

Presidential economic approval rating and the cross-section of stock returns

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Introduction

- ▶ Authors construct a monthly presidential economic approval rating (PEAR) index
- ▶ Stocks with high betas to changes in the PEAR index significantly under-perform those with low betas
- ▶ PEAR beta dynamically reveals a firm's perceived alignment to the incumbent president's economic policies and investors seem to misprice such an alignment
- ▶ Evidence supporting mispricing-based explanation:
 - ▶ Positive correlation between absolute change in the PEAR index and retail turnover
 - ▶ PEAR beta positively predict analysts forecast errors and negatively predict future revisions in their long-term growth forecasts as well as future revisions in the price target growth forecasts
 - ▶ PEAR beta spread portfolio returns are higher on announcements days

Robustness

- ▶ Performance over political cycles
 - ▶ Split the sample between Democratic and Republican government
- ▶ Performance over the presidential transition and non-transition periods
 - ▶ Split the sample into transition (12 months before and after elections) and non transition periods
- ▶ Performance over NBER recessions and expansions
- ▶ Performance among different firms
 - ▶ Split the sample according to limits-to-arbitrage measures: IVOL, illiquidity and firm size
- ▶ Alternative PEAR beta estimates
 - ▶ Excluding mkt return from regression, and with different rolling windows
- ▶ Alternative PEAR indexes
 - ▶ Estimate PEAR beta on the residual of AR(1) model
 - ▶ Presidential approval rating index
 - ▶ PEAR using top 6 polling organizations

PEAR Index

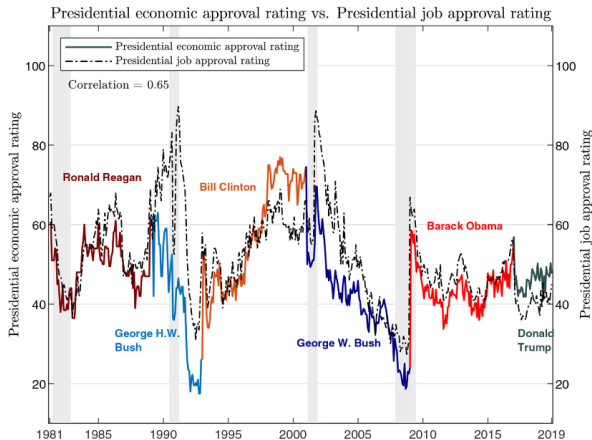


Fig. 1. Presidential economic approval rating (PEAR). This figure depicts the presidential economic approval rating (PEAR) from April 1981 to December 2019, which is based on 1,713 polls conducted by 21 polling organizations and collected by the Roper iPoll at the Roper Center for Public Opinion. It takes the average value if there are multiple polls conducted by different polling organizations in one month. The Gallup presidential job approval rating is also plotted for comparison.

PEAR Index - Building the Index

- ▶ Multiple national polls
- ▶ Focus on the responses to an economy-specific question: “Do you approve or disapprove of the way (name of a president) is handling the economy?”
- ▶ Data from Roper iPoll at the Roper Center for Public Opinion
- ▶ 2100 polls in total from 46 organizations over the period from April 1981 to December 2019.
- ▶ Exclude organizations conducting less than five polls in the sample and polls that are conducted in one month but released in subsequent months
- ▶ Left with 1,713 polls from 21 polling organizations.
- ▶ Construct the PEAR index by simply averaging approval ratings available in each month.
- ▶ Months with missing data are filled with the previous month value (50 months with missing data, with a maximum of 4 consecutive months)

PEAR Summary Statistics

Table 1

Summary statistics of PEAR and other related indexes. This table reports the summary statistics and the level and change correlations between the presidential economic approval rating (PEAR) and other sentiment and politics related indexes, consisting of (orthogonalized) investor sentiment (Baker and Wurgler, 2006), University of Michigan consumer sentiment, presidential job approval rating (Liu and Shaliastovich, 2022), aggregate political risk and sentiment (Hassan et al., 2019), and political uncertainty [measured by economic policy uncertainty in Baker et al. (2016)]. AR(1) and AR(12) refer to the first- and 12th-order autocorrelations. All the time series are at the monthly frequency and over the 1981:04–2019:12 period, except for investor sentiment being 1981:04–2018:12, quarterly aggregate political risk and sentiment being 2002Q1–2019Q4, and political uncertainty being 1985:01–2019:12.

Panel A: Summary statistics							
	Mean	Median	Min	Max	Volatility	AR(1)	AR(12)
PEAR	46.98	46.00	17.50	77.00	11.62	0.93	0.60
Consumer sentiment	87.75	90.90	55.30	112.00	11.92	0.95	0.66
Investor sentiment	0.25	0.03	−0.94	2.94	0.70	0.98	0.47
Presidential approval	51.65	50.00	27.00	89.80	11.72	0.93	0.48
Political risk	7.78	7.81	6.05	10.26	1.00	0.75	0.05
Political sentiment	4.65	4.63	1.77	6.68	1.00	0.91	0.47
Political uncertainty	108.49	83.07	44.36	370.16	75.00	0.97	0.73
Panel B: Correlations							
	PEAR	Investor sentiment	Consumer sentiment	Presidential approval	Political risk	Political sentiment	Political uncertainty
<u>Correlation between levels</u>							
PEAR	1.00						
Investor sentiment	0.23***	1.00					
Consumer sentiment	0.62***	0.20***	1.00				
Presidential approval	0.65***	0.13***	0.25***	1.00			
Political risk	0.09	−0.53***	−0.46***	0.07	1.00		
Political sentiment	0.22*	0.18	0.65***	−0.36***	−0.17	1.00	
Political uncertainty	−0.23***	−0.35***	−0.59***	−0.18***	0.53***	−0.25**	1.00
<u>Correlation between changes</u>							
PEAR	1.00						
Investor sentiment	−0.06	1.00					
Consumer sentiment	0.07	−0.04	1.00				
Presidential approval	0.23***	−0.04	0.07	1.00			
Political risk	−0.18	−0.08	−0.37***	−0.12	1.00		
Political sentiment	0.10	0.23*	0.13	−0.07	−0.29**	1.00	
Political uncertainty	0.02	0.04	−0.19***	0.15***	0.24**	−0.16	1.00

Main Estimation Method

- ▶ PEAR Beta

- ▶ For each stock and each month from June 1981, we run the following time series regression with a 60-month rolling window, requiring at least 24 observations:

$$R_{i,t} = \alpha + \beta_{i,0}\Delta PEAR_t + \beta_{i,1}\Delta PEAR_{t-1} + \beta_{i,Macro}Macro_t + \varepsilon_{i,t}$$

- ▶ **Macro** consists of the change of the effective federal funds rate, log change of the Coincident Economic Activity Index, log change of total monetary base, and stock market return
- ▶ $\beta_{PEAR} = \beta_0 + \beta_1$
- ▶ To avoid mixing betas from opposing political parties, from the first to the forty-seventh month after each new president's inauguration, the authors use the information from the last president in the same party to fill in the time series till they have 48-month data to calculate the PEAR beta
 - ▶ For example, when Donald Trump becomes new president in February 2017, authors use the last 47-month information from George W. Bush's second term
- ▶ Authors estimate the PEAR beta from June 1983 to December 2019 with 416 non-missing months in total

Data

- ▶ Monthly stock returns from the Center for Research in Security Prices (CRSP)
- ▶ Quarterly and annual accounting data from Compustat
- ▶ All common stocks listed on the NYSE, Amex, and Nasdaq exchanges
- ▶ Exclude stocks with a price less than \$1 and stocks with missing returns

Results

- ▶ At the beginning of each month from June 1983 to November 2019, they form decile portfolios by sorting firms into ten groups based on their PEAR betas in the prior month
- ▶ Value-weight stocks in these portfolios and rebalance them monthly
- ▶ The PEAR beta spread portfolio (L-H) refers to the strategy that buys stocks in decile 1 and sells stocks in decile 10
- ▶ The abnormal return of the PEAR beta spread portfolio ranges from 0.59% to 1.00% depending on specification
- ▶ The low PEAR beta premium implies an annual Sharpe ratio of 0.76, and it is higher than the market Sharpe ratio of 0.55
- ▶ Average returns and FF5 alphas of the PEAR beta spread portfolio hold up to 36 months after formation

PEAR Beta Premium - Results

Table 3

Low PEAR beta premium. This table reports monthly average excess returns and alphas (in %) of PEAR beta (β_{PEAR}) decile portfolios, where P1 (P10) refers to the portfolio with low (high) β_{PEAR} , and L-H refers to the strategy that buys P1 and sells P10. All portfolios are value-weighted and rebalanced at a monthly frequency. Factor models include Fama and French (2015) five-factor model (FF5), Hou et al. (2015) q-factor model (HXZ), Stambaugh and Yuan (2017) mispricing-factor model (SY), Daniel et al. (2020) behavioral-factor model (DHS), and Daniel et al. (1997) characteristics-based model (DGTW). Reported in parentheses are *t*-values. Industry demeaned β_{PEAR} is based on the Fama-French 48 industries. The sample period is 1983:06–2019:12.

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	L-H
Panel A: Sort on β_{PEAR}											
β_{PEAR}	−1.78	−0.76	−0.44	−0.22	−0.03	0.14	0.34	0.58	0.96	2.10	3.88
Excess	1.19	0.89	0.82	0.76	0.80	0.68	0.50	0.64	0.55	0.08	1.11
	(3.40)	(3.50)	(3.59)	(3.49)	(3.68)	(2.98)	(2.07)	(2.44)	(1.73)	(0.19)	(4.47)
α_{FF5}	0.73	0.16	0.06	−0.06	0.02	−0.03	−0.28	−0.07	0.02	−0.27	1.00
	(4.34)	(1.39)	(0.62)	(−0.85)	(0.29)	(−0.30)	(−3.16)	(−0.62)	(0.11)	(−1.69)	(4.04)
α_{HXZ}	0.71	0.19	0.14	−0.05	0.05	0.02	−0.15	0.02	0.06	−0.22	0.93
	(4.11)	(1.64)	(1.47)	(−0.59)	(0.70)	(0.25)	(−1.65)	(0.17)	(0.41)	(−1.14)	(3.64)
α_{SY}	0.55	0.19	0.12	−0.12	0.03	0.02	−0.28	−0.03	−0.04	−0.37	0.92
	(3.01)	(1.60)	(1.23)	(−1.56)	(0.35)	(0.21)	(−3.01)	(−0.27)	(−0.24)	(−1.78)	(3.46)
α_{DHS}	0.71	0.19	0.20	−0.05	−0.01	0.01	−0.18	0.11	0.07	−0.11	0.82
	(3.80)	(1.53)	(2.00)	(−0.67)	(−0.16)	(0.10)	(−1.82)	(0.93)	(0.45)	(−0.55)	(3.07)
DGTW	0.31	0.03	0.04	0.04	0.06	−0.04	−0.13	−0.01	0.02	−0.28	0.59
	(1.95)	(0.36)	(0.56)	(0.68)	(1.00)	(−0.71)	(−1.83)	(−0.16)	(0.17)	(−1.58)	(2.92)
Panel B: Sort on industry demeaned β_{PEAR}											
β_{PEAR}	−1.84	−0.84	−0.52	−0.30	−0.11	0.06	0.25	0.49	0.84	1.97	3.81
Excess	1.21	0.74	0.76	0.82	0.76	0.80	0.61	0.57	0.55	0.15	1.06
	(3.39)	(2.84)	(3.36)	(3.85)	(3.61)	(3.63)	(2.52)	(2.24)	(1.90)	(0.39)	(4.69)
α_{FF5}	0.77	0.06	0.03	0.06	0.01	−0.01	−0.12	−0.15	−0.11	−0.20	0.96
	(4.60)	(0.55)	(0.29)	(0.83)	(0.09)	(−0.19)	(−1.24)	(−1.41)	(−0.92)	(−1.35)	(4.23)
α_{HXZ}	0.79	0.11	0.11	0.11	0.03	0.05	−0.05	−0.07	−0.07	−0.17	0.96
	(4.58)	(0.96)	(1.11)	(1.51)	(0.47)	(0.70)	(−0.55)	(−0.49)	(−0.58)	(−0.97)	(4.09)
α_{SY}	0.62	0.09	0.03	0.07	−0.01	0.03	−0.11	−0.19	−0.15	−0.26	0.87
	(3.36)	(0.75)	(0.32)	(0.94)	(−0.14)	(0.34)	(−1.12)	(−1.74)	(−1.20)	(−1.35)	(3.58)
α_{DHS}	0.78	0.14	0.08	0.05	0.07	0.05	−0.08	−0.04	0.01	−0.05	0.83
	(4.26)	(1.12)	(0.79)	(0.63)	(0.93)	(0.61)	(−0.80)	(−0.39)	(0.10)	(−0.27)	(3.37)
DGTW	0.36	−0.02	−0.06	0.08	0.05	0.05	−0.01	−0.08	−0.02	−0.26	0.61
	(2.25)	(−0.21)	(−0.83)	(1.32)	(0.75)	(0.93)	(−0.14)	(−0.96)	(−0.15)	(−1.59)	(3.19)

PEAR Beta Premium

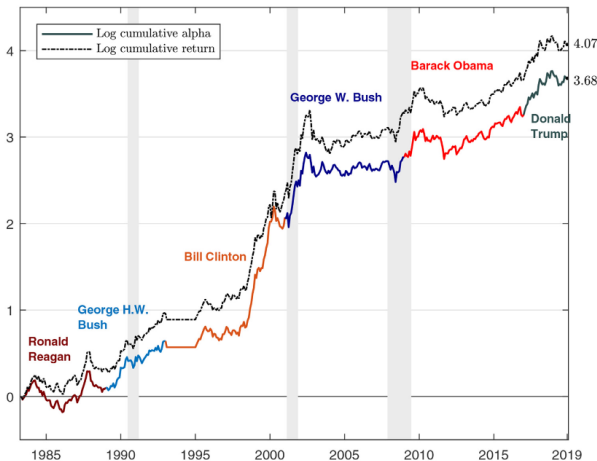


Fig. 2. Low PEAR beta premium: Cumulative performance. This figure plots the log cumulative return and FF5 alpha of the PEAR beta spread portfolio. The sample period is 1983:06–2019:12.

PEAR Returns After Formation

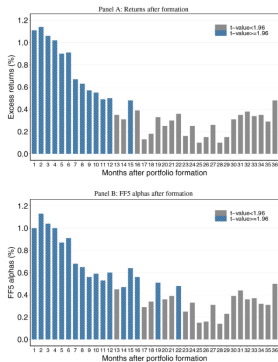


Fig. 3. Low PEAR beta spread after portfolio formation. This figure plots the average excess returns (Panel A) and FFS alphas (Panel B) of the PEAR beta spread portfolio after formation. Grey (blue) indicates that the t -value is smaller (larger) than 1.96. The sample period is 1981:06–2019:12. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

Robustness

Table 4

Low PEAR beta premium: Robustness. This table reports the monthly average excess returns and FF5 alphas of PEAR beta (β_{PEAR}) spread portfolios in different subsamples. Panels A, B, and C split the sample in time series into Democratic and Republican presidency periods, president transition and non-transition periods (transition periods are defined as twelve months surrounding the January of new president inauguration), and NBER-dated recessions and expansions, respectively. Panels D, E, and F split the sample in cross section based on idiosyncratic volatility (IVOL) (Ang et al., 2006), illiquidity (Amihud, 2002), and firm size according to the median breakpoints, respectively. Panel G considers alternative β_{PEAR} estimations: estimating β_{PEAR} by excluding the MKT factor or using a 4-year or 8-year rolling window. Panel H considers alternative PEAR indexes, including using the innovation of the AR(1) process of $\Delta PEAR$, the president job approval rating, and the index based on the polls from the top 6 polling agents [the missing values are filled by using the dyad ratios algorithm of Scimmon (1999)]. All portfolios are value-weighted and rebalanced at a monthly frequency. Reported in parentheses are *t*-values. The sample period is 1983:06–2019:12.

	Excess return	FF5 alpha	#(obs.)		Excess return	FF5 alpha	#(obs.)
Panel A: Democratic vs. Republican presidents				Panel B: Transition vs. non-transition periods			
Democratic	1.26 (3.32)	1.31 (3.09)	169	Transition	1.99 (3.25)	1.65 (2.92)	113
Republican	1.01 (3.07)	0.79 (2.62)	247	Non-transition	0.78 (3.12)	0.77 (2.84)	303
Difference	0.25 (0.50)	0.52 (1.06)		Difference	-1.21 (-1.83)	-0.89 (-1.50)	
Panel C: Recessions vs. expansions				Panel D: Low vs. high IVOL firms			
Recession	2.06 (1.61)	1.53 (1.26)	34	Low IVOL	1.10 (4.17)	1.04 (3.77)	
Expansion	1.03 (4.18)	0.95 (3.57)	382	High IVOL	0.77 (2.97)	0.74 (2.74)	
Difference	-1.03 (-0.79)	-0.58 (-0.47)		Difference	-0.33 (-1.13)	-0.30 (-0.97)	
Panel E: Liquid vs. illiquid firms				Panel F: Small vs. big firms			
Liquid	1.09 (4.12)	1.01 (3.80)		Small	0.53 (3.58)	0.38 (2.54)	
Illiquid	0.44 (2.47)	0.25 (1.40)		Big	1.09 (4.09)	0.99 (3.73)	
Difference	-0.65 (-2.47)	-0.76 (-2.73)		Difference	0.55 (2.09)	0.61 (2.20)	
Panel G: Alternative β_{PEAR} estimation				Panel H: Alternative PEAR			
Excluding MKT	1.06 (3.86)	0.85 (3.39)		Innovation of $\Delta PEAR$ AR(1)	1.19 (4.64)	1.13 (4.32)	
4-year rolling	1.03 (4.17)	0.80 (3.30)		Presidential approval rating	0.47 (1.95)	0.44 (1.75)	
8-year rolling	0.93 (3.94)	0.78 (3.26)		Top 6 agents	0.98 (3.59)	1.07 (3.88)	

International Evidence

► Low PEAR beta premium continues to hold in other G7 countries

Table 5

Low PEAR beta premium: International evidence. This table reports monthly average excess returns and FF5 alphas (in %) of PEAR beta (β_{PEAR}) portfolios in other G7 countries. Stock return and market capitalization information are from Datastream. All returns and market capitalizations are based on local currencies, the risk-free rate for each country is the 90-day interbank rate, and the international Fama-French five-factor data are from [Schmidt et al. \(2019\)](#). P1 (P10) refers to the portfolio with low (high) PEAR beta, and L-H refers to the strategy that buys P1 and sells P10. The last column reports the average trade intensity between each country and the US, which is defined as the sum of bilateral trade (imports and exports) between each country and the US divided by the sum of their GDPs ([Frankel and Rose, 1998](#)). All portfolios are value-weighted and rebalanced at a monthly frequency. Reported in parentheses are t -values. The sample periods for results of excess returns are 1987:01–2019:12 for Canada, 1989:12–2019:12 for France and Germany, 1999:12–2019:12 for Italy, 1983:06–2019:12 for Japan, and 1987:12–2019:12 for the UK. The sample period for FF5 factors is 1991:07–2018:01.

	Excess return			FF5 alpha			Trade intensity
	P1	P10	L-H	P1	P10	L-H	
Canada	0.31 (0.61)	−0.55 (−1.15)	0.86 (1.87)	0.23 (0.38)	−0.99 (−2.15)	1.22 (2.24)	2.86
France	0.49 (1.35)	0.39 (0.87)	0.10 (0.25)	−0.01 (−0.04)	−0.55 (−1.73)	0.54 (1.23)	0.35
Germany	0.60 (1.62)	−0.19 (−0.91)	0.79 (2.01)	0.21 (0.77)	−0.84 (−2.77)	1.05 (2.31)	0.65
Italy	0.44 (1.00)	0.24 (0.43)	0.20 (0.38)	−0.03 (−0.12)	−0.22 (−0.53)	0.18 (0.32)	0.29
Japan	0.72 (2.25)	0.08 (0.25)	0.65 (2.22)	0.50 (2.98)	−0.23 (−1.16)	0.73 (2.53)	1.20
UK	0.72 (2.05)	−0.36 (−0.92)	1.08 (2.97)	0.39 (1.31)	−0.59 (−2.10)	0.98 (2.20)	0.57

Fama-MacBeth Regressions

Table 6

Fama-MacBeth regressions. This table reports the results of Fama-MacBeth regressions of one-month-ahead stock excess returns on PEAR beta (β_{PEAR}), controlling for other firm-specific characteristics, which include log firm size (*SIZE*), log book-to-market ratio (*BM*), price momentum (*MOM*), short-term reversal (*STR*), idiosyncratic volatility (*IVOL*), illiquidity (*ILLIQ*, Amihud, 2002), failure probability (*Distress*, Campbell et al., 2008), β_{CFRM} , β_{UNC} (Bali et al., 2017b), β_{RW} (Chen et al., 2021), political alignment index (*PAI*, Kim et al., 2012), political sensitivity (*PS*, Addoum and Kumar, 2016), government spending exposure (*GSE*, Belo et al., 2013), and political connectedness (*PC*, Cooper et al., 2010). In Column 6, we include 48 industry dummies classified following Fama and French (1997). All independent variables except for industry dummies are winsorized at the 1st and 99th percentiles, and then normalized to have zero mean and standard deviation of one. Intercepts are included in all the regressions but unreported for brevity. Newey-West t-values are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. The sample period is 1983:06–2019:12.

	DepVar.: One-month-ahead excess returns (%)					
	(1)	(2)	(3)	(4)	(5)	(6)
β_{PEAR}	-0.14*** (-4.12)	-0.11*** (-4.09)	-0.10*** (-3.43)	-0.09*** (-3.30)	-0.09*** (-2.75)	-0.07** (-2.32)
β_{CFRM}			0.06 (0.65)		0.05 (0.57)	0.06 (0.71)
β_{UNC}			-0.04 (-1.28)		-0.04 (-1.17)	-0.05 (-1.58)
β_{RW}			-0.05 (-1.22)		-0.02 (-0.36)	-0.02 (-0.39)
<i>PAI</i>				0.03 (1.09)	0.04 (1.57)	0.02 (1.07)
<i>PS</i>				0.18*** (3.15)	0.17*** (3.60)	
<i>PC</i>				0.10* (1.79)	0.12** (2.32)	0.09* (1.66)
<i>GSE</i>				-0.00 (-0.02)	0.01 (0.13)	0.02 (0.67)
<i>SIZE</i>		-0.13* (-1.96)	-0.15** (-2.37)	-0.13* (-1.83)	-0.14** (-2.21)	-0.12* (-1.85)
<i>BM</i>		0.12 (1.61)	0.12* (1.77)	0.11 (1.59)	0.12* (1.80)	0.19*** (3.67)
<i>MOM</i>		0.19** (2.16)	0.19** (2.40)	0.16* (1.85)	0.16** (2.24)	0.13* (1.80)
<i>STR</i>		-0.42*** (-6.42)	-0.48*** (-6.94)	-0.48*** (-6.60)	-0.53*** (-6.92)	-0.60*** (-7.41)
<i>IVOL</i>		0.07 (0.73)	0.08 (0.79)	0.10 (0.91)	0.11 (1.00)	0.07 (0.66)
<i>ILLIQ</i>		0.13*** (2.68)	0.15*** (3.54)	0.12** (2.30)	0.14*** (2.94)	0.15*** (3.20)
<i>Distress</i>		-0.45*** (-3.40)	-0.46*** (-3.58)	-0.38*** (-2.80)	-0.40*** (-2.97)	-0.36*** (-2.84)
Industry FEs	No	No	No	No	No	Yes
#(obs.)	1,222,759	1,048,446	1,025,342	797,594	779,088	779,088
Adj. R^2	0.002	0.039	0.049	0.049	0.059	0.077

Perceived alignment with the incumbent president

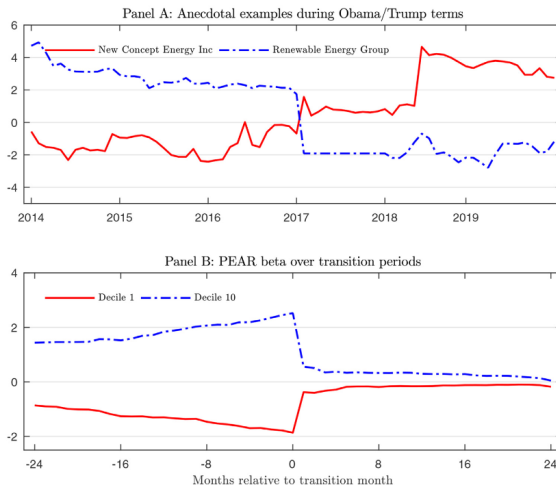


Fig. 5. Trend of PEAR beta. Panel A plots the PEAR betas of two anecdotal examples (New Concept Energy Inc. vs. Renewable Energy Group) during Obama's and Trump's terms. Panel B plots the average values of PEAR beta in decile 1 and decile 10 around the presidential transition periods. The sample period is 1983:05–2019:12.

Perceived alignment with the incumbent president

Table 7

Low PEAR beta premium: Incumbent vs. former president betas. This table reports the monthly average excess returns and FF5 alphas of PEAR beta (β_{PEAR}) decile portfolios, where PEAR beta is calculated conditioning on the months whether the incumbent (former) president is in power. Specifically, at the end of each month, we split the past 60 months into two sub-samples, one coming from months when the incumbent president is in power and the other from months when the former president is in power (with a requirement of at least 12 observations), and then estimate an incumbent president beta and a former president beta for each firm accordingly. The sample period is 1983:06–2019:12.

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	L-H
Panel A: Incumbent president beta											
Excess return	0.83 (2.13)	0.83 (2.94)	0.76 (3.13)	0.59 (2.59)	0.60 (2.66)	0.62 (2.62)	0.48 (1.97)	0.48 (1.80)	0.43 (1.30)	−0.03 (−0.07)	0.86 (4.21)
α_{FF5}	0.62 (3.95)	0.24 (1.92)	0.14 (1.36)	−0.08 (−1.03)	−0.07 (−0.95)	0.04 (0.42)	−0.20 (−2.45)	−0.12 (−1.15)	0.10 (0.80)	−0.24 (−1.69)	0.86 (4.10)
Panel B: Former president beta											
Excess return	1.12 (2.83)	1.16 (3.68)	1.14 (3.88)	0.85 (2.99)	0.97 (3.65)	0.97 (3.46)	0.88 (2.92)	0.86 (2.90)	0.97 (2.77)	0.62 (1.35)	0.50 (1.87)
α_{FF5}	0.21 (1.27)	0.11 (0.69)	0.07 (0.67)	−0.16 (−1.72)	−0.02 (−0.20)	0.10 (0.90)	−0.01 (−0.06)	−0.06 (−0.43)	0.21 (1.29)	−0.23 (−1.07)	0.44 (1.60)

Analysts Forecast Errors and Future Revisions

Table 8

Analyst expectation and low PEAR beta premium: Edays vs. non-Edays. Panel A reports the results from Fama-MacBeth regressions of analyst expectation measures and three-day cumulative abnormal returns (CAR, in %) around earnings announcement days (Edays) on PEAR beta (β_{PEAR}), controlling for firm-specific characteristics (same as column 2 of Table 6). Analyst expectation measures include analyst forecast error ($AFE_t = (\text{Consensus}_t - \text{Actual})/PRC_{t-1}$, in %), revision in long-term growth rate forecasts ($\Delta LTC_{t+12} = LTC_{t+12} - LTC_t$, in %), and revision in analyst price target growth forecasts ($\Delta PTC_{t+12} = (PT_{t+12} - PT_t)/PRC_{t-1}$, in %). The CAR results, adjusted by Daniel et al. (1997) benchmark returns, are at the quarterly frequency and based on the quarter-end month PEAR betas. Panel B reports the daily average returns of PEAR beta decile portfolios on Edays and non-Edays, respectively. Also reported are daily returns adjusted by Daniel et al. (1997) characteristics-based returns and market returns. The sample period is 1983:06–2019:12, except for analyst price target forecasts being 1999:03–2019:12.

Panel A: Analyst reactions and CARs around Edays						
β_{PEAR}	AFE_t	ΔLTC_{t+12}	ΔPTC_{t+12}	CAR_{q+1}	CAR_{q+2}	CAR_{q+3}
	0.38*** (2.62)	−0.08** (−2.18)	−15.67*** (−3.50)	−0.07*** (−2.65)	−0.06** (−2.43)	−0.02 (−0.63)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.133	0.039	0.045	0.014	0.013	0.013

Panel B: low PEAR beta premiums among Edays and non-Edays											
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	L-H
Earnings announcement days											
Excess	14.06 (2.19)	11.78 (2.59)	6.85 (2.01)	9.27 (2.75)	4.38 (1.37)	3.37 (0.93)	5.57 (1.17)	15.43 (3.42)	1.00 (0.17)	−4.81 (−0.76)	18.88 (2.59)
DGTW	12.33 (2.41)	7.32 (1.98)	2.36 (2.09)	4.14 (1.86)	0.31 (0.86)	0.96 (1.13)	3.13 (1.30)	6.65 (2.94)	−1.86 (−0.53)	−5.11 (−1.13)	17.44 (2.61)
MKT	13.92 (2.50)	9.94 (2.75)	3.64 (1.36)	6.78 (2.41)	1.92 (0.72)	3.06 (1.02)	3.55 (1.09)	11.54 (3.05)	0.81 (0.16)	−5.90 (−1.08)	19.82 (2.76)
Non-earnings announcement days											
Excess	5.53 (3.22)	4.50 (3.72)	4.05 (3.62)	4.05 (3.91)	3.85 (3.76)	3.70 (3.42)	2.55 (2.35)	2.55 (1.96)	2.63 (1.72)	1.52 (0.77)	4.02 (3.41)
DGTW	2.16 (2.44)	1.29 (2.89)	0.15 (0.51)	0.63 (2.00)	0.39 (1.44)	0.10 (0.35)	−0.96 (−2.48)	−0.61 (−1.38)	−0.69 (−1.06)	−1.14 (−1.21)	3.31 (3.23)
MKT	3.48 (3.45)	2.48 (4.73)	2.13 (5.50)	2.12 (5.59)	1.87 (5.55)	1.64 (4.29)	0.55 (1.35)	0.67 (1.08)	0.55 (0.70)	−0.52 (−0.47)	4.01 (3.46)

Analysts Forecast Errors and Future Revisions

- ▶ Analysts Forecast Errors (AFE)
- ▶ Future Revisions of Long-Term Growth (LTG)
- ▶ Future Revisions in Price Target Growth (PTG)

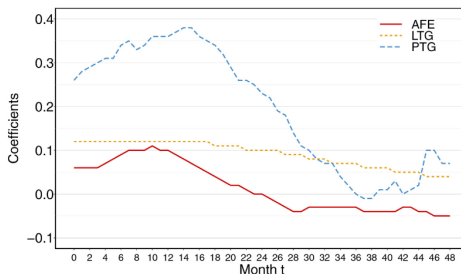


Fig. 6. PEAR vs. analyst expectation. This figure plots the coefficients of regressions of the aggregate analyst expectation measures in month $t + j$ on the PEAR index in month t for $j = 0, 1, \dots, 48$. The analyst expectation measures include analyst forecast error (AFE), long-term growth forecast (LTG), and price target implied growth (PTG). AFE is defined as the difference between the consensus earnings forecast and the actual reported earnings, scaled by the closing stock price in the previous month. LTG is defined as the consensus long-term growth rate forecast. PTG is defined as the consensus price target forecast scaled by the stock price in the previous month. The sample period is 1981:04–2019:12, except for analyst price target forecasts being 1999:03–2019:12.

Alternative Explanations

- ▶ Risk aversion
 - ▶ Unemployment rate, aggregate risk aversion, negative of surplus consumption ratio and option based risk aversion
 - ▶ PEAR is negatively correlated with these four risk aversion measures
 - ▶ High PEAR beta stocks would do worse precisely when aggregate risk aversion increases (or when PEAR decreases), and they are therefore riskier and should earn higher returns. Such a risk-based story is therefore inconsistent with the empirical findings
- ▶ Macroeconomic risk
 - ▶ 132 macro variables
 - ▶ Generally, the correlations are very low, and the highest one is 0.16 between the change of PEAR and consumption growth (CG)
- ▶ Hedge for downside risk
 - ▶ Faccio et al. (2006) find that over the sample period 1997 to 2002, of the 450 politically connected firms from 35 countries, only 51 firms received bailouts
 - ▶ Low PEAR beta premium hardly changes when authors remove the largest 25 firms from the sample each month
- ▶ Sentiment-induced overpricing and short sale constraints
 - ▶ Split the sample into two subsamples based on the median values of the four sentiment measures, and examine the difference of the low PEAR beta premium between the high and low sentiment periods
 - ▶ Sentiment-induced overpricing is not empirically supported

Conclusion

- ▶ Authors construct a novel monthly presidential economic approval rating (PEAR) index
- ▶ In the cross-section, stocks with high PEAR beta significantly underperform those with low PEAR beta by 1% per month
- ▶ The low PEAR beta premium persists up to one year and remains significant in a number of robustness tests.
- ▶ The PEAR beta captures a firm's perceived alignment to the incumbent president's economic policy and investors seem overpricing firms with positive PEAR betas and underpricing firms with negative ones.