AI in Finance – FOMC reports
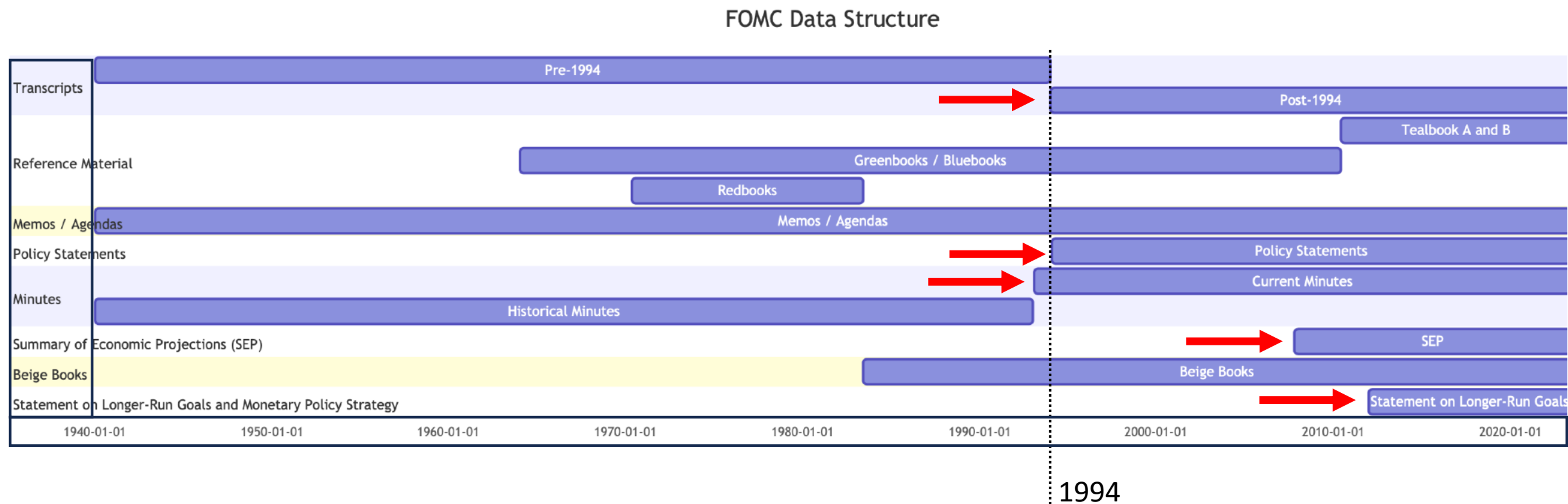
- ➢ Prayut Jain
- ➢ Mousumi Das
- ➢ Soumya Mishra

FOMC Meeting outline

Here's a general outline of how an FOMC meeting typically proceeds:

1. **Preparation:** Before the meeting, FOMC participants receive several documents to prepare, including the Tealbooks (which provide in-depth analysis of current economic and financial conditions and projections), the agenda, and various memos.

2. **Discussion of Economic Conditions:** The meeting begins with a discussion of current economic conditions. This discussion is informed by the data and analysis in the Tealbooks and other materials.

3. **Policy Discussion:** After discussing the state of the economy, the Committee members and other participants discuss monetary policy options. This discussion is informed by the analysis and options presented in Tealbook B.

4. **Decision:** The Committee then makes its policy decision. This decision is typically about whether to raise, lower, or maintain the target range for the federal funds rate, although the Committee can also make decisions about other aspects of monetary policy.

5. **Statement Release:** After the meeting, the FOMC releases a statement summarizing its policy decision and the reasoning behind it. This statement is made public immediately after the meeting.

6. **Press Conference:** Starting in 2011, the Chair of the Federal Reserve (currently Jerome Powell as of my knowledge cutoff in September 2021) holds a press conference after every other FOMC meeting. The press conference provides an opportunity for the Chair to explain the Committee's decision in more detail and for journalists to ask questions.

FOMC Data Structure

FOMC Data Structure

Transcripts	Pre-1994	Post-1994
Reference Material	Greenbooks / Bluebooks	Tealbook A and B
	Redbooks	
Memos / Agendas	Memos / Agendas	
Policy Statements		Policy Statements
Minutes	Historical Minutes	Current Minutes
Summary of Economic Projections (SEP)		SEP
Beige Books		Beige Books
Statement on Longer-Run Goals and Monetary Policy Strategy		Statement on Longer-Run Goals

1940-01-01   1950-01-01   1960-01-01   1970-01-01   1980-01-01   1990-01-01   2000-01-01   2010-01-01   2020-01-01
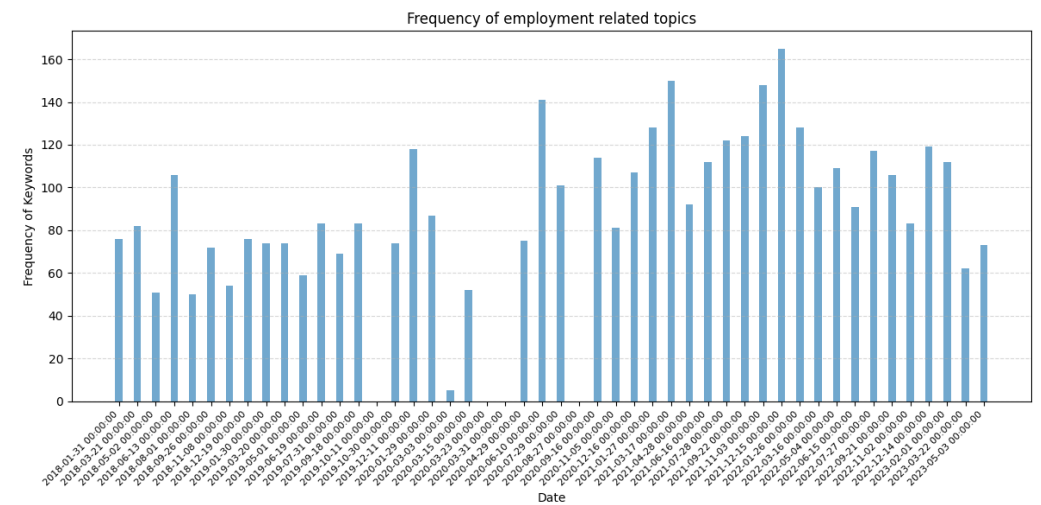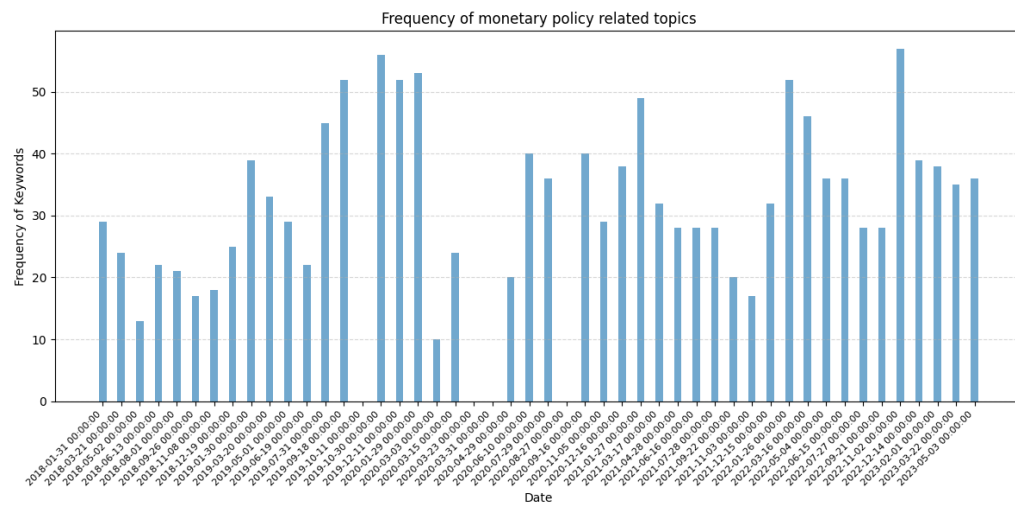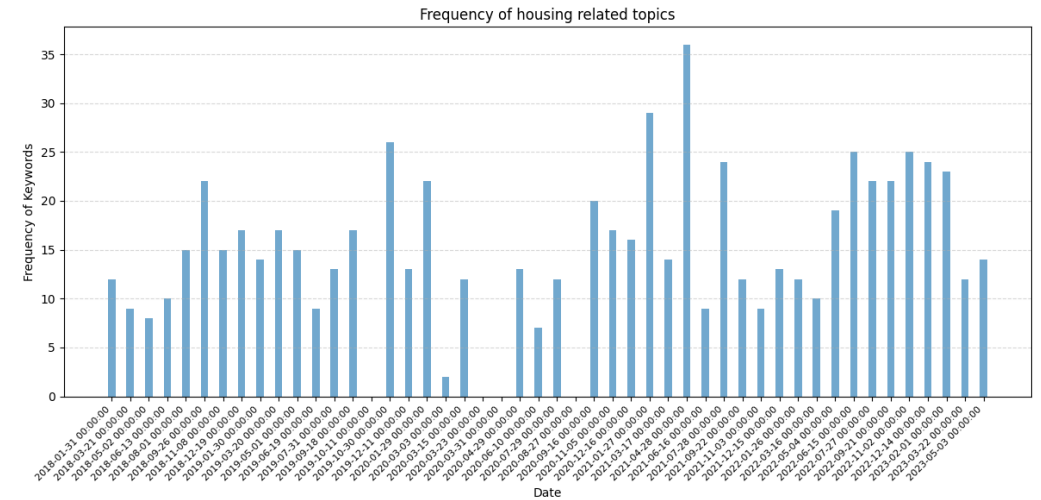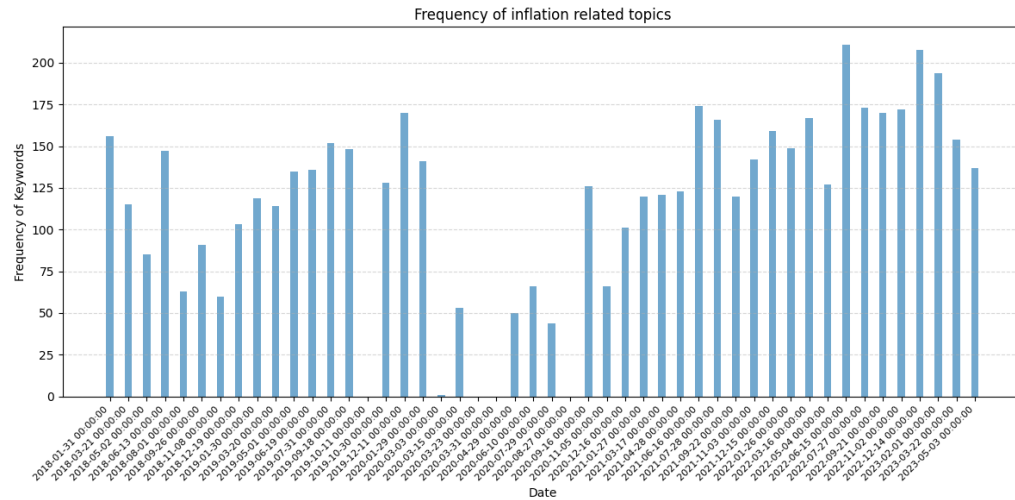
1994

Data to be collected (starting 1994)

- Post 2011
  - Transcripts (NOTE: not available post 2018)
  - Minutes of FOMC meeting (lag of ~3weeks)
  - Policy statements / Implementation notes
  - Press Conference Transcripts
  - Long run economic outlook

- Pre 2011
  - Transcripts
  - Minutes of FOMC meeting
  - Policy statements
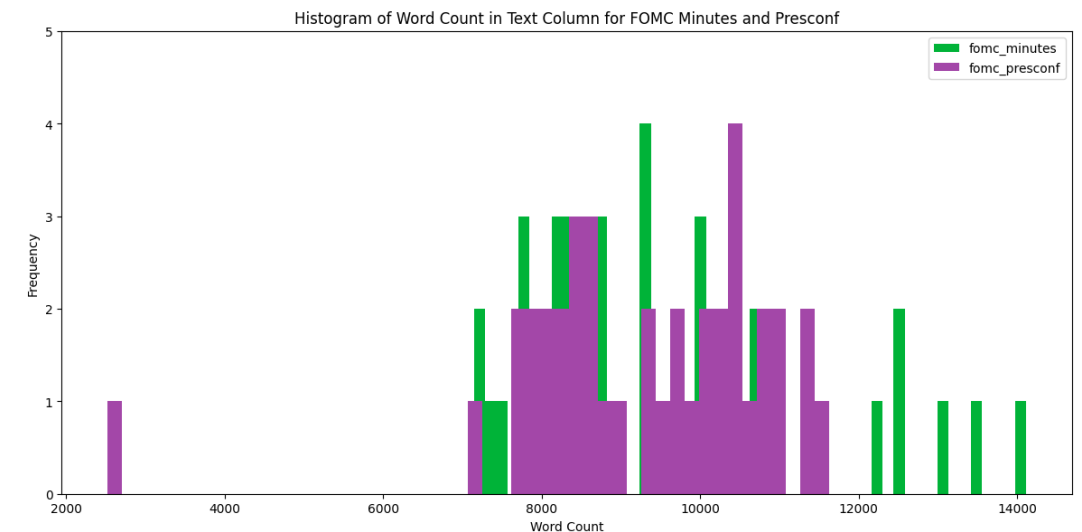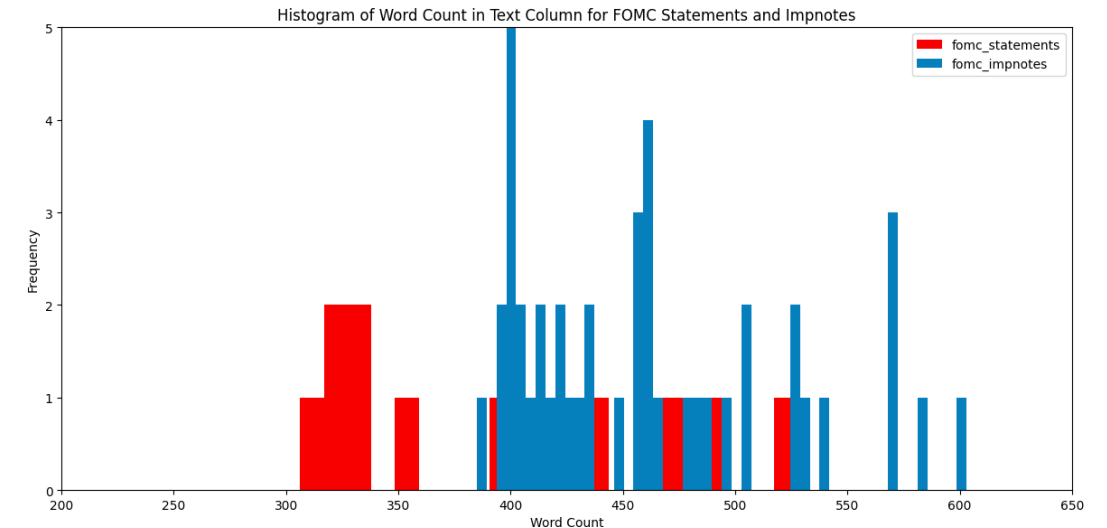
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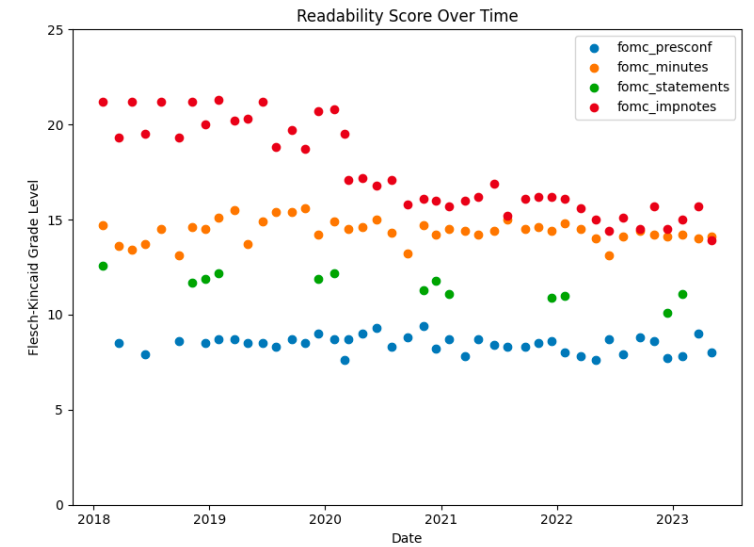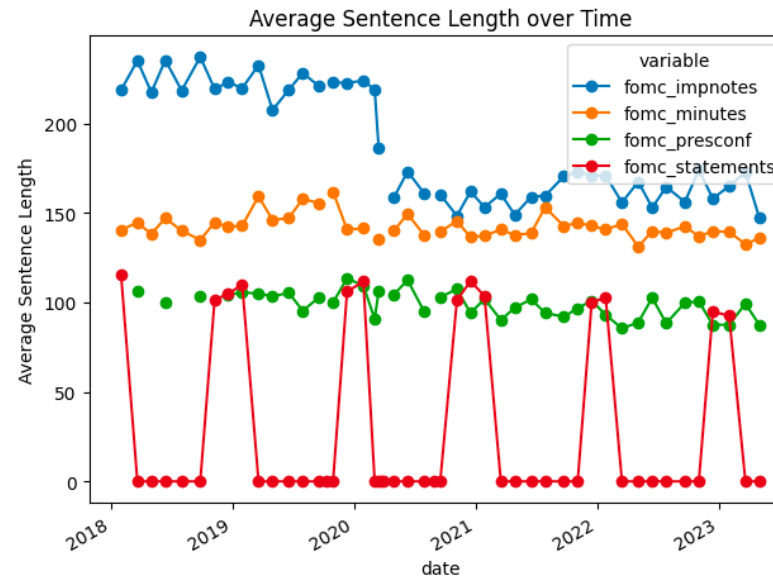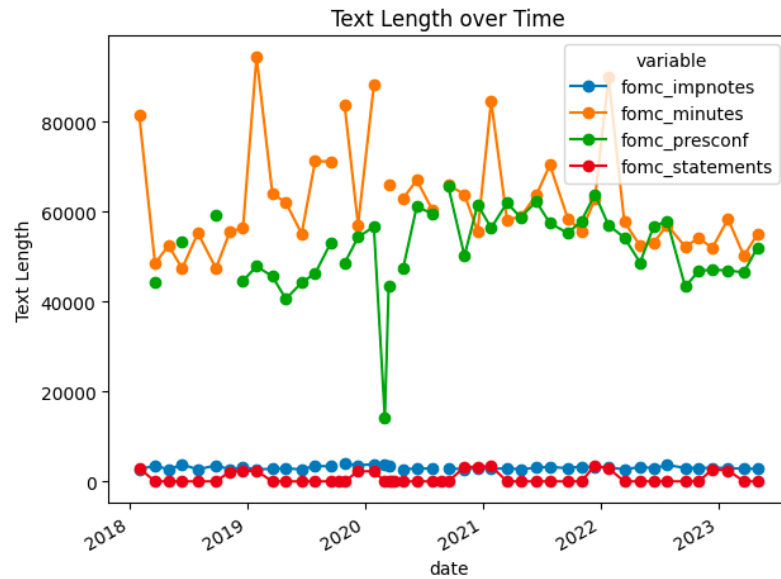
Word frequency as a POC for sentiment

Basic Idea: LLM enacting a Fed chair

Instruct tuned LLM trained on financial data, mainly FOMC material, and fine tuned for these capabilities:

- Economic outlook summarization
- Aspect based sentiment recognition
- Q/A bot – more like talk to your FOMC documents
  - This will be trained using Q/A from press conference for it to learn to think and talk as a fed chairman

- Llama / Alpaca are good options. But we can also leverage Langchains.
- Initial data usage: Limited to only after 1994

Future Extensions:

- Expand to bigger and older corpus (Consider beige books and preparatory material)
- Feedback reinforcement for the fine-tuned model
- Expansion to Global Central banks