Joint IMF-IMFS Webinar on “Negative Interest Rates: Taking Stock on the Experience So Far”

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Main thesis

I. Is the equilibrium real rate low enough to justify NIRP?
II. NIRP did not lower inflation much
III. Negative side effects of NIRP to rise over time
IV. Exit from NIRP is difficult
Estimates of $r^*$ are highly uncertain

Estimates of the equilibrium real interest rate by various authors; standard error band around estimates of Holston et al (2016), in %

Source: BIS Annual Report 2018

1 One standard error bands around natural rate estimates of Holston et al (2016), based on sample averages. 2 Longer-run median projection from the SEP for the federal funds rate less 2% inflation target. 3 Based on French government bond yields, supplemented by German government bond yields to interpolate missing data.
Questionable assumptions behind models to estimate $r^*$

Laubach-Williams model for estimation of $r^*$ rests on questionable assumptions
- Is low inflation only caused by a weak economy (Phillips curve)?
- Is weak economy only caused by restrictive monetary policy?

Rachel-Smith estimate $r^*$ based on savings-investment imbalances
- $r^*$ can also be influenced by central banks‘ bond purchases
- Estimates of the impact of structural drivers such as demography on savings and investment curves highly uncertain
- Estimates of the impact of $r$ on savings and investment highly uncertain
NIRP has only small impact on inflation according to the ECB

Actual eurozone inflation rate, and counterfactual paths in absence of ECB’s non-standard measures

Source: ECB Working Paper No 2346, Dec 2019
Main effects of NIRP to decline over time, while negative side effects become more prominent

- Consumers can’t bring consumption forward forever, expansionary impact of NIRP to decline over time

- Negative side effects to grow over time
  - Decline in the profitability of banks
  - Governments get used to borrow at non-positive interest rates
  - Zombiefication of corporates
  - Bubbles in financial and real estate markets due to hunt for yield
Rising share of zombie firms

Share of firms classified as zombies, 14 advanced economies

Source: BIS Working Paper No 882, September 2020

1 Zombie firms defined as firms with both an interest coverage ratio of less than 1 and a Tobin’s q below the median firm in the sector over two years. To be declassified as a zombie firm, an ICR larger than one or a Tobin’s q above the sector median over two years is required. The probability of remaining a zombie firm is calculated as the number of firms that are classified a zombie in year $t$ that remain a zombie in year $t+1$ divided by the number of firms that are classified a zombie in year $t$. 
Hunt for yield raised equity valuations

Price-earnings-ratio for the EuroStoxx50

Source: Datastream
Exit from NIRP is difficult

Arguments which make exit from NIRP difficult:

- Exit should be met with resistance by politicians who fear higher government bond yields
- Exit may cause zombie firms to fail
- Exit may cause bubbles to burst
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