

# Online Appendix

## An Alternative Explanation for the “Fed Information Effect”\*

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### Abstract

This online appendix contains additional regression results, robustness checks, and a case study that reinforce results presented in the main text. Appendix A discusses Blue Chip forecast revisions, bootstrapping, and robustness analysis for Table 1 in the main text. Appendix B performs extensive robustness analysis for the omitted variables regressions in Tables 2, 3, and 4 in the main text, including for different samples. Appendix C shows that Blue Chip survey forecast errors for the federal funds rate are predictable with exactly the same variables that predict high-frequency monetary policy surprises, suggesting that the predictability is not due to risk premia. Appendix D presents details of Macroeconomic Advisers’ daily “GDP Tracking” forecast of real GDP, which reinforce the results from our more general survey of Blue Chip forecasters in Section 4 of the paper. Appendix E performs robustness analysis for Table 8 in the main text, comparing the forecast accuracy of Blue Chip to Fed “Greenbook” forecasts.

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## A Additional Details and Results for Section 2

Tables 1A–1B contain additional results for the Blue Chip forecast revision regressions in Section 2 of the paper.

As discussed in the main text, we computed Blue Chip forecast revisions using the same timing convention as [Nakamura and Steinsson \(2018\)](#), to maximize comparability with their results (although the exact choice of timing convention makes relatively little difference in our results). Computing the change in these quarterly-horizon forecasts in January (i.e., from the beginning of January to the beginning of February) or February is straightforward: the 0-quarter-ahead forecast would be for Q1, the 1-quarter-ahead forecast for Q2, etc., and the forecast revision is just the change in those forecasts over the course of the month. To compute the change in the Blue Chip forecast from March to April, the Nakamura–Steinsson timing convention defines the change in the 1-quarter-ahead forecast to be the 1-quarter-ahead forecast in April minus the 2-quarter-ahead forecast in March, which is the revision in the forecast for Q3. The Blue Chip forecast changes for other months and horizons are computed analogously.

We computed standard errors in these Tables and in the main text using the same bootstrap procedure as in [Swanson \(2021\)](#). Because the monetary policy factors (target, path, and the NS monetary policy surprise) are generated from a first-stage estimation procedure, there is some additional uncertainty regarding those variables that would not be present if they were directly observed; traditional OLS or heteroskedasticity-consistent standard errors do not take this extra sampling uncertainty into account and thus are not correct in general (e.g., [Pagan, 1984](#)). Details of this procedure are provided in [Swanson \(2021\)](#); to summarize, we sample the residuals of the factor model for the monetary policy factors along with the regression residuals with replacement. The bootstrapped standard errors for each coefficient are computed from the empirical distribution of the coefficient across 10,000 bootstrap replications. These standard errors are typically larger than asymptotic standard errors, but the differences are typically not great—see Table 1A.

Table 1A replicates Table 1 in the main text but reports asymptotic heteroskedasticity-consistent standard errors instead of bootstrap standard errors. Table 1B replicates Table 1 using only post-1994 data, when the Federal Reserve began to explicitly communicate to financial markets any changes in the federal funds rate. Results in Tables 1A and 1B are generally very similar to those in Table 1.

Table 1A: Fed Information Effect Replication and Sample Extension, robust standard errors

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
(A) Campbell et al. replication sample: 1/1990–6/2007 ( $N = 129$ )						
target	−0.113 (0.097)		0.097 (0.118)		0.146 (0.096)	
path	−0.226 (0.113)		0.273 (0.136)		0.102 (0.176)	
$R^2$	0.04		0.02		0.02	
(B) Nakamura-Steinsson replication sample: 1/1995–3/2014, excluding unscheduled FOMC announcements and 7/2008–6/2009 ( $N = 120$ )						
NS surprise		−0.165 (0.267)		0.920 (0.323)		0.062 (0.253)
$R^2$		0.00		0.06		0.00
(C) Full sample: 1/1990–6/2019 ( $N = 217$ )						
target	−0.161 (0.137)		0.162 (0.184)		0.163 (0.096)	
path	−0.237 (0.115)		0.139 (0.126)		0.084 (0.120)	
NS surprise		−0.391 (0.196)		0.325 (0.257)		0.288 (0.143)
$R^2$	0.03	0.02	0.01	0.01	0.02	0.02
(D) Full sample: 1/1990–6/2019, excluding unscheduled FOMC announcements ( $N = 206$ )						
target	0.070 (0.268)		0.126 (0.301)		0.123 (0.156)	
path	−0.315 (0.125)		0.369 (0.144)		0.133 (0.128)	
NS surprise		−0.298 (0.313)		0.542 (0.356)		0.267 (0.198)
$R^2$	0.02	0.01	0.02	0.02	0.01	0.01

Same as Table 1, except that asymptotic heteroskedasticity-consistent (Huber-White) standard errors are reported rather than bootstrapped standard errors. See notes to Table 1 and text for details.

Table 1B: Fed Information Effect Replication and Sample Extension, post-1994 sample

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
(A) Campbell et al. post-1994 replication sample: 1/1994–6/2007 ( $N = 94$ )						
target	0.070 (0.118)		0.229 (0.155)		0.045 (0.127)	
path	-0.261 (0.133)		0.427 (0.176)		0.158 (0.147)	
$R^2$	0.05		0.10		0.02	
(B) Nakamura-Steinsson replication sample: 1/1995–3/2014, excluding unscheduled FOMC announcements and 7/2008–6/2009 ( $N = 120$ )						
NS surprise		-0.165 (0.292)		0.920 (0.376)		0.062 (0.249)
$R^2$		0.00		0.06		0.00
(C) Full post-1994 sample: 1/1994–6/2019 ( $N = 182$ )						
target	-0.070 (0.134)		0.294 (0.181)		0.114 (0.106)	
path	-0.262 (0.159)		0.235 (0.217)		0.116 (0.125)	
NS surprise		-0.323 (0.239)		0.619 (0.335)		0.261 (0.190)
$R^2$	0.02	0.01	0.03	0.03	0.01	0.01
(D) Full post-1994 sample: 1/1994–6/2019, excl. unscheduled FOMC announcements ( $N = 179$ )						
target	0.140 (0.195)		0.142 (0.246)		0.112 (0.153)	
path	-0.350 (0.159)		0.401 (0.200)		0.146 (0.124)	
NS surprise		-0.282 (0.262)		0.595 (0.329)		0.271 (0.203)
$R^2$	0.03	0.01	0.01	0.02	0.01	0.01

Same as Table 1, except that samples begin in February 1994 rather than January 1990. Bootstrapped standard errors in parentheses. See notes to Table 1 and text for details.

## B Additional Details and Results for Section 3

Tables 2A–2E, 3A–3E, and 4A–4F perform robustness analysis of Tables 2, 3, and 4 in the main text. All of these tables separate the financial market variables into an “old news” component (the change in the financial variable from 13 weeks prior to the FOMC announcement to the beginning of the month of the FOMC announcement) and a true “news” component (the change in the financial variables from the beginning of the month of the FOMC announcement to the day before the FOMC announcement). Coefficients on the constant, time trend, and lagged Blue Chip forecast revisions are also reported. The time trend is divided by 1000 to make the scale of its coefficients comparable to the other coefficients in the tables. Note that the variables  $\text{BCrev}_{t-1}^X$  denote the change over the course of month  $t - 1$  in the 1-quarter-ahead Blue Chip forecast of variable  $X$ ; this is not exactly the same as the lagged left-hand-side variables, which are the revisions over the course of month  $t$  in the average of the 1-, 2-, and 3-quarter-ahead forecasts. The lagged revision in the 1-quarter-ahead forecast was a better predictor of the subsequent Blue Chip forecast revisions than the lagged revision in the average 1-to-3-quarter-ahead forecast.

### B.1 Table 2 Robustness

Table 2A replicates Table 2 from the main text except with the additional coefficients reported and the financial market variables separated into components as described above. Table 2B replicates Table 2A for the full sample excluding all unscheduled FOMC announcements. Table 2C replicates the analysis considering only post-1994 FOMC announcements. Table 2D replicates the analysis using the same sample as in [Campbell et al. \(2012\)](#), and Table 2E replicates it using the same sample as [Nakamura and Steinsson \(2018\)](#).

Results in Tables 2A–2E are robust across samples. The time trend is significant for Blue Chip CPI inflation forecast revisions, but not for the other variables. The lagged Blue Chip unemployment forecast revision is important for predicting the current Blue Chip unemployment forecast revision and the lagged Blue Chip GDP forecast revision is important for predicting the current Blue Chip GDP and unemployment forecast revisions both. The signs on these lagged forecast revisions are consistent with the information rigidities found by [Coibion and Gorodnichenko \(2012, 2015\)](#). Coefficients on the macroeconomic news variables are very similar to Table 2 in the main text. For the financial news variables, the stock market is highly statistically significant for the unemployment and GDP forecast revisions, and both the “old news” component and the news since the beginning of the month are significant, although the significance of the latter is greater. The commodity price index is highly statistically significant for CPI forecast revisions, and both the “old news” component and the news since the beginning of the month are again, significant; again, the significance of the latter component is greater. The yield curve slope is sometimes statistically significant for the unemployment rate, but only the “old news” component.

Table 2A: Economic News Predicts Blue Chip Forecast Revisions, full sample

Blue Chip forecast revision:	Unemployment rate	Real GDP growth	CPI inflation
	(1)	(2)	(3)
constant	-0.022 (0.027)	0.064 (0.054)	-0.087 (0.033)
time trend	-0.039 (0.059)	-0.127 (0.115)	0.179 (0.071)
BCrev $^u_{t-1}$	0.128 (0.058)	0.136 (0.112)	0.058 (0.070)
BCrev $^{GDP}_{t-1}$	-0.033 (0.024)	0.180 (0.047)	0.066 (0.029)
BCrev $^{CPI}_{t-1}$	0.015 (0.023)	-0.000 (0.044)	0.036 (0.027)
Macroeconomic news			
unemployment surprise	0.324 (0.037)	-0.015 (0.071)	0.016 (0.044)
payrolls surprise	-0.130 (0.055)	-0.043 (0.106)	-0.147 (0.066)
GDP surprise	-0.022 (0.013)	0.062 (0.025)	0.014 (0.016)
BBK index	-0.044 (0.008)	0.023 (0.015)	0.009 (0.009)
change in core CPI inflation from 6 mos. previous	-0.028 (0.009)	-0.009 (0.018)	0.031 (0.011)
expectation of core CPI release	0.165 (0.095)	-0.371 (0.186)	0.194 (0.115)
core CPI surprise	0.094 (0.069)	-0.166 (0.133)	0.203 (0.083)
Financial news			
$\Delta \log$ S&P500 from 13wks to beg of mo.	-0.162 (0.086)	0.432 (0.165)	0.071 (0.103)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	-0.533 (0.168)	1.846 (0.326)	-0.356 (0.202)

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Table 2A (cont.): Economic News Predicts Blue Chip Forecast Revisions, full sample

Blue Chip forecast revision:	Unemployment rate (1)	Real GDP growth (2)	CPI inflation (3)
Financial news (cont.)			
$\Delta$ yield curve slope from 13wks to beg of mo.	-0.021 (0.012)	-0.008 (0.022)	0.010 (0.014)
$\Delta$ yield curve slope from beg. of mo. to FOMC	-0.041 (0.030)	-0.042 (0.059)	0.026 (0.037)
$\Delta$ log pcommodity from 13wks to beg of mo.	-0.010 (0.113)	0.238 (0.218)	0.229 (0.136)
$\Delta$ log pcommodity from beg. of mo. to FOMC	-0.453 (0.221)	-0.326 (0.427)	1.224 (0.267)
$R^2$	0.66	0.46	0.35

Same as Table 2 except that all coefficients are reported and financial market responses are split into change from 13 weeks prior to FOMC announcement to beginning of month of FOMC announcement, and change from beginning of month of FOMC announcement to day before FOMC announcement. Sample is the full sample: all months containing an FOMC announcement from 1/1990 to 6/2019, excluding FOMC announcements that occurred in the first 3 business days of the month (2 business days after 12/2000),  $N = 217$  observations. Bootstrapped standard errors in parentheses. See notes to Table 2 and text for details.

Table 2B: Economic News Predicts Blue Chip Forecast Revisions, full sample excluding unscheduled FOMC announcements

Blue Chip forecast revision:	Unemployment rate (1)	Real GDP growth (2)	CPI inflation (3)
constant	-0.018 (0.029)	0.050 (0.046)	-0.101 (0.032)
time trend	-0.048 (0.063)	-0.098 (0.100)	0.205 (0.070)
BCrev $^u_{t-1}$	0.121 (0.062)	0.163 (0.098)	0.050 (0.068)
BCrev $^{GDP}_{t-1}$	-0.039 (0.026)	0.161 (0.041)	0.041 (0.028)
BCrev $^{CPI}_{t-1}$	0.022 (0.024)	0.008 (0.038)	0.027 (0.026)
Macroeconomic news			
unemployment surprise	0.309 (0.038)	-0.024 (0.061)	0.012 (0.043)
payrolls surprise	-0.131 (0.060)	-0.037 (0.095)	-0.104 (0.066)
GDP surprise	-0.020 (0.013)	0.059 (0.021)	0.018 (0.015)
BBK index	-0.044 (0.008)	0.021 (0.013)	0.005 (0.009)
change in core CPI inflation from 6 mos. previous	-0.027 (0.010)	0.000 (0.016)	0.029 (0.011)
expectation of core CPI release	0.149 (0.102)	-0.333 (0.161)	0.237 (0.112)
core CPI surprise	0.067 (0.066)	-0.076 (0.105)	0.170 (0.073)
Financial news			
$\Delta \log$ S&P500 from 13wks to beg of mo.	-0.187 (0.098)	0.474 (0.154)	0.046 (0.107)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	-0.500 (0.176)	1.981 (0.278)	-0.423 (0.192)

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Table 2B (cont.): Economic News Predicts Blue Chip Forecast Revisions, full sample  
excluding unscheduled FOMC announcements

Blue Chip forecast revision:	Unemployment rate	Real GDP growth	CPI inflation
	(1)	(2)	(3)
Financial news (cont.)			
$\Delta$ yield curve slope from 13wks to beg of mo.	-0.023 (0.012)	-0.003 (0.020)	0.019 (0.014)
$\Delta$ yield curve slope from beg. of mo. to FOMC	-0.010 (0.031)	-0.088 (0.049)	-0.016 (0.034)
$\Delta$ log pcommodity from 13wks to beg of mo.	0.005 (0.121)	0.180 (0.192)	0.292 (0.134)
$\Delta$ log pcommodity from beg. of mo. to FOMC	-0.450 (0.231)	-0.048 (0.363)	1.499 (0.254)
$R^2$	0.66	0.52	0.40

Same as Table 2A except that sample is the full sample (all months containing an FOMC announcement from 1/1990 to 6/2019) excluding unscheduled FOMC announcements and excluding FOMC announcements that occurred in the first 3 business days of the month (2 business days after 12/2000),  $N = 206$  observations. Bootstrapped standard errors in parentheses. See notes to Table 2A and text for details.

Table 2C: Economic News Predicts Blue Chip Forecast Revisions, post-1994 sample

Blue Chip forecast revision:	Unemployment rate (1)	Real GDP growth (2)	CPI inflation (3)
constant	-0.031 (0.030)	0.078 (0.048)	-0.082 (0.033)
time trend	-0.061 (0.071)	-0.098 (0.112)	0.165 (0.076)
BCrev $^u_{t-1}$	0.113 (0.066)	0.188 (0.106)	0.052 (0.072)
BCrev $^{GDP}_{t-1}$	-0.020 (0.030)	0.149 (0.048)	0.107 (0.032)
BCrev $^{CPI}_{t-1}$	0.019 (0.025)	0.014 (0.039)	0.042 (0.027)
Macroeconomic news			
unemployment surprise	0.340 (0.042)	0.010 (0.067)	0.001 (0.046)
payrolls surprise	-0.126 (0.069)	0.031 (0.110)	-0.089 (0.075)
GDP surprise	-0.018 (0.016)	0.057 (0.025)	0.020 (0.017)
BBK index	-0.050 (0.009)	0.034 (0.015)	-0.002 (0.010)
change in core CPI inflation from 6 mos. previous	-0.028 (0.011)	0.010 (0.018)	0.022 (0.012)
expectation of core CPI release	0.225 (0.126)	-0.476 (0.200)	0.218 (0.137)
core CPI surprise	0.114 (0.090)	-0.065 (0.142)	0.049 (0.097)
Financial news			
$\Delta \log$ S&P500 from 13wks to beg of mo.	-0.128 (0.101)	0.273 (0.162)	-0.000 (0.111)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	-0.474 (0.184)	1.720 (0.293)	-0.197 (0.199)

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Table 2C (cont.): Economic News Predicts Blue Chip Forecast Revisions, post-1994 sample

Blue Chip forecast revision:	Unemployment rate (1)	Real GDP growth (2)	CPI inflation (3)
Financial news (cont.)			
$\Delta$ yield curve slope from 13wks to beg of mo.	-0.023 (0.013)	-0.005 (0.021)	0.002 (0.014)
$\Delta$ yield curve slope from beg. of mo. to FOMC	-0.053 (0.034)	-0.061 (0.053)	0.014 (0.037)
$\Delta$ log pcommodity from 13wks to beg of mo.	-0.091 (0.135)	0.472 (0.213)	0.313 (0.146)
$\Delta$ log pcommodity from beg. of mo. to FOMC	-0.434 (0.248)	-0.255 (0.397)	0.881 (0.270)
$R^2$	0.66	0.52	0.35

Same as Table 2A except that sample is all months containing an FOMC announcement from 1/1994 to 6/2019 excluding FOMC announcements that occurred in the first 3 business days of the month (2 business days after 12/2000),  $N=182$  observations. Bootstrapped standard errors in parentheses. See notes to Table 2A and text for details.

Table 2D: Economic News Predicts Blue Chip Forecast Revisions, Campbell et al. sample

Blue Chip forecast revision:	Unemployment rate (1)	Real GDP growth (2)	CPI inflation (3)
constant	-0.042 (0.035)	0.031 (0.084)	-0.196 (0.051)
time trend	-0.063 (0.112)	0.134 (0.263)	0.466 (0.162)
BCrev $^u_{t-1}$	0.174 (0.071)	0.118 (0.166)	0.091 (0.102)
BCrev $^{GDP}_{t-1}$	-0.063 (0.026)	0.173 (0.062)	0.005 (0.038)
BCrev $^{CPI}_{t-1}$	0.010 (0.039)	-0.077 (0.092)	-0.022 (0.056)
Macroeconomic news			
unemployment surprise	0.230 (0.041)	0.073 (0.096)	-0.000 (0.059)
payrolls surprise	-0.193 (0.053)	0.017 (0.124)	-0.204 (0.076)
GDP surprise	-0.029 (0.011)	0.068 (0.025)	0.012 (0.016)
BBK index	-0.018 (0.010)	-0.001 (0.024)	0.039 (0.015)
change in core CPI inflation from 6 mos. previous	-0.020 (0.010)	-0.036 (0.023)	0.036 (0.014)
expectation of core CPI release	0.220 (0.114)	-0.303 (0.269)	0.526 (0.165)
core CPI surprise	0.104 (0.066)	-0.147 (0.155)	0.296 (0.096)
Financial news			
$\Delta \log$ S&P500 from 13wks to beg of mo.	-0.044 (0.090)	0.455 (0.212)	0.178 (0.130)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	-0.457 (0.201)	1.232 (0.469)	-1.073 (0.290)

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Table 2D (cont.): Economic News Predicts Blue Chip Forecast Revisions, Campbell et al. sample

Blue Chip forecast revision:	Unemployment rate (1)	Real GDP growth (2)	CPI inflation (3)
Financial news (cont.)			
$\Delta$ yield curve slope from 13wks to beg of mo.	-0.006 (0.012)	-0.011 (0.027)	0.036 (0.017)
$\Delta$ yield curve slope from beg. of mo. to FOMC	-0.035 (0.030)	-0.081 (0.071)	0.018 (0.043)
$\Delta$ log pcommodity from 13wks to beg of mo.	0.079 (0.116)	0.164 (0.274)	0.149 (0.168)
$\Delta$ log pcommodity from beg. of mo. to FOMC	-0.456 (0.224)	-0.340 (0.525)	1.509 (0.322)
$R^2$	0.63	0.40	0.43

Same as Table 2A except that sample is the same as [Campbell et al. \(2012\)](#): all months containing an FOMC announcement from 1/1990 to 6/2007, excluding FOMC announcements that occurred in the first 3 business days of the month ( $N=129$  observations). Bootstrapped standard errors in parentheses. See notes to Table 2A and text for details.

Table 2E: Economic News Predicts Blue Chip Forecast Revisions, Nakamura-Steinsson sample

Blue Chip forecast revision:	Unemployment rate (1)	Real GDP growth (2)	CPI inflation (3)
constant	-0.012 (0.039)	0.071 (0.058)	-0.108 (0.045)
time trend	-0.193 (0.113)	-0.245 (0.167)	0.281 (0.127)
$BCrev_{t-1}^u$	0.193 (0.076)	0.068 (0.114)	-0.026 (0.087)
$BCrev_{t-1}^{GDP}$	-0.068 (0.036)	0.069 (0.053)	0.055 (0.041)
$BCrev_{t-1}^{CPI}$	0.081 (0.041)	-0.052 (0.062)	0.018 (0.047)
Macroeconomic news			
unemployment surprise	0.294 (0.051)	0.049 (0.075)	0.059 (0.057)
payrolls surprise	-0.240 (0.082)	-0.013 (0.123)	-0.037 (0.094)
GDP surprise	-0.027 (0.016)	0.043 (0.025)	0.026 (0.019)
BBK index	-0.027 (0.015)	0.042 (0.023)	-0.023 (0.017)
change in core CPI inflation from 6 mos. previous	-0.025 (0.012)	0.011 (0.018)	0.013 (0.014)
expectation of core CPI release	0.173 (0.165)	-0.427 (0.246)	0.291 (0.188)
core CPI surprise	0.138 (0.106)	-0.122 (0.158)	0.113 (0.120)
Financial news			
$\Delta \log$ S&P500 from 13wks to beg of mo.	-0.158 (0.138)	0.565 (0.205)	0.139 (0.157)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	-0.237 (0.224)	1.065 (0.334)	-0.579 (0.257)

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Table 2E (cont.): Economic News Predicts Blue Chip Forecast Revisions, Nakamura-Steinsson sample

Blue Chip forecast revision:	Unemployment rate	Real GDP growth	CPI inflation
	(1)	(2)	(3)
Financial news (cont.)			
$\Delta$ yield curve slope from 13wks to beg of mo.	-0.017 (0.015)	0.029 (0.023)	0.009 (0.017)
$\Delta$ yield curve slope from beg. of mo. to FOMC	-0.013 (0.038)	-0.084 (0.056)	-0.039 (0.043)
$\Delta$ log pcommodity from 13wks to beg of mo.	-0.151 (0.153)	0.431 (0.228)	0.317 (0.173)
$\Delta$ log pcommodity from beg. of mo. to FOMC	-0.530 (0.290)	0.101 (0.431)	1.150 (0.331)
$R^2$	0.62	0.49	0.33

Same as Table 2A except that sample is the same as [Nakamura and Steinsson \(2018\)](#): all months containing an FOMC announcement from 1/1995 to 3/2014, excluding unscheduled FOMC announcements, excluding all FOMC announcements from 7/2008–6/2009, and excluding FOMC announcement that occurred in the first 7 calendar days of the month ( $N=120$  observations). Bootstrapped standard errors in parentheses. See notes to Table 2A and text for details.

## B.2 Table 3 Robustness

In Tables 3A–3E, note that if a month contains two FOMC announcements (which can be the case when unscheduled FOMC announcements are included in the sample), then the total monetary policy surprise for that month is the sum of all the high-frequency monetary policy surprises that occur within the month. (This is the same convention used by [Campbell et al., 2012](#).)

Table 3A replicates Table 3 from the main text but reports additional details and decomposes the financial market variables as above. Table 3B repeats the analysis with unscheduled FOMC announcements excluded. Table 3C repeats the analysis considering only FOMC announcements from 1994 onward. Table 3D repeats the analysis for the [Campbell et al. \(2012\)](#) sample, and Table 3E repeats it for the [Nakamura and Steinsson \(2018\)](#) sample.

The results in Tables 3A–3E are robust across samples. The strongest predictors of the monetary policy surprises are consistently the stock market and commodity prices, with high levels of statistical significance. It is typically the “old news” component of those asset price changes that predict the subsequent monetary policy surprise, perhaps because it takes time for the FOMC to decide that the asset price change is persistent or substantial enough to act upon. The yield curve slope is also a significant predictor in almost all samples, with the negative sign indicating that a fall in the 3-month Treasury yield predicts a subsequent FOMC surprise easing; in contrast to the stock market and commodity prices, here it is the change in the yield curve in the few days since the beginning of the month that has predictive power. News about nonfarm payrolls is an important predictor in samples that include pre-1994 unscheduled FOMC announcements, reflecting the fact that, historically, the FOMC often changed the federal funds rate shortly after a bad employment report.

Table 3A: Economic News Predicts High-Frequency Monetary Policy Surprises, full sample

Monetary policy surprise:	target	path	NS surprise
	(1)	(2)	(3)
constant	-0.340 (0.450)	-0.085 (0.303)	-0.207 (0.239)
Macroeconomic news			
unemployment surprise	0.010 (0.044)	-0.010 (0.029)	0.001 (0.023)
payrolls surprise	0.133 (0.067)	0.011 (0.045)	0.071 (0.036)
GDP surprise	0.003 (0.016)	0.014 (0.011)	0.007 (0.009)
BBK index	0.003 (0.008)	0.001 (0.006)	0.002 (0.004)
change in core CPI inflation from 6 mos. previous	0.001 (0.011)	0.007 (0.007)	0.003 (0.006)
expectation of core CPI release	-0.112 (0.105)	0.092 (0.070)	-0.018 (0.055)
core CPI surprise	0.051 (0.080)	0.080 (0.054)	0.059 (0.043)
Financial news			
$\Delta \log$ S&P500 from 13wks to beg of mo.	0.170 (0.097)	0.185 (0.065)	0.163 (0.053)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	0.062 (0.076)	0.011 (0.051)	0.036 (0.040)
$\Delta$ yield curve slope from 13wks to beg of mo.	-0.013 (0.014)	-0.011 (0.009)	-0.011 (0.007)
$\Delta$ yield curve slope from beg. of mo. to FOMC	-0.093 (0.036)	-0.021 (0.025)	-0.056 (0.020)
$\Delta \log$ pcommodity from 13wks to beg of mo.	0.114 (0.122)	0.236 (0.082)	0.156 (0.066)
$\Delta \log$ pcommodity from beg. of mo. to FOMC	-0.029 (0.257)	-0.128 (0.172)	-0.068 (0.136)
$R^2$	0.16	0.19	0.26

Same as Table 3 except that financial market responses are split into change from 13 weeks prior to FOMC announcement to beginning of month of FOMC announcement, and change from beginning of month of FOMC announcement to day before FOMC announcement. Sample is the full sample: all months containing an FOMC announcement from 1/1990 to 6/2019, excluding FOMC announcements that occurred in the first 3 business days of the month (2 business days after 12/2000),  $N=217$  observations. Bootstrapped standard errors in parentheses. See notes to Table 3 and text for details.

Table 3B: Economic News Predicts High-Frequency Monetary Policy Surprises, full sample excluding unscheduled FOMC announcements

Monetary policy surprise:	target	path	NS surprise
	(1)	(2)	(3)
constant	-0.142 (0.266)	-0.121 (0.286)	-0.128 (0.180)
Macroeconomic news			
unemployment surprise	-0.005 (0.026)	-0.003 (0.028)	-0.004 (0.018)
payrolls surprise	0.044 (0.041)	-0.006 (0.044)	0.020 (0.028)
GDP surprise	-0.009 (0.009)	0.013 (0.010)	0.001 (0.006)
BBK index	0.003 (0.005)	0.006 (0.006)	0.004 (0.003)
change in core CPI inflation from 6 mos. previous	-0.007 (0.007)	0.005 (0.007)	-0.001 (0.006)
expectation of core CPI release	0.016 (0.061)	0.106 (0.066)	0.056 (0.042)
core CPI surprise	0.027 (0.044)	0.048 (0.047)	0.035 (0.030)
Financial news			
$\Delta \log$ S&P500 from 13wks to beg of mo.	0.039 (0.060)	0.227 (0.065)	0.122 (0.042)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	0.024 (0.045)	0.016 (0.048)	0.020 (0.030)
$\Delta$ yield curve slope from 13wks to beg of mo.	-0.000 (0.008)	-0.012 (0.009)	-0.006 (0.006)
$\Delta$ yield curve slope from beg. of mo. to FOMC	-0.025 (0.021)	-0.016 (0.022)	-0.020 (0.014)
$\Delta \log$ pcommodity from 13wks to beg of mo.	0.101 (0.072)	0.230 (0.079)	0.156 (0.050)
$\Delta \log$ pcommodity from beg. of mo. to FOMC	-0.049 (0.146)	-0.195 (0.156)	-0.113 (0.099)
$R^2$	0.06	0.23	0.22

Same as Table 3A except that sample is the full sample (all months containing an FOMC announcement from 1/1990 to 6/2019) excluding unscheduled FOMC announcements and excluding FOMC announcements that occurred in the first 3 business days of the month (2 business days after 12/2000),  $N=206$  observations. Bootstrapped standard errors in parentheses. See notes to Table 3A and text for details.

Table 3C: Economic News Predicts High-Frequency Monetary Policy Surprises, post-1994 sample

Monetary policy surprise:	target	path	NS surprise
	(1)	(2)	(3)
constant	-0.707 (0.472)	-0.271 (0.338)	-0.436 (0.235)
Macroeconomic news			
unemployment surprise	0.004 (0.047)	-0.008 (0.033)	-0.001 (0.023)
payrolls surprise	0.103 (0.075)	0.018 (0.054)	0.055 (0.037)
GDP surprise	-0.002 (0.018)	0.013 (0.012)	0.004 (0.009)
BBK index	-0.002 (0.009)	-0.000 (0.006)	-0.001 (0.004)
change in core CPI inflation from 6 mos. previous	-0.009 (0.012)	0.006 (0.008)	-0.002 (0.006)
expectation of core CPI release	0.109 (0.138)	0.207 (0.100)	0.133 (0.069)
core CPI surprise	0.036 (0.098)	0.125 (0.070)	0.066 (0.049)
Financial news			
$\Delta \log$ S&P500 from 13wks to beg of mo.	0.237 (0.102)	0.211 (0.073)	0.194 (0.053)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	0.117 (0.079)	0.039 (0.056)	0.070 (0.039)
$\Delta$ yield curve slope from 13wks to beg of mo.	-0.011 (0.014)	-0.005 (0.010)	-0.007 (0.007)
$\Delta$ yield curve slope from beg. of mo. to FOMC	-0.087 (0.036)	-0.027 (0.026)	-0.051 (0.018)
$\Delta \log$ pcommodity from 13wks to beg of mo.	0.091 (0.126)	0.235 (0.090)	0.135 (0.063)
$\Delta \log$ pcommodity from beg. of mo. to FOMC	-0.018 (0.263)	-0.108 (0.188)	-0.051 (0.128)
$R^2$	0.16	0.22	0.30

Same as Table 3A except that sample is all months containing an FOMC announcement from 1/1994 to 6/2019 excluding FOMC announcements that occurred in the first 3 business days of the month (2 business days after 12/2000),  $N = 206$  observations. Bootstrapped standard errors in parentheses. See notes to Table 3A and text for details.

Table 3D: Economic News Predicts High-Frequency Monetary Policy Surprises, Campbell et al. sample

Monetary policy surprise:	target	path	NS surprise
	(1)	(2)	(3)
constant	0.028 (0.620)	0.165 (0.441)	0.082 (0.324)
Macroeconomic news			
unemployment surprise	0.024 (0.059)	-0.049 (0.042)	-0.009 (0.031)
payrolls surprise	0.151 (0.080)	-0.020 (0.057)	0.065 (0.042)
GDP surprise	0.000 (0.017)	0.015 (0.012)	0.006 (0.009)
BBK index	0.009 (0.013)	0.008 (0.009)	0.007 (0.007)
change in core CPI inflation from 6 mos. previous	0.007 (0.014)	0.017 (0.010)	0.011 (0.007)
expectation of core CPI release	-0.143 (0.129)	0.120 (0.092)	-0.020 (0.067)
core CPI surprise	0.092 (0.091)	0.049 (0.065)	0.064 (0.048)
Financial news			
$\Delta \log$ S&P500 from 13wks to beg of mo.	0.191 (0.124)	0.289 (0.090)	0.211 (0.066)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	0.001 (0.106)	-0.035 (0.076)	-0.014 (0.056)
$\Delta$ yield curve slope from 13wks to beg of mo.	-0.012 (0.016)	-0.011 (0.012)	-0.010 (0.009)
$\Delta$ yield curve slope from beg. of mo. to FOMC	-0.157 (0.044)	-0.013 (0.032)	-0.081 (0.024)
$\Delta \log$ pcommodity from 13wks to beg of mo.	0.153 (0.162)	0.302 (0.116)	0.198 (0.086)
$\Delta \log$ pcommodity from beg. of mo. to FOMC	-0.157 (0.321)	-0.030 (0.228)	-0.089 (0.168)
$R^2$	0.27	0.26	0.39

Same as Table 3A except that sample is the same as [Campbell et al. \(2012\)](#): all months containing an FOMC announcement from 1/1990 to 6/2007, excluding FOMC announcements that occurred in the first 3 business days of the month ( $N=129$  observations). Bootstrapped standard errors in parentheses. See notes to Table 3A and text for details.

Table 3E: Economic News Predicts High-Frequency Monetary Policy Surprises,  
Nakamura-Steinsson sample

Monetary policy surprise:	target	path	NS surprise
	(1)	(2)	(3)
constant	0.171 (0.307)	-0.227 (0.394)	0.011 (0.257)
Macroeconomic news			
unemployment surprise	-0.015 (0.030)	0.034 (0.039)	0.005 (0.025)
payrolls surprise	0.080 (0.050)	-0.006 (0.064)	0.049 (0.042)
GDP surprise	-0.014 (0.010)	0.014 (0.013)	-0.003 (0.009)
BBK index	-0.008 (0.008)	0.019 (0.011)	0.003 (0.007)
change in core CPI inflation from 6 mos. previous	0.001 (0.007)	0.006 (0.009)	0.003 (0.006)
expectation of core CPI release	-0.065 (0.097)	0.144 (0.126)	0.021 (0.082)
core CPI surprise	0.007 (0.063)	0.074 (0.081)	0.037 (0.053)
Financial news			
$\Delta \log$ S&P500 from 13wks to beg of mo.	-0.030 (0.078)	0.245 (0.100)	0.087 (0.065)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	-0.026 (0.051)	0.033 (0.066)	-0.003 (0.043)
$\Delta$ yield curve slope from 13wks to beg of mo.	-0.004 (0.009)	0.001 (0.011)	-0.002 (0.007)
$\Delta$ yield curve slope from beg. of mo. to FOMC	-0.040 (0.022)	-0.041 (0.029)	-0.044 (0.019)
$\Delta \log$ pcommodity from 13wks to beg of mo.	0.111 (0.084)	0.209 (0.109)	0.163 (0.072)
$\Delta \log$ pcommodity from beg. of mo. to FOMC	-0.110 (0.170)	-0.152 (0.218)	-0.137 (0.143)
$R^2$	0.12	0.26	0.19

Same as Table 3A except that sample is the same as [Nakamura and Steinsson \(2018\)](#): all months containing an FOMC announcement from 1/1995 to 3/2014, excluding unscheduled FOMC announcements, excluding all FOMC announcements from 7/2008-6/2009, and excluding FOMC announcement that occurred in the first 7 calendar days of the month ( $N = 120$  observations). Bootstrapped standard errors in parentheses. See notes to Table 3A and text for details.

### B.3 Table 4 Robustness

Tables 4A–4F perform robustness checks on Table 4 from the main text. Table 4A replicates Table 4 but with the additional details and financial market variable decomposition as above. Table 4B repeats the analysis, but with the BKK index excluded, since some macroeconomic data releases that underlie the BBK index are released after the FOMC announcement rather than before. Table 4C repeats Table 4A but with all unscheduled FOMC announcements excluded. Table 4D repeats the analysis using only FOMC announcements from 1994 onward. Table 4E repeats the analysis using the [Campbell et al. \(2012\)](#) samples, and Table 4F repeats the analysis using the [Nakamura and Steinsson \(2018\)](#) sample.

Results across Tables 4A–4F are robust. The coefficients on the monetary policy surprises change drastically from Table 1 and are in almost all cases reversed in sign back to what standard macroeconomic models would imply.

Table 4A: Economic News Drives Out the Fed Information Effect, full sample

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
constant	-0.017 (0.029)	-0.017 (0.028)	0.050 (0.055)	0.053 (0.055)	-0.094 (0.034)	-0.088 (0.034)
time trend	-0.057 (0.060)	-0.057 (0.060)	-0.092 (0.115)	-0.092 (0.115)	0.179 (0.071)	0.179 (0.072)
BCrev $^u_{t-1}$	0.116 (0.059)	0.116 (0.059)	0.160 (0.112)	0.162 (0.112)	0.052 (0.070)	0.059 (0.071)
BCrev $^{GDP}_{t-1}$	-0.040 (0.025)	-0.040 (0.025)	0.194 (0.048)	0.194 (0.048)	0.067 (0.030)	0.066 (0.030)
BCrev $^{CPI}_{t-1}$	0.020 (0.023)	0.020 (0.023)	-0.012 (0.044)	-0.011 (0.044)	0.032 (0.027)	0.036 (0.028)
Macroeconomic news						
unemployment surprise	0.324 (0.037)	0.324 (0.037)	-0.017 (0.071)	-0.016 (0.071)	0.013 (0.044)	0.016 (0.044)
payrolls surprise	-0.144 (0.056)	-0.144 (0.056)	-0.018 (0.108)	-0.015 (0.108)	-0.155 (0.067)	-0.147 (0.068)
GDP surprise	-0.023 (0.013)	-0.023 (0.013)	0.066 (0.025)	0.065 (0.025)	0.016 (0.016)	0.014 (0.016)
BBK index	-0.045 (0.008)	-0.045 (0.008)	0.024 (0.015)	0.024 (0.015)	0.009 (0.009)	0.009 (0.010)
change in core CPI inflation from 6 mos. previous	-0.029 (0.010)	-0.029 (0.009)	-0.006 (0.018)	-0.006 (0.018)	0.033 (0.011)	0.031 (0.011)
expectation of core CPI release	0.153 (0.101)	0.153 (0.100)	-0.335 (0.195)	-0.347 (0.193)	0.223 (0.120)	0.194 (0.121)
core CPI surprise	0.074 (0.070)	0.074 (0.070)	-0.120 (0.134)	-0.125 (0.133)	0.215 (0.083)	0.203 (0.084)
Financial news						
$\Delta \log$ S&P500 fr. 13wks to beg of mo.	-0.199 (0.091)	-0.199 (0.090)	0.515 (0.173)	0.507 (0.173)	0.089 (0.108)	0.071 (0.109)
$\Delta \log$ S&P500 fr. beg. of mo. to FOMC	-0.525 (0.168)	-0.525 (0.168)	1.821 (0.323)	1.830 (0.323)	-0.376 (0.200)	-0.356 (0.203)

results continued on next page

Table 4A (cont.): Economic News Drives Out the Fed Information Effect, full sample

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
Financial news (cont.)						
$\Delta$ yield curve slope fr. 13wks to beg of mo.	-0.018 (0.012)	-0.018 (0.012)	-0.013 (0.022)	-0.013 (0.022)	0.009 (0.014)	0.010 (0.014)
$\Delta$ yield curve slope fr. beg. of mo. to FOMC	-0.028 (0.031)	-0.028 (0.031)	-0.066 (0.060)	-0.068 (0.060)	0.030 (0.037)	0.026 (0.038)
$\Delta$ log pcommodity fr. 13wks to beg of mo.	-0.065 (0.123)	-0.065 (0.122)	0.367 (0.235)	0.348 (0.232)	0.276 (0.146)	0.231 (0.146)
$\Delta$ log pcommodity fr. beg. of mo. to FOMC	-0.451 (0.222)	-0.451 (0.222)	-0.334 (0.423)	-0.329 (0.424)	1.213 (0.265)	1.224 (0.269)
Monetary policy surprise						
target	0.121 (0.074)		-0.213 (0.142)		0.075 (0.088)	
path	0.103 (0.096)		-0.287 (0.188)		-0.194 (0.114)	
NS surprise		0.242 (0.136)		-0.489 (0.259)		-0.005 (0.162)
$R^2$	0.67	0.67	0.48	0.47	0.37	0.35

Same as Table 4 except that financial market responses are split into change from 13 weeks prior to FOMC announcement to beginning of month of FOMC announcement, and change from beginning of month of FOMC announcement to day before FOMC announcement. Sample is the full sample: all months containing an FOMC announcement from 1/1990 to 6/2019, excluding FOMC announcements that occurred in the first 3 business days of the month (2 business days after 12/2000),  $N = 217$  observations. Bootstrapped standard errors in parentheses. See notes to Table 4 and text for details.

Table 4B: Economic News Drives Out the Fed Information Effect, full sample excluding  
BBK index

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
constant	-0.008 (0.030)	-0.008 (0.030)	0.045 (0.055)	0.048 (0.055)	-0.096 (0.034)	-0.089 (0.034)
time trend	-0.047 (0.065)	-0.047 (0.065)	-0.097 (0.116)	-0.097 (0.116)	0.177 (0.072)	0.177 (0.073)
BCrev $^u_{t-1}$	0.208 (0.060)	0.208 (0.060)	0.110 (0.108)	0.113 (0.108)	0.033 (0.067)	0.039 (0.068)
BCrev $^{GDP}_{t-1}$	-0.085 (0.025)	-0.085 (0.025)	0.218 (0.045)	0.218 (0.045)	0.076 (0.028)	0.076 (0.029)
BCrev $^{CPI}_{t-1}$	0.007 (0.025)	0.007 (0.024)	-0.005 (0.044)	-0.003 (0.044)	0.035 (0.027)	0.039 (0.028)
Macroeconomic news						
unemployment surprise	0.363 (0.039)	0.363 (0.039)	-0.038 (0.070)	-0.037 (0.070)	0.005 (0.043)	0.007 (0.044)
payrolls surprise	-0.186 (0.060)	-0.186 (0.060)	0.004 (0.108)	0.008 (0.108)	-0.146 (0.067)	-0.138 (0.067)
GDP surprise	-0.021 (0.014)	-0.021 (0.014)	0.064 (0.025)	0.063 (0.025)	0.016 (0.016)	0.014 (0.016)
change in core CPI inflation from 6 mos. previous	-0.028 (0.010)	-0.028 (0.010)	-0.006 (0.018)	-0.007 (0.018)	0.033 (0.011)	0.031 (0.011)
expectation of core CPI release	0.130 (0.108)	0.130 (0.107)	-0.323 (0.195)	-0.335 (0.193)	0.227 (0.120)	0.199 (0.121)
core CPI surprise	0.054 (0.075)	0.054 (0.075)	-0.109 (0.134)	-0.114 (0.134)	0.219 (0.083)	0.207 (0.084)
Financial news						
$\Delta \log$ S&P500 fr. 13wks to beg of mo.	-0.221 (0.097)	-0.221 (0.097)	0.527 (0.174)	0.519 (0.173)	0.094 (0.108)	0.076 (0.109)
$\Delta \log$ S&P500 fr. beg. of mo. to FOMC	-0.671 (0.178)	-0.671 (0.178)	1.899 (0.320)	1.908 (0.319)	-0.346 (0.198)	-0.326 (0.200)

results continued on next page

Table 4B (cont.): Economic News Drives Out the Fed Information Effect, full sample  
excluding BBK index

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
Financial news (cont.)						
$\Delta$ yield curve slope fr. 13wks to beg of mo.	0.005 (0.012)	0.005 (0.012)	-0.026 (0.021)	-0.026 (0.021)	0.005 (0.013)	0.005 (0.013)
$\Delta$ yield curve slope fr. beg. of mo. to FOMC	0.010 (0.033)	0.010 (0.033)	-0.086 (0.059)	-0.088 (0.059)	0.022 (0.036)	0.018 (0.037)
$\Delta$ log pcommodity fr. 13wks to beg of mo.	-0.147 (0.131)	-0.147 (0.130)	0.411 (0.235)	0.391 (0.232)	0.294 (0.146)	0.248 (0.146)
$\Delta$ log pcommodity fr. beg. of mo. to FOMC	-0.574 (0.237)	-0.574 (0.237)	-0.269 (0.424)	-0.264 (0.424)	1.238 (0.264)	1.250 (0.268)
Monetary policy surprise						
target	0.113 (0.079)		-0.208 (0.142)		0.077 (0.088)	
path	0.095 (0.103)		-0.283 (0.189)		-0.192 (0.114)	
NS surprise		0.225 (0.145)		-0.480 (0.259)		-0.001 (0.162)
$R^2$	0.61	0.61	0.47	0.47	0.36	0.35

Same as Table 4A except that the BBK index is excluded from the vector of news variables. all months containing an FOMC announcement from 1/1990 to 6/2019, excluding FOMC announcements that occurred in the first 3 business days of the month (2 business days after 12/2000),  $N=217$  observations. Bootstrapped standard errors in parentheses. See notes to Table 4A and text for details.

Table 4C: Economic News Drives Out the Fed Information Effect, full sample excluding  
 unscheduled FOMC announcements

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
constant	-0.010 (0.029)	-0.008 (0.029)	0.042 (0.046)	0.043 (0.046)	-0.106 (0.032)	-0.104 (0.032)
time trend	-0.060 (0.062)	-0.060 (0.062)	-0.090 (0.099)	-0.089 (0.099)	0.207 (0.069)	0.208 (0.070)
BCrev $^u_{t-1}$	0.107 (0.060)	0.107 (0.060)	0.173 (0.097)	0.173 (0.098)	0.053 (0.068)	0.053 (0.068)
BCrev $^{GDP}_{t-1}$	-0.048 (0.025)	-0.050 (0.025)	0.170 (0.041)	0.168 (0.041)	0.046 (0.029)	0.044 (0.029)
BCrev $^{CPI}_{t-1}$	0.030 (0.023)	0.031 (0.024)	0.000 (0.038)	-0.001 (0.038)	0.024 (0.027)	0.025 (0.027)
Macroeconomic news						
unemployment surprise	0.312 (0.037)	0.312 (0.037)	-0.025 (0.061)	-0.026 (0.061)	0.012 (0.042)	0.011 (0.043)
payrolls surprise	-0.141 (0.058)	-0.137 (0.058)	-0.036 (0.095)	-0.033 (0.095)	-0.108 (0.066)	-0.103 (0.066)
GDP surprise	-0.018 (0.013)	-0.020 (0.013)	0.060 (0.022)	0.059 (0.021)	0.020 (0.015)	0.018 (0.015)
BBK index	-0.046 (0.008)	-0.046 (0.008)	0.022 (0.013)	0.022 (0.013)	0.005 (0.009)	0.005 (0.009)
change in core CPI inflation from 6 mos. previous	-0.026 (0.010)	-0.027 (0.010)	0.001 (0.016)	0.000 (0.016)	0.030 (0.011)	0.029 (0.011)
expectation of core CPI release	0.118 (0.100)	0.110 (0.100)	-0.299 (0.162)	-0.305 (0.162)	0.254 (0.113)	0.245 (0.113)
core CPI surprise	0.048 (0.065)	0.046 (0.065)	-0.060 (0.106)	-0.061 (0.106)	0.176 (0.073)	0.174 (0.073)
Financial news						
$\Delta \log$ S&P500 fr. 13wks to beg of mo.	-0.230 (0.097)	-0.243 (0.097)	0.523 (0.157)	0.514 (0.156)	0.073 (0.110)	0.057 (0.109)
$\Delta \log$ S&P500 fr. beg. of mo. to FOMC	-0.489 (0.171)	-0.490 (0.171)	1.975 (0.276)	1.974 (0.276)	-0.424 (0.191)	-0.425 (0.192)

results continued on next page

Table 4C (cont.): Economic News Drives Out the Fed Information Effect, full sample  
excluding unscheduled FOMC announcements

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
Financial news (cont.)						
$\Delta$ yield curve slope fr. 13wks to beg of mo.	-0.021 (0.012)	-0.020 (0.012)	-0.006 (0.020)	-0.005 (0.020)	0.018 (0.014)	0.019 (0.014)
$\Delta$ yield curve slope fr. beg. of mo. to FOMC	-0.002 (0.030)	-0.003 (0.030)	-0.093 (0.049)	-0.093 (0.049)	-0.017 (0.034)	-0.018 (0.034)
$\Delta$ log pcommodity fr. 13wks to beg of mo.	-0.088 (0.123)	-0.101 (0.123)	0.266 (0.200)	0.256 (0.199)	0.331 (0.140)	0.314 (0.139)
$\Delta$ log pcommodity fr. beg. of mo. to FOMC	-0.422 (0.224)	-0.412 (0.225)	-0.083 (0.363)	-0.075 (0.362)	1.478 (0.254)	1.491 (0.254)
Monetary policy surprise						
target	0.337 (0.111)		-0.128 (0.176)		0.041 (0.122)	
path	0.153 (0.142)		-0.221 (0.165)		-0.145 (0.114)	
NS surprise		0.509 (0.167)		-0.360 (0.263)		-0.105 (0.183)
$R^2$	0.68	0.68	0.52	0.52	0.40	0.40

Same as Table 4A except that sample is the full sample (all months containing an FOMC announcement from 1/1990 to 6/2019) excluding unscheduled FOMC announcements and excluding FOMC announcements that occurred in the first 3 business days of the month (2 business days after 12/2000),  $N=206$  observations. Bootstrapped standard errors in parentheses. See notes to Table 4A and text for details.

Table 4D: Economic News Drives Out the Fed Information Effect, post-1994 sample

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
constant	-0.019 (0.031)	-0.019 (0.031)	0.065 (0.049)	0.071 (0.049)	-0.092 (0.033)	-0.087 (0.033)
time trend	-0.079 (0.071)	-0.079 (0.071)	-0.088 (0.112)	-0.087 (0.113)	0.171 (0.076)	0.172 (0.077)
BCrev $^u_{t-1}$	0.097 (0.066)	0.097 (0.066)	0.192 (0.106)	0.198 (0.106)	0.054 (0.072)	0.058 (0.073)
BCrev $^{GDP}_{t-1}$	-0.031 (0.031)	-0.031 (0.030)	0.156 (0.048)	0.156 (0.048)	0.112 (0.033)	0.111 (0.033)
BCrev $^{CPI}_{t-1}$	0.029 (0.025)	0.029 (0.025)	0.004 (0.040)	0.008 (0.040)	0.035 (0.027)	0.039 (0.027)
Macroeconomic news						
unemployment surprise	0.340 (0.042)	0.340 (0.042)	0.009 (0.067)	0.010 (0.067)	-0.000 (0.046)	0.001 (0.046)
payrolls surprise	-0.144 (0.069)	-0.144 (0.069)	0.036 (0.110)	0.041 (0.110)	-0.086 (0.075)	-0.082 (0.075)
GDP surprise	-0.019 (0.015)	-0.019 (0.015)	0.059 (0.025)	0.057 (0.025)	0.022 (0.017)	0.020 (0.017)
BBK index	-0.049 (0.009)	-0.049 (0.009)	0.034 (0.015)	0.033 (0.015)	-0.002 (0.010)	-0.002 (0.010)
change in core CPI inflation fr. 6 mos. previous	-0.028 (0.011)	-0.028 (0.011)	0.012 (0.018)	0.010 (0.018)	0.024 (0.012)	0.022 (0.012)
expectation of core CPI release	0.178 (0.128)	0.178 (0.127)	-0.418 (0.203)	-0.448 (0.203)	0.261 (0.139)	0.237 (0.139)
core CPI surprise	0.092 (0.090)	0.092 (0.090)	-0.032 (0.143)	-0.052 (0.143)	0.074 (0.097)	0.058 (0.098)
Financial news						
$\Delta \log$ S&P500 fr. 13wks to beg of mo.	-0.192 (0.105)	-0.192 (0.105)	0.326 (0.168)	0.312 (0.168)	0.036 (0.115)	0.025 (0.116)
$\Delta \log$ S&P500 fr. beg. of mo. to FOMC	-0.469 (0.183)	-0.469 (0.183)	1.700 (0.292)	1.717 (0.293)	-0.212 (0.198)	-0.199 (0.200)

results continued on next page

Table 4D (cont.): Economic News Drives Out the Fed Information Effect, post-1994 sample

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
Financial news (cont.)						
$\Delta$ yield curve slope fr. 13wks to beg of mo.	-0.021 (0.013)	-0.021 (0.013)	-0.006 (0.020)	-0.007 (0.021)	0.001 (0.014)	0.001 (0.014)
$\Delta$ yield curve slope fr. beg. of mo. to FOMC	-0.037 (0.035)	-0.037 (0.034)	-0.068 (0.055)	-0.071 (0.055)	0.010 (0.037)	0.007 (0.038)
$\Delta$ log pcommodity fr. 13wks to beg of mo.	-0.169 (0.140)	-0.169 (0.138)	0.565 (0.222)	0.519 (0.220)	0.380 (0.152)	0.343 (0.151)
$\Delta$ log pcommodity fr. beg. of mo. to FOMC	-0.425 (0.246)	-0.425 (0.246)	-0.266 (0.394)	-0.261 (0.396)	0.874 (0.267)	0.878 (0.270)
Monetary policy surprise						
target	0.165 (0.085)		-0.021 (0.135)		0.000 (0.092)	
path	0.141 (0.105)		-0.257 (0.167)		-0.194 (0.114)	
NS surprise		0.356 (0.166)		-0.216 (0.260)		-0.138 (0.177)
$R^2$	0.67	0.67	0.53	0.52	0.37	0.36

Same as Table 4A except that sample is all months containing an FOMC announcement from 1/1994 to 6/2019, excluding FOMC announcements that occurred in the first 3 business days of the month ( $N=182$  observations). Bootstrapped standard errors in parentheses. See notes to Table 4A and text for details.

Table 4E: Economic News Drives Out the Fed Information Effect, Campbell et al. sample

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
constant	-0.042 (0.037)	-0.041 (0.037)	0.025 (0.087)	0.025 (0.086)	-0.200 (0.053)	-0.196 (0.053)
time trend	-0.069 (0.116)	-0.066 (0.115)	0.158 (0.268)	0.157 (0.268)	0.458 (0.164)	0.468 (0.166)
BCrev $^u_{t-1}$	0.168 (0.074)	0.171 (0.073)	0.145 (0.171)	0.144 (0.171)	0.082 (0.105)	0.093 (0.105)
BCrev $^{GDP}_{t-1}$	-0.063 (0.029)	-0.064 (0.028)	0.183 (0.066)	0.183 (0.066)	0.011 (0.041)	0.006 (0.041)
BCrev $^{CPI}_{t-1}$	0.010 (0.043)	0.011 (0.042)	-0.084 (0.099)	-0.085 (0.099)	-0.027 (0.061)	-0.022 (0.061)
Macroeconomic news						
unemployment surprise	0.228 (0.042)	0.230 (0.042)	0.074 (0.096)	0.074 (0.096)	-0.007 (0.060)	-0.000 (0.060)
payrolls surprise	-0.198 (0.056)	-0.196 (0.055)	0.039 (0.130)	0.038 (0.129)	-0.211 (0.080)	-0.202 (0.080)
GDP surprise	-0.029 (0.011)	-0.030 (0.011)	0.071 (0.026)	0.071 (0.026)	0.014 (0.016)	0.012 (0.016)
BBK index	-0.019 (0.011)	-0.019 (0.011)	0.002 (0.025)	0.002 (0.025)	0.038 (0.015)	0.039 (0.016)
change in core CPI inflation from 6 mos. previous	-0.020 (0.010)	-0.020 (0.010)	-0.032 (0.024)	-0.032 (0.024)	0.039 (0.015)	0.037 (0.015)
expectation of core CPI release	0.222 (0.122)	0.218 (0.121)	-0.291 (0.285)	-0.290 (0.284)	0.542 (0.174)	0.527 (0.175)
core CPI surprise	0.101 (0.068)	0.100 (0.068)	-0.119 (0.158)	-0.119 (0.158)	0.300 (0.098)	0.298 (0.099)
Financial news						
$\Delta \log$ S&P500 fr. 13wks to beg of mo.	-0.048 (0.096)	-0.052 (0.096)	0.510 (0.224)	0.512 (0.223)	0.198 (0.137)	0.182 (0.138)
$\Delta \log$ S&P500 fr. beg. of mo. to FOMC	-0.443 (0.207)	-0.447 (0.206)	1.157 (0.479)	1.158 (0.479)	-1.065 (0.296)	-1.078 (0.298)

results continued on next page

Table 4E (cont.): Economic News Drives Out the Fed Information Effect, Campbell et al. sample

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
Financial news (cont.)						
$\Delta$ yield curve slope fr. 13wks to beg of mo.	-0.005 (0.012)	-0.005 (0.012)	-0.014 (0.028)	-0.015 (0.028)	0.035 (0.017)	0.036 (0.017)
$\Delta$ yield curve slope fr. beg. of mo. to FOMC	-0.030 (0.033)	-0.031 (0.032)	-0.109 (0.076)	-0.109 (0.076)	0.023 (0.046)	0.016 (0.047)
$\Delta$ log pcommodity fr. 13wks to beg of mo.	0.079 (0.129)	-0.068 (0.126)	0.235 (0.300)	0.239 (0.294)	0.197 (0.184)	0.154 (0.182)
$\Delta$ log pcommodity fr. beg. of mo. to FOMC	-0.453 (0.226)	-0.453 (0.226)	-0.361 (0.524)	-0.361 (0.524)	1.506 (0.320)	1.507 (0.324)
Monetary policy surprise						
target	0.036 (0.081)		-0.173 (0.191)		0.043 (0.116)	
path	-0.012 (0.132)		-0.130 (0.628)		-0.143 (0.290)	
NS surprise		0.048 (0.153)		-0.346 (0.361)		-0.024 (0.220)
$R^2$	0.63	0.63	0.41	0.41	0.43	0.43

Same as Table 4A except that sample is the same as [Campbell et al. \(2012\)](#): all months containing an FOMC announcement from 1/1990 to 6/2007, excluding FOMC announcements that occurred in the first 3 business days of the month ( $N = 129$  observations). Bootstrapped standard errors in parentheses. See notes to Table 4A and text for details.

Table 4F: Economic News Drives Out the Fed Information Effect, Nakamura-Steinsson sample

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
constant	-0.010 (0.040)	-0.010 (0.039)	0.051 (0.058)	0.073 (0.058)	-0.115 (0.046)	-0.109 (0.045)
time trend	-0.198 (0.114)	-0.198 (0.112)	-0.206 (0.165)	-0.252 (0.167)	0.295 (0.129)	0.282 (0.127)
BCrev $^u_{t-1}$	0.182 (0.077)	0.182 (0.077)	0.044 (0.113)	0.051 (0.115)	-0.026 (0.088)	-0.024 (0.088)
BCrev $^{GDP}_{t-1}$	-0.070 (0.036)	-0.070 (0.036)	0.081 (0.053)	0.067 (0.053)	0.060 (0.041)	0.055 (0.041)
BCrev $^{CPI}_{t-1}$	0.086 (0.042)	0.086 (0.042)	-0.060 (0.061)	-0.046 (0.062)	0.013 (0.048)	0.017 (0.048)
Macroeconomic news						
unemployment surprise	0.292 (0.051)	0.292 (0.050)	0.067 (0.074)	0.046 (0.075)	0.065 (0.058)	0.059 (0.057)
payrolls surprise	-0.250 (0.084)	-0.250 (0.083)	-0.053 (0.122)	-0.028 (0.124)	-0.042 (0.095)	-0.035 (0.095)
GDP surprise	-0.027 (0.017)	-0.027 (0.016)	0.053 (0.025)	0.044 (0.025)	0.028 (0.019)	0.026 (0.019)
BBK index	-0.027 (0.016)	-0.027 (0.015)	0.050 (0.023)	0.041 (0.023)	-0.020 (0.018)	-0.022 (0.017)
change in core CPI inflation from 6 mos. previous	-0.027 (0.012)	-0.027 (0.012)	0.010 (0.018)	0.009 (0.018)	0.014 (0.014)	0.014 (0.014)
expectation of core CPI release	0.168 (0.168)	0.168 (0.165)	-0.351 (0.244)	-0.435 (0.246)	0.317 (0.191)	0.292 (0.188)
core CPI surprise	0.132 (0.106)	0.132 (0.106)	0.121 (0.155)	0.113 (0.157)	0.116 (0.121)	0.114 (0.121)
Financial news						
$\Delta \log$ S&P500 fr. 13wks to beg of mo.	-0.177 (0.141)	-0.178 (0.139)	0.593 (0.205)	0.537 (0.207)	0.158 (0.161)	0.142 (0.159)
$\Delta \log$ S&P500 fr. beg. of mo. to FOMC	-0.240 (0.228)	-0.239 (0.224)	0.937 (0.334)	1.062 (0.333)	-0.615 (0.262)	-0.579 (0.257)

results continued on next page

Table 4F (cont.): Economic News Drives Out the Fed Information Effect, Nakamura-Steinsson sample

Blue Chip forecast revision:	Unemployment rate		Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)
Financial news (cont.)						
$\Delta$ yield curve slope fr. 13wks to beg of mo.	-0.017 (0.015)	-0.017 (0.015)	0.030 (0.022)	0.030 (0.023)	0.010 (0.017)	0.009 (0.017)
$\Delta$ yield curve slope fr. beg. of mo. to FOMC	-0.004 (0.039)	-0.004 (0.039)	-0.067 (0.057)	-0.072 (0.058)	-0.039 (0.044)	-0.040 (0.044)
$\Delta$ log pcommodity fr. 13wks to beg of mo.	-0.191 (0.159)	-0.191 (0.158)	0.419 (0.233)	0.374 (0.236)	0.336 (0.181)	0.323 (0.180)
$\Delta$ log pcommodity fr. beg. of mo. to FOMC	-0.513 (0.290)	-0.513 (0.290)	0.130 (0.423)	0.124 (0.431)	1.149 (0.332)	1.148 (0.332)
Monetary policy surprise						
target	0.126 (0.174)		0.491 (0.254)		0.072 (0.198)	
path	0.082 (0.136)		-0.172 (0.199)		-0.098 (0.155)	
NS surprise		0.193 (0.209)		0.274 (0.312)		-0.030 (0.237)
$R^2$	0.63	0.63	0.52	0.41	0.33	0.33

Same as Table 4A except that sample is the same as [Nakamura and Steinsson \(2018\)](#): all months containing an FOMC announcement from 1/1995 to 3/2014, excluding unscheduled FOMC announcements, excluding all FOMC announcements from 7/2008–6/2009, and excluding FOMC announcement that occurred in the first 7 calendar days of the month ( $N = 120$  observations). Bootstrapped standard errors in parentheses. See notes to Table 4A and text for details.

## C Predictability of Federal Funds Rate Forecast Errors

Here we show that the same macro and financial news variables that predict monetary policy surprises (in Table 4 in the main text) also predict survey forecast errors for the federal funds rate. These results extend the evidence by Cieslak (2018), Schmeling, Schrimpf and Steffensen (2022) and Bauer and Swanson (2022), and they strongly suggest that the predictability in Table 4 is not due to risk premia, but rather to violations of the FIRE hypothesis. Under the FIRE hypothesis, forecast errors should not be predictable using publicly available information at the time the forecast is made. Our evidence here shows that deviations from FIRE are quantitatively important. A likely explanation is that market participants do not have full information about the Fed’s monetary policy reaction function, consistent with the Fed response to news channel.

We use data from the Blue Chip Financial Forecasts. Forecast errors are calculated as the difference between the average federal funds rate realized over the course of a certain calendar quarter and the consensus (mean) survey forecast for the funds rate for that quarter. The survey responses are collected from the panel of professional forecasters with a deadline on the 26th of the previous month (except for December, where the deadline is the 21st). We use all the same macroeconomic and financial variables that were used in Section 3, but we make sure that the timing of the variables is such that they are observable by the forecasters at the time of the survey deadline. We run separate predictive regressions for forecast errors at horizons  $h$  from one through four quarters. Our sample starts in January 1990 and ends in June 2019.<sup>1</sup>

The results for these predictive regressions are reported in Table C.1. Because of the overlapping quarterly forecasts in monthly data, the residuals are necessarily serially correlated. We use Newey-West standard errors with  $3(h + 1)$  lags to account for this serial correlation.

A substantial part of the variation in these forecast errors is predictable: the  $R^2$  for these predictive regressions is 21-22 percent, and several of the news variables are statistically significant. Among the most informative predictors is the return in the S&P 500 over the last six weeks, as well as the BBK index, two measures which summarize the current state of economic news. The signs of the statistically significant coefficients are economically intuitive and typically correspond to the signs in Table 4 of the paper. For example, if the stock market has performed well recently, due to good economic news, this predicts both positive BCFF forecast errors in Table C.1 as well as hawkish policy surprises in Table 4. Such positive coefficients are consistent with the notion that the FOMC reacts more strongly to cyclical economic news than anticipated by market participants and forecasters.

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<sup>1</sup>A concrete example illustrates the timing: For the January 2000 survey, the  $h = 1$  forecast is for the average fed funds rate over Q2-2000,  $h = 2$  is for Q3-2000, and so forth. The survey deadline is December 21, 1999, so the predictors include the non-farm payroll surprise from the employment report released on the first Friday of December, the 6-week stock market return up to December 21, and so forth.

Table C.1: Economic News Predicts BCFF Funds Rate Forecast Errors

Forecast horizon (quarters):	$h = 1$	$h = 2$	$h = 3$	$h = 4$
Macroeconomic news				
unemployment surprise	-0.149 (0.090)	-0.122 (0.229)	-0.177 (0.306)	-0.241 (0.393)
payrolls surprise	-0.277 (0.177)	0.046 (0.314)	0.219 (0.409)	0.282 (0.409)
GDP surprise	0.005 (0.030)	-0.005 (0.065)	0.015 (0.099)	0.004 (0.129)
BBK index	0.138 (0.074)	0.258 (0.137)	0.375 (0.200)	0.516 (0.261)
change in core CPI inflation from 6 mos. previous	0.017 (0.051)	0.004 (0.104)	0.003 (0.164)	0.022 (0.216)
expectation of core CPI release	-0.980 (0.494)	-1.958 (0.987)	-2.722 (1.299)	-3.723 (1.813)
core CPI surprise	-0.193 (0.213)	-0.473 (0.301)	-0.965 (0.349)	-1.245 (0.513)
Financial news				
$\Delta \log$ S&P500	0.994 (0.351)	1.349 (0.707)	1.474 (1.051)	1.712 (1.275)
$\Delta$ yield curve slope	-0.017 (0.068)	-0.123 (0.132)	-0.164 (0.201)	-0.148 (0.276)
$\Delta \log$ pcommodity	-0.050 (0.366)	-0.710 (0.869)	-0.782 (1.365)	-1.307 (1.708)
$R^2$	0.21	0.22	0.22	0.22

Estimated coefficients and  $R^2$  from regressions of BCFF funds rate forecast errors on measures of economic news. Sample period is from 1/1990 to 6/2019. Newey-West standard errors with  $3(h+1)$  lags are provided in parentheses. See notes to Table 4 and text for details.

## D Macroeconomic Advisers Daily GDP Tracking

Macroeconomic Advisers (MA) is a private company that has specialized in macroeconomic forecasting and analysis since 1982. In 2017 they were purchased by IHS Markit, and as of 2022 they became part of S&P Global Market Intelligence. Macroeconomic Advisers won Blue Chip’s Lawrence Klein award for forecast accuracy in two different years, and was named by *The Wall Street Journal* as the most accurate macroeconomic forecaster of 2017.

One of the many products they offer is a daily “GDP Tracking” estimate of current-quarter and next-quarter real GDP. Figure D.1 provides an example of their current-quarter GDP Tracking estimate for 2019Q1. Each month, the GDP Tracking report begins with a base Macroeconomic Advisers forecast for current-quarter real GDP growth. That base forecast is then updated after every major macroeconomic data release that month. For example, when the monthly retail sales report from the U.S. Census Bureau for January 2019 came in substantially weaker than expected on March 11, 2019, MA revised down its forecast for 2019Q1 Personal Consumption Expenditures growth from 1.3 percent to 0.9 percent, implying a downward revision to their 2019Q1 real GDP growth forecast from 1.2 percent to 1.0 percent. They make analogous revisions for each of the other statistical releases listed in the figure. A quick glance over the statistics in Figure D.1 reveals, however, that the FOMC announcement on March 20, 2019, is not listed. Apparently, the FOMC announcement on that date was not informative for MA’s current-quarter real GDP forecast at that time, and was not expected to be informative, since it was not even listed in the table.

Of course, one might worry that March 2019 was special, or that the FOMC announcement did affect MA’s forecast of real GDP in future quarters, just not in the current quarter. To resolve these questions, we obtained copies of MA’s current-quarter and next-quarter GDP Tracking forecasts for every month from January 2002 to December 2019. Over that 18-year period, MA *never* revised its current-quarter or next-quarter GDP forecast in response to an FOMC announcement. This suggests that the Fed information effect is very small, at least for this one multiple-award-winning Blue Chip forecaster.

Figure D.1: Macroeconomic Advisers 2019Q1 Real GDP Tracking Estimate, March 2019

Release Title		Release Date		GDP		Final Sales of Domestic Product										Net Exports		CIPI			
		Date	Month	Chng %	ch	Total	Total	Private	PCE	Struct	Equip	IPP	Res	Gov	Level	Chng	Exports	Imports	Level	Chng	
<b>MA Base Forecast</b>		4-Mar		60	1.3	1.6	1.5	1.2	1.3	-0.4	1.8	8.0	-7.5	2.6	-960	3	4.2	2.7	81	-16	
New Home Sales		5-Mar	Dec	61	1.3	1.6	1.5	1.3	1.3	-0.4	1.8	8.0	<b>-6.7</b>	2.6	-960	3	4.2	2.7	81	-16	
International Trade		6-Mar	Dec	55	1.3	1.5	1.5	1.3	1.3	-0.4	<b>1.8</b>	8.0	-6.7	2.6	<b>-970</b>	<b>-5</b>	<b>3.0</b>	<b>2.7</b>	81	-16	
Housing Starts		8-Mar	Jan	61	1.3	1.6	1.6	1.4	1.3	-0.4	1.8	8.0	<b>-3.5</b>	2.6	-970	-5	3.0	2.7	81	-16	
Employment Situation		8-Mar	Feb	58	1.2	1.5	1.5	1.4	<b>1.3</b>	-0.4	1.8	8.0	<b>-4.5</b>	<b>2.5</b>	-970	-5	3.0	2.7	81	-16	
Dynamic Factor Model Update		8-Mar	N/A	58	1.2	1.5	1.5	1.4	1.3	-0.4	1.8	8.0	-4.5	2.5	-970	-5	3.0	2.7	81	-16	
Retail Sales		11-Mar	Jan	48	1.0	1.3	1.3	1.1	<b>0.9</b>	-0.4	1.8	8.0	<b>-3.0</b>	2.5	-970	-5	3.0	2.7	81	-16	
Business Inventories		11-Mar	Dec	48	1.0	1.3	1.3	1.1	<b>0.9</b>	-0.4	1.8	8.0	-3.0	2.5	-970	-5	3.0	2.7	<b>81</b>	<b>-16</b>	
Consumer Price Index		12-Mar	Feb	48	1.0	1.3	1.3	1.1	<b>0.9</b>	-0.4	1.8	8.0	-3.0	2.5	-970	-5	3.0	2.7	81	-16	
Advance Durable Goods		13-Mar	Jan	48	1.0	1.3	1.3	1.1	0.9	-0.4	<b>1.8</b>	8.0	-3.0	2.5	<b>-971</b>	<b>-6</b>	<b>2.8</b>	<b>2.8</b>	<b>84</b>	<b>-14</b>	
Construction Spending		13-Mar	Jan	50	1.1	1.4	1.4	1.1	0.9	<b>0.2</b>	1.8	8.0	<b>-4.4</b>	<b>3.0</b>	-971	-6	2.8	2.8	84	-14	
New Home Sales		14-Mar	Jan	51	1.1	1.4	1.4	1.1	0.9	0.2	1.8	8.0	<b>-4.3</b>	3.0	-971	-6	2.8	2.8	84	-14	
Industrial Production		15-Mar	Feb	57	1.2	1.5	1.5	1.2	<b>1.0</b>	<b>0.3</b>	<b>1.9</b>	8.0	-4.3	3.0	-971	-6	2.8	2.8	<b>86</b>	<b>-12</b>	
Dynamic Factor Model Update		15-Mar	N/A	57	1.2	1.5	1.5	1.2	1.0	0.3	<b>2.0</b>	8.0	-4.3	3.0	<b>-971</b>	<b>-6</b>	<b>2.8</b>	<b>2.8</b>	86	-12	
Manufacturers' S&O		19-Mar	Jan	65	1.4	1.5	1.5	1.2	1.0	0.3	2.0	8.0	-4.3	3.0	<b>-971</b>	<b>-6</b>	<b>2.8</b>	<b>2.8</b>	<b>95</b>	<b>-4</b>	
Quarterly Services Survey		21-Mar	Q4	54	1.1	1.2	1.3	0.9	<b>0.8</b>	0.3	2.0	<b>6.5</b>	-4.3	3.0	-971	-6	2.8	2.8	95	-4	
Wholesale Inventories		22-Mar	Jan	54	1.2	1.2	1.3	0.9	0.8	0.3	2.0	6.5	-4.3	3.0	-971	-6	2.8	2.8	<b>96</b>	<b>-3</b>	
Existing Home Sales		22-Mar	Feb	60	1.3	1.4	1.4	1.1	0.8	0.3	2.0	6.5	<b>-1.0</b>	3.0	-971	-6	2.8	2.8	96	-3	
Housing Starts		26-Mar	Feb	58	1.2	1.3	1.3	1.0	0.8	0.3	2.0	6.5	<b>-2.4</b>	3.0	-971	-6	2.8	2.8	96	-3	
International Trade		27-Mar	Jan	57	1.2	1.3	1.2	0.9	0.8	0.3	<b>0.0</b>	6.5	-2.4	3.0	<b>-963</b>	<b>1</b>	<b>2.3</b>	<b>1.6</b>	96	-3	
Quarterly Serv Survey (update)		27-Mar	Q4	58	1.2	1.3	1.2	0.9	<b>0.7</b>	0.3	0.0	<b>8.0</b>	-2.4	3.0	-963	1	2.3	1.6	96	-3	
GDP		28-Mar	Q4	64	1.4	1.4	1.4	1.0	<b>0.9</b>	0.3	0.0	8.0	-2.4	3.0	-955	1	2.3	1.6	94	-3	
Pending Home Sales		28-Mar	Feb	64	1.4	1.4	1.4	1.0	0.9	0.3	0.0	8.0	<b>-2.3</b>	3.0	-955	0	2.3	1.6	94	-3	
Personal Income & Outlays		29-Mar	Feb	58	1.2	1.3	1.2	0.9	<b>0.7</b>	0.3	0.0	8.0	-2.3	3.0	-955	0	2.3	1.6	94	-3	
New Home Sales		29-Mar	Feb	62	1.3	1.4	1.3	1.0	0.7	0.3	0.0	8.0	<b>-0.4</b>	3.0	-955	0	2.3	1.6	94	-3	
Underlying Details File		29-Mar	Feb	62	1.3	1.4	1.4	1.0	0.7	0.3	<b>0.8</b>	8.0	-0.4	3.0	<b>-956</b>	<b>-1</b>	<b>2.1</b>	1.6	<b>92</b>	<b>-5</b>	
Dynamic Factor Model Update		29-Mar	N/A	62	1.3	1.4	1.4	1.0	0.7	0.3	0.8	8.0	-0.4	3.0	-956	-1	2.1	1.6	92	-5	
<b>CQ Forecast as of</b>		29-Mar		62	1.3	1.4	1.4	1.0	0.7	0.3	0.8	8.0	-0.4	3.0	-956	-1	2.1	1.6	92	-5	
<i>Contributions to GDP Growth</i>				7.4		7.4	7.4	0.9	0.5	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.3	-0.2		-0.1	
<b>BEA's Advance Est.</b>		26-Apr																			



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## E Additional Results for Section 5

Tables E.1–E.3 perform extensions and additional robustness checks of the forecast accuracy comparison between Blue Chip and the Fed’s internal “Greenbook” forecasts.

Table E.1 replicates Table 8 in the main text, but over the full sample for which we have both Blue Chip and Greenbook data, 1980–2013. Over this longer sample, the Greenbook forecasts are a bit better than Blue Chip for the current quarter, especially for GDP inflation. Overall, however, the results are very similar to those in Table 8, with the two forecasts being very similar in terms of accuracy.

Table E.2 replicates Table 8, but compares each Greenbook forecast to the *next* Blue Chip forecast, giving Blue Chip an informational advantage over GB of a few weeks on average. With this information structure, the BC forecasts consistently outperform GB at essentially every horizon, although the differences are not large enough to be statistically significant.

Table E.3 considers the opposite informational assumption, comparing each GB forecast to the *previous* BC forecast, putting BC at an informational disadvantage. In this case, GB consistently outperforms BC at most forecast horizons, with the differences being statistically significant for some of the shorter horizons.

Table E.1: Comparison of Greenbook and Blue Chip Forecasts, 1980–2013

Horizon (quarters)	RMSEs			Encompassing regressions			
	GB	BC	$H_0: GB = BC$	GB	BC	$R^2$	$H_0: GB = BC$
(A) Unemployment rate							
0	0.20	0.22	.28	0.65 (.12)	0.34 (.12)	.99	.19
1	0.39	0.41	.32	0.77 (.21)	0.21 (.21)	.95	.19
2	0.59	0.61	.66	0.74 (.32)	0.23 (.31)	.88	.42
3	0.76	0.79	.64	0.81 (.41)	0.13 (.40)	.79	.40
0-3 avg.	0.46	0.47	.54	0.79 (.28)	0.18 (.28)	.93	.28
(B) Real GDP growth							
0	2.17	2.32	.03	1.07 (.25)	-0.10 (.35)	.50	.05
1	2.94	2.80	.25	-0.09 (.52)	1.09 (.62)	.19	.28
2	2.87	2.89	.93	0.64 (.49)	-0.20 (.85)	.07	.51
3	2.98	2.89	.68	0.18 (.51)	-0.19 (.88)	.00	.77
0-3 avg.	1.83	1.78	.68	0.38 (.53)	0.55 (.72)	.27	.89
(C) CPI inflation							
0	1.10	1.40	.10	0.98 (.11)	-0.11 (.10)	.86	.00
1	2.21	2.15	.58	0.73 (.25)	-0.06 (.31)	.46	.16
2	2.07	1.94	.12	0.16 (.24)	0.58 (.35)	.37	.47
3	2.02	2.04	.84	0.64 (.35)	0.12 (.46)	.36	.52
0-3 avg.	1.21	1.20	.88	0.89 (.24)	-0.16 (.27)	.73	.04

Same as Table 8 except sample runs from 1980 to 2013 (274 observations). See notes to Table 8 for details.

Table E.2: Comparison of Greenbook and Blue Chip Forecasts, Blue Chip always after Greenbook

Horizon (quarters)	RMSEs			Encompassing regressions			
	GB	BC	$H_0: GB=BC$	GB	BC	$R^2$	$H_0: GB=BC$
(A) Unemployment rate							
0	0.25	0.23	.10	0.26 (.17)	0.73 (.17)	.98	.17
1	0.44	0.42	.24	0.15 (.34)	0.84 (.34)	.94	.32
2	0.63	0.61	.53	0.30 (.47)	0.68 (.47)	.87	.69
3	0.81	0.80	.92	0.53 (.56)	0.41 (.55)	.77	.92
0-3 avg.	0.50	0.48	.49	0.30 (.46)	0.67 (.46)	.91	.69
(B) Real GDP growth							
0	2.50	2.44	.40	0.20 (.33)	0.85 (.41)	.39	.37
1	2.81	2.69	.16	-0.04 (.39)	0.95 (.46)	.16	.20
2	2.99	2.93	.74	0.37 (.52)	-0.04 (.85)	.02	.75
3	3.00	2.96	.87	0.30 (.55)	-0.26 (.88)	.01	.67
0-3 avg.	1.88	1.80	.50	0.24 (.55)	0.65 (.74)	.23	.72
(C) CPI inflation							
0	1.43	1.54	.48	0.77 (.16)	0.11 (.15)	.77	.03
1	2.23	2.03	.04	0.31 (.30)	0.42 (.42)	.41	.87
2	2.10	2.00	.14	0.00 (.32)	0.81 (.46)	.37	.29
3	2.06	2.09	.72	0.64 (.39)	0.12 (.50)	.34	.55
0-3 avg.	1.25	1.19	.52	0.60* (.34)	0.18 (.35)	.70	.54

Same as Table 8, except that BC forecasts are always after the GB forecast, giving BC an informational advantage over GB. Sample runs from 1980 to 2013 (274 observations). See notes to Table 8 for details.

Table E.3: Comparison of Greenbook and Blue Chip Forecasts, Blue Chip always before Greenbook

Horizon (quarters)	RMSEs			Encompassing regressions			
	GB	BC	$H_0: GB = BC$	GB	BC	$R^2$	$H_0: GB = BC$
(A) Unemployment rate							
0	0.17	0.21	.00	0.82 (.10)	0.16 (.10)	.99	.00
1	0.35	0.41	.00	1.07 (.16)	-0.11 (.16)	.96	.00
2	0.55	0.60	.15	1.02 (.21)	-0.07 (.21)	.90	.01
3	0.73	0.80	.27	1.06 (.29)	-0.14 (.28)	.81	.03
0-3 avg.	0.42	0.47	.06	1.09 (.18)	-0.14 (.17)	.94	.00
(B) Real GDP growth							
0	2.10	2.35	.00	1.23 (.16)	-0.33 (.22)	.55	.00
1	2.82	2.75	.60	0.33 (.39)	0.62 (.46)	.19	.72
2	2.88	2.89	.94	0.63 (.43)	-0.19 (.80)	.07	.48
3	3.00	2.91	.69	0.21 (.47)	-0.10 (.81)	.01	.78
0-3 avg.	1.77	1.74	.80	0.50 (.39)	0.41 (.55)	.29	.93
(C) CPI inflation							
0	0.95	1.30	.02	1.01 (.13)	-0.13 (.14)	.89	.00
1	1.97	1.95	.90	0.77 (.25)	-0.11 (.30)	.51	.11
2	2.18	2.03	.07	0.01 (.31)	0.78 (.39)	.36	.26
3	2.08	2.07	.93	0.35 (.44)	0.40 (.59)	.33	.96
0-3 avg.	1.16	1.12	.62	0.70 (.21)	0.06 (.27)	.74	.17

Same as Table 8, except that BC forecasts are always before the GB forecast, giving GB an informational advantage over BC. Sample runs from 1980 to 2013 (274 observations). See notes to Table 8 for details.

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