

THE CORPORATE FINANCE BENEFITS OF SHORT HORIZON INVESTORS

Mariassunta Giannetti

Stockholm School of Economics, CEPR and ECGI

Xiaoyun Yu

Indiana University

Investor Horizons

- Asset managers differ greatly in their trading horizons
 - **Long horizon investors** focus on predicting long-run movements in asset values driven by fundamentals and **care about firm long-term performance**
 - **Short horizon investors** focus on predicting the flow of buy and sell orders and aim to profit from stock short-term appreciations; **worry about firms' short-term underperformance**
 - Kay Review of UK Equity Markets and Long-Term Decision Making; Academic Papers; Press

Investor Horizon and Listed Companies

- Concerns that firms may focus on meeting short-term earnings at the expense of long-term value
 - Macroeconomic concerns for growth
- Criticisms on investors short-term focus frequent in the media
 - Democratic presidential candidate [Hillary Clinton](#) proposed a progressive reform of capital gains taxes for the top income tax bracket

“The current definition of a long-term holding period -- just one year -- is woefully inadequate. That may count as long term for my baby granddaughter, but not for the American economy.” – Hillary Clinton

Investor Horizon and Listed Companies

- Academic research
- **Institutional investors improve firm performance and corporate policies**
 - Institutional investors (with the exception of quasi-indexers) improve the governance of innovation (Aghion, Van Reenen and Zingales, 2013)
- **Short investment horizons lead to inefficient corporate policies**
 - Theory:
 - Managerial myopia (Stein, 1989)
 - Empirical evidence:
 - Bushee, 1998; Bushee and Noe 2000; Bushee 2001; Gaspar, Massa and Matos, 2005; Chen, Harford and Li, 2007; Cella, Ellul and Giannetti, 2013; Cremers, Pareek and Sautner, 2015

This paper

- *Are there any contexts in which short-horizon investors may be beneficial for firm performance?*
- In dynamic economic environments, firms with more short-term institutional investors may be faster in adapting to change....
- ...and as a consequence they may perform better
- Possible Mechanisms
 - Voice: Short-term institutional investors put more pressure on companies subject to negative shocks to restructure
 - Exit: Managers expect short-term investors to sell to a larger extent following short-term underperformance and may as a consequence become faster in adapting
 - Clientele Effect: Firms may want to attract short-term investors because they make prices more informative (Han and Sangiorgi, 2016)

Conceptual Framework

- A stylized model in which short-term investors' pressure for change can be good or bad
- The stylized model incorporates short-termism as Stein (1989)
 - Short horizon investors may pressure managers for “change” that leads to short-term gains in valuation, but that destroys long-term cash flows
- But it also allows for “good” change

Conceptual Framework

The Standard View of Short-Termism (Stein 1989)

- **State of the world not favorable to change occurring with probability $1-\mu$**
- Short-term investors increase their holdings in a firm and ask for “change”
- Good managers answer with change –even though it is (long-term) value destroying
- **Boost in short-term valuation** derives from the fact that the firm separates from firms with low quality management in the expectations of market participants
 - A firm that changes is valued $\underline{v}_M > p\bar{v}_M + (1-p)v_L$ in the short-term (where p is the fraction of high quality managers)
- **Long-term underperformance** derives from the fact that the management has undertaken a suboptimal action
 - Without change the firm would be worth $\bar{v}_M > \underline{v}_M$ in the long-run

“New View”

- **State of the world favorable to change occurring with probability μ**
- Short-term investors increase their holdings in a firm and ask for “change”
- Good managers change
- Boost in short-term and long-term performance
 - Short-term valuations increase because the firm separates from firms with low quality management and because market participants know that with some probability change is good

$$\mu v_H + (1 - \mu)\underline{v}_M > p\bar{v}_M + (1 - p)v_L$$

- Long-term valuations also higher

$$\bar{v}_H > \bar{v}_M$$

When may change/short-termism be desirable?

- Large negative shocks leading to plausibly exogenous large increases in competition affecting manufacturing industries
- **Large reductions of import tariff rates**
 - In international trade, large interest in the effect of import competition on firm performance
 - In Finance: Fresard (2010), Xu (2012), Valta (2012)
 - *We explore firm reactions to the actual increase in imports*
 - (Author, Dorn and Hanson, AER 2013; Bloom, Draca and Van Reenen, ReStud 2016)
- **Industry deregulations affecting service industries**
 - Asker and Ljungqvist (2010)

What we do

- We test whether *ex ante* differences in ownership structure lead to differential responses to the above negative shocks
- Contribution(s):
 - An economic context in which short-term investors may be beneficial
 - How firm characteristics (and ownership) affect the firms' resilience to import competition
 - Evidence in economics on the negative effect of import competition on domestic firms (Author, Dorn and Hanson, AER 2013; Bloom, Draca and Van Reenen, ReStud 2016)
 - No evidence on the characteristics of firm that may help weather import competition

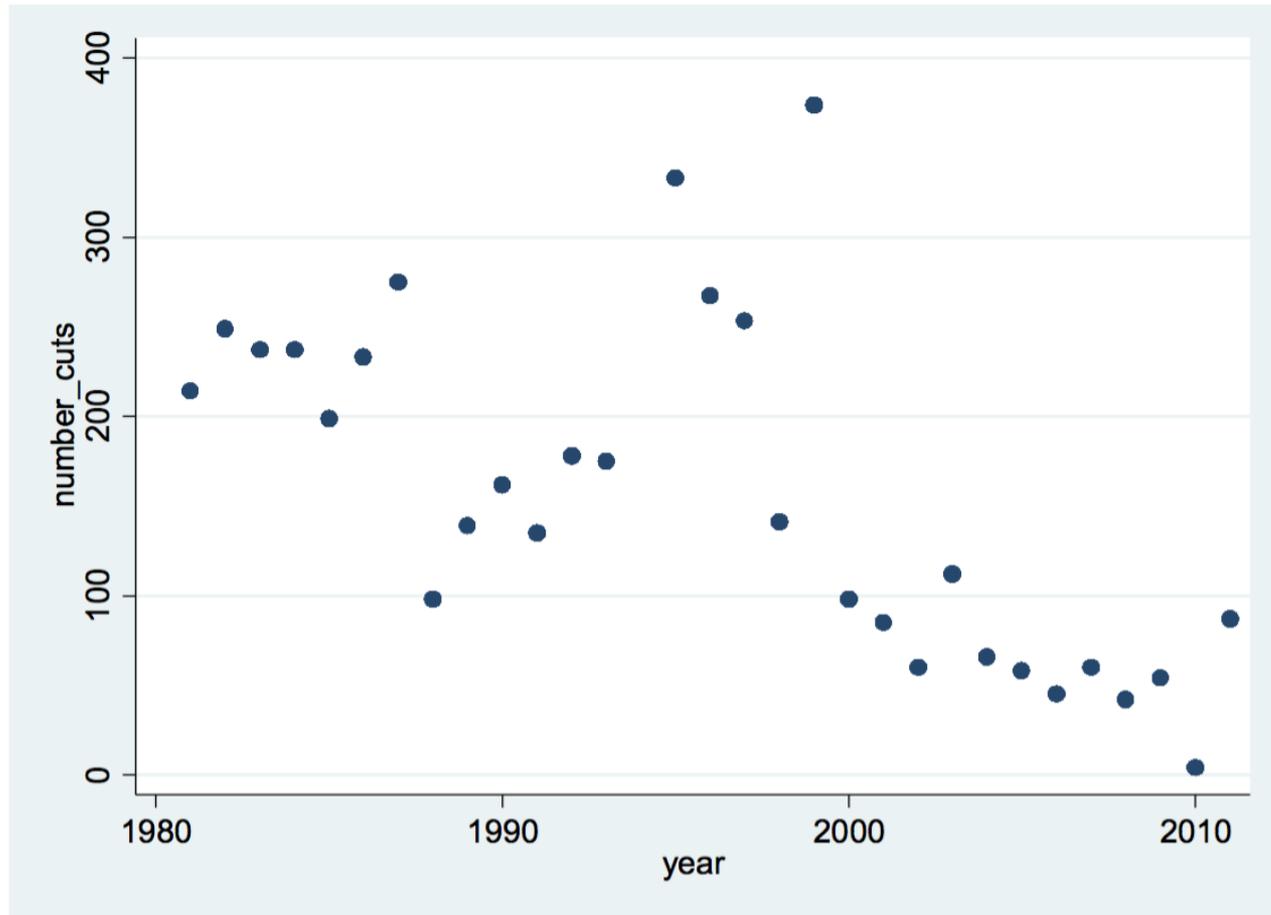
Our Findings in a Nutshell

- Firms with ex ante more-short term institutional investors restructure more following large increases in competitive pressure
- ...and as a consequence perform better
- Results are not due to selection effects
 - No evidence that short-term institutional investors increase their holdings in firms that are going to perform better in the new competitive environment
 - No evidence that only the fittest firms with short-term investors survive. Firms with long-term investors exit to a larger extent
- No evidence of pre-existing trends

Data

- US import data for 4-digit SIC code industries (1981-2011)
 - We compute ad valorem tariff rates, computed as the duties collected at the U.S. Customs, divided by the Free-On-Board custom value of imports
 - Feenstra (1996), Feenstra, Romalis, and Schott (2010), our updates
- Firm characteristics: CRSP, COMPUSTAT, SDC, Execucomp etc...

The distribution of large import tariff cuts



Number of four-digit SIC industries affected by a tariff cut in a given year

Measuring Investor Horizon

- Institutional ownership data: 13F
- **Investor Level Horizon**
 - Horizon is a predetermined and persistent characteristic of the investor
 - Two alternative proxies based on the past holding period of an investor:
 - **Transient investors** as classified by Bushee (1998)
 - **The investor's portfolio turnover**. The minimum of the absolute values of buys and sells of a manager in a given quarter divided by her total stock holdings
 - As in Wermers (2000), Brunneimeier and Nagel (2004)
- **Firm Level Horizon**
 - We aggregate the horizon of the firm's shareholders using ownership weights just before the event
 - **A firm's % short-term investors**: using Bushee's classification of transient investors
 - **A firm's average churn ratio**, that is, the average portfolio turnover of the institutional investors in a firm)
 - Cella, Ellul and Giannetti (2013)

Empirical Approach

- **Temporary effects:** Initial effects of negative shocks in the year following the tariff cuts
 - **How firms react to shock**
 - Changes in market share, asset growth, employment growth
- **Permanent effects:** Long-term performance (up to five years after the tariff cuts)
 - Tobin's Q, ROA, labor productivity
- **Mechanisms**

Growth of sales

Relative to the other US listed companies in the same four digit industry during the year, firms with short-term investors maintain larger market shares

	(1)	(2)	(3)	(4)	(5)	(6)
Cut × % Short-term Investors	0.194*** (0.063)	0.509*** (0.087)	0.494*** (0.087)			
Cut	-0.033*** (0.009)	0.028** (0.012)	0.024** (0.012)	-0.033*** (0.010)	0.032*** (0.011)	0.028*** (0.011)
% Short-term Investors	0.845*** (0.044)	0.325*** (0.057)	0.294*** (0.056)			
Cut × Churn				0.811*** (0.242)	4.204*** (0.651)	4.162*** (0.646)
Churn				4.960*** (0.291)	0.804** (0.409)	0.694* (0.411)
% Institutional Investors	-0.411*** (0.015)	-0.303*** (0.028)	-0.307*** (0.028)	-0.654*** (0.027)	-0.260*** (0.043)	-0.264*** (0.043)
Cut × % Institutional Investors		-0.202*** (0.031)	-0.189*** (0.031)		-0.424*** (0.057)	-0.410*** (0.057)
ROA			0.193*** (0.019)			0.159*** (0.016)
Constant	0.279*** (0.008)			0.303*** (0.008)		
Observations	25,531	25,220	25,011	28,301	27,986	27,717
R-squared	0.106	0.302	0.303	0.101	0.303	0.301
Firm FE	NO	YES	YES	NO	YES	YES
Year FE	YES	YES	YES	YES	YES	YES

In column 3, increasing short-term institutional ownership from the bottom to the top quartile leads to a change in market share of 5% in the year following the tariff cut

Initial Reaction: Assets Growth

	(1)	(2)	(3)	(4)	(5)	(6)
Cut x % Short-term Investors	0.196*** (0.057)	0.568*** (0.081)	0.542*** (0.081)			
Cut	-0.029*** (0.009)	0.021* (0.012)	0.012 (0.011)	-0.026*** (0.009)	0.025** (0.011)	0.015 (0.011)
% Short-term Investors	0.738*** (0.038)	0.425*** (0.052)	0.334*** (0.049)			
Cut x Churn				0.678*** (0.225)	4.539*** (0.603)	4.472*** (0.591)
Churn				4.038*** (0.249)	0.984*** (0.353)	0.498 (0.356)
% Institutional Investors	-0.304*** (0.013)	-0.357*** (0.028)	-0.361*** (0.027)	-0.482*** (0.023)	-0.295*** (0.039)	-0.285*** (0.039)
Cut x % Institutional Investors		-0.198*** (0.031)	-0.172*** (0.030)		-0.427*** (0.055)	-0.402*** (0.054)
ROA			0.453*** (0.021)			0.407*** (0.018)
Constant	0.220*** (0.006)			0.237*** (0.006)		
Observations	25,531	25,220	25,011	28,301	27,986	27,717
R-squared	0.104	0.271	0.337	0.096	0.265	0.323
Firm FE	NO	YES	YES	NO	YES	YES
Year FE	YES	YES	YES	YES	YES	YES

Initial Reaction: Employment Growth

	(1)	(2)	(3)	(4)	(5)	(6)
Cut x % Short-term Investors	0.181*** (0.062)	0.538*** (0.081)	0.529*** (0.082)			
Cut	-0.033*** (0.009)	0.034*** (0.012)	0.032*** (0.012)	-0.034*** (0.010)	0.032*** (0.011)	0.029*** (0.011)
% Short-term Investors	0.808*** (0.043)	0.304*** (0.052)	0.282*** (0.051)			
Cut x Churn				0.753*** (0.244)	4.436*** (0.577)	4.394*** (0.576)
Churn				4.478*** (0.288)	0.544 (0.362)	0.470 (0.363)
% Institutional Investors	-0.411*** (0.016)	-0.244*** (0.030)	-0.247*** (0.030)	-0.624*** (0.027)	-0.202*** (0.041)	-0.206*** (0.040)
Cut x % Institutional Investors		-0.218*** (0.032)	-0.210*** (0.032)		-0.437*** (0.054)	-0.427*** (0.053)
ROA			0.146*** (0.016)			0.124*** (0.014)
Constant	0.252*** (0.008)			0.277*** (0.008)		
Observations	25,531	25,220	25,011	28,301	27,986	27,717
R-squared	0.104	0.338	0.332	0.098	0.333	0.324
Firm FE	NO	YES	YES	NO	YES	YES
Year FE	YES	YES	YES	YES	YES	YES

Long-Term Effects

- But firms with more short-horizon investors could just be window dressing (e.g., Graham, Harvey, and Rajgopal, 2005)
- Consider long-term effects on performance (up to five years after the cut)
 - Tobin's Q
 - ROA (t+1)
 - Labor productivity

Long-term Effects: Tobin's Q

	(1)	(2)	(3)	(4)	(5)	(6)
Post Cut × % Short-term Investors	0.632*** (0.212)	0.637*** (0.216)	0.644** (0.276)			
Post Cut	-0.184*** (0.029)	-0.182*** (0.043)	-0.291*** (0.056)	-0.192*** (0.028)	-0.213*** (0.036)	-0.313*** (0.048)
% Short-term Investors	0.773*** (0.172)	0.776*** (0.177)	0.724*** (0.191)			
Post Cut × Churn				2.693*** (0.808)	2.226** (0.903)	3.183** (1.289)
Churn				1.546** (0.870)	1.092 (0.951)	1.581 (1.054)
% Institutional Investors	-0.960*** (0.096)	-0.961*** (0.097)	-0.910*** (0.113)	-0.864*** (0.101)	-0.828*** (0.108)	-0.867*** (0.128)
Post Cut × % Institutional Investors		-0.005 (0.083)	0.068 (0.096)		0.084 (0.083)	0.060 (0.100)
Leverage	0.381*** (0.070)	0.381*** (0.070)	0.452*** (0.074)	0.443*** (0.059)	0.440*** (0.059)	0.493*** (0.062)
ROA	-0.105* (0.060)	-0.105* (0.060)	-0.144** (0.062)	-0.155*** (0.051)	-0.155*** (0.051)	-0.188*** (0.052)
Observations	23,623	23,623	23,023	27,280	27,247	26,704
R-squared	0.614	0.614	0.669	0.630	0.630	0.678
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	NO	YES	YES	NO
Industry × Year FE	NO	NO	YES	NO	NO	YES

Even after five years, a one-standard-deviation increase in institutional ownership leads to a 30 percentage points higher Tobin's Q for firms that have been subject to a tariff cut

Long-term Effects: Profitability

	(1)	(2)	(3)	(4)	(5)	(6)
Post Cut × % Short-term Investors	0.092** (0.040)	0.100** (0.039)	0.128** (0.056)			
Post Cut	0.003 (0.006)	0.007 (0.010)	0.007 (0.014)	-0.002 (0.007)	0.004 (0.010)	0.002 (0.013)
% Short-term Investors	0.018 (0.031)	0.024 (0.033)	0.026 (0.041)			
Post Cut × Churn				0.408** (0.170)	0.551*** (0.183)	0.582* (0.303)
Churn				0.310* (0.161)	0.439** (0.182)	0.438** (0.205)
% Institutional Investors	0.003 (0.021)	0.002 (0.021)	0.005 (0.028)	-0.006 (0.021)	-0.018 (0.022)	-0.014 (0.029)
Post Cut × % Institutional Investors		-0.010 (0.018)	-0.011 (0.022)		-0.025 (0.021)	-0.023 (0.024)
Leverage	-0.065* (0.035)	-0.065* (0.035)	-0.065* (0.036)	-0.072** (0.031)	-0.073** (0.031)	-0.078** (0.031)
Observations	21,476	21,476	20,873	24,745	24,719	24,191
R-squared	0.640	0.640	0.669	0.660	0.658	0.682
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	NO	YES	YES	NO
Industry × Year FE	NO	NO	YES	NO	NO	YES

A one-standard-deviation increase in short-term institutional ownership translates into 5.6 percentage points higher ROA five years after a large tariff cut

Mechanisms

- These effects appear to be achieved through the following channels
 - Investment in fixed assets
 - PPE growth
 - Diversifications
 - M&As and diversifying M&As
 - R&D expenses
 - R&D growth
 - Advertising expenses
 - Advertising growth
 - Product market differentiation
 - Hoberg and Phillips (2015)
 - Executive turnover

Mechanisms: Product Differentiation

We measure product differentiation using Hoberg and Phillips measure of a firms product overlap with other firms (an inverse proxy for how differentiated a product is)

	(1)	(2)	(3)	(4)
Cut x % Short-term Investors	-0.129** (0.045)	-0.124** (0.048)		
Cut	0.019 (0.015)	0.018 (0.015)	0.023 (0.015)	0.022 (0.016)
% Short-term Investors	-0.025 (0.035)	-0.034 (0.036)		
Cut x Churn			-0.539** (0.234)	-0.534** (0.242)
Churn			-0.394* (0.217)	-0.442* (0.219)
% Institutional Investors	-0.013 (0.025)	-0.021 (0.027)	0.019 (0.046)	0.014 (0.042)
Size		0.006 (0.008)		0.005 (0.009)
Leverage		-0.004 (0.013)		-0.001 (0.011)
ROA		0.018 (0.029)		0.024 (0.029)
Observations	14,256	14,207	14,630	14,579
R-squared	0.064	0.064	0.058	0.059
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Mechanisms: Executive Turnover

	(1)	(2)
Cut x % Short-term Investors	0.104** (0.043)	
Cut	0.012 (0.014)	0.010 (0.014)
% Short-term Investors	0.032 (0.026)	
Cut x Churn		0.637* (0.356)
Churn		0.077 (0.158)
% Institutional Investors	-0.005 (0.014)	-0.005 (0.019)
Cut x % Institutional Investors	-0.032 (0.025)	-0.054 (0.035)
Leverage	0.008 (0.018)	0.009 (0.015)
ROA	-0.120*** (0.032)	-0.117*** (0.033)
Size	-0.004 (0.003)	-0.004 (0.003)
# of Executives	0.036*** (0.001)	0.036*** (0.001)
Observations	8,183	8,224
R-squared	0.088	0.087
Year FE	YES	YES

Robustness

- Placebo test
- Endogeneity of institutional ownership
- Exit analysis
- Short-term ownership following large tariff cuts
- Alternative mechanism: cash holdings; block ownership; leverage

Placebo Test

Dependent Variable	Market Share	Asset Growth	Employment Growth	PPE Growth
	(1)	(2)	(3)	(4)
Cut (t-1) × % Short-term Investors	0.049 (0.075)	0.076 (0.051)	0.002 (0.055)	0.051 (0.047)
Cut (t-1)	-0.007 (0.011)	-0.022*** (0.007)	-0.006 (0.008)	-0.003 (0.006)
% Short-term Investors	0.301*** (0.071)	0.403*** (0.044)	0.302*** (0.044)	0.445*** (0.041)
% Institutional Investors	-0.009 (0.017)	0.012 (0.011)	0.006 (0.011)	0.015 (0.009)
Cut × % Institutional Investors	-0.150*** (0.032)	-0.233*** (0.023)	-0.088*** (0.026)	-0.109*** (0.021)
Market Share (t-1)	-4.319*** (0.673)			
Observations	22,261	22,897	22,897	22,897
R-squared	0.165	0.241	0.333	0.288
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Endogeneity of institutional ownership?

Dependent Variable	Market Share	Asset Growth	Employment Growth	PPE Growth
	(1)	(2)	(3)	(4)
Cut × % Short-term Investors (t-4)	0.284** (0.133)	0.217** (0.102)	0.166* (0.086)	0.217*** (0.079)
Cut	0.013 (0.016)	-0.023** (0.011)	-0.005 (0.012)	0.006 (0.010)
% Short-term Investors (t-4)	-0.010 (0.073)	-0.094* (0.050)	-0.017 (0.050)	-0.042 (0.042)
% Institutional Investors (t-4)	-0.053* (0.032)	-0.093*** (0.025)	-0.081*** (0.029)	-0.109*** (0.022)
Cut × % Institutional Investors (t-4)	-0.088** (0.043)	0.006 (0.031)	-0.016 (0.031)	-0.048* (0.026)
Market Share (t-1)	-4.860*** (0.715)			
Observations	15,920	16,168	16,168	16,168
R-squared	0.155	0.224	0.305	0.259
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Endogeneity of institutional ownership? (II)

- Also no evidence that institutional ownership increases in the year before the tariff cut

Are Firms with Short-Term Institutional Investors Positively Selected? → Exit analysis

Dependent Variable	Death						Exit					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Post Cut × % Short-term Investors	-0.006 (0.006)	-0.004 (0.006)	-0.001 (0.010)				-0.009 (0.012)	-0.003 (0.012)	0.014 (0.020)			
Post Cut	0.003** (0.001)	0.003*** (0.001)	0.007*** (0.002)	0.005*** (0.001)	0.005*** (0.001)	0.009*** (0.002)	0.008*** (0.002)	0.010*** (0.002)	0.018*** (0.004)	0.008** (0.003)	0.021*** (0.005)	0.023*** (0.005)
% Short-term Investors	0.001 (0.004)	0.004 (0.004)	0.000 (0.005)				-0.018** (0.009)	-0.001 (0.009)	0.001 (0.011)			
Post Cut × Churn				-0.067*** (0.024)	-0.062** (0.024)	-0.082* (0.046)				0.034 (0.066)	0.064 (0.121)	0.185 (0.124)
Churn				-0.016 (0.027)	0.003 (0.027)	-0.023 (0.036)				-0.427*** (0.075)	-0.424*** (0.084)	-0.015 (0.090)
% Institutional Investors	-0.007** (0.003)	-0.005* (0.003)	-0.008** (0.004)	-0.000 (0.004)	-0.000 (0.004)	0.001 (0.005)	-0.032*** (0.007)	-0.023*** (0.007)	-0.031*** (0.009)	-0.062*** (0.012)	-0.074*** (0.014)	-0.067*** (0.014)
Post Cut × % Institutional Investors		-0.006** (0.002)	-0.003 (0.003)		-0.004 (0.003)	-0.002 (0.004)		-0.025*** (0.006)	-0.030*** (0.009)			-0.072*** (0.013)
Leverage	0.027*** (0.005)	0.027*** (0.005)	0.027*** (0.006)	0.025*** (0.005)	0.025*** (0.005)	0.023*** (0.006)	0.095*** (0.014)	0.094*** (0.014)	0.097*** (0.015)	0.128*** (0.014)	0.131*** (0.015)	0.127*** (0.015)
ROA	-0.022*** (0.005)	-0.023*** (0.005)	-0.021*** (0.005)	-0.028*** (0.006)	-0.028*** (0.006)	-0.028*** (0.005)	-0.015 (0.009)	-0.016* (0.009)	-0.014 (0.009)	-0.008 (0.010)	-0.007 (0.009)	-0.008 (0.009)
Observations	23,324	23,324	22,747	26,638	26,607	26,084	23,324	23,324	22,747	26,638	26,117	26,084
R-squared	0.205	0.205	0.289	0.164	0.163	0.249	0.508	0.509	0.559	0.616	0.660	0.658
Firm FE	YES											
Year FE	YES	YES	NO									
Industry × Year FE	NO	NO	YES									

Short-term Ownership Following Large Tariff Cuts

	% Short-term Investors			Churn		
	(1)	(2)	(3)	(4)	(5)	(6)
Post Cut	0.008** (0.004)	0.004 (0.003)	0.003 (0.003)	0.002*** (0.001)	0.001 (0.001)	0.001 (0.001)
% Institutional Investors		0.095*** (0.007)	0.094*** (0.006)		0.044*** (0.001)	0.044*** (0.001)
Leverage			0.008** (0.004)			0.000 (0.001)
ROA			0.031*** (0.003)			0.006*** (0.001)
Observations	19,725	19,711	19,561	21,302	21,268	21,082
R-squared	0.638	0.652	0.656	0.787	0.826	0.830
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES

Alternative Mechanisms (Cash Holdings)

Dependent Variable	Market Share	Asset Growth	Employment Growth	Sales Growth	PPE Growth
	(1)	(2)	(3)	(4)	(5)
Cut × % Short-term Investors	0.358*** (0.117)	0.458*** (0.085)	0.434*** (0.085)	0.439*** (0.087)	0.454*** (0.075)
Cut	0.011 (0.017)	-0.013 (0.013)	0.004 (0.013)	0.009 (0.013)	0.003 (0.012)
% Short-term Investors	0.233*** (0.073)	0.327*** (0.049)	0.304*** (0.052)	0.311*** (0.056)	0.455*** (0.048)
% Institutional Investors	-0.122*** (0.032)	-0.356*** (0.026)	-0.253*** (0.030)	-0.312*** (0.028)	-0.250*** (0.025)
Cut × % Institutional Investors	-0.124*** (0.038)	-0.136*** (0.030)	-0.177*** (0.032)	-0.172*** (0.031)	-0.176*** (0.028)
Cash	-0.132*** (0.050)	0.276*** (0.030)	-0.009 (0.030)	-0.046 (0.032)	-0.073*** (0.027)
Cut × Cash	0.020 (0.076)	0.098*** (0.032)	0.118*** (0.032)	0.066* (0.040)	0.132*** (0.027)
Market Share (t-1)	-4.461*** (0.672)				
ROA		0.438*** (0.021)	0.144*** (0.017)	0.194*** (0.019)	0.120*** (0.014)
Observations	22,249	25,005	25,005	25,005	25,005
R-squared	0.166	0.345	0.333	0.303	0.330
Firm FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES

Alternative Mechanisms (Block Ownership)

Dependent Variable	Sales Growth	Asset Growth	Employment Growth	PPE Growth
	(1)	(2)	(3)	(4)
Cut × % Short-term Investors	0.494*** (0.087)	0.543*** (0.081)	0.529*** (0.082)	0.561*** (0.072)
Cut	0.024** (0.012)	0.011 (0.012)	0.033*** (0.013)	0.034*** (0.011)
% Short-term Investors	0.294*** (0.057)	0.333*** (0.049)	0.282*** (0.051)	0.423*** (0.048)
% Institutional Investors	-0.307*** (0.028)	-0.361*** (0.027)	-0.247*** (0.030)	-0.242*** (0.025)
Cut × % Institutional Investors	-0.189*** (0.031)	-0.171*** (0.030)	-0.210*** (0.032)	-0.210*** (0.028)
Cut × Family Block Ownership	-0.003 (0.043)	0.015 (0.034)	-0.011 (0.043)	-0.003 (0.036)
ROA	0.193*** (0.019)	0.453*** (0.021)	0.146*** (0.016)	0.118*** (0.014)
Observations	25,011	25,011	25,011	25,011
R-squared	0.303	0.337	0.332	0.329
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

“Out-of-sample” Test: Industry Deregulations

Dependent Variable	Market Share		Asset Growth		Tobin's Q	
	(1)	(2)	(3)	(4)	(5)	(6)
Deregulation × % Short-term Investors	0.780** (0.395)		0.799** (0.386)			
Post Deregulation × % Short-term Investors					1.504*** (0.493)	
Deregulation	-0.007 (0.028)	0.017 (0.028)	0.027 (0.029)	0.059** (0.027)		
Post Deregulation					-0.227*** (0.074)	-0.153** (0.065)
% Short-term Investors	0.354*** (0.114)		0.444*** (0.079)		0.579*** (0.148)	
Deregulation × Churn		5.514* (2.895)		5.911** (2.419)		
Post Deregulation × Churn						6.760** (2.821)
Churn		0.621 (0.408)		0.376 (0.507)		1.622*** (0.608)
% Institutional Investors	-0.187*** (0.052)	-0.143** (0.059)	-0.227*** (0.038)	-0.122** (0.059)	-0.290*** (0.075)	-0.233*** (0.088)
Deregulation × % Institutional Investors	-0.054 (0.109)	-0.360 (0.245)	-0.277** (0.118)	-0.641*** (0.210)	-0.123 (0.153)	-0.401 (0.250)
Market Share (t-1)	-5.991*** (1.470)	-6.207*** (1.477)				
ROA			0.627*** (0.038)	0.596*** (0.035)	0.331*** (0.079)	0.234*** (0.064)
Leverage					0.428*** (0.081)	0.435*** (0.070)
Observations	9,375	10,162	10,289	11,343	11,345	12,478
R-squared	0.221	0.216	0.326	0.320	0.645	0.654
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Industry × Year FE	NO	NO	NO	NO	YES	YES

Conclusion

- Firms with more short-term investors appear more apt at adapting to volatile economic environments
 - They may be subject to short-term investors' pressure through exit or voice
 - They may be used to be faster
- Broader implications:
 - Less stagnation following large negative shocks in countries with short-term investors?
 - Short-term investors could be an antidote to zombie firms...and perhaps a cure for countries like Japan