Summary of *Central bank communication and the yield curve*

Matteo Leombroni, Andrea Vedolin, Gyuri Venter, Paul Whelan (JFE, 2024)
Summarized by Li Ziming

1. **What are the research questions?**
   - Can monetary policy in the form of central bank communication impact sovereign rates?

2. **Why are the research questions interesting?**
   - The role of central banks has garnered great attention after financial turmoil.
   - Debate about the role of central banks in controlling long-term interest rates continues.

3. **What is the paper's contribution?**
   - Contribute to the literature studies ECB's action during the European debt crisis.
     - Prior literature: Find unconventional policies of ECB eased financial conditions in peripheral countries.
     - Extend: Focus on different dimensions of central bank communication and show structural breaks on the sovereign yield spread.
   - Contribute to the literature that explores belief-driven equilibria around the European sovereign debt crisis.
     - Provide empirical evidence for a risk premium channel and confirm the existance of "bad equilibria".
   - Contribute to the literature that explores the signaling channel of monetary policy.
     - Prior literature: Policymakers' actions reveal their private knowledge to market participants.
     - Extend: Extract two distinct policy shocks and find risk premium shocks capture superior signals and information about unconventional policies.

4. **What hypotheses are tested in the paper?**
   - H1: In normal times, forward guidance(IR) communication shocks have a positive and uniform impact on all sovereign yields. In crisis times, they have a positive effect on core yields, and a smaller or even negative impact on peripheral yields.
   - H2: In normal times, risk premium(U) communication shocks have a negligible effect on sovereign yields. In crisis times, they have a negative impact on all sovereign yields, which is larger in absolute value for peripheral yields.

   a) **Do these hypotheses follow from and answer the research questions?**
   - Yes.

   b) **Do these hypotheses follow from theory? Explain logic of the hypotheses.**
   - Under the premise that monetary policy communication drives market participants' beliefs, the paper develop a model to discuss the cross-sectional impact of central bank communication on asset prices.

5. **Sample: comment on the appropriateness of the sample selection procedures.**
   - The study only focuses on four countries and the amount of data after selected is too small.

6. **Comment on the appropriateness of variable definition and measurement.**

- The paper uses first principal component in PCA to represent the effect of shocks to forward guidance and uses the factor orthogonal to the first principal component to represent the effect of shocks to risk premia, but what is the economic substance of these variables and what do they consist of?

7. **Comment on the appropriateness of the regress/predict model specification.**

- For the regression of time series data, is it better to use the AR and MA model which include autoregressive and moving average terms?

8. **What difficulties arise in drawing inferences from the empirical work?**

- How to exclude other events that may affect yields on the ECB day?

9. **Describe at least one publishable and feasible extension of this research.**

- The impact of central bank communication on different credit rating companies or different local government bonds yield curve.