard (1989) document that companies owning mainly fixed assets have fewer possibilities to engage in value-destructing behaviour
- Control sample: companies with high CRE-ratio (Eichholtz and Brounen (2005))
- (3) $CRER = \frac{PPE}{Total\ Assets}$
- Control sample: 542 observations (unbalanced panel)
- Methodology similar to previous analysis

Results control sample

Findings in line with results complete universe

- Results confirm complete sample evidence
 - Corporate governance is positively related with firm value
 - Corporate governance is positively related with operating performance

- Findings support 'REIT effect'

Control Sample: Tobin's Q and Operating Performance

	Tobin's Q	ROE	ROA	NPM	Salesgrowth
Intercept	1.854 (11.72) ^{***}	-5.142 (-5.49) ^{***}	-1.426 (-3.20) ^{***}	-0.023 (-2.79) ^{***}	-1.610 (-0.99)
Gov Index	0.003 (2.93) ^{***}	0.038 (3.06) ^{***}	0.013 (2.25) ^{**}	0.000 (4.03) ^{***}	0.008 (0.38)
n	542	542	542	542	542
Pseudo-R ²	6.78%	6.45%	4.10%	0.24%	0.84%

* (**) (***) indicates significance at 10% (5%) (1%) level

Regressions corrected for time and control variables (not reported in table)

Equity performance: methodology

- Corporate governance and stock performance
 - Financial markets' ability to factor financial consequences of corporate governance into stock prices
 - If governance is priced, difference between high and low governance portfolio should be insignificant
 - GIM: Democratic outperforms Dictator with 9% on annual basis
- Construction of two mutually exclusive portfolios based on corporate governance ratings: top 30% vs. bottom 30% (capitalization)
- Monthly data: January 2000 through December 2005 – annual reranking
 - Ratings 2003 extended backwards
- Performance assessed using Carhart (1997) model

$$(4) R_{it} - R_{ft} = \alpha_i + \beta_{0i}(R_{mt} - R_{ft}) + \beta_{1i}(SMB) + \beta_{2i}(HML) + \beta_{3i}(MOM) + \varepsilon_{it}$$

Equity performance: results

Low-rated REITs outperform high-rated REITs...

- Good governance portfolio no significant alpha, bad governance portfolio significant risk-adjusted outperformance
- Contrasting existing evidence in corporate finance literature...
...but in line with lack of relationship governance and operating performance
- Different cut-off points or equally-weighted approach does not change results

	30% value weighted portfolio - Full period					
	α	$Rm-Rft$	SMB	HML	MOM	Adj. R^2
Good governance	-0.48 (-0.25)	0.84 *** (21.39)	-0.02 (-0.39)	0.11 ** (2.25)	-0.08 *** (-2.89)	0.90
Bad governance	3.21 * (1.89)	0.89 *** (25.69)	0.14 *** (2.95)	-0.01 (-0.16)	0.00 (0.11)	0.93
Difference portfolio	-3.68 (-1.43)	-0.05 (-0.96)	-0.17 ** (-2.23)	0.12 * (1.78)	-0.08 ** (-2.23)	0.15

* (**) (***) indicates significance at 10% (5%) (1%) level

Alphas are annualized percentages

Equity performance: results subperiods

First halve sample drives results

- Subsample analysis reveals that first period drives results
 - In 90s, REITs underperformed, but funds with good governance valued higher
 - After burst tech bubble, investors have flocked to property funds
 - Undervalued (poorly governed) REITs interesting investment opportunity

Period 2000 - 2003						
	α	$Rm-Rft$	SMB	HML	MOM	Adj. R^2
Good governance	1.81 (0.67)	0.85 *** (11.68)	-0.05 (-0.65)	0.09 (1.43)	-0.08 ** (-2.36)	0.88
Bad governance	7.77 *** (3.47)	0.82 *** (13.59)	0.12 * (1.93)	-0.01 (-0.18)	-0.02 (-0.58)	0.91
Difference portfolio	-5.96 * (-1.67)	0.03 (0.36)	-0.16 * (-1.70)	0.10 (1.20)	-0.06 (-1.43)	0.08
Period 2003-2006						
	α	$Rm-Rft$	SMB	HML	MOM	Adj. R^2
Good governance	-3.56 (-1.14)	0.85 *** (16.46)	0.01 (0.05)	0.21 (1.42)	-0.08 (-0.76)	0.90
Bad governance	-2.98 (-1.18)	0.94 *** (22.73)	0.21 ** (2.23)	0.12 (1.01)	-0.01 (-0.14)	0.95
Difference portfolio	-0.58 (-0.14)	-0.09 (-1.32)	-0.21 (-1.28)	0.09 (0.45)	-0.07 (-0.47)	0.15

* (**) (***) indicates significance at 10% (5%) (1%) level

Alphas are annualized percentages

Conclusions and implications for investors

Results suggest 'REIT effect'

- REITs are becoming a preferred vehicle to build up global real estate exposure
- Firm-level corporate governance high in REITs
- High governance ratings for U.S. REITs...
 - ...do not enhance operating performance
 - ...do not lead to higher firm valuation, except for the structure of executive compensation
 - ...do not facilitate a profitable trading strategy
- Our findings may indicate a 'REIT effect'
 - Legal restrictions already curb opportunities to engage in value-destructing behavior
 - Obligatory cash-flow distribution
 - Operational restrictions
 - In line with Klapper and Love (2004) and Durnev and Kim (2005)