

# Furor over the Fed: A President's Tweets and Central Bank Independence

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## Abstract

We illustrate how financial market data is informative about the interactions between monetary and fiscal policy. Federal funds futures are private contracts that reflect investor's expectations about future monetary policy decisions. By relating price movements of these contracts with President Trump's tweets on monetary policy, we explore how financial market participants have perceived attempts by the President to influence monetary policy decisions. Our results indicate that market participants expected the Federal Reserve Bank to adjust monetary policy in the direction suggested by President Trump.

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**JEL Codes:** *E44, E52, E58.*

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# Introduction

Over the past century, central banks around the world have been granted independence to shield monetary policy decisions from political influence and reduce inflationary bias. Under this institutional arrangement, politicians remain responsible for taxes, debt and deficits, while central bankers focus on various concepts of price stability.

This separation of policy assignments is regularly challenged by electoral concerns or imperatives of public debt management. Mounting political pressures or government interference are widespread. Using media reports, Binder (2018) documents that, out of a sample of 118 central banks, 39 percent experienced at least one event of pressure between 2010 and 2018. Accordingly, central banks are being watched closely by economists and the broader public to understand whether, or to what degree, their decisions are influenced by outside pressures.

We study the case of attempted influence by the President of the United States on that country's central bank starting in November 2017. In particular, President Donald Trump repeatedly criticized the Federal Reserve System (Fed) and its Chair for keeping interest rates too high. The pressure to lower rates is occurring amid the ongoing trade war with China, rising government debt and upcoming elections. We present an empirical method to elicit markets' perceptions of the outcome of this influence game.<sup>1</sup>

The unique feature of the recent US example is that President Trump often makes comments related to policy through his Twitter account. We exploit this and construct a dataset of the President's tweets that comment on US monetary policy following the nomination of Jerome Powell as Chair of the Fed on November 2, 2017. Financial market participants follow the President's tweets as closely as they follow economic data and other daily news.<sup>2</sup> The publication time-stamp is therefore a good proxy for the time when financial market participants become aware of the tweet.

We merge the sample of tweets with high-frequency financial data to study the effect of published tweets on market expectations of future monetary policy decisions. At every Federal Open Market Committee (FOMC) meeting, the Fed announces a target for the federal funds rate, a key monetary policy instrument.<sup>3</sup> This rate is a benchmark for financial markets: private and government-sponsored investors regularly trade futures contracts indexed to this rate.<sup>4</sup> Accordingly, variation in prices of fed funds futures reflects changing market expectations regarding future FOMC decisions. We focus on short-term expectations about the next policy decision.

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1. Our method parallels the one introduced by Bianchi, Kung and Kind (2020) and a comparative discussion is provided throughout the text.

2. A survey of European traders conducted in 2019 by the Swiss Stock Exchange finds that four respondents out of five said their strategies are to some extent influenced by Donald Trump's tweets. Survey results and methodology are described at <https://www.six-group.com/en/newsroom/media-releases/2020/20200115-trader-survey.html>.

3. There are eight regularly scheduled FOMC meetings every year, at an average frequency of every six weeks. Figure 3 reports the evolution of the fed funds rate.

4. A futures contract is a legal agreement to buy or sell a particular commodity or asset at a given price and specific time in the future. Fed funds futures are indexed to the fed funds rate.

Using futures data since Jerome Powell was nominated as Chair of the Federal Reserve, we find that the average daily revision of the expected fed funds rate during the days without relevant tweets is slightly positive regardless of whether there was a release of major economic news. In contrast, during the days with relevant tweets, the average revision is negative: financial markets react to the President’s comments and anticipate a higher probability of a rate cut at the upcoming FOMC meeting.

We further refine the analysis by controlling for possible confounding factors, including policy rate cycle, public remarks by FOMC members, and information related to the trade conflict with China. Quantitatively, our results suggest that the effect of a President’s tweet is associated with an average increase of between 0.8% and 4.4% in the probability of a 25-basis-point rate cut at the upcoming FOMC meeting.

Our analysis supports the following narrative. The President’s efforts to influence the Fed escalated over 2019, both in the tone and the frequency of tweets. Financial markets reacted to President Trump’s tweets by assigning a higher probability of a policy rate cut in the future. Finally, we find that on average the Fed did not implement policy as loose as expected over the timeframe of our analysis. Whether this reflects that corresponding policy decisions were resistant to the President’s pressure remains uncertain though.

## Related studies

The goal of this note is to illustrate a methodology that uses data from financial markets to study the effects of pressure on monetary policy decisions. Importantly, we do so in an accessible way that relies mostly on publicly available data.

Bianchi, Kung and Kind (2020) conduct an independent and thorough analysis of the same topic. Rather than relying on daily market data, as we do, they use narrow intraday time windows to identify the reaction of markets to the President’s tweets. As emphasized throughout the text, our qualitative and quantitative results are similar.<sup>5</sup> Therefore, our analysis contributes to the literature by showing that the findings of Bianchi, Kung and Kind (2020) are robust to using daily data instead of high-frequency data. Tillmann (2020) studies the effect of the President’s comments released through Twitter and other media on long-term interest rates. Using daily data on Treasury yields with maturity of one year and longer, he finds that interest rates decline in response to the pressure on monetary policy.

Blanchard and Collins (2019) use a similar method to infer how financial market participants perceive the effects of the Trump administration’s trade policies. In particular, they look at the intraday price changes of futures on stock market indexes in the United States and China after the

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5. A richer dataset used by Bianchi, Kung and Kind (2020) allows to conduct further analysis. In particular, futures contracts are available at longer maturities, covering expectations over several FOMC meetings. With such information, one can verify that market reactions are not simply a readjustment in the timing of a rate cut already anticipated.

President posted tweets about trade with China. They show that the reaction of stock markets in both the United States and China to tweets promoting a trade war is negative: a trade war is not a zero-sum game—it’s a lose-lose situation.

Beyond these case studies, high-frequency financial data are commonly used to study the effects of monetary policy and overcome the pervasive endogeneity problem in macroeconometrics. Bernanke and Kuttner (2005) and Gürkaynak, Sack and Swanson (2005) extract expectations regarding monetary policy decisions from fed funds futures contracts using daily or intraday data.<sup>6</sup> They compare market expectations about the decision before the FOMC meeting with the actual decision. The difference between expectations and the decision is then interpreted as exogenous monetary policy surprises. Such policy surprises can be used to study how monetary policy affects asset prices and other economic variables. Corsetti, Duarte and Mann (2018) apply this method to the euro zone to investigate the differential effects of common monetary policy decisions across member countries.<sup>7</sup> The latest development has been to dissect the nature of policy surprises into different components. In this vein, Jarociński and Karadi (2020) showed that high-frequency policy surprises reflect both policy changes and new information on the economic outlook.

Empirical literature on central bank independence typically uses public commentary of politicians in traditional media such as newspapers. Ehrmann and Fratzscher (2011) document that elected politicians in Europe and the European Central Bank have different preferences about monetary policy. Binder (2018) finds evidence of pervasive political pressure on central banks across multiple countries around the world.<sup>8</sup>

Finally, in our ongoing work, Camous and Matveev (2020), we build a theoretical game of monetary-fiscal interactions. We ask whether a central bank should adjust its policy framework to defend its independence against fiscal influence. We show that designing monetary rules with explicit actions against fiscal influence is desirable: this can not only improve economic outcomes but also enhance the overall credibility of a central bank. This work continues a tradition of research interested in monetary-fiscal interactions, as recently reviewed by Bassetto and Sargent (2020). Bianchi and Ilut (2017) and Bianchi and Melosi (2014) are notable examples that show how the high inflation period in the US in the ‘60s-‘70s was the outcome of leading fiscal decisions and accommodating monetary policy. These papers also emphasize a role of private agents’ expectations regarding policy mix in supporting high inflation. This account of the Great Inflation period demonstrates the perils of fiscal dominance and the importance of assessing market’s perception of monetary-fiscal interactions.

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6. See Gorodnichenko and Weber (2016) and Nakamura and Steinsson (2018) for more recent contributions.

7. Readers interested in data about the euro zone can readily consult asset reactions to monetary policy innovations from the database provided by Altavilla et al. (2019).

8. Another strand of the literature often infers a measure of actual central bank independence by studying the predictability of monetary policy based on election cycles, see, e.g., Alpanda and Honig (2009).

# 1 Data and Identification

Our analysis is based on two key types of data. First, we document pressure on the Fed’s monetary policy using tweets posted by President Trump that contain specific keywords—Fed(eral), reserve, Powell, interest, rate, currency, inflation—and select only those tweets that directly relate to the Fed.<sup>9,10</sup> Second, we extract market expectations about upcoming federal funds rate policy decisions from daily prices of corresponding futures contracts.<sup>11</sup> We combine these two data sources to study how the President’s pressure affected expectations of market participants regarding monetary policy decisions.

Our analysis starts on November 2, 2017, the day the President announced the nomination of Jerome Powell as Chair of the Fed, and runs until the day of the FOMC meeting on September 18, 2019. We use data on fed funds rate futures during the days with and without relevant tweets to compute changes in expectations about the upcoming monetary policy decision. The revision of market expectations is proportional to the daily change of the settlement price for a futures contract associated to the month of the upcoming FOMC meeting; see Appendix A for details. We remove data for September 16-17, 2019 from our analysis, because on these specific days price changes of futures contract are largely driven by turmoil in repo money markets.<sup>12</sup>

There are 88 relevant tweets in our sample, including the tweet announcing the nomination of the Chair.<sup>13</sup> Some of the tweets belong to the same thread, or sequence of tweets; some of the days feature multiple threads that are relevant. Given our access to daily futures data, we treat all tweets within the same trading day as one event.<sup>14</sup> We discard tweets outside trading hours and during weekends, because they cannot be related to movements of futures price. Finally, we exclude observations on FOMC decision days, because on these days the change of futures price largely reflects market adjustments to actual policy decisions. This leaves 39 days with tweets within the sample period. The list of these tweets is reported in Appendix B.

Using this data, we characterize a fixed effect of the president’s tweets on the revisions of market expectations. This allows us to identify the *average* effect that the President’s pressure had on market expectations of monetary policy. This approach is valid provided that there is no omitted

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9. The history of Trump’s tweets is publicly available at [www.trumptwitterarchive.com](http://www.trumptwitterarchive.com).

10. For instance, the tweet *Thank you for soooo many nice comments regarding my Oval Office speech. A very interesting experience!* (January 8, 2019, 22:33 CT, emphasis added) contains a target keyword but is obviously not related to monetary policy.

11. Daily data on the 30-Day Federal Funds Futures from the CME Group is publicly available at [www.quandl.com](http://www.quandl.com).

12. The observations on these days are problematic because specific tensions on interbank markets and Fed reactions to this particular situation have interfered with policy announcement. In particular, a shortage of liquidity in the repo market pushed the effective fed funds rate above the target range for the first time since the Great Recession. Then, the Fed’s open-market operations calmed the market. These movements were unrelated to upcoming policy decisions regarding the fed funds rate.

13. *Today, it was my pleasure and great honor to announce my nomination of Jerome Powell to be the next Chairman of the @FederalReserve* (November 2, 2017, 17:35 CT). Before this tweet, Donald Trump had never tweeted about the Fed, its Chair or its policies as President.

14. Trading hours of the electronic platform: 17:00 CT on the previous day to 16:00 CT on the current day.

factor that systematically affects market expectations and induces the President to pressure the Fed. Note that we do not attempt to identify the effects of individual instances of pressure. Therefore, the use of daily data is less problematic compared to the literature on high-frequency identification of monetary policy shocks.<sup>15</sup>

Certainly, daily variation in the price of fed funds rate futures can be linked to multiple factors. Controlling for some of these confounding factors allows us to address possible concerns regarding the identification assumption and improve the reliability of our estimates. First, we use data on the dates and time of major economic data releases.<sup>16</sup> Second, we collect data on the dates and time of public remarks by the voting members of the FOMC.<sup>17</sup> Third, we identify the days when the President not only tweeted about monetary policy but also about the ongoing trade conflict with China. Finally, we analyze media reports on the days with the relevant President’s tweets to document important news on economic data and the trade conflict not captured by the sources described above.<sup>18</sup>

## 2 Analysis and Results

Our analysis involves the following steps. We work with daily changes in expectations of upcoming monetary policy decisions. We categorize days within the full sample based on whether there were tweets posted by the President or not. To account for possible confounding factors, we compute statistics of changes in expectations for various subsamples.

### Daily Changes in Expectations

Figure 1 displays daily changes in financial market expectations about future monetary policy decisions throughout the entire sample period. Negative numbers reflect a decrease in the expected policy rate. Days that feature major economic data releases are denoted with red dots, and remaining days are denoted with small grey dots. Days that feature relevant tweets by the President are indicated with blue squares. Dashed lines stand for FOMC meetings, and large black dots monetary policy surprises, i.e., the difference between the actual federal funds rate and the expected rate the day before the meeting.

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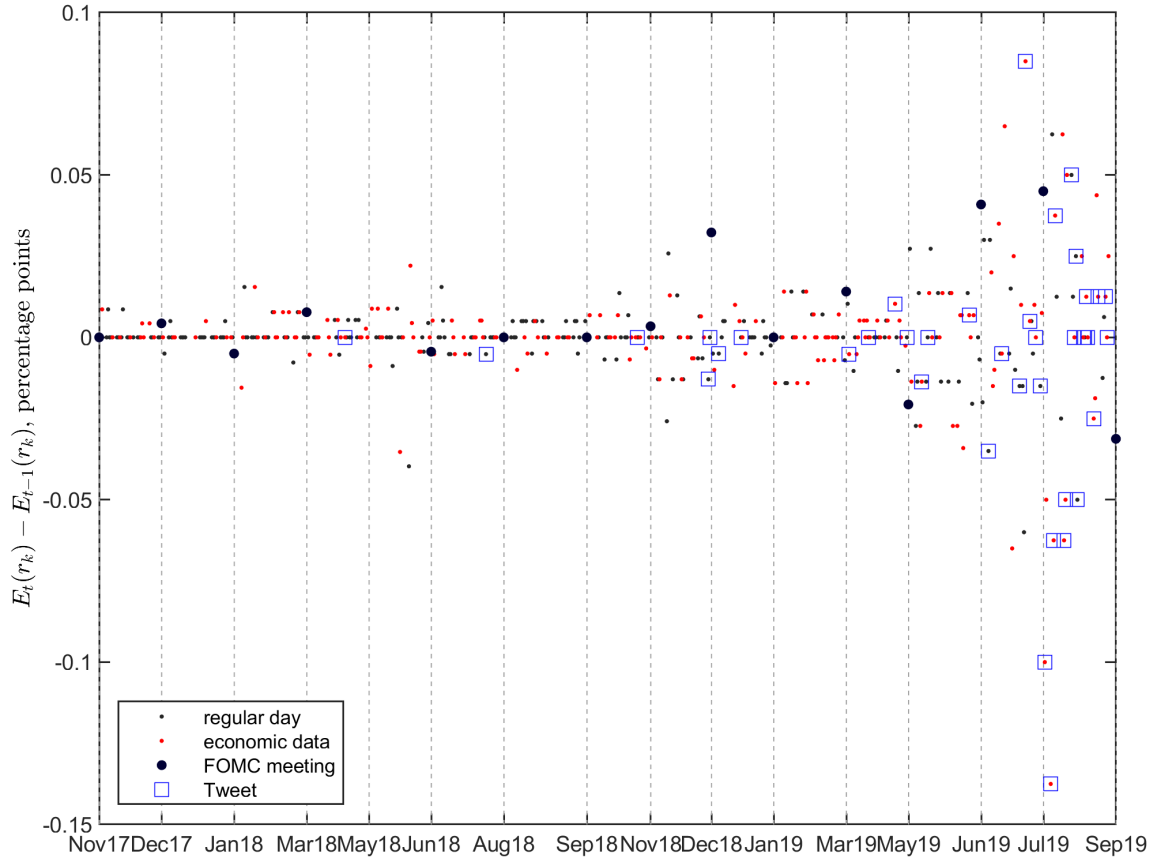
15. This literature studies effects of monetary policy shocks on other variables, which requires precise estimates of the shocks in the first place. In this case, the use of narrow intraday time windows is crucial to identify individual shocks.

16. The following releases are taken into account: (Core) Inflation, GDP Growth, Non-Farm Payrolls, Durable Goods Orders, Retail Sales, Personal Income and Spending, Balance of Trade, Institute for Supply Management (Non-)Manufacturing Purchasing Managers’ Indexes, Michigan Consumer Sentiment Index. The data is publicly available from the corresponding data providers and could also be accessed in a centralized way at [www.tradingeconomics.com](http://www.tradingeconomics.com).

17. A comprehensive repository of FOMC participants’ speeches, testimony, interviews and commentary is publicly available at [www.stlouisfed.org/fomcspeak](http://www.stlouisfed.org/fomcspeak).

18. We use the media monitoring database provided by Factiva to look for reports with the subject of economic news, financial market news, or international relations. The search is restricted to sources classified as reliable. We filter the results by relevance and study the first 20 headlines on a given day.

Figure 1: Daily revision of expectations about the fed funds rate at the next FOMC meeting



**Notes:** Grey dashed lines mark days of the FOMC meetings. Dots represent daily changes in expectations of the monetary policy rate at the upcoming meeting. The federal funds target rate (FFR) after the upcoming FOMC announcement in month  $k$  is denoted as  $r_k$ ;  $E_t$  denotes expectation conditional on information at time  $t$ . Daily changes are computed using the method described in Appendix A and expressed in percentage points, e.g., a reduction of expected policy rate from 2 percent to 1.95 percent is 0.05 percentage points.

Consider the general pattern of daily expectation changes. The revisions are tightly clustered around zero from the beginning of the sample on November 2, 2017 until the FOMC meeting on May 1, 2019. The notable outlier during this period is the tight monetary policy shock resulting from the last interest rate hike announced after the FOMC meeting on December 19, 2018. The changes of policy expectations become more volatile in the remaining part of the sample. This pattern suggests a change in economic conditions around May 2019. As visible in Figure 3, it coincides with a reversal in the Fed policy cycle, which resulted in a series of consecutive rate cuts starting from the FOMC meeting on July 31, 2019.

### Baseline Analysis

A first look at the distribution of tweets over time points to an escalation in the attempts of President Trump to weigh on the Fed’s decisions. The frequency of relevant tweets is very low at

the beginning of the period. However, it increases to at least one thread every few days in August and September 2019. Furthermore, a semantic analysis, which is beyond the scope of this note, would point to a qualitative increase in the President’s dissatisfaction with the conduct of monetary policy.<sup>19</sup>

To isolate the average effect of tweets on market expectations, we proceed as follows. First, we split the days without FOMC decisions in our sample into two groups according to whether they feature a relevant tweet or not. The average revision of expectations during the days without relevant tweets is slightly positive, as reported in the first row of Table 1. In contrast, the average revision is negative on the days with tweets, which means a shift of expectations toward easier policy.<sup>20</sup> This basic partition suggests that on average market participants associated the President’s tweets with a reduction of expected policy rate.

Our baseline analysis considers three distinct groups of observations: days that feature only a relevant tweet, days with only an economic data release, and days with neither of the two. The additional split conditional on economic data releases allows to better isolate the effect of tweets from the effect of major economic news.<sup>21</sup> The descriptive statistics for these three groups are displayed in the second and third rows of Table 1, and the corresponding histograms are plotted in Figure 2. The average revision of expectations during the days without relevant tweets remains slightly positive regardless of whether there was a release of economic data. The average revision on the days with tweets only and no economic data releases is negative but roughly twice as small as on all the days with tweets. Specifically, we find the average effect of tweets on expectations in this restricted subsample is equal to -0.4 basis points.

Additionally, note from Figure 2 that the volatility of changes in expectations is higher on the days with relevant tweets. Part of this wedge is not only explained by the effect of the tweets, but also by the fact that these days are concentrated during the second half of our sample period, with general economic volatility and reversal in the Fed policy cycle. Accordingly, we also repeat the analysis for subsamples of data before and after the FOMC meeting on May 1, 2019. The descriptive statistics for these two subsamples are displayed in the fourth and fifth rows of Table 1. In both cases, the results reported previously hold: the average revision of expectations during the days without relevant tweets is slightly positive, while the average revision is negative on the days with

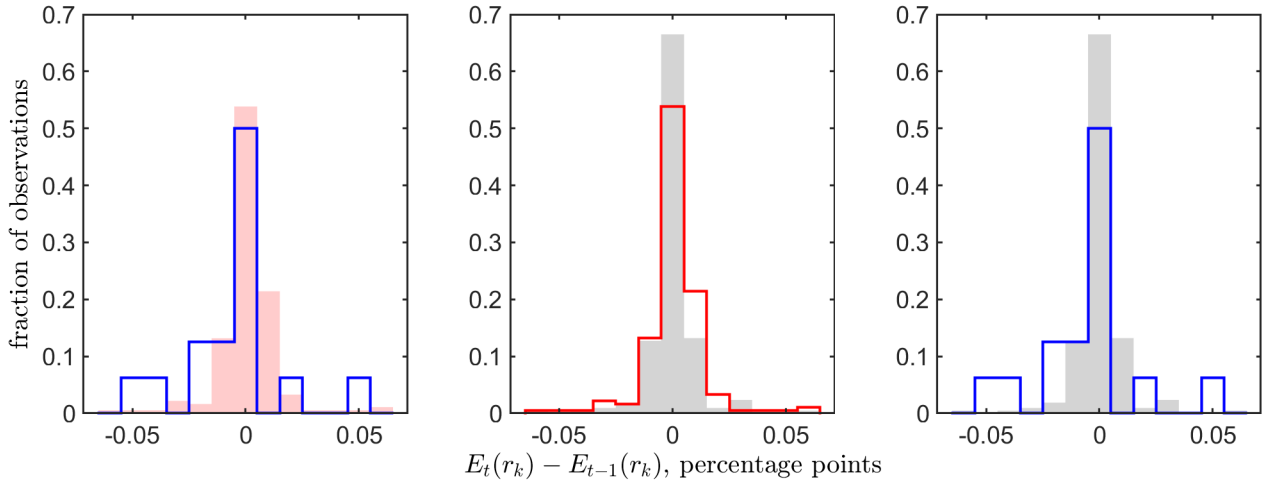
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19. Contrast, for instance, the first tweet in our sample *Russia and China are playing the Currency Devaluation game as the U.S. keeps raising interest rates. Not acceptable!* (April 16, 2018, 07:31 CT), with a later tweet *Our Federal Reserve cannot “mentally” keep up with the competition - other countries. At the G-7 in France, all of the other Leaders were giddy about how low their Interest Costs have gone. Germany is actually “getting paid” to borrow money - ZERO INTEREST PLUS! No Clue Fed!* (August 28, 2019, 09:36 CT).

20. A standard statistical  $t$ -test to compare the means across groups is not appropriate given the small sample size and the clear presence of heteroskedasticity. We find a significant negative average effect of the President’s tweets when estimating a regression of expectations changes with fixed effect on the days with relevant tweets and the controls discussed below as well as Newey-West standard errors. These results are available upon request.

21. Naturally, this identification challenge could be overcome by using high-frequency intraday data, as in Bianchi, Kung and Kind (2020). As mentioned earlier, identification of the individual effect of each tweet is not necessary for our purposes; and as discussed later, our results compare well with those that rely on high frequency data.

Figure 2: Daily revision of expectations about the fed funds rate at the next FOMC meeting



**Notes:** These histograms display distributions of daily changes in expectations of the monetary policy rate at the upcoming meeting. Daily changes are computed and expressed in percentage points. Data represent three types of event days, as in Table 1. **Grey shaded area:** days with no tweets by the President and no economic data releases (mean: 0.03 bp). **Red contour or shaded area:** days with only economic data releases (mean: 0.10 bp). **Blue contour:** only tweets by President Trump (mean: -0.39 bp).

tweets.

## Economic Interpretation

Overall, we find a downward average revision of expectations of between 0.4 and 0.9 basis points on the days with relevant tweets.<sup>22</sup> One way to assess the significance of these numbers is to convert them into a probability of a rate cut. Consider the policy choice menu of keeping the rate unchanged against cutting it by 25 basis points. A 0.4-basis-point change in expectations is then equivalent to a 1.6-percentage-point increase in the rate cut probability. Similarly, a 0.9-basis-point revision translates into a 3.6-percentage-point increase in the rate cut probability.

The magnitudes discussed above can also be compared with the average change in futures contracts on the days with FOMC meetings, usually interpreted as the surprise component of monetary policy decisions. Over the period from November 2, 2017, to September 18, 2019, the average daily variation in similar contracts on FOMC days is +0.6 basis points.

## Controlling for Confounding Factors

There are multiple factors that affect daily variation in the price of fed funds rate futures. We consider some of these confounding factors to address possible concerns regarding the identification assumption and improve the reliability of our estimates.

22. With an identification based on intraday variation of futures contracts, Bianchi, Kung and Kind (2020) find a negative average effect of 0.3 basis points and a cumulative negative effect of 10 basis points.

Table 1: Data moments

|                           | Twitter Days |        |    | Regular Days |        |     |
|---------------------------|--------------|--------|----|--------------|--------|-----|
|                           | avg          | std    | N  | avg          | std    | N   |
| Full sample               | -0.0088      | 0.0377 | 39 | 0.0006       | 0.0120 | 394 |
| Economic data release     |              |        |    |              |        |     |
| no                        | -0.0039      | 0.0220 | 16 | 0.0003       | 0.0104 | 212 |
| yes                       | -0.0121      | 0.0457 | 23 | 0.0010       | 0.0137 | 182 |
| Policy cycle              |              |        |    |              |        |     |
| tighten                   | -0.0016      | 0.0057 | 11 | 0.0003       | 0.0064 | 330 |
| ease                      | -0.0116      | 0.0442 | 28 | 0.0024       | 0.0263 | 64  |
| FOMC public remarks       |              |        |    |              |        |     |
| no                        | -0.0109      | 0.0266 | 21 | 0.0008       | 0.0109 | 232 |
| yes                       | -0.0063      | 0.0482 | 18 | 0.0004       | 0.0136 | 162 |
| Trade conflict with China |              |        |    |              |        |     |
| no                        | -0.0018      | 0.0299 | 22 | —            | —      | —   |
| yes                       | -0.0178      | 0.0452 | 17 | —            | —      | —   |

**Notes.** This table reports summary statistics for average daily changes in policy rate expectations at upcoming policy meeting. Daily changes are computed using the method described in Appendix A and expressed in percentage points. Reported statistics include average, standard deviation and number of observations (N) within each (sub)sample. The sample of regular days consists of days without Fed-related tweets by the President. The sample of Twitter days consists of days with at least one Fed-related tweet by the President. Each of these two samples is split into subsamples across time before (tighten) and after (ease) the FOMC meeting on May 1, 2019 as well as according to whether (i) there was at least one major economic data release, (ii) there was at least one public remark by a voting FOMC member. The sample of Twitter days is also split according to whether there was a President’s tweet or other news regarding the ongoing trade conflict with China. Days with FOMC decision announcements are excluded from the analysis.

Our baseline analysis already showed that the sign of the average revision of expectations to Fed-related tweets is not sensitive to contemporaneous releases of economic data. Public remarks by FOMC members are also carefully monitored by market participants. As reported in the sixth and seventh rows of Table 1, the average change in expectations is negative, whether it is computed on the days when the President tweeted alongside or separate from a public remark by a voting member of the FOMC. Furthermore, the average revision is stronger when such confounding events do not occur. One can thus discard the possibility that the President’s tweets are just a noise on the days when relevant policy information is released by FOMC voting members.

Moreover, the attempts by the President to influence monetary policy decisions took place amid trade tensions with China. The reaction of market participants to Fed-related tweets might be driven by information about negotiations with China and the possible implications for the US economy rather than by pressure on the central bank. We split the full sample of days with Fed-related tweets

in two subsamples conditional on the coincidence with a release of news regarding the trade conflict (either through the President’s Twitter account or other media). The corresponding descriptive statistics are displayed in the eighth and ninth rows of Table 1. The sign of the average revision in expectations on days with Fed-related tweets doesn’t change when controlling for releases of information associated to the trade conflict. Note that the average change of expectations is stronger when Fed-related tweets coincide with information on the trade conflict, hence the state of the conflict is an important factor affecting the expected path of monetary policy.

Taking these additional controls into account, we find a negative average revision of expectations of between 0.2 and 1.1 basis points on the days with Fed-related tweets (with controls for one of the factors at a time). This range is wider than in our baseline analysis above and contains the estimate of the negative average effect of 0.3 basis points reported by Bianchi, Kung and Kind (2020) based on an identification using high-frequency intraday variation in futures contracts.

## Actual Policy Decisions

Did the Fed surrender to the President’s pressure? This is a delicate question because Fed decisions are (publicly) motivated only by “its statutory mandate of maximum employment and price stability”.<sup>23</sup> The remainder of this section discusses why possible answers are debatable and proposes a potential avenue for future research trying to answer this question.

Actual policy decisions regarding the fed funds rate are reported in Figure 3: the Fed reached the peak of a tightening cycle in December 2018, maintained its target rate constant until July 2019 and then implemented two consecutive 25-basis-point cuts.<sup>24</sup> However, this loosening of monetary stance occurred not only under the President’s pressure, but also during a period of rising uncertainty regarding the performance of the US economy. Note that President Trump was not satisfied with these rate cuts, as indicated in this tweet in September 2019: *The Federal Reserve should get our interest rates down to ZERO, or less, ....*<sup>25</sup>

A more subtle approach is to analyze the surprise component of actual policy decisions, which is captured by the change of the futures contract on the day of the FOMC meeting. The average monetary policy shock over our sample period is +0.6 basis points, suggesting the Fed did not implement policy as loose as expected over time. However, this measure of surprise is not conditional on the President’s pressure, instead the expectations of policy prior the FOMC meetings are driven by multiple factors. Thus, one should find a way to disentangle policy surprises into components

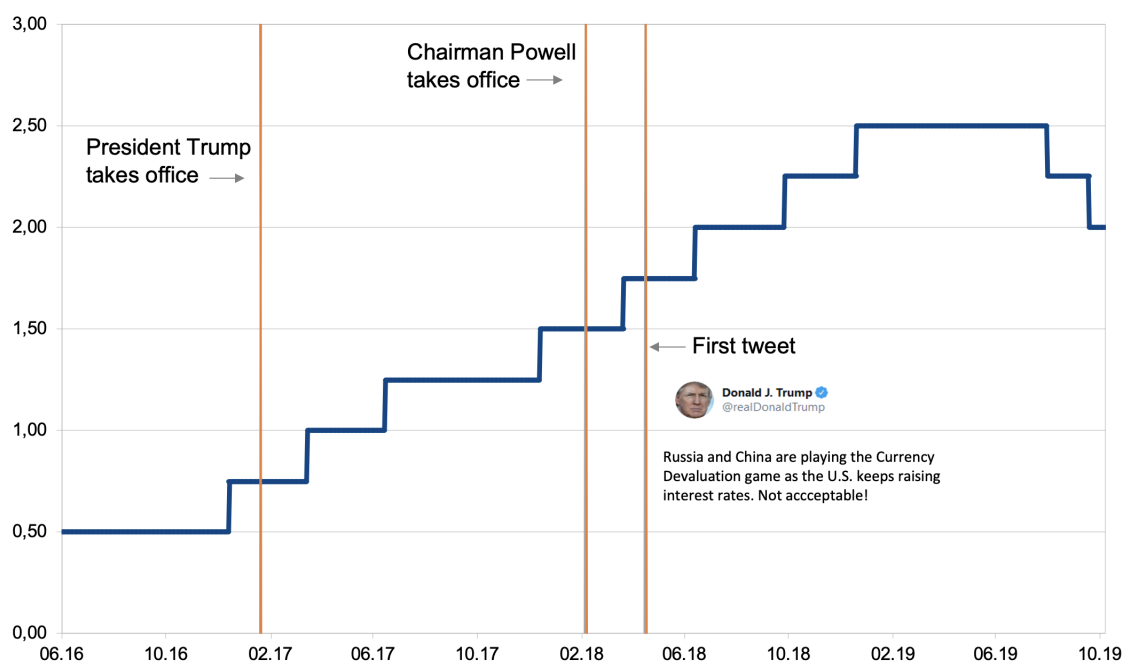
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23. See comments in the FOMC statement released on June 19, 2019, available on [federalreserve.gov](https://www.federalreserve.gov).

24. Data on the fed funds target rate are available from the Federal Reserve Bank of St. Louis database under the code DFEDTARU.

25. The tweet continues as follows: *... and we should then start to refinance our debt. INTEREST COST COULD BE BROUGHT WAY DOWN, while at the same time substantially lengthening the term. We have the great currency, power, and balance sheet. The USA should always be paying the lowest rate. No Inflation! It is only the naïveté of Jay Powell and the Federal Reserve that doesn’t allow us to do what other countries are already doing. A once in a lifetime opportunity that we are missing because of “Boneheads.”*

Figure 3: Federal funds rate target



**Notes:** The federal funds rate is a central target for the implementation of monetary policy. Formally, this is the interest rate at which banks lend excess reserves to each other. The Federal Reserve buys and sells securities to maintain the fed funds rate around the target rate. The target rate is evaluated regularly, according to the evolution of economic activity.

including the one that captures responses to pressure. A promising avenue is to study high-frequency comovements with other assets as in Jarociński and Karadi (2020).

Finally, regardless of how the actual decision of the central bank turns out, expectations of financial markets participants of a possible accommodation of the President’s demands by monetary policy might work its way to other interest rate markets and affect economic outcomes. A first evidence of such spillover to the Treasury debt market is provided by Tillmann (2020).

## Conclusions

How did financial markets react to President Trump’s attempts to influence monetary policy? We present a method that extracts changes of market expectations about future monetary policy decisions in response to the President’s tweets. The analysis reveals that markets are sensitive to the President’s comments about monetary policy, which raises important questions about the independence of the central bank.

There is substantial debate about whether the Fed surrendered to the pressure exerted by the President. On the one hand, positive monetary policy surprises on the days with FOMC policy announcement might be interpreted as if the Fed did not accommodate the President’s demand. On

the other hand, the reversal of policy cycle in May 2019 might suggest otherwise. This debate is an important topic for future research.

## A Market expectations of monetary policy

We infer revisions of market expectations of the upcoming policy decision using futures contracts that are settled at the end of the month corresponding to the next FOMC meeting. Let  $k$  be the month of the upcoming FOMC meeting and  $f_t^k$  be the price of the corresponding federal funds rate futures contract at time  $t$ . Also, let  $r_k$  be the federal funds target rate after the FOMC announcement. Then the revision of expectation regarding  $r_k$  between  $t - 1$  and  $t$  is proportional to the change of the futures price during this period:

$$\mathbb{E}_t(r_k) - \mathbb{E}_{t-1}(r_k) \propto f_t^k - f_{t-1}^k, \quad (1)$$

where  $\mathbb{E}_t$  denotes expectation conditional on information at time  $t$ , and a constant of proportionality depends on the number of days between the FOMC meeting and the end of the month when it occurs.

Note that equation (1) neglects possible variations in market risk premium, which is a common approach when working with high-frequency data because the risk premium has been found to vary at business-cycle frequency—see, e.g., Piazzesi and Swanson (2008). Moreover, we follow Gürkaynak, Sack and Swanson (2005) and use the unscaled change in next-month futures contract when the FOMC meeting occurs on a day within the last seven days of the month.

## B Dataset of tweets

We used the following dataset of tweets by President Trump in our analysis. The time-stamps of tweets are reported using the Central Time (CT) Zone, which simplifies the match with the data on fed funds futures that are traded on the Chicago Mercantile Exchange. Tweets are grouped daily in reverse chronological order according to the following trading hours: 17:00 CT on the previous day to 16:00 CT on the current day. For convenience, we also report the dates of upcoming FOMC meetings and the revisions of expectations about the corresponding policy rate decision. The revisions are computed using equation (1) and expressed in percentage points.

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*Expectation revision: 0.0000 p.p.*

12-Sep-2019 07:13:09 European Central Bank, acting quickly, Cuts Rates 10 Basis Points. They are trying, and succeeding, in depreciating the Euro against the VERY strong Dollar hurting U.S. exports.... And the Fed sits, and sits, and sits. They get paid to borrow money, while we are paying interest!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: 0.0125 p.p.*

11-Sep-2019 05:42:13 The Federal Reserve should get our interest rates down to ZERO, or less, and we should then start to refinance our debt. INTEREST COST COULD BE BROUGHT WAY DOWN, while at the same time substantially lengthening the term. We have the great currency, power, and balance sheet.....

11-Sep-2019 05:42:13 ....The USA should always be paying the the lowest rate. No Inflation! It is only the naïveté of Jay Powell and the Federal Reserve that doesn't allow us to do what other countries are already doing. A once in a lifetime opportunity that we are missing because of "Boneheads."

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: 0.0125 p.p.*

06-Sep-2019 10:14:20 "China is eating the Tariffs." Billions pouring into USA. Targeted Patriot Farmers getting massive Dollars from the incoming Tariffs! Good Jobs Numbers No Inflation(Fed). China having worst year in decades. Talks happening, good for all!

06-Sep-2019 07:22:25 I agree with @jimcramer the Fed should lower rates. They were WAY too early to raise, and Way too late to cut - and big dose quantitative tightening didn't exactly help either. Where did I find this guy Jerome? Oh well, you can't win them all!

05-Sep-2019 22:33:33 "I think President Trump is set in his ways because he doesn't see any weakening. I mean look at the joblessness report today. What I'm surprised at is how strong the consumer is. I think the Chinese need it (a deal) more than we do. It's statistical. I just think....

05-Sep-2019 22:33:33 ....that our economy is very strong. If the Fed would lower rates to where the bond market says they should be, then I really wouldn't worry about a recession." @jimcramer @JoeSquawk

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: -0.0250 p.p.*

03-Sep-2019 08:45:24 Germany, and so many other countries, have negative interest rates, “they get paid for loaning money,” and our Federal Reserve fails to act! Remember, these are also our weak currency competitors!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: 0.0000 p.p.*

30-Aug-2019 09:10:13 If the Fed would cut, we would have one of the biggest Stock Market increases in a long time. Badly run and weak companies are smartly blaming these small Tariffs instead of themselves for bad management...and who can really blame them for doing that? Excuses!

30-Aug-2019 08:55:41 The Euro is dropping against the Dollar “like crazy,” giving them a big export and manufacturing advantage...and the Fed does NOTHING! Our Dollar is now the strongest in history. Sounds good, doesn’t it? Except to those (manufacturers) that make product for sale outside the U.S.

30-Aug-2019 08:55:41 ....We don’t have a Tariff problem (we are reigning in bad and/or unfair players), we have a Fed problem. They don’t have a clue!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: 0.0125 p.p.*

29-Aug-2019 08:05:22 The Economy is doing GREAT, with tremendous upside potential! If the Fed would do what they should, we are a Rocket upward!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: 0.0000 p.p.*

28-Aug-2019 09:36:41 Our Federal Reserve cannot “mentally” keep up with the competition - other countries. At the G-7 in France, all of the other Leaders were giddy about how low their Interest Costs have gone. Germany is actually “getting paid” to borrow money - ZERO INTEREST PLUS! No Clue Fed!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: 0.0000 p.p.*

27-Aug-2019 11:37:59 The Federal Reserve loves watching our manufacturers struggle with their exports to the benefit of other parts of the world. Has anyone looked at what almost all other countries are doing to take advantage of the good old USA? Our Fed has been calling it wrong for too long!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: -0.0500 p.p.*

23-Aug-2019 09:40:56 As usual the Fed did NOTHING! It is incredible that they can “speak” without knowing or asking what I am doing, which will be announced shortly. We have a very strong dollar and a very weak Fed. I will work “brilliantly” with both and the U.S. will do great...

23-Aug-2019 09:57:40 ....My only question is who is our bigger enemy, Jay Powell or Chairman Xi?

23-Aug-2019 08:01:33 Now the Fed can show their stuff!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: 0.0250 p.p.*

22-Aug-2019 09:21:52 The Economy is doing really well. The Federal Reserve can easily make it Record Setting! The question is being asked, why are we paying much more in interest than Germany and certain other countries? Be early (for a change), not late. Let America win big, rather than just win!

22-Aug-2019 07:53:13 Germany sells 30 year bonds offering negative yields. Germany competes with the USA. Our Federal Reserve does not allow us to do what we must do. They put us at a disadvantage against our competition. Strong Dollar, No Inflation! They move like quicksand. Fight or go home!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: 0.0000 p.p.*

21-Aug-2019 08:56:12 So Germany is paying Zero interest and is actually being paid to borrow money, while the U.S., a far stronger and more important credit, is paying interest and just stopped (I hope!) Quantitative Tightening. Strongest Dollar in History, very tough on exports. No Inflation!.....

21-Aug-2019 08:56:12 ....WHERE IS THE FEDERAL RESERVE?

21-Aug-2019 07:52:27 Doing great with China and other Trade Deals. The only problem we have is Jay Powell and the Fed. He’s like a golfer who can’t putt, has no touch. Big U.S. growth if he does the right thing, BIG CUT - but don’t count on him! So far he has called it wrong, and only let us down....

21-Aug-2019 07:52:27 ....We are competing with many countries that have a far lower interest rate, and we should be lower than them. Yesterday “highest Dollar in U.S.History.” No inflation. Wake up Federal Reserve. Such growth potential, almost like never before!

21-Aug-2019 07:04:27 “The speed bump has been missteps by the Federal Reserve.” @CharlesPayne2nd @foxand-friends So true!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: 0.0500 p.p.*

19-Aug-2019 10:26:20 Our Economy is very strong, despite the horrendous lack of vision by Jay Powell and the Fed, but the Democrats are trying to “will” the Economy to be bad for purposes of the 2020 Election. Very Selfish! Our dollar is so strong that it is sadly hurting other parts of the world...

19-Aug-2019 10:26:20 .....The Fed Rate, over a fairly short period of time, should be reduced by at least 100 basis points, with perhaps some quantitative easing as well. If that happened, our Economy would be even better, and the World Economy would be greatly and quickly enhanced-good for everyone!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: -0.0500 p.p.*

15-Aug-2019 15:14:16 “If they don’t get this Trade Deal with the U.S. done, China could have it first recession (or worse!) in years. There’s disinvestment in China right now. Also, the Fed is too tight (I agree).” Steve Moore, Heritage Foundation

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: -0.0625 p.p.*

14-Aug-2019 14:21:05 We are winning, big time, against China. Companies & jobs are fleeing. Prices to us have not gone up, and in some cases, have come down. China is not our problem, though Hong Kong is not helping. Our problem is with the Fed. Raised too much & too fast. Now too slow to cut....

14-Aug-2019 14:21:05 ..Spread is way too much as other countries say THANK YOU to clueless Jay Powell and the Federal Reserve. Germany, and many others, are playing the game! CRAZY INVERTED YIELD CURVE! We should easily be reaping big Rewards & Gains, but the Fed is holding us back. We will Win!

14-Aug-2019 12:14:50 The Great Charles Payne @cvpayne correctly stated that Fed Chair Jay Powell made TWO enormous mistakes. 1. When he said “mid cycle adjustment.” 2. We’re data dependent. “He did not do the right thing.” I agree (to put it mildly!). @Varneyco

14-Aug-2019 10:39:31 “The Fed has got to do something! The Fed is the Central Bank of the United States not the Central Bank of the World.” Mark Grant @Varneyco Correct! The Federal Reserve acted far too quickly, and now is very, very late. Too bad, so much to gain on the upside!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: 0.0375 p.p.*

08-Aug-2019 09:38:16 As your President, one would think that I would be thrilled with our very strong dollar. I am not! The Fed's high interest rate level, in comparison to other countries, is keeping the dollar high, making it more difficult for our great manufacturers like Caterpillar, Boeing.....

08-Aug-2019 09:38:17 ....John Deere, our car companies, & others to compete on a level playing field. With substantial Fed Cuts (there is no inflation) and no quantitative tightening, the dollar will make it possible for our companies to win against any competition. We have the greatest companies...

08-Aug-2019 09:38:17 ...in the world there is nobody even close, but unfortunately the same cannot be said about our Federal Reserve. They have called it wrong at every step of the way, and we are still winning. Can you imagine what would happen if they actually called it right?

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: -0.0625 p.p.*

07-Aug-2019 07:46:22 "Three more Central Banks cut rates." Our problem is not China - We are stronger than ever, money is pouring into the U.S. while China is losing companies by the thousands to other countries, and their currency is under siege - Our problem is a Federal Reserve that is too.....

07-Aug-2019 07:46:23 ....proud to admit their mistake of acting too fast and tightening too much (and that I was right!). They must Cut Rates bigger and faster, and stop their ridiculous quantitative tightening NOW. Yield curve is at too wide a margin, and no inflation! Incompetence is a.....

07-Aug-2019 07:46:24 ....terrible thing to watch, especially when things could be taken care of sooo easily. We will WIN anyway, but it would be much easier if the Fed understood, which they don't, that we are competing against other countries, all of whom want to do well at our expense!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: -0.1375 p.p.*

05-Aug-2019 07:12:44 China dropped the price of their currency to an almost a historic low. It's called "currency manipulation." Are you listening Federal Reserve? This is a major violation which will greatly weaken China over time!

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: -0.1000 p.p.*

31-Jul-2019 19:17:45 Experts stated that the Fed should not have tightened, and then waited too long to undo their mistake. James Bullard of St. Louis Fed said they waited too long to correct the mistake that they made last December. "Mistake, Powell cut rate and then he started talking." @LouDobbs

*Upcoming FOMC meeting: 18-Sep-2019*

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*Expectation revision: -0.0150 p.p.*

29-Jul-2019 08:18:14 The Fed “raised” way too early and way too much. Their quantitative tightening was another big mistake. While our Country is doing very well, the potential wealth creation that was missed, especially when measured against our debt, is staggering. We are competing with other.....

29-Jul-2019 08:18:14 ...countries that know how to play the game against the U.S. That’s actually why the E.U. was formed....and for China, until now, the U.S. has been “easy pickens.” The Fed has made all of the wrong moves. A small rate cut is not enough, but we will win anyway!

29-Jul-2019 06:48:54 The E.U. and China will further lower interest rates and pump money into their systems, making it much easier for their manufacturers to sell product. In the meantime, and with very low inflation, our Fed does nothing - and probably will do very little by comparison. Too bad!

*Upcoming FOMC meeting: 31-Jul-2019*

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*Expectation revision: 0.0000 p.p.*

26-Jul-2019 09:40:26 Q2 GDP Up 2.1% Not bad considering we have the very heavy weight of the Federal Reserve anchor wrapped around our neck. Almost no inflation. USA is set to Zoom!

*Upcoming FOMC meeting: 31-Jul-2019*

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*Expectation revision: 0.0050 p.p.*

22-Jul-2019 07:05:12 It is far more costly for the Federal Reserve to cut deeper if the economy actually does, in the future, turn down! Very inexpensive, in fact productive, to move now. The Fed raised & tightened far too much & too fast. In other words, they missed it (Big!). Don’t miss it again!

22-Jul-2019 07:02:19 With almost no inflation, our Country is needlessly being forced to pay a MUCH higher interest rate than other countries only because of a very misguided Federal Reserve. In addition, Quantitative Tightening is continuing, making it harder for our Country to compete. As good.....

22-Jul-2019 07:02:20 ...as we have done, it could have been soooo much better. Interest rate costs should have been much lower, & GDP & our Country’s wealth accumulation much higher. Such a waste of time & money. Also, very unfair that other countries manipulate their currencies and pump money in!

*Upcoming FOMC meeting: 31-Jul-2019*

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*Expectation revision: 0.0850 p.p.*

19-Jul-2019 08:42:16 ....Fed: There is almost no inflation!

19-Jul-2019 08:38:21 I like New York Fed President John Williams first statement much better than his second. His first statement is 100% correct in that the Fed “raised” far too fast & too early. Also must stop with the crazy quantitative tightening. We are in a World competition & winning big...

19-Jul-2019 08:38:21 ...but it is no thanks to the Federal Reserve. Had they not acted so fast and “so much,” we would be doing even better than we are doing right now. This is our chance to build unparalleled wealth and success for the U.S., GROWTH, which would greatly reduce % debt. Don’t blow it!

19-Jul-2019 07:43:05 Because of the faulty thought process we have going for us at the Federal Reserve, we pay much higher interest rates than countries that are no match for us economically. In other words, our interest costs are much higher than other countries, when they should be lower. Correct!

*Upcoming FOMC meeting: 31-Jul-2019*

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*Expectation revision: -0.0150 p.p.*

14-Jul-2019 21:17:10 We are doing great Economically as a Country, Number One, despite the Fed’s antiquated policy on rates and tightening. Much room to grow!

*Upcoming FOMC meeting: 31-Jul-2019*

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*Expectation revision: -0.0050 p.p.*

03-Jul-2019 09:21:52 China and Europe playing big currency manipulation game and pumping money into their system in order to compete with USA. We should MATCH, or continue being the dummies who sit back and politely watch as other countries continue to play their games - as they have for many years!

02-Jul-2019 17:36:48 I am pleased to announce that it is my intention to nominate Judy Shelton, Ph. D., U.S. Executive Dir European Bank of Reconstruction & Development to be on the board of the Federal Reserve....

02-Jul-2019 17:08:29 I am pleased to announce that it is my intention to nominate Christopher Waller Ph. D., Executive VP and Director of Research, Federal Reserve Bank of St. Louis, Missouri, to be on the board of the Federal Reserve....

*Upcoming FOMC meeting: 31-Jul-2019*

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*Expectation revision: -0.0350 p.p.*

24-Jun-2019 07:29:49      Despite a Federal Reserve that doesn't know what it is doing - raised rates far to fast (very low inflation other parts of world slowing, lowering & easing) & did large scale tightening, \$50 Billion/month, we are on course to have one of the best Months of June in U.S. history..

24-Jun-2019 07:29:49      ....Think of what it could have been if the Fed had gotten it right. Thousands of points higher on the Dow, and GDP in the 4's or even 5's. Now they stick, like a stubborn child, when we need rates cuts, & easing, to make up for what other countries are doing against us. Blew it!

*Upcoming FOMC meeting: 31-Jul-2019*

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*Expectation revision: 0.0068 p.p.*

11-Jun-2019 07:10:26      The United States has VERY LOW INFLATION, a beautiful thing!

11-Jun-2019 07:08:30      This is because the Euro and other currencies are devalued against the dollar, putting the U.S. at a big disadvantage. The Fed Interest rate way to high, added to ridiculous quantitative tightening! They don't have a clue! <https://t.co/0CpnUzJqB9>

*Upcoming FOMC meeting: 19-Jun-2019*

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*Expectation revision: 0.0000 p.p.*

14-May-2019 07:35:41      China will be pumping money into their system and probably reducing interest rates, as always, in order to make up for the business they are, and will be, losing. If the Federal Reserve ever did a "match," it would be game over, we win! In any event China wants a deal!

*Upcoming FOMC meeting: 19-Jun-2019*

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*Expectation revision: -0.0136 p.p.*

10-May-2019 08:01:47      Great Consumer Price Index just out. Really good, very low inflation! We have a great chance to "really rock!" Good numbers all around.

*Upcoming FOMC meeting: 19-Jun-2019*

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*Expectation revision: 0.0000 p.p.*

30-Apr-2019 12:56:57 China is adding great stimulus to its economy while at the same time keeping interest rates low. Our Federal Reserve has incessantly lifted interest rates, even though inflation is very low, and instituted a very big dose of quantitative tightening. We have the potential to go...  
30-Apr-2019 13:05:02 ...up like a rocket if we did some lowering of rates, like one point, and some quantitative easing. Yes, we are doing very well at 3.2% GDP, but with our wonderfully low inflation we could be setting major records &, at the same time, make our National Debt start to look small!

*Upcoming FOMC meeting: 01-May-2019*

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*Expectation revision: 0.0103 p.p.*

22-Apr-2019 11:16:38 My friend Herman Cain, a truly wonderful man, has asked me not to nominate him for a seat on the Federal Reserve Board. I will respect his wishes. Herman is a great American who truly loves our Country!

*Upcoming FOMC meeting: 01-May-2019*

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*Expectation revision: 0.0000 p.p.*

04-Apr-2019 07:01:15 Despite the unnecessary and destructive actions taken by the Fed, the Economy is looking very strong, the China and USMCA deals are moving along nicely, there is little or no Inflation, and USA optimism is very high!

*Upcoming FOMC meeting: 01-May-2019*

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*Expectation revision: -0.0052 p.p.*

22-Mar-2019 11:47:33 It is my pleasure to announce that @StephenMoore, a very respected Economist, will be nominated to serve on the Fed Board. I have known Steve for a long time – and have no doubt he will be an outstanding choice!

*Upcoming FOMC meeting: 01-May-2019*

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*Expectation revision: 0.0000 p.p.*

08-Jan-2019 07:01:15 Economic numbers looking REALLY good. Can you imagine if I had long term ZERO interest rates to play with like the past administration, rather than the rapidly raised normalized rates we have today. That would have been SO EASY! Still, markets up BIG since 2016 Election!

*Upcoming FOMC meeting: 30-Jan-2019*

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*Expectation revision: -0.0050 p.p.*

24-Dec-2018 09:55:22      The only problem our economy has is the Fed. They don't have a feel for the Market, they don't understand necessary Trade Wars or Strong Dollars or even Democrat Shutdowns over Borders. The Fed is like a powerful golfer who can't score because he has no touch - he can't putt!

*Upcoming FOMC meeting: 30-Jan-2019*

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*Expectation revision: 0.0000 p.p.*

18-Dec-2018 06:13:24      I hope the people over at the Fed will read today's Wall Street Journal Editorial before they make yet another mistake. Also, don't let the market become any more illiquid than it already is. Stop with the 50 B's. Feel the market, don't just go by meaningless numbers. Good luck!

*Upcoming FOMC meeting: 19-Dec-2018*

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*Expectation revision: -0.0129 p.p.*

17-Dec-2018 07:27:16      It is incredible that with a very strong dollar and virtually no inflation, the outside world blowing up around us, Paris is burning and China way down, the Fed is even considering yet another interest rate hike. Take the Victory!

*Upcoming FOMC meeting: 19-Dec-2018*

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*Expectation revision: 0.0000 p.p.*

30-Oct-2018 07:53:03      "If the Fed backs off and starts talking a little more Dovish, I think we're going to be right back to our 2800 to 2900 target range that we've had for the S&P 500." Scott Wren, Wells Fargo.

*Upcoming FOMC meeting: 08-Nov-2018*

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*Expectation revision: -0.0052 p.p.*

20-Jul-2018 07:43:05      China the European Union and others have been manipulating their currencies and interest rates lower, while the U.S. is raising rates while the dollars gets stronger and stronger with each passing day - taking away our big competitive edge. As usual, not a level playing field...  
20-Jul-2018 07:51:45      ....The United States should not be penalized because we are doing so well. Tightening now hurts all that we have done. The U.S. should be allowed to recapture what was lost due to illegal currency manipulation and BAD Trade Deals. Debt coming due & we are raising rates - Really?

*Upcoming FOMC meeting: 01-Aug-2018*

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*Expectation revision: 0.0000 p.p.*

16-Apr-2018 07:31:02      Russia and China are playing the Currency Devaluation game as the U.S. keeps raising interest rates. Not acceptable!

*Upcoming FOMC meeting: 02-May-2018*

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## References

- Alpanda, S. and A. Honig. 2009. “The Impact of Central Bank Independence on Political Monetary Cycles in Advanced and Developing Nations.” *Journal of Money, Credit and Banking* 41 (7): 1365–1389.
- Altavilla, C., L. Brugnolini, R. S. Gürkaynak, R. Motto and G. Ragusa. 2019. “Measuring Euro Area Monetary Policy.” *Journal of Monetary Economics* 108 (December): 162–179.
- Bassetto, M. and T. J. Sargent. 2020. “Shotgun Wedding: Fiscal and Monetary Policy.” *Annual Review of Economics* 12.
- Bernanke, B. S. and K. N. Kuttner. 2005. “What Explains the Stock Market’s Reaction to Federal Reserve Policy?” *Journal of Finance* 60 (3): 1221–1257.
- Bianchi, F. and C. Ilut. 2017. “Monetary/fiscal policy mix and agents’ beliefs.” *Review of Economic Dynamics* 26:113–139.
- Bianchi, F., H. Kung and T. Kind. 2020. “Threats to Central Bank Independence: High-Frequency Identification with Twitter.” NBER Working Paper No. 26308.
- Bianchi, F. and L. Melosi. 2014. “Dormant shocks and fiscal virtue.” *NBER Macroeconomics Annual* 28 (1): 1–46.
- Binder, C. 2018. “Political Pressure on Central Banks.” Unpublished manuscript.
- Blanchard, O. and C. G. Collins. 2019. “Markets Don’t Believe Trump’s Trade War Is Zero-Sum.” Peterson Institute for International Economics, *Trade and Investment Policy Watch*.
- Camous, A. and D. Matveev. 2020. “The Central Bank Strikes Back! Credibility of Monetary Policy under Fiscal Influence.” Unpublished manuscript.
- Corsetti, G., J. B. Duarte and S. Mann. 2018. “One Money, Many Markets - A Factor Model Approach to Monetary Policy in the Euro Area with High-Frequency Identification.” Cambridge Working Papers in Economics No. 1816.
- Ehrmann, M. and M. Fratzscher. 2011. “Politics and Monetary Policy.” *Review of Economics and Statistics* 93 (3): 941–960.
- Gorodnichenko, Y. and M. Weber. 2016. “Are Sticky Prices Costly? Evidence from the Stock Market.” *American Economic Review* 106 (1): 165–199.
- Gürkaynak, R. S., B. Sack and E. Swanson. 2005. “Do Actions Speak Louder Than Words? The Response of Asset Prices to Monetary Policy Actions and Statements.” *International Journal of Central Banking* 1 (1): 55–93.

- Jarociński, M. and P. Karadi. 2020. “Deconstructing monetary policy surprises—the role of information shocks.” *American Economic Journal: Macroeconomics* 12 (2): 1–43.
- Nakamura, E. and J. Steinsson. 2018. “High-Frequency Identification of Monetary Non-Neutrality: The Information Effect.” *Quarterly Journal of Economics* 133 (3): 1283–1330.
- Piazzesi, M. and E. T. Swanson. 2008. “Futures Prices as Risk-Adjusted Forecasts of Monetary Policy.” *Journal of Monetary Economics* 55 (4): 677–691.
- Tillmann, P. 2020. “Trump, Twitter, and Treasuries.” *Contemporary Economic Policy* (forthcoming).