

CENTRAL BANKS AND THE ABSORPTION OF INTERNATIONAL SHOCKS (1890-2021)

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- **What?**
 - The paper explores the role of CB balance sheets in taming the effect of the global financial cycle since the late 19th century.
- **How?**
 - Collect new monthly detailed data of 22 CB balance sheets and construct new series of MP shocks
 - Based on Panel LPs ,the paper analyzes how the policy rate of the CB, the money market rate, the exchange rate, the domestic and international portfolio of the CB and the growth rate of the domestic stock market index react to a global monetary policy shock.
 - Key variables based **on theoretical priors**: trilemma vs dilemma
 - **Distinguish 4 subsamples**: the classical gold standard (1891-1913), the interwar gold exchange standard (1925-31), the Bretton Woods (1956-1971), post Bretton Woods (1973- 1998), 1990-2019
- **Main results:**
 - The paper demonstrates **the historical role of the CB BS to tame the effect of international MP shocks.**
 - **The macroeconomic trilemma prevailed until the early 1970s**: floating exchange rates or capital controls worked as genuine shock absorbers, while CB BS partially mitigated the constraints of fixed exchange rates
 - Since the nineties, **the world economy is closer to a dilemma**: floating exchange rates are no longer sufficient to isolate the domestic money and asset markets from international shocks.

- **Impressive dataset**
 - Construct a monthly data set of 22 central banks since the late 19th century
 - with a detailed and standardized classification of assets and liabilities in the balance sheets.
 - propose new series of MP shocks since 1890, using a mix of daily money market and exchange rate data, and monthly macroeconomic variables.

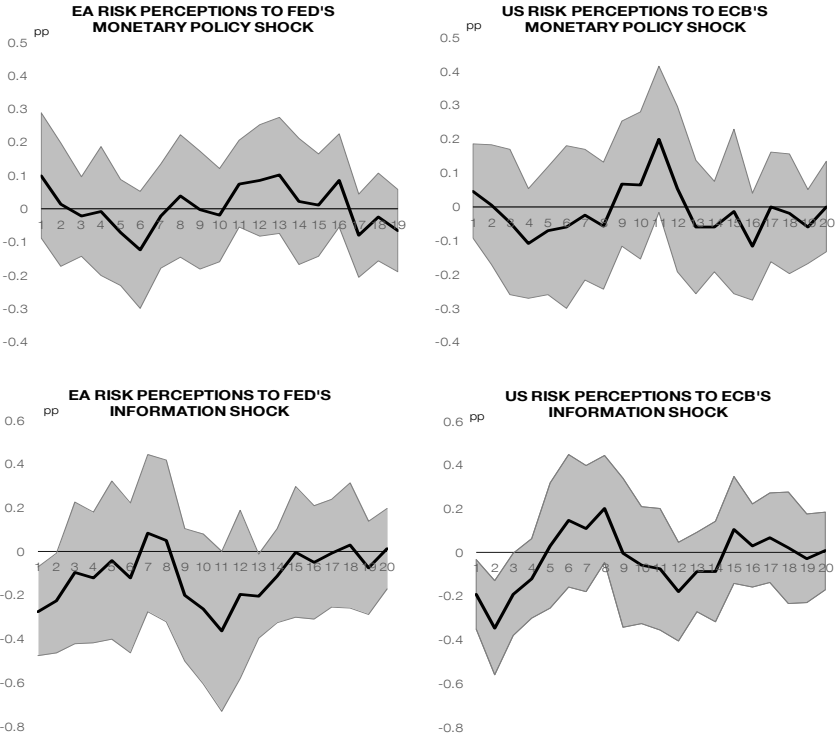
- **With a very timely and relevant application**
 - The role of the BS in taming the effects of a global financial cycle
 - The importance of the dilemma nowadays.

- **Relevant contributions**
 - Monetary policy surprises since the late 19th century!
 - Cb dataset: monthly dataset since 1891

- **The paper identifies** changes in the policy rate which are not driven by exchange rate and interest rate movements and purge the series of movements in response to information about economic variables.
- **For an exogenous shock:**
 - Orthogonal to current and lagged conditions
 - Unanticipated.
 - Uncorrelated with other exogenous shocks
- **Somme comments:**
 - **Using a daily window** can be problematic: why not controlling for relevant macroeconomic releases in the first step?
 - **Weighting issue:** the paper sums up the residual of the first regression with daily data to produce a monthly index.
 - What about weighting them by the day of the month?
 - See **Kilian (2023)**
 - **Liquidity of some daily variables over the sample:**
 - You control for daily exchange rate movements and market interest rates: how liquid were they?

MONETARY POLICY SHOCKS: CB INFORMATION SHOCK VS PURE MONETARY POLICY SHOCK

- **Jarocinsky and Karadi(2020)** distinguish between **a pure monetary policy shock and a central bank information shock**
 - Ignoring the central bank information shocks biases the inference on monetary policy nonneutrality.
- **Alonso et al (forthcoming)** find that risk **spillovers are mainly driven by the CB information shock**



Source: Alonso et al (forthcoming)

- **Use of LP with panel data** and control for monthly industrial production and consumer prices in each country and MP shocks are directly included
- **But, there may be some measurement error** (Stock and Watson (2018))
 - The instrument is constructed as a partial measure of the shock of interest, which generally leads to bias if the measure is treated as the true shock. However, that measurement error doesn't need to compromise the validity of the measure as an instrument.
 - **Instead of the univariate approach, why not using a LP instrumental variable approach?** (see Jordà et al, 2019)
- **Some controls:**
 - How do you control for the existence of capital controls?
 - And the degree of openness of an economy?

- The paper constructs a monthly data set of 22 central banks since the late 19th century with a detailed and standardized classification of assets and liabilities in the balance sheets.
- **More information on the dataset:**
 - How it compares with Ferguson, Kornejew, Schmelzing and Schularick (2023)?
 - Annual data from 1587-2020
 - Show the evolution of CB balance sheets by type of assets
 - Does the composition of the Balance sheet matter?
- More information on the classification of countries (peg vs floating)

THANK YOU FOR YOUR ATTENTION



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- Ferguson, N., Kornejew, M., Schmelzing, P., & Schularick, M. (2023). *The Safety Net: Central Bank Balance Sheets and Financial Crises, 1587-2020*. Centre for Economic Policy Research.
- Stock, J. H., & Watson, M. W. (2018). Identification and estimation of dynamic causal effects in macroeconomics using external instruments. *The Economic Journal*, 128(610), 917-948.