Thoughts on US Monetary Policy
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QE and Nominal GDP… the Collapse (and Rebound?) of the Money Multiplier

Note that quarter by quarter the growth in nominal GDP is exactly accounted by these three factors.

As of 31 December 2015
SOURCE: Haver Analytics
Maturity profile of the Fed’s balance sheet through 2030

As of 1 January 2016
SOURCE: Federal Reserve Bank of New York, PIMCO
MBS “maturities” are estimated by modeling prepayments on MBS currently held on the Fed’s balance sheet.
A ‘New Neutral’ Requires a Gradual Lift Off to a Lower Destination

The equilibrium real federal funds rate is at present well below its historical average and is anticipated to rise only gradually over time as the various headwinds that have restrained the economic recovery continue to abate. If incoming data support such a forecast, the federal funds rate should be normalized, but at a gradual pace.

- Chairman Janet Yellen speaking at the "The New Normal for Monetary Policy" research conference at the Federal Reserve Bank of San Francisco, March 27, 2015
Evolution of Market Pricing of Short Term Interest Rates in December 2018

As of 29 February 2016
SOURCE: Bloomberg
Global growth converging to slowing trend trajectories

Potential output growth and its components

Advanced Economies

Emerging Market Economies

As of 15 April 2015
SOURCE: IMF World Economic Outlook
Neutral real interest rate, in theory, a weighted average of US and foreign potential output growth (Clarida, Gali, Gertler (2002))

Only in the special case of a closed economy is neutral real interest rate a function solely of home potential output growth. In general, CGG (2002) show that:

\[
r_{rt} = \rho + \beta_1 E_t \{ \Delta y_{t+1} \} + \beta_2 E_t \{ \Delta y^*_{t+1} \}
\]

Potential Global GDP Growth

Potential Home GDP growth

What happens in Beijing and Brasilia is (almost) as important as what happens in Washington to US bond yields - in the front end as well as the long end!
US Bond Yields Reflect in Part the Value of Insurance in an Uncertain World

Curiously, heightened risk and fears of further disruptions – not just another financial crisis, but also geopolitical instability and pandemics – do not seem to carry much weight in current policy discussions... Though bonds are hardly a perfect hedge against such risks... even relatively minor shifts in disaster risk – say, a rise from a normal 2–3% to 3–4% – can lead to a massive decline in global real interest rates, even taking them well into negative territory. This can be the case even if expected growth is strong...

Ken Rogoff, “The Stock Bond Disconnect,” Project Syndicate
Ceteris paribus, a 40 percent expected return on a 30 year Treasury with a 2 percent greater probability of a crisis lowers the expected return absent the crisis by about 70 basis points!
Fed likely to continue to rely on communication to keep policy rate expectations anchored…

“The Committee expects that economic conditions will evolve in a manner that will warrant only **gradual** increases in the federal funds rate; the federal funds rate is likely to remain, for some time, **below levels that are expected in the longer run.**

“FOMC Statement – 16 December 2015

“The Committee anticipates that it will be appropriate to raise the target range for the federal funds rate when it has **seen further improvement in the labor market and is reasonably confident that inflation will move back to its 2 percent objective** over the medium term.”


“To support continued progress…the Committee…anticipates that exceptionally low levels for the federal funds rate are **likely to be warranted at least through mid-2015**


“Fed Statement - 12 December 2012

“This exceptionally low range for the federal funds rate will be appropriate **at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee’s 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored.”

Fed Statement - 12 December 2012

As of 29 February 2016

SOURCE: Bloomberg, Federal Reserve
As output gaps close in some major economies, and as central banks aim to run economies ‘hot’, is there upside risk to inflation that is not factored in to the consensus view?

As of 25 January 2016
If the Fed were to aim for a Price Level Target, it would want inflation of almost 3% for next 3 years to make up for falling below the price level path consistent with 2 percent inflation objective.

Fed formally adopts a 2% inflation target

As of 31 December 2015
SOURCE: PIMCO, Haver Analytics