Lessons for QE Policy from Research

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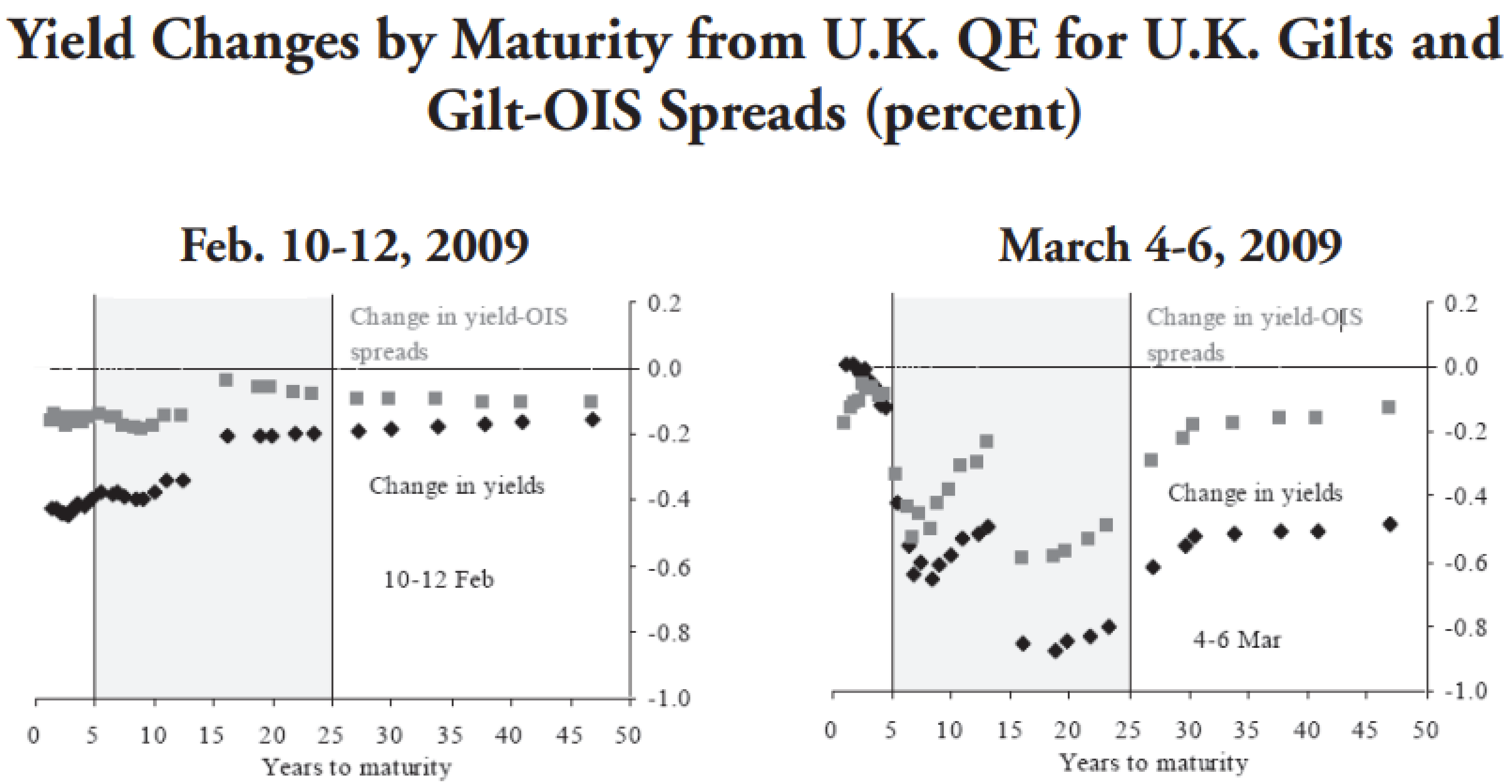
What have we learned from the 12 years of QE research?

1. QE works differently than conventional policy
   - Impacts are highest in the asset market targeted
   - Impacts are highest during periods of financial distress, segmentation, illiquidity
2. QE alters the quantity of bank reserves, and the post-crisis regulatory regime implies a substantially higher necessary reserves
3. These results already offer lessons for rules governing QE/QT
   - And they differ from current rules

Narrow channel evidence from U.K.



Source: Joyce, Lasaosa, Stevens and Tong (2011)

Narrow channel evidence from MBS

- Asset prices:
  - Krishnamurthy and Vissing-Jorgensen (2011, 2013): MBS purchases moved MBS yields on current-coupon MBS particularly

- Asset quantities:
  - Rodnyansky and Darmouni (2017): If it is narrow channel, then MBS not Treasury purchases should drive lending
  - DiMaggio, Kermani and Palmer (2015): If it is narrow channel mechanism, then MBS purchases should particularly spur conforming (not jumbo) mortgage originations, because Fed purchased conforming

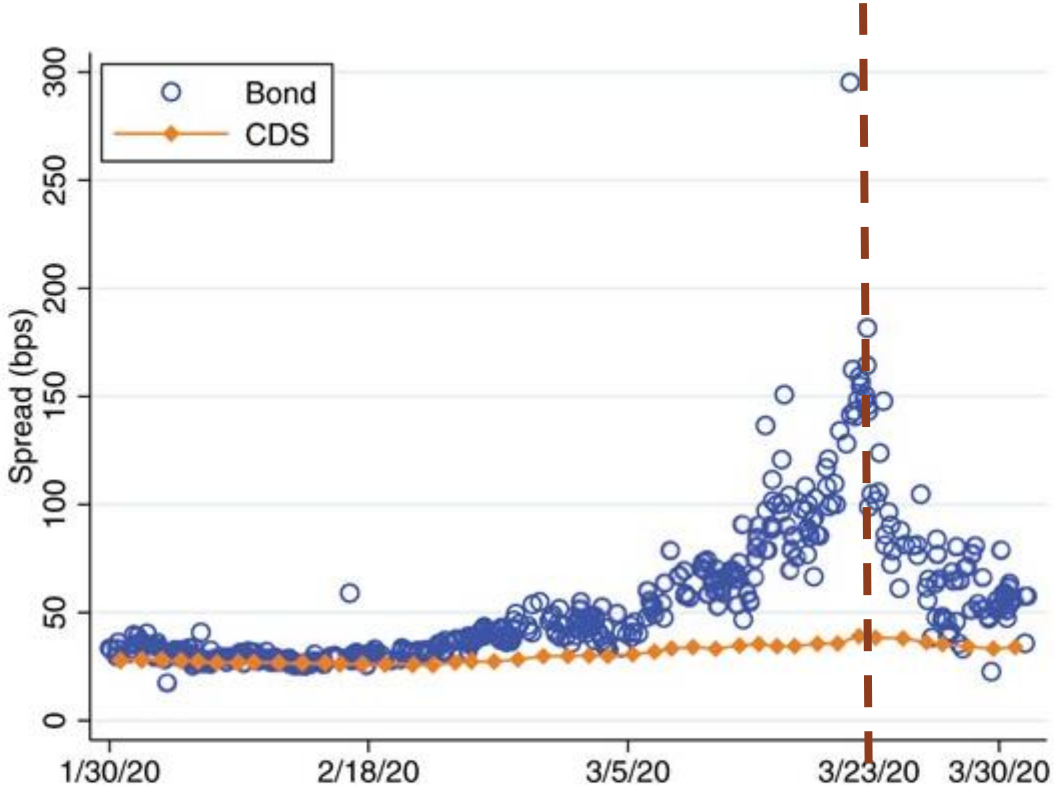
Many more [unconventional] narrow-channel studies

- Eser and Schwab (2016): SMP announcements by ECB lowered particularly the target countries' sovereign yields during stress periods
  - Altavilla, Giannone and Lenza (2014): OMT announcements by ECB particularly compressed spreads of GIIPS sovereigns to bunds
  - Similar evidence in Krishnamurthy, Nagel and Vissing-Jorgensen (2018)

- Grosse-Rueschkamp, Steffen, and Streitz (2019), Todorov (2020): ECB CSPP lowered eligible bond yields

- Haddad, Moreira, and Muir (2020): Fed IG Corporate bond purchase program and IG yields
  - Similar results in Gilchrist, Wei, Xu, Zakrajsek (2020) for corporate bonds and Moussawi (2022) for municipal bonds

QE in crisis states of the world



Google Bond Yield and CDS;
Fed Bond Purchase Program Announced 3/23

Source: Haddad, Moreira and Muir (2020)

Current policy

- Current Fed policy describes the impact of QE in terms of term premia
  - “$Q bn of QE lowers 10-year term premia by 20 bps”

- And then places QE on comparable footing to conventional policy
  - “X bps reduction in the policy rate lowers 10-year rate by 20bps”

Implying Q = X

- **Tying together** conventional and unconventional is simple and communicable in terms of a policy instrument that is well understood
- Gives policy sequencing: taper asset purchases then raise policy rate

Policy rules given what we have learned (A)

- Since QE impacts are higher in crisis states than normal states
  - Compared to conventional policy
- It follows that central bank should use balance sheet policy more in crisis states than normal
  - Expand balance sheet in states worse than ***X***
  - Shrink balance sheet in states better than ***X***
  - ***X*** determined by cost of balance sheet and macro-benefit of policy; Economy requires much higher reserve balances than pre-crisis
- In contrast, the tying-together rule favors delaying balance sheet reductions
  - Policy sequencing: taper asset purchases then raise policy rate

Policy rules given what we have learned (B)

- Since QE impacts work through narrow channels of the asset market targeted
  - Compared to conventional policy

- It follows that central bank should use balance sheet policy considering the mechanics of the targeted asset market
  - Buy MBS if housing is central to macro dynamics

- In contrast, the tying-together rule has probably led to some mistakes
  - Buying MBS in 2020/2021 fueled a housing boom in the U.S.

Conclusion

- QE works differently than conventional policy
  - Impacts are most potent during periods of financial distress, segmentation, illiquidity
  - Impacts are highest in the asset market targeted

- Differences indicate the policy rules that should govern QE and QT

- Economy requires much higher reserve balances than pre-crisis