# Hawkwatchers

Jo Denby, Natasha Mathur, Elena Badillo

#### Introduction

• Central bank communication: increasingly important monetary policy tool.

It provides information to the public regarding the next policy rate

movements ("managing expectations").

The information is not explicit, so it is not a commitment from the central

bank: deviating doesn't damage credibility.

### **Collecting Data**

Scrape press releases and policy interest rates from US Federal Reserve

website

2017 FOMC Meetings				
Jan/Feb	31-1	Statement: PDF   HTML Implementation Note		Minutes: PDF   HTML (Released February 22, 2017)
March	14-15*	Statement: PDF   HTML Implementation Note	Press Conference Projection Materials PDF   HTML	Minutes: PDF   HTML (Released April 05, 2017)
Мау	2-3	Statement: PDF   HTML Implementation Note		Minutes: PDF   HTML (Released May 24, 2017)
June	13-14*	Statement: PDF   HTML Implementation Note	Press Conference Projection Materials PDF   HTML Addendum to the Policy Normalization Principles and Plans	Minutes: PDF   HTML (Released July 05, 2017)
July	25-26	Statement: PDF   HTML Implementation Note		Minutes: PDF   HTML (Released August 16, 2017)

## Natural Language Toolkit (nltk)

Tokenize strings

Prune stop-words (if desired)

Investigate intra- and inter-text similarity

Use measures like tf-idf to identify exemplar words

## Natural Language Toolkit (nltk)

Collect a set of 'telling' words for classification

• Create infrastructure allowing an algorithm to classify new releases

#### **End Result**

Django-based website allowing user input

Hosts an algorithm trained on past releases

Classifies new press releases