

Internet Appendix for

“Adapting to Radical Change: The Benefits of Short-Horizon Investors”

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Variable Definitions and Data Sources

Variables	Definition
% Institutional Investors	The fraction of shares outstanding held by institutional investors at year $t - 1$. Source: 13F.
% Short-term Investors	The fraction of shares outstanding held by transient investors at year $t - 1$. Transient investors are identified following Bushee's (1998, 2001) classification of 13F investors. Source: 13F and Bushee's Website.
% Dedicated Investors	The fraction of shares outstanding held by dedicated investors at year $t - 1$. Dedicated investors are identified following Bushee's (1998, 2001) classification of 13F investors. Source: 13F and Bushee's Website.
# Major New Products	The number of announcements of new product introductions with cumulative abnormal returns above the 75 th percentile year by year after adjusting for firm size and book-to-market ratio. Source: Mukherjee et al. (2017).
Bottom Quintile Consensus	The average of analyst forecasts that belong to the bottom quintile of all the earnings forecasts issued for a firm in a year. We require a firm to be covered by at least four analysts in a given year. Source: I/B/E/S.
Cash	Cash and short-term investments divided by total assets. Winsorized at 1%. Source: COMPUSTAT.
Churn	The weighted average of the portfolio turnover of institutional investors in a firm, where the weight is the fraction of shares held by investor j at the end of year $t - 1$. Each institutional investor's quarterly portfolio turnover is calculated as the minimum of the absolute values of buys and sells made by institutional investor j during quarter t , divided by the total holdings at the end of quarter $t - 1$, with buys and sells being measured using end-of-quarter $t - 1$ prices. We then average each investor portfolio turnover over the previous year using as weight the proportion of shares outstanding held by that investor. Source: 13F.
Consensus Forecast	Analysts' consensus forecast of earnings of a firm in a year. We require a firm to be covered by at least four analysts in a given year. Source: I/B/E/S.
Cut	A dummy variable equal to one if a firm belongs to an industry that experiences a large tariff cut during the previous year, and zero otherwise. Sources: Feenstra (1996), Feenstra et al. (2002), and Schott (2010).
Death	A dummy variable equal to one if in a given year a firm is liquidated (CRSP delisting codes 400-490), is dropped (500-591), or expires (600-610), and zero otherwise. Source: CRSP.
Diversifying M&A	A dummy variable equal to one if a firm acquires a target whose primary 3-digit SIC code differs from its own, and zero otherwise. Source: SDC.
Divestiture	A dummy variable equal to one if a firm partially or fully disposes of a business unit losing control of it. Source: SDC.
Executive Turnover	The number of executives leaving or joining a firm in a given year, divided by the number of executives at the end of the previous year. Source: EXECUCOMP.
Exit	A dummy variable equal to one if in a given year a firm experiences a merger (CRSP delisting codes 200-290), an exchange (300-390), a liquidation (CRSP delisting codes 400-490), is dropped (500-591), or expires (600-610), and zero otherwise. Source: CRSP.

Exploratory	The number of exploratory patents filed (and eventually granted) divided by the number of all patents filed (and eventually granted) by the firm in a given year; a patent is classified as exploratory if at least 60% of its citations are outside of a firm's existing expertise (Gao et al. 2018). Source: USPTO.
Exporting Firm	A dummy variable equal to one if a firm has foreign sales in a given year, and zero otherwise. Source: COMPUSTAT.
Family Block Ownership	The proportion of share blocks held by families, as of 2010. Source: Orbis.
Generality	One minus the Herfindahl index of the three-digit technology class distribution of all the patents that cite a given patent. Source: USPTO.
High WP	A dummy variable equal to one for sample firms with CEO's wealth-performance sensitivity in the top tercile of the sample firm distribution during a year and zero otherwise. Source: Edmans et al. (2009).
Investor Activism	A dummy variable equal to one if a firm has been targeted by activist hedge funds (which filed 13D) during the previous year and zero otherwise. Source: Edmans et al. (2013).
Leverage	Total liabilities divided by total assets. Winsorized at 1%. Source: COMPUSTAT.
Ln(Cites)	Natural logarithm of one plus the total number of citations received on the patents that a firm filed (and eventually granted), scaled by the number of the patents filed (and eventually granted) by the firm. The total number of citation counts per firm is winsorized at the 99 th percentile. Source: USPTO.
Ln(Patents)	Natural logarithm of one plus the total number of patents a firm filed (and eventually granted) in a given year. The total number of patents is winsorized at the 99 th percentile. Source: USPTO.
M&A	A dummy variable equal to one if a firm makes a merger and acquisition deal in a given year and zero otherwise. Source: SDC.
MNC	The number of foreign geographic segments of a firm. Winsorized at 1%. Source: COMPUSTAT.
Ownership Concentration	The Herfindahl index of the fraction of shares held by institutional investors at year $t - 1$. Source: 13F.
PPE Growth	The difference between the natural logarithm of a firm's gross property, plant, and equipment in year t and year $t - 1$. Winsorized so that the maximum is no more than 1 and minimum no less than -1. Source: COMPUSTAT.
Profit Margin	Revenues minus operating costs, divided by operating costs. Winsorized at 1%. Source: COMPUSTAT.
Post Cut	A dummy variable equal to one following a large tariff cut in a given industry, and zero otherwise. Sources: Feenstra (1996), Feenstra et al. (2002), and Schott (2010).
R&D	Research and development expenses divided by total assets. Winsorized at 1%. Source: COMPUSTAT.
Rated Firm	A dummy variable equal to one if a firm's S&P Domestic Long-Term Issuer Credit Rating (splterm in COMPUSTAT) is not missing, nor equal to "D (Default)", "SD (Selective Default)", "N. M. (Not Meaningful)", or "Suspended". Source: COMPUSTAT.
ROA	Return on assets, calculated as net earnings divided by total assets. Winsorized at 1%. Source: COMPUSTAT.
Sales Growth	The difference between the natural logarithm of a firm's sales in year t and year $t - 1$. Winsorized so that the maximum is no more than 1 and minimum no less than -1. Source: COMPUSTAT.

Sum of All Positive CARs	The sum of all positive cumulative abnormal returns of new product introduction over the year. Source: Mukherjee et al. (2017).
Technological Uniqueness	The absolute value of the difference between a firm's gross property, plant, and equipment scaled by its number of employees and its industry-year median. Winsorized at 1%. Source: COMPUSTAT.
Tobin's Q	The sum of market value of equity and total liabilities divided by total assets. Winsorized at 5%. Source: COMPUSTAT.
Trademarks	A dummy variable equal to one if a firm has registered at least one trademarks in a given year and zero otherwise. Source: USPTO.

Table A.1: Univariate Comparison

In this table, we compare characteristics of firms with short-term institutional ownership above and below the median. The p -value of the T-test for the difference in sample mean is reported in column 5.

	Low Level of Short-term Investors		High Level of Short-term Investors		p -value
	# obs.	Mean	# obs.	Mean	
	(1)	(2)	(3)	(4)	
% Short-term Investors	12,766	0.025	12,765	0.175	0.000
Churn	12,766	0.013	12,765	0.051	0.000
% Institutional Investors	12,766	0.197	12,765	0.573	0.000
Total Assets (\$MM)	12,652	3,852	12,701	3,614	0.297
Cash	12,647	0.221	12,699	0.264	0.000
Employees (thousands)	12,167	9.111	12,443	9.574	0.299
Leverage	12,637	0.470	12,660	0.448	0.000

Table A.2: Short-Term Institutional Ownership Following Large Tariff Cuts

This table shows how short-term ownership varies in the years following large tariff cuts. In columns 1-3, the dependent variable is the fraction of short-term investors of a sample firm at year $t + 1$. In columns 4-6, the dependent variable is a sample firm's *Churn* at year $t + 1$. All models include a constant and firm and year fixed effects as described in the table, whose coefficients are not reported. Standard errors are clustered at the industry \times year level and are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable	% Short-term Investors			Churn		
	(1)	(2)	(3)	(4)	(5)	(6)
Post Cut	0.008*** (0.003)	0.003 (0.003)	0.003 (0.003)	0.002*** (0.001)	0.001 (0.000)	0.001 (0.000)
% Institutional Investors		0.094*** (0.005)	0.096*** (0.006)		0.044*** (0.001)	0.042*** (0.001)
ROA		0.027*** (0.002)	0.032*** (0.003)		0.006*** (0.000)	0.005*** (0.001)
Leverage			0.008** (0.004)			0.001 (0.001)
Size			-0.001 (0.001)			0.001*** (0.000)
Observations	19,725	19,600	19,566	21,302	21,123	21,087
R-squared	0.638	0.656	0.657	0.787	0.830	0.831
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES