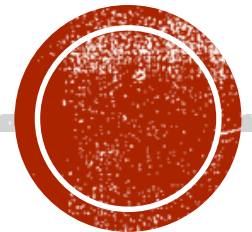


CAN WE LEARN FROM FOMC STATEMENTS/MINUTES ABOUT THE PROBABILITY OF A FUTURE CHANGE IN INTEREST RATES?

Group 4D-Intelli

Members: Yuhang Xia, Chonwai Ho, Cho Hyun Ji,
Xueyang Wei, Jiahao Sun, Cheng Peng

Feb 23, 2019



WHY THIS TOPIC?



- Fed is a very predictable central bank and that its communications have helped markets to anticipate future policy rate changes
- Through textual analysis of transcripts of FOMC meetings, can we identify the primary concerns that cause the Federal Reserve to change the target federal funds rate?
- Can we do this by quantifying the content of the meeting?
- We want to answer the above questions



WHY IS FOMC STATEMENTS/MINUTES IMPORTANT?

- Over time, the Fed has substantially increased its level of transparency thereby aiming at making monetary policy more effective.
- the release of the minutes can have a sizable impact on Treasury bond yields. The impacts are largest when the tone of the minutes differs from the tone of the statement. This presumably leads markets to change their expectations of future monetary policy.
- The Fed is a highly predictable central bank and its communications have helped markets to anticipate future policy rate changes. The policy decision and communications by which the Fed or its officials explain monetary policy may have an impact on the market assessment of the future monetary policy course.

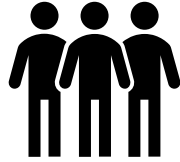


GROUP INTRODUCTION

- Who are we?
- We are a collaborative team combined with coding skills and research skills.
- We use coding methods (Python) to do data scraping and tokenization
- We implement our trading data with research theories to do academic studies



MEMBER LIST



- Yuhang Xia- Team leader & Coordinator
- Chon Wai Ho- Specialty in data collecting and data cleaning
- HyunJin Cho- Well executed in term tokenization and bow claculation
- Xueyang Wei- Proficient at acquiring online data, familiar with selenium, request and scraping. Responsible for data processing
- Jiahao Sun- Adept at data merging
- Diyi Li- Skilled in data organizing and data analyzing
- Cheng Peng- Good at paper research and analysis



HOW WE DO THIS

---SUB TASKS AND RESPONSIBILITIES

1. Scrape the FOMC statements/minutes from the website –Yuhang Xia
2. Collect the daily interest rate data from US government –Chon Wai Ho
3. Tokenize the FOMC minutes –Cho Hyun Jin
4. Calculate the bag of words –XueYang Wei
5. Data merging- Jiahao Sun
6. Evaluate predictive performance-Cheng Peng
7. Upload our finding and everything to the github- Diyi Li

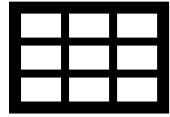


FORSEE THE RESULT-WHAT WE ARE LOOKING FOR(OUR GOAL)

- In this project, we examine whether the release of statements/minutes has helped markets in real time to predict the federal funds rate.
- Hopefully we will find that timely FOMC meeting minutes have provided assurance to markets about the most likely path of future interest rates.
- our textual analysis reveals insights on the relative frequencies of topics discussed during FOMC meetings and their change over time.



TIMETABLE & WHAT WE HAVE DONE SO FAR



- Week 5 (by Feb 23rd)

Hands on Project, finish the first 2 steps: (done)

Scrape online & Collect interest rate

- Week 6& 7 (by Mar 8th)

Data processing & Get first result

- Week 8 (by March 15th)

Wrap up and blog post





PARTIAL RESULTS


查看


MCTranscriptAnalysis-master > feddata > 1982


名称


 FOMC19820202meeting.pdf


 FOMC19820202meeting.txt


 FOMC19820202meetingStop.txt


 FOMC19820202meetingStopstemmed.txt


 FOMC19820330meeting.pdf


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 FOMC19820518meeting.pdf

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 FOMC19820518meetingStop.txt

 FOMC19820518meetingStopstemmed.txt

 FOMC19820520confcall.pdf

307 KB

FOMC19820202meeting.txt - 记事本

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on some catch-up theory. How many other people are engaged in the
it ours and then we will be in the hole next year! MR. ZEISEL. You
to continue to be characterized by relatively high wage settlemen
the easy strategy, number 2, has inflation virtually leveling
the price side. to outside forecasts, we have a fairly optimistic
mirroring the decline in unit labor costs. There apparently isn't
we see some real growth. It's small relative to past cycles, but it
inside risks, particularly in the shorter term. MR. PARTEE. That's
is worthwhile to think about where the shocks could be. We had, wh
ted. that are unanticipated are precisely that; we can't predict
big. But I must say that in recent shock that would cause a real bu
ession? the last few weeks. MR. KEEHN. I think there's more commer
the so-called raw z-scores, the predictors of bankruptcy, as to
one of the fundamental differences in the picture now. CHAIRMAN
[reicast] a scenario that could be quite explosive. This level of
that puzzles me. How would you explain that? MR. PRELL. Well, the
ing that we cannot control interest rates except maybe every tempor
ial dropping to the lowest level since 1960. That is a fairly long
of alternatives was set forth--strategies one, two, and three, c
ken away, output dropped and the unemployment rate rose. That was
no change in monetary policy? That's correct. 2/1-2/82 MS. TEETER



FURTHER PLAN



- We will stick to our plan to finish the whole process, each part in our workflow may iterate, however, as our work goes deeper, we may find it necessary to make some adjustment in our work flows to achieve our final goal.



CONCLUSION AND OUTLOOK

- Understanding how interest rate changes with regards to FOMC communications requires qualitative information into quantitative measures.
- In this project, we apply pre-processing methods and transformations that lead to statistical analysis using machine learning methodology to interpret FOMC transcripts.
- We hope to find empirical evidence on the correlation between FOMC statements/minutes and interest rate return
- We aim to deliver high-quality code and presentations, and we are very excited about what we will finally get as a result.



Q & A

