Eurosystem's asset purchases and money market rates

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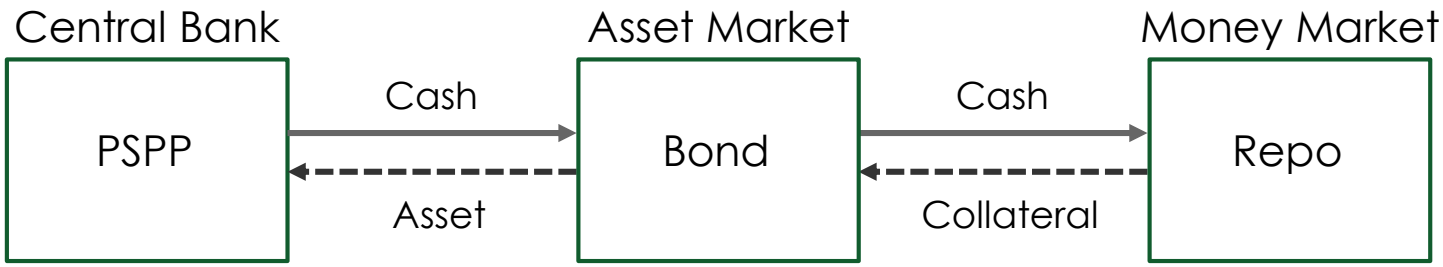
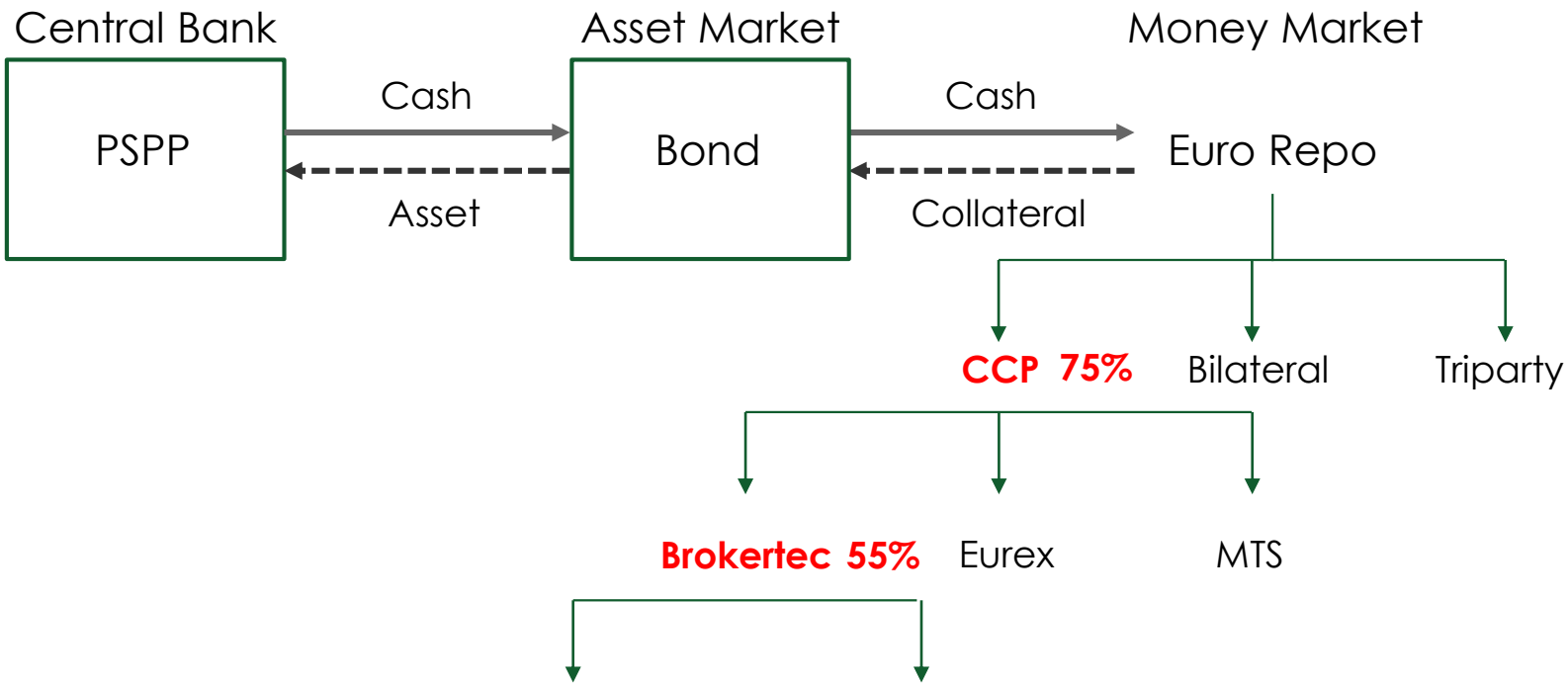
The paper in a nutshell

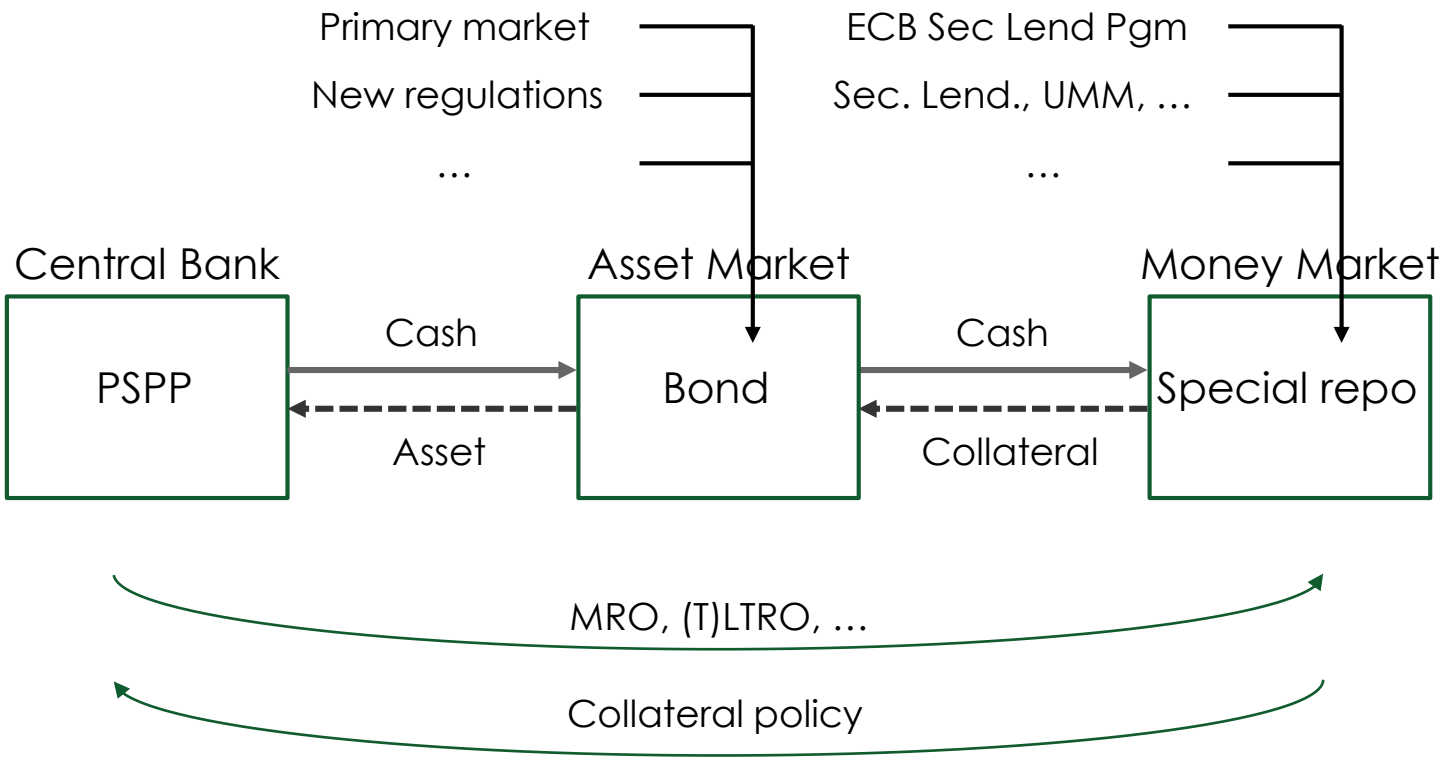


Representativeness of this segment?



Around 19% …

Many factors … Mission impossible?



Many factors … Mission impossible? Not really

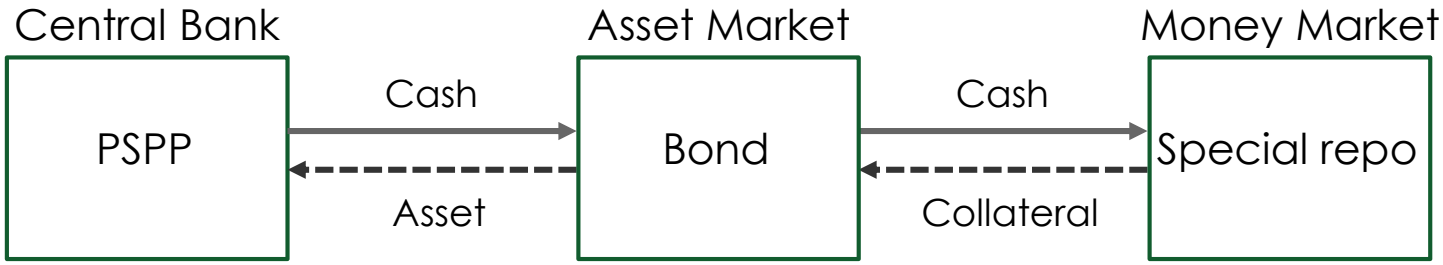
How can one handle such a complex system and many factors?

- Panel Regressions!

Good econometric method …

- Unless you have all data for a perfect identification strategy, Fixed Effects help capture …
  - Bond FE: bond characteristics (e.g. maturity, coupon, …)
  - Country FE: country features (e.g. haircuts, sovereign, …)
  - Time FE: a bundle of underlying driving forces (e.g. Excess Liquidity …)
  - … and switching off time-FE, one can try to quantify some "underlying driving forces" or "calendar" effects such as End-of-Quarter, EoM, …

Main findings



PSPP ↑

also
EL ↑
MRO/LTRO ↑

Special rates ↓

More for:
On-the-Run
C-t-D
if bonds held by agents with rigid demand
if issued by GE, IT, SP

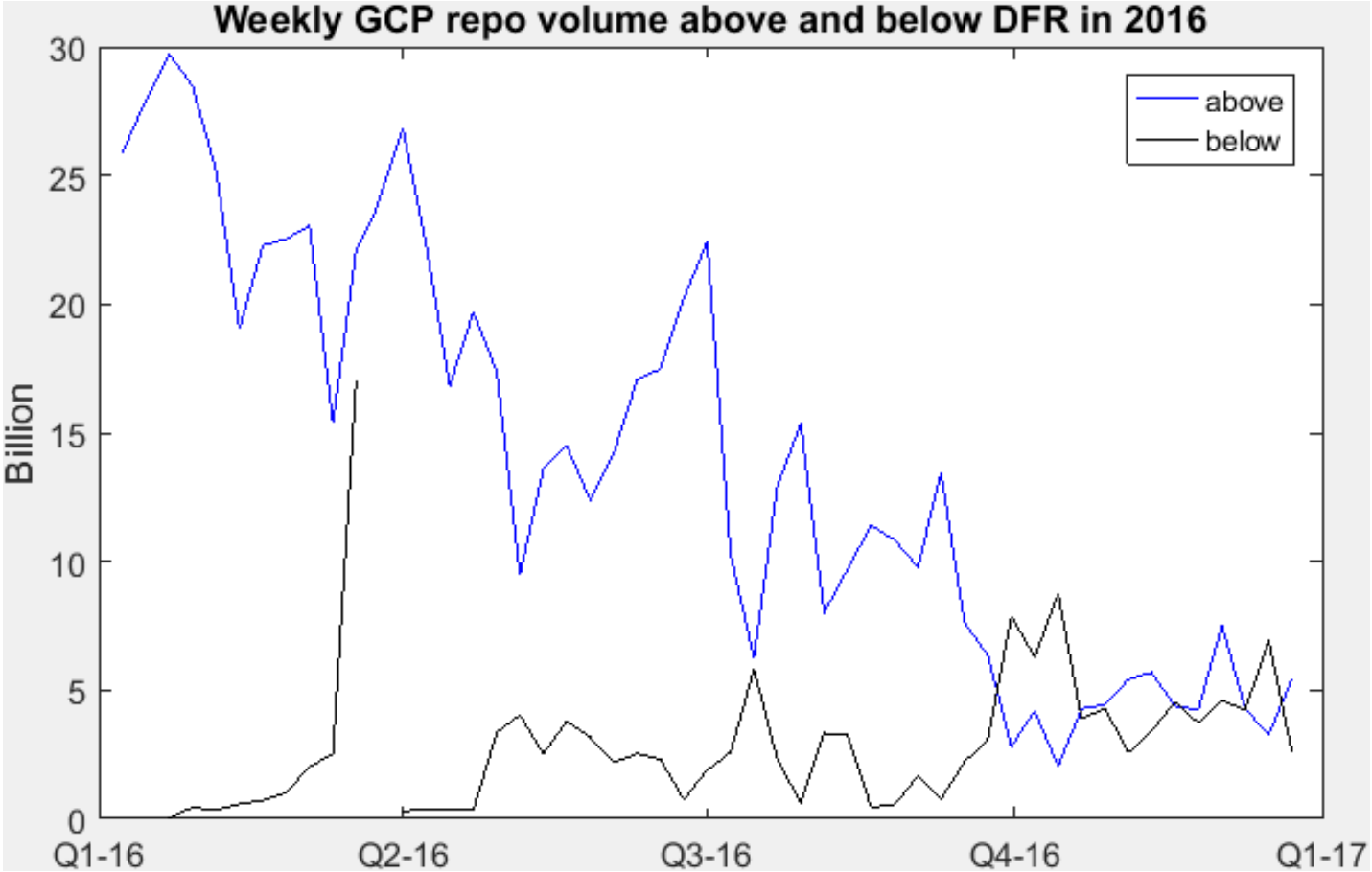
Comment 1: Which research question?

Two main questions:

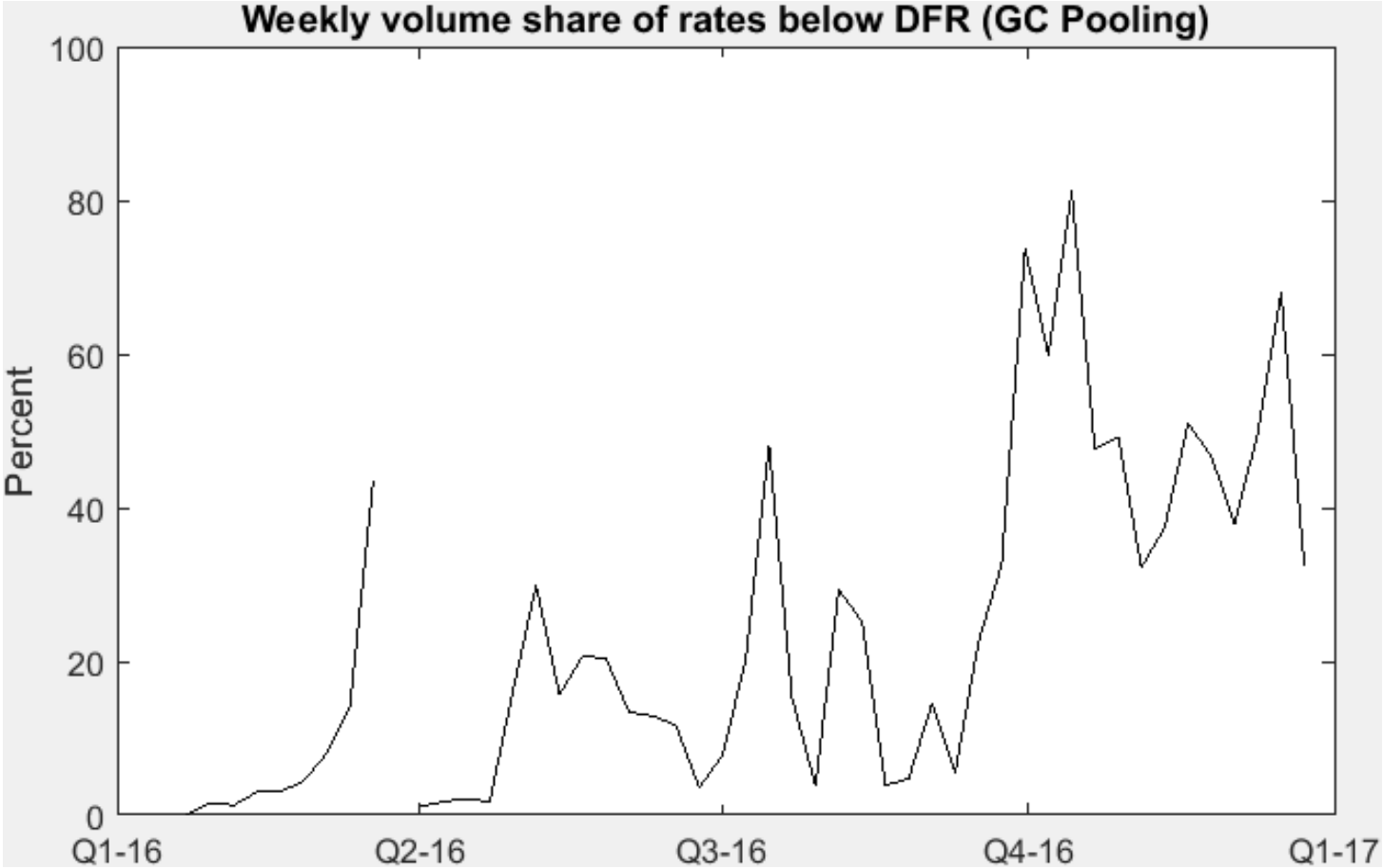
- Why repos are traded below the ECB Deposit Facility Rate (DFR)?
  - But there is no regression analysis
- How the PSPP program affect repo markets?
  - There is a regression analysis but only for Specials

- Both are very important questions!
- **Focus** on one of them and provide an **in-depth analysis**

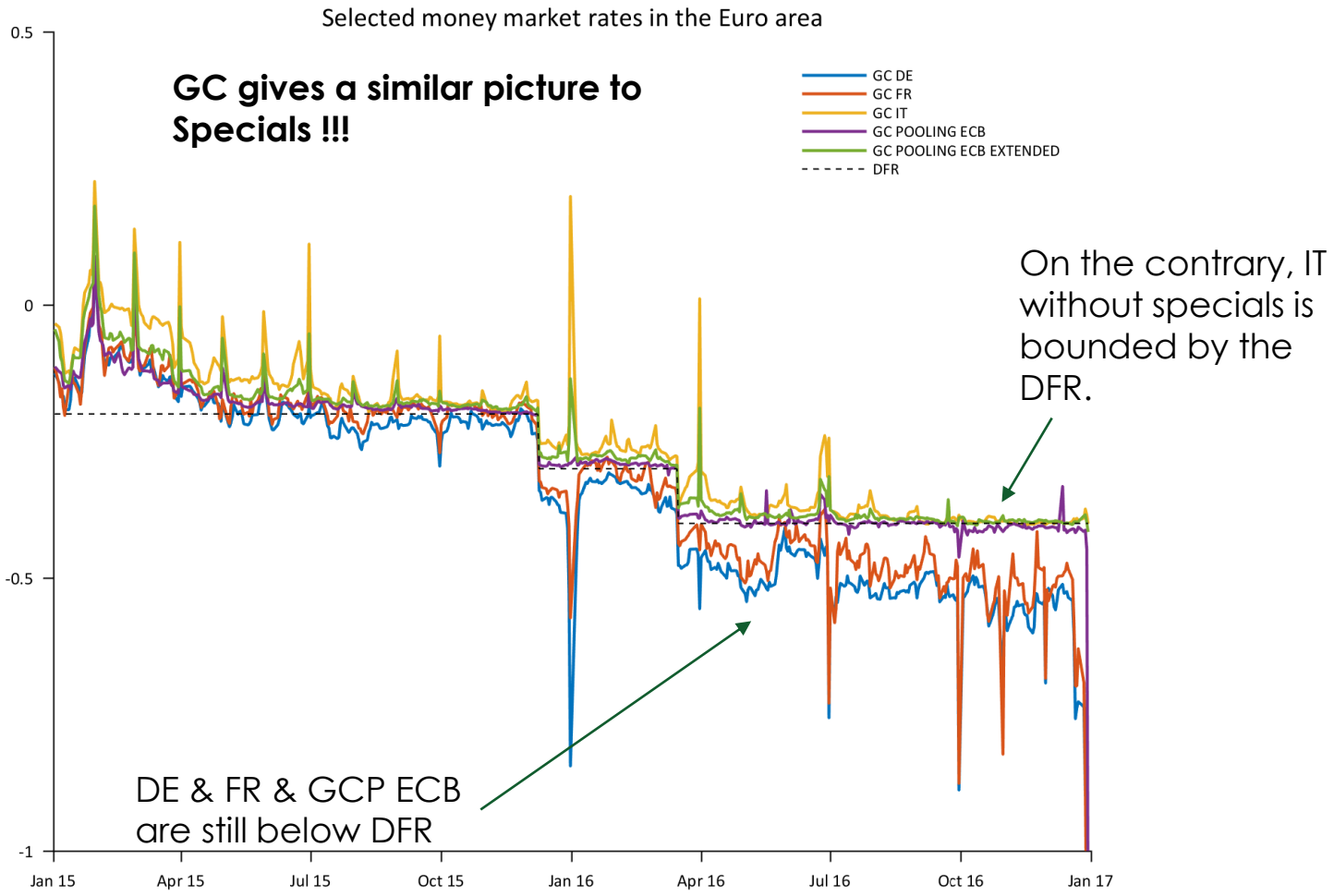
About Q1: Market share below DFR



About Q1: Market share below DFR



About Q2: What drives GC repo rates?



Comment 2: Where is "Specialness"?

- Explained variable: $r_t^{SP,i}$
- Challenging $r_t^{GC,i} - r_t^{SP,i}$ as the measure of Specialness e.g. Corradin, Maddaloni (2017), Ferrari et al. (2017).
- … because $r_t^{GC,i}$ is **not** a risk-free rate
- … because country i can become SPECIAL **as a whole**

- But then $r_t^{GC,i}$ is neglected in the regression analysis
- Can one really explain $r_t^{SP,i}$ ignoring $r_t^{GC,i}$?
- Mmmmmm …
  - Economically it's hard to argue this
  - Econometrically, omitted Δ bias

Comment 2: Where is "Specialness"?

- Let's look at specialness as $\theta^i r_t^{GC,i} - r_t^{SP,i}$. Previous literature imposes $\theta^i = 1$. But you can generalize this …
- Option 1 (static):
  - $\theta^i r_t^{GC,i} - r_t^{SP,i} = f(PSPP_t, \dots) + \varepsilon_t^i$
  - $r_t^{SP,i} = f\left(PSPP_t, \theta^i r_t^{GC,i}, \dots\right) + \varepsilon_t^i$
- Option 2 (dynamic), e.g. $\theta_t^i r_t^{GC,i} - r_t^{SP,i}$ 2-stage approach …
  - Step 1: every week τ you regress $r_\tau^{GC,i} = \cdots + \theta^i PSPP_\tau + \varepsilon_\tau^i$ and collected a weekly time series of $\hat{\theta}_\tau$
  - Step 2: $r_{\tau+1}^{SP,i} = f\left(PSPP_{\tau+1\tau}, \hat{\theta}_\tau, \dots\right) + \varepsilon_{\tau+1}^i$
- Option 3: a **unique** risk-free rate exists! $r_t^{RF} - r_t^{SP,i}$
  - What can r_t^{RF} be? DFR? GCP? …

Other points

- Calendar effects
  - Your findings: EoM and EoQ, rates down
  - BIS (2017): since mid-2015 repo rates referencing German and French collateral have spiked downwards at period-ends, while those against Italian and Spanish collateral have continued to spike **upwards**.
- EU versus U.S.
  - EU repo rates below DFR similar to the U.S experience, i.e. mm rates below the rate of interest on excess reserves (IOER)?
  - Lack of arbitrage: Trading **non-anonymity**, **relationships** and **bargaining power** are key Bech and Morten (2011)

Overall

- A very interesting paper !!! 
- The first serious attempt to see how the PSPP program affects European repos

- Multiple research questions and interesting ideas. Center your analysis on one of them and make the rest ancillary …
- Very promising regression results on Specials. What about GC?

Appendix

What drives GC rates?