Do firm expectations respond to monetary policy announcements?

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Motivation

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  - But, what about households and firms?

This paper in a nutshell

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- We exploit *within month variation* of responses to the **Decision Maker Panel (DMP)** survey questions
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  - Effects of bank rate changes are highly non-linear wrt the size of the adjustments
  - **Newspaper coverage** of the BoE' decisions is important to reach out to the general public

Related literature

- **Monetary policy announcements on expectations**: Boneva et al. (2016), Lamla and Vinogradov (2019), Enders et al. (2019), Bottone and Rosolia (2019), Lewis et al. (2019), Claus and Nguyen (2020), Rast (2021), De Fiore et al. (2022), Binder et al. (2022), Ferrando and Forti Grazzini (2023)...

    - *Firms' expectations respond to changes in interest rate*

- **Firms vs Households vs Financial Markets**: Andre et al. (2022b), Coibion (2012), Reis (2020), Andre et al. (2022a), Candia et al. (2024), Mikosch et al. (2022), Mikosch et al. (2024)...

    - *Firms do not respond to monetary announcements as markets do*

- **DMP**: Bloom et al. (2018), Bloom et al. (2019a), Bloom et al. (2019b), Altig et al. (2020), Yotzov et al. (2024) ...

Data

Decision Maker Panel (DMP)

- The DMP was launched in August 2016 by the BoE, the University of Nottingham and Stanford University
- Representative of the U.K. business population
- CFO from small, medium, and large U.K. companies operating in a broad range of sectors respond to questionnaires sent to them every month
- 8,000 firms and around 3,000 firms responding in any given month
- Firms' expectations are computed from the **DMP**
- DMP is limited in time but covers several monetary and economic events
- Our sample starts in November 2016 and stops in December 2023

DMP survey questions

Focus on the **following questions** from the survey:

- *Looking ahead, from now to 12 months from now, what approximate % change in your AVERAGE PRICE would you assign to each of the following scenarios? (with five scenarios: lowest, low, middle, high, highest provided)*

- *Please assign a percentage likelihood (probability) to the % changes in your AVERAGE PRICES you entered*

Firms' expectations

- Each respondent i supplies future price growth rates Δz

- For each variable provided **five values** at support points $j = 1, 2, 3, 4, 5$; $\Delta z_{i,t,j}$

- Along with the associated probabilities, $p_{i,t,j}$

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- Calculate the respondent's mean expectation of the growth rates, for each period, as:

$$\text{Mean}_{i,t}(\Delta z_{i,t,j}) = \sum_{j=1}^{N} p_{i,t,j} \cdot \Delta z_{i,t,j}$$

- Similarly, compute the median, left tail and right tail expectations of the price growth

BoE base rate, CPI Inflation and Own Expected Price Growth
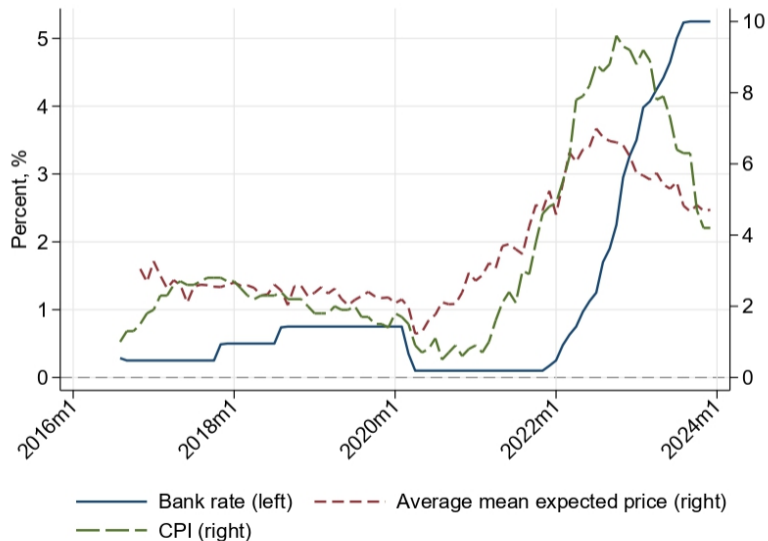
Monetary policy shocks

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- **High-frequency monetary policy surprises**
- Baseline from Cesa-Bianchi et al. (2020) computed as the changes in the 3-month Sterling future in a 30-minutes window

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- Several robustness checks:
  - ▶ Isolating the Target component
  - ▶ Information-cleaned shocks
  - ▶ News-cleaned shocks
  - ▶ Cleaned with the "poor man" approach by Jarociński and Karadi (2020)

▶ Shock validation   ▶ Time series
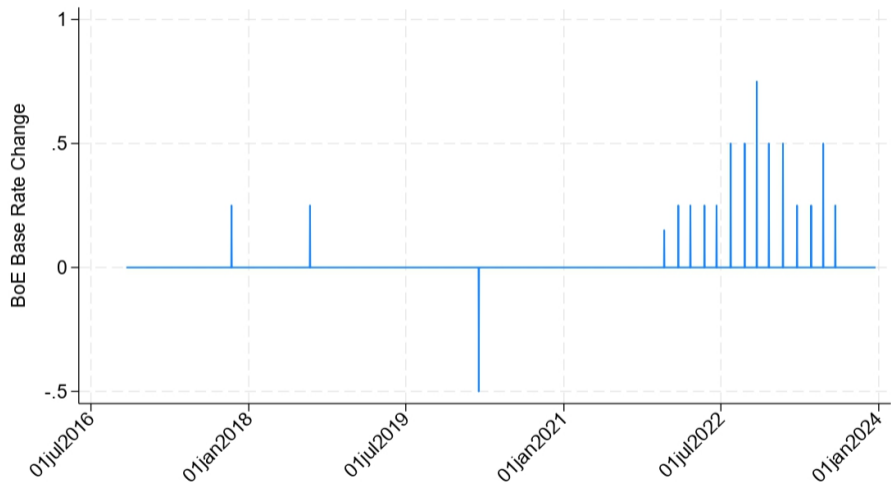
Monetary policy surprises, the changes in the 3-month Sterling future

Empirical Strategy

MPC Announcement

Control Group
$(t - h)$

Treatment
Group $(t + h)$

Filing before announcement

Filing after announcement

DMP Wave
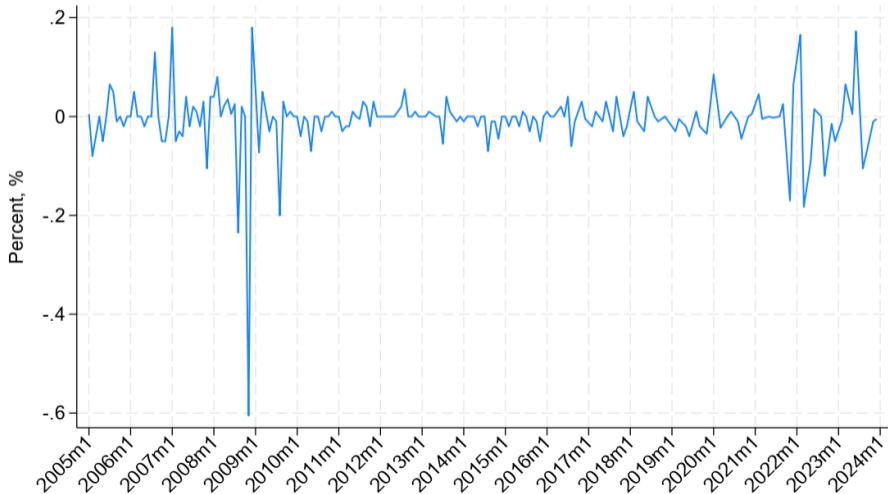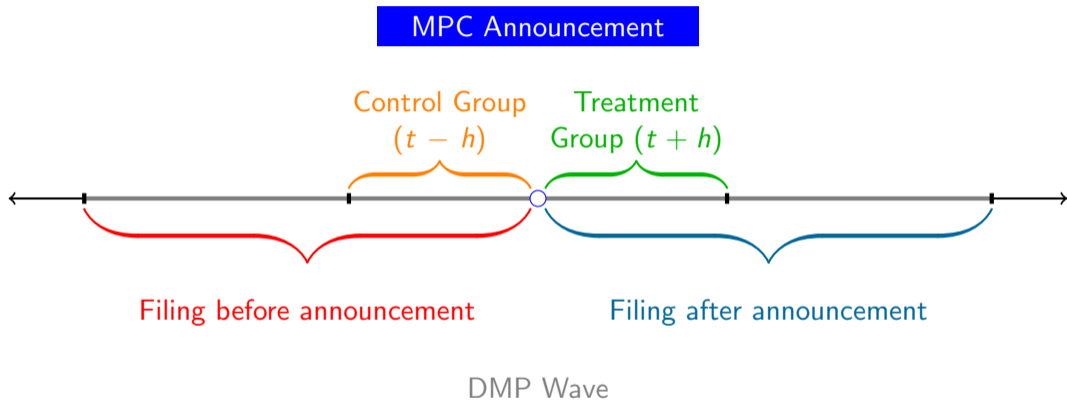
The survey allows us to exploit cross-sectional variation in subjective firms' expectations

DMP Responses within month
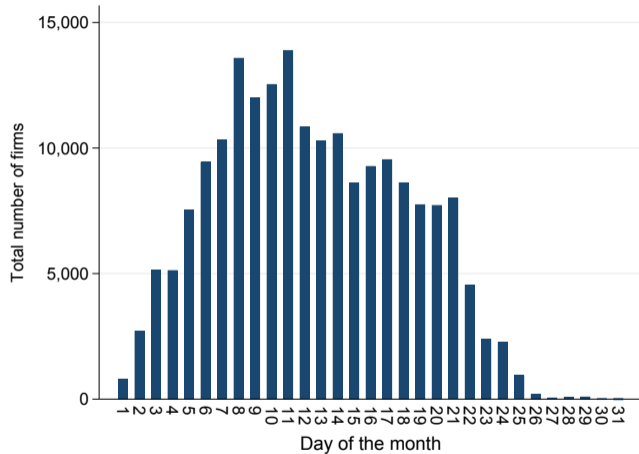
Responses are mainly filed in the second and third week of the month

Empirical specification

- The baseline empirical specification is:

$$y_{i,t} = \alpha + \delta D_{i,t} + \beta D_{i,t}\mathbf{s_t} + \gamma X_{i,t} + \epsilon_{i,t}$$

- $y_{i,t}$ is one of the **moments** of the expected price growth distribution - i.e., mean, median, or tails

- $D_{i,t}$ is a dummy equal to 1 if the firm responds after the announcement and 0 otherwise

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- Robust standard errors

- β capture the average effect of a 25bps monetary policy shock on $y_{i,t}$

What monetary policy shocks do firms respond to?

Policy rate changes, actual and information-cleaned

	(1) Mean price	(2) Median price	(3) Left tail price	(4) Right tail price	(5) Mean price	(6) Median price	(7) Left tail price	(8) Right tail price
BR × D MPC	-0.354	-0.402*	-0.447**	-0.302				
	(0.228)	(0.236)	(0.222)	(0.262)				
BR (Info) × D MPC					-0.793**	-0.871**	-0.824**	-0.821**
					(0.349)	(0.351)	(0.333)	(0.400)
D MPC	-0.525*	-0.385	-0.355	-0.643*	-1.025**	-0.929**	-0.845**	-1.184**
	(0.299)	(0.305)	(0.280)	(0.348)	(0.414)	(0.413)	(0.375)	(0.482)
Past price growth	0.185***	0.166***	0.146***	0.215***	0.185***	0.166***	0.146***	0.215***
	(0.0210)	(0.0214)	(0.0216)	(0.0231)	(0.0210)	(0.0214)	(0.0216)	(0.0230)
Medium (50-250)	-0.565***	-0.332**	-0.249*	-0.824***	-0.562***	-0.328**	-0.246*	-0.820***
	(0.147)	(0.150)	(0.145)	(0.165)	(0.147)	(0.150)	(0.145)	(0.165)
Large (above 250)	-0.966***	-0.633***	-0.415***	-1.435***	-0.965***	-0.632***	-0.413***	-1.434***
	(0.155)	(0.159)	(0.158)	(0.173)	(0.155)	(0.159)	(0.158)	(0.173)
Exporter	-0.132	-0.163	-0.276**	0.00187	-0.127	-0.158	-0.272**	0.00710
	(0.126)	(0.128)	(0.125)	(0.140)	(0.126)	(0.128)	(0.125)	(0.140)
Observations	6664	6664	6664	6664	6664	6664	6664	6664
R^2	0.183	0.161	0.140	0.191	0.183	0.161	0.140	0.192
Wave FE	YES	YES	YES	YES	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES	YES	YES	YES	YES
Number of meetings	48	48	48	48	48	48	48	48
BR change meetings	13	13	13	13				

	(1)	(2)	(3)	(4)
	Mean price	Median price	Left tail price	Right tail price
Surprise x Dummy MPC	1.897	1.694	1.087	2.469*
	(1.277)	(1.281)	(1.232)	(1.417)
Dummy MPC	-0.774**	-0.672*	-0.642**	-0.891**
	(0.343)	(0.347)	(0.317)	(0.400)
Past price growth	0.184***	0.164***	0.143***	0.214***
	(0.0211)	(0.0214)	(0.0216)	(0.0232)
Medium (50-250)	-0.634***	-0.406***	-0.320**	-0.898***
	(0.149)	(0.151)	(0.146)	(0.168)
Large (above 250)	-1.031***	-0.710***	-0.477***	-1.511***
	(0.157)	(0.159)	(0.158)	(0.176)
Exporter	-0.165	-0.193	-0.306**	-0.0338
	(0.129)	(0.131)	(0.128)	(0.144)
Constant	4.328***	3.936***	2.840***	5.781***
	(0.292)	(0.298)	(0.270)	(0.345)
Observations	6287	6287	6287	6287
R^2	0.186	0.164	0.141	0.198
Wave FE	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES
Number of meetings	47	47	47	47

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Non-linear effects of actual rate changes

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- Then we consider a time-dependent cut of the data:
  - The **rate cut** of 50 basis points on March 11, 2020 in response to the COVID pandemic
  - The **substantial rate hikes** at the peak of the tightening cycle of 50 basis points and above
    - from July 2022 to February 2023
  - The beginning and end of the cycle mainly characterized by **rate hikes** of 15 and 25 bps
    - from December 2021 to June 2022 and from March 2023 to December 2023

Policy rate changes, large vs small adjustments

	(1) Mean price	(2) Median price	(3) Left tail price	(4) Right tail price
BR change ($<|50bps|$) x Dummy mpc	0.549	0.570	0.679	0.501
	(0.659)	(0.685)	(0.647)	(0.751)
BR change ($>=|50bps|$) x Dummy mpc	-0.603**	-0.669**	-0.757***	-0.523
	(0.305)	(0.308)	(0.289)	(0.351)
Dummy MPC	-0.921**	-0.811**	-0.849**	-0.995**
	(0.416)	(0.409)	(0.379)	(0.485)
Past price growth	0.185***	0.166***	0.146***	0.215***
	(0.0210)	(0.0214)	(0.0216)	(0.0230)
Constant	4.297***	3.910***	2.888***	5.690***
	(0.339)	(0.340)	(0.310)	(0.400)
Observations	6664	6664	6664	6664
R^2	0.183	0.161	0.140	0.192
Wave FE	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES
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The Bank of England's tightening cycle

	(1) Mean price	(2) Median price	(3) Left tail price	(4) Right tail price
Covid BR change	-0.902***	-0.978***	-0.923***	-0.964**
	(0.330)	(0.333)	(0.316)	(0.381)
Bookends cycle BR changes	0.890	0.872	0.606	1.203*
	(0.568)	(0.577)	(0.535)	(0.650)
Peak cycle BR changes	-1.736**	-1.718*	-1.542*	-1.980**
	(0.868)	(0.885)	(0.845)	(0.956)
Dummy MPC	-1.338***	-1.223***	-1.047***	-1.626***
	(0.423)	(0.414)	(0.378)	(0.495)
Past price growth	0.186***	0.166***	0.146***	0.215***
	(0.0210)	(0.0214)	(0.0216)	(0.0230)
Constant	4.812***	4.403***	3.220***	6.384***
	(0.398)	(0.399)	(0.370)	(0.460)
Observations	6664	6664	6664	6664
R^2	0.184	0.162	0.141	0.193
Wave FE	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES
Number of meetings	48	48	48	48
BR change meetings	13	13	13	13

Robustness

- The role of newspaper `▸ Go`
- Heterogeneity across firms' characterstics `▸ Go`
- Different window size `▸ Go`
- Testing identification `▸ Go`
- Different level of saturation `▸ Go`
- Distinguish by size of shocks `▸ Go`
- Distinguish by sign of shocks `▸ Go`

Conclusion

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- We compare responses to survey before and after MPC announcements
- Find that firms' expected price growth respond to announcements of policy rate changes
- Results mainly driven by changes in the **left tail** of the distribution
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	(1) Infl. swaps 1y	(2) Infl. swaps 1y	(3) Infl. swaps 2y	(4) Infl. swaps 2y	(5) Infl. swaps 5-2y	(6) Infl. swaps 5-2y
Dummy MPC	0.00507	0.00976	0.0209**	0.0340***	-0.00870*	-0.00362
	(0.0179)	(0.0196)	(0.00912)	(0.00962)	(0.00473)	(0.00507)
BR change x Dummy MPC	-0.00255		0.0240		0.0111	
	(0.0301)		(0.0149)		(0.00770)	
Surprise x Dummy MPC		-0.138		-0.0766**		0.000248
		(0.0918)		(0.0381)		(0.0253)
Dummy ONS Infl.	0.0348	0.0254	-0.00693	-0.0125	0.00119	-0.00152
	(0.0244)	(0.0235)	(0.0137)	(0.0129)	(0.00942)	(0.00921)
CPI surprise x Dummy ONS	0.810***	0.888***	0.374***	0.435***	-0.00296	0.00847
	(0.0970)	(0.111)	(0.0591)	(0.0632)	(0.0382)	(0.0398)
Dummy ONS Empl.	-0.137***	-0.128***	-0.0793***	-0.0798***	-0.0134	-0.0112
	(0.0284)	(0.0217)	(0.0147)	(0.0121)	(0.0102)	(0.0107)
Unemp. surprise x Dummy ONS Empl.	0.552***	0.568***	-0.0255	0.0102	-0.141***	-0.121***
	(0.117)	(0.106)	(0.0575)	(0.0493)	(0.0370)	(0.0373)
Wage surprise x Dummy ONS Empl.	0.481***	0.456***	0.00539	-0.0110	-0.0523	-0.0652
	(0.123)	(0.116)	(0.0468)	(0.0414)	(0.0384)	(0.0396)
Constant	4.055***	4.086***	3.837***	3.856***	3.724***	3.728***
	(0.0108)	(0.0106)	(0.00525)	(0.00511)	(0.00285)	(0.00287)
Observations	521	512	521	512	521	512
Wave FE	YES	YES	YES	YES	YES	YES
Number of meetings	57	57	57	57	57	57
BR change meetings	17		17		17	

	(1) Infl. swaps 1y	(2) Infl. swaps 1y	(3) Infl. swaps 2y	(4) Infl. swaps 2y	(5) Infl. swaps 5-2y	(6) Infl. swaps 5-2y
Dummy MPC	0.0115	0.00853	0.0350***	0.0336***	-0.00366	-0.00406
	(0.0190)	(0.0193)	(0.00956)	(0.00953)	(0.00530)	(0.00518)
Surprise (Info clean) × Dummy MPC	-0.236**		-0.124***		-0.00589	
	(0.102)		(0.0403)		(0.0251)	
Surprise (News clean) × Dummy MPC		-0.217**		-0.106***		-0.0207
		(0.0942)		(0.0367)		(0.0206)
Dummy ONS Infl.	0.0299	0.0276	-0.0104	-0.0119	-0.00124	-0.000698
	(0.0235)	(0.0227)	(0.0128)	(0.0126)	(0.00917)	(0.00927)
CPI surprise × Dummy ONS	0.905***	0.826***	0.442***	0.400***	0.0106	0.00879
	(0.104)	(0.0900)	(0.0609)	(0.0564)	(0.0385)	(0.0371)
Dummy ONS Empl.	-0.134***	-0.130***	-0.0826***	-0.0801***	-0.0116	-0.0123
	(0.0212)	(0.0214)	(0.0121)	(0.0119)	(0.0106)	(0.0105)
Unemp. surprise × Dummy ONS Empl.	0.568***	0.605***	0.0108	0.0293	-0.122***	-0.119***
	(0.110)	(0.113)	(0.0484)	(0.0499)	(0.0370)	(0.0366)
Wage surprise × Dummy ONS Empl.	0.471***	0.440***	-0.00355	-0.0206	-0.0641	-0.0641
	(0.120)	(0.114)	(0.0385)	(0.0416)	(0.0395)	(0.0395)
Constant	4.086***	4.086***	3.856***	3.856***	3.728***	3.728***
	(0.0106)	(0.0106)	(0.00507)	(0.00510)	(0.00287)	(0.00287)
Observations	512	512	512	512	512	512
Wave FE	YES	YES	YES	YES	YES	YES
Number of meetings	57	57	57	57	57	57

Alternative monetary policy shocks `▸ Back`

	(1) Median price	(2) Median price	(3) Median price	(4) Median price	(5) Median price	(6) Median price	(7) Median price
Dummy MPC	-0.645*	-0.725**	-0.663*	-0.668*	-0.771**	-0.675*	-0.665*
	(0.358)	(0.350)	(0.346)	(0.347)	(0.372)	(0.346)	(0.345)
Surprise (Info clean) × Dummy MPC	0.706						
	(1.345)						
Surprise (News clean) × Dummy MPC		1.722					
		(1.271)					
Surprise (JK clean) × Dummy MPC			1.266				
			(1.277)				
Target × Dummy MPC				0.593			
				(1.601)			
Target (Info clean) × Dummy MPC					-0.893		
					(1.746)		
Target (News clean) × Dummy MPC						0.742	
						(1.630)	
Target (JK clean) × Dummy MPC							0.777
							(1.640)
Observations	6287	6287	6287	6287	6287	6287	6287
R^2	0.163	0.164	0.163	0.163	0.163	0.163	0.163
Wave FE	YES	YES	YES	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES	YES	YES	YES
Number of meetings	47	47	47	47	47	47	47

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Predicted probability of responding after the announcement
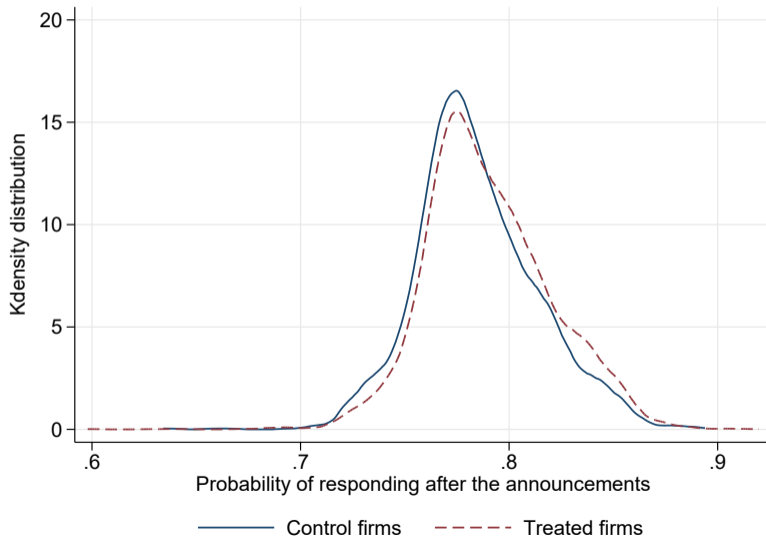
	(1) Mean price	(2) Median price	(3) Left tail price	(4) Right tail price
Dummy MPC	-0.394	-0.236	-0.190	-0.531
	(0.287)	(0.293)	(0.273)	(0.333)
Past price growth	0.185***	0.166***	0.146***	0.215***
	(0.0210)	(0.0214)	(0.0216)	(0.0231)
Medium (50-250)	-0.566***	-0.333**	-0.250*	-0.824***
	(0.147)	(0.150)	(0.145)	(0.165)
Large (above 250)	-0.966***	-0.633***	-0.414***	-1.435***
	(0.155)	(0.159)	(0.158)	(0.173)
Exporter	-0.134	-0.166	-0.279**	-0.000211
	(0.126)	(0.128)	(0.125)	(0.140)
Constant	3.870***	3.439***	2.352***	5.318***
	(0.255)	(0.267)	(0.248)	(0.300)
Observations	6664	6664	6664	6664
R^2	0.183	0.160	0.139	0.191
Wave FE	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES
Number of meetings	47	47	47	47

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
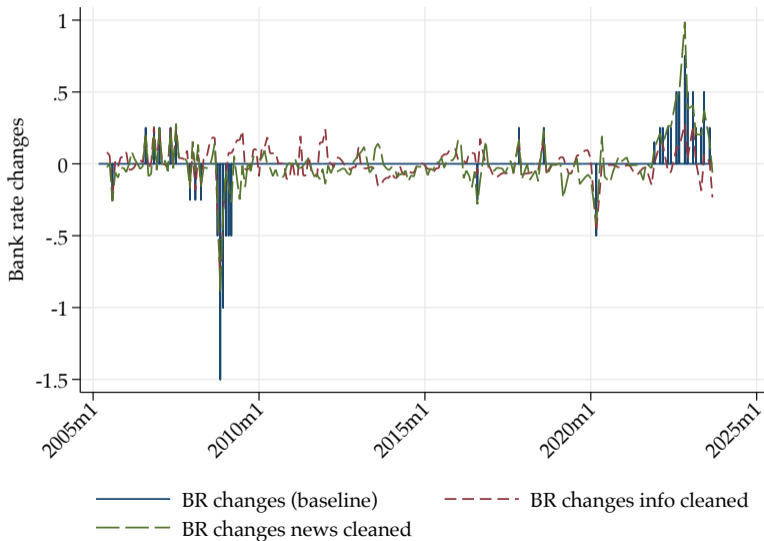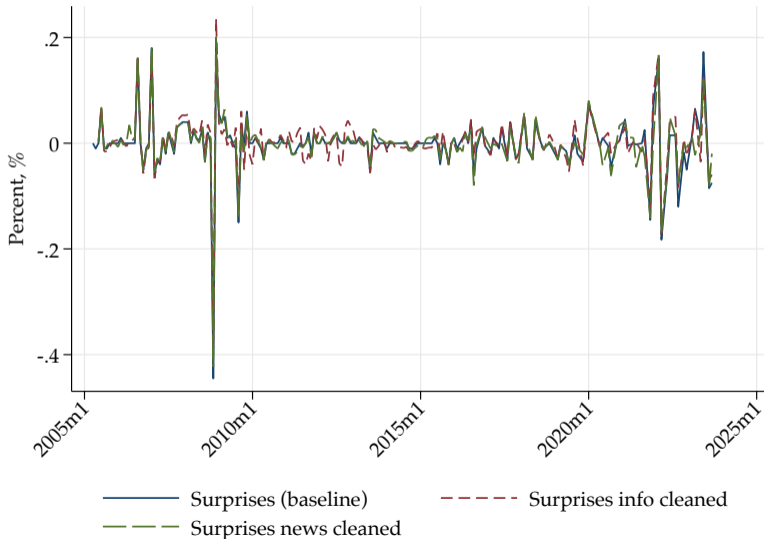
- We collect data on newspaper coverage from GDELT

- We collect data on newspaper coverage from GDELT
- Focus on the percentage of total news articles mentioning specific **keywords**:
  - ▸ `Bank of England`
  - ▸ `Inflation`
  - ▸ `Bank of England, Policy Rate` or `Interest Rate`
  - ▸ `Inflation, Prices` or `Consumer Price Index`.

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  - ▸ `Inflation`
  - ▸ `Bank of England`, `Policy Rate` or `Interest Rate`
  - ▸ `Inflation`, `Prices` or `Consumer Price Index`.
- Evaluate the relationship between monetary policy announcements and media coverage
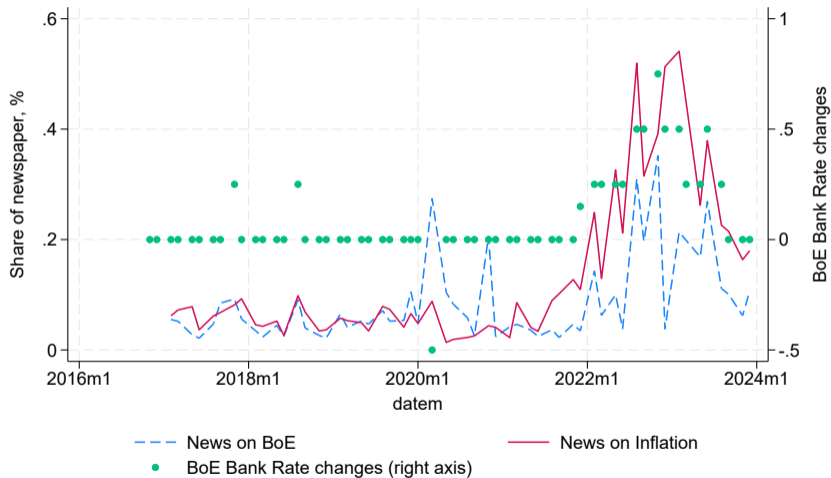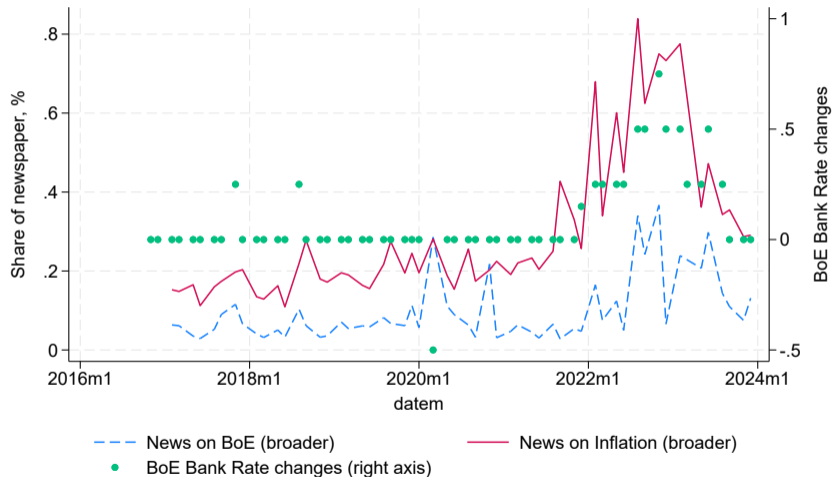
Legend:
- – – News on BoE (broader)
- —— News on Inflation (broader)
- ● BoE Bank Rate changes (right axis)

X-axis: datem (2016m1, 2018m1, 2020m1, 2022m1, 2024m1)
Left Y-axis: Share of newspaper, %
Right Y-axis: BoE Bank Rate changes

MPC announcements and newspaper coverage Back

	(1) News on BoE	(2) News on Infl.	(3) News on BoE (broader)	(4) News on Infl. (broader)
Dummy MPC	0.0107^{***}	-0.00402	0.00722^{*}	0.00113
	(0.00393)	(0.00510)	(0.00430)	(0.00766)
Abs. BR change × Dummy MPC	0.0241^{***}	0.0289^{***}	0.0248^{***}	0.0295^{**}
	(0.00852)	(0.0100)	(0.00891)	(0.0128)
Abs. Surprise × Dummy MPC	0.0344	0.0348	0.0477^{*}	0.0592
	(0.0245)	(0.0327)	(0.0266)	(0.0497)
Constant	0.0235^{***}	0.0783^{***}	0.0351^{***}	0.229^{***}
	(0.00156)	(0.00288)	(0.00176)	(0.00416)
Observations	554	554	554	554
R^2	0.491	0.816	0.503	0.835
Wave FE	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES
Number of meetings	56	56	56	56

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

High-frequency surprises and firms' expectations, with different levels of saturation `▸ Back`

	(1) Median price	(2) Left tail price	(3) Median price	(4) Left tail price	(5) Median price	(6) Left tail price
Surprise × Dummy MPC	1.804	1.207	1.694	1.087	0.858	0.253
	(1.286)	(1.236)	(1.281)	(1.232)	(1.412)	(1.430)
Dummy MPC	-0.671*	-0.651**	-0.672*	-0.642**	-0.627*	-0.537*
	(0.350)	(0.319)	(0.347)	(0.317)	(0.332)	(0.310)
Past price growth	0.167***	0.147***	0.164***	0.143***	0.160***	0.142***
	(0.0214)	(0.0217)	(0.0214)	(0.0216)	(0.0218)	(0.0221)
Medium (50-250)	-0.423***	-0.321**	-0.406***	-0.320**	-0.444***	-0.334**
	(0.151)	(0.146)	(0.151)	(0.146)	(0.153)	(0.150)
Large (above 250)	-0.649***	-0.390**	-0.710***	-0.477***	-0.725***	-0.476***
	(0.157)	(0.156)	(0.159)	(0.158)	(0.163)	(0.161)
Exporter	-0.256**	-0.361***	-0.193	-0.306**	-0.165	-0.268**
	(0.116)	(0.114)	(0.131)	(0.128)	(0.133)	(0.130)
Constant	3.950***	2.839***	3.936***	2.840***	3.913***	2.743***
	(0.297)	(0.270)	(0.298)	(0.270)	(0.286)	(0.267)
Observations	6287	6287	6287	6287	6244	6244
R^2	0.157	0.132	0.164	0.141	0.228	0.201
Wave FE	YES	YES	YES	YES	NO	NO
Sector FE	NO	NO	YES	YES	NO	NO
Wave × Sector FE	YES	NO	NO	NO	YES	YES
ONS controls	YES	YES	YES	YES	YES	YES
Number of meetings	47	47	47	47	47	47

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Bank rate changes and firms' expectations, with different levels of saturation ▸Back

	(1) Median price	(2) Left tail price	(3) Median price	(4) Left tail price	(5) Median price	(6) Left tail price
BR change × Dummy MPC	-0.397*	-0.448**	-0.402*	-0.447**	-0.382	-0.390*
	(0.236)	(0.221)	(0.236)	(0.222)	(0.242)	(0.230)
Dummy MPC	-0.387	-0.365	-0.385	-0.355	-0.327	-0.245
	(0.306)	(0.281)	(0.305)	(0.280)	(0.296)	(0.279)
Past price growth	0.168***	0.149***	0.166***	0.146***	0.161***	0.145***
	(0.0213)	(0.0216)	(0.0214)	(0.0216)	(0.0217)	(0.0219)
Medium (50-250)	-0.356**	-0.257*	-0.332**	-0.249*	-0.383**	-0.278*
	(0.149)	(0.144)	(0.150)	(0.145)	(0.150)	(0.146)
Large (above 250)	-0.597***	-0.354**	-0.633***	-0.415**	-0.660***	-0.430***
	(0.155)	(0.153)	(0.159)	(0.158)	(0.160)	(0.158)
Exporter	-0.241**	-0.345***	-0.163	-0.276**	-0.137	-0.239*
	(0.113)	(0.111)	(0.128)	(0.125)	(0.128)	(0.125)
Constant	3.709***	2.636***	3.678***	2.619***	3.671***	2.533***
	(0.299)	(0.272)	(0.304)	(0.276)	(0.294)	(0.274)
Observations	6664	6664	6664	6664	6621	6621
R^2	0.156	0.133	0.161	0.140	0.226	0.201
Wave FE	YES	YES	YES	YES	NO	NO
Sector FE	NO	NO	YES	YES	NO	NO
Wave × Sector FE	NO	NO	NO	NO	YES	YES
ONS controls	YES	YES	YES	YES	YES	YES
Number of meetings	48	48	48	48	48	48

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

	(1) Median price	(2) Left tail price	(3) Median price	(4) Left tail price	(5) Median price	(6) Left tail price
BR change (Info clean) x Dummy MPC	-0.868**	-0.831**	-0.871**	-0.824**	-0.800**	-0.692**
	(0.349)	(0.330)	(0.351)	(0.333)	(0.349)	(0.342)
Dummy MPC	-0.930**	-0.861**	-0.929**	-0.845**	-0.839**	-0.663*
	(0.415)	(0.376)	(0.413)	(0.395)	(0.395)	(0.377)
Past price growth	0.168***	0.149***	0.166***	0.146***	0.161***	0.144***
	(0.0213)	(0.0216)	(0.0214)	(0.0216)	(0.0216)	(0.0219)
Medium (50-250)	-0.354**	-0.255*	-0.328**	-0.246*	-0.379**	-0.274*
	(0.149)	(0.144)	(0.150)	(0.145)	(0.150)	(0.146)
Large (above 250)	-0.596***	-0.353**	-0.632***	-0.413***	-0.658***	-0.429***
	(0.155)	(0.153)	(0.159)	(0.158)	(0.160)	(0.158)
Exporter	-0.238**	-0.342***	-0.158	-0.272**	-0.133	-0.236*
	(0.113)	(0.111)	(0.128)	(0.125)	(0.128)	(0.125)
Constant	3.973***	2.848***	3.939***	2.826***	3.915***	2.707***
	(0.338)	(0.307)	(0.339)	(0.308)	(0.326)	(0.307)
Observations	6664	6664	6664	6664	6621	6621
R^2	0.156	0.133	0.161	0.140	0.226	0.201
Wave FE	YES	YES	YES	YES	NO	NO
Sector FE	NO	NO	YES	YES	NO	NO
Wave x Sector FE	NO	NO	NO	NO	YES	YES
ONS controls	YES	YES	YES	YES	YES	YES
Number of meetings	48	48	48	48	48	48

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

	(1) Mean price	(2) Median price	(3) Left tail price	(4) Right tail price
Surprise bottom 1/3 × Dummy MPC	1.249	1.137	0.837	1.365
	(1.607)	(1.580)	(1.587)	(1.728)
Surprise middle 1/3 × Dummy MPC	-14.50	-15.83	-31.59	2.032
	(21.25)	(21.21)	(20.88)	(24.16)
Surprise top 1/3 × Dummy MPC	3.378	3.009	1.967	4.674
	(2.587)	(2.646)	(2.394)	(2.985)
Dummy MPC	-0.938**	-0.821**	-0.767**	-1.105**
	(0.388)	(0.390)	(0.362)	(0.447)
Past price growth	0.184***	0.164***	0.143***	0.215***
	(0.0212)	(0.0215)	(0.0217)	(0.0233)
Medium (50-250)	-0.635***	-0.407***	-0.321**	-0.900***
	(0.149)	(0.151)	(0.146)	(0.168)
Large (above 250)	-1.032***	-0.711***	-0.477***	-1.514***
	(0.157)	(0.160)	(0.159)	(0.176)
Exporter	-0.165	-0.193	-0.307**	-0.0332
	(0.129)	(0.131)	(0.128)	(0.144)
Constant	4.305***	3.914***	2.814***	5.760***
	(0.295)	(0.300)	(0.272)	(0.349)
Observations	6287	6287	6287	6287
R^2	0.186	0.164	0.141	0.198
Wave FE	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES
Number of meetings	47	47	47	47

	(1) Mean price	(2) Median price	(3) Left tail price	(4) Right tail price
Positive Surprises	3.119	2.718	1.431	4.695
	(2.590)	(2.652)	(2.389)	(2.996)
Negative Surprises	1.274	1.173	0.912	1.335
	(1.618)	(1.592)	(1.596)	(1.741)
Dummy MPC	-0.896**	-0.773**	-0.676*	-1.112**
	(0.389)	(0.391)	(0.359)	(0.453)
Past price growth	0.184***	0.164***	0.143***	0.215***
	(0.0212)	(0.0215)	(0.0217)	(0.0232)
Medium (50-250)	-0.635***	-0.407***	-0.321**	-0.900***
	(0.149)	(0.151)	(0.146)	(0.168)
Large (above 250)	-1.033***	-0.711***	-0.477***	-1.514***
	(0.157)	(0.160)	(0.159)	(0.176)
Exporter	-0.165	-0.192	-0.306**	-0.0331
	(0.129)	(0.131)	(0.128)	(0.144)
Constant	4.317***	3.927***	2.837***	5.760***
	(0.294)	(0.300)	(0.272)	(0.347)
Observations	6287	6287	6287	6287
R^2	0.186	0.164	0.141	0.198
Wave FE	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES

	(1)	(2)	(3)	(4)
	Mean price	Median price	Left tail price	Right tail price
BR change ($<$ |50bps|) x Dummy mpc	0.549	0.570	0.679	0.501
	(0.659)	(0.685)	(0.647)	(0.751)
BR change ($>=$ |50bps|) x Dummy mpc	-0.603**	-0.669**	-0.757***	-0.523
	(0.305)	(0.308)	(0.289)	(0.351)
Dummy MPC	-0.921**	-0.811**	-0.849**	-0.995**
	(0.416)	(0.409)	(0.379)	(0.485)
Past price growth	0.185***	0.166***	0.146***	0.215***
	(0.0210)	(0.0214)	(0.0216)	(0.0230)
Constant	4.297***	3.910***	2.888***	5.690***
	(0.339)	(0.340)	(0.310)	(0.400)
Observations	6664	6664	6664	6664
R^2	0.183	0.161	0.140	0.192
Wave FE	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES
Number of meetings	48	48	48	48
BR change meetings	13	13	13	13

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

	(1) Median price	(2) Median price	(3) Median price
Surprise × Dummy MPC	1.901	1.706	1.892
	(1.491)	(1.267)	(1.290)
Dummy MPC	-0.673*	-0.672*	-0.674*
	(0.347)	(0.347)	(0.350)
Medium (50-250) × Surprise × Dummy MPC	-0.260		
	(0.823)		
Large (above 250) × Surprise × Dummy MPC	-0.349		
	(0.949)		
Exporter × Surprise × Dummy MPC		-0.0284	
		(0.662)	
Finance × Surprise × Dummy MPC			-1.774
			(1.141)
Constant	3.944***	3.937***	4.002***
	(0.301)	(0.298)	(0.298)
Observations	6287	6287	6287
R^2	0.164	0.164	0.158
Wave FE	YES	YES	YES
Sector FE	YES	YES	NO
ONS controls	YES	YES	YES
Number of meetings	47	47	47

	(1) Median price	(2) Median price	(3) Median price
BR change × Dummy MPC	-0.423	-0.439*	-0.395*
	(0.267)	(0.248)	(0.237)
Dummy MPC	-0.381	-0.384	-0.386
	(0.305)	(0.305)	(0.306)
Medium (50-250) × BR change × Dummy MPC	-0.0136		
	(0.188)		
Large (above 250) × BR change × Dummy MPC	0.104		
	(0.179)		
Exporter × BR change × Dummy MPC		0.0842	
		(0.151)	
Finance × BR change × Dummy MPC			-0.0971
			(0.377)
Constant	3.687***	3.695***	3.751***
	(0.308)	(0.303)	(0.300)
Observations	6664	6664	6664
R^2	0.161	0.161	0.156
Wave FE	YES	YES	YES
Sector FE	YES	YES	NO
ONS controls	YES	YES	YES
Number of meetings	48	48	48
BR change meetings	13	13	13

Info-cleaned bank rate changes by demographic characteristics and firms' expectations `▸ Back`

	(1) Median price	(2) Median price	(3) Median price
BR change (Info clean) x Dummy MPC	-0.907** (0.406)	-0.979** (0.390)	-0.873** (0.352)
Dummy MPC	-0.934** (0.413)	-0.925** (0.413)	-0.923** (0.415)
Medium (50-250) $\times$ BR change (Info clean) x Dummy MPC	-0.185 (0.316)		
Large (above 250) $\times$ BR change (Info clean) x Dummy MPC	0.407 (0.302)		
Exporter $\times$ BR change (Info clean) x Dummy MPC		0.244 (0.250)	
Finance $\times$ BR change (Info clean) x Dummy MPC			0.235 (0.566)
Constant	3.946*** (0.339)	3.943*** (0.339)	4.010*** (0.339)
Observations	6664	6664	6664
R^2	0.162	0.161	0.157
Wave FE	YES	YES	YES
Sector FE	YES	YES	NO
ONS controls	YES	YES	YES
Number of meetings	48	48	48
BR change meetings	45	45	45

	(1) Median price	(2) Median price	(3) Median price	(4) Median price	(5) Median price	(6) Median price
Dummy MPC	-0.396	-0.672*	-0.385	-0.672*	-0.0430	-0.162
	(0.353)	(0.372)	(0.305)	(0.347)	(0.215)	(0.238)
BR change x Dummy MPC	-0.426		-0.402*		-0.435*	
	(0.312)		(0.236)		(0.230)	
Surprise x Dummy MPC		1.860		1.694		1.301
		(1.349)		(1.281)		(1.013)
Past price growth	0.157***	0.157***	0.166***	0.164***	0.162***	0.161***
	(0.0256)	(0.0254)	(0.0214)	(0.0214)	(0.0165)	(0.0165)
Medium (50-250)	-0.499**	-0.626***	-0.332**	-0.406***	-0.271**	-0.313***
	(0.195)	(0.194)	(0.150)	(0.151)	(0.109)	(0.109)
Large (above 250)	-0.795***	-0.875***	-0.633***	-0.710***	-0.601***	-0.647***
	(0.203)	(0.200)	(0.159)	(0.159)	(0.116)	(0.116)
Exporter	-0.100	-0.111	-0.163	-0.193	-0.104	-0.119
	(0.158)	(0.161)	(0.128)	(0.131)	(0.0943)	(0.0958)
Constant	3.768***	3.960***	3.680***	3.915***	3.369***	3.430***
	(0.319)	(0.301)	(0.291)	(0.283)	(0.183)	(0.169)
Observations	4652	4454	6664	6287	12198	11808
R^2	0.152	0.158	0.161	0.164	0.158	0.159
Wave FE	YES	YES	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES	YES	YES
Window	3 days	3 days	5 days	5 days	7 days	7 days
Number of meetings	47	46	48	47	50	49
BR change meetings	13		13		13	

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

	(1)	(2)	(3)	(4)	(5)	(6)
	Median price	Median price	Median price	Median price	Median price	Median price
Dummy MPC	-0.997**	-0.656*	-0.929**	-0.645*	-0.358	-0.169
	(0.445)	(0.383)	(0.413)	(0.358)	(0.256)	(0.242)
BR change (Info clean) × Dummy MPC	-1.060**		-0.871**		-0.697**	
	(0.478)		(0.351)		(0.283)	
Surprise (Info clean) × Dummy MPC		0.923		0.706		0.708
		(1.434)		(1.345)		(0.948)
Past price growth	0.157***	0.157***	0.166***	0.164***	0.162***	0.160***
	(0.0255)	(0.0254)	(0.0214)	(0.0214)	(0.0165)	(0.0165)
Medium (50-250)	-0.494**	-0.627***	-0.328**	-0.406***	-0.270**	-0.314***
	(0.195)	(0.194)	(0.150)	(0.151)	(0.109)	(0.109)
Large (above 250)	-0.791***	-0.875***	-0.632***	-0.710***	-0.600***	-0.646***
	(0.203)	(0.200)	(0.159)	(0.159)	(0.116)	(0.116)
Exporter	-0.0924	-0.115	-0.158	-0.196	-0.103	-0.121
	(0.158)	(0.161)	(0.128)	(0.131)	(0.0943)	(0.0957)
Constant	4.006***	3.924***	3.920***	3.867***	3.433***	3.412***
	(0.340)	(0.302)	(0.323)	(0.287)	(0.184)	(0.172)
Observations	4652	4454	6664	6287	12198	11808
R^2	0.152	0.158	0.161	0.163	0.158	0.159
Wave FE	YES	YES	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES	YES	YES
ONS controls	YES	YES	YES	YES	YES	YES
Window	3 days	3 days	5 days	5 days	7 days	7 days
Number of meetings	47	46	48	47	50	49
BR change meetings	13		13		13	

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$