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**Fed Members'
Monetary Tones
and Yields**

**Musa Amadeus,
Rajeev Bhargava,
Michael Guidi, Marvin Loh,
Gideon Ozik,
and Ronnie Sadka**

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Musa Amadeus

Musa Amadeus is a quantitative researcher at MKT MediaStats with a background in financial data science, machine learning, and computational finance. He holds a PhD in Finance from the Carroll School of Management at Boston College as well as a BA in Applied Mathematics from Harvard College.



Michael Guidi

Michael Guidi is a Managing Director and Head of Alternative Data at State Street Associates (SSA). Michael's team focuses on generating quantitative investment research that utilizes SSA's proprietary datasets developed in conjunction with academic partners. This research and data includes indicators focused on a range of economic topics such as investor behavior, media sentiment, inflation, and geopolitics. Michael holds a Bachelor of Science in electrical and computer engineering from University of Florida, a MS in mathematical finance from Boston University, and the CFA designation.



Marvin Loh

Marvin Loh is a Managing Director and senior global market strategist within the multi-asset research team at State Street Global Markets. Marvin leads the rates effort and monitors market developments and formulates their impact on a wide range of asset classes utilizing State Street's unique proprietary flow and asset allocation indicators. Marvin joined State Street in 2018 and focuses on the rates, foreign exchange, and credit markets. His prior experience has included research roles in the FX, rates, investment grade and high yield credit and equity markets. He received his Bachelor of Science degree and MBA from New York University, Stern School of Business. He is a frequent commentator in the financial press and has been interviewed on numerous radio and TV business programs.



Gideon Ozik

Dr. Gideon Ozik is founder and managing partner of MKT MediaStats, LLC, a technology and data analytics company, which combines expertise in data science and financial economics to extract financial markets insights from unique sets of untapped big data sources. Prior to MKT Gideon led investment solutions at Nexar Capital (acquired by UBP), managed hedge funds at Société Générale and developed quantitative derivatives strategies at NISA Investment Advisors.

His prior academic experience includes teaching machine learning, alternative data, data analytics, financial derivatives, investments theory and quantitative research at HEC Paris, Dauphine University and EDHEC Business School where he is currently an affiliate professor. His research has been published at academic and practitioner journals including the Journal of Financial Economics, Review of Financial Studies, Journal of Finance and Quantitative Analysis, Financial Analyst Journal, Journal of Portfolio Management, and Journal of Fixed Income.

Dr. Ozik earned B.Sc from the Technion - Israel Institute of Technology, MBA from Washington University, and PhD in Finance from EDHEC Business School, France.



Ronnie Sadka

Professor Ronnie Sadka Senior Associate Dean and chairperson of the Finance Department at the Carroll School of Management, Boston College. His research focuses on the liquidity in financial markets, the role of the media, and retail trading. More recently, he has been developing alternative data driven investment applications through MKT MediaStats, LLC. Sadka is a frequent speaker at academic and practitioner conferences; his work has been published in leading academic and professional journals, and has been covered by various media outlets.

Prior academic experience includes teaching at the University of Chicago (Booth), New York University (Stern), Northwestern University (Kellogg), and the University of Washington (Foster). Industry experience includes Goldman Sachs Asset Management and Lehman Brothers (quantitative strategies), the economic advisory board of NASDAQ OMX, and State Street Associates (academic partner). Professor Sadka earned a B.Sc. (Magna Cum Laude) in industrial engineering and a M.Sc. (Summa Cum Laude) in operations research, both from Tel-Aviv University. He received a Ph.D. in finance from Northwestern University (Kellogg).

Fed Members' Monetary Tones and Yields

Musa Amadeus, Rajeev Bhargava, Michael Guidi, Marvin Loh, Gideon Ozik, and Ronnie Sadka

Musa Amadeus

is a quantitative researcher at MKT MediaStats in Cambridge, MA. musa.amadeus@mktmediastats.com

Rajeev Bhargava

is a managing director and the head of investor behavior research at State Street Associates in Cambridge, MA. rbhargava@statestreet.com

Michael Guidi

is a managing director and a quantitative researcher at State Street Associates in Cambridge, MA. mguidi@statestreet.com

Marvin Loh

is a Senior Global Macro Strategist at State Street Global Markets in Boston, MA. mloh1@statestreet.com

Gideon Ozik

is the founder and managing partner at MKT MediaStats and is an affiliate professor of finance at EDHEC Business School in Cambridge, MA. gideon.ozik@mktmediastats.com

Ronnie Sadka

is the senior associate dean for faculty, chairperson and professor of finance, and Haub Family Professor of the Carroll School of Management at Boston College, and the founder and managing partner of MKT MediaStats in Chestnut Hill, MA. sadka@bc.edu

KEY FINDINGS

- Natural language processing methods can be utilized to quantify the monetary tones of individual Fed members in media both during and between monetary policy meetings.
- The measurement of Fed members' monetary tones facilitates an understanding of the dynamics of the individual monetary policy stances underlying aggregated, consensus (top-down) Fed tones.
- Treasury yields underreact to Fed Board of Governors' tones during non-FOMC meeting weeks. Short-term horizon yields primarily reflect voting tones while relatively longer-term horizon yields incorporate information from both voting and non-voting tones.

ABSTRACT

Amadeus et al. (2022) observe that aggregated, consensus (top-down) central bank monetary tones in media contain predictive information pertaining to future weekly yield fluctuations. This article elucidates the more granular, stratified (bottom-up) dynamics underlying these relations. The predictive relationships between Fed consensus tones and yields are primarily driven by an underreaction of yields to the Fed Board of Governors' tones between monetary policy meetings. Over short-term horizons, Treasury yields appear to price voting FOMC members' (Board of Governors' and Regional Bank Presidents') tones while relatively longer-term horizon yields appear to reflect both voting and non-voting tones. Fed Regional Bank Presidents' monetary tones are more responsive to regional inflation fluctuations than to unemployment. The analysis of the heterogeneous impacts of Fed members' tones over distinct yield horizons provides insights pertaining to the pricing of voting and non-voting Fed members' tones in Treasury markets.

Media coverage pertaining to the monetary policy stances of key central bankers profoundly impacts financial markets. This article presents a framework to quantify Fed members' monetary tones within media. The measurement of individual Fed members' monetary tones facilitates an understanding of the temporal and cross-sectional dynamics of the monetary policy positions of Fed members at a finer granularity than is feasible with aggregated (top-down) Fed consensus tones (Amadeus et al. 2022). Monetary tones in media coverage of Fed members' policy positions may capture more transparent interpretations of information flow from central banks than official communications.

We develop a framework to quantify Fed members' monetary tones within media coverage by utilizing a large set of articles covering Fed policy. This method uses the

articles stored in a reservoir of news articles to measure the intensity of hawkish and dovish media coverage pertaining to a given Fed member each day. We refer to these measures as Fed members' monetary tones. We find that the predictive relationships between Fed consensus (top-down) tones and yields identified by Amadeus et al. (2022) are primarily driven by an underreaction of yields to Fed Board of Governors' tones between monetary policy meetings. We observe that over short-term horizons, Treasury yields appear to price voting FOMC members' (Board of Governors' and Regional Bank Presidents') tones while relatively longer-term horizon yields appear to reflect both voting and non-voting tones. We also find that Fed Regional Bank Presidents' monetary tones are more responsive to regional inflation fluctuations than to unemployment.

There is a broad body of literature which examines the effects of monetary policy on financial markets. For instance, Bredin, Hyde, and Reilly (2010) find that excess bond returns tend to primarily reflect domestic as opposed to foreign monetary policy surprises. Hanson and Stein (2015) find that changes in monetary policy have strong effects on distant forward real interest rates. Kuttner (2001); Cochrane and Piazzesi (2002); and Gürkaynak, Sack, and Swanson (2005) observe that shocks to monetary policy rates are linked to pronounced fluctuations in Treasury yields. Guo, Kontonikas, and Maio (2020) find that bond risk premium news is the primary factor which explains the response of excess corporate bond returns to monetary policy shocks. Thorbecke (1997) finds that expansionary monetary policies increase ex-post stock returns. Bernanke and Kuttner (2005) identify a pronounced stock market response to unexpected monetary policy actions. Kurov (2010) finds that investor sentiment plays a pivotal role in explaining the effects of monetary policy on the stock market. Maio (2014) observes that the negative ramifications of Fed funds rate shocks on stock returns stem primarily from a negative effect on future expected cash flows.

Textual analysis has been primarily utilized in the financial literature within frameworks which delineate stock-level equity sentiment (Chen et al. 2014; Bartov, Faurel, and Mohanram 2018; McGurk, Nowak, and Hall 2020) and in examining firm disclosures (Loughran and McDonald 2011). Tobback, Nardelli, and Martens (2017) construct an indicator which measures the media's assessment of the ECB's tones during press conferences. Fos and Xu (2022) find that the voting rights of FOMC members have a substantial impact on how economic conditions in members' districts affect the federal funds rate. They observe that an increase in voting districts' inflation significantly predicts an increase in the federal funds rate (no such relationship for non-voting districts). To our knowledge, this is the first article to empirically identify an underreaction of Treasury yields to Fed Board of Governors' tones in media between monetary policy meetings and to examine the differential mechanisms through which Treasury yields incorporate information within voting and non-voting Fed members' tones.

The remainder of this article proceeds as follows. The data section outlines the construction methodology underlying the Fed members' monetary tones measures. The monetary tones and yields section presents our primary empirical analyses and results. The regional inflation, unemployment, and monetary tones section presents results at the regional level. The conclusion summarizes our primary findings and concludes this article.

DATA

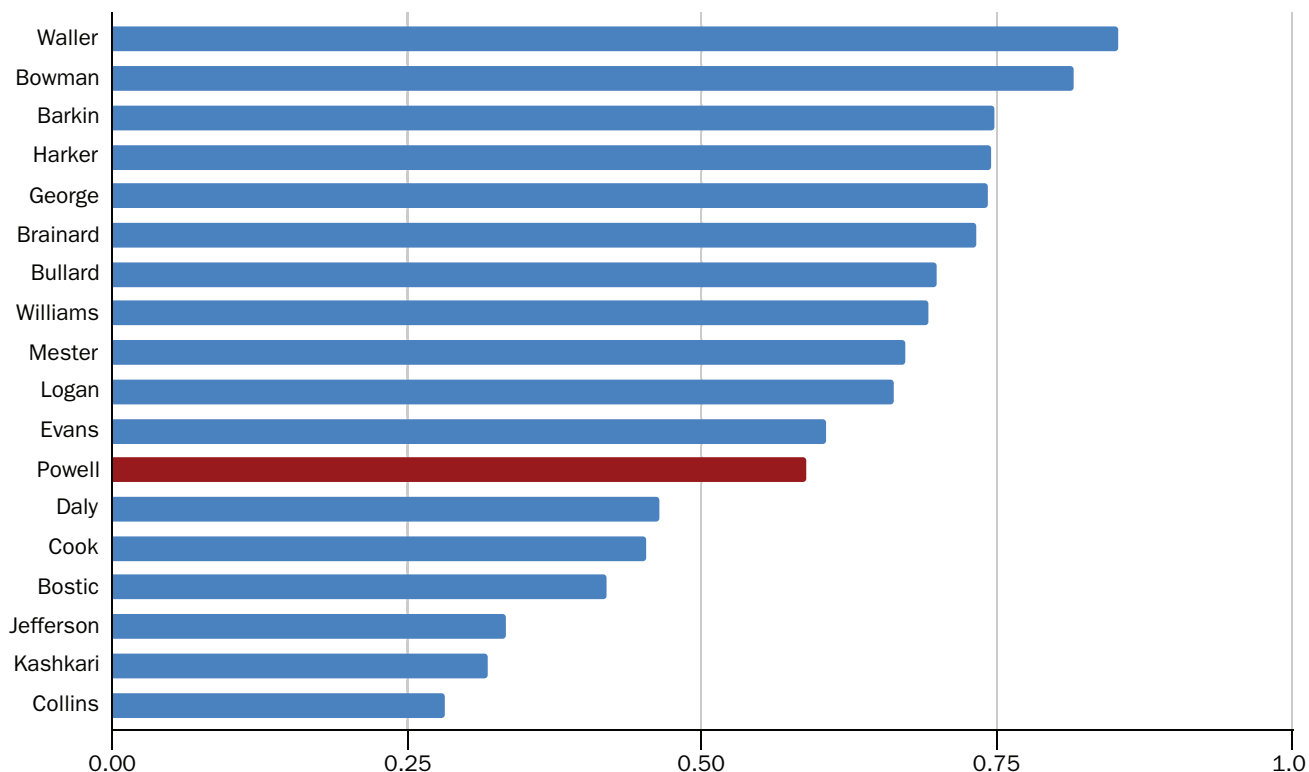
We build on the paradigm presented by Amadeus et al. (2022), by developing a framework to quantify Fed members' monetary tones within media coverage. This method utilizes the articles stored in a reservoir of news articles to measure the intensity of hawkish and dovish media coverage pertaining to a given Fed member each day.

First, relevant articles are tagged as pertaining to a given Fed member. For each Fed member, a further stratification of hawkish and dovish tagging is performed. Articles are classified as hawkish if they are composed of keywords or regular expressions representing hawkish policy, quantitative tightening, raising of rates, balance sheet reductions, or increasing inflation expectations. Conversely, articles are classified as dovish if they are composed of keywords or regular expressions representing dovish policy, quantitative easing, reduction of rates, balance sheet expansions, or decreasing inflation expectations. The dovish measures capture the daily ratio of member-related articles that are tagged as dovish out of the entire set of articles pertaining to a given member within the reservoir for a given formation horizon. The hawkish measures capture the daily ratio of member-related articles that are tagged as hawkish out of the entire set of articles pertaining to a given member within the reservoir for a given formation horizon. Our monetary tones measures capture the difference between hawkish and dovish media coverage intensities, pertaining to a given Fed member, divided by the sum of these media coverage intensities. We construct our baseline measures for Fed members over a 1-day formation horizon.

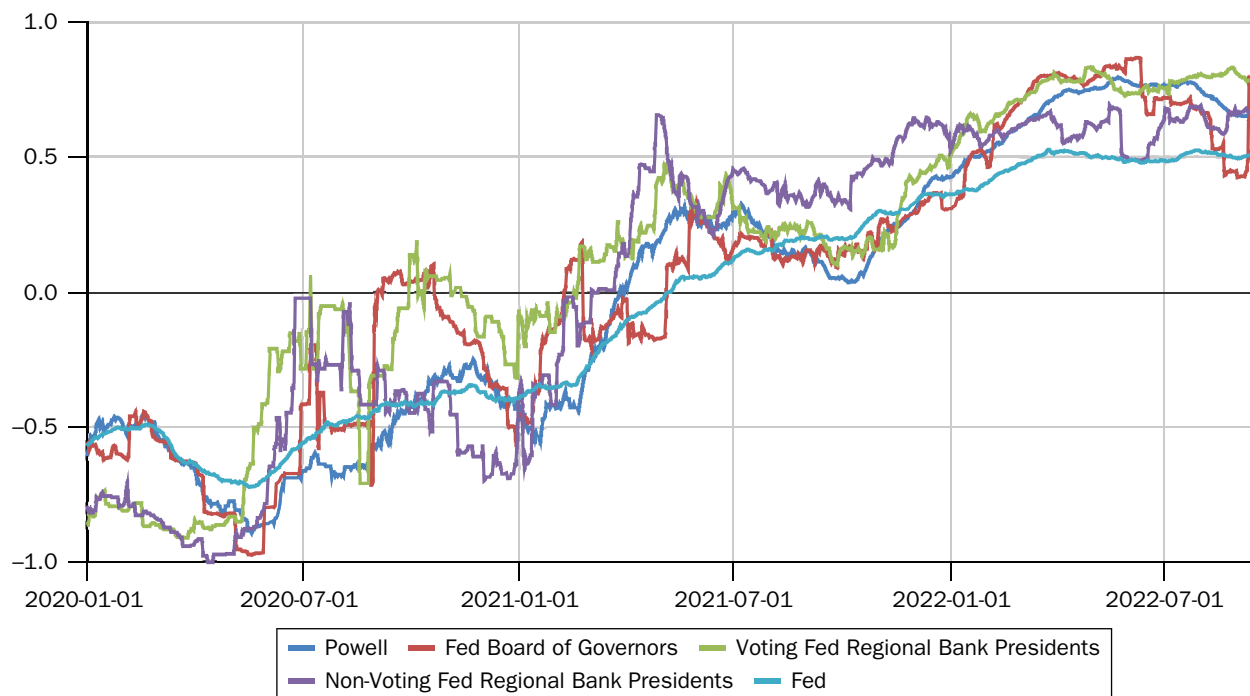
As Fed members do not uniformly appear in the media at a daily frequency, we utilize a moving average paradigm in smoothing and attenuating the sparsity within individual Fed members’ monetary tones at the daily frequency. Exhibit 1 presents the monetary tones of Fed members as constructed over a 90-day formation horizon as of October 2022. Powell’s monetary tones are relatively moderate when compared to the tones of more pronounced hawkish and dovish Fed members. In Exhibit 2, we measure Fed Board of Governors’ tones as well as voting and non-voting Fed Regional

EXHIBIT 1

Fed Members’ Monetary Tones



NOTE: This exhibit presents Fed members’ monetary tones measured over a 90-day formation horizon (as of October 17, 2022).

EXHIBIT 2**Fed Members' Monetary Tones vs. Fed Consensus (Top-Down) Monetary Tones**

NOTES: This exhibit presents the time-series of Fed members' tones and Fed consensus (top-down) tones. The underlying sample roughly spans January 2020 through September 2022.

Bank Presidents' tones by cross-sectionally averaging the constituent Fed members' tones. Powell's and Fed consensus (top-down) tones are also presented for comparison. We observe that Fed members' tones became more dovish following the onset of the COVID-19 pandemic as monetary policy aimed to support and stimulate the economy. As inflationary pressures increased in 2021 through 2022, Fed members became more hawkish.

For augmented comparability, Exhibit 3A presents the time-series of Powell's tones vs. voting Fed Regional Bank presidents' tones. We observe that Powell's tones tend to be more dovish than the tones of voting Fed Regional Bank Presidents. The Pearson correlation between Powell's and voting Fed Regional Bank Presidents' tones is roughly 92%. We also find that Fed Board of Governors' tones tend to be more dovish than those of voting Fed Regional Bank Presidents (Exhibit 3B, Pearson correlation ~92%).

MONETARY TONES AND YIELDS

Within our primary empirical tests, we examine the contemporaneous and predictive relationships between Fed members' monetary tones and changes in yields. We consider contemporaneous through 6-week future weekly (week-over-week) changes across 3-month (short-term yield horizon) and 2-year (longer-term yield horizon) maturity yields. We obtain Treasury yields from the Federal Reserve Bank of St. Louis.

As in Amadeus et al. (2022), we find that Fed consensus (top-down) tones tend to lead 3-month Treasury yields. Exhibit 4 presents the time-series of the 90-day moving average of Federal Reserve monetary tones as well as Treasury 3-month yields.

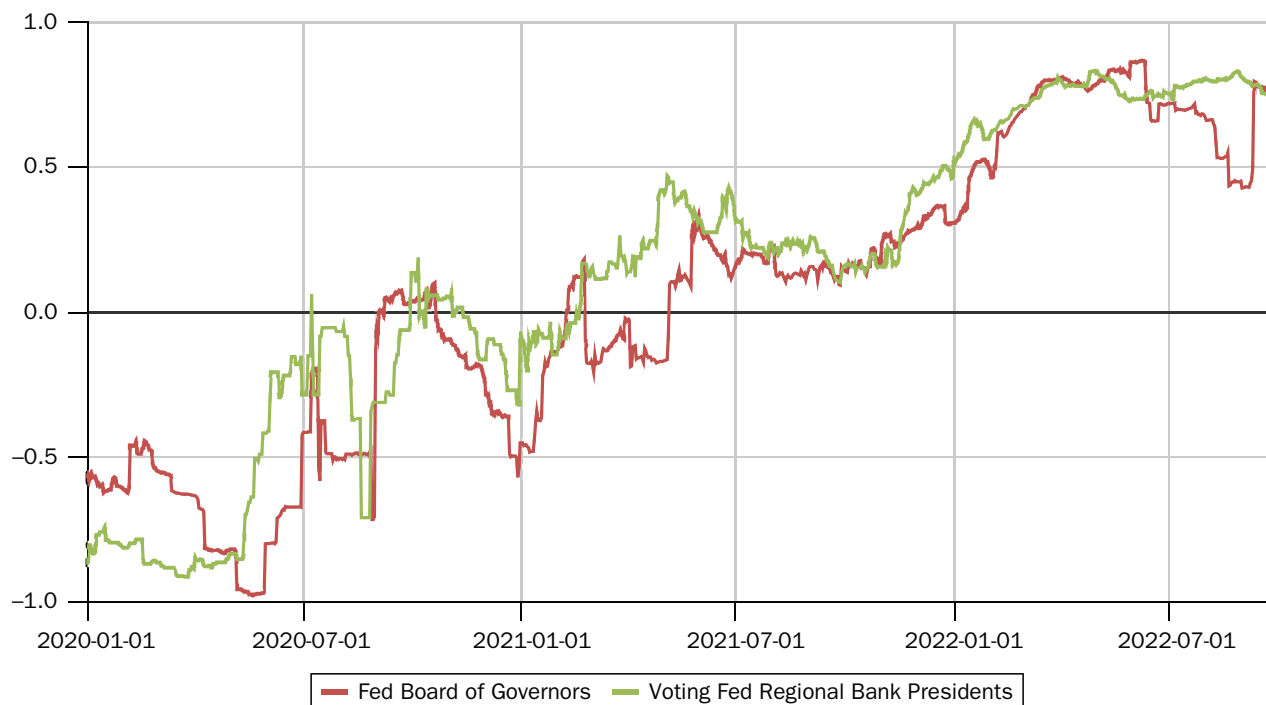
EXHIBIT 3A

Powell's Monetary Tones vs. Voting Fed Regional Bank Presidents' Monetary Tones



EXHIBIT 3B

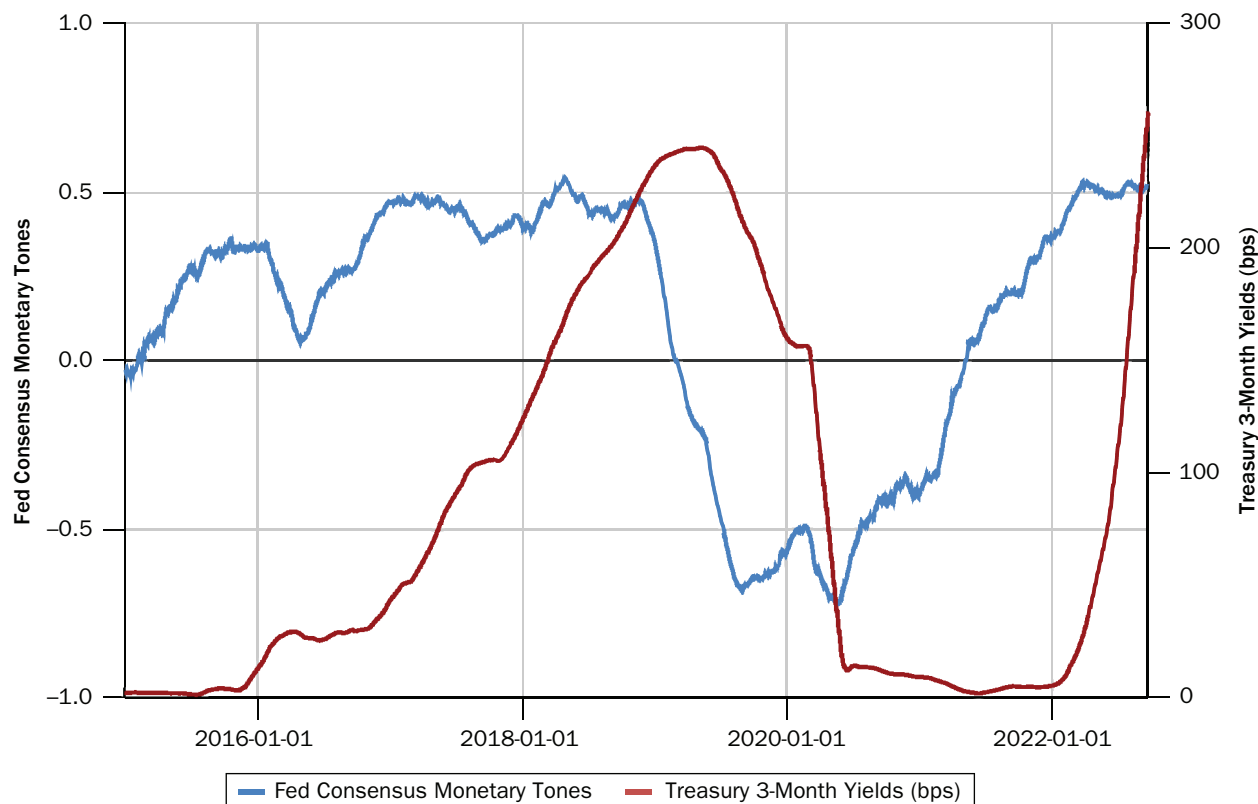
Fed Board of Governors' Monetary Tones vs. Voting Fed Regional Bank Presidents' Monetary Tones



NOTES: This exhibit presents the time-series of Powell's, Fed Board of Governors', and Voting Fed Regional Bank Presidents' tones. The underlying sample roughly spans January 2020 through September 2022.

EXHIBIT 4

Fed Consensus (Top-Down) Monetary Tones and Treasury 3-Month Yields



NOTES: This exhibit presents the time-series of the 90-day moving average of Fed consensus (top-down) monetary tones vs. Treasury 3-month yields. The underlying sample roughly spans January 2015 through September 2022.

The precipitous 2020 decline and subsequent 2022 increase in Treasury 3-month yields are both predicted by substantial concomitant variations in Fed consensus tones.

Within Exhibit 5, we examine the relationships between weekly changes of Treasury 3-month yields for weeks (t) through (t + 6) and weekly Fed Board of Governors' and active (in-office) Fed Regional Bank Presidents' tones during week (t). We control for week (t) levels and changes in Treasury 3-month yields as well as for Treasury 3-month minus 1-month spreads (both levels and changes). We also control for weekly levels and changes in the VIX and the MOVE indices. The variable FOMC meeting (t) is an indicator variable which takes on a value of 1 if a Federal Open Market Committee meeting occurs during week (t) and 0 otherwise. We interact this variable with the controls as well as with the monetary tones variables. We utilize Z-score transformed variables to identify economic magnitudes. The Z-score of a variable is constructed by demeaning the variable and dividing it by its standard deviation. We find that the predictive relationships between Fed consensus (top-down) tones and yields, as identified by Amadeus et al. (2022), are primarily driven by an underreaction of yields to Fed Board of Governors' tones between monetary policy meeting weeks. Specifically, we observe that a 1-standard deviation increase in Fed Board of Governors' tones during non-FOMC meeting week (t) tends to precipitate a roughly 7 basis point increase in Treasury 3-month yields (sum of the week-over-week changes in yields between weeks t through t + 6). This effect manifests gradually between weeks (t) through (t + 6), inclusive. This suggests that Treasury 3-month yields underreact to

EXHIBIT 5

Weekly Changes of Treasury 3-Month Constant Maturity Yields vs. Fed Board of Governors' and Active Fed Regional Bank Presidents' Monetary Tones: Economic Magnitudes

	Δ [Treasury 3-Month]						
	(t)	(t + 1)	(t + 2)	(t + 3)	(t + 4)	(t + 5)	(t + 6)
Z[BOG Tones] (t)	1.34*** [3.27]	0.96 [1.6]	1.13** [2.43]	0.81* [1.95]	1.00*** [2.94]	0.77** [2.3]	1.07*** [2.85]
Z[BOG Tones] * [FOMC Meeting] (t)	1.93 [1.35]	-1.2 [-1.32]	-1.90* [-1.74]	0.11 [0.19]	0.76 [0.63]	2.89 [1.19]	-0.75 [-0.52]
Z[Active Pres. Tones] (t)	1.06*** [2.71]	0.23 [0.65]	0.89 [1.04]	1.45 [1.23]	1.17 [1.18]	0.8 [1.22]	0.74 [0.67]
Z[Active Pres. Tones] * [FOMC Meeting] (t)	2.42 [0.97]	0.06 [0.11]	-0.59 [-0.54]	-0.85 [-0.67]	-0.12 [-0.11]	2.4 [1.03]	-0.22 [-0.18]

NOTES: The specifications feature regressions of weekly changes of Treasury 3-month constant maturity yields on weekly levels of Fed Board of Governors' and active (in-office) Fed Regional Bank Presidents' monetary tones. Monetary tones are measured as the difference between hawkish and dovish media coverage intensities divided by their sum. The variable FOMC Meeting (t) is an indicator variable which takes on a value of 1 if an FOMC meeting occurs during a given week and 0 otherwise. The Z-score of a given variable is constructed by demeaning the variable and dividing it by its standard deviation. The t-statistics utilize Newey-West (1987) adjusted standard errors which account for heteroskedasticity and autocorrelation of a maximum order of 3 available weeks. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. The time index (t) roughly spans February 2018 through September 2022.

Fed Board of Governors' tones between monetary policy meetings. In contrast, active (in-office) Fed Regional Bank Presidents' tones appear to be priced contemporaneously during week (t).

In Exhibit 6, we stratify active Fed Regional Bank Presidents' tones into voting and non-voting Fed Regional Bank Presidents' tones. Voting FOMC members consist of the seven members of the Fed Board of Governors, the Fed Regional Bank President of New York, as well as four of the remaining eleven Fed Regional Bank Presidents who serve on one-year terms on a rotating basis.¹ The results in Exhibit 6 suggest that over relatively short-term Treasury 3-month yield horizons, Treasury yields appear to price voting FOMC members' tones. The contemporaneous impacts of Fed Board of Governors' tones on Treasury 3-month yields are more pronounced during FOMC meeting weeks (positive and statistically significant coefficient on the interaction effect between Fed Board of Governors' tones and the FOMC meeting week indicator during week t). The negative and statistically significant coefficient on the interaction effect between Fed Board of Governors' tones and the FOMC Meeting week indicator during outcome week (t + 1) suggests that Treasury 3-month yields overreact to Fed Board of Governor's tones during FOMC meeting weeks.

Within Exhibits 7 and 8, we conduct these analyses over longer-term 2-year yield horizons. As in the 3-month yield settings, we observe that Treasury 2-year yields appear to underreact to Fed Board of Governors' tones between monetary policy meetings. A 1 standard deviation increase in Fed Board of Governors' tones during non-FOMC meeting week (t) tends to precipitate a roughly 11 basis point increase in Treasury 2-year yields (sum of the week-over-week changes in yields between weeks t through t + 6 in Exhibit 7). By comparison, the underreaction to active Fed Regional Bank Presidents' tones tends to be less pronounced. In Exhibit 8, we further stratify active Fed Regional Bank Presidents' tones into voting and non-voting tones. We find that Treasury 2-year yields incorporate information from both voting and non-voting tones. Interestingly, the contemporaneous impacts of non-voting Fed Regional Bank

¹<https://www.federalreserve.gov/monetarypolicy/fomc.htm>.

EXHIBIT 6**Weekly Changes of Treasury 3-Month Constant Maturity Yields vs. Fed Board of Governors', Voting, and Non-Voting Fed Regional Bank Presidents' Monetary Tones: Economic Magnitudes**

	Δ [Treasury 3-Month]						
	(t)	(t + 1)	(t + 2)	(t + 3)	(t + 4)	(t + 5)	(t + 6)
Z[BOG Tones] (t)	0.99**	1.21*	0.94	0.52	1.23**	1.01**	0.86
	[2.11]	[1.84]	[1.61]	[1.03]	[2.39]	[2.27]	[1.5]
Z[BOG Tones] * [FOMC Meeting] (t)	4.12*	-2.14*	-2.68	-0.31	1.52	5.35	1.08
	[1.89]	[-1.74]	[-1.49]	[-0.44]	[0.8]	[1.28]	[0.4]
Z[Voting Pres. Tones] (t)	1.01***	0.51	1	0.53	-0.47	-0.16	0.61
	[3.18]	[1.07]	[1.17]	[0.93]	[-0.48]	[-0.26]	[0.6]
Z[Voting Pres. Tones] * [FOMC Meeting] (t)	0.77	-0.16	-0.2	-0.61	-0.7	-0.08	-0.96
	[0.31]	[-0.17]	[-0.13]	[-0.85]	[-0.45]	[-0.03]	[-0.4]
Z[Non-Voting Pres. Tones] (t)	-0.27	-0.07	0.23	0.75	1.33	0.83	0.81
	[-0.87]	[-0.2]	[0.32]	[1.27]	[1.02]	[0.97]	[0.8]
Z[Non-Voting Pres. Tones] * [FOMC Meeting] (t)	3.53	-0.41	-0.7	0.13	2.17	5.78	1.67
	[1.09]	[-0.43]	[-0.46]	[0.19]	[1.2]	[1.34]	[0.63]

NOTES: The specifications feature regressions of weekly changes of Treasury 3-month constant maturity yields on weekly levels of Fed Board of Governors' as well as voting and non-voting Fed Regional Bank Presidents' monetary tones. Monetary tones are measured as the difference between hawkish and dovish media coverage intensities divided by their sum. The variable FOMC Meeting (t) is an indicator variable which takes on a value of 1 if an FOMC meeting occurs during a given week and 0 otherwise. The Z-score of a given variable is constructed by demeaning the variable and dividing it by its standard deviation. The t-statistics utilize Newey-West (1987) adjusted standard errors which account for heteroskedasticity and autocorrelation of a maximum order of 3 available weeks. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. The time index (t) roughly spans February 2018 through September 2022.

EXHIBIT 7**Weekly Changes of Treasury 2-Year Constant Maturity Yields vs. Fed Board of Governors' and Active Fed Regional Bank Presidents' Monetary Tones: Economic Magnitudes**

	Δ [Treasury 2-Year]						
	(t)	(t + 1)	(t + 2)	(t + 3)	(t + 4)	(t + 5)	(t + 6)
Z[BOG Tones] (t)	1.17*	1.10*	1.86***	2.84***	1.68**	1.54**	0.81
	[1.86]	[1.93]	[2.75]	[3.25]	[2.51]	[2.19]	[1.09]
Z[BOG Tones] * [FOMC Meeting] (t)	2.15	-1.41	-0.01	-1.19	-0.47	0.43	-0.65
	[1.59]	[-1.11]	[-0.01]	[-1.05]	[-0.38]	[0.23]	[-0.38]
Z[Active Pres. Tones] (t)	1.02*	1.63***	1.16	1.01	0.91	0.42	1.94**
	[1.95]	[2.79]	[1.21]	[1.07]	[1.18]	[0.55]	[2.02]
Z[Active Pres. Tones] * [FOMC Meeting] (t)	2.56	-0.51	-1.3	0	0.22	1.43	-3.85**
	[1.25]	[-0.34]	[-0.9]	[0]	[0.18]	[0.97]	[-2.07]

NOTES: The specifications feature regressions of weekly changes of Treasury 2-year constant maturity yields on weekly levels of Fed Board of Governors' and active (in-office) Fed Regional Bank Presidents' monetary tones. Monetary tones are measured as the difference between hawkish and dovish media coverage intensities divided by their sum. The variable FOMC Meeting (t) is an indicator variable which takes on a value of 1 if an FOMC meeting occurs during a given week and 0 otherwise. The Z-score of a given variable is constructed by demeaning the variable and dividing it by its standard deviation. The t-statistics utilize Newey-West (1987) adjusted standard errors which account for heteroskedasticity and autocorrelation of a maximum order of 3 available weeks. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. The time index (t) roughly spans February 2018 through September 2022.

EXHIBIT 8**Weekly Changes of Treasury 2-Year Constant Maturity Yields vs. Fed Board of Governors', Voting, and Non-Voting Fed Regional Bank Presidents' Monetary Tones: Economic Magnitudes**

	Δ [Treasury 2-Year]						
	(t)	(t + 1)	(t + 2)	(t + 3)	(t + 4)	(t + 5)	(t + 6)
Z[BOG Tones] (t)	1.62*	1.76***	1.47	2.99**	1.90**	2.00**	-0.14
	[1.76]	[2.71]	[1.56]	[2.47]	[2.15]	[2.17]	[-0.12]
Z[BOG Tones] * [FOMC Meeting] (t)	3.03	-2.5	0.91	-1.47	1.22	2.04	2.34
	[1.56]	[-1.21]	[0.43]	[-0.8]	[0.6]	[0.58]	[0.8]
Z[Voting Pres. Tones] (t)	1.43*	1.63**	0.43	0.34	-0.85	0.67	1.18
	[1.67]	[2.02]	[0.64]	[0.43]	[-0.93]	[0.98]	[1.15]
Z[Voting Pres. Tones] * [FOMC Meeting] (t)	-2.17	-1.24	-3.24	-1.02	-1.45	-1.36	-2.08
	[-0.77]	[-0.57]	[-2.05]	[-0.53]	[-0.81]	[-0.76]	[-1.21]
Z[Non-Voting Pres. Tones] (t)	0.47	-0.23	0.98	0.26	1.22	0.41	1.69**
	[0.82]	[-0.34]	[1.03]	[0.32]	[1.35]	[0.48]	[2.1]
Z[Non-Voting Pres. Tones] * [FOMC Meeting] (t)	5.99*	2.17	0.78	1.48	4.75*	2.76	-6.44
	[1.82]	[0.67]	[0.35]	[0.61]	[1.97]	[1.04]	[-1.62]

NOTES: The specifications feature regressions of weekly changes of Treasury 2-year constant maturity yields on weekly levels of Fed Board of Governors' as well as voting and non-voting Fed Regional Bank Presidents' monetary tones. Monetary tones are measured as the difference between hawkish and dovish media coverage intensities divided by their sum. The variable FOMC Meeting (t) is an indicator variable which takes on a value of 1 if an FOMC meeting occurs during a given week and 0 otherwise. The Z-score of a given variable is constructed by demeaning the variable and dividing it by its standard deviation. The t-statistics utilize Newey-West (1987) adjusted standard errors which account for heteroskedasticity and autocorrelation of a maximum order of 3 available weeks. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. The time index (t) roughly spans February 2018 through September 2022.

Presidents' tones on Treasury 2-year yields appear most pronounced during FOMC meeting weeks (positive and statistically significant coefficient on the interaction effect between non-voting Fed Regional Bank Presidents' tones and the FOMC meeting week indicator during week t).

REGIONAL INFLATION, UNEMPLOYMENT, AND MONETARY TONES

Within Exhibit 9, we utilize panel settings to explore the relationships between regional inflation, unemployment, and active Fed Regional Bank Presidents' tones at the monthly frequency. We obtain regional inflation and regional unemployment data from the US Bureau of Labor Statistics. We measure the inflation rate as the month-over-month change in the respective underlying regional consumer price index (in basis points). We control for levels and changes in the inflation and unemployment rates as well as for autoregressive monetary tones effects. We also account for active Fed Regional Bank Presidents' fixed effects. We find that active Fed Regional Bank Presidents' monetary tones are relatively more responsive to regional inflation fluctuations than to unemployment. A 1-standard deviation increase in regional inflation rates precipitates a roughly 0.33 increase in active Fed Regional Bank Presidents' tones during month (t) and predicts significant subsequent elevations in monetary tones once the inflation data are formally released. These results suggest that Fed members would be willing to tolerate a slowdown in job markets, stemming from hawkish monetary policy, to better align the US economy with their price stability mandates prior to becoming more dovish.

EXHIBIT 9

Monthly Active Fed Regional Bank Presidents' Monetary Tones vs. Regional Inflation and Unemployment: Economic Magnitudes

	Active Fed Regional Bank Presidents' Tones		
	(Month, t)	(Month, t + 1)	(Month, t + 2)
Z[Regional Inflation Rate] (Month, t)	0.33*** [4.81]	0.17*** [3.19]	0.22*** [3.98]
Z[Regional Unemployment Rate] (Month, t)	0.02 [0.24]	0.08 [1.65]	0.12 [1.6]

NOTES: The specifications feature regressions of monthly active Fed Regional Bank Presidents' monetary tones on monthly regional inflation rates and regional unemployment rates. Monetary tones are measured as the difference between hawkish and dovish media intensities divided by their sum. The regional inflation rate is the month-over-month change in the respective underlying regional consumer price index (in basis points). The Z-score of a given variable is constructed by demeaning the variable and dividing it by its standard deviation. The t-statistics utilize standard errors which are clustered at the active Fed Regional Bank Presidents' level and at the year-month level. *, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. The time index (t) roughly spans February 2018 through August 2022.

CONCLUSION

Media-derived Fed members' monetary tones measures are valuable tools in quantifying the temporal and cross-sectional dynamics of the monetary policy positions of Fed members. We present a framework for the measurement of these tones. We observe that Treasury yields appear to underreact to Fed Board of Governors' tones during non-FOMC meeting weeks. We find that short-term yields reflect voting tones while relatively longer horizon yields incorporate information from voting and non-voting Fed members' tones. Interestingly, active (in-office) Fed Regional Bank Presidents' tones appear to be relatively more responsive to fluctuations in regional inflation rates than to unemployment rates.

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