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

\[ S - I = F(R^*) = 0 = F(\text{Demographics, Savings glut, Low productivity, Risk aversion}) \]

  • \( R^* \) is invariant to policy choices and exogenous to the cycle.

• Cyclical debate by market participants:

\[ D - S \text{ of Treasuries (Nom R)} = 0 = F(\text{QE, Foreign QE, ZIRP, Market structure, Regulation}) \]

  • 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)

ACM US Term Premium = 10y yield – E(short-term rates over 10y)
(1982 – 2019)

<table>
<thead>
<tr>
<th>Shock</th>
<th>ln C/W</th>
<th>$cw^f$</th>
<th>$cw^{rp}$</th>
<th>$cw^r$</th>
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<tbody>
<tr>
<td>Productivity</td>
<td>sign of $\gamma - 1$</td>
<td>+</td>
<td>$\sim$</td>
<td>$\sim$</td>
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<tr>
<td>Population Growth</td>
<td>sign of $\gamma - 1$</td>
<td>+</td>
<td></td>
<td>−</td>
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<tr>
<td>Deleveraging (outside ELB)</td>
<td>−</td>
<td>−</td>
<td>$\sim$</td>
<td>0</td>
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<tr>
<td>Deleveraging (at the ELB)</td>
<td>−</td>
<td>0</td>
<td>$\sim$</td>
<td>−</td>
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<tr>
<td>Risk Appetite</td>
<td>−</td>
<td>+</td>
<td>−</td>
<td>0</td>
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Strongly counter-cyclical Term Premium

![Graph showing strongly counter-cyclical term premium](image-url)
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?

FF rate and ACM TP

-2 0 2 4 6 8
1990m1 2000m1 2010m1 2020m1
date
FF tp
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

Evolution of RN and TP 2012 - present

- ZIRP binding
- Taper tantrum
- Strong spillovers ECB’s & BoJ’s QE
- ZIRP becoming less binding, TP should be falling
- Fiscal + Cov(risk) correction
- Flatter Phillips curve + Asymmetric Fed
- Weak spillovers ECB’s QE
- ZIRP increasingly binding
International spillovers: Smaller impact of global QE relative to 2014

ECB's QE2 Impact on US TP smaller than normal

<table>
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<th>date</th>
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<th>Coef.</th>
<th>Std. Err.</th>
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<td>2020m1</td>
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Residuals from this regression:

Hedged 10yr Treasuries* vs DM rates (%)

12/31/2013 vs Today

* 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”? 

Likelihood of Potential Outcomes

Taper tantrum: Rise in TP

0

R^N_{2013}

R^N_{2017/8} \sim 3 \%
QE and supply of Bonds

Net DM global bond supply (rolling 4qtrs, $ trn)

- Net
- Non-fin bonds
- Rest of World
- Fin. bonds
- Govt.

Central bank interventions

Source: Bloomberg Finance LP, DB Global Research
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