

The Market Impact of Fed Communications: The Role of the Press Conference

Corrigendum

Namrata Narain and Kunal Sangani

January 8, 2026

Our paper “The Market Impact of Fed Communications: The Role of the Press Conference” (International Journal of Central Banking 22(1), 313–389, 2026) contained an error in the timing of four press conferences. This document gives the correct timing and updates all analyses.

While some exhibits change slightly, the paper’s qualitative conclusions (and nearly all quantitative results) are unchanged. We apologize for any confusion that our error may have caused.

Appendix Table A1 in the published paper states incorrect press conference times on four dates: Mar 20, 2013, Jun 19, 2013, Sep 18, 2013, and Dec 18, 2013. Each of these four press conferences started at 14:30. The start and end times in Appendix Table A1 were shifted forward by 15 minutes.

We reran all analyses after accounting for this change. The table on the next page shows which exhibits in the paper are affected.¹ The remainder of this document includes all updated exhibits. Our personal websites also host revised versions of the paper with the updated exhibits in place.

¹Exhibits that do not include variables related to the timing of the press conference or do not include press conferences under Chair Bernanke’s tenure are unaffected.

Exhibit	Affected	Exhibit	Affected
Table 1	Yes	Figure 7	No
Table 2	Yes	Figure 8a	No
Table 3	Yes	Figure 8b	No
Table 4	No	Figure 9a	No
Table 5	No	Figure 9b	No
Table 6	Yes	Figure 9c	No
Figure 1	No	Figure 10a	No
Figure 2	Yes	Figure 10b	No
Figure 3	No	Figure 11a	No
Figure 4	Yes	Figure 11b	No
Figure 5	No	Figure 11c	No
Figure 6a	No		
Figure 6b	No		
Appendix Table A1	Yes	Appendix Figure A1	Yes
Appendix Table A2	Yes	Appendix Figure A2	Yes
Appendix Table A3	No	Appendix Figure A3a	Yes
Appendix Table A4	Yes	Appendix Figure A3b	No
Appendix Table A5	Yes	Appendix Figure A3c	No
Appendix Table A6	Yes	Appendix Figure A4a	Yes
Appendix Table A7	No	Appendix Figure A4b	No
Appendix Table A8	No	Appendix Figure A4c	No
Appendix Table A9	No	Appendix Figure A5a	Yes
Appendix Table A10	No	Appendix Figure A5b	Yes
Appendix Table A11	No	Appendix Figure A6	Yes
Appendix Table A12	Yes	Appendix Figure A7	Yes
Appendix Table A13	Yes	Appendix Figure A8	No
Appendix Table A14	No	Appendix Figure A9a	No
Appendix Table A15	No	Appendix Figure A9b	No
		Appendix Figure A10a	No
		Appendix Figure A10b	No
		Appendix Figure A10c	No
		Appendix Figure A11	No
		Appendix Figure A12a	No
		Appendix Figure A12b	No
		Appendix Figure A12c	No

Table 1: Robustness: Heightened market volatility during Chair Powell's press conferences.

Period	Regression coefficients					R^2
	Intercept	Std. Err.	Powell	Std. Err.		
<i>Volatility measure: Squared S&P 500 returns over event</i>						
Press conference	0.156**	(0.042)	0.559**	(0.201)	0.07	
FOMC statement release (30min window)	0.220**	(0.065)	0.048	(0.096)	0.00	
FOMC statement release (15min window)	0.153**	(0.059)	0.101	(0.094)	0.01	
Placebo period (1 week prior)	0.035**	(0.011)	0.018	(0.016)	0.02	
Placebo period (2 weeks prior)	0.038**	(0.012)	0.014	(0.031)	0.00	
Placebo period (4 weeks prior)	0.085**	(0.020)	0.004	(0.031)	0.00	
<i>Volatility measure: Squared Dow Jones Industrial returns over event</i>						
Press conference	0.131**	(0.038)	0.382**	(0.137)	0.07	
FOMC statement release (30min window)	0.203**	(0.074)	0.007	(0.091)	0.00	
FOMC statement release (15min window)	0.159**	(0.072)	0.037	(0.092)	0.00	
Placebo period (1 week prior)	0.031**	(0.011)	0.017	(0.015)	0.02	
Placebo period (2 weeks prior)	0.032**	(0.011)	0.016	(0.025)	0.00	
Placebo period (4 weeks prior)	0.065**	(0.016)	0.030	(0.032)	0.01	
<i>Volatility measure: Variance of S&P 500 returns over 5-min increments</i>						
Press conference	0.013**	(0.003)	0.039**	(0.012)	0.09	
FOMC statement release (30min window)	0.029**	(0.005)	0.015	(0.011)	0.02	
FOMC statement release (15min window)	0.041**	(0.009)	0.020	(0.017)	0.01	
Placebo period (1 week prior)	0.004**	(0.001)	0.002	(0.001)	0.02	
Placebo period (2 weeks prior)	0.004**	(0.001)	0.001	(0.001)	0.01	
Placebo period (4 weeks prior)	0.006**	(0.002)	0.002	(0.002)	0.01	
<i>Volatility measure: Variance of Dow Jones Industrial returns over 5-min increments</i>						
Press conference	0.012**	(0.003)	0.028**	(0.009)	0.09	
FOMC statement release (30min window)	0.026**	(0.005)	0.008	(0.009)	0.01	
FOMC statement release (15min window)	0.037**	(0.008)	0.010	(0.014)	0.01	
Placebo period (1 week prior)	0.003**	(0.001)	0.002	(0.001)	0.03	
Placebo period (2 weeks prior)	0.003**	(0.001)	0.001	(0.001)	0.02	
Placebo period (4 weeks prior)	0.005**	(0.001)	0.036	(0.036)	0.01	

Note: The variable Powell is an indicator set to one for press conferences given by Chair Powell and zero otherwise. For placebo periods, the variable Powell is equal to one if Chair Powell delivered the press conference that follows one, two, or four weeks after the placebo period. Squared market returns expressed in units of percent squared. Heteroskedasticity-robust (HC3) standard errors in parentheses. ** indicates significant at 5%, * at 10%.

Table 2: Press conference market volatility for sub-periods of Chair Powell’s term.

Volatility measure:	<i>Squared S&P 500 returns over press conf.</i>			<i>Variance of S&P 500 returns in 5-min increments</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
Powell	0.131 (0.201)	0.287 (0.228)	-0.113 (0.180)	0.012 (0.012)	0.010 (0.009)	-0.015 (0.013)
Powell post-Covid	0.603* (0.324)		0.572* (0.316)	0.038** (0.019)		0.035** (0.018)
Tightening		0.106 (0.181)	0.106 (0.182)		-0.004 (0.005)	-0.004 (0.005)
Powell \times Tightening		0.767* (0.444)	0.748* (0.439)		0.089** (0.025)	0.087** (0.024)
Intercept	0.156** (0.041)	0.137** (0.031)	0.137** (0.031)	0.013** (0.003)	0.014** (0.003)	0.014** (0.003)
<i>N</i>	73	73	73	73	73	73
<i>R</i> ²	0.11	0.16	0.20	0.14	0.35	0.40

Note: The variable Powell is an indicator set to one for press conferences under Chair Powell’s tenure and zero otherwise. Squared market returns expressed in units of percent squared. Heteroskedasticity-robust (HC3) standard errors in parentheses.

Table 3: Reversals during Chair Powell’s tenure.

	<i>Market Reaction to Press Conference</i>					
	Equity markets		Treasury markets			
	S&P 500 (1)	Dow Jones Ind. (2)	2Y (3)	5Y (4)	10Y (5)	
Market Reaction to FOMC Statement	0.167 (0.181)	0.174 (0.157)	0.318** (0.091)	0.397** (0.095)	0.461** (0.135)	
Powell \times Market Reaction to Statement	-0.636** (0.314)	-0.506 (0.316)	-0.530** (0.209)	-0.507** (0.193)	-0.547** (0.214)	
<i>N</i>	73	73	61	61	61	
<i>R</i> ²	0.08	0.05	0.08	0.13	0.13	

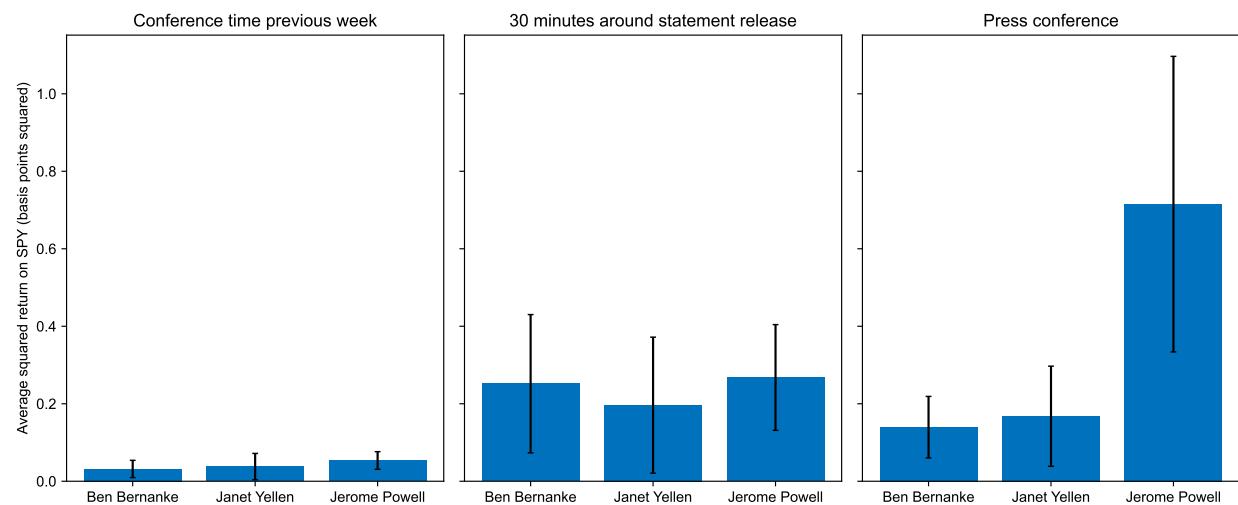
Note: For equity markets, reactions to FOMC statement and press conference are returns over the event window. For treasury markets, reactions to statement and press conference are changes in yields over the event window. Due to limitation on intraday data, Treasury market analyses (columns 3–5) are limited to the press conferences since March 2014 (start of Chair Yellen’s tenure). Heteroskedasticity-robust (HC3) standard errors in parentheses. ** indicates significance at 5%, * at 10%.

Table 6: Q&A language and market reaction to press conference.

<i>Panel A. Market Direction</i>	<i>Returns over press conference</i>		
	(1)	(2)	(3)
Difference between Valence Q&A vs. Statement	0.500** (0.228)	0.302** (0.148)	0.059 (0.100)
Powell × (Diff. Valence Q&A vs. Statement)			0.441* (0.252)
Sample	Powell	All	All
Chair FEs	-	Yes	Yes
<i>N</i>	45	73	73
<i>R</i> ²	0.10	0.07	0.10
<i>Panel B. Market Volatility (Measure I)</i>	<i>Sq. returns over press conference</i>		
	(1)	(2)	(3)
Abs. Diff. between Valence Q&A vs. Statement	0.402** (0.169)	0.285** (0.133)	-0.035 (0.063)
Powell × (Abs. Diff. Valence Q&A vs. Statement)			0.436** (0.183)
Sample	Powell	All	All
Chair FEs	-	Yes	Yes
<i>N</i>	45	73	73
<i>R</i> ²	0.10	0.13	0.16
<i>Panel C. Market Volatility (Measure II)</i>	<i>Variance returns over 5-min increments</i>		
	(1)	(2)	(3)
Abs. Diff. between Valence Q&A vs. Statement	0.041** (0.010)	0.030** (0.008)	0.001 (0.002)
Powell × (Abs. Diff. Valence Q&A vs. Statement)			0.040** (0.010)
Sample	Powell	All	All
Chair FEs	-	Yes	Yes
<i>N</i>	45	73	73
<i>R</i> ²	0.32	0.30	0.37

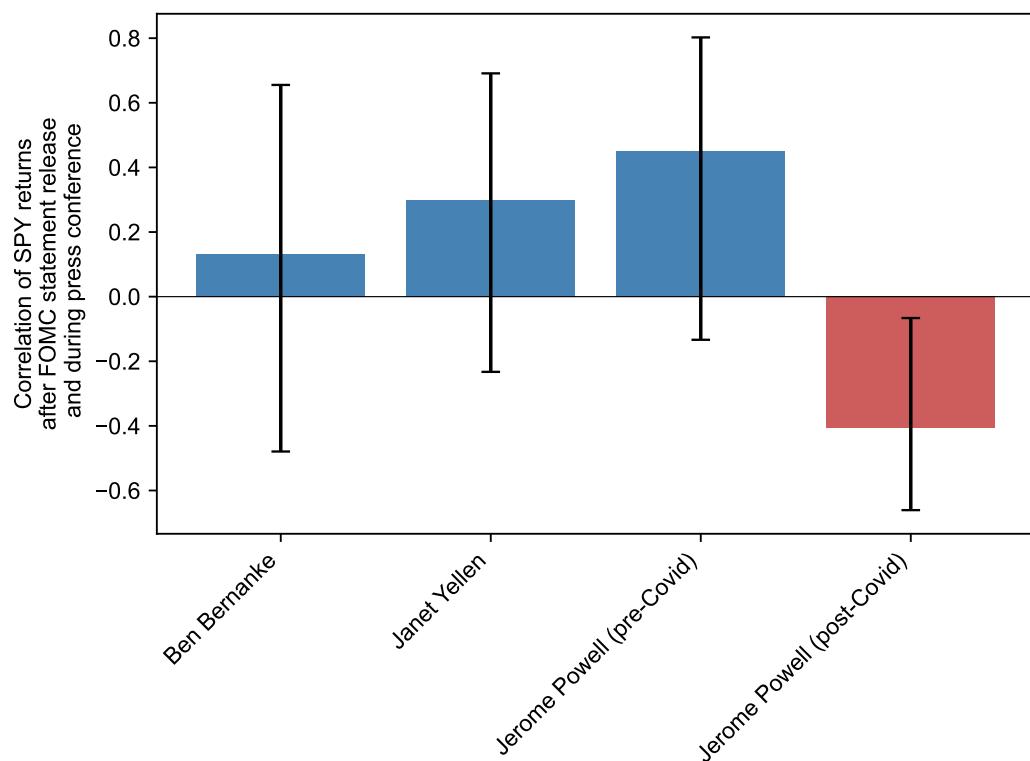
Note: The valence of each text is the share of positive words minus the share of negative words. Text measures normalized to have mean zero and unit standard deviation. Returns over press conference are SPY returns from the beginning to end of the press conference. Heteroskedasticity-robust (HC3) standard errors in parentheses. ** indicates significance at 5%, * at 10%.

Figure 2: Market volatility for placebo conference, FOMC statement release, and press conference under three chairs, measured using squared S&P 500 returns.



Note: The figure shows average squared returns of the S&P 500 index (proxied by the SPY ETF) during press conferences given by Chair Powell, Chair Yellen, and Chair Bernanke. We measure returns from the minute before the press conference starts to the minute it ends.

Figure 4: Correlation of market reaction to FOMC statement release with market reaction to press conference.



Note: Correlation of S&P 500 returns after statement release and during press conference for each chair, with Chair Powell's conferences split before/after March 2020. A positive correlation means that the S&P 500 tended to move in the same direction after the statement release and during the press conference given by the chair. Error bars indicate 95 percent confidence interval.

Appendix A Additional Figures and Tables

Table A1: Press conferences sample.

Date	Chair	Target Rate	SEP Release?	Statement Release	Press Conference Start	Press Conference End
Apr 27, 2011	Ben Bernanke	0 to 1/4 percent	Yes	12:30*	14:15	15:11
Jun 22, 2011	Ben Bernanke	0 to 1/4 percent	Yes	12:30†	14:15	15:05
Nov 02, 2011	Ben Bernanke	0 to 1/4 percent	Yes	12:30†	14:15	15:03
Jan 25, 2012	Ben Bernanke	0 to 1/4 percent	Yes	12:20†	14:15	15:21
Apr 25, 2012	Ben Bernanke	0 to 1/4 percent	Yes	12:35†	14:15	15:06
Jun 20, 2012	Ben Bernanke	0 to 1/4 percent	Yes	12:35†	14:15	15:00
Sep 13, 2012	Ben Bernanke	0 to 1/4 percent	Yes	12:35†	14:15	15:06
Dec 12, 2012	Ben Bernanke	0 to 1/4 percent	Yes	12:30†	14:15	15:31
Mar 20, 2013	Ben Bernanke	0 to 1/4 percent	Yes	14:00	14:30	15:26
Jun 19, 2013	Ben Bernanke	0 to 1/4 percent	Yes	14:00	14:30	15:28
Sep 18, 2013	Ben Bernanke	0 to 1/4 percent	Yes	14:00	14:30	15:27
Dec 18, 2013	Ben Bernanke	0 to 1/4 percent	Yes	14:00	14:30	15:36
Mar 04, 2014	Janet Yellen	0 to 1/4 percent	<i>Excluded: Unscheduled conference call</i>			
Mar 19, 2014	Janet Yellen	0 to 1/4 percent	Yes	14:00	14:30	15:31
Jun 18, 2014	Janet Yellen	0 to 1/4 percent	Yes	14:00	14:30	15:24
Sep 17, 2014	Janet Yellen	0 to 1/4 percent	Yes	14:00	14:30	15:27
Dec 17, 2014	Janet Yellen	0 to 1/4 percent	Yes	14:00	14:30	15:30
Mar 18, 2015	Janet Yellen	0 to 1/4 percent	Yes	14:00	14:30	15:25
Jun 17, 2015	Janet Yellen	0 to 1/4 percent	Yes	14:00	14:30	15:29
Sep 17, 2015	Janet Yellen	0 to 1/4 percent	Yes	14:00	14:30	15:28
Dec 16, 2015	Janet Yellen	1/4 to 1/2 percent	Yes	14:00	14:30	15:36
Mar 16, 2016	Janet Yellen	1/4 to 1/2 percent	Yes	14:00	14:30	15:30
Jun 15, 2016	Janet Yellen	1/4 to 1/2 percent	Yes	14:00	14:30	15:24
Sep 21, 2016	Janet Yellen	1/4 to 1/2 percent	Yes	14:00	14:30	15:30
Dec 14, 2016	Janet Yellen	1/2 to 3/4 percent	Yes	14:00	14:30	15:20
Mar 15, 2017	Janet Yellen	3/4 to 1 percent	Yes	14:00	14:30	15:19
Jun 14, 2017	Janet Yellen	1 to 1-1/4 percent	Yes	14:00	14:30	15:28
Sep 20, 2017	Janet Yellen	1 to 1-1/4 percent	Yes	14:00	14:30	15:35
Dec 13, 2017	Janet Yellen	1-1/4 to 1-1/2 percent	Yes	14:00	14:30	15:37
Mar 21, 2018	Jerome Powell	1-1/2 to 1-3/4 percent	Yes	14:00	14:30	15:13
Jun 13, 2018	Jerome Powell	1-3/4 to 2 percent	Yes	14:00	14:30	15:22
Sep 26, 2018	Jerome Powell	2 to 2-1/4 percent	Yes	14:00	14:30	15:27

Dec 19, 2018	Jerome Powell	2-1/4 to 2-1/2 percent	Yes	14:00	14:30	15:14	
Jan 30, 2019	Jerome Powell	2-1/4 to 2-1/2 percent	No	14:00	14:30	15:17	
Mar 20, 2019	Jerome Powell	2-1/4 to 2-1/2 percent	Yes	14:00	14:30	15:15	
May 01, 2019	Jerome Powell	2-1/4 to 2-1/2 percent	No	14:00	14:30	15:11	
Jun 19, 2019	Jerome Powell	2-1/4 to 2-1/2 percent	Yes	14:00	14:30	15:14	
Jul 31, 2019	Jerome Powell	2 to 2-1/4 percent	No	14:00	14:30	15:15	
Sep 18, 2019	Jerome Powell	1-3/4 to 2 percent	Yes	14:00	14:30	15:21	
Oct 30, 2019	Jerome Powell	1-1/2 to 1-3/4 percent	No	14:00	14:30	15:17	
Dec 11, 2019	Jerome Powell	1-1/2 to 1-3/4 percent	Yes	14:00	14:30	15:21	
Jan 29, 2020	Jerome Powell	1-1/2 to 1-3/4 percent	No	14:00	14:30	15:24	
Mar 03, 2020	Jerome Powell	1 to 1-1/4 percent		<i>Excluded: Emergency meeting</i>			
Mar 15, 2020	Jerome Powell	0 to 1/4 percent		<i>Excluded: Emergency meeting</i>			
Apr 29, 2020	Jerome Powell	0 to 1/4 percent	No	14:00	14:30	15:18	
Jun 10, 2020	Jerome Powell	0 to 1/4 percent	Yes	14:00	14:30	15:28	
Jul 29, 2020	Jerome Powell	0 to 1/4 percent	No	14:00	14:30	15:29	
Sep 16, 2020	Jerome Powell	0 to 1/4 percent	Yes	14:00	14:30	15:33	
Nov 05, 2020	Jerome Powell	0 to 1/4 percent	No	14:00	14:30	15:18	
Dec 16, 2020	Jerome Powell	0 to 1/4 percent	Yes	14:00	14:30	15:27	
Jan 27, 2021	Jerome Powell	0 to 1/4 percent	No	14:00	14:30	15:24	
Mar 17, 2021	Jerome Powell	0 to 1/4 percent	Yes	14:00	14:30	15:29	
Apr 28, 2021	Jerome Powell	0 to 1/4 percent	No	14:00	14:30	15:25	
Jun 16, 2021	Jerome Powell	0 to 1/4 percent	Yes	14:00	14:30	15:30	
Jul 28, 2021	Jerome Powell	0 to 1/4 percent	No	14:00	14:30	15:24	
Sep 22, 2021	Jerome Powell	0 to 1/4 percent	Yes	14:00	14:30	15:24	
Nov 03, 2021	Jerome Powell	0 to 1/4 percent	No	14:00	14:30	15:25	
Dec 15, 2021	Jerome Powell	0 to 1/4 percent	Yes	14:00	14:30	15:30	
Jan 26, 2022	Jerome Powell	0 to 1/4 percent	No	14:00	14:30	15:25	
Mar 16, 2022	Jerome Powell	1/4 to 1/2 percent	Yes	14:00	14:30	15:24	
May 04, 2022	Jerome Powell	3/4 to 1 percent	No	14:00	14:30	15:17	
Jun 15, 2022	Jerome Powell	1-1/2 to 1-3/4 percent	Yes	14:00	14:30	15:26	
Jul 27, 2022	Jerome Powell	2-1/4 to 2-1/2 percent	No	14:00	14:30	15:24	
Sep 21, 2022	Jerome Powell	3 to 3-1/4 percent	Yes	14:00	14:30	15:12	
Nov 02, 2022	Jerome Powell	3-3/4 to 4 percent	No	14:00	14:30	15:15	
Dec 14, 2022	Jerome Powell	4-1/4 to 4-1/2 percent	Yes	14:00	14:30	15:15	
Feb 01, 2023	Jerome Powell	4-1/2 to 4-3/4 percent	No	14:00	14:30	15:14	
Mar 22, 2023	Jerome Powell	4-3/4 to 5 percent	Yes	14:00	14:30	15:13	
May 03, 2023	Jerome Powell	5 to 5-1/4 percent	No	14:00	14:30	15:19	
Jun 14, 2023	Jerome Powell	5 to 5-1/4 percent	Yes	14:00	14:30	15:19	

Jul 26, 2023	Jerome Powell	5-1/4 to 5-1/2 percent	No	14:00	14:30	15:19
Sep 20, 2023	Jerome Powell	5-1/4 to 5-1/2 percent	Yes	14:00	14:30	15:23
Nov 01, 2023	Jerome Powell	5-1/4 to 5-1/2 percent	No	14:00	14:30	15:21
Dec 13, 2023	Jerome Powell	5-1/4 to 5-1/2 percent	Yes	14:00	14:30	15:14
Jan 31, 2024	Jerome Powell	5-1/4 to 5-1/2 percent	No	14:00	14:30	15:19
Mar 20, 2024	Jerome Powell	5-1/4 to 5-1/2 percent	Yes	14:00	14:30	15:17

Note: *The FOMC statement was released at the time indicated, and the SEP was released at 14:15.

[†]The FOMC statement was released at the time indicated, and the SEP was released at 14:00.

Table A2: Summary statistics of variables over press conferences sample.

Variable	Source	Mean	St. dev.	Min	Max
SPY return: statement release (%)	NYSE TAQ	0.085	0.511	-1.421	1.192
SPY return: press conference (%)	NYSE TAQ	0.088	0.715	-2.583	1.782
SPY return: placebo period (%)	NYSE TAQ	-0.024	0.216	-0.604	0.461
Variance SPY 5-min returns: statement (10^{-4})	NYSE TAQ	0.051	0.121	0.001	0.978
Variance SPY 5-min returns: press (10^{-4})	NYSE TAQ	0.061	0.212	0.001	1.780
Variance SPY 5-min returns: placebo (10^{-4})	NYSE TAQ	0.005	0.005	0.000	0.031
DIA return: statement release (%)	NYSE TAQ	0.081	0.465	-1.261	1.357
DIA return: press conference (%)	NYSE TAQ	0.060	0.614	-1.980	1.574
DIA return: placebo period (%)	NYSE TAQ	-0.028	0.204	-0.558	0.383
Variance DIA 5-min returns: statement (10^{-4})	NYSE TAQ	0.044	0.114	0.001	0.944
Variance DIA 5-min returns: press (10^{-4})	NYSE TAQ	0.052	0.202	0.001	1.718
Variance DIA 5-min returns: placebo (10^{-4})	NYSE TAQ	0.004	0.005	0.000	0.023
2Y Treasury: yield level (bp)	Bloomberg USGG2YR	189.66	160.11	11.720	505.38
2Y Treasury: change around statement (bp)	Bloomberg USGG2YR	-0.289	4.809	-13.430	10.900
2Y Treasury: change during press conf. (bp)	Bloomberg USGG2YR	-1.194	4.679	-20.350	9.550
5Y Treasury: yield level (bp)	Bloomberg USGG5YR	211.44	123.45	26.26	473.83
5Y Treasury: change around statement (bp)	Bloomberg USGG5YR	-0.196	4.618	-12.050	9.430
5Y Treasury: change during press conf. (bp)	Bloomberg USGG5YR	-1.242	4.177	-15.720	8.240
10Y Treasury: yield level (bp)	Bloomberg USGG10YR	239.60	102.72	59.05	480.56
10Y Treasury: change around statement (bp)	Bloomberg USGG10YR	-0.163	2.975	-8.360	6.410
10Y Treasury: change during press conf. (bp)	Bloomberg USGG10YR	-0.883	2.977	-10.150	5.560
Implied Vol 2Y: Level	Bloomberg LIVE	1.059	0.665	0.280	3.120
Implied Vol 5Y: Level	Bloomberg LIVE	3.072	1.195	1.230	6.820
Implied Vol 10Y: Level	Bloomberg LIVE	5.001	1.500	2.640	9.220
Implied Vol 20Y: Level	Bloomberg LIVE	9.686	2.493	5.650	17.290
VIX: Level	Bloomberg	18.698	6.260	9.780	37.210
Implied Vol 2Y: Change from day before	Bloomberg LIVE	-0.074	0.121	-0.430	0.140
Implied Vol 5Y: Change from day before	Bloomberg LIVE	-0.258	0.304	-1.330	0.500
Implied Vol 10Y: Change from day before	Bloomberg LIVE	-0.363	0.360	-1.500	0.330
Implied Vol 20Y: Change from day before	Bloomberg LIVE	-0.563	0.488	-2.130	0.480
VIX: Log change from day before	Bloomberg	-0.036	0.093	-0.193	0.480

Table A4: Market volatility during press conferences and macroeconomic indicators.

	<i>Sq. S&P 500 returns over press conference</i>			Unemployment		
	(1)	(2)	(3)	(4)	(5)	(6)
Inflation	-0.063 (0.045)					
Powell × Inflation	0.363** (0.098)					
Infl. Distance from 2% Target		0.059 (0.065)				
Powell × Infl. Distance from 2% Target		0.296** (0.123)				
Infl. Over 3%			-0.085 (0.054)			
Powell × Infl. Over 3%			0.915** (0.361)			
Unemployment Rate				-0.010 (0.022)		
Powell × Unemployment Rate				-0.095** (0.047)		
Unemp. Distance from u^*					-0.018 (0.026)	
Powell × Unemp. Distance from u^*					-0.100 (0.062)	
Unemp. Over 6%						-0.021 (0.083)
Powell × Unemp. Over 6%						-0.597** (0.275)
Powell	-0.694** (0.261)	-0.181 (0.169)	0.104 (0.138)	0.994** (0.403)	0.695** (0.275)	0.673** (0.253)
<i>N</i>	73	73	73	73	73	73
<i>R</i> ²	0.37	0.39	0.16	0.10	0.09	0.10

Note: Inflation is percent change over the past year in the BLS's seasonally-adjusted consumer price index for all urban consumers, all items in U.S. city average (CPIAUCSL), Unemp. is the unemployment rate from the BLS (UNRATE), and u^* is the NAIRU / noncyclical rate of unemployment from the CBO (NR0U). Heteroskedasticity-robust (HC3) standard errors in parentheses. ** indicates significance at 5%, * at 10%.

Table A5: Market volatility (measured using volatility of returns in 5-min increments) during press conferences and macroeconomic indicators.

	Variance of S&P 500 returns over 5-min increments					
	Inflation			Unemployment		
	(1)	(2)	(3)	(4)	(5)	(6)
Inflation	-0.007*					
	(0.004)					
Powell × Inflation	0.026**					
	(0.006)					
Infl. Distance from 2% Target		0.008				
		(0.006)				
Powell × Infl. Distance from 2% Target		0.014*				
		(0.009)				
Infl. Over 3%			-0.008**			
			(0.004)			
Powell × Infl. Over 3%			0.065**			
			(0.020)			
Unemployment Rate				-0.001		
				(0.002)		
Powell × Unemployment Rate				-0.006*		
				(0.003)		
Unemp. Distance from u^*					-0.002	
					(0.002)	
Powell × Unemp. Distance from u^*					-0.004	
					(0.003)	
Unemp. Over 6%						-0.004
						(0.006)
Powell × Unemp. Over 6%						-0.040**
						(0.016)
Powell	-0.045**	-0.004	0.008	0.066**	0.044**	0.046**
	(0.016)	(0.011)	(0.008)	(0.026)	(0.015)	(0.015)
<i>N</i>	73	73	73	73	73	73
<i>R</i> ²	0.45	0.47	0.22	0.14	0.11	0.15

Note: Inflation is percent change over the past year in the BLS's consumer price index for all urban consumers, all items in U.S. city average, Unemp. is the unemployment rate from the BLS, and u^* is the NAIRU / noncyclical rate of unemployment from the CBO. Heteroskedasticity-robust (HC3) standard errors in parentheses. ** indicates significance at 5%, * at 10%.

Table A6: Reversals during Chair Powell's tenure.

	<i>Returns over press conference</i>		
	(1)	(2)	(3)
Bernanke × Returns around statement	0.126 (0.312)	0.126 (0.315)	0.126 (0.317)
Yellen × Returns around statement	0.267 (0.184)	0.267 (0.186)	0.267 (0.187)
Powell × Returns around statement	-0.469* (0.260)		
Powell (pre-Covid) × Returns around statement		0.526 (0.549)	0.529 (0.545)
Powell (post-Covid) × Returns around statement		-0.694** (0.253)	
Powell (post-Covid, pre-tightening) × Returns around statement			-0.336 (0.557)
Powell (post-Covid, tightening) × Returns around statement			-0.752** (0.282)
<i>N</i>	73	73	73
<i>R</i> ²	0.08	0.16	0.16

Note: Column (1) reports coefficients β_i from the specification

$$\text{ReturnsOverPressConference}_{i,t} = \alpha_i + \sum_i \beta_i \text{ReturnsAroundStatement}_{i,t} + \varepsilon_{i,t},$$

for chair i on press conference date t . The coefficients on the Chair dummies, α_i , are not reported for readability. Columns (2) and (3) further break apart Chair Powell's tenure into pre- and post-Covid phases using the date March 1, 2020, and break Chair Powell's tenure into pre-tightening and tightening phases using the date March 1, 2022 (prior to the first interest rate hike on March 16, 2022). Returns around statement are SPY returns over a thirty minute window around the FOMC statement release, and returns over press conference are SPY returns from start to end of the subsequent press conference. Heteroskedasticity-robust (HC3) standard errors in parentheses. ** indicates significance at 5%, * at 10%.

Table A12: Market reaction to press conference and other measures of language.

Measure of Q&A	<i>Dependent variable: Returns over press conference</i>					
	Measure		Powell × Measure		N	R^2
	Estimate	Std. Error	Estimate	Std. Error		
Difference Valence Q&A vs. Statement	0.500**	(0.228)			45	0.10
Difference Valence Q&A vs. Statement	0.302**	(0.148)			73	0.07
Difference Valence Q&A vs. Statement	0.059	(0.100)	0.441*	(0.252)	73	0.10
Flesch-Kincaid Score (complexity)	-0.583**	(0.280)			45	0.07
Flesch-Kincaid Score (complexity)	-0.285	(0.177)			73	0.03
Flesch-Kincaid Score (complexity)	0.042	(0.098)	-0.625**	(0.300)	73	0.07
Uncertainty words in Q&A	0.006	(0.140)			45	0.00
Uncertainty words in Q&A	-0.013	(0.087)			73	0.00
Uncertainty words in Q&A	-0.038	(0.071)	0.044	(0.158)	73	0.01
Hawk-Dove Index Q&A	-0.053	(0.122)			45	0.00
Hawk-Dove Index Q&A	0.000	(0.080)			73	0.00
Hawk-Dove Index Q&A	0.072	(0.077)	-0.125	(0.146)	73	0.01
Diff. Hawk-Dove Index Q&A vs. Statement	-0.079	(0.106)			45	0.01
Diff. Hawk-Dove Index Q&A vs. Statement	-0.059	(0.090)			73	0.01
Diff. Hawk-Dove Index Q&A vs. Statement	0.036	(0.102)	-0.114	(0.148)	73	0.01
Cosine Similarity of Statement and Q&A	-0.082	(0.285)			45	0.00
Cosine Similarity of Statement and Q&A	-0.107	(0.220)			73	0.01
Cosine Similarity of Statement and Q&A	-0.178	(0.200)	0.096	(0.351)	73	0.01
Cosine Similarity of Minutes and Q&A	-0.303	(0.190)			45	0.04
Cosine Similarity of Minutes and Q&A	-0.282**	(0.136)			73	0.05
Cosine Similarity of Minutes and Q&A	-0.238	(0.147)	-0.064	(0.242)	73	0.05

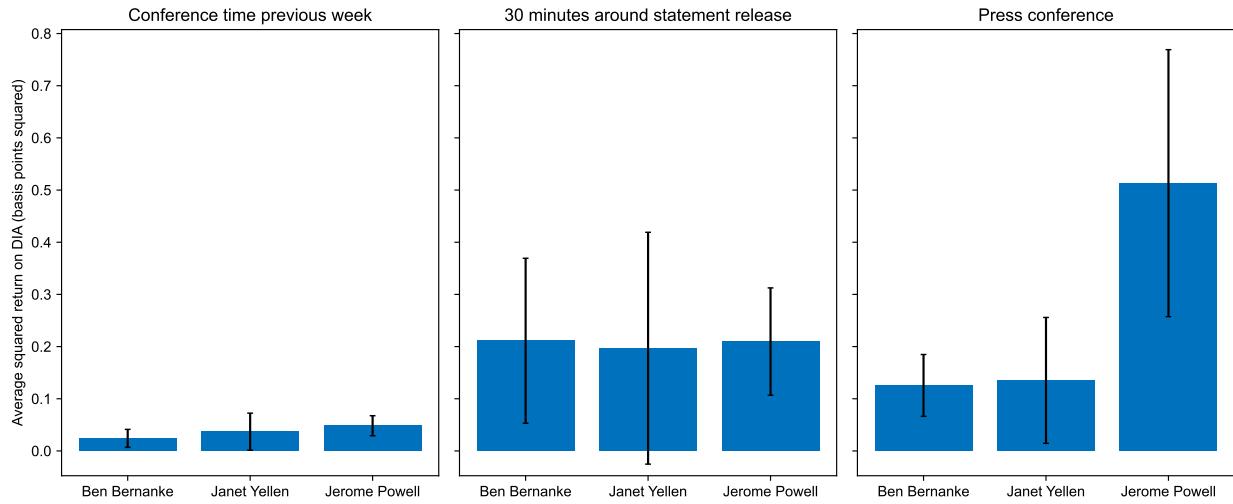
Note: All measures are normalized to have mean zero and unit standard deviation. Returns over press conference are SPY returns from the beginning to end of the press conference. Heteroskedasticity-robust (HC3) standard errors in parentheses. ** indicates significance at 5%, * at 10%.

Table A13: Market volatility during press conference and other measures of language.

Measure of Q&A	<i>Dependent variable: Sq. returns over press conference</i>					
	Measure		Powell × Measure		N	<i>R</i> ²
	Estimate	Std. Error	Estimate	Std. Error		
Abs. Diff. Valence Q&A vs. Statement	0.402**	(0.169)			45	0.10
Abs. Diff. Valence Q&A vs. Statement	0.285**	(0.133)			73	0.13
Abs. Diff. Valence Q&A vs. Statement	-0.035	(0.063)	0.436**	(0.183)	73	0.16
Flesch-Kincaid Score (complexity)	-0.700*	(0.421)			45	0.05
Flesch-Kincaid Score (complexity)	-0.409*	(0.238)			73	0.09
Flesch-Kincaid Score (complexity)	-0.088	(0.067)	-0.612	(0.432)	73	0.11
Uncertainty words in Q&A	-0.165	(0.185)			45	0.01
Uncertainty words in Q&A	-0.081	(0.114)			73	0.07
Uncertainty words in Q&A	0.036	(0.023)	-0.201	(0.189)	73	0.08
Hawk-Dove Index Q&A	0.140	(0.170)			45	0.01
Hawk-Dove Index Q&A	0.075	(0.099)			73	0.07
Hawk-Dove Index Q&A	-0.013	(0.039)	0.153	(0.176)	73	0.08
Abs. Diff. Hawk-Dove Index Q&A vs. Statement	0.085	(0.231)			45	0.00
Abs. Diff. Hawk-Dove Index Q&A vs. Statement	0.068	(0.187)			73	0.07
Abs. Diff. Hawk-Dove Index Q&A vs. Statement	-0.001	(0.038)	0.085	(0.237)	73	0.07
Cosine Similarity of Statement and Q&A	1.047**	(0.443)			45	0.21
Cosine Similarity of Statement and Q&A	0.728**	(0.348)			73	0.19
Cosine Similarity of Statement and Q&A	-0.205	(0.131)	1.252**	(0.467)	73	0.26
Cosine Similarity of Minutes and Q&A	0.303	(0.289)			45	0.02
Cosine Similarity of Minutes and Q&A	0.123	(0.218)			73	0.07
Cosine Similarity of Minutes and Q&A	-0.259**	(0.110)	0.561*	(0.313)	73	0.09

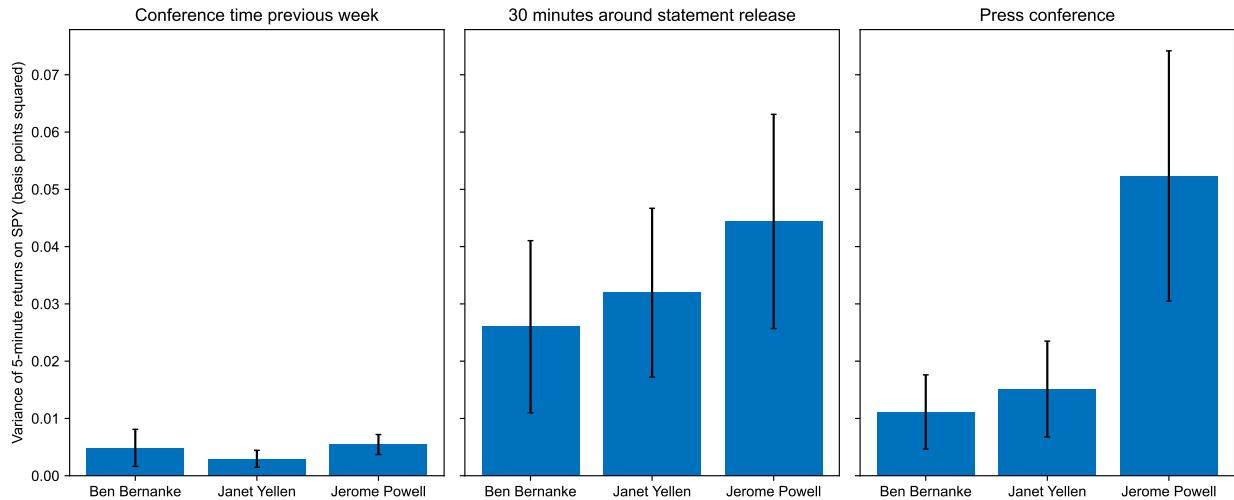
Note: All measures are normalized to have mean zero and unit standard deviation. Returns over press conference are SPY returns from the beginning to end of the press conference. Heteroskedasticity-robust (HC3) standard errors in parentheses. ** indicates significance at 5%, * at 10%.

Figure A1: Market volatility for placebo conference, FOMC statement release, and press conference under three chairs, using returns on the Dow Jones Industrial index.



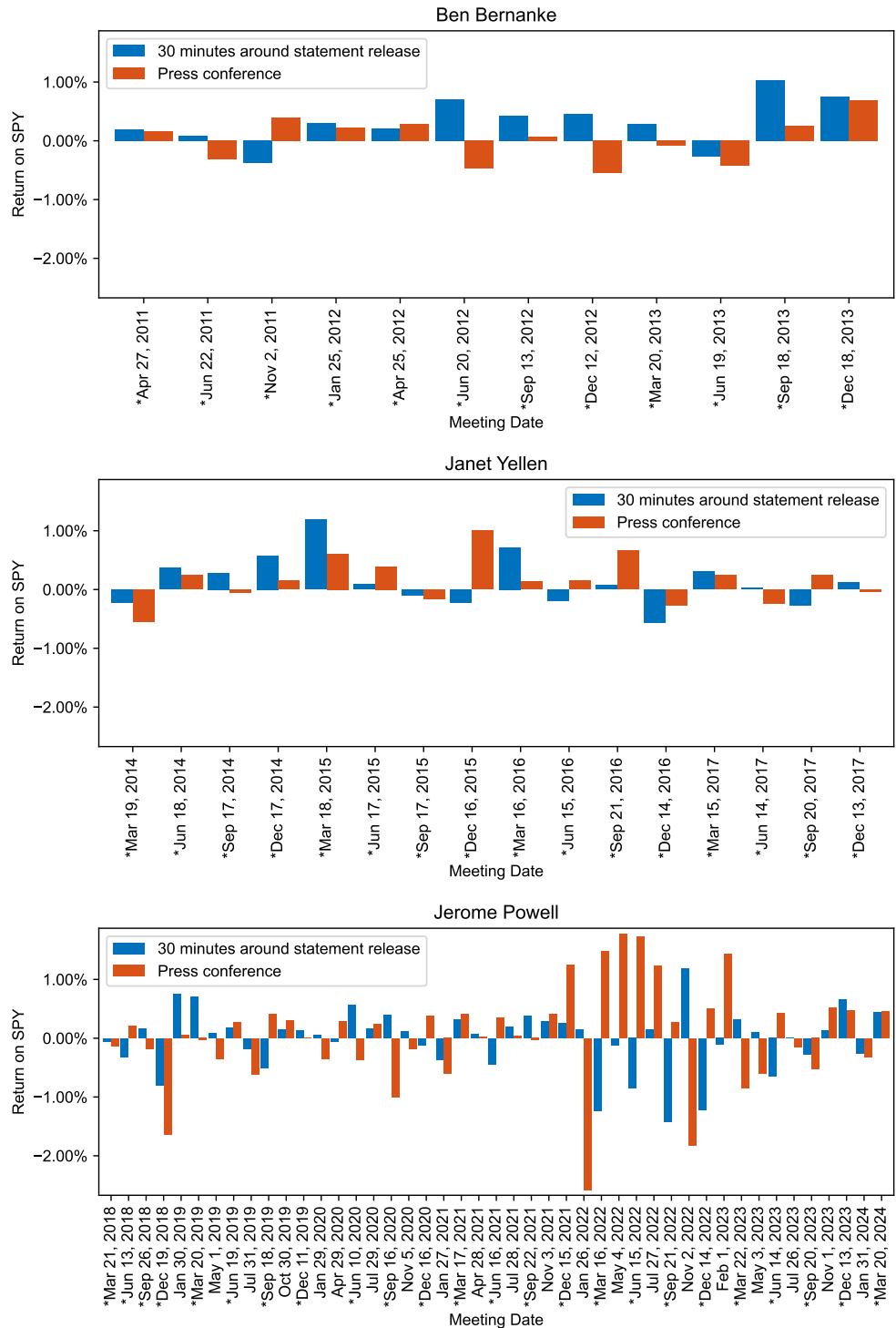
Note: The figure shows average squared returns of the Dow Jones Industrial index (proxied by the DIA ETF) during press conferences given by Chair Powell, Chair Yellen, and Chair Bernanke. We measure returns from the minute before the press conference starts to the minute it ends. We exclude emergency and unscheduled conferences: the March 4, 2014 unscheduled conference call under Chair Yellen and the emergency Covid-19 related press conferences given by Chair Powell on March 3, 2020 and March 15, 2020.

Figure A2: Market volatility for placebo conference, FOMC statement release, and press conference under three chairs, measured using returns in five-minute increments.



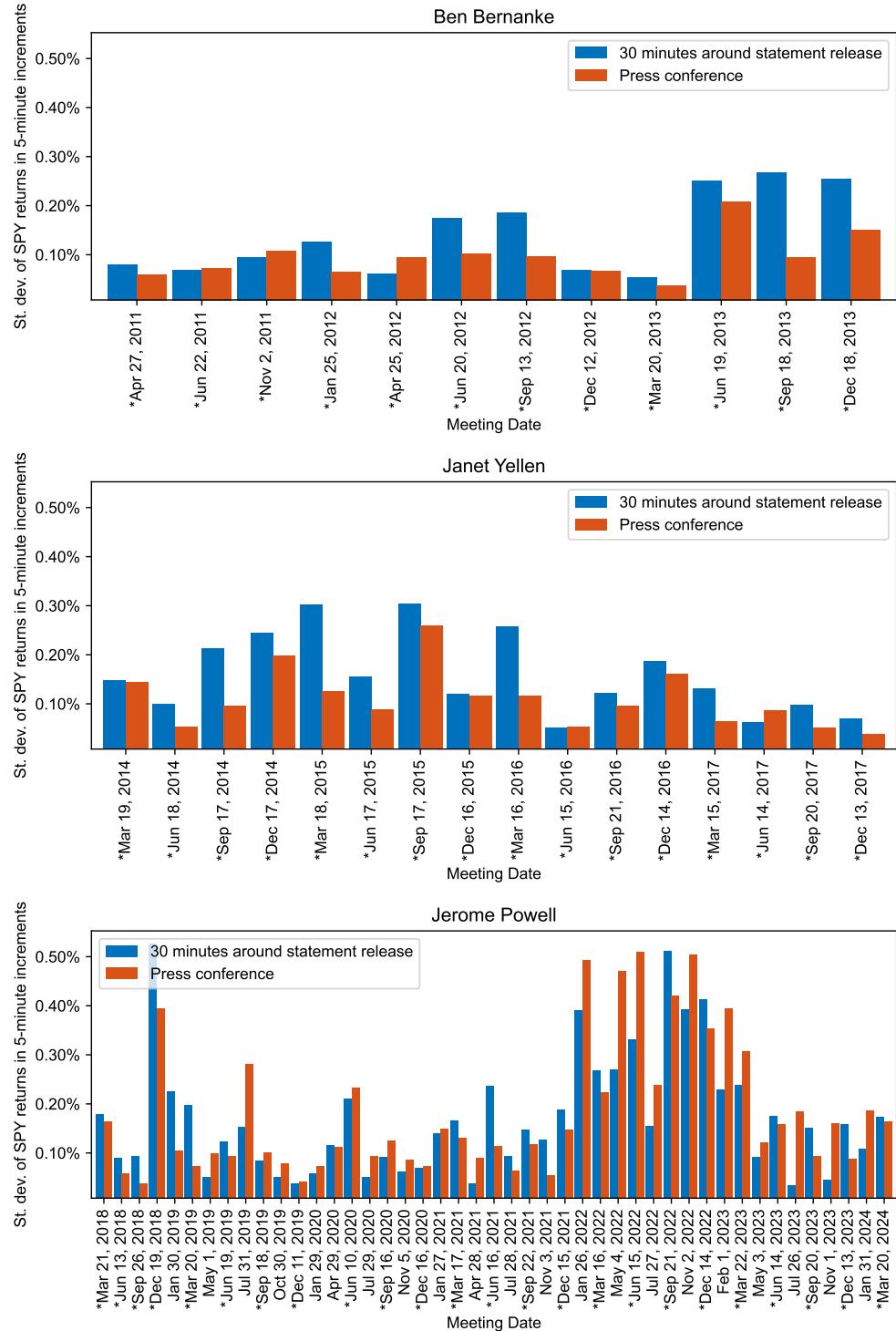
Note: The figure shows average squared returns of the S&P 500 index (proxied by the SPY ETF) over 5-minute increments during press conferences given by Chair Powell, Chair Yellen, and Chair Bernanke. We measure returns from the minute before the press conference starts to the minute it ends. We exclude emergency and unscheduled conferences: the March 4, 2014 unscheduled conference call under Chair Yellen and the emergency Covid-19 related press conferences given by Chair Powell on March 3, 2020 and March 15, 2020.

Figure A3: S&P 500 returns for FOMC statement release and press conference for each conference.



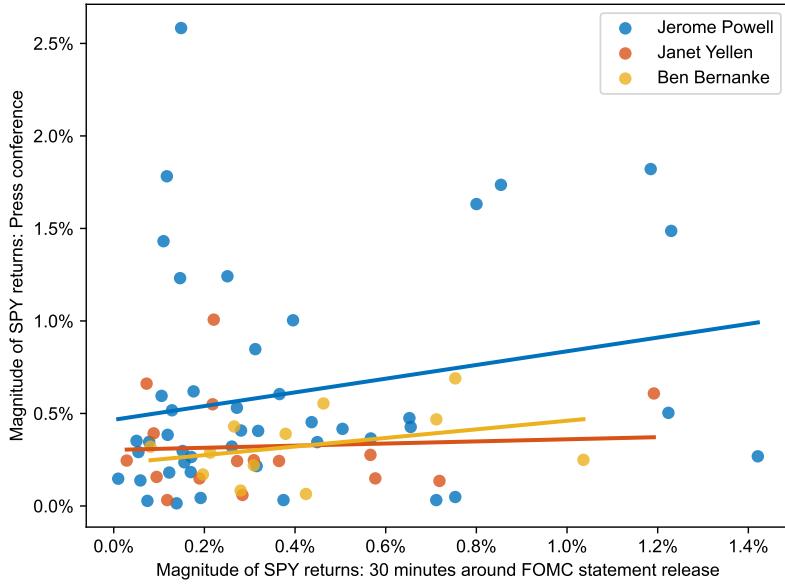
Note: Asterisks denote meetings at which an FOMC projections dot plot was released.

Figure A4: Standard deviation of S&P 500 returns measured in five-minute increments for each conference.

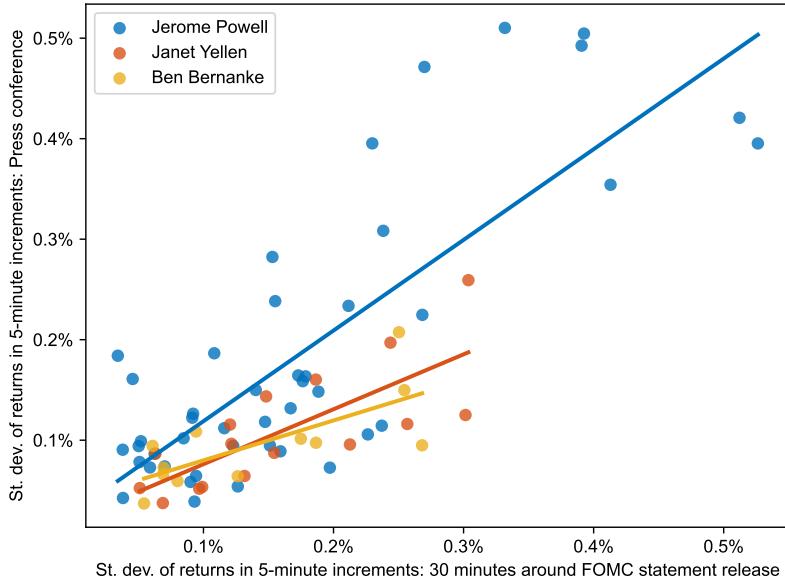


Note: Asterisks denote meetings at which an FOMC projections dot plot was released.

Figure A5: Correlation of magnitude and volatility of market reaction to FOMC statement release and to press conference.



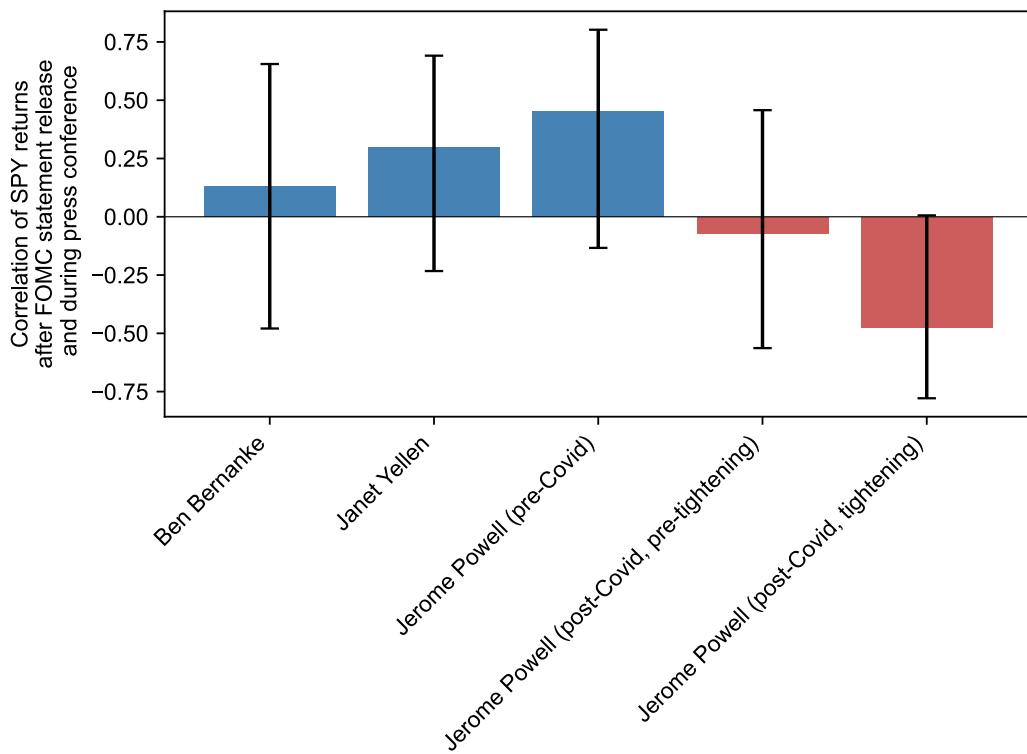
(a) Absolute magnitude of market reaction.



(b) Volatility of market reaction.

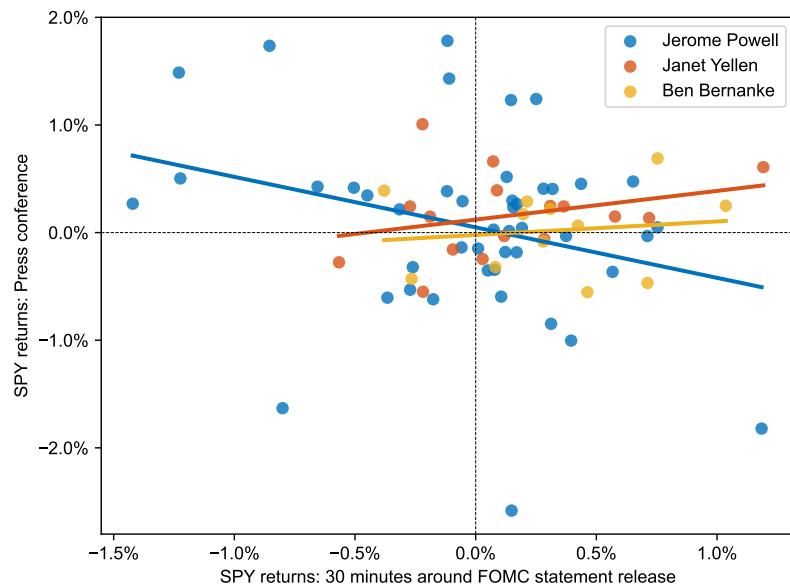
Note: The top panel plots the magnitude (absolute value) of the market return to the FOMC statement release against the magnitude of the market return during the press conference. The bottom panel plots the dispersion of returns measured in five-minute increments in the 15 minutes after the FOMC statement release against the dispersion of returns during the press conference. These figures use S&P 500 returns; results from returns on the Dow Jones Industrial index are similar.

Figure A6: Correlation of market reaction to FOMC statement release with market reaction to press conference.



Note: Correlation of S&P 500 returns after statement release and during press conference for each chair, with Chair Powell's conferences split before/after March 1, 2020 and March 1, 2022. A positive correlation means that the S&P 500 tended to move in the same direction after the statement release and during the press conference given by the chair. Error bars indicate 95 percent confidence interval.

Figure A7: Scatterplot of market returns during press conference vs. returns around statement release.



Note: The figure plots the S&P 500 return from beginning to end of the press conference against the S&P 500 return in a 30 minute window around the FOMC statement release, with best-fit lines by Federal Reserve Chair. Results from returns on the Dow Jones Industrial index are similar.

References

- Loughran, T. and B. McDonald (2024). Measuring firm complexity. *Journal of Financial and Quantitative Analysis* 59(6), 2487–2514.
- Parle, C. (2022). The financial market impact of ECB monetary policy press conferences—A text based approach. *European Journal of Political Economy* 74, 102230.
- Swanson, E. T. (2021). Measuring the effects of Federal Reserve forward guidance and asset purchases on financial markets. *Journal of Monetary Economics* 118, 32–53.