

The Litigation Sensitivity Channel of Shareholder Rights

Tural Karimli* and Altan Pazarbasi†

*Frankfurt School of Finance & Management, t.karimli@fs.de

†Bilkent University, altan.pazarbasi@bilkent.edu.tr

Abstract

We develop a novel firm-level measure of class-action litigation exposure using textual analysis of risk factor disclosures in corporate filings. Ex-ante litigation exposure predicts future litigation events and commands a risk premium. We document a new litigation sensitivity channel of shareholder rights by exploiting our measure and the variation in U.S. circuit court ideology. For a wide range of outcomes, litigation sensitive firms respond more sharply to shifts toward more liberal courts. Strengthened shareholder litigation rights foster valuable corporate innovation and improve firm prospects. Our results emphasize the importance of firm heterogeneity in assessing the impact of the litigation system.

Motivation & Research question

- How does shareholder litigation risk affect corporate outcomes?
 - + mitigates moral hazard problem due to its deterrence effect (Porta et. al., 1998).
 - discourages innovation since these activities leave firms vulnerable to meritless lawsuits (Kempf and Spalt, 2021).
- Empirical evidence on the effect of class-action litigation risk on firm prospects is ambiguous.
- There is no firm-level measure for litigation exposure.

Sample construction

- 10-K filings from SEC's EDGAR website
- Securities class-action dataset from SCAC
- Firm fundamentals from Compustat
- Stock performance from CRSP

Period: 2006-2020

Firms: With at least 100 million total assets and non-missing risk factor text

Constructing Firm-level Ex-ante Litigation Exposure

1. Scrape and clean "Item 1A. Risk Factors" from 10-K filings.
2. Determine sued firms based on securities class-action data (SCAC).
3. Calculate Cosine similarity of sued and not sued firms' term frequency vectors:
 - Take information $X_{i,t}$ of firm i sued at $t+1$
 - Measure similarity of information $Y_{j,t+1}$ of firm j to $X_{i,t}$
 $\Rightarrow X_{i,t}$ contains information about ex-ante litigation probability.

Litigation exposure predicts class-action lawsuits

Dependent variable:	Sued _{t+1}					
	(1)	(2)	(3)	(4)	(5)	(6)
Litigation Exposure _t	0.108*** (3.79)	0.113*** (3.58)	0.106*** (3.68)	0.114*** (3.54)	0.114*** (3.45)	0.120*** (3.20)
FPS _t	0.020*** (4.40)	0.022*** (4.59)	0.022*** (4.69)	0.022*** (4.58)	0.021*** (4.22)	0.025*** (4.63)
Litigious Words _t		0.001 (0.87)				0.001 (0.72)
Litigation Risk (KS) _t			0.025 (0.23)			0.081 (0.60)
Risk Factor Text _t				0.001 (0.07)		0.002 (0.13)
Readability _t				0.000 (0.06)		-0.000 (-0.14)
Political Risk _t					0.004 (0.63)	0.006 (0.76)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	36,577	31,996	34,357	31,996	30,208	24,666
Adj. R ²	0.029	0.030	0.029	0.030	0.028	0.030

Litigation exposure commands higher risk premia

	Bottom	2	3	4	Top	Top-Bottom
Excess Return	0.124*** (4.966)	0.137*** (4.659)	0.174*** (6.234)	0.219*** (6.888)	0.248*** (5.066)	0.115** (2.852)
CAPM α	0.037* (1.959)	0.04 (1.684)	0.061** (2.781)	0.095*** (3.493)	0.125*** (3.229)	0.077** (2.29)
FF3 α	0.046*** (11.784)	0.049*** (9.184)	0.074*** (7.441)	0.094*** (5.282)	0.108*** (3.658)	0.055* (2.151)
Q α	0.049*** (5.942)	0.063*** (6.817)	0.091*** (16.269)	0.128*** (10.774)	0.161*** (9.778)	0.103*** (8.721)

- 11.5% higher return per annum on long-short portfolio
- Consistent results using value-weighted portfolios and expected return proxies of Martin and Wagner (2019)

Identification Strategy

Challenges:

1. Proxies like industry membership \Rightarrow spurious correlation
2. Firm-level ex-ante litigation measure is endogenous

Solutions:

1. Firm-level ex-ante litigation measure \Rightarrow relevant information
2. *Liberal Court* (Huang et. al., 2019) \Rightarrow exogenous shock to legal system
 More democrat \rightarrow less business friendly legal system

Hypothesis: \uparrow Strict litigation environment \Rightarrow \uparrow response by firms with higher ex-ante litigation exposure

Firms with higher litigation exposure engage in value-enhancing innovation activities

Dependent variable:	R&D Intensity _{t+1}		Innovation Output _{t+1}	
	(1)	(2)	(3)	(4)
Liberal Court _t × Litigation Exposure _t	0.415*** (7.90)	0.628*** (9.56)	0.553*** (5.56)	0.329*** (4.15)
Liberal Court _t	-0.096*** (-7.20)			-0.063*** (-3.42)
Litigation Exposure _t	0.060*** (2.65)	-0.041 (-1.61)	-0.144*** (-3.87)	-0.051 (-1.60)
Controls	Yes	Yes	Yes	Yes
Industry FE	No	No	Yes	No
Industry × Year FE	No	Yes	No	Yes
Circuit FE	Yes	No	No	Yes
Circuit × Year FE	Yes	No	Yes	No
Obs.	33435	33499	33499	33435
Adj. R ²	0.490	0.492	0.252	0.247

Cash holdings rises to accommodate expected litigation costs

Dependent variable:	Cash Savings _{t+1}			
	(1)	(2)	(3)	(4)
Liberal Court _t × Litigation Exposure _t	0.241*** (4.66)	0.224*** (4.30)	0.236*** (4.28)	0.168*** (2.84)
Liberal Court _t	-0.038*** (-3.75)	-0.036*** (-3.51)	-0.056*** (-3.40)	
Litigation Exposure _t	-0.057*** (-2.63)	-0.040* (-1.81)	-0.052** (-2.24)	-0.030 (-1.30)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	No	No	No
Industry FE	Yes	No	No	Yes
Industry × Year FE	No	Yes	Yes	No
Circuit FE	No	No	Yes	No
Circuit × Year FE	No	No	No	Yes
Obs.	33498	33434	33434	33498
Adj. R ²	0.073	0.084	0.084	0.076

Shareholder litigation rights improve performance for firms with high ex-ante litigation risk

Dependent variable:	Tobin's Q _{t+1}			
	(1)	(2)	(3)	(4)
Liberal Court _t × Litigation Exposure _t	8.253*** (5.80)	6.067*** (4.23)	5.782*** (3.88)	6.768*** (3.87)
Liberal Court _t	-1.432*** (-5.04)	-0.994*** (-3.48)	-1.469*** (-3.78)	
Litigation Exposure _t	-2.227*** (-3.60)	-1.517** (-2.36)	-1.741*** (-2.64)	-1.930*** (-2.73)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	No	No	No
Industry FE	Yes	No	No	Yes
Industry × Year FE	No	Yes	Yes	No
Circuit FE	No	No	Yes	No
Circuit × Year FE	No	No	No	Yes
Obs.	33445	33381	33381	33445
Adj. R ²	0.281	0.303	0.309	0.293

Bottom Line

- We provide a novel text-based firm-level ex-ante litigation exposure measure.
- The positive response of innovation output and Tobin's Q contrasts with recent evidence on the dark side of shareholder litigation.