An Alternative Explanation for the "Fed Information Effect" *

Online Appendix

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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 boostrapped 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:	Unemplo	yment rate	Real GD	P growth	CPI in	flation
	(1)	(2)	(3)	(4)	(5)	(6)
(A) Campbell et al. replication sample: 1/1990–6/2007 ($N=129$)						
target	-0.114 (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)		$0.163 \\ (0.097)$	
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, excl	uding unsched	luled FOMC	c announcem	nents $(N=2)$	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)		0.543 (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 heterosked asticity-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:	Unemplo	yment rate	Real GD	P growth	CPI in	nflation
	(1)	(2)	(3)	(4)	(5)	(6)
(A) Campbell et al. post-1994 replication sample: 1/1994–6/2007 ($N=94$)						
target	0.0698 (0.119)		0.229 (0.155)		$0.045 \\ (0.127)$	
path	-0.261 (0.133)		0.427 (0.177)		0.158 (0.145)	
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 (0.294)		0.920 (0.373)		0.062 (0.249)
R^2		0.00		0.06		0.00
(C) Full post-1994 sample:	1/1994-6,	$\sqrt{2019} \ (N = 182)$	2)			
target	-0.070 (0.133)		0.294 (0.183)		0.114 (0.104)	
path	-0.262 (0.158)		$0.235 \\ (0.219)$		0.116 (0.127)	
NS surprise		-0.323 (0.237)		0.619 (0.338)		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. ur	scheduled F	FOMC annou	uncements	(N = 179)
target	0.140 (0.197)		$0.142 \\ (0.245)$		0.112 (0.154)	
path	-0.350 (0.161)		$0.401 \\ (0.197)$		0.146 (0.123)	
NS surprise		-0.282 (0.266)		0.595 (0.331)		0.271 (0.205)
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 $\operatorname{BCrev}_{t-1}^X$ denote the change over the course of month t-1 in the 1-quarterahead 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 sometimess 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 (1)	Real GDP growth (2)	CPI inflation (3)
constant	-0.022 (0.027)	$0.064 \\ (0.054)$	-0.088 (0.033)
time trend	-0.040 (0.059)	-0.127 (0.116)	$0.179 \\ (0.071)$
BCrev_{t-1}^u	$0.129 \\ (0.058)$	0.136 (0.114)	$0.058 \\ (0.070)$
$\mathrm{BCrev}_{t-1}^{GDP}$	-0.033 (0.024)	$0.180 \\ (0.047)$	$0.066 \\ (0.030)$
$\mathrm{BCrev}_{t-1}^{CPI}$	$0.015 \\ (0.023)$	-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 (0.107)	-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	$0.094 \\ (0.068)$	-0.166 (0.133)	$0.203 \\ (0.082)$
Financial news			
$\Delta \log S\&P500$ from 13wks to beg of mo.	-0.162 (0.086)	0.432 (0.164)	$0.071 \\ (0.103)$
$\Delta \log$ S&P500 from beg. of mo. to FOMC	-0.533 (0.167)	1.846 (0.329)	-0.356 (0.204)

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

Blue Chip forecast revision:	Unemployment rate	Real GDP growth	CPI inflation
	(1)	(2)	(3)
Financial news (cont.)			
Δ yield curve slope from 13wks to beg of mo.	-0.021 (0.011)	-0.008 (0.022)	$0.010 \\ (0.014)$
Δ yield curve slope from beg. of mo. to FOMC	-0.041 (0.030)	-0.042 (0.059)	$0.026 \ (0.037)$
Δ log prommodity from 13wks to beg of mo.	-0.010 (0.112)	$0.238 \\ (0.218)$	0.229 (0.134)
Δ log prommodity from beg. of mo. to FOMC	-0.453 (0.220)	-0.326 (0.426)	$ \begin{array}{c} 1.224 \\ (0.265) \end{array} $
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	Real GDP growth	CPI inflation
	(1)	(2)	(3)
constant	-0.018 (0.029)	$0.050 \\ (0.046)$	-0.102 (0.032)
time trend	-0.048 (0.063)	-0.098 (0.101)	$0.205 \\ (0.069)$
BCrev_{t-1}^u	0.121 (0.062)	$0.163 \\ (0.097)$	$0.050 \\ (0.068)$
$\mathrm{BCrev}_{t-1}^{GDP}$	-0.039 (0.026)	$0.161 \\ (0.041)$	$0.042 \\ (0.028)$
$\mathrm{BCrev}_{t-1}^{CPI}$	$0.022 \\ (0.024)$	$0.008 \\ (0.038)$	0.027 (0.026)
Macroeconomic news			
unemployment surprise	$0.309 \\ (0.039)$	-0.024 (0.061)	$0.011 \\ (0.042)$
payrolls surprise	-0.131 (0.060)	-0.037 (0.096)	-0.104 (0.067)
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 (0.113)
core CPI surprise	$0.067 \\ (0.066)$	-0.076 (0.106)	$0.170 \\ (0.073)$
Financial news			
$\Delta \log S\&P500$ from 13wks to beg of mo.	-0.187 (0.097)	$0.474 \\ (0.154)$	$0.046 \\ (0.107)$
Δ log S&P500 from beg. of mo. to FOMC	-0.500 (0.174)	$ \begin{array}{c} 1.982 \\ (0.279) \end{array} $	-0.423 (0.195)

Table 2B (cont.): 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)
Financial news (cont.)			
Δ yield curve slope from 13wks to beg of mo.	-0.023 (0.013)	-0.003 (0.020)	$0.019 \\ (0.014)$
Δ yield curve slope from beg. of mo. to FOMC	-0.010 (0.031)	-0.088 (0.049)	-0.016 (0.034)
Δ log prommodity from 13wks to beg of mo.	$0.005 \\ (0.121)$	0.181 (0.195)	0.292 (0.136)
Δ log prommodity from beg. of mo. to FOMC	-0.450 (0.232)	-0.048 (0.365)	1.500 (0.255)
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 (0.113)	$0.165 \\ (0.077)$
BCrev_{t-1}^u	0.113 (0.066)	$0.188 \\ (0.104)$	$0.052 \\ (0.072)$
$\mathrm{BCrev}_{t-1}^{GDP}$	-0.020 (0.030)	$0.149 \\ (0.047)$	0.107 (0.032)
$\mathrm{BCrev}_{t-1}^{CPI}$	$0.019 \\ (0.025)$	0.014 (0.039)	$0.042 \\ (0.027)$
Macroeconomic news			
unemployment surprise	$0.340 \\ (0.043)$	$0.010 \\ (0.068)$	$0.001 \\ (0.046)$
payrolls surprise	-0.127 (0.070)	0.031 (0.110)	-0.089 (0.074)
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 (0.202)	0.218 (0.138)
core CPI surprise	$0.114 \\ (0.089)$	-0.065 (0.143)	$0.050 \\ (0.098)$
Financial news			
$\Delta \log S\&P500$ from 13wks to beg of mo.	-0.128 (0.102)	$0.273 \\ (0.161)$	-0.000 (0.110)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	-0.474 (0.185)	$ \begin{array}{c} 1.720 \\ (0.294) \end{array} $	-0.197 (0.201)

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

Blue Chip forecast revision:	Unemployment rate	Real GDP growth	CPI inflation
	(1)	(2)	(3)
Financial news (cont.)			
Δ yield curve slope from 13wks to beg of mo.	-0.023 (0.013)	-0.005 (0.021)	$0.002 \\ (0.014)$
Δ yield curve slope from beg. of mo. to FOMC	-0.054 (0.033)	-0.061 (0.054)	0.014 (0.037)
Δ log prommodity from 13wks to beg of mo.	-0.091 (0.133)	$0.472 \\ (0.211)$	0.313 (0.145)
Δ log prommodity from beg. of mo. to FOMC	-0.434 (0.248)	-0.255 (0.402)	0.881 (0.269)
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 (0.036)	0.031 (0.083)	-0.196 (0.051)
time trend	-0.063 (0.113)	0.134 (0.262)	$0.466 \\ (0.161)$
BCrev_{t-1}^u	$0.175 \\ (0.070)$	0.118 (0.164)	0.091 (0.101)
$\mathrm{BCrev}_{t-1}^{GDP}$	-0.063 (0.026)	0.173 (0.062)	$0.005 \\ (0.038)$
$\mathrm{BCrev}_{t-1}^{CPI}$	$0.010 \\ (0.039)$	-0.078 (0.092)	-0.022 (0.057)
Macroeconomic news			
unemployment surprise	$0.230 \\ (0.041)$	$0.073 \\ (0.097)$	-0.001 (0.060)
payrolls surprise	-0.193 (0.053)	0.017 (0.124)	-0.204 (0.075)
GDP surprise	-0.029 (0.011)	$0.068 \\ (0.025)$	0.012 (0.015)
BBK index	-0.018 (0.010)	-0.002 (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	$0.220 \\ (0.115)$	-0.303 (0.266)	0.526 (0.164)
core CPI surprise	$0.104 \\ (0.066)$	-0.147 (0.156)	$0.296 \\ (0.096)$
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 (0.199)	$ \begin{array}{c} 1.232 \\ (0.472) \end{array} $	-1.073 (0.292)

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

Blue Chip forecast revision:	Unemployment rate	Real GDP growth	CPI inflation
	(1)	(2)	(3)
Financial news (cont.)			
Δ yield curve slope from 13wks to beg of mo.	-0.006 (0.012)	-0.011 (0.027)	0.036 (0.017)
Δ yield curve slope from beg. of mo. to FOMC	-0.035 (0.030)	-0.081 (0.071)	0.018 (0.044)
Δ log prommodity from 13wks to beg of mo.	$0.079 \\ (0.117)$	$0.164 \\ (0.274)$	0.149 (0.168)
Δ log prommodity from beg. of mo. to FOMC	-0.456 (0.223)	-0.340 (0.526)	1.509 (0.323)
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 (0.059)	-0.108 (0.045)
time trend	-0.193 (0.112)	-0.245 (0.166)	0.281 (0.129)
BCrev_{t-1}^u	$0.193 \\ (0.076)$	$0.068 \\ (0.114)$	-0.026 (0.087)
$\mathrm{BCrev}_{t-1}^{GDP}$	-0.068 (0.036)	$0.069 \\ (0.053)$	$0.055 \\ (0.041)$
$\mathrm{BCrev}_{t-1}^{CPI}$	0.081 (0.042)	-0.053 (0.062)	0.018 (0.047)
Macroeconomic news			
unemployment surprise	0.294 (0.051)	$0.049 \\ (0.074)$	$0.059 \\ (0.057)$
payrolls surprise	-0.240 (0.082)	-0.013 (0.123)	-0.037 (0.093)
GDP surprise	-0.027 (0.016)	0.043 (0.024)	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	$0.173 \\ (0.164)$	-0.427 (0.248)	0.291 (0.190)
core CPI surprise	$0.138 \\ (0.105)$	-0.122 (0.157)	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 (0.156)
$\Delta \log$ S&P500 from beg. of mo. to FOMC	-0.237 (0.227)	1.065 (0.333)	-0.579 (0.252)

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.)			
Δ yield curve slope from 13wks to beg of mo.	-0.017 (0.015)	$0.030 \\ (0.023)$	$0.009 \\ (0.018)$
Δ yield curve slope from beg. of mo. to FOMC	-0.013 (0.038)	-0.084 (0.056)	-0.039 (0.043)
Δ log prommodity from 13wks to beg of mo.	-0.151 (0.155)	0.431 (0.230)	0.317 (0.173)
Δ log prommodity from beg. of mo. to FOMC	-0.530 (0.290)	$0.101 \\ (0.380)$	1.150 (0.329)
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 (0.444)	-0.085 (0.303)	-0.207 (0.237)
Macroeconomic news			
unemployment surprise	0.010 (0.045)	-0.010 (0.030)	$0.008 \\ (0.024)$
payrolls surprise	$0.133 \\ (0.067)$	0.011 (0.045)	0.072 (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	$0.001 \\ (0.011)$	$0.007 \\ (0.007)$	$0.004 \\ (0.006)$
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.	$0.170 \\ (0.098)$	$0.185 \\ (0.066)$	$0.163 \\ (0.053)$
$\Delta \log S\&P500$ from beg. of mo. to FOMC	$0.062 \\ (0.074)$	$0.011 \\ (0.051)$	$0.036 \\ (0.040)$
Δ yield curve slope from 13wks to beg of mo.	-0.013 (0.014)	-0.011 (0.009)	-0.011 (0.007)
Δ yield curve slope from beg. of mo. to FOMC	-0.093 (0.037)	-0.021 (0.025)	-0.056 (0.020)
Δ log prommodity from 13wks to beg of mo.	0.114 (0.123)	0.236 (0.083)	$0.156 \\ (0.066)$
Δ log prommodity from beg. of mo. to FOMC	-0.029 (0.258)	-0.129 (0.175)	-0.069 (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 (0.265)	-0.121 (0.287)	-0.128 (0.180)
Macroeconomic news			
unemployment surprise	-0.005 (0.026)	-0.003 (0.029)	-0.004 (0.018)
payrolls surprise	$0.044 \\ (0.041)$	-0.006 (0.044)	$0.020 \\ (0.028)$
GDP surprise	-0.010 (0.010)	0.013 (0.010)	$0.001 \\ (0.006)$
BBK index	$0.003 \\ (0.005)$	$0.006 \\ (0.006)$	$0.004 \\ (0.004)$
change in core CPI inflation from 6 mos. previous	-0.007 (0.007)	$0.005 \\ (0.007)$	-0.001 (0.005)
expectation of core CPI release	$0.016 \\ (0.061)$	$0.106 \\ (0.066)$	$0.056 \\ (0.041)$
core CPI surprise	0.027 (0.043)	$0.048 \\ (0.047)$	$0.036 \\ (0.030)$
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)	$0.020 \\ (0.030)$
Δ yield curve slope from 13wks to beg of mo.	-0.000 (0.008)	-0.012 (0.009)	-0.006 (0.006)
Δ yield curve slope from beg. of mo. to FOMC	-0.025 (0.021)	-0.016 (0.022)	-0.020 (0.014)
Δ log prommodity from 13wks to beg of mo.	$0.101 \\ (0.073)$	0.230 (0.079)	$0.156 \\ (0.051)$
Δ log prommodity from beg. of mo. to FOMC	-0.049 (0.147)	-0.195 (0.154)	-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 (0.473)	-0.271 (0.338)	-0.436 (0.237)
Macroeconomic news			
unemployment surprise	$0.004 \\ (0.047)$	-0.008 (0.034)	-0.001 (0.023)
payrolls surprise	$0.103 \\ (0.075)$	0.018 (0.054)	$0.055 \\ (0.037)$
GDP surprise	-0.002 (0.017)	0.013 (0.013)	$0.004 \\ (0.008)$
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	$0.109 \\ (0.138)$	$0.207 \\ (0.098)$	0.133 (0.069)
core CPI surprise	$0.036 \\ (0.099)$	$0.125 \\ (0.071)$	0.066 (0.049)
Financial news			
$\Delta \log S\&P500$ from 13wks to beg of mo.	0.237 (0.103)	0.211 (0.074)	0.194 (0.054)
$\Delta \log S\&P500$ from beg. of mo. to FOMC	0.117 (0.079)	0.039 (0.056)	$0.070 \\ (0.039)$
Δ yield curve slope from 13wks to beg of mo.	-0.011 (0.014)	-0.005 (0.010)	-0.007 (0.007)
Δ yield curve slope from beg. of mo. to FOMC	-0.087 (0.036)	-0.027 (0.026)	-0.051 (0.018)
Δ log prommodity from 13wks to beg of mo.	0.091 (0.127)	0.235 (0.090)	0.135 (0.062)
Δ log prommodity from beg. of mo. to FOMC	-0.018 (0.263)	-0.108 (0.186)	-0.051 (0.127)
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 (0.443)	$0.082 \\ (0.321)$
Macroeconomic news			
unemployment surprise	0.024 (0.059)	-0.050 (0.042)	-0.009 (0.031)
payrolls surprise	$0.152 \\ (0.081)$	-0.020 (0.057)	$0.065 \\ (0.042)$
GDP surprise	$0.000 \\ (0.016)$	$0.015 \\ (0.012)$	$0.007 \\ (0.009)$
BBK index	$0.009 \\ (0.013)$	$0.008 \\ (0.009)$	$0.007 \\ (0.007)$
change in core CPI inflation from 6 mos. previous	$0.007 \\ (0.014)$	0.018 (0.010)	0.011 (0.008)
expectation of core CPI release	-0.143 (0.129)	$0.120 \\ (0.091)$	-0.020 (0.067)
core CPI surprise	0.092 (0.091)	0.049 (0.066)	$0.065 \\ (0.048)$
Financial news			
$\Delta \log S\&P500$ from 13wks to beg of mo.	0.191 (0.123)	0.289 (0.089)	$0.212 \\ (0.067)$
$\Delta \log S\&P500$ from beg. of mo. to FOMC	$0.001 \\ (0.106)$	-0.035 (0.076)	-0.014 (0.055)
Δ yield curve slope from 13wks to beg of mo.	-0.012 (0.017)	-0.011 (0.012)	-0.010 (0.009)
Δ yield curve slope from beg. of mo. to FOMC	-0.157 (0.044)	-0.013 (0.032)	-0.081 (0.024)
Δ log prommodity from 13wks to beg of mo.	0.153 (0.160)	0.302 (0.117)	$0.198 \\ (0.085)$
Δ log prommodity from beg. of mo. to FOMC	-0.158 (0.319)	-0.030 (0.227)	-0.089 (0.167)
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	$0.171 \\ (0.306)$	-0.227 (0.396)	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 (0.008)
BBK index	-0.008 (0.009)	0.019 (0.011)	$0.003 \\ (0.007)$
change in core CPI inflation from 6 mos. previous	$0.001 \\ (0.007)$	$0.006 \\ (0.092)$	$0.003 \\ (0.006)$
expectation of core CPI release	-0.066 (0.098)	0.144 (0.124)	0.021 (0.081)
core CPI surprise	$0.007 \\ (0.063)$	0.074 (0.082)	0.037 (0.054)
Financial news			
$\Delta \log S\&P500$ from 13wks to beg of mo.	-0.030 (0.077)	0.245 (0.102)	0.087 (0.066)
$\Delta \log S\&P500$ from beg. of mo. to FOMC	-0.026 (0.051)	0.033 (0.066)	-0.003 (0.043)
Δ yield curve slope from 13wks to beg of mo.	-0.004 (0.009)	$0.001 \\ (0.012)$	-0.002 (0.008)
Δ yield curve slope from beg. of mo. to FOMC	-0.040 (0.022)	-0.041 (0.029)	-0.044 (0.019)
Δ log prommodity from 13wks to beg of mo.	0.111 (0.083)	0.209 (0.110)	$0.163 \\ (0.072)$
Δ log prommodity from beg. of mo. to FOMC	-0.110 (0.170)	-0.152 (0.221)	-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

Table 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

CPI in	flation
(5)	(6)
0.094 0.034)	-0.088 (0.034)
0.179 0.071)	0.179 (0.072)
0.052 0.069)	0.059 (0.070)
0.067 0.029)	$0.066 \\ (0.030)$
0.032 0.027)	0.036 (0.028)
0.013 0.044)	0.016 (0.045)
$0.155 \\ 0.068)$	-0.147 (0.068)
0.017 0.016)	0.014 (0.016)
	$0.009 \\ (0.009)$
	0.031 (0.012)
	0.194 (0.121)
	0.203 (0.084)
	0.071 (0.108)
	-0.356 (0.203)
	0.016) 0.016) 0.009 0.009) 0.033 0.011) 0.223 0.121) 0.215 0.083) 0.090 0.107) 0.376 0.201)

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

Blue Chip forecast revision:	Unemple	yment rate	Real GD	Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)	
Financial news (cont.)							
Δ yield curve slope fr. 13wks to beg of mo.	-0.018 (0.012)	-0.018 (0.012)	-0.014 (0.022)	-0.013 (0.023)	0.010 (0.014)	0.010 (0.014)	
Δ yield curve slope fr. beg. of mo. to FOMC	-0.028 (0.032)	-0.028 (0.032)	-0.066 (0.061)	-0.068 (0.060)	$0.030 \\ (0.038)$	0.026 (0.038)	
Δ log prommodity fr. 13wks to beg of mo.	-0.065 (0.122)	-0.065 (0.121)	$0.368 \\ (0.236)$	0.348 (0.233)	0.276 (0.148)	0.231 (0.148)	
Δ log prommodity fr. beg. of mo. to FOMC	-0.451 (0.219)	-0.451 (0.219)	-0.334 (0.425)	-0.329 (0.425)	$ \begin{array}{c} 1.213 \\ (0.261) \end{array} $	1.224 (0.265)	
Monetary policy surprise							
target	0.121 (0.074)		-0.213 (0.141)		0.075 (0.089)		
path	$0.103 \\ (0.096)$		-0.287 (0.187)		-0.194 (0.113)		
NS surprise		$0.242 \\ (0.135)$		-0.489 (0.257)		-0.005 (0.163)	
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:	Unemple	yment rate	Real GD	P growth	CPI in	nflation
	(1)	(2)	(3)	(4)	(5)	(6)
constant	-0.008 (0.031)	-0.008 (0.030)	$0.045 \\ (0.054)$	$0.048 \\ (0.054)$	-0.096 (0.034)	-0.089 (0.034)
time trend	-0.048 (0.065)	-0.048 (0.065)	-0.097 (0.113)	-0.097 (0.113)	0.177 (0.072)	0.177 (0.073)
BCrev_{t-1}^u	$0.208 \\ (0.061)$	$0.208 \\ (0.061)$	$0.110 \\ (0.108)$	0.113 (0.108)	0.033 (0.067)	0.039 (0.068)
$\mathrm{BCrev}_{t-1}^{GDP}$	-0.085 (0.026)	-0.085 (0.026)	0.218 (0.046)	0.218 (0.046)	$0.076 \\ (0.028)$	0.076 (0.029)
$\mathrm{BCrev}_{t-1}^{CPI}$	$0.007 \\ (0.025)$	$0.007 \\ (0.025)$	-0.005 (0.044)	-0.004 (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 (0.069)	0.005 (0.043)	$0.008 \\ (0.044)$
payrolls surprise	-0.186 (0.060)	-0.187 (0.060)	$0.004 \\ (0.109)$	$0.008 \\ (0.109)$	-0.146 (0.066)	-0.138 (0.067)
GDP surprise	-0.021 (0.014)	-0.021 (0.014)	$0.064 \\ (0.026)$	$0.063 \\ (0.026)$	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 (0.012)
expectation of core CPI release	$0.130 \\ (0.109)$	$0.130 \\ (0.108)$	-0.323 (0.195)	-0.335 (0.193)	0.228 (0.121)	$0.199 \\ (0.121)$
core CPI surprise	$0.054 \\ (0.073)$	$0.054 \\ (0.073)$	-0.109 (0.133)	-0.114 (0.133)	0.219 (0.084)	0.207 (0.085)
Financial news						
$\Delta \log S\&P500$ fr. 13wks to beg of mo.	-0.222 (0.097)	-0.221 (0.096)	0.527 (0.173)	0.519 (0.172)	0.094 (0.107)	$0.076 \\ (0.108)$
$\Delta \log S\&P500$ fr. beg. of mo. to FOMC	-0.671 (0.178)	-0.671 (0.177)	1.899 (0.320)	1.908 (0.319)	-0.346 (0.200)	-0.326 (0.202)

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

Blue Chip forecast revision:	Unemplo	yment rate	Real GD	Real GDP growth		CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)	
Financial news (cont.)							
Δ 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)	$0.005 \\ (0.013)$	$0.005 \\ (0.013)$	
Δ 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)	$0.022 \\ (0.037)$	0.018 (0.037)	
Δ log prommodity fr. 13wks to beg of mo.	-0.147 (0.132)	-0.147 (0.130)	0.411 (0.235)	0.391 (0.233)	0.294 (0.147)	0.248 (0.147)	
Δ log prommodity fr. beg. of mo. to FOMC	-0.574 (0.234)	-0.574 (0.234)	-0.269 (0.433)	-0.264 (0.433)	1.238 (0.264)	1.250 (0.268)	
Monetary policy surprise							
target	0.113 (0.079)		-0.208 (0.142)		0.077 (0.089)		
path	0.095 (0.104)		-0.283 (0.189)		-0.192 (0.114)		
NS surprise		0.225 (0.145)		-0.480 (0.260)		-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

Unemple	oyment rate	Real GD	P growth	CPI in	nflation
(1)	(2)	(3)	(4)	(5)	(6)
-0.010 (0.029)	-0.008 (0.029)	0.042 (0.046)	0.043 (0.046)	-0.106 (0.033)	-0.104 (0.033)
-0.060 (0.062)	-0.060 (0.062)	-0.090 (0.099)	-0.089 (0.099)	0.207 (0.069)	$0.208 \\ (0.070)$
0.107 (0.060)	0.107 (0.060)	$0.173 \\ (0.098)$	0.173 (0.098)	0.053 (0.068)	$0.053 \\ (0.068)$
-0.048 (0.025)	-0.050 (0.025)	$0.170 \\ (0.041)$	$0.168 \\ (0.040)$	$0.046 \\ (0.029)$	$0.044 \\ (0.029)$
0.030 (0.024)	0.031 (0.024)	$0.000 \\ (0.038)$	-0.001 (0.038)	0.024 (0.027)	$0.025 \\ (0.027)$
0.312 (0.037)	0.312 (0.037)	-0.025 (0.061)	-0.026 (0.061)	0.012 (0.043)	0.011 (0.043)
-0.141 (0.059)	-0.137 (0.059)	-0.036 (0.094)	-0.033 (0.094)	-0.108 (0.066)	-0.103 (0.066)
-0.019 (0.013)	-0.020 (0.013)	$0.060 \\ (0.021)$	$0.059 \\ (0.021)$	$0.020 \\ (0.015)$	$0.018 \\ (0.015)$
-0.046 (0.008)	-0.046 (0.008)	0.022 (0.013)	0.022 (0.013)	$0.005 \\ (0.009)$	$0.005 \\ (0.009)$
-0.026 (0.010)	-0.027 (0.010)	$0.001 \\ (0.016)$	$0.000 \\ (0.016)$	$0.030 \\ (0.011)$	0.029 (0.011)
0.118 (0.100)	0.110 (0.100)	-0.299 (0.162)	-0.305 (0.161)	0.254 (0.115)	$0.245 \\ (0.115)$
0.048 (0.065)	$0.046 \\ (0.065)$	-0.060 (0.107)	-0.061 (0.107)	0.176 (0.073)	$0.174 \\ (0.074)$
-0.230 (0.097)	-0.243 (0.097)	0.523 (0.157)	0.514 (0.156)	0.073 (0.111)	0.057 (0.110)
-0.489 (0.168)	-0.490 (0.169)	$ \begin{array}{c} 1.975 \\ (0.275) \end{array} $	1.974 (0.275)	-0.424 (0.192)	-0.425 (0.192)
	(1) -0.010 (0.029) -0.060 (0.062) 0.107 (0.060) -0.048 (0.025) 0.312 (0.037) -0.141 (0.059) -0.019 (0.013) -0.046 (0.008) -0.026 (0.010) 0.118 (0.100) 0.048 (0.065) -0.230 (0.097) -0.489	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

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

Blue Chip forecast revision:	Unemple	yment rate	Real GD	P growth	CPI in	CPI inflation	
	(1)	(2)	(3)	(4)	(5)	(6)	
Financial news (cont.)							
Δ 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)	
Δ 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)	
Δ log prommodity fr. 13wks to beg of mo.	-0.088 (0.122)	-0.101 (0.122)	$0.266 \\ (0.201)$	0.256 (0.200)	0.331 (0.139)	0.314 (0.139)	
Δ log prommodity fr. beg. of mo. to FOMC	-0.423 (0.225)	-0.412 (0.167)	-0.083 (0.367)	-0.075 (0.367)	$ \begin{array}{c} 1.478 \\ (0.251) \end{array} $	1.491 (0.252)	
Monetary policy surprise							
target	0.337 (0.111)		-0.128 (0.177)		0.041 (0.122)		
path	0.153 (0.103)		-0.221 (0.165)		-0.145 (0.114)		
NS surprise		$0.509 \\ (0.165)$		-0.360 (0.265)		-0.105 (0.184)	
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:	Unemple	oyment rate	Real GD	P growth	CPI infl	lation
	(1)	(2)	(3)	(4)	(5)	(6)
constant	-0.019 (0.031)	-0.019 (0.031)	$0.065 \\ (0.049)$	0.071 (0.049)		-0.087 (0.034)
time trend	-0.079 (0.071)	-0.079 (0.071)	-0.088 (0.112)	-0.087 (0.112)	0.171 (0.077)	0.172 (0.078)
BCrev_{t-1}^u	0.097 (0.066)	$0.097 \\ (0.065)$	$0.192 \\ (0.105)$	$0.198 \\ (0.105)$	$0.054 \\ (0.072)$	0.058 (0.073)
$\mathrm{BCrev}_{t-1}^{GDP}$	-0.031 (0.030)	-0.031 (0.030)	$0.156 \\ (0.048)$	0.156 (0.049)	0.112 (0.033)	0.112 (0.033)
$\mathrm{BCrev}_{t-1}^{CPI}$	$0.029 \\ (0.025)$	$0.029 \\ (0.025)$	$0.004 \\ (0.040)$	$0.008 \\ (0.039)$	$0.035 \\ (0.027)$	0.039 (0.027)
Macroeconomic news						
unemployment surprise	0.340 (0.042)	$0.340 \\ (0.042)$	$0.009 \\ (0.066)$	$0.010 \\ (0.067)$	-0.000 (0.045)	$0.001 \\ (0.046)$
payrolls surprise	-0.144 (0.069)	-0.144 (0.068)	$0.036 \\ (0.109)$	$0.042 \\ (0.109)$		-0.082 (0.074)
GDP surprise	-0.019 (0.016)	-0.019 (0.016)	$0.059 \\ (0.025)$	$0.057 \\ (0.025)$	$0.022 \\ (0.017)$	$0.020 \\ (0.017)$
BBK index	-0.050 (0.009)	-0.050 (0.008)	0.034 (0.015)	0.033 (0.015)		-0.002 (0.010)
change in core CPI inflation from 6 mos. previous	-0.028 (0.011)	-0.028 (0.011)	0.012 (0.018)	0.010 (0.018)	0.024 (0.012)	0.023 (0.012)
expectation of core CPI release	0.178 (0.130)	$0.178 \\ (0.129)$	-0.418 (0.204)	-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 (0.144)	-0.052 (0.144)	0.074 (0.098)	0.058 (0.098)
Financial news						
$\Delta \log S\&P500$ fr. 13wks to beg of mo.	-0.192 (0.106)	-0.192 (0.106)	0.326 (0.170)	0.312 (0.170)	$0.036 \\ (0.114)$	0.025 (0.115)
$\Delta \log S\&P500$ fr. beg. of mo. to FOMC	-0.469 (0.184)	-0.469 (0.184)	1.700 (0.291)	1.717 (0.292)		-0.199 (0.203)

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

Blue Chip forecast revision:	Unemple	yment rate	Real GD	P growth	CPI in	flation
	(1)	(2)	(3)	(4)	(5)	(6)
Financial news (cont.)						
Δ yield curve slope fr. 13wks to beg of mo.	-0.021 (0.013)	-0.021 (0.013)	-0.006 (0.021)	-0.007 (0.021)	$0.001 \\ (0.014)$	$0.001 \\ (0.014)$
Δ yield curve slope fr. beg. of mo. to FOMC	-0.037 (0.034)	-0.037 (0.034)	-0.068 (0.055)	-0.071 (0.055)	0.010 (0.037)	0.007 (0.037)
Δ log prommodity fr. 13wks to beg of mo.	-0.169 (0.138)	-0.169 (0.136)	$0.565 \\ (0.221)$	0.519 (0.218)	0.380 (0.150)	0.343 (0.150)
Δ log prommodity fr. beg. of mo. to FOMC	-0.425 (0.248)	-0.425 (0.248)	-0.266 (0.391)	-0.261 (0.392)	0.874 (0.270)	0.878 (0.272)
Monetary policy surprise						
target	$0.165 \\ (0.085)$		-0.021 (0.135)		$0.000 \\ (0.092)$	
path	0.141 (0.104)		-0.257 (0.165)		-0.194 (0.113)	
NS surprise		0.356 (0.168)		-0.216 (0.258)		-0.138 (0.178)
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:	Unemple	oyment rate	Real GD	P growth	CPI in	flation
	(1)	(2)	(3)	(4)	(5)	(6)
constant	-0.042 (0.037)	-0.041 (0.037)	$0.025 \\ (0.086)$	0.025 (0.086)	-0.200 (0.053)	-0.196 (0.053)
time trend	-0.069 (0.115)	-0.066 (0.114)	0.158 (0.269)	0.157 (0.269)	0.458 (0.164)	0.468 (0.165)
BCrev_{t-1}^u	$0.168 \\ (0.074)$	0.171 (0.073)	$0.145 \\ (0.170)$	$0.144 \\ (0.169)$	0.083 (0.104)	0.093 (0.105)
$\mathrm{BCrev}_{t-1}^{GDP}$	-0.063 (0.029)	-0.064 (0.029)	0.183 (0.066)	0.183 (0.065)	0.011 (0.041)	0.006 (0.041)
$\mathrm{BCrev}_{t-1}^{CPI}$	0.010 (0.043)	0.011 (0.042)	-0.085 (0.098)	-0.085 (0.098)	-0.028 (0.060)	-0.023 (0.061)
Macroeconomic news						
unemployment surprise	0.228 (0.042)	0.230 (0.042)	0.074 (0.097)	0.074 (0.097)	-0.007 (0.059)	-0.000 (0.059)
payrolls surprise	-0.198 (0.056)	-0.196 (0.056)	0.039 (0.131)	0.038 (0.130)	-0.211 (0.079)	-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 (0.015)
change in core CPI inflation from 6 mos. previous	-0.020 (0.011)	-0.020 (0.010)	-0.032 (0.025)	-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 (0.283)	-0.290 (0.282)	$0.542 \\ (0.174)$	0.527 (0.175)
core CPI surprise	$0.101 \\ (0.068)$	$0.100 \\ (0.068)$	-0.119 (0.158)	-0.119 (0.158)	$0.300 \\ (0.096)$	0.298 (0.097)
Financial news						
$\Delta \log S\&P500$ fr. 13wks to beg of mo.	-0.048 (0.097)	-0.052 (0.097)	0.510 (0.222)	0.512 (0.222)	0.198 (0.139)	0.182 (0.140)
$\Delta \log S\&P500$ fr. beg. of mo. to FOMC	-0.444 (0.205)	-0.447 (0.205)	1.157 (0.481)	1.158 (0.480)	-1.065 (0.292)	-1.078 (0.295)

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

Blue Chip forecast revision:	Unemple	yment rate	Real GD	P growth	CPI in	flation
	(1)	(2)	(3)	(4)	(5)	(6)
Financial news (cont.)						
Δ yield curve slope fr. 13wks to beg of mo.	-0.005 (0.012)	-0.005 (0.012)	-0.015 (0.028)	-0.015 (0.028)	$0.035 \\ (0.017)$	$0.036 \\ (0.017)$
Δ yield curve slope fr. beg. of mo. to FOMC	-0.030 (0.032)	-0.031 (0.032)	-0.109 (0.076)	-0.109 (0.075)	0.023 (0.046)	0.016 (0.046)
Δ log prommodity fr. 13wks to beg of mo.	0.079 (0.128)	-0.068 (0.125)	$0.235 \\ (0.301)$	$0.239 \\ (0.295)$	0.197 (0.187)	$0.154 \\ (0.185)$
Δ log prommodity fr. beg. of mo. to FOMC	-0.453 (0.225)	-0.453 (0.224)	-0.361 (0.521)	-0.361 (0.521)	1.506 (0.322)	1.507 (0.325)
Monetary policy surprise						
target	0.037 (0.081)		-0.173 (0.189)		0.043 (0.116)	
path	-0.012 (0.121)		-0.130 (0.267)		-0.143 (0.151)	
NS surprise		0.048 (0.154)		-0.346 (0.358)		-0.024 (0.223)
R^2	0.63	0.63	0.48	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

Unemple	yment rate	Real GD	P growth	CPI ir	nflation
(1)	(2)	(3)	(4)	(5)	(6)
-0.011 (0.040)	-0.010 (0.039)	0.051 (0.059)	$0.074 \\ (0.059)$	-0.115 (0.045)	-0.109 (0.045)
-0.198 (0.115)	-0.198 (0.113)	-0.206 (0.167)	-0.252 (0.169)	0.295 (0.127)	0.282 (0.126)
0.182 (0.077)	0.182 (0.077)	0.044 (0.114)	$0.052 \\ (0.116)$	-0.026 (0.087)	-0.024 (0.087)
-0.070 (0.036)	-0.070 (0.035)	$0.082 \\ (0.053)$	$0.067 \\ (0.053)$	$0.060 \\ (0.041)$	$0.055 \\ (0.040)$
0.086 (0.042)	0.086 (0.042)	-0.060 (0.061)	-0.046 (0.062)	0.013 (0.048)	0.018 (0.047)
$0.292 \\ (0.051)$	$0.292 \\ (0.050)$	$0.067 \\ (0.075)$	$0.046 \\ (0.076)$	$0.065 \\ (0.058)$	$0.059 \\ (0.057)$
-0.250 (0.084)	-0.250 (0.083)	-0.053 (0.122)	-0.028 (0.123)	-0.042 (0.095)	-0.035 (0.095)
-0.027 (0.017)	-0.027 (0.017)	$0.053 \\ (0.025)$	$0.044 \\ (0.025)$	0.028 (0.019)	0.026 (0.019)
-0.027 (0.016)	-0.027 (0.015)	$0.050 \\ (0.023)$	0.041 (0.023)	-0.020 (0.018)	-0.022 (0.017)
-0.027 (0.012)	-0.027 (0.012)	$0.010 \\ (0.018)$	$0.009 \\ (0.018)$	0.014 (0.014)	$0.014 \\ (0.014)$
$0.168 \\ (0.169)$	$0.168 \\ (0.166)$	-0.351 (0.249)	-0.435 (0.251)	0.317 (0.189)	0.292 (0.187)
$0.132 \\ (0.107)$	0.132 (0.107)	0.121 (0.155)	0.113 (0.157)	0.116 (0.121)	0.114 (0.121)
-0.177 (0.143)	-0.178 (0.142)	0.593 (0.204)	0.537 (0.206)	0.158 (0.159)	$0.142 \\ (0.158)$
-0.240 (0.225)	-0.239 (0.220)	0.937 (0.338)	1.063 (0.337)	-0.615 (0.259)	-0.579 (0.255)
	(1) -0.011 (0.040) -0.198 (0.115) 0.182 (0.077) -0.070 (0.036) 0.086 (0.042) 0.292 (0.051) -0.250 (0.084) -0.027 (0.016) -0.027 (0.016) -0.027 (0.012) 0.168 (0.169) 0.132 (0.107) -0.177 (0.143) -0.240	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

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

Blue Chip forecast revision:	Unemple	yment rate	Real GD	P growth	CPI in	flation
	(1)	(2)	(3)	(4)	(5)	(6)
Financial news (cont.)						
Δ yield curve slope fr. 13wks to beg of mo.	-0.017 (0.015)	-0.017 (0.015)	$0.030 \\ (0.022)$	0.030 (0.022)	$0.010 \\ (0.017)$	0.009 (0.017)
Δ yield curve slope fr. beg. of mo. to FOMC	-0.004 (0.039)	-0.004 (0.038)	-0.067 (0.057)	-0.073 (0.057)	-0.039 (0.044)	-0.041 (0.044)
Δ log prommodity fr. 13wks to beg of mo.	-0.191 (0.160)	-0.191 (0.159)	0.419 (0.231)	0.374 (0.234)	0.336 (0.182)	0.323 (0.181)
Δ log prommodity fr. beg. of mo. to FOMC	-0.513 (0.293)	-0.513 (0.293)	0.130 (0.425)	0.124 (0.431)	1.149 (0.327)	1.148 (0.328)
Monetary policy surprise						
target	0.126 (0.177)		$0.491 \\ (0.255)$		0.072 (0.198)	
path	0.083 (0.137)		-0.172 (0.200)		-0.098 (0.156)	
NS surprise		0.193 (0.212)		0.274 (0.313)		-0.030 (0.241)
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) and Schmeling, Schrimpf and Steffensen (2021) and 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 2019.¹

The results for these predictive regressions are reported in Table C.1. Because of the overlapping quarterly forecasts in monthly data, the residuals of the predictive regressions 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 paricipants and forecasters.

 $^{^{1}}$ 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)	$ \begin{array}{c} 1.474 \\ (1.051) \end{array} $	$ \begin{array}{c} 1.712 \\ (1.275) \end{array} $
Δ yield curve slope	-0.017 (0.068)	-0.123 (0.132)	-0.164 (0.201)	-0.148 (0.276)
Δ log p commodity	-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 \mathbb{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 are now known as Macroeconomic Advisers by IHS Markit. 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 currentquarter and next-quarter real GDP. Figure D.1 provides an example of their current-quarter GDP Tracking estimate for 2011Q1 from the company's public blog in April 2011.² Each month, the GDP Tracking report begins with a base Macroeconomic Advisers forecast for current-quarter real GDP growth. (Note that because real GDP for 2011Q1 is not released by the U.S. Bureau of Economic Analysis until the end of April 2011, it is still referred to as "current-quarter" GDP tracking by MA in April 2011.) 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 March 2011 came in substantially stronger than expected on April 13, 2011, MA revised up its forecast for 2011Q1 Personal Consumption Expenditures from 1.8 percent to 2.3 percent growth, implying an upward revision to their 2011Q1 real GDP growth forecast from 1.5 percent to 1.8 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 April 27, 2011, is not listed. Apparently, the FOMC announcement on that date was not informative for MA's current-quarter real GDP forecast at that time.

Of course, one might worry that April 2011 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.

²See http://macroadvisers.blogspot.com/2011/04/q1-gdp-advance-estimate-is-18-02-pp.html.

Figure D.1: Macroeconomic Advisers 2011Q1 Real GDP Tracking Estimate, April 2011

ADVISERS	MACROECONO ADVISERS	MIC	S	Irre	nt-(Juai	ter	GD	PT	raci	Current-Quarter GDP Tracking		Firs	t Qu	First Quarter 2011	20	11
April 28, 2011				Ш	WW	www.macroadvisers.com	croad	iviser	S.COI	_			Ш		314	314-721-47	1747
			GDP	<u>a</u>				Final	Sales	of D	Final Sales of Domestic Product	roduc	*			CIPI	Ы
		Reference			Total	H	nal Sal	es to D	omesti	Final Sales to Domestic Purchasers	asers		Net	Net Exports			
Release Title	Date	Month	Chng	% ch		Total	PCE	Struct.	E&S	Res	Gov. C&GI	Level	Chng	Exports	Imports	Level	Chng
MA Base Forecast	1-Apr-11		88	2.1	1.1	9.0	1.6	-18.6	9.7	4.8	-3.8	-382	16	14.4	8.4	47	31
Man. Ship, Inv, Orders	31-Mar-11	Feb	na	na	па	na	na	па	na	па	na	na	na	na	na	na	na
Construction	1-Apr-11	Feb	na	na	па	na	na	na	па	na	na	na	па	па	na	na	na
Unit Vehicle Sales	1-Apr-11	Mar	na	na	па	na	na	па	na	па	na	na	Па	па	na	na	na
Chain Store Sales	7-Apr-11	Mar	71	2.1	1.1	0.7	1.8	-18.6	7.8	4.8	-3.8	-382	16	14.4	8.4	47	31
Wholesale Trade	8-Apr-11	Feb	71	2.1	1.1	0.7	1.8	-18.6	7.8	4.8	-3.8	-382	16	14.4	8.4	47	31
International Trade	12-Apr-11	Feb	20	1.5	0.3	9.0	1.8	-18.6	8.4	4.8	-3.8	408	-10	5.7	6.7	99	39
Retail Sales	13-Apr-11	Mar	28	1.8	9.0	1.0	2.3	-18.6	8.4	4.8	-3.8	408	-10	5.7	6.7	52	35
Business Inventories	13-Apr-11	Feb	48	1.5	9.0	1.0	2.3	-18.6	8.4	4.8	-3.8	-408	-10	5.7	6.7	43	56
Consumer Price Index	15-Apr-11	Mar	48	1.4	9.0	0.9	2.2	-18.6	8.4	4.8	-3.8	408	-10	5.7	6.7	43	28
Industrial Production	15-Apr-11	Mar	47	1.4	0.5	0.9	2.2	-18.6	8.3	4.8	-3.8	408	-10	5.7	6.7	44	28
Boeing Deliveries & Ords	15-Apr-11	Mar	48	1.4	0.5	0.9	2.2	-18.6	8.1	4.8	-3.8	409	-11	5.5	6.7	44	28
Housing Starts	19-Apr-11	Mar	48	1.4	0.5	0.9	2.2	-18.6	8.1	5.2	-3.8	-408	-11	5.5	6.7	44	28
Existing Home Sales	20-Apr-11	Mar	47	1.4	0.5	6.0	2.2	-18.6	8.1	5.8	-3.8	408	-11	5.5	6.7	44	28
New Home Sales	25-Apr-11	Mar	47	1.4	0.5	0.9	2.2	-18.8	8.1	6.2	-3.8	409	-11	5.5	6.7	44	28
Durable Goods Orders	27-Apr-11	Mar	25	1.6	0.5	6.0	2.2	-18.6	8.1	6.2	-3.8	409	-11	6.9	7.0	49	32
CQ Forecast as of	27-Apr-11		25	1.6	0.5	6.0	2.2	-18.6	8.1	6.2	-3.8	409	-11	6.5	7.0	49	32
BEA's Advance Est.	28-Apr-11		28	1.8	8.0	6.0	2.7	-21.7	11.6	4.1	-5.2	400	-2	4.9	4.4	44	28

Macroeconomic Advisers public blog,

q1-gdp-advance-estimate-is-18-02-pp.html.

Source:

Inv, and Ords: These data were available prior to completion of the base forecast and, hence, incorporated therein

Construction: These data were available prior to completion of the base forecast and, hence, incorporated therein. Unit Vehicle Sales: These data were available prior to completion of the base forecast and, hence, incorporated therein.

Chain Store Sales: ICSC chain-store sales rose sharply in March, suggesting more growth of PCE in March than we previously expected. Wholesale Trade: Nonautomotive wholesale inventories rose in line with expectations in February and were little revised for January.

International Trade: Net exports were well below expectations through February.

Retail Sales: While core sales rose less than expected in March, large upward revisions in previous months imply more growth of core sales in the first quarter than we previously expected. Business Inventories: Nonautomotive retail inventories rose much less than expected in February. http://macroadvisers.blogspot.com/2011/04/

Consumer Price Index: The components of the CPI that we use to deflate retail sales came in higher than expected. This implies less real retail sales and PCE in Q1 than we expected. Industrial Production: Vehicle assemblies were above expectations in March, suggesting more inventory investment in Q1 than previously estimated. Boeing delivered 43 civilian aircraft in March, 2 fewer than expected, and at lower average value that assumed. Housing Starts: Starts and permits were above expectations in March, suggesting more brokers' commissions in Q1 than previously thought. Existing Home sales rose more than expected in March, suggesting more brokers' commissions in Q1 than previously assumed. New Home Sales: Bow home sales through March were above expectations, suggesting slightly higher brokers' commissions in Q1 than previously assumed. Durable Goods Orders: While shipments of nondefense capital goods ex air were close to expectations, manufacturing inventories exceeded expectations, implying more CIPI in Q1.

Explanatory Note: This table summarizes how the monthly data affect our current-quarter forecast of real GDP growth. Components labeled "Level" are expressed as billions of channed 2005 dotions at annual rades. Components labeled "Change in the annual rades in the advanced levels of the man component grown in the present mode-based forecasts the component grown for the base inchanges the proposed grown and advanced grown rade as a manualizate forecast for the man of the base inchanges the proposed grown in the case of the proposed grown and advanced grown in the case of the proposed forecast inchanges the proposed grown in the case of the proposed grown is a second grown in the case of the proposed grown is a second grown in the case of the proposed grown in the case of the grown in the grown in the grown in the case of the grown in grown in the grown

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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		RM	SEs	E	ncompassir	ng regr	essions
(quarters)	GB	BC	$H_0: GB = BC$	GB	BC	\mathbb{R}^2	$H_0: GB = BC$
(A) Unemploy	ment rat	ie e					
0	0.20	0.22	.280	$0.65 \\ (.117)$	0.34 (.117)	.99	.194
1	0.39	0.41	.322	0.77 $(.209)$	0.21 (.213)	.95	.190
2	0.59	0.61	.660	0.74 $(.320)$	0.23 $(.312)$.88	.417
3	0.76	0.79	.644	0.81 (.414)	0.13 $(.404)$.79	.404
0-3 avg.	0.46	0.47	.539	0.79 (.282)	0.18 $(.276)$.93	.276
(B) Real GDF	growth						
0	2.17	2.32	.032	1.07 $(.249)$	-0.10 (.348)	.50	.047
1	2.94	2.80	.247	-0.09 (.515)	1.09 (.619)	.19	.284
2	2.87	2.89	.931	$0.64 \\ (.495)$	-0.20 (.854)	.07	.508
3	2.98	2.89	.681	0.18 $(.514)$	-0.19 (.882)	.00	.769
0-3 avg.	1.83	1.78	.675	0.38 $(.531)$	$0.55 \\ (.724)$.27	.892
(C) CPI inflat	ion						
0	1.10	1.40	.102	0.98 (.106)	-0.11 (.098)	.86	.000
1	2.21	2.15	.580	$0.73 \\ (.250)$	-0.06 (.314)	.46	.160
2	2.07	1.94	.123	0.16 $(.236)$	0.58 $(.352)$.37	.468
3	2.02	2.04	.841	$0.64 \\ (.345)$	0.12 $(.463)$.36	.517
0-3 avg.	1.21	1.20	.884	0.89 $(.245)$	-0.16 (.270)	.73	.038

Same as Table 8 except sample runs from 1980-2013 (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		RMS	SEs	E	ncompassir	ıg regr	essions
(quarters)	GB	BC	$H_0: GB = BC$	GB	BC	\mathbb{R}^2	$H_0: GB = BC$
(A) Unemploy	ment rat	ie e					
0	0.25	0.23	.097	0.26 $(.169)$	$0.73 \\ (.172)$.98	.166
1	0.44	0.42	.235	$0.15 \\ (.338)$	0.84 $(.345)$.94	.318
2	0.63	0.61	.535	$0.30 \\ (.469)$	$0.68 \\ (.467)$.87	.685
3	0.81	0.80	.919	$0.53 \\ (.559)$	0.41 $(.548)$.77	.915
0-3 avg.	0.50	0.48	.490	0.30 $(.462)$	$0.67 \\ (.459)$.91	.688
(B) Real GDF	growth						
0	2.50	2.44	.405	$0.20 \\ (.333)$	$0.85 \\ (.408)$.39	.369
1	2.81	2.69	.174	-0.04 (.397)	$0.95 \\ (.475)$.16	.235
2	2.99	2.93	.736	0.37 $(.517)$	-0.04 (.845)	.02	.749
3	3.00	2.96	.871	$0.30 \\ (.551)$	-0.26 (.879)	.01	.667
0-3 avg.	1.88	1.80	.512	0.24 $(.555)$	$0.65 \\ (.752)$.23	.743
(C) CPI inflat	tion						
0	1.43	1.54	.478	$0.77 \\ (.159)$	0.11 $(.152)$.77	.030
1	2.23	2.03	.038	0.31 $(.302)$	$0.42 \\ (.422)$.41	.872
2	2.10	2.00	.140	0.00 (.321)	0.81 (.456)	.37	.292
3	2.06	2.09	.719	0.64 (.389)	0.12 (.504)	.34	.555
0-3 avg.	1.25	1.19	.520	0.60* (.336)	0.18 (.353)	.70	.535

Same as Table 8, except that BC forecasts are always after the GB forecast, giving BC an informational advantage over GB. Sample runs from 1980-2013 (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		RM	SEs	E	ncompassir	ıg regr	essions
(quarters)	GB	BC	$H_0: GB = BC$	GB	BC	\mathbb{R}^2	$H_0: GB = BC$
(A) Unemploy	ment rat	ie e					
0	0.17	0.21	.002	0.82 (.105)	$0.16 \\ (.105)$.99	.002
1	0.35	0.41	.005	1.07 $(.158)$	-0.11 (.162)	.96	.000
2	0.55	0.60	.153	1.02 (.212)	-0.07 (.207)	.90	.009
3	0.73	0.80	.266	1.06 (.291)	-0.14 (.277)	.81	.034
0-3 avg.	0.42	0.47	.064	1.09 (.175)	-0.14 (.173)	.94	.000
(B) Real GDF	growth						
0	2.10	2.35	.004	1.23 $(.158)$	-0.33 (.221)	.55	.000
1	2.82	2.75	.578	0.33 $(.387)$	0.62 (.466)	.19	.715
2	2.88	2.89	.941	$0.63 \\ (.430)$	-0.19 (.795)	.07	.479
3	3.00	2.91	.694	0.21 (.471)	-0.10 (.805)	.01	.783
0-3 avg.	1.77	1.74	.792	$0.50 \\ (.387)$	0.41 $(.550)$.29	.918
(C) CPI inflat	tion						
0	0.95	1.30	.022	1.01 (.134)	-0.13 (.136)	.89	.000
1	1.97	1.95	.897	0.77 $(.254)$	-0.11 (.298)	.51	.107
2	2.18	2.03	.070	0.01 (.306)	0.78 (.395)	.36	.264
3	2.08	2.07	.926	0.35 $(.445)$	0.40 (.588)	.33	.958
0-3 avg.	1.16	1.12	.617	0.70 (.210)	0.06 (.268)	.74	.171

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

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