This paper

Research Question: Study the effect of unconventional monetary policy, in the form of collateralized lending to banks, on sovereign borrowing costs

Strategy: Analyze the impact of the ECB 3-Year Long-Term Refinancing Operations (vLTRO) on Portuguese yields and public debt management

vLTRO announced → Collateral constrained banks buy short gov't bonds to tap the facility
Yield curve steepens → Debt agency resumes issuance auctioning short bonds

Main Finding

Central Bank Interventions: vLTRO

- 3-Year Maturity, low interest rates, two “full allotments”
  - vLTRO announcement
  - vLTRO1 allotment
  - vLTRO2 allotment
  - 8Dec11 21Dec11 29Feb12

- Banks’ eligible collateral already pledged at ECB in December 2011
  1. vLTRO1: rollover
  2. vLTRO2: new borrowing

Demand for Collateral

- Prime source of collateral: domestic government bonds
- High yields generate attractive collateral trade
- Increase in holdings by entities with vLTRO access

- Purchases of domestic bonds explain 71% of net uptake
- No other asset has explanatory power

Did banks borrow from the vLTRO to purchase govt debt?
- No, purchases of govt bonds decrease after the second allotment
- Purchases occurred before the allotment

Sovereign Borrowing Costs

- Yield curve steepens after the vLTRO
  - 0.25 0.5 1 2 3 4 5 6 7 8 9 10 30
  - Maturity, Years
  - %
  - PT Yield curve − before and after vLTRO
  - 08Dec2011 03Mar2012

- vLTRO vs. QE
  - QE ⇒ purchase LT bonds, issue ST reserves ⇒ flattens the yield curve
  - vLTRO ⇒ opposite effect ⇒ steepens the yield curve
  - ST borrowing costs ↓, LT costs ↑

Debt Agency reacts

- Public Debt auctions resume in the intra-allotment period
- Newly issued bonds are short-term

Portfolio Maturity Choice

Theoretical Model

- Bank portfolio choice: government debt and borrowing from the ECB with liquidity management motive
- By the time borrowing matures:
  1. ...short-term bonds are cash.
  2. ...long-term bonds still risky.
- LT bonds expose holder to liquidity risk ⇒ preference for ST bonds

Empirical Evidence

- vLTRO shifted preference away from LT and towards ST bonds
- Demand for ST bonds ↑ by 21-24 p.p. (of amounts issued)