A market's view on Low R*
and the role of Monetary Policy

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Bridging the disconnect on the role of Monetary Policy
Academics vs Markets

- Academic debate

S - I = F(R*) = 0 = F(Demographics, Savings glut, Low productivity, Risk aversion)

  - R* is invariant to policy choices and exogenous to the cycle.
  - Borio (2018), Benigno and Fornaro (2018) recent challenges.

- Cyclical debate by market participants:

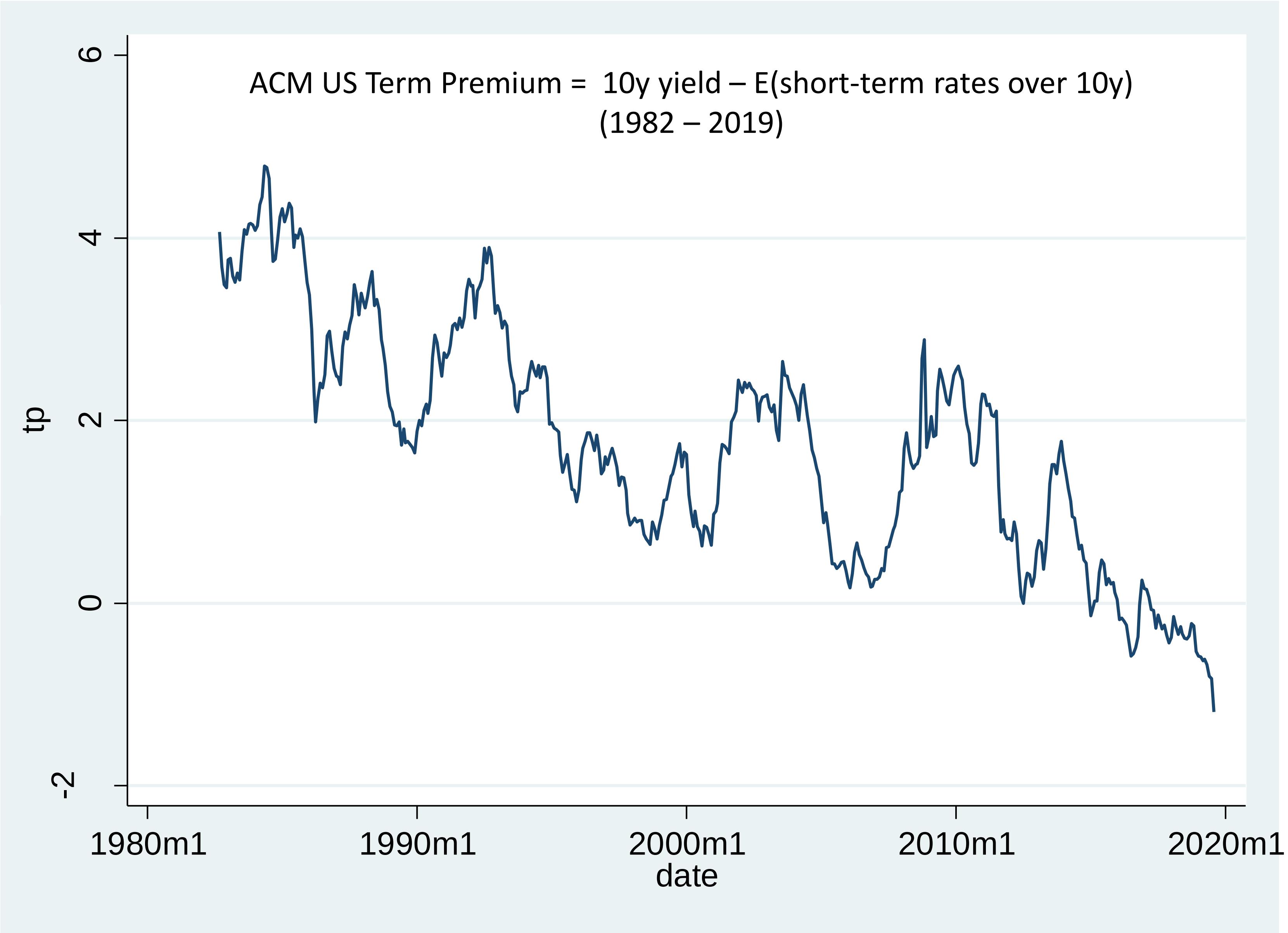
D – S of Treasuries (Nom R) = 0 = F(QE, Foreign QE, ZIRP, Market structure, Regulation)

  - Monetary policy plays a key role in the decline in global rates

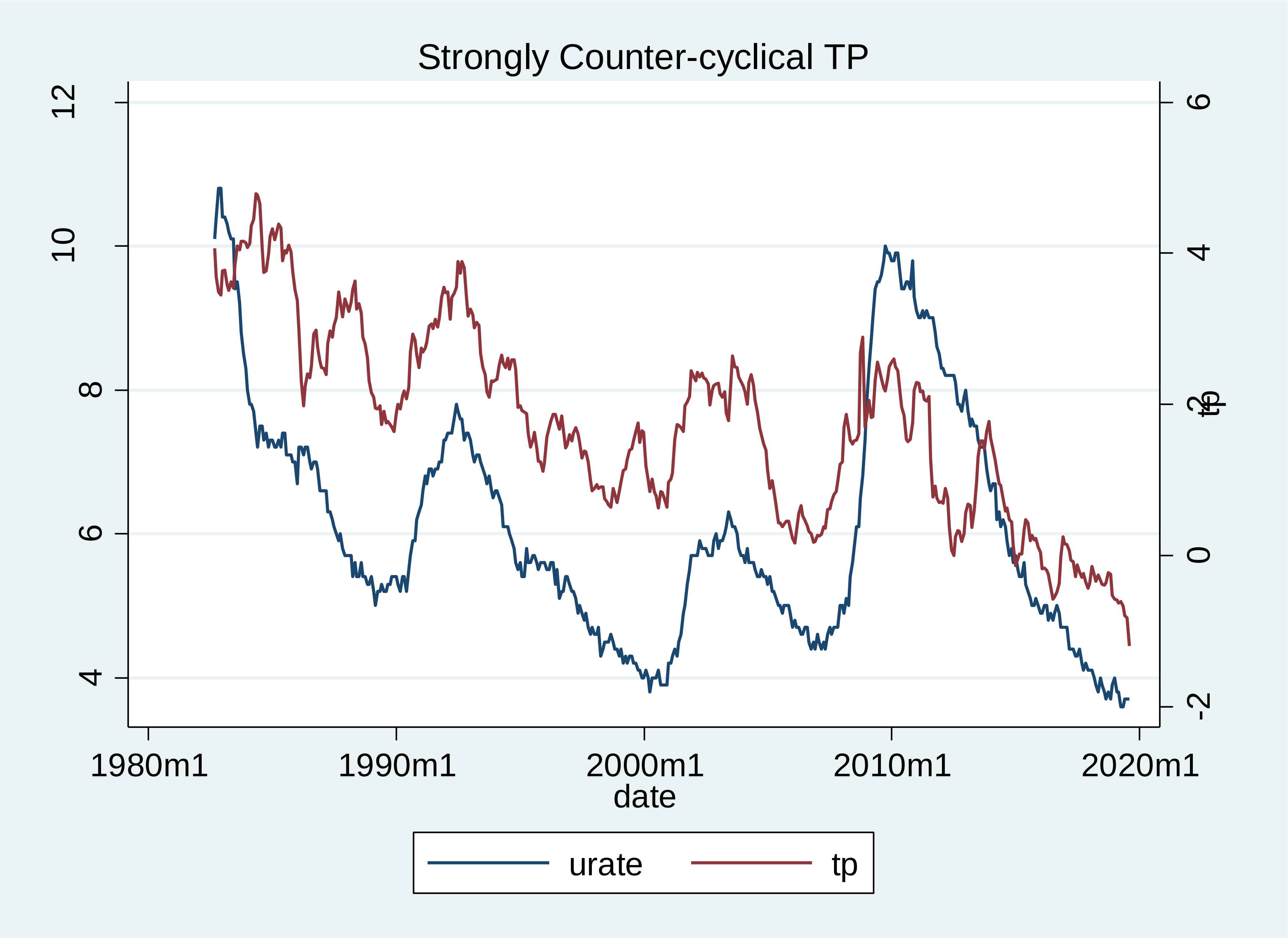
Secular forces and Term premium puzzle

"Global real rates: a secular approach"
Gourinchas and Rey (June 2019)

Shock	$\ln C/W$	cw^f	cw^{rp}	cw^c
Productivity	sign of $\gamma - 1$	$+$	$\sim$	$-$
Population Growth	sign of $\gamma - 1$	$+$	$\sim$	$-$
Deleveraging (outside ELB)	$-$	$-$	$\sim$	0
Deleveraging (at the ELB)	$-$	0	$\sim$	$-$
Risk Appetite	$-$	$+$	$-$	0



Strongly counter-cyclical Term Premium



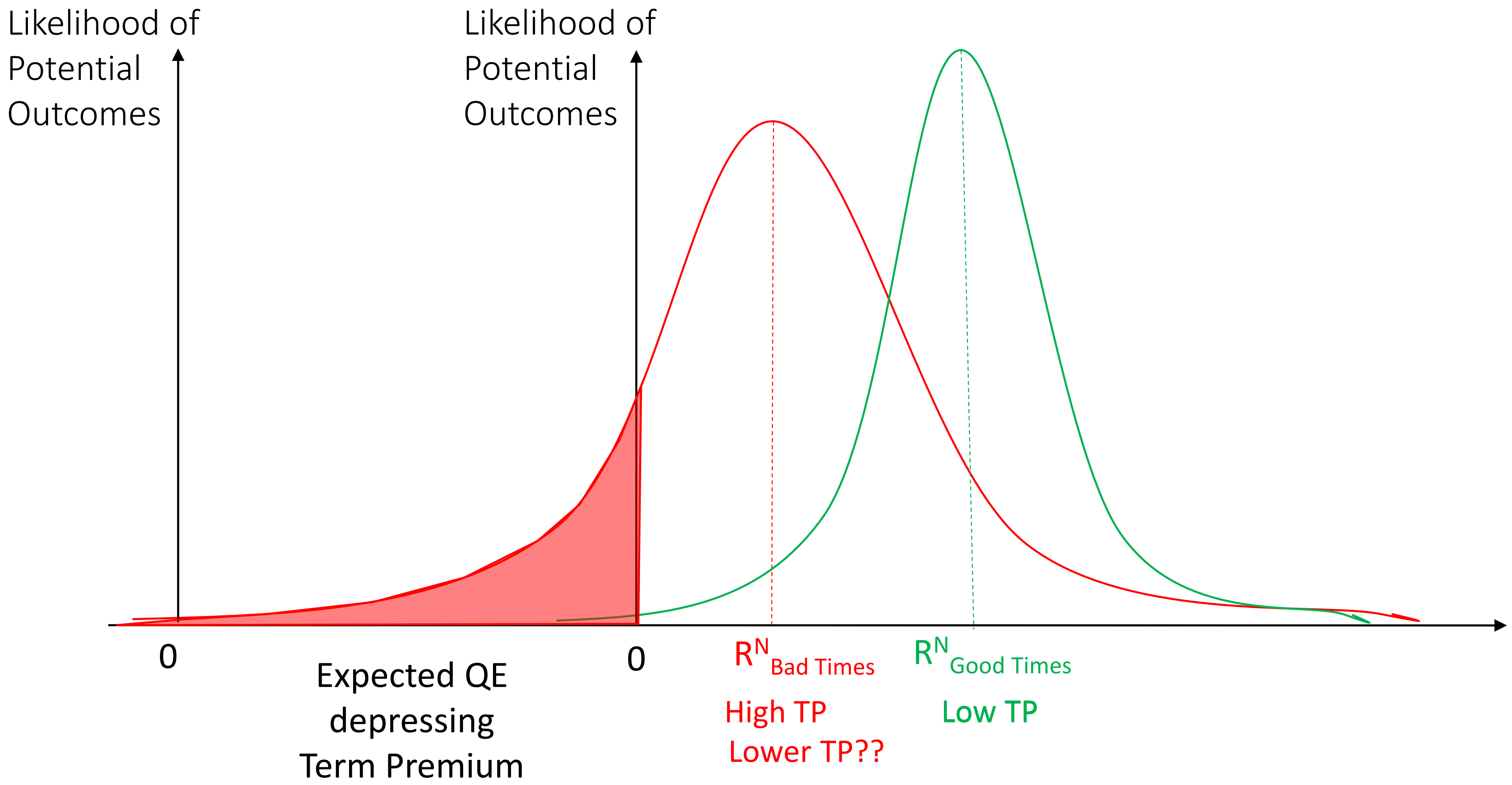
Thinking about the role of monetary policy on low R*

1. ZIRP/QE can lead to a pro-cyclical TP, with implications for the yield curve and the flatness of the Phillips curve.

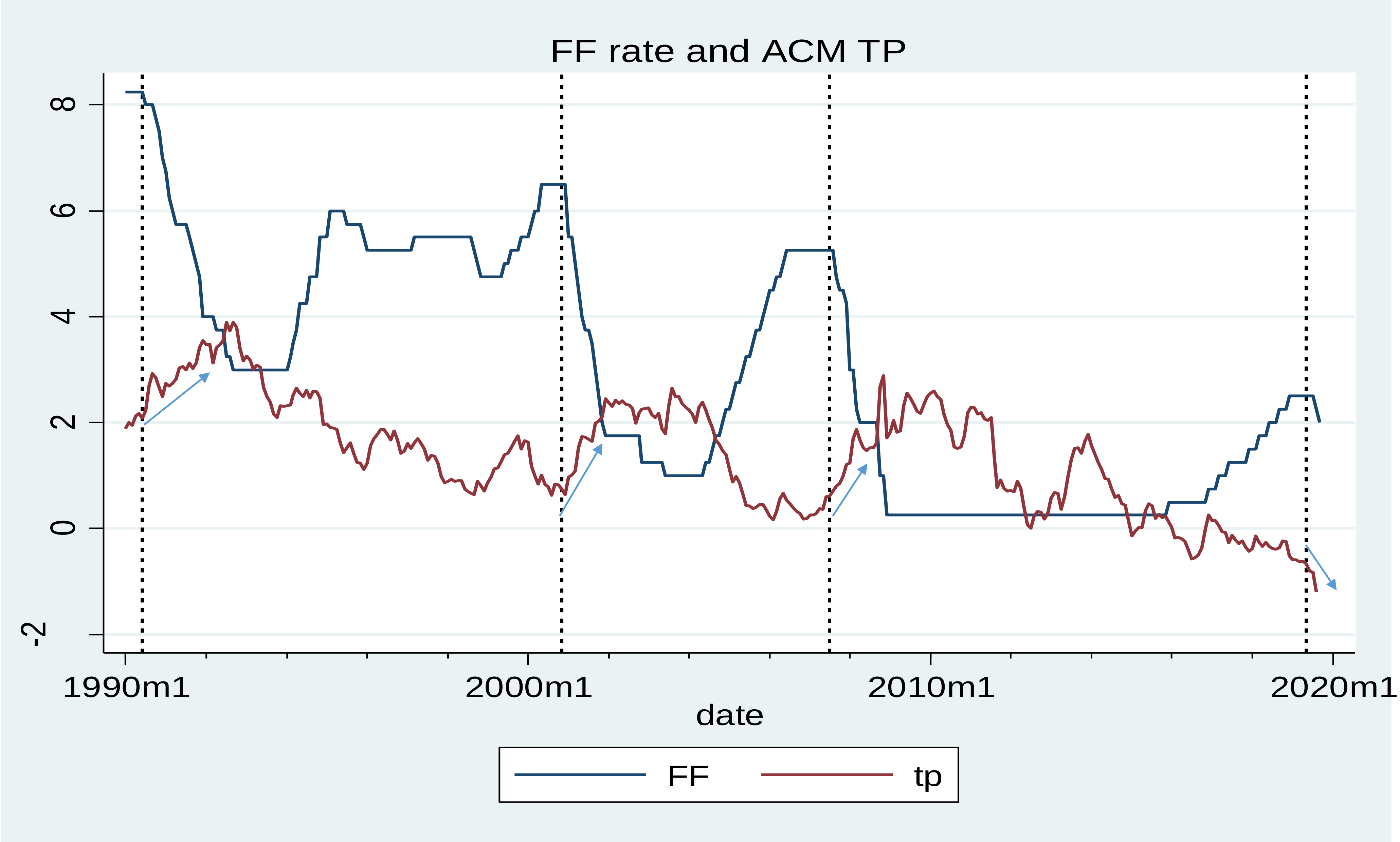
2. Beyond ZIRP/QE, a flatter Phillips curve can lower the term premium over time by increasing the covariance between rates and risk.

3. International spillovers of QE can be reaching their limits.

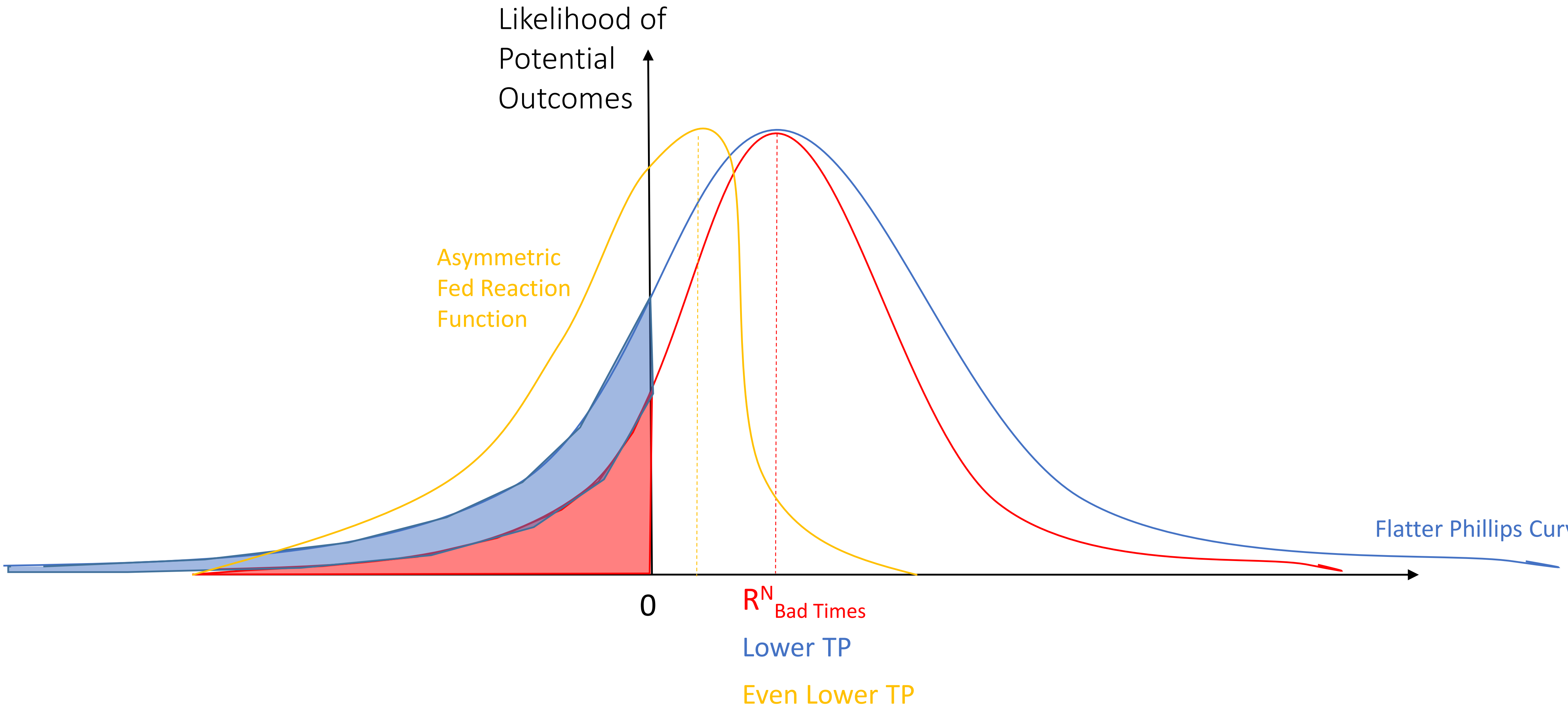
ZIRP could lead to a pro-cyclical TP with implications for yield curve, the magnitude and timing of stimulus



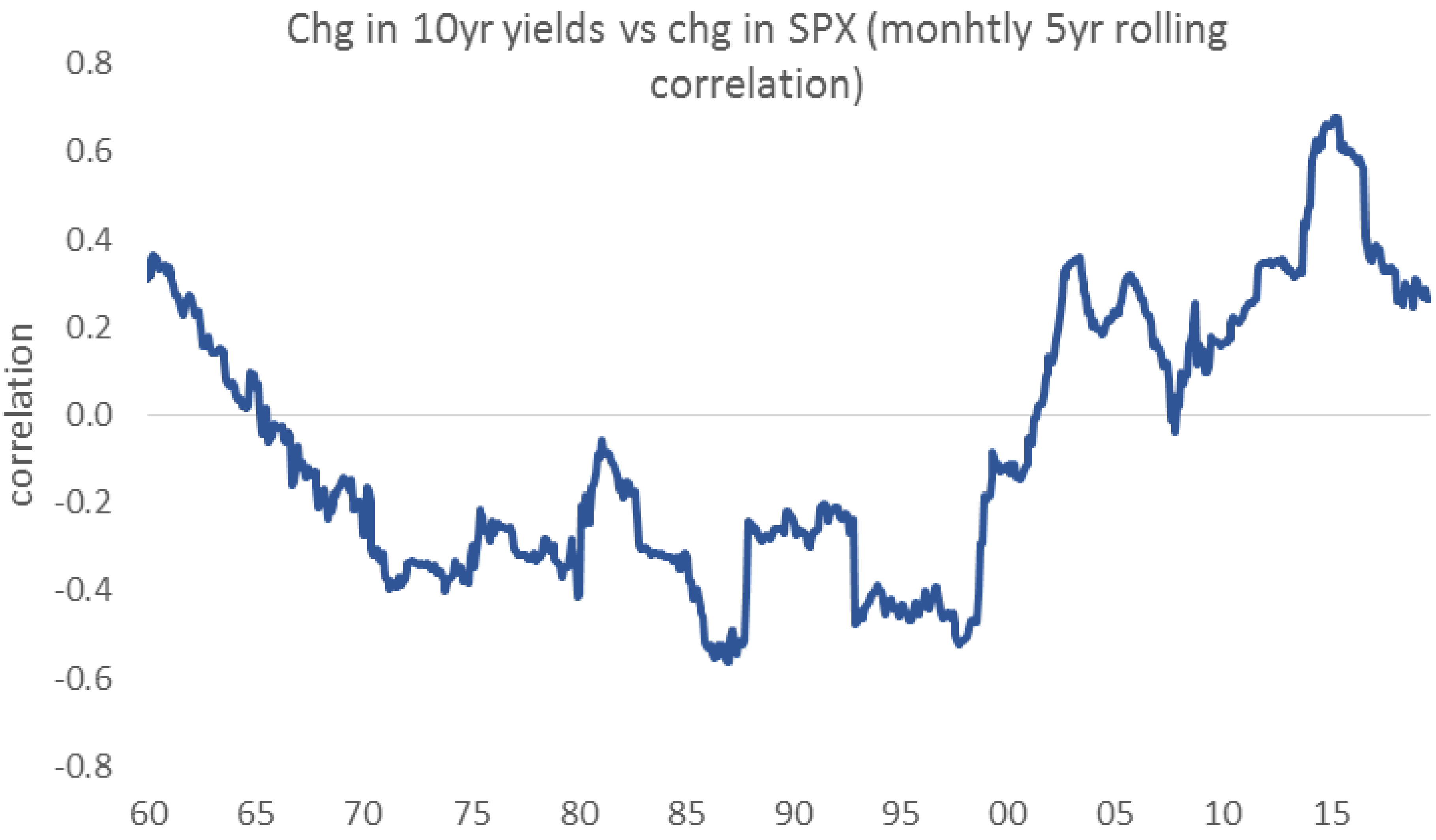
Pro-cyclical TP: Flatter yield curve, less intertemporal substitution… flatter Phillips curve?



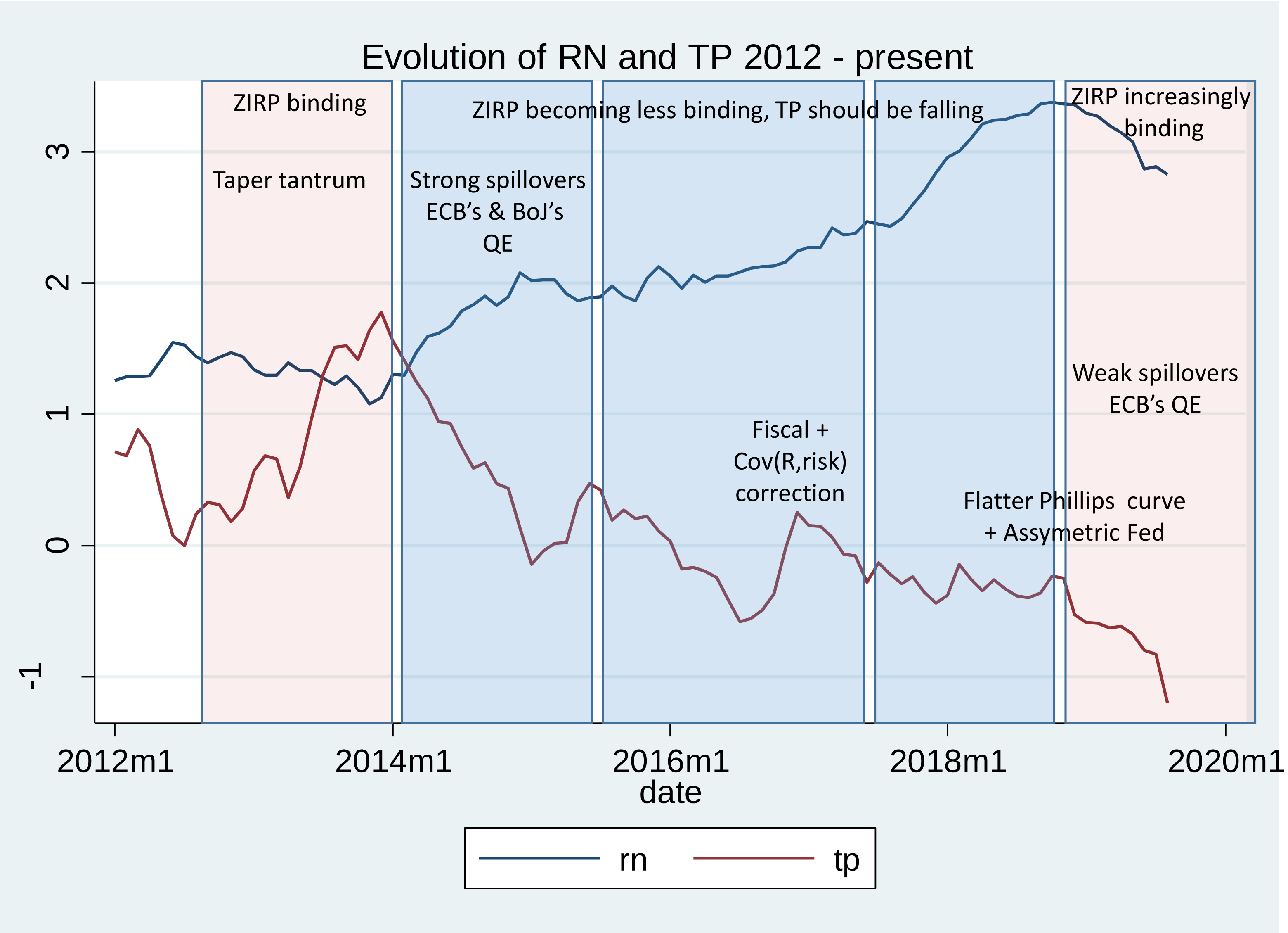
Interactions with ZIRP&QE: Flatter Phillips Curve and more Asymmetric Fed Reaction Function can lead to flatter yield curves today and changes in the timing of stimulus



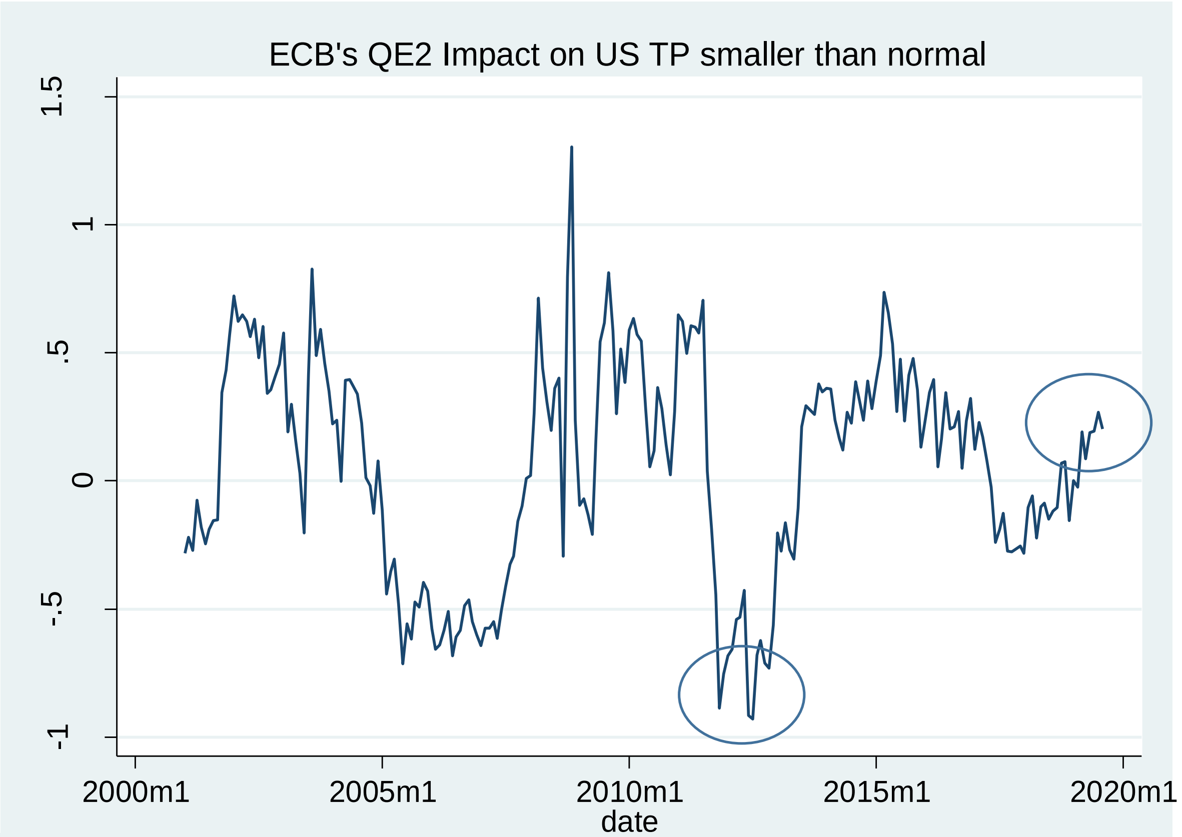
Beyond ZIRP and QE: A flatter Phillips curve allows a stronger Fed response that increases covariance of rates with risk, depressing TP. (Market structure: Risk Parity strategies.)



Learning and periods of binding and non-binding ZIRP/QE

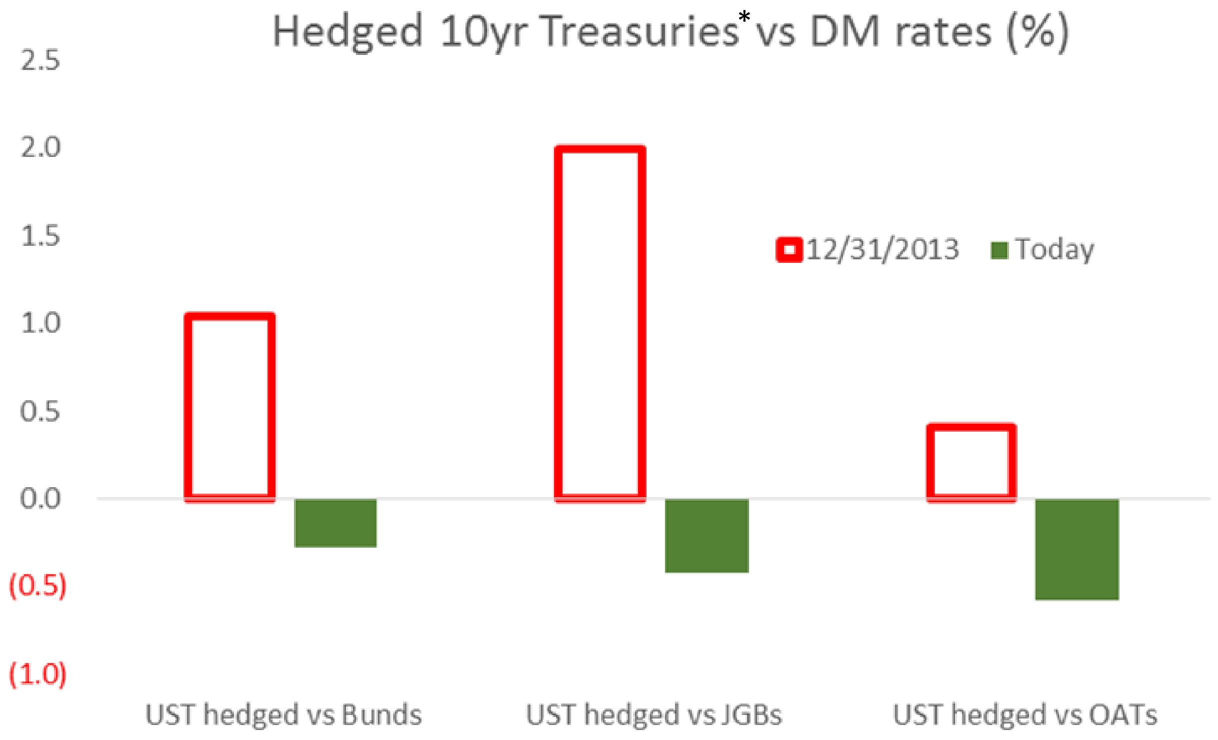


International spillovers: Smaller impact of global QE relative to 2014



Residuals from this regression:

tp	Coef.	Std. Err.	t
tp_eu	1.223328	.0400455	30.55
_cons	-.7723159	.0647848	-11.92



* using 1y FX forwards.

Limits to Central Bank neutrality

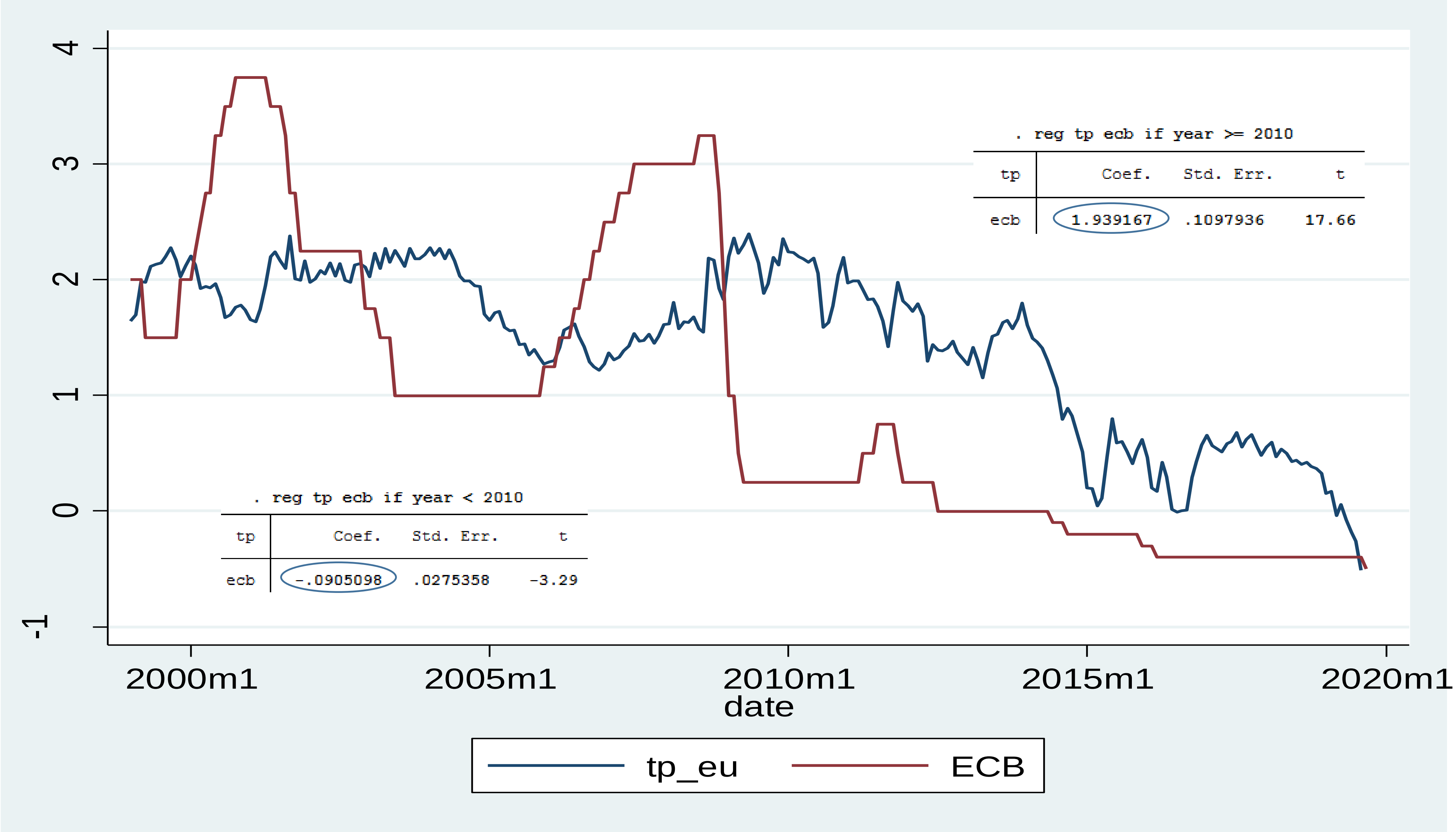
1. Monetary policy can lead to a pro-cyclical TP, flatter yield curves and Phillips curves.

2. Monetary policy can lead to an increased covariance between rates and risk that reduces TP.

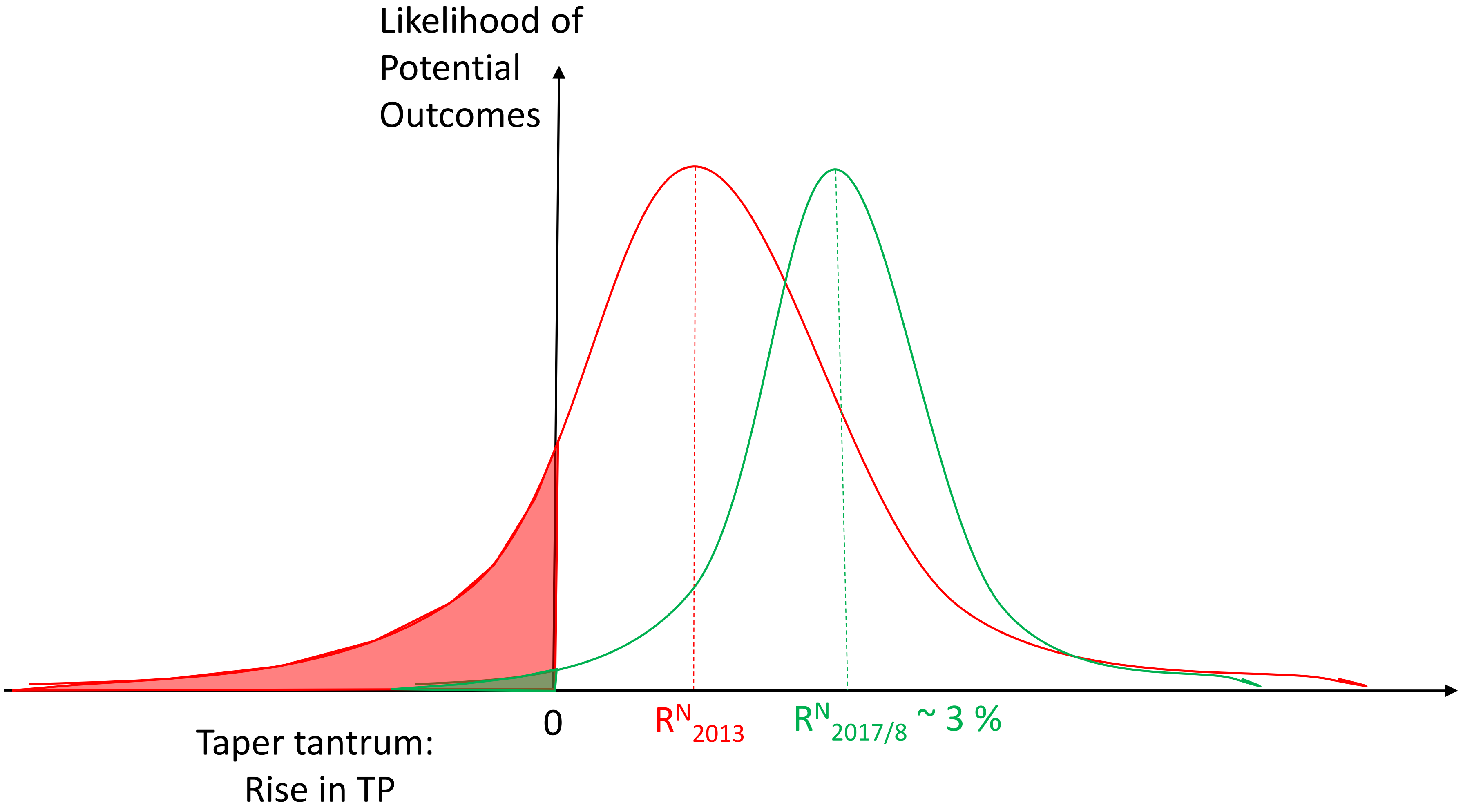
3. International spillovers of QE can be reaching their limits.

Appendix

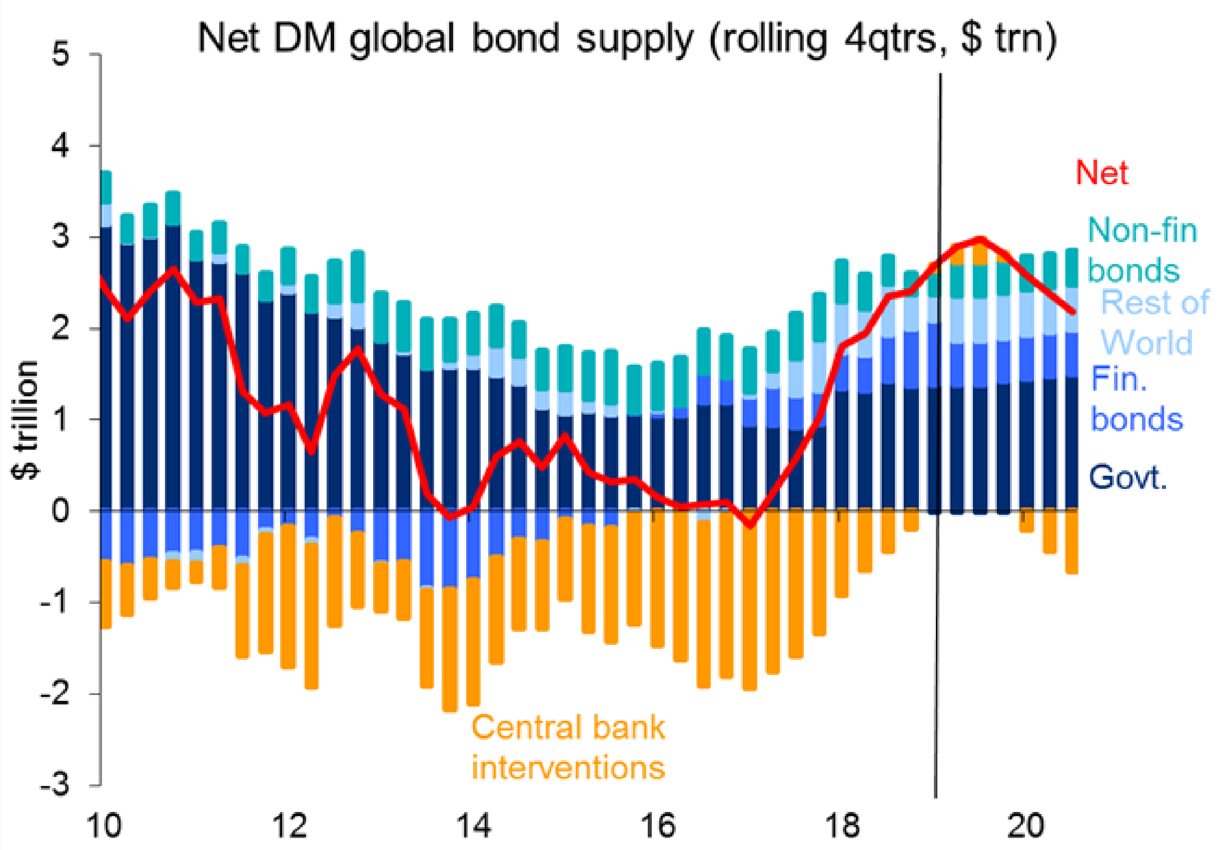
TP in the EU has turned strongly pro-cyclical throughout Z/NIRP's period

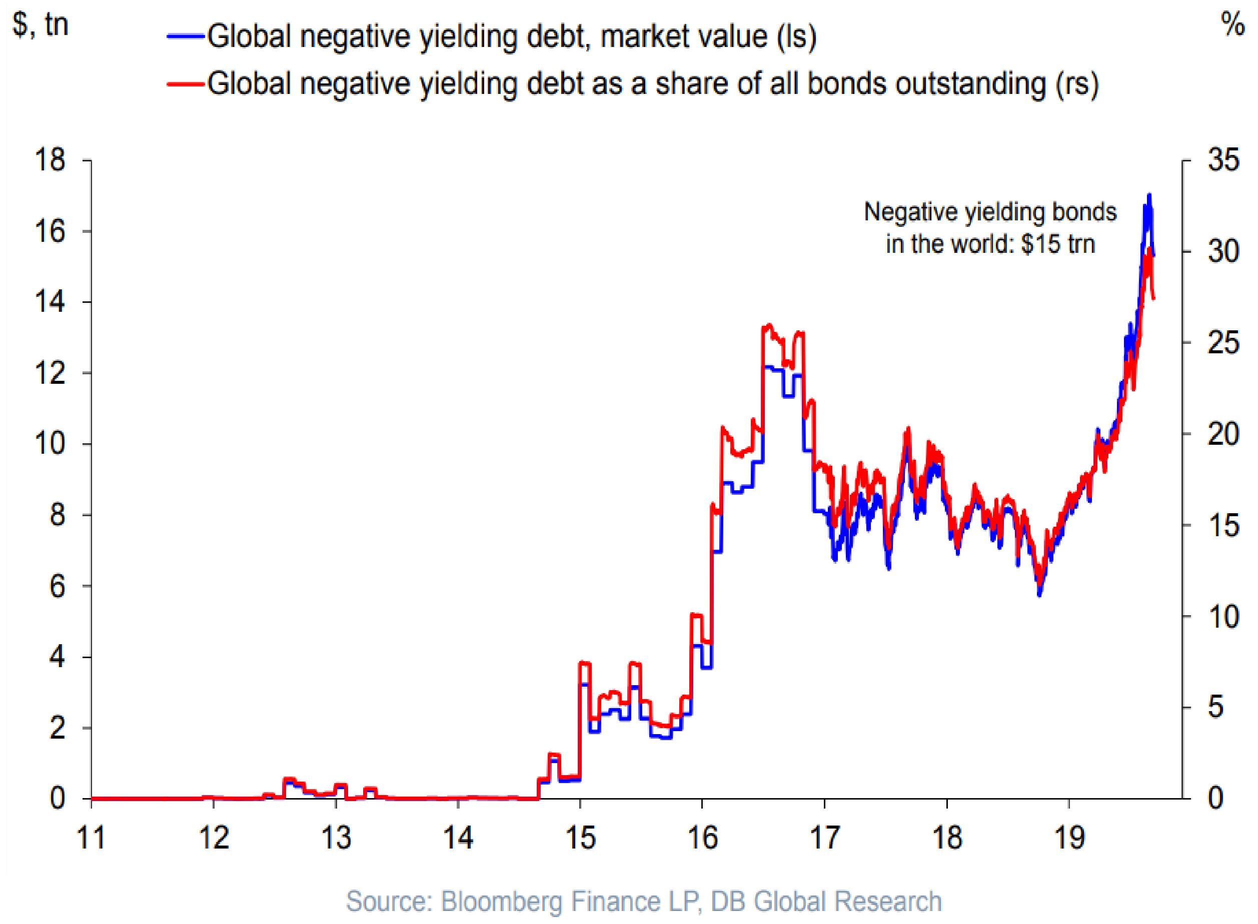


Back to non-binding ZIRP or Fed success: The missing "100bps rise in Term Premium from QT"?

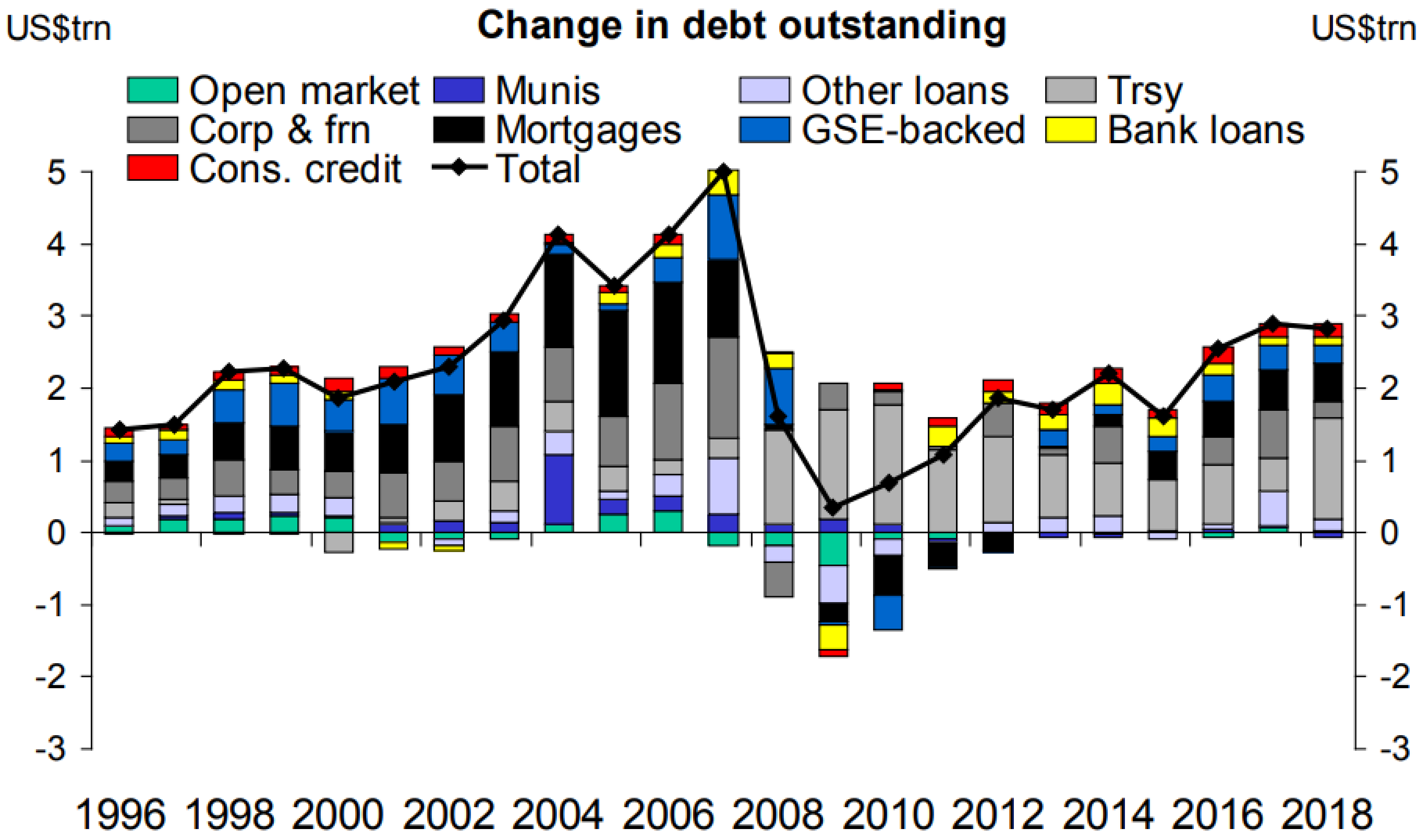


QE and supply of Bonds

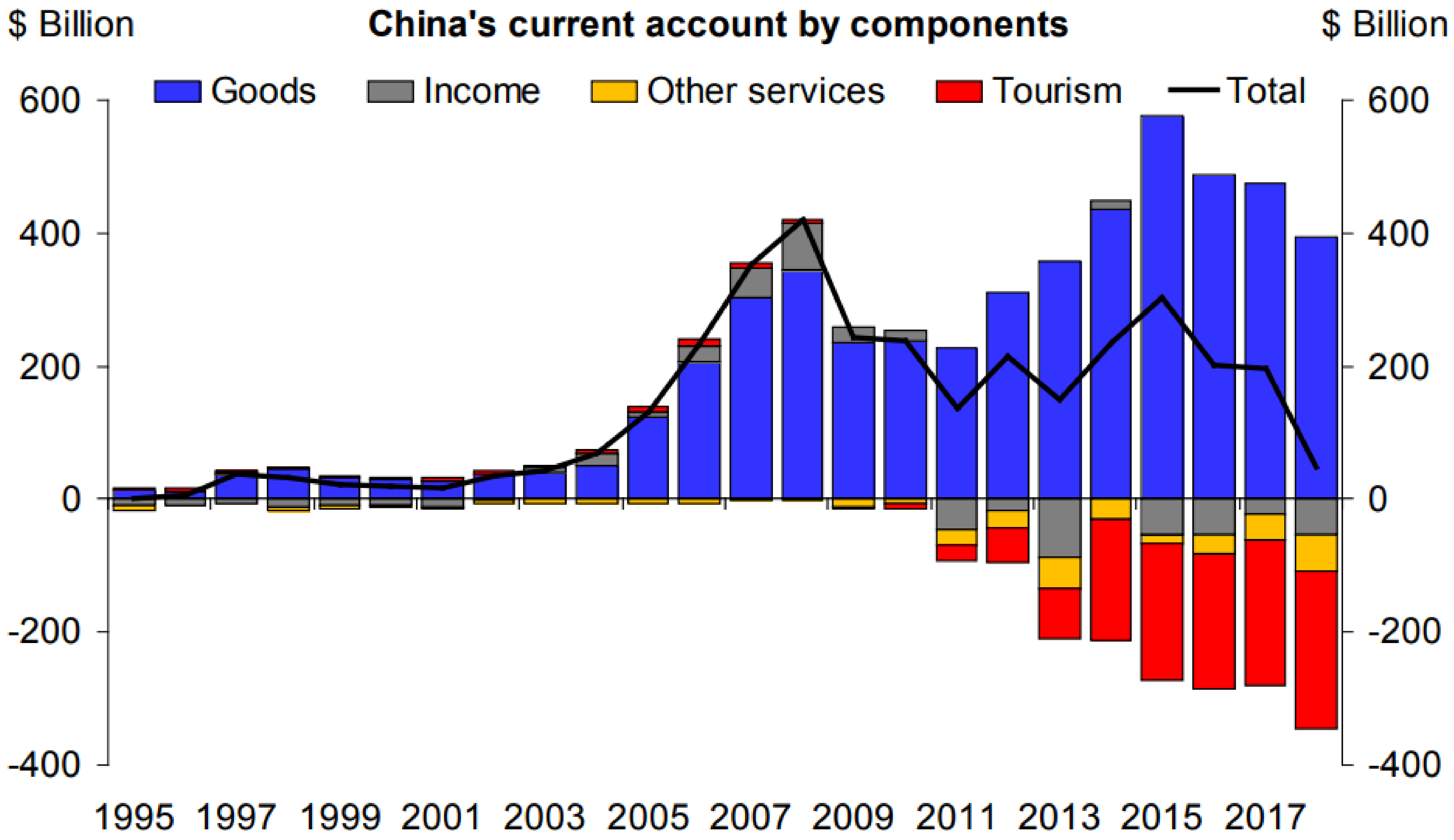




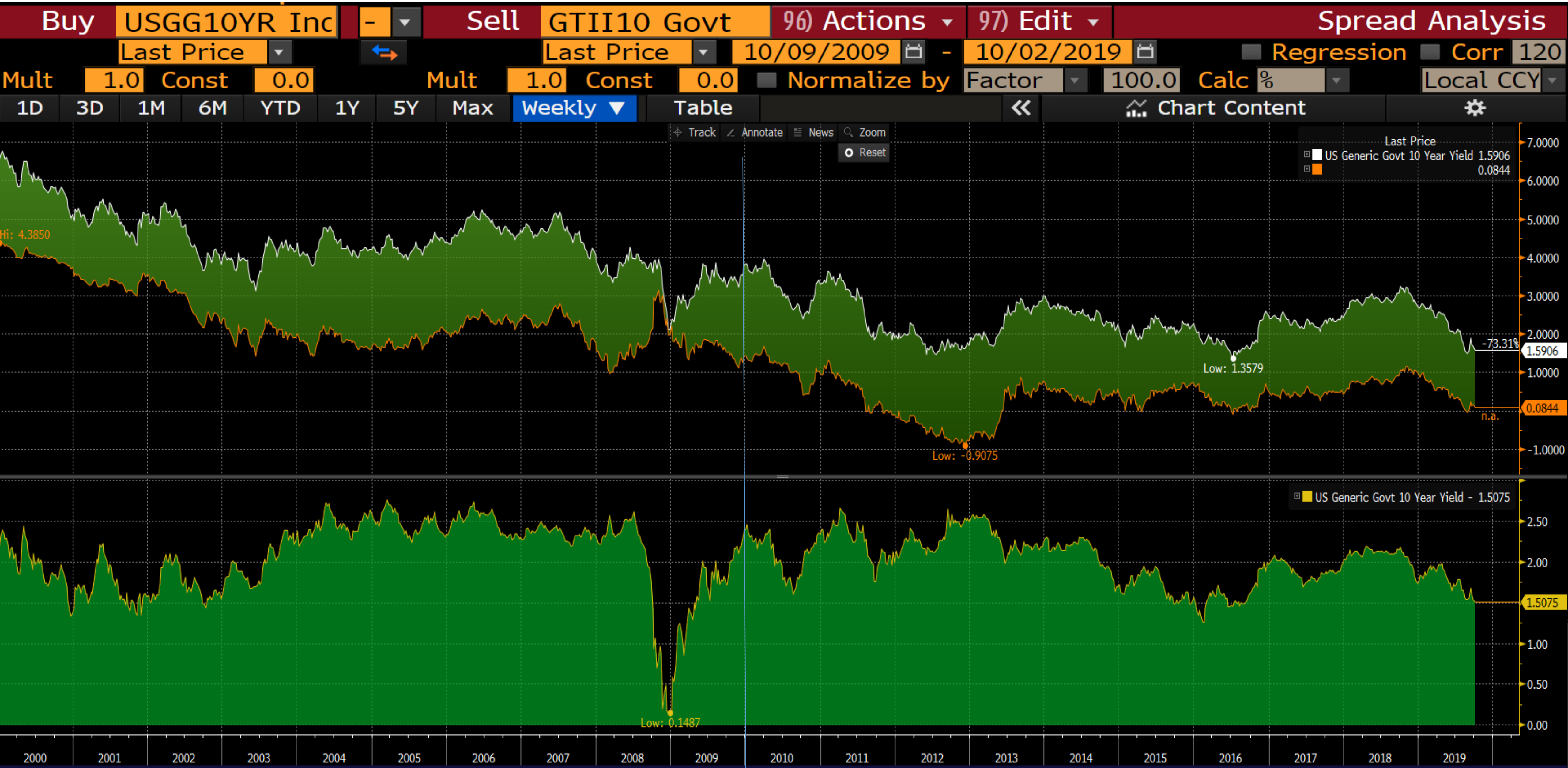
FI supply has fallen relative to pre-crisis. The price of safe bonds relative to riskier bonds has fallen.



No EM/China saving glut anymore



Last 20 years: Trend in nominal and real rates, not in inflation expectations.
Last 10 years: Inflation expectations have fallen



Commodity prices explain two very different decades