

Derivative Litigation and Board Effectiveness: Evidence from Delaware's Judicially-led Reforms in 2003

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Motivation

- In literature, we are not clear about whether shareholder derivative litigation is an effective corporate governance mechanism.
- Delaware's judicially-led reforms in 2003 provide an opportunity to study the "shareholder litigation mechanism".

Institutional Background on Delaware's Judicially-led Reforms in 2003

- Lowered the procedural hurdles to derivative litigation.
 - The demand requirement
 - The special litigation committee
- Liberalized Section 220 of the Delaware General Corporation Law.
- Imposed stricter judicial standards for evaluating director and officer fiduciary duties.
 - *In re Walt Disney Co. Derivative Litigation*
 - *In re Oracle Corp. Derivative Litigation*

Hypothesis Development

Derivative litigation may affect board of director incentives and behavior through a "reputation" channel.

- Reputation concern motivates directors to be effective monitors.

Fama and Jensen (1983), Hermalin and Weisbach (2010)

- Shareholder litigation can severely damage directors' reputation and career opportunities.

Fich and Shivdasani (2007), Brochet and Srinivasan (2014)

Hypothesis

Higher likelihood of derivative litigation leads to a more effective Board of Directors.

Hypothesis 1: Higher likelihood of derivative litigation leads to higher CEO pay-for-performance sensitivity.

Hypothesis 2: Higher likelihood of derivative litigation leads to greater CEO turnover-performance sensitivity.

Data

The sample consists of 2153 publicly-traded firms from 1999 to 2007.

- CEO compensation: salary, bonus, stock granted, stock options, other long-term incentive payouts.
- CEO turnovers: forced turnovers
- Firm performance: stock returns adjusted by value-weighted industry (3-digit SIC) returns.
- CEO characteristics, board and governance characteristics, firm characteristics

Summary Statistics

Variables	25%	Median	75%	Mean	SD
<i>CEO Compensation (in Thousands)</i>	1410	2953	6700	5693	11602
<i>CEO Turnover</i>	0	0	0	0.036	0.186
<i>Industry-adjusted Stock Return</i>	-0.201	-0.022	0.181	0.040	0.502
<i>CEO Ownership</i>	0.001	0.003	0.012	0.023	0.060
<i>CEO Tenure</i>	2	5	9	6.890	7.241
<i>CEO Chairman</i>	1	1	1	0.767	0.423
<i>Board Size</i>	7	9	11	9.432	2.726
<i>Fraction Independent Directors</i>	0.571	0.714	0.818	0.682	0.166
<i>Classified Board</i>	0	1	1	0.601	0.490
<i>Average Director Tenure</i>	5.778	8	10.692	8.926	22.317
<i>Average Director's Outside Seats</i>	0.364	0.727	1.182	0.823	0.605
<i>Fraction Female Directors</i>	0	0.100	0.154	0.099	0.007
<i>Fraction Interlocking Directors</i>	0	0	0	0.007	0.030
<i>Fraction Former Employee Directors</i>	0	0	0.100	0.049	0.078
<i>G Index</i>	7	9	11	9.313	2.610

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Model Specification

$$\begin{aligned} \text{COMP}_{i,t} = & \beta_0 + \beta_1 \times \text{RET}_{i,t} + \beta_2 \times \text{RET}_{i,t} \times \text{DELAWARE}_i + \\ & \beta_3 \times \text{RET}_{i,t} \times \text{POST}_t + \beta_4 \times \text{RET}_{i,t} \times \text{DELAWARE}_i \times \text{POST}_t + \\ & \beta_5 \times \text{DELAWARE}_i \times \text{POST}_t + \gamma X_{i,t} + \nu_i + \mu_t + \eta_k + \epsilon_{i,t} \end{aligned} \quad (1)$$

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Delaware Firms:

$$\text{Pre-event: } \frac{\partial \text{COMP}}{\partial \text{RET}} = \beta_1 + \beta_2$$

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Non-Delaware Firms:

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Delaware (Post-Pre) - Non-Delaware (Post-Pre) = β_4

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$$\begin{aligned} \text{Prob}(\text{TURNOVER}_{i,t}) = & \\ & \beta_0 + \beta_1 \times \text{RET}_{i,t} + \beta_2 \times \text{RET}_{i,t} \times \text{DELAWARE}_i + \beta_3 \times \\ & \text{RET}_{i,t} \times \text{POST}_t + \beta_4 \times \text{RET}_{i,t} \times \text{DELAWARE}_i \times \text{POST}_t + \\ & \beta_5 \times \text{DELAWARE}_i \times \text{POST}_t + \gamma X_{i,t} + \nu_i + \mu_t + \eta_k + \epsilon_{i,t} \end{aligned} \tag{2}$$

Empirical Results

Table 3: The Effects of Delaware's Judicially-led Reforms in 2003 on Board Effectiveness

Variables	CEO Compensation	CEO Turnover
	OLS (1)	LPM (2)
<i>Stock Return</i>	0.077** (0.032)	-0.022*** (0.008)
<i>Stock Return</i> × <i>Delaware</i> × <i>Post</i>	0.317*** (0.091)	-0.077*** (0.029)
<i>Stock Return</i> × <i>Delaware</i>	-0.106** (0.042)	-0.001 (0.011)
<i>Stock Return</i> × <i>Post</i>	-0.215*** (0.070)	0.010 (0.023)
<i>Delaware</i> × <i>Post</i>	0.032 (0.037)	0.014 (0.010)
<i>Constant</i>	4.917*** (1.207)	0.382 (0.351)
Control Variables	Yes	Yes
Firm FE, Year FE, Industry FE	Yes	Yes
Observations	6228	7353
Adjusted R ²	0.727	0.083

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Table 4: Dynamic Analysis of the Effects of Delaware's 2003 Judicially-led Reforms

Variables	CEO Compensation	CEO Turnover
	OLS (1)	LPM (2)
<i>Stock Return</i>	-0.104 (0.069)	-0.022 (0.018)
<i>Stock Return</i> × <i>Delaware</i> × <i>Before</i> (-3)	-0.087 (0.109)	0.019 (0.028)
<i>Stock Return</i> × <i>Delaware</i> × <i>Before</i> (-2)	-0.051 (0.103)	-0.039 (0.026)
<i>Stock Return</i> × <i>Delaware</i> × <i>Before</i> (-1)	-0.156 (0.134)	-0.002 (0.038)
<i>Stock Return</i> × <i>Delaware</i> × <i>After</i> (+1)	-0.107 (0.146)	-0.126** (0.058)
<i>Stock Return</i> × <i>Delaware</i> × <i>After</i> (+2)	0.361** (0.158)	-0.064 (0.042)
<i>Stock Return</i> × <i>Delaware</i> × <i>After</i> (+3)	0.207 (0.170)	-0.075* (0.040)
<i>Stock Return</i> × <i>Delaware</i> × <i>After</i> (+4)	-0.199 (0.200)	-0.056 (0.070)
<i>Stock Return</i> × <i>Delaware</i>	0.014 (0.078)	0.013 (0.020)
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Table 5: Placebo Tests

	CEO Compensation OLS	CEO Compensation OLS	CEO Turnover LPM	CEO Turnover LPM
	1999-2002 Placebo event in 2001	2003-2006 Placebo event in 2005	1999-2002 Placebo event in 2001	2003-2006 Placebo event in 2005
Variables	(1)	(2)	(3)	(4)
<i>Stock Return</i>	-0.077 (0.053)	-0.050 (0.064)	-0.033** (0.014)	-0.025 (0.026)
<i>Stock Return</i> × <i>Delaware</i> × <i>PostPlacebo</i>	-0.017 (0.093)	-0.041 (0.133)	-0.020 (0.028)	-0.009 (0.051)
<i>Stock Return</i> × <i>Delaware</i>	0.002 (0.059)	-0.024 (0.085)	0.013 (0.016)	-0.032 (0.033)
<i>Stock Return</i> × <i>PostPlacebo</i>	0.174** (0.071)	0.210** (0.101)	0.026 (0.017)	0.022 (0.038)
<i>Delaware</i> × <i>PostPlacebo</i>	-0.090* (0.053)	-0.023 (0.036)	-0.002 (0.013)	0.009 (0.011)
<i>Constant</i>	5.185*** (1.860)	5.884*** (1.305)	0.967*** (0.314)	0.313 (0.444)
Control Variables	Yes	Yes	Yes	Yes
Firm FE, Year FE, Industry FE	Yes	Yes	Yes	Yes
Observations	3982	4316	4783	5044
Adjusted R ²	0.707	0.784	0.082	0.095

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<i>Stock Return</i> × <i>Delaware</i> × <i>PostPlacebo</i>	-0.017 (0.093)	-0.041 (0.133)	-0.020 (0.028)	-0.009 (0.051)
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<i>Stock Return</i> × <i>PostPlacebo</i>	0.174** (0.071)	0.210** (0.101)	0.026 (0.017)	0.022 (0.038)
<i>Delaware</i> × <i>PostPlacebo</i>	-0.090* (0.053)	-0.023 (0.036)	-0.002 (0.013)	0.009 (0.011)
<i>Constant</i>	5.185*** (1.860)	5.884*** (1.305)	0.967*** (0.314)	0.313 (0.444)
Control Variables	Yes	Yes	Yes	Yes
Firm FE, Year FE, Industry FE	Yes	Yes	Yes	Yes
Observations	3982	4316	4783	5044
Adjusted R ²	0.707	0.784	0.082	0.095

Conclusion

- Delaware's judicially-led reforms in 2003 significantly affect board decisions in CEO compensation and CEO replacement.
- Shareholder derivative litigation is an effective corporate governance mechanism.