Goals of the paper
The main results achieved
suggestions for improvements

Discussion on: Sentiment in Central banks' Financial Stability Reports.

Discussant: Giuseppe Bruno[1]

[1]Bank of Italy

Big Data & Machine Learning Applications for Central Banks.

Rome 21-22 October 2019

Goals of the paper
The main results achieved
suggestions for improvements

Outline

Goals of the paper
The main results achieved
suggestions for improvements

2 / 8

Paper's objectives

Global Financial Crises: from the spring of 2007 to the FRB QE at the end of 2008

- What is the Sentiment conveyed by the Central Banks in their FSR?
- Does this Sentiment causative links in financial cycle indicators?
- Is there any consequence on the monetary policy decisions?

Ricardo and his coauthors try to answer these questions.

They do a very good step forward.

Goals of the paper
The main results achieved
suggestions for improvements

3 / 8

Financial Stability Reports

a very comprehensive financial stability dictionary is built by extracting the most relevant words present in FSR written in English by 64 countries

- Translating the FSR into a numerical score: The Financial Stability Sentiment (FSS);
- Gauging the FSS relevance in the last 15 years ;
- the authors investigate the financial cycle indicators affecting Central Banks Sentiment;
- FS Sentiment computed from the FSR is able to assess and flag the financial cycles turning points?

Goals of the paper
The main results achieved
suggestions for improvements

Financial Stability Sentiment

a set of seven defined topics is found significant

$$FSS_{i,t} = \sum_{j=1}^{7} B_j \cdot FSS_{i,t}^{j} + \sum_{j=1}^{7} C_j Freq_{i,t}^{j} + u_i + e_{i,t}$$

Then the authors check out the links between quantitative indicators to the FSS_i^j with

$$FSS_{i,t}^{j} = \beta \cdot X_{i,t-h}^{j} + u_i + e_{i,t}^{j}$$

Goals of the paper
The main results achieved
suggestions for improvements

Forecasting Financial Crisis

Can we forecast banking crisis?

The authors propose:

$$C_{i,t} = \beta_{FSS} FSS_{i,t-h} + e_{i,t}$$

The coefficients β_{FSS} is significant at 10% level.

What about forecasting accuracy comparisons with general dynamic probit models?

$$C_{i,t} = \sum_{j=1}^{p} \delta_j \cdot C_{i,t-j} + \sum_{j=1}^{q} \gamma_j \cdot X_{i,t-j} + e_{i,t}$$

see for examples Antonio Antunes et al. **Forecasting banking crises with dynamic panel probit models** IJF 2018.

Goals of the paper
The main results achieved
suggestions for improvements

polar word distribution

we have a total of 391 words with 295 negative words and 96 positive words

- Do the polar words actually have such a negatively skewed distributions?

- Is there any neutral word with possible positive interpretation?

Goals of the paper
The main results achieved
suggestions for improvements

7 / 8

Computing FSS index

The FSS index is computed with

$$FSS_{country,period} = \frac{\#Negwords - \#Poswords}{\#Totwords}$$

- can we take into account adjective intensifiers?
- is it possible to smooth out indexes when conditionals tense are used?

Goals of the paper
The main results achieved
suggestions for improvements

8 / 8

Acknowledgement

!!Thank you very much for Attention!!