

# “The implications of non-bank activities on the transmission of monetary policy”

MONETARY, FINANCIAL AND PRUDENTIAL POLICY INTERACTIONS IN THE POST-CRISIS WORLD

Anil K Kashyap

October 24, 2016

- 1) Why does activity happen outside the banking system?
- 2) How does the presence of this activity generally interact with monetary policy?
- 3) Are there any special interactions when interest are very low and expected to remain low for some time?

# Why does activity happen outside the banking system?

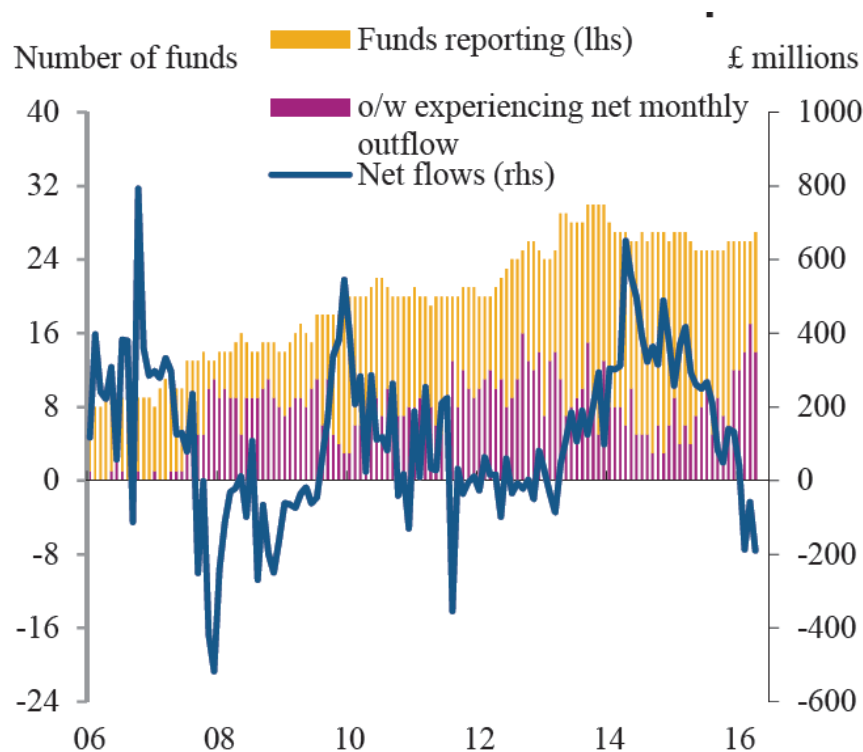
- Sometimes for very good, benign efficient reasons
  - E.g. unsecured bond market or commercial paper funding
- More worrisome if reasons is to avoid regulation that would apply if an activity occurred inside the banking system
- I will argue that thinking separately about asset and liability side regulatory arbitrage may be helpful

# US Style Money Market Mutual Funds

## **Liability-Side Arbitrage**

- Set up to avoid interest rate restrictions on bank deposits
- Nearly economically redundant once rate ceilings vanish, except they remain exempt from some bank restrictions
  - Essentially bank deposits with no capital requirements
- Problem is that they are runnable because assets are not perfectly liquid and owners are paid first come first serve
  - Creates an incentive for me to run if I think you might
- Blew up during the crisis, required guarantees and created follow problems for some European banks

# Net flows into UK-domiciled open-ended property funds since 2015



Source: Morningstar

# Structured Investment Vehicles

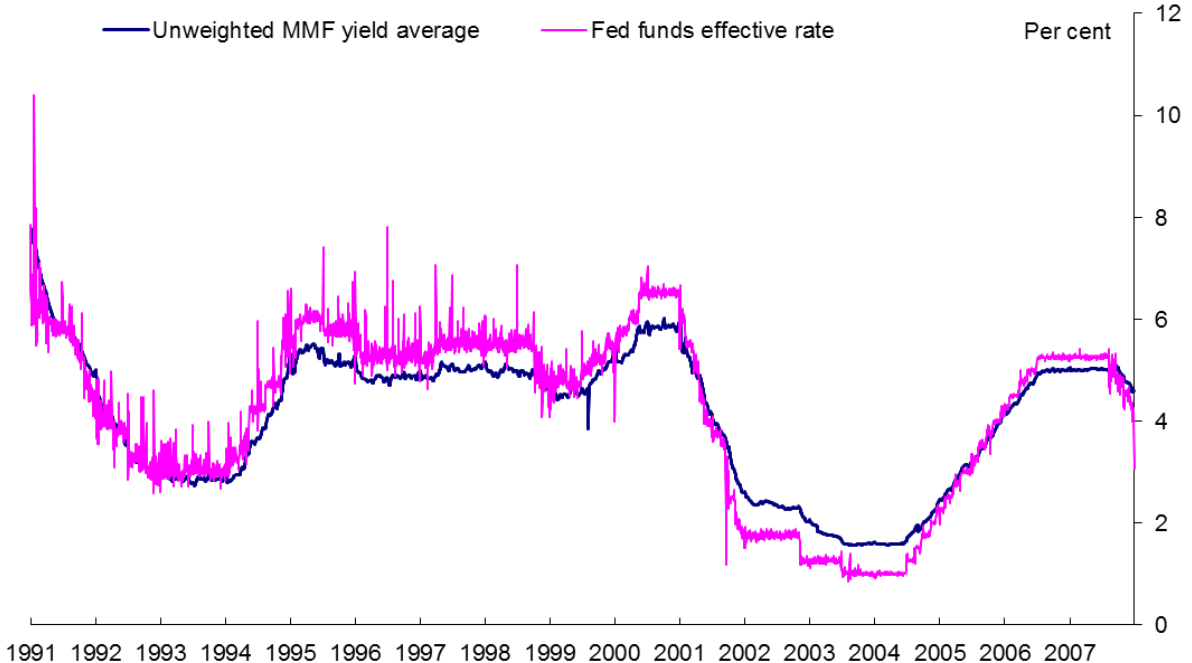
## Asset-Side Arbitrage

- Set up to avoid capital requirements
  - Securitization with partial recourse identified in BCBS WP #1!
- Again will be runnable, and if the assets migrate back on the balance sheet as in the crisis, you get a capital crunch
- Estimated \$350 billion dollar credit contraction that the banks had to pick up.

# Regulatory Arbitrage and Monetary Policy Transmission

- Need to begin with a theory of transmission and decide which financial channels matter
- Liability-side arbitrage will alter funding flows and perhaps interest rate pass through

# Pass through from Fed Funds Rate to MMMF rates



Sources: Bloomberg, and Bank calculations.  
(a) MMF yields are the unweighted average for 10 large prime MMMFs. Data prior to 2005 based on a smaller sample.

# Regulatory Arbitrage and Monetary Policy Transmission

- Asset side arbitrage is perhaps more directly linked to credit supply effects
- In principle shadow banking could amplify or dampen policy effects
  - Undercapitalized banks with debt overhang might not pass through a cut in rates. Shadow banking might help.
  - Suppose MP influences term premia but not the expected path of rates. Now easing may encourage capital structure arbitrage and SIVs may exacerbate this.



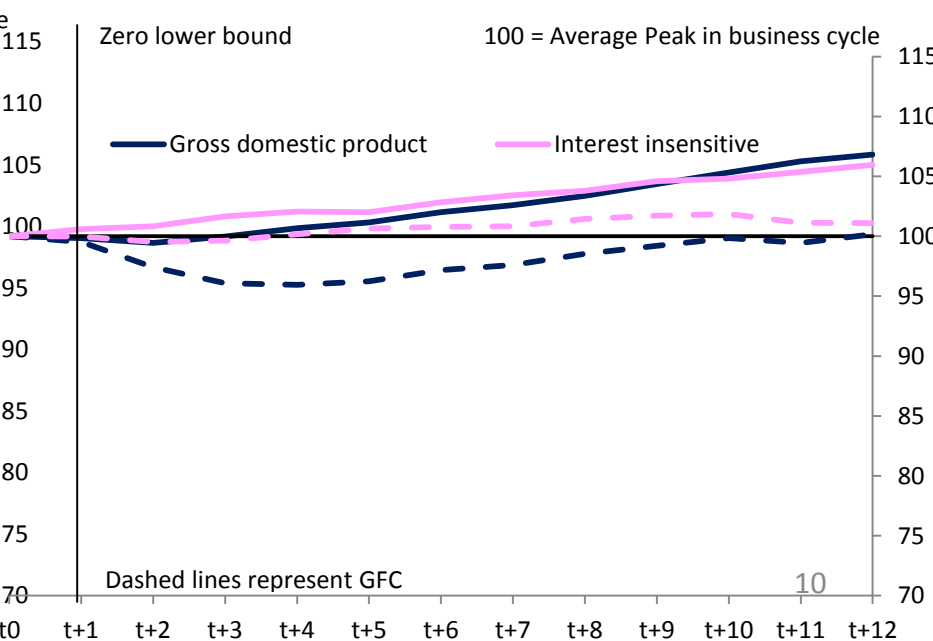
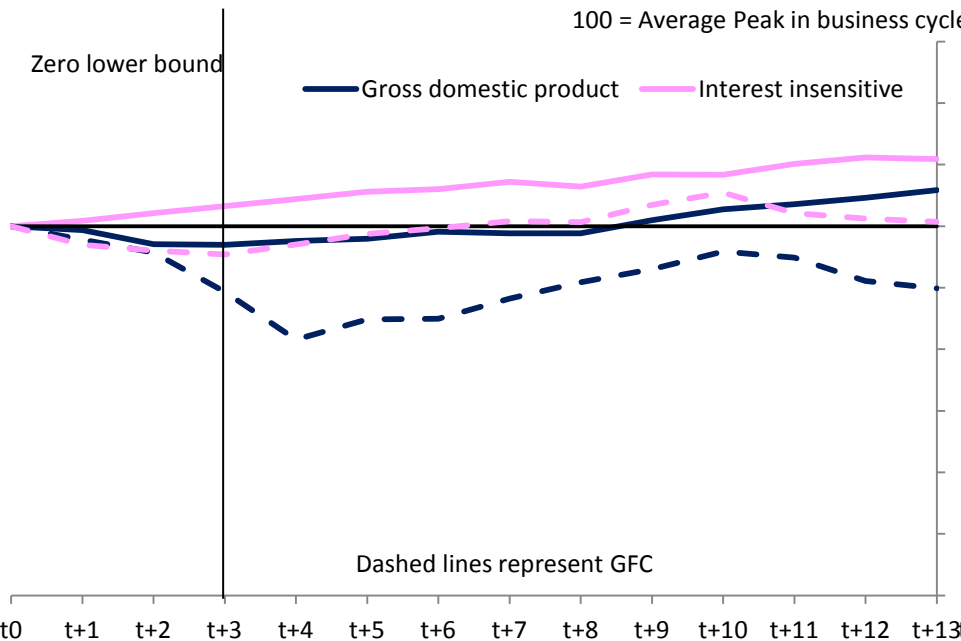
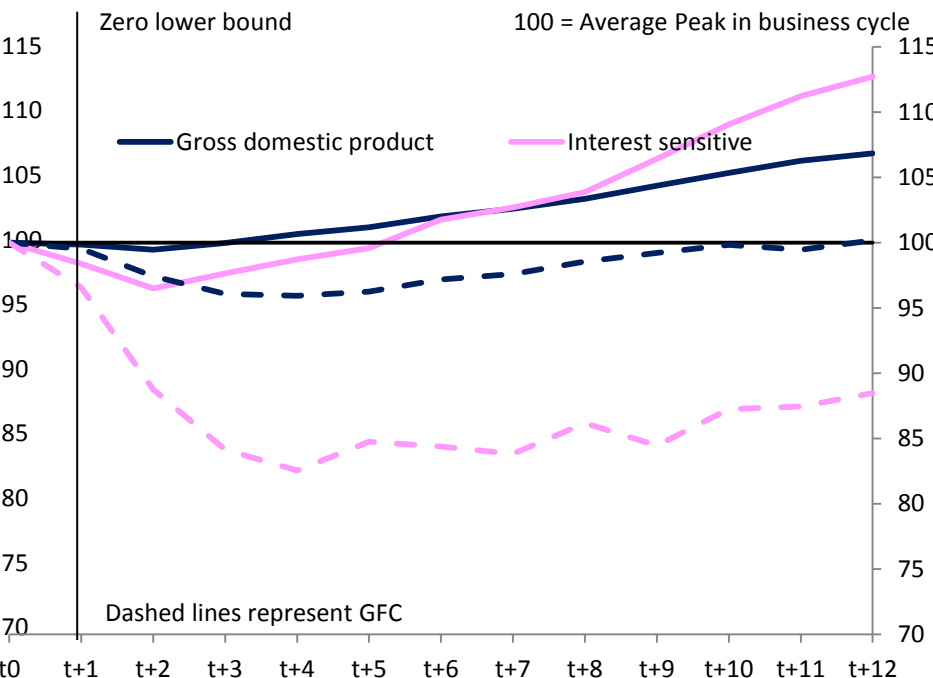
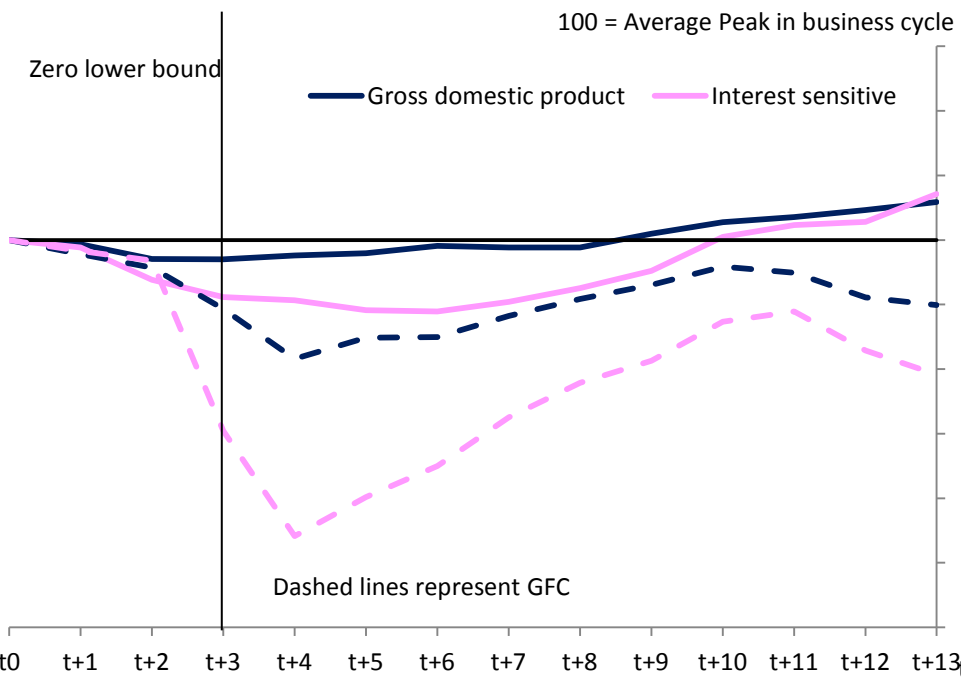
# Interactions with low rates

- Is it the duration of low rates or the level and is there anything special about zero?
  - Most theories say going from 25 bp to 15 is the same as going from 10 to 0.
  - How much demand can you pull forward?
- Do shadow banks reach for yield in special ways?
  - Greenwood, Hanson, Stein asymmetry between falling and rising rates
- Does QE interact with presence of shadow banks?
  - Maybe it works more on term premia and promotes more capital structure arbitrage?

# Japan

# Pushing on a String?

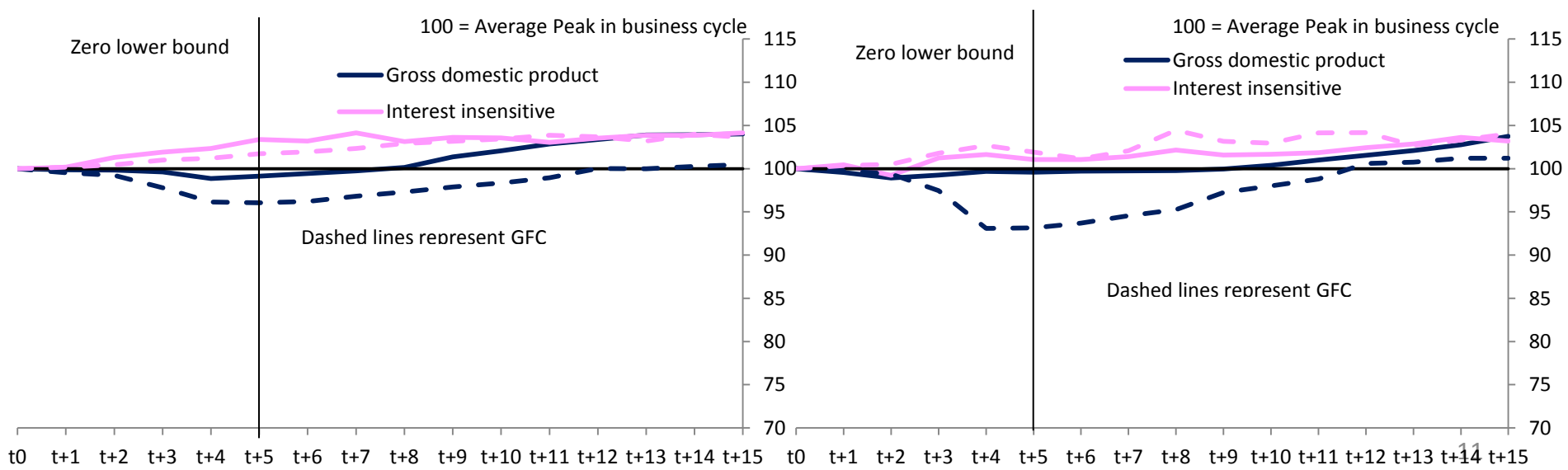
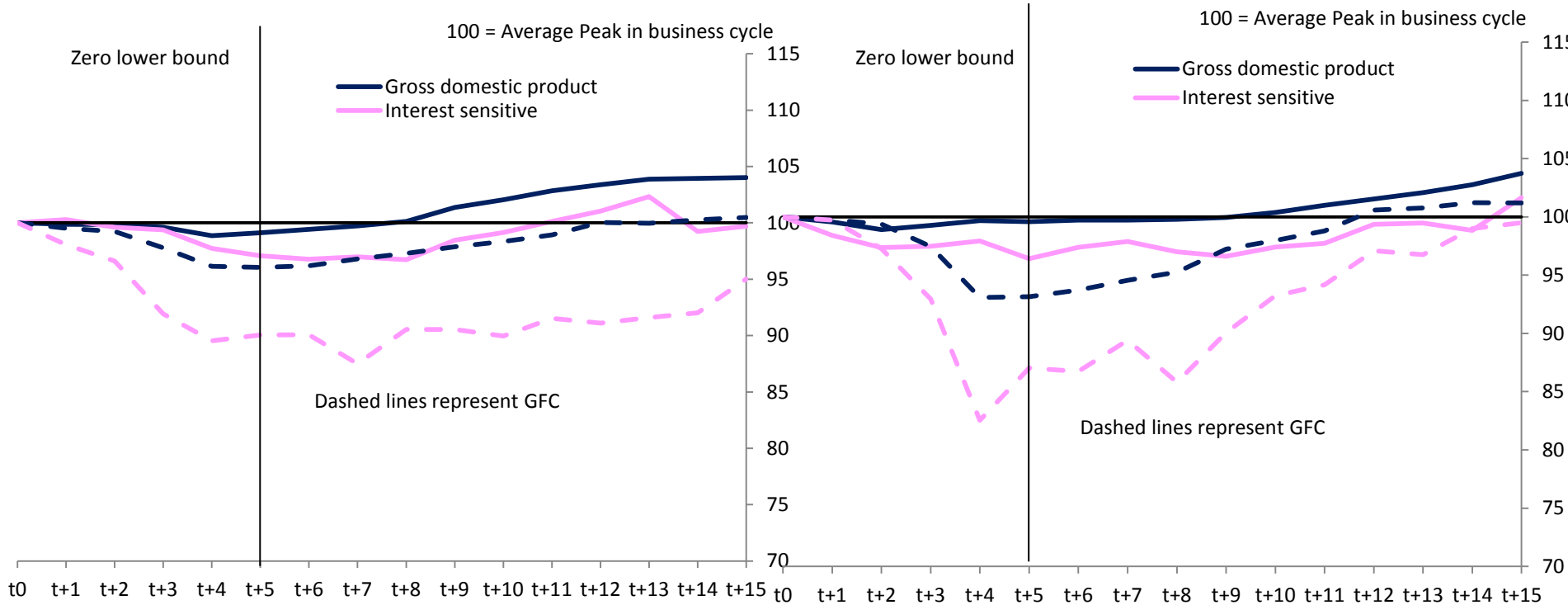
# US



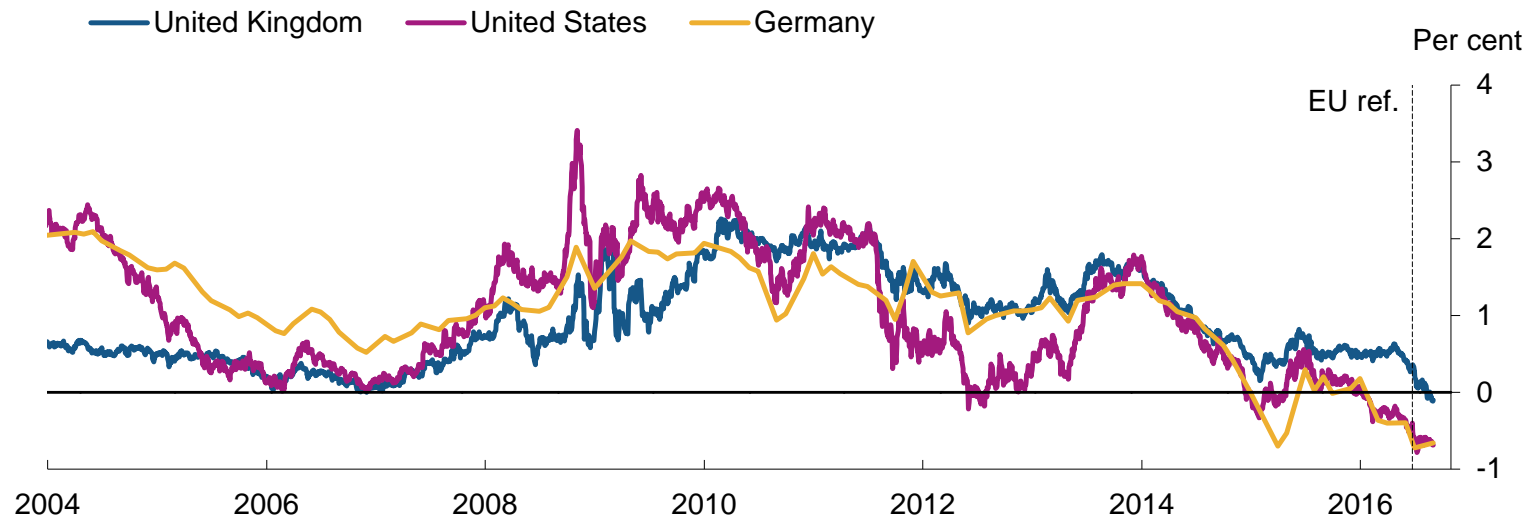
# France

# Pushing on a String?

# Germany



# Estimates of term premia for government bonds



Sources: Bloomberg, Federal Reserve Bank of New York and Bank calculations.

(a) UK estimate is derived using the model described in Malik, S., & Meldrum, A. (2016). Evaluating the robustness of UK term structure decompositions using linear regression methods. *Journal of Banking & Finance*, 67, 85-102. The German series is a preliminary estimate based on the same methodology as the UK estimate.

US estimates are available from [www.newyorkfed.org/research/data\\_indicators/term\\_premia.html](http://www.newyorkfed.org/research/data_indicators/term_premia.html).

# Conclusions

- How about forming a Basel Committee on Shadow Banking?
  - Asset and liability side arbitrage subcommittees should exist too.
- Maybe rising and falling rates play out differently?
- More measurement of some of the non-standard possible channels would be very helpful.
- If we are worried about low rates and transmission channels, then probably we should pay more attention to separating movements in risk premia from other movements.