

US Daily: The Neutral Rate Through the Fed's Eyes (Abecasis / Mericle)

- The FOMC's estimate of the longer-run nominal neutral rate has increased from 2.5% in late 2019 to 2.9% in the latest Summary of Economic Projections (SEP). We expect it to rise somewhat further next year, for two reasons. First, some FOMC participants might look for guidance to the bond market's implicit view of neutral as roughly approximated by distant forward market interest rates, which now stand at around 4%, well above pre-Covid levels.
- Second, some FOMC participants might also consult model-based econometric estimates of the neutral rate, which have risen too. The Tealbook briefing materials that the Fed staff prepares for the FOMC reveal that in the past, the staff has summarized several model-based estimates for the FOMC. We have updated these models and find that their estimates of the nominal neutral rate range from 2.8%-4.6% and average 3.8% as of 2024Q3. As a result of revisions to earlier real-time data and the subsequent paths of interest rates and the economy, the models now estimate that the neutral rate was 3.6% in 2018, 0.5pp higher than they estimated in real time.
- In addition to nudging their estimates of long-run neutral a bit higher, Fed officials might also conclude that the appropriate terminal rate this cycle should be a bit higher than long-run neutral because non-monetary policy tailwinds, especially much larger than usual primary fiscal deficits and very strong risk sentiment, are boosting aggregate demand and offsetting the impact of higher rates on the economy. For both reasons, we expect the cutting cycle to end at around 3.25-3.5%, 100bp above the peak reached last cycle, though we could easily imagine the FOMC stopping somewhat higher or lower.

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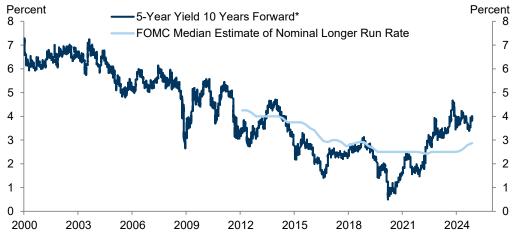
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The Neutral Rate Through the Fed's Eyes

The FOMC's estimate of the longer-run nominal neutral rate—the level of the funds rate that would stabilize the economy at full employment and 2% inflation, assuming other economic forces are at normal or equilibrium levels—has increased from 2.5% in late 2019 to 2.9% in the latest Summary of Economic Projections (SEP).

We expect the FOMC's estimate to rise somewhat further next year, for two reasons. First, some FOMC participants might look for guidance to the bond market's implicit view of neutral as roughly approximated by distant forward market interest rates, which now stand at around 4% (Exhibit 1), far above pre-Covid levels.

Exhibit 1: The FOMC's Estimate of the Longer-Run Nominal Neutral Rate Has Increased Slowly from 2.5% to 2.9%, While Market-Based Proxies Have Risen More Sharply from Pre-Covid Levels to Around 4%



* Based on OIS rates from 2004 and Treasury yields adjusted for the average difference between OIS rates and yields from 2004-2007 before then.

Source: Goldman Sachs Global Investment Research, Federal Reserve

Second, some FOMC participants might also consult model-based econometric estimates of the neutral rate, which have risen too.

The Tealbook briefing materials that the Fed staff prepares for the FOMC are released to the public with a 5 year delay. As we <u>noted</u> earlier this year, they reveal that in the past, the staff has summarized several model-based estimates for the FOMC. These models estimate neutral in a number of ways—some rely heavily on economic theory while others take a more flexible empirical approach; some require that the neutral rate move slowly over time, while others allow it to fluctuate more; and some rely exclusively on macroeconomic data, while others leverage information from a range of asset prices.

We have updated these model estimates of the nominal neutral rate and find that they range from 2.8%-4.6% and average 3.8% as of 2024Q3, as shown in Exhibit 2.

Econometric Estimates of the Real Neutral Rate Percent Percent 3.0 3.0 ■2018 Real Time ■2018 Revised ■2024 Latest 2.5 2.5 2.0 2.0 1.5 1.5 1.0 1.0 0.5 0.5 0.0 0.0 Del Negro Del Negro Lubik, HLW ΙW Johannsen, Lewis. Average et al DSGE et al VAR Matthes Mertens Vazquez-

Exhibit 2: Pre-Pandemic Estimates of Neutral from Economic Models Tracked by the FOMC Have Been Revised Up 0.5pp to 1.6% Real or 3.6% Nominal on Average and Have Edged Up Slightly Since Then

Source: Goldman Sachs Global Investment Research, Federal Reserve

Notably, the models do not suggest, on average, that the neutral rate has changed dramatically since before the pandemic, as many commentators have asserted. As a result of revisions to earlier real-time data and learning from the more recent experience of strong growth under a much higher policy rate, the models now estimate that the neutral rate was 3.6% in 2019, 0.5pp higher than they estimated in real time and just 0.2pp lower than they estimate it is today. Exhibit 3 shows the upward revisions to the well-known Holston-Laubach-Williams model as an example.

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The conclusion implied by the models—that it is not so much that the neutral rate has risen as that it was not as low as widely believed last cycle—is <u>consistent</u> with our long-standing view and might make some FOMC participants more inclined to raise their estimates of the current neutral rate because doing so does not require believing that anything fundamental has changed dramatically.

Percent 4.5 ¬ Percent Holston-Laubach-Williams Real Neutral Rate Estimate As of 2019Q4 With Latest Data 4.0 4.0 3.5 3.5 3.0 3.0 2.5 2.5 2.0 2.0 1.5 1.5 1.0 1.0 0.5 0.5 0.0 0.0 1990 1996 2002 2008 2020 2014

Exhibit 3: The Real-Time Pre-Pandemic Estimate of the Popular Holston-Laubach-Williams Model of the Neutral Rate Has Since Been Revised Up, as Have Estimates from Most Other Models

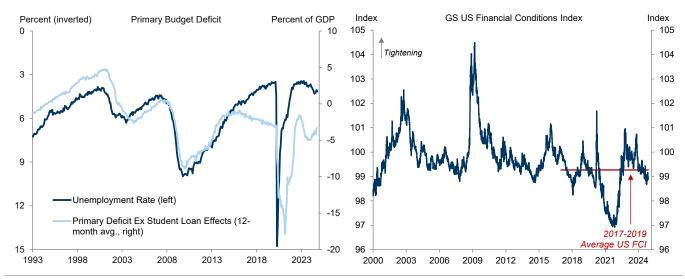
Source: Goldman Sachs Global Investment Research, Federal Reserve

In addition to nudging their estimates of long-run neutral a bit higher, Fed officials might also conclude that the appropriate terminal rate this cycle should be a bit <u>higher than long-run neutral</u> because non-monetary policy tailwinds are boosting aggregate demand and offsetting the impact of higher rates on the economy. One of these tailwinds is the fiscal deficit, which is currently about 5% of GDP wider than has been on average when the unemployment rate has been this low (left side of Exhibit 4).

Another tailwind is the fact that broad financial conditions have not tightened commensurately with the funds rate, limiting the transmission of tighter monetary policy to the economy. In fact, risk sentiment has been so robust that our financial conditions index is somewhat below its average level in 2017-2019, despite the much higher level of the fed funds rate and higher interest rates across the curve (right side of Exhibit 4).

These non-monetary policy tailwinds are not necessarily entirely additive to the estimates from all of the models, which vary in the degree to which they capture the impact of these shorter-term tailwinds—models that smooth the neutral rate less or whose coefficients are allowed to change over time are likely to incorporate some of these tailwinds into their neutral rate estimates, for example.

Exhibit 4: Tailwinds From Larger Fiscal Deficits and Resilient Risk Sentiment Could Lead Fed Officials to Conclude That the Terminal Rate This Cycle Should Be Higher Than the Neutral Rate



Source: Goldman Sachs Global Investment Research, Federal Reserve

Both because we expect FOMC participants to revise up their current 2.875% median neutral rate estimate a bit higher and because the appropriate terminal rate this cycle is arguably a bit higher than the longer-run neutral rate, we expect the cutting cycle to end at around 3.25-3.5%, 100bp above the peak reached last cycle. But Fed officials are likely still in an early stage of this debate, and we could easily imagine the FOMC stopping somewhat higher or lower.

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Disclosure Appendix

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