

Not-for-Publication Appendix: Corporate Decision-Making in the Presence of Political Uncertainty: The Case of Corporate Cash Holdings

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1 Cash Holdings, Capital Expenditure, and R&D using non-missing R&D

In this section we present summary statistics for the control variables used in the estimation of Equations 2 and 3. These are provided in Table 1. We also provide summary statistics for the level of capital expenditure and R&D spending for the different subgroups of firms based on financial constraint in Tables 2 and 3, respectively. Finally, we provide full regression results for all of the results discussed in Section 6 of the main text. Table 4 provides the full set of results from estimating Equation 1 using only observations without missing R&D. Table 5 presents the results from the estimation of Equation 2, and Table 6 presents the results from the estimation of Equation 3. Tables 7 and 8 display results from regressions where the PC and EPU shocks are interacted with one of the three proxies for financial constraint. These tables focus on the period four quarters following the shock.

Table 1

Summary statistics for corporate control variables used in capital expenditure and R&D regressions

Market-to-Book is the market value of a firm's equity to its book value. Cash Flow measures earnings after paying out interest, dividends, and taxes divided by beginning of period total assets. Cash Flow measures earnings after paying out interest, dividends, and taxes divided by beginning of period total assets. Sales Growth is measured as the year-on-year percent change in quarterly sales growth. LN(Age) is the natural log of the number of years a firm appears in the Compustat Quarterly File. LN(Size) is measured as the natural log of a firm's total assets measured in 2009 dollars. Capital intensity-to-assets is defined as a firm's net property, plant, and equipment scaled by beginning of period total assets. Profitability-to-assets is defined as earnings before interest, taxes, depreciation, and amortization scaled by beginning of period total assets. Leverage measures long-term and current debt divided by beginning of period total assets. Herfindahl-Hirschman Index is calculated at the 3-digit SIC level and measures a firm's market share of its industry.

	Mean	SD	Min	Max
Market-to-Book	2.7567	3.3964	0.4625	24.2265
Cash Flow	-0.0174	0.1107	-0.6817	0.1210
Sales Growth	0.2422	0.9047	-0.8194	6.7799
LN(Age)	2.4447	0.7337	-0.0007	3.9813
LN(Size)	3.2955	2.6218	-6.9078	11.773
Capital Intensity	0.2269	0.2004	0.0044	0.8786
Profitability	-0.0034	0.1008	-0.5646	0.1433
Leverage	0.2639	0.3645	0	2.4282
HHI	1451.47	1369.12	241.81	10000

Table 2

Summary Statistics for capital expenditure by subgroup

Capital Expenditure-to-Assets measures capital expenditure for the current quarter divided beginning of period total assets. Constrained firms (Size) are defined as those in the bottom 33% of the total assets distribution. Unconstrained firms (Size) are defined as those in the top 33% of the total assets distribution. Following Brown, Fazzari, and Petersen (2009), constrained firms (Age) are those that have been publicly traded for no more than fifteen years while unconstrained firms (Age) are those that have been publicly traded for longer than fifteen years. The Size-Age Index is constructed following Hadlock and Pierce (2010). Firms with index values in the top tercile for each quarter are considered constrained and firms in the bottom tercile for each quarter are considered unconstrained. Political sensitivity is determined according to SIC codes as proposed by Atanassov, Julio, and Leng (2018).

Category	Mean	SD	Min	Max
All Firms	0.0129	0.0164	-0.0022	0.0953
Constrained Firms (Size)	0.0103	0.0173	-0.0022	0.0953
Unconstrained Firms (Size)	0.0150	0.0144	-0.0022	0.0953
Constrained Firms (Age)	0.0139	0.0181	-0.0022	0.0953
Unconstrained Firms (Age)	0.0115	0.0130	-0.0022	0.0953
Constrained Firms (Size-Age Index)	0.0111	0.0178	-0.0022	0.0953
Unconstrained Firms (Size-Age Index)	0.0141	0.0134	-0.0022	0.0953
Politically Sensitive Industries	0.0104	0.0146	-0.0022	0.0953
Politically Insensitive Industries	0.0135	0.0167	-0.0022	0.0953

Table 3

Summary Statistics for R&D by subgroup

R&D-to-Assets measures research and development expenditures divided by beginning of period total assets. Constrained firms (Size) are defined as those in the bottom 33% of the total assets distribution. Unconstrained firms (Size) are defined as those in the top 33% of the total assets distribution. Following Brown, Fazzari, and Petersen (2009), constrained firms (Age) are those that have been publicly traded for no more than fifteen years while unconstrained firms (Age) are those that have been publicly traded for longer than fifteen years. The Size-Age Index is constructed following Hadlock and Pierce (2010). Firms with index values in the top tercile for each quarter are considered constrained and firms in the bottom tercile for each quarter are considered unconstrained. Political sensitivity is determined according to SIC codes as proposed by Atanassov, Julio, and Leng (2018).

Category	Mean	SD	Min	Max
All Firms	0.0282	0.0445	0.0000	0.2704
Constrained Firms (Size)	0.0490	0.0625	0.0000	0.2704
Unconstrained Firms (Size)	0.0116	0.0178	0.0000	0.2704
Constrained Firms (Age)	0.0323	0.0481	0.0000	0.2704
Unconstrained Firms (Age)	0.0218	0.0372	0.0000	0.2704
Constrained Firms (Size-Age Index)	0.0485	0.0606	0.0000	0.2704
Unconstrained Firms (Size-Age Index)	0.0124	0.0182	0.0000	0.2704
Politically Sensitive Industries	0.0538	0.0649	0.0000	0.2704
Politically Insensitive Industries	0.0229	0.0368	0.0000	0.2704

Table 4

Response of cash holdings to PC & EPU shocks with missing R&D removed

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of cash holdings to total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,1} and EPU Shock_{4,2} refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag SVAR model with the PC Index ordered first and the EPU Index ordered second. All variables are defined in Table 3 of the main text. PC Shock_{4,1} is the standardized structural Partisan Conflict shock recovered from the four lag SVAR model with the PC Index ordered first. EPU Shock_{4,2} is the standardized structural Economic Policy Uncertainty shock recovered from the four lag SVAR model with the EPU Index ordered second. PC Shock_{4,1}^d the standardized structural Partisan Conflict shock recovered from the four lag SVAR model with the PC Index ordered first and a dummy variable capturing post-2008 quarters. EPU Shock_{4,2}^d is the standardized structural Economic Policy Uncertainty shock recovered from the four lag SVAR model with the EPU Index ordered second and a dummy variable capturing post-2008 quarters. Presidential Election is a dummy variable that equals one for calendar quarters occurring during a presidential election year and zero otherwise. Market-to-Book is the market value of a firm's equity to its book value. Cash Flow measures earnings after paying out interest, dividends, and taxes divided by beginning of period total assets. Net Working Capital-to-Assets is current assets net of cash, cash equivalents, short-term assets, and current liabilities divided by beginning of period total assets. Capital Expenditure-to-Assets measures capital expenditure for the current quarter divided by beginning of period total assets. Leverage measures long-term and current debt divided by beginning of period total assets. R&D-to-Assets measures research and development expenditures divided by beginning of period total assets. Acquisitions-to-Assets measures acquisitions for the current quarter divided by beginning of period total assets. Dividend is a dummy variable that equals one if a firm issues a dividend during the current quarter and zero otherwise. Investment Grade is a dummy variable that equals one if a firm has an investment grade bond or commercial paper rating and zero otherwise. Size is measured as the natural log of a firm's total assets measured in 2009 dollars. CF Volatility is measured as the standard deviation of industry-level cash flows over the previous five years based on two-digit SIC codes. GDP Growth is measured as the log difference in quarterly GDP measured in 2009 dollars. Consumer Confidence measures quarterly observations of the University of Michigan Consumer Sentiment Index. Expected GDP Growth measures the percent change between the one-year ahead GDP forecast and the actual level of GDP observed during the Livingston survey period. Leading Economic Index measures the log change in quarterly observations of the Conference Board's Leading Economic Index.

	(1)	(2)	(3)	(4)
	Cash Holdings _{t+1}	Cash Holdings _{t+2}	Cash Holdings _{t+3}	Cash Holdings _{t+4}
PC Shock _{4,1}	0.000277 (0.000380)	0.00184*** (0.000403)	0.00103** (0.000423)	0.00160*** (0.000421)
EPU Shock _{4,2}	-0.00243*** (0.000431)	-0.00199*** (0.000469)	-0.00216*** (0.000496)	-0.000222 (0.000528)
Presidential Election	-0.000160 (0.00160)	-0.00312* (0.00163)	-0.00863*** (0.00168)	-0.0105*** (0.00175)
Cash Holdings _{t-1}	0.423*** (0.00883)	0.352*** (0.00933)	0.311*** (0.00950)	0.249*** (0.00976)
Market-to-Book	0.0116*** (0.000504)	0.00928*** (0.000539)	0.00744*** (0.000561)	0.00562*** (0.000619)
Cash Flow	-0.0122 (0.0164)	-0.00957 (0.0181)	-0.0192 (0.0195)	0.00562 (0.0220)
Net Working Capital-to-Assets	-0.0224*** (0.00442)	-0.0260*** (0.00484)	-0.0271*** (0.00536)	-0.0318*** (0.00600)
Capital Expend.-to-Assets	-0.652*** (0.0443)	-0.677*** (0.0513)	-0.748*** (0.0521)	-0.700*** (0.0558)
Leverage	-0.0584*** (0.00469)	-0.0599*** (0.00529)	-0.0559*** (0.00574)	-0.0519*** (0.00603)
R&D-to-Assets	0.203*** (0.0490)	0.203*** (0.0516)	0.110** (0.0549)	0.130** (0.0602)
Acquisitions-to-Assets	-0.479*** (0.0223)	-0.392*** (0.0223)	-0.335*** (0.0212)	-0.305*** (0.0219)
Dividend	0.00244 (0.00292)	0.000737 (0.00324)	0.00193 (0.00347)	0.000680 (0.00382)
Investment Grade	0.00170 (0.00490)	0.00348 (0.00546)	0.00443 (0.00578)	0.00379 (0.00627)
Size	-0.0144*** (0.00190)	-0.0190*** (0.00212)	-0.0224*** (0.00232)	-0.0243*** (0.00257)
CF Volatility	0.0000868 (0.000256)	-0.0000279 (0.000283)	0.0000727 (0.000301)	0.0000968 (0.000322)
GDP Growth	0.388*** (0.0838)	0.612*** (0.0885)	0.297*** (0.0859)	-0.0909 (0.0902)
Consumer Confidence	-0.000374*** (0.0000695)	-0.000403*** (0.0000785)	-0.000399*** (0.0000851)	-0.000370*** (0.0000939)
Expected GDP Growth	-0.000840* (0.000484)	-0.00168*** (0.000520)	-0.00158*** (0.000562)	-0.00174*** (0.000620)
Leading Economic Index	0.148*** (0.0349)	0.0701* (0.0394)	0.0111 (0.0429)	0.0729 (0.0458)
Constant	0.220*** (0.0122)	0.271*** (0.0137)	0.317*** (0.0150)	0.340*** (0.0165)
Observations	112987	107699	102748	98447
Adjusted R ²	0.758	0.740	0.732	0.723

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 5
Response of capital expenditure to PC & EPU shocks

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of capital expenditure to total assets. All accounting variables have been scaled by lagged total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,1} and EPU Shock_{4,2} refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag VAR model with the PC Index ordered first and the EPU Index ordered second. Presidential Election is a dummy variable that equals one for calendar quarters occurring during a presidential election year and zero otherwise. Market-to-Book is the market value of a firm's equity to its book value. Cash Flow measures earnings after paying out interest, dividends, and taxes divided by beginning of period total assets. Cash Flow measures earnings after paying out interest, dividends, and taxes divided by beginning of period total assets. Sales Growth is measured as the year-on-year percent change in quarterly sales growth. GDP Growth is measured as the log difference in quarterly GDP measured in 2009 dollars. Consumer Confidence measures quarterly observations of the University of Michigan Consumer Sentiment Index. Expected GDP Growth measures the percent change between the one-year ahead GDP forecast and the actual level of GDP observed during the Livingston survey period. Leading Economic Index measures the log change in quarterly observations of the Conference Board's Leading Economic Index.

	(1)	(2)	(3)	(4)
	Capital Expenditure _{t+1}	Capital Expenditure _{t+2}	Capital Expenditure _{t+3}	Capital Expenditure _{t+4}
PC Shock _{4,1}	-0.000285 (0.0000387)	-0.000458 (0.0000395)	-0.000445 (0.0000432)	0.0000376 (0.0000435)
EPU Shock _{4,2}	-0.000198*** (0.0000420)	-0.000168*** (0.0000420)	-0.000143*** (0.0000423)	-0.000342*** (0.0000441)
Presidential Election	-0.000773*** (0.000143)	-0.000749*** (0.000152)	-0.000799*** (0.000164)	-0.00137*** (0.000172)
Capital Expenditure _{t-1}	0.319*** (0.00963)	0.235*** (0.00952)	0.204*** (0.00949)	0.132*** (0.00947)
Market-to-Book	0.000576*** (0.0000368)	0.000623*** (0.0000416)	0.000599*** (0.0000439)	0.000537*** (0.0000451)
Cash Flow	0.00658*** (0.00105)	0.00981*** (0.00123)	0.0109*** (0.00127)	0.00975*** (0.00125)
Sales Growth	0.000279*** (0.0000721)	0.000235*** (0.0000781)	0.000254*** (0.0000817)	0.000243*** (0.0000780)
GDP Growth	0.0528*** (0.00770)	0.0703*** (0.00829)	0.0783*** (0.00803)	0.105*** (0.00863)
Consumer Confidence	0.0000369*** (0.00000662)	0.0000337*** (0.00000750)	0.0000217*** (0.00000805)	0.00000811 (0.00000876)
Expected GDP Growth	0.000474*** (0.0000412)	0.000506*** (0.0000452)	0.000540*** (0.0000486)	0.000650*** (0.0000536)
Leading Economic Index	-0.0259*** (0.00303)	-0.0193*** (0.00335)	-0.00953*** (0.00349)	-0.0138*** (0.00362)
Constant	0.000641 (0.000537)	0.00158*** (0.000594)	0.00424*** (0.000623)	0.00337*** (0.000677)
Observations	112987	107699	102748	98447
Adjusted R ²	0.439	0.414	0.411	0.396

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 6
Response of R&D to PC & EPU shocks

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of R&D Expenditures to total assets. All accounting variables have been scaled by lagged total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,1} and EPU Shock_{4,2} refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag VAR model with the PC Index ordered first and the EPU Index ordered second. Presidential Election is a dummy variable that equals one for calendar quarters occurring during a presidential election year and zero otherwise. Market-to-Book is the market value of a firm's equity to its book value. Cash Flow measures earnings after paying out interest, dividends, and taxes divided by beginning of period total assets. Cash Flow measures earnings after paying out interest, dividends, and taxes divided by beginning of period total assets. LN(Age) is the natural log of the number of years a firm appears in the Compustat Quarterly File. LN(Size) is measured as the natural log of a firm's total assets measured in 2009 dollars. Capital intensity-to-assets is defined as a firm's net property, plant, and equipment scaled by beginning of period total assets. Profitability-to-assets is defined as earnings before interest, taxes, depreciation, and amortization scaled by beginning of period total assets. Leverage measures long-term and current debt divided by beginning of period total assets. Herfindahl-Hirschman Index is calculated at the 3-digit SIC level and measures a firm's market share of its industry. GDP Growth is measured as the log difference in quarterly GDP measured in 2009 dollars. Consumer Confidence measures quarterly observations of the University of Michigan Consumer Sentiment Index. Expected GDP Growth measures the percent change between the one-year ahead GDP forecast and the actual level of GDP observed during the Livingston survey period. Leading Economic Index measures the log change in quarterly observations of the Conference Board's Leading Economic Index.

	(1)	(2)	(3)	(4)
	R&D-to-Assets _{t+1}	R&D-to-Assets _{t+2}	R&D-to-Assets _{t+3}	R&D-to-Assets _{t+4}
PC Shock _{4,1}	0.0000612 (0.0000620)	0.000101 (0.0000615)	-0.000118* (0.0000630)	-0.0000435 (0.0000674)
EPU Shock _{4,2}	0.0000131 (0.0000737)	0.000171** (0.0000773)	0.000248*** (0.0000741)	0.000267*** (0.0000827)
Presidential Election	-0.000142 (0.000254)	-0.000172 (0.000281)	-0.0000495 (0.000291)	0.000191 (0.000298)
R&D-to-Assets _{t-1}	0.445*** (0.0135)	0.366*** (0.0151)	0.328*** (0.0162)	0.254*** (0.0169)
Market-to-Book	0.000358*** (0.0000951)	0.0000924 (0.000112)	-0.0000994 (0.000122)	-0.0000584 (0.000132)
Cash Flow	-0.0153*** (0.00536)	-0.0164** (0.00646)	-0.0134* (0.00712)	-0.0173** (0.00751)
LNAge	0.000128 (0.000442)	0.000204 (0.000549)	0.000675 (0.000606)	0.000730 (0.000676)
LNSales	-0.00145*** (0.000277)	-0.00235*** (0.000336)	-0.00272*** (0.000368)	-0.00280*** (0.000418)
Capital Intensity-to-Assets	0.00666*** (0.00203)	0.00341 (0.00230)	0.00138 (0.00247)	0.00128 (0.00262)
Profitability-to-Assets	-0.0546*** (0.00580)	-0.0366*** (0.00666)	-0.0236*** (0.00718)	-0.0183** (0.00795)
Leverage	-0.000478 (0.00105)	0.000141 (0.00126)	-0.0000503 (0.00130)	0.000114 (0.00143)
HHI	7.01×10^{-8} (0.000000105)	9.52×10^{-8} (0.000000121)	9.16×10^{-8} (0.000000129)	6.40×10^{-8} (0.000000146)
GDP Growth	-0.00237 (0.0129)	-0.000750 (0.0128)	-0.0202 (0.0126)	-0.0442*** (0.0134)
Consumer Confidence	-0.00000715 (0.0000110)	0.00000975 (0.0000129)	0.0000201 (0.0000142)	0.0000143 (0.0000156)
Expected GDP Growth	-0.000196*** (0.0000727)	-0.000378*** (0.0000886)	-0.000311*** (0.0000893)	-0.000288*** (0.0000965)
Leading Economic Index	0.00897 (0.00577)	0.0120* (0.00652)	0.0118* (0.00712)	0.0185** (0.00801)
Constant	0.0179*** (0.00144)	0.0234*** (0.00174)	0.0257*** (0.00190)	0.0268*** (0.00207)
Observations	112987	107699	102748	98447
Adjusted R ²	0.795	0.772	0.766	0.755

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 7

Response of capital expenditure when PC and EPU shocks are interacted with financial constraint and political sensitivity

The dependent variable in all regressions is the ratio of capital expenditure to total assets. Parentheses contain standard errors that are clustered at the firm level. All accounting variables have been scaled by lagged total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,1} and EPU Shock_{4,2} refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag VAR model with the PC Index ordered first and the EPU Index ordered second. The columns represent the different measures of financial constraint and political sensitivity that were used in Table 9 of the main text. Constrained firms based on Size are defined as those in the bottom 33% of the total assets distribution. Unconstrained firms based on Size are defined as those in the top 33% of the total assets distribution. Following Brown, Fazzari, and Petersen (2009), constrained firms based on Age are those that have been publicly traded for no more than fifteen years while unconstrained firms based on Age are those that have been publicly traded for longer than fifteen years. The Size-Age Index is constructed following Hadlock and Pierce (2010). Firms with index values in the top tercile for each quarter are considered constrained and firms in the bottom tercile for each quarter are considered unconstrained. Political sensitivity is determined according to SIC codes as proposed by Atanassov, Julio, and Leng (2018).

	(1) Size	(2) Age	(3) Size-Age Index	(4) Political Sensitivity
PC Shock _{4,1}	-0.000884 (0.0000593)	-0.000450 (0.0000535)	-0.000820 (0.0000541)	-0.0000104 (0.0000472)
PC Shock _{4,1} × Constrained	0.000258** (0.000107)	0.000116 (0.0000760)	0.000263*** (0.0000947)	
PC Shock _{4,1} × Politically Sensitive				0.0000239 (0.000106)
EPU Shock _{4,2}	-0.000370*** (0.0000633)	-0.000261*** (0.0000565)	-0.000336*** (0.0000596)	-0.000403*** (0.0000473)
EPU Shock _{4,2} × Constrained	0.0000883 (0.000101)	0.0000186 (0.0000744)	0.0000764 (0.0000928)	
EPU Shock _{4,2} × Politically Sensitive				0.000345*** (0.000102)
Constrained	0.00383 (0.00267)	0.00259*** (0.000300)	0.00395** (0.00157)	
Observations	59184	98447	66412	98447
Adjusted R ²	0.392	0.399	0.390	0.396

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 8

Response of R&D when PC and EPU shocks are interacted with financial constraint and political sensitivity

The dependent variable in all regressions is the ratio of R&D expenditure to total assets. Parentheses contain standard errors that are clustered at the firm level. All accounting variables have been scaled by lagged total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,1} and EPU Shock_{4,2} refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag VAR model with the PC Index ordered first and the EPU Index ordered second. The columns represent the different measures of financial constraint and political sensitivity that were used in Table 10 of the main text. Constrained firms based on Size are defined as those in the bottom 33% of the total assets distribution. Unconstrained firms based on Size are defined as those in the top 33% of the total assets distribution. Following Brown, Fazzari, and Petersen (2009), constrained firms based on Age are those that have been publicly traded for no more than fifteen years while unconstrained firms based on Age are those that have been publicly traded for longer than fifteen years. The Size-Age Index is constructed following Hadlock and Pierce (2010). Firms with index values in the top tercile for each quarter are considered constrained and firms in the bottom tercile for each quarter are considered unconstrained. Political sensitivity is determined according to SIC codes as proposed by Atanassov, Julio, and Leng (2018).

	(1) Size	(2) Age	(3) Size-Age Index	(4) Political Sensitivity
PC Shock _{4,1}	-0.0000654 (0.0000579)	0.000120 (0.0000809)	-0.0000146 (0.0000564)	0.0000133 (0.0000616)
PC Shock _{4,1} × Constrained	0.0000849 (0.000190)	-0.000251** (0.000120)	-0.000103 (0.000170)	
PC Shock _{4,1} × Politically Sensitive				-0.000356 (0.000256)
EPU Shock _{4,2}	-0.0000572 (0.0000870)	0.0000885 (0.0000945)	-0.0000650 (0.0000832)	0.000192** (0.0000796)
EPU Shock _{4,2} × Constrained	0.000555*** (0.000207)	0.000272** (0.000132)	0.000625*** (0.000186)	
EPU Shock _{4,2} × Politically Sensitive				0.000434 (0.000271)
Constrained	0.0120 (0.00837)	-0.000952 (0.000602)	0.0116*** (0.00335)	
Observations	59184	98447	66412	98447
Adjusted R^2	0.763	0.755	0.765	0.755

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

2 Robustness Checks from Section 7

In this section of the appendix we provide tables showing results that were discussed in Section 7 of the main text. Table 9 shows the results from estimating the structural PC and EPU shocks using an SVAR that accounts for the post-2008 period. Tables 10 – 15 provide results from reestimating Equation 1 with the natural log of cash-to-net assets as the dependent variable rather than cash-to-total assets. We use the natural logarithm of this ratio because dividing by net assets introduces many outliers, as other authors using this measure of cash holdings have experienced. As in the main text, assets are measured at the beginning of the quarter.

Beginning with Table 16 we provide several tables that confirm the robustness of the SVAR model used in the paper. Table 16 provides summary statistics of the alternative SVAR shocks used in this appendix. Table 17 lists the time series variables used to compute the factors in the FA-SVAR models and Table 18 provides results from regressions using the FA-SVAR to estimate the PC and EPU shocks. Table 19 displays results using PC and EPU shocks where the PC Index was ordered second in the SVAR and the EPU Index was ordered first. The results in Table 20 are estimated using PC and EPU shocks where the PC Index was ordered fourth and the EPU Index was ordered fifth. Finally, Table 21 – 25 present results from using PC and EPU shocks recovered from a 2-lag SVAR system rather than a 4-lag SVAR system. Diagrams showing the evolution of the PC and EPU shocks used in this section are provided in Figures 1 – 5.

Table 9

Response of cash holdings to PC & EPU shocks when controlling for the post-2008 period

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of cash holdings total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock $_{4,1}^d$ and EPU Shock $_{4,2}^d$ refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag SVAR model with the PC Index ordered first, the EPU Index ordered second, and a dummy variable that equals 1 for all observations occurring after 2008Q4.

	(1)	(2)	(3)	(4)
	Cash Holdings $_{t+1}$	Cash Holdings $_{t+2}$	Cash Holdings $_{t+3}$	Cash Holdings $_{t+4}$
PC Shock $_{4,1}^d$	0.000153 (0.000162)	0.000675*** (0.000174)	0.000503*** (0.000186)	0.000999*** (0.000189)
EPU Shock $_{4,2}^d$	-0.00141*** (0.000169)	-0.000775*** (0.000190)	-0.000791*** (0.000199)	0.0000110 (0.000210)
Observations	307708	294728	282672	271723
Adjusted R^2	0.802	0.780	0.768	0.753

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 10

textbfSummary statistics for LN(Cash) by Subgroup

LN(Cash) refers to the natural log of cash holdings divided by net total assets. Constrained firms (Size) are defined as those in the bottom 33% of the total assets distribution. Unconstrained firms (Size) are defined as those in the top 33% of the total assets distribution. Following Brown, Fazzari, and Petersen (2009), constrained firms (Age) are those that have been publicly traded for no more than fifteen years while unconstrained firms (Age) are those that have been publicly traded for longer than fifteen years. The Size-Age Index is constructed following Hadlock and Pierce (2010). Firms with index values in the top tercile for each quarter are considered constrained and firms in the bottom tercile for each quarter are considered unconstrained. Political sensitivity is determined according to SIC codes as proposed by Atanassov, Julio, and Leng (2018).

Category	Mean	SD	Min	Max
All Firms	-2.7101	1.9290	-15.1540	1.7619
Constrained Firms (Size)	-2.1790	2.0202	-11.1043	1.7619
Unconstrained Firms (Size)	-3.2391	1.6276	-15.1540	1.7619
Constrained Firms (Age)	-2.6265	2.0265	-15.1540	1.7619
Unconstrained Firms (Age)	-2.8358	1.7647	-13.6967	1.7619
Constrained Firms (Size-Age Index)	-2.0817	2.0483	-11.2583	1.7619
Unconstrained Firms (Size-Age Index)	-3.1278	1.6730	-15.1540	1.7619
Politically Insensitive Industries	-2.5577	2.1571	-15.1540	1.7619
Politically Sensitive Industries	-2.7546	1.8548	-13.8138	1.7619

Table 11

Response of cash-to-net assets to PC & EPU shocks

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the natural log of cash-to-net assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,1} and EPU Shock_{4,2} refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag VAR model with the PC Index ordered first and the EPU Index ordered second.

	(1) LN(Cash) _{t+1}	(2) LN(Cash) _{t+2}	(3) LN(Cash) _{t+3}	(4) LN(Cash) _{t+4}
PC Shock _{4,1}	0.00264 (0.00172)	0.00530*** (0.00188)	0.00454** (0.00200)	0.0107*** (0.00207)
EPU Shock _{4,2}	-0.00714*** (0.00178)	0.000299 (0.00197)	0.00199 (0.00210)	0.00813*** (0.00226)
Observations	302158	289291	277532	266598
Adjusted R^2	0.783	0.758	0.750	0.728

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 12

Response of cash-to-net assets to PC and EPU shocks based on financial constraint and political sensitivity

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the natural log of cash-to-total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,1} and EPU Shock_{4,2} refer to the standardized structural PC and EPU shocks, respectively, recovered from the 4 lag SVAR model with the PC Index ordered first and the EPU Index ordered second. Constrained firms based on Size are defined as those in the bottom 33% of the total assets distribution. Unconstrained firms based on Size are defined as those in the top 33% of the total assets distribution. Following Brown, Fazzari, and Petersen (2009), constrained firms based on Age are those that have been publicly traded for no more than fifteen years while unconstrained firms based on Age are those that have been publicly traded for longer than fifteen years. The Size-Age Index is constructed following Hadlock and Pierce (2010) and firms with index values in the top tercile for each quarter are considered constrained and firms in the bottom tercile for each quarter are considered unconstrained. Political sensitivity is determined according to SIC codes as proposed by Atanassov, Julio, and Leng (2018).

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		LN(Cash) _{t+1}	LN(Cash) _{t+2}	LN(Cash) _{t+3}	LN(Cash) _{t+4}	LN(Cash) _{t+1}	LN(Cash) _{t+2}	LN(Cash) _{t+3}	LN(Cash) _{t+4}
		Unconstrained				Constrained			
Panel A: Size	PC Shock _{4,1}	0.00300 (0.00277)	0.00494* (0.00293)	0.00511 (0.00313)	0.00880*** (0.00319)	0.00620* (0.00368)	0.0117*** (0.00403)	0.00887** (0.00431)	0.0176*** (0.00444)
	EPU Shock _{4,2}	0.00166 (0.00275)	0.00885*** (0.00301)	0.0102*** (0.00315)	0.0185*** (0.00338)	-0.0175*** (0.00390)	-0.0122*** (0.00419)	-0.0104** (0.00445)	-0.000616 (0.00483)
	Observations	93674	90769	88160	85638	87192	82402	78060	74101
	Adjusted R ²	0.776	0.750	0.745	0.721	0.747	0.722	0.711	0.694
Panel B: Age	PC Shock _{4,1}	0.00530** (0.00248)	0.00578** (0.00263)	0.00387 (0.00273)	0.0118*** (0.00298)	0.00145 (0.00236)	0.00530** (0.00255)	0.00565** (0.00269)	0.0118*** (0.00276)
	EPU Shock _{4,2}	-0.00684*** (0.00250)	0.00396 (0.00277)	0.00301 (0.00303)	0.00903*** (0.00323)	-0.00733*** (0.00247)	-0.00143 (0.00264)	0.00144 (0.00282)	0.00661** (0.00297)
	Observations	124670	119217	114245	109665	177488	170074	163287	156933
	Adjusted R ²	0.791	0.766	0.760	0.735	0.791	0.772	0.767	0.753
Panel C: Size-Age Index	PC Shock _{4,1}	0.00301 (0.00251)	-0.0000183 (0.00264)	0.00185 (0.00273)	0.00551* (0.00295)	0.00894** (0.00380)	0.0126*** (0.00417)	0.0121*** (0.00451)	0.0227*** (0.00454)
	EPU Shock _{4,2}	-0.000220 (0.00247)	0.00916*** (0.00276)	0.00783*** (0.00294)	0.0143*** (0.00317)	-0.0217*** (0.00400)	-0.0155*** (0.00429)	-0.0134*** (0.00457)	-0.00323 (0.00491)
	Observations	119673	115467	111634	108065	82809	78379	74342	70646
	Adjusted R ²	0.779	0.752	0.747	0.719	0.756	0.733	0.723	0.708
		Insensitive				Sensitive			
Panel D: Political Sensitivity	PC Shock _{4,1}	0.00219 (0.00195)	0.00454** (0.00215)	0.00534** (0.00226)	0.00945*** (0.00235)	0.00345 (0.00364)	0.00692* (0.00391)	0.00110 (0.00423)	0.0136*** (0.00437)
	EPU Shock _{4,2}	-0.00722*** (0.00200)	0.00160 (0.00220)	0.00280 (0.00236)	0.00810*** (0.00252)	-0.00602 (0.00389)	-0.00382 (0.00435)	-0.000328 (0.00461)	0.00816 (0.00499)
	Observations	233784	223708	214494	205970	68374	65583	63038	60628
	Adjusted R ²	0.768	0.742	0.735	0.709	0.821	0.799	0.789	0.776

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 13

Response of cash-to-net assets when PC and EPU shocks are interacted with financial constraint and political sensitivity

The dependent variable in all regressions is the natural log of cash-to-net assets. Parentheses contain standard errors that are clustered at the firm level. All accounting variables have been scaled by lagged total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,1} and EPU Shock_{4,2} refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag VAR model with the PC Index ordered first and the EPU Index ordered second. The columns represent the different measures of financial constraint and political sensitivity that were used in Table 12. Constrained firms based on Size are defined as those in the bottom 33% of the total assets distribution. Unconstrained firms based on Size are defined as those in the top 33% of the total assets distribution. Following Brown, Fazzari, and Petersen (2009), constrained firms based on Age are those that have been publicly traded for no more than fifteen years while unconstrained firms based on Age are those that have been publicly traded for longer than fifteen years. The Size-Age Index is constructed following Hadlock and Pierce (2010). Firms with index values in the top tercile for each quarter are considered constrained and firms in the bottom tercile for each quarter are considered unconstrained. Political sensitivity is determined according to SIC codes as proposed by Atanassov, Julio, and Leng (2018).

	(1) Size	(2) Age	(3) Size-Age Index	(4) Political Sensitivity
PC Shock _{4,1}	0.00805** (0.00316)	0.0116*** (0.00294)	0.00639** (0.00292)	0.0112*** (0.00233)
PC Shock _{4,1} × Constrained	0.0119** (0.00528)	-0.00186 (0.00398)	0.0177*** (0.00521)	
PC Shock _{4,1} × Politically Sensitive				-0.00226 (0.00477)
EPU Shock _{4,2}	0.0215*** (0.00333)	0.0100*** (0.00313)	0.0190*** (0.00314)	0.0105*** (0.00248)
EPU Shock _{4,2} × Constrained	-0.0240*** (0.00529)	-0.00568 (0.00396)	-0.0257*** (0.00519)	
EPU Shock _{4,2} × Politically Sensitive				-0.0105** (0.00486)
Constrained	0.334 (0.216)	-0.0839*** (0.0189)	-0.0140 (0.103)	
Observations	159739	266598	178711	266598
Adjusted R ²	0.726	0.728	0.730	0.728

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 14

Response of cash-to-net assets to PC and EPU shocks conditioned on capital intensity and redeployability

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the natural log of cash-to-net assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,1} and EPU Shock_{4,2} refer to the standardized structural PC and EPU shocks, respectively, recovered from the 4 lag VAR model with the PC Index ordered first and the EPU Index ordered second. Capital Intensity is the ratio of a firm's net expenditures on plant, property, and equipment divided by total assets. Following Gulen and Ion (2015), Redeployability is an industry-level measure of the proportion of assets used in each industry that are used by other industries.

	(1) LN(Cash) _{t+4}	(2) LN(Cash) _{t+4}
PC Shock _{4,1}	0.00966*** (0.00350)	0.0103** (0.00432)
PC Shock _{4,1} × Capital Intensity	0.00262 (0.00835)	
EPU Shock _{4,2}	0.0168*** (0.00364)	0.0159*** (0.00451)
EPU Shock _{4,2} × Capital Intensity	-0.0245*** (0.00835)	
Capital Intensity	-0.0765 (0.0610)	
PC Shock _{4,1} × Redeployability		0.00123 (0.00233)
EPU Shock _{4,2} × Redeployability		-0.00608*** (0.00235)
Observations	266470	203899
Adjusted R ²	0.728	0.735

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 15

Response of cash-to-net assets to PC & EPU shocks when controlling for the post-2008 period

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the natural log of cash-to-net assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock $_{4,1}^d$ and EPU Shock $_{4,2}^d$ refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag SVAR model with the PC Index ordered first, the EPU Index ordered second, and a dummy variable that equals 1 for all observations occurring after 2008Q4.

	(1)	(2)	(3)	(4)
	LN(Cash) $_{t+1}$	LN(Cash) $_{t+2}$	LN(Cash) $_{t+3}$	LN(Cash) $_{t+4}$
PC Shock $_{4,1}^d$	-0.000333 (0.00174)	0.00220 (0.00188)	0.00249 (0.00198)	0.00833*** (0.00205)
EPU Shock $_{4,2}^d$	-0.0103*** (0.00175)	-0.00240 (0.00196)	0.000000578 (0.00209)	0.00691*** (0.00223)
Observations	302158	289291	277532	266598
Adjusted R^2	0.783	0.758	0.750	0.728

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 16

Summary Statistics for alternative shock specifications

The shocks listed in this table are used for for the robustness checks in the appendix. PC Shock $_{FA,4,2}$ and EPU Shock $_{FA,4,3}$ refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag factor-augmented SVAR with the PC Index ordered second and the EPU Index ordered third. PC Shock $_{4,4}$ and EPU Shock $_{4,5}$ refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag SVAR model with the PC Index ordered fourth and the EPU Index ordered fifth. PC Shock $_{4,2}$ and EPU Shock $_{4,1}$ refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the four lag SVAR model with the PC Index ordered second and the EPU Index ordered first. PC Shock $_{2,1}$ and EPU Shock $_{2,2}$ refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the two lag sVAR model with the PC Index ordered first and the EPU Index ordered second. PC Shock $_{2,2}$ and EPU Shock $_{2,1}$ refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the two lag SVAR model with the PC Index ordered second and the EPU Index ordered first. PC Shock $_{2,4}$ and EPU Shock $_{2,5}$ refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the two lag SVAR model with the PC Index ordered fourth and the EPU Index ordered fifth.

	Mean	SD	Min	Max
PC Shock $_{FA,4,2}$	0.0000	1.0000	-2.6119	2.3430
EPU Shock $_{FA,4,3}$	0.0000	1.0000	-2.2888	3.9338
PC Shock $_{4,4}$	0.0000	1.0000	-2.7079	2.3414
EPU Shock $_{4,5}$	0.0000	1.0000	-2.3933	3.8891
PC Shock $_{4,2}$	0.0000	1.0000	-2.5789	2.3406
EPU Shock $_{4,1}$	0.0000	1.0000	-2.2741	3.8299
PC Shock $_{2,1}$	0.0000	1.0000	-2.5350	2.2791
EPU Shock $_{2,2}$	0.0000	1.0000	-2.5257	3.6459
PC Shock $_{2,1}^d$	0.0000	1.0000	-2.3453	2.3653
EPU Shock $_{2,2}^d$	0.0000	1.0000	-2.3945	3.5684
PC Shock $_{2,2}$	0.0000	1.0000	-2.5814	2.3436
EPU Shock $_{2,1}$	0.0000	1.0000	-2.2992	3.6419
PC Shock $_{2,4}$	0.0000	1.0000	-2.5979	2.3294
EPU Shock $_{2,5}$	0.0000	1.0000	-2.3699	3.6799

Table 17

Time series employed for the computation of the factors

Note: "Transform" indicates the transformation applied to the series (1 = first difference of logarithm, 2 = level, 3 = first difference). Source: Federal Reserve Bank of St. Louis and Bureau of Economic Analysis websites.

N	Series	Mnemonics	Transform
1	Real GDP	<i>GDPC96</i>	1
2	Real Gross National Product	<i>GNPC96</i>	1
3	Real National Income	<i>NICUR/GDPDEF</i>	1
4	Real Disposable Income	<i>DPIC96</i>	1
5	Real Personal Income	<i>RPI</i>	1
6	Non-farm Business Sector: Output	<i>OUTNFB</i>	1
7	Real Final Sales of Domestic Product	<i>FINSLC96</i>	1
8	Real Gross Private Domestic Inv.	<i>GPDIC96</i>	1
9	Real Personal Consumption Exp.	<i>PCECC96</i>	1
10	Real Gross Private Saving	<i>GPSAVE/GDPDEF</i>	1
11	Federal Government: Current Expenditures, Real	<i>FGEXPND/GDPDEF</i>	1
12	Federal Government: Current Receipts, Real	<i>FGRECPT/GDPDEF</i>	1
13	Net Federal Government Saving	<i>FGDEF</i>	3
14	Govt. Current Exp. /GDP Deflator	<i>GEXPND/GDPDEF</i>	1
15	Govt. Current Receipts/GDP Deflator	<i>GRECPT/GDPDEF</i>	1
16	Real Government Consumption Expenditure, Gross Investment	<i>GCEC96</i>	1
17	Real Change in Private Inventories	<i>CBIC96</i>	2
18	Real Exports of Goods and Services	<i>EXPGSC1</i>	1
19	Real Imports of Goods and Services	<i>IMPGSC1</i>	1
20	Corporate Profits After Tax, Real	<i>CP/GDPDEF</i>	1
21	Non-financial Corporate Business: Profits after Tax, Real	<i>NFCPATAX/GDPDEF</i>	1
22	Corporate Net Cash Flow, Real	<i>CNCF/GDPDEF</i>	1
23	Net Corporate Dividends, Real	<i>DIVIDEND/GDPDEF</i>	1
24	Industrial Production Index	<i>INDPRO</i>	1
25	Industrial Production: Business Equipment	<i>IPBUSEQ</i>	1
26	Industrial Production: Consumer Goods	<i>IPCONGD</i>	1
27	Industrial Production: Durable Consumer Goods	<i>IPDCONGD</i>	1
28	Industrial Production: Final Products (Market Group)	<i>IPFINAL</i>	1
29	Industrial Production: Materials	<i>IPB53000SQ</i>	1
30	Industrial Production: Non-durable Consumer Goods	<i>IPB51200SQ</i>	1
31	Capacity Utilization: Manufacturing	<i>CUMFN</i>	1
32	Industrial Production: Manufacturing	<i>IPGMFSQ</i>	1
33	Industrial Production: Durable Manufacturing	<i>IPDMAN</i>	1
34	Industrial Production: Mining	<i>IPFG21SQ</i>	1
35	Industrial Production: Non-durable Manufacturing	<i>IPNMAN</i>	1

N	Series	Mnemonics	Transform
36	Industrial Production: Durable Materials	<i>IPDMAT</i>	1
37	Industrial Production: Electric and Gas Utilities	<i>IPG2211A2SQ</i>	1
38	ISM Manufacturing: PMI Composite Index	<i>NAPM</i>	2
39	ISM Manufacturing: Production Index	<i>NAPMPI</i>	2
40	Average Weekly Overtime Hours of Prod. and Non-supervisory Employees: Manuf.	<i>AWHMAN</i>	2
41	Average Weekly Overtime Hours of Prod. and Non-supervisory Employees: Manuf.	<i>AWOTMAN</i>	3
42	Civilian Labor Force Participation Rate	<i>CIVPART</i>	3
43	Civilian Labor Force	<i>CLF160V</i>	1
44	Civilian Employment	<i>CE160V</i>	1
45	All Employees: Total Private Industries	<i>USPRIV</i>	1
46	All Employees: Goods-Producing Industries	<i>USGOOD</i>	1
47	All Employees: Service-Providing Industries	<i>SRVPRD</i>	1
48	Unemployed	<i>UNEMPLOY</i>	1
49	Average(Mean) Duration of Unemployment	<i>UEMPMEAN</i>	3
50	Civilian Unemployment Rate	<i>UNRATE</i>	3
51	Nonfarm Business Sector: Hours of All Persons	<i>HOANBS</i>	3
52	Initial Claims	<i>ICSA</i>	1
53	Housing Starts: Total: New Privately Owned Units Started	<i>HOUST</i>	1
54	Housing Starts in Northeast Census Region	<i>HOUSTNE</i>	1
55	Housing Starts in Midwest Census Region	<i>HOUSTMW</i>	1
56	Housing Starts in South Census Region	<i>HOUSTS</i>	1
57	Housing Starts in West Census Region	<i>HOUSTW</i>	1
58	New Private Housing Units Authorized by Building Permits	<i>PERMIT</i>	1
59	ISM Manufacturing: Inventories Index	<i>NAPMII</i>	2
60	Gross Domestic Product: Chain-Type Price Index	<i>GDPCTPI</i>	1
61	Gross National Product: Chain-type Price Index	<i>GNPCTPI</i>	1
62	Gross Domestic Product: Implicit Price Deflator	<i>GDPDEF</i>	1
63	Gross National Product: Implicit Price Deflator	<i>GNPDEF</i>	1
64	Consumer Price Index for All Urban Consumers: All Items	<i>CPIAUCSL</i>	1
65	Consumer Price Index for All Urban Consumers: All Items Less Food	<i>CPIULFSL</i>	1
66	Consumer Price Index for All Urban Consumers: All Items Less Energy	<i>CPILEGSL</i>	1
67	Consumer Price Index for All Urban Consumers: All Items Less Food & Energy	<i>CPILFESL</i>	1
68	Consumer Price Index for All Urban Consumers: Energy	<i>CPIENGSL</i>	1

N	Series	Mnemonics	Transform
69	Consumer Price Index for All Urban Consumers: Food	<i>CPIUFDSL</i>	1
70	Producer Price Index: Finished Goods: Capital Equipment	<i>PPICPE</i>	1
71	Producer Price Index: Crude Materials for Further Processing	<i>PPICRM</i>	1
72	Producer Price Index: Finished Consumer Goods	<i>PPIFCG</i>	1
73	Producer Price Index: Finished Goods	<i>PPIFGS</i>	1
74	Non-farm Business Sector: Hours of All Persons	<i>HOANBS</i>	1
75	Non-farm Business Sector: Output per Hour of All Persons	<i>OPHNFB</i>	1
76	Non-farm Business Sector: Unit Non-labor Payments	<i>UNLPNBS</i>	1
77	Non-farm Business Sector: Unit labor Cost	<i>ULCNFB</i>	1
78	Compensation of Employees: Wages and Salary Accruals	<i>WASCUR</i>	1
79	Non-farm Business Sector: Compensation Per Hour	<i>COMPNFB</i>	1
80	Non-farm Business Sector: Real Compensation Per Hour	<i>COMPRNFB</i>	1
81	Effective Federal Funds Rate	<i>FEDFUNDS</i>	3
82	3-Month T-Bill: Secondary Market Rate	<i>TB3MS</i>	3
83	1-Year Treasury Constant Maturity Rate	<i>GS1</i>	3
84	10-Year Treasury Constant Maturity Rate	<i>GS10</i>	3
85	Moody's Seasoned AAA Corp. Bond Yield	<i>AAA</i>	3
86	Moody's Seasoned BAA Corp. Bond Yield	<i>BAA</i>	3
87	Bank Prime Loan Rate	<i>MPRIME</i>	3
88	GS10-FEDFUNDS Spread	<i>GS10 – FEDFUNDS</i>	2
89	GS1-FEDFUNDS Spread	<i>GS1 – FEDFUNDS</i>	2
90	BAA-FEDFUNDS Spread	<i>BAA – FEDFUNDS</i>	2
91	M1 Money Stock	<i>M1SL</i>	1
92	M2 Less Small Time Deposits	<i>M2MSL</i>	1
93	M2 Money Stock	<i>M2SL</i>	1
94	Commercial and Industrial Loans at All Commercial Banks	<i>BUSLOANS</i>	1
95	Consumer Loans at All Commercial Banks	<i>CONSUMERSA</i>	1
96	Bank Credit at All Commercial Banks	<i>LOANINV</i>	1
97	Real Estate Loans at All Commercial Banks	<i>REALLN</i>	1
98	Total Consumer Credit Owned and Securitized, Outstanding	<i>TOTALSL</i>	1
99	St. Louis Adjusted Monetary Base	<i>AMBSL</i>	1
100	Trade Weighted US Dollar Index: Major Currencies	<i>TWEXMMTH</i>	3
101	Switzerland/US Foreign Exchange Rate	<i>EXSZUS</i>	1
102	Japan/US Foreign Exchange Rate	<i>EXJPUS</i>	1
103	U.K./US Foreign Exchange Rate	<i>EXUSUK(-1)</i>	1

N	Series	Mnemonics	Transform
104	Canada/US Foreign Exchange Rate	<i>EXCAUS</i>	1
105	Personal consumption expenditures: Services: Health care, Real	<i>DHLCRC1Q-</i> <i>027SBEA</i>	1
106	Personal consumption expenditures: Services: Health Care (chain-type price index)	<i>DHLCRG3Q-</i> <i>086SBEA</i>	1

Table 18

Response of cash holdings with PC shock ordered 2nd and EPU shock ordered 3rd in FA-SVAR Model

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of cash holdings to total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock $_{FA,4,2}$ and EPU Shock $_{FA,4,3}$ refer to the standardized structural PC and EPU shocks, respectively, recovered from the four lag FA-VAR model with the PC Index ordered second and the EPU Index ordered third.

	(1) Cash Holdings $_{t+1}$	(2) Cash Holdings $_{t+2}$	(3) Cash Holdings $_{t+3}$	(4) Cash Holdings $_{t+4}$
PC Shock $_{FA,4,2}$	0.000629*** (0.000163)	0.00115*** (0.000173)	0.000863*** (0.000189)	0.00127*** (0.000190)
EPU Shock $_{FA,4,3}$	-0.00101*** (0.000163)	-0.000642*** (0.000180)	-0.000882*** (0.000189)	-0.000300 (0.000203)
Observations	305918	292985	280940	270091
Adjusted R^2	0.802	0.780	0.769	0.753

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 19

Response of cash holdings with PC shock ordered 2nd & EPU shock ordered 1st in SVAR

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of cash holdings to total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,2} and EPU Shock_{4,1} refer to the standardized structural PC and EPU shocks, respectively, recovered from the four lag VAR model with the PC Index ordered first and the EPU Index ordered second.

	(1) Cash Holdings _{t+1}	(2) Cash Holdings _{t+2}	(3) Cash Holdings _{t+3}	(4) Cash Holdings _{t+4}
PC Shock _{4,2}	0.000692*** (0.000162)	0.00111*** (0.000174)	0.000843*** (0.000187)	0.00113*** (0.000188)
EPU Shock _{4,1}	-0.000918*** (0.000168)	-0.000255 (0.000185)	-0.000405** (0.000195)	0.000333 (0.000209)
Observations	307708	294728	282672	271723
Adjusted R^2	0.802	0.780	0.768	0.753

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 20

Response of cash holdings with PC shock ordered 4th and EPU shock ordered 5th

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of cash holdings to total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{4,4} and EPU Shock_{4,5} refer to the standardized structural PC and EPU shocks, respectively, recovered from the four lag VAR model with the PC Index ordered fourth and the EPU Index ordered last.

	(1) Cash Holdings _{<i>t</i>+1}	(2) Cash Holdings _{<i>t</i>+2}	(3) Cash Holdings _{<i>t</i>+3}	(4) Cash Holdings _{<i>t</i>+4}
PC Shock _{4,4}	0.000308* (0.000163)	0.000776*** (0.000172)	0.000560*** (0.000186)	0.000953*** (0.000189)
EPU Shock _{4,5}	-0.000668*** (0.000165)	-0.000257 (0.000181)	-0.000558*** (0.000190)	-0.0000765 (0.000206)
Observations	307708	294728	282672	271723
Adjusted <i>R</i> ²	0.802	0.780	0.768	0.753

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 21

Response of cash holdings using PC & EPU shocks from 2-lag SVAR

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of cash holdings to total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables.

PC Shock_{2,1} and EPU Shock_{2,2} refer to the standardized structural PC and EPU shocks, respectively, recovered from a two lag SVAR model with the PC Index ordered first and the EPU Index ordered second.

	(1) Cash Holdings _{t+1}	(2) Cash Holdings _{t+2}	(3) Cash Holdings _{t+3}	(4) Cash Holdings _{t+4}
PC Shock _{2,1}	0.000479*** (0.000175)	0.000711*** (0.000171)	0.000425** (0.000181)	0.000842*** (0.000183)
EPU Shock _{2,2}	-0.00110*** (0.000191)	-0.000213 (0.000204)	-0.000236 (0.000215)	0.000366 (0.000238)
Observations	311201	298111	286028	275057
Adjusted R^2	0.802	0.780	0.768	0.752

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 22

Response of cash holdings to PC and EPU shocks based on financial constraint and political sensitivity using 2-lag SVAR shocks

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of cash holdings to total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{2,1} and EPU Shock_{2,2} refer to the standardized structural PC and EPU shocks, respectively, recovered from the two lag SVAR model with the PC Index ordered first and the EPU Index ordered second. Constrained firms based on Size are defined as those in the bottom 33% of the total assets distribution. Unconstrained firms based on Size are defined as those in the top 33% of the total assets distribution. Following Brown, Fazzari, and Petersen (2009), constrained firms based on Age are those that have been publicly traded for no more than fifteen years while unconstrained firms based on Age are those that have been publicly traded for longer than fifteen years. The Size-Age Index is constructed following Hadlock and Pierce (2010). Firms with index values in the top tercile for each quarter are considered constrained and firms in the bottom tercile for each quarter are considered unconstrained. Political sensitivity is determined according to SIC codes as proposed by Atanassov, Julio, and Leng (2018).

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Cash Holdings _{t+1}	Cash Holdings _{t+2}	Cash Holdings _{t+3}	Cash Holdings _{t+4}	Cash Holdings _{t+1}	Cash Holdings _{t+2}	Cash Holdings _{t+3}	Cash Holdings _{t+4}
		Unconstrained				Constrained			
Panel A: Size	PC Shock _{2,1}	0.000704 (0.000167)	0.000172 (0.000171)	-0.0000360 (0.000180)	0.000400** (0.000189)	0.00104** (0.000476)	0.00179*** (0.000469)	0.00136*** (0.000500)	0.00185*** (0.000496)
	EPU Shock _{2,2}	0.0000292 (0.000210)	0.000820*** (0.000213)	0.000502** (0.000228)	0.00105*** (0.000249)	-0.00332*** (0.000520)	-0.00204*** (0.000551)	-0.00168*** (0.000576)	-0.000770 (0.000650)
	Observations	96106	93188	90491	88005	90341	85440	80958	76929
	Adjusted R ²	0.829	0.803	0.790	0.768	0.726	0.704	0.692	0.678
Panel B: Age	PC Shock _{2,1}	0.000344 (0.000221)	0.000357* (0.000206)	0.0000413 (0.000217)	0.000499** (0.000229)	0.000631** (0.000249)	0.00100*** (0.000248)	0.000815*** (0.000257)	0.00139*** (0.000263)
	EPU Shock _{2,2}	-0.000818*** (0.000244)	0.000136 (0.000257)	-0.000147 (0.000280)	0.0000933 (0.000310)	-0.00126*** (0.000272)	-0.000431 (0.000288)	-0.000468 (0.000308)	0.000247 (0.000330)
	Observations	127445	121938	116860	112270	183756	176173	169168	162787
	Adjusted R ²	0.804	0.793	0.775	0.802	0.784	0.776	0.766	
Panel C: Size-Age Index	PC Shock _{2,1}	-0.0000823 (0.000163)	-0.000115 (0.000163)	-0.000194 (0.000170)	-0.000115 (0.000163)	0.00127** (0.000497)	0.00177*** (0.000495)	0.00168*** (0.000529)	0.00227*** (0.000519)
	EPU Shock _{2,2}	-0.000179 (0.000189)	0.000540*** (0.000206)	0.000269 (0.000220)	0.000540*** (0.000206)	-0.00344*** (0.000551)	-0.00244*** (0.000582)	-0.00192*** (0.000607)	-0.000700 (0.000688)
	Observations	122606	118361	114441	118361	85699	81167	77022	73248
	Adjusted R ²	0.841	0.814	0.799	0.814	0.736	0.716	0.706	0.694
		Insensitive				Sensitive			
Panel D: Political Sensitivity	PC Shock _{2,1}	0.000370* (0.000189)	0.000524*** (0.000185)	0.000400** (0.000197)	0.000749*** (0.000201)	0.000682 (0.000415)	0.00118*** (0.000414)	0.000384 (0.000429)	0.000998** (0.000429)
	EPU Shock _{2,2}	-0.00114*** (0.000209)	-0.000343 (0.000224)	-0.000186 (0.000237)	0.0000218 (0.000262)	-0.000804* (0.000455)	0.000334 (0.000487)	-0.000360 (0.000508)	0.00161*** (0.000562)
	Observations	240902	230637	221178	212588	70299	67474	64850	62469
	Adjusted R ²	0.787	0.762	0.749	0.730	0.828	0.812	0.802	0.794

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 23

Response of cash holdings when 2-lag PC and EPU shocks are interacted with financial constraint and political sensitivity

The dependent variable in all regressions is the ratio of cash holdings to total assets. The columns represent the different measures of financial constraint and political sensitivity that were used in Table 22. Parentheses contain standard errors that are clustered at the firm level. All accounting variables have been scaled by lagged total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{2,1} and EPU Shock_{2,2} refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the two lag VAR model with the PC Index ordered first and the EPU Index ordered second.

	(1) Size	(2) Age	(3) Size-Age Index	(4) Political Sensitivity
PC Shock _{2,1}	0.000466** (0.000197)	0.000333 (0.000224)	0.000182 (0.000196)	0.000758*** (0.000198)
PC Shock _{2,1} × Constrained	0.00151*** (0.000490)	0.000880*** (0.000324)	0.00218*** (0.000506)	
PC Shock _{2,1} × Politically Sensitive				0.000373 (0.000435)
EPU Shock _{2,2}	0.00131*** (0.000279)	0.000156 (0.000297)	0.00104*** (0.000267)	0.000338 (0.000254)
EPU Shock _{2,2} × Constrained	-0.00192*** (0.000568)	0.0000958 (0.000380)	-0.00175*** (0.000592)	
EPU Shock _{2,2} × Politically Sensitive				0.000126 (0.000502)
Constrained	0.00492 (0.0209)	-0.00643*** (0.00173)	-0.00561 (0.0119)	
Observations	164934	275057	184138	275057
Adjusted R ²	0.727	0.752	0.742	0.752

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 24

Response of cash holdings to PC and EPU shocks conditioned on capital intensity and redeployability using 2-lag SVAR shocks

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of cash holdings to total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock_{2,1} and EPU Shock_{2,2} refer to the standardized structural PC and EPU shocks, respectively, recovered from the two lag VAR model with the PC Index ordered first and the EPU Index ordered second. Capital Intensity is the ratio of a firm's net expenditures on plant, property, and equipment divided by total assets. Following Gulen and Ion (2015), Redeployability is an industry-level measure of the proportion of assets used in each industry that are used by other industries. Full regression results are available upon request.

	(1)	(2)
	Cash Holdings _{<i>t+4</i>}	Cash Holdings _{<i>t+4</i>}
PC Shock _{2,1}	0.000243 (0.000316)	0.000658* (0.000363)
PC Shock _{2,1} × Capital Intensity	0.00167** (0.000679)	
PC Shock _{2,1} × Redeployability		0.000171 (0.000171)
EPU Shock _{2,2}	0.000589 (0.000383)	0.000623 (0.000435)
EPU Shock _{2,2} × Capital Intensity	-0.000655 (0.000720)	
EPU Shock _{2,2} × Redeployability		-0.000232 (0.000178)
Capital Intensity	-0.00309 (0.00662)	
Observations	274906	210350
Adjusted <i>R</i> ²	0.752	0.760

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

Table 25

Response of cash holdings using PC & EPU Shocks from 2-lag SVAR with post-2008 dummy variable

Parentheses contain standard errors that are clustered at the firm level. The dependent variable in all regressions is the ratio of cash holdings to total assets. All regressions include firm fixed-effects and fiscal and calendar-quarter dummy variables. PC Shock $_{2,1}^d$ and EPU Shock $_{2,2}^d$ refer to the standardized structural Partisan Conflict and Economic Policy Uncertainty shocks, respectively, recovered from the two lag SVAR model with the PC Index ordered first, the EPU Index ordered second, and a dummy variable that equals one for all observations occurring after 2008Q4.

	(1)	(2)	(3)	(4)
	Cash Holdings $_{t+1}$	Cash Holdings $_{t+2}$	Cash Holdings $_{t+3}$	Cash Holdings $_{t+4}$
PC Shock $_{2,1}^d$	0.0000500 (0.000173)	0.000366** (0.000176)	0.000249 (0.000188)	0.000699*** (0.000191)
EPU Shock $_{2,2}^d$	-0.00136*** (0.000189)	-0.000507** (0.000201)	-0.000532** (0.000211)	0.0000863 (0.000232)
Observations	311201	298111	286028	275057
Adjusted R^2	0.802	0.780	0.768	0.752

***, **, * indicated statistical significance at the 0.01, 0.05, and 0.10 level, respectively.

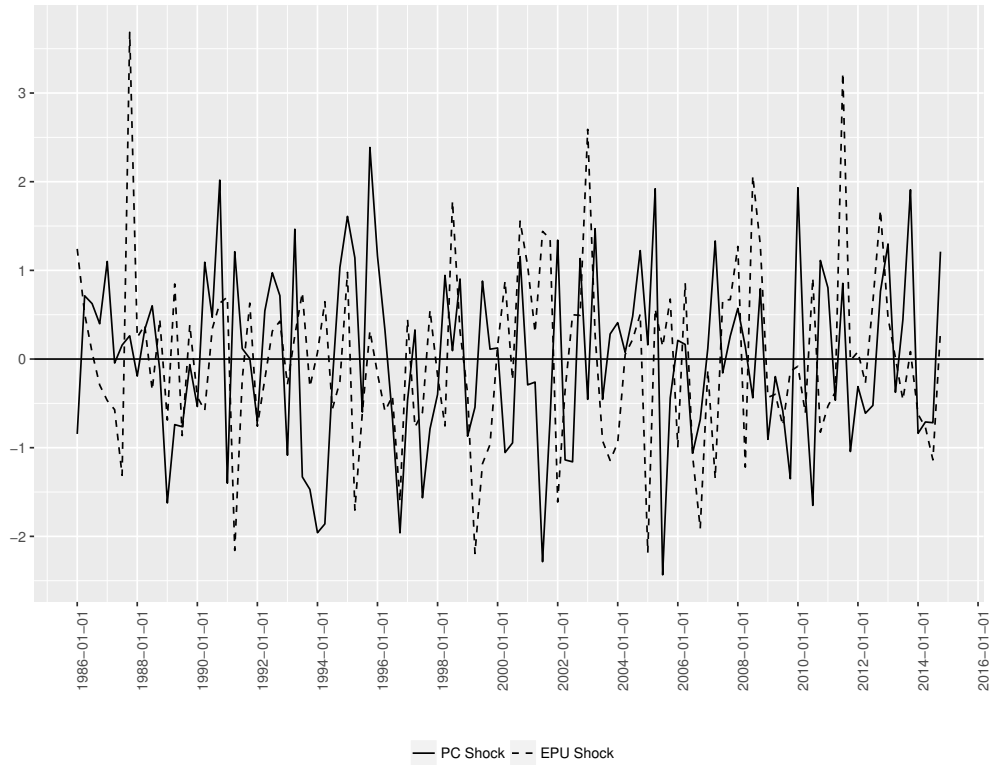


Figure 1
PC and EPU Shocks from 4-Lag SVAR Model for 1986Q1 – 2014Q4. Accounting for Post-2008 Period
 Note: PC and EPU shocks are recovered from a 4-lag SVAR model with the PC Index ordered first and the EPU Index ordered second and a dummy variable that equals one for observations beginning with 2009Q1. The shocks are standardized to have a mean of zero and a standard deviation of one. The y-axis measures standard deviations.

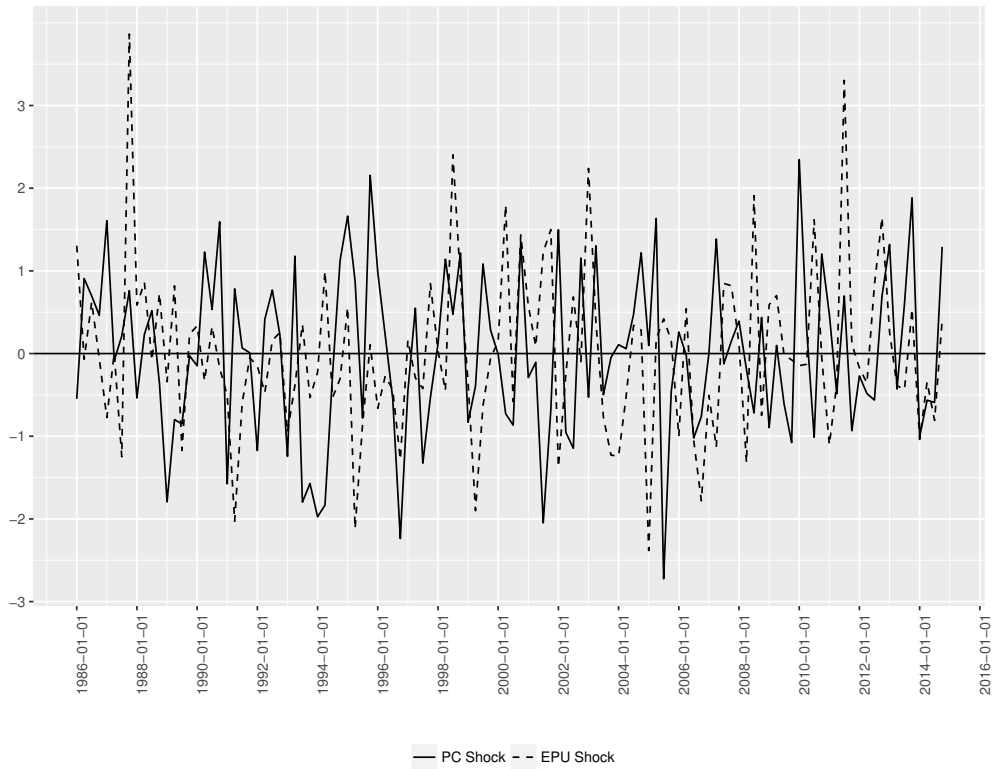


Figure 2
PC and EPU Shocks from 4-Lag SVAR Model with PC Index ordered 4th and EPU Index ordered 5th

Note: PC and EPU shocks recovered from a 4-lag SVAR model. The shocks are standardized to have a mean of zero and standard deviation of one. The y-axis measures standard deviations.

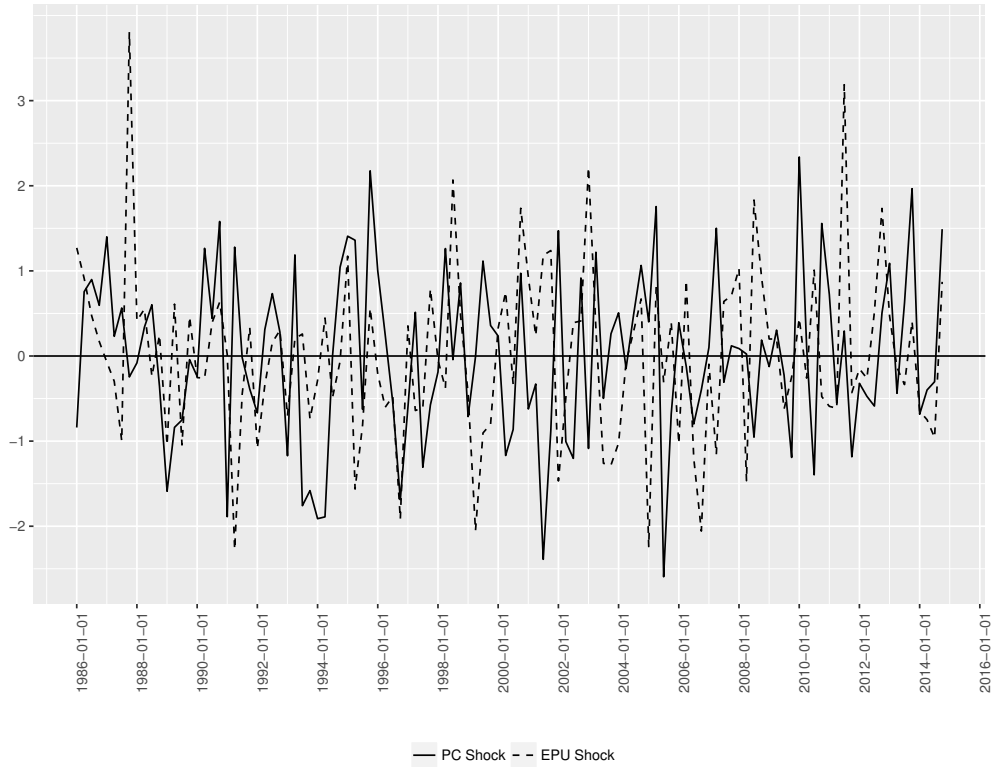


Figure 3
PC and EPU Shocks from 4-Lag SVAR Model with EPU Index ordered 1st and PC Index ordered 2nd

Note: PC and EPU shocks recovered from a 4-lag SVAR model. The shocks are standardized to have a mean of zero and a standard deviation of one. The y-axis measures standard deviations.

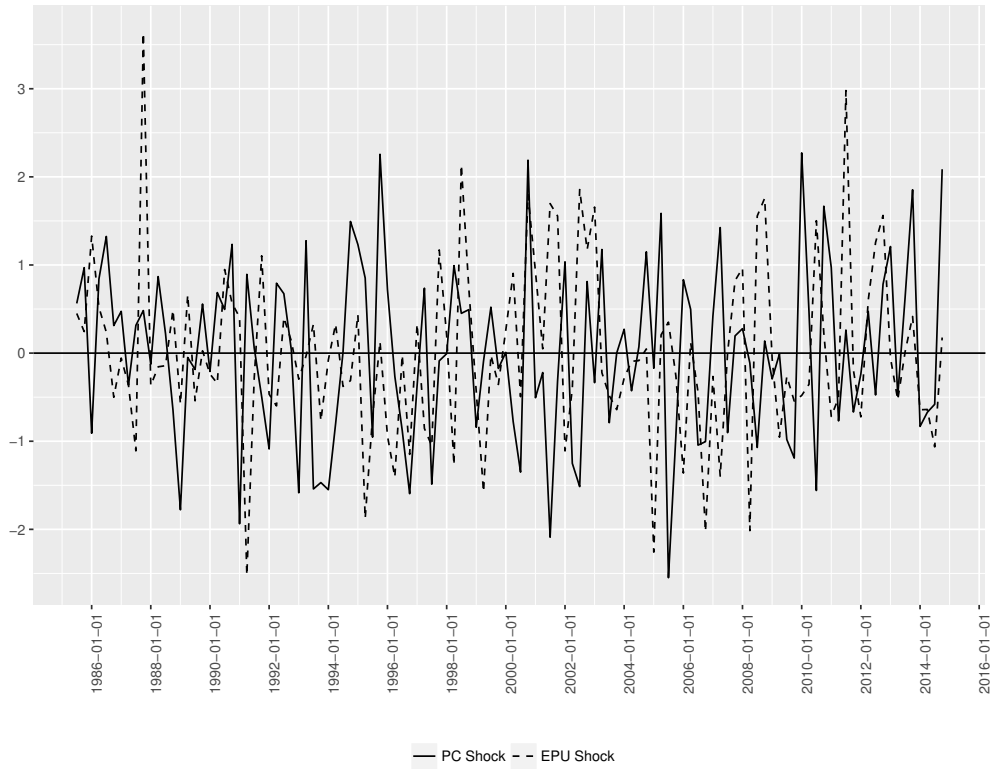


Figure 4

PC and EPU Shocks from 2-Lag SVAR Model

Note: PC and EPU shocks recovered from a 2-lag SVAR model. The shocks are standardized to have a mean of zero and a standard deviation of one. The y-axis measures standard deviations.

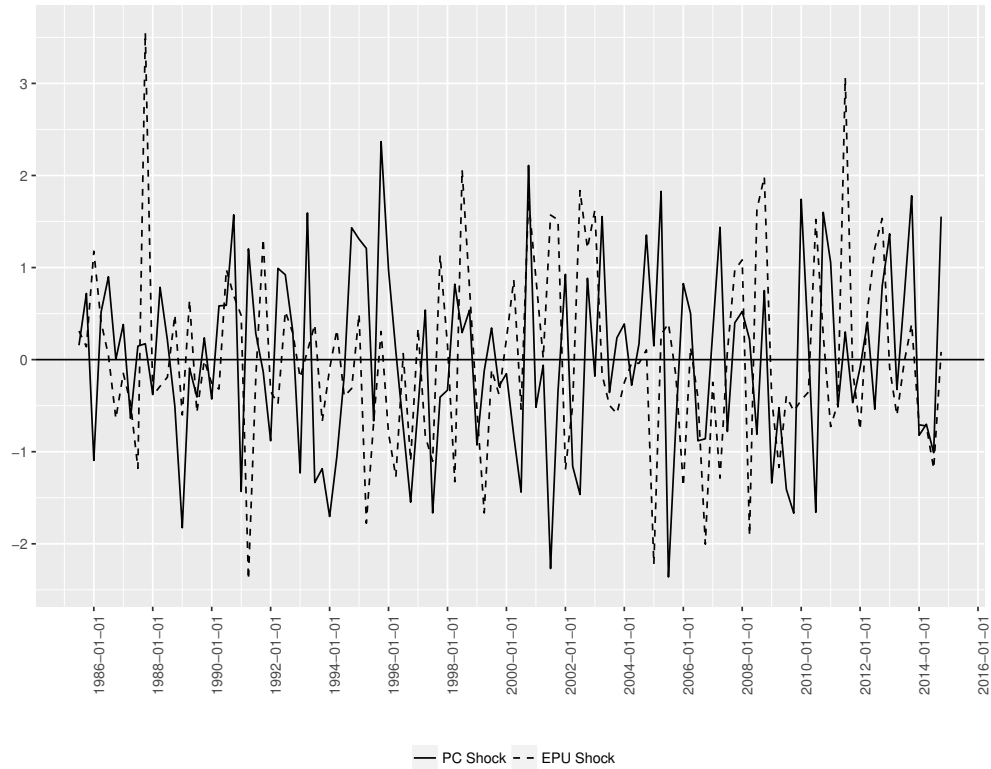


Figure 5

PC and EPU Shocks from 2-Lag SVAR Model. Accounting for Post-2008 Period

Note: PC and EPU shocks are recovered from a 2-lag SVAR model with the PC Index ordered first and the EPU Index ordered second and a dummy variable that equals one for observations beginning with 2009Q1. The shocks are standardized to have a mean of zero and a standard deviation of one. The y-axis measures standard deviations.

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