Liquid Insight

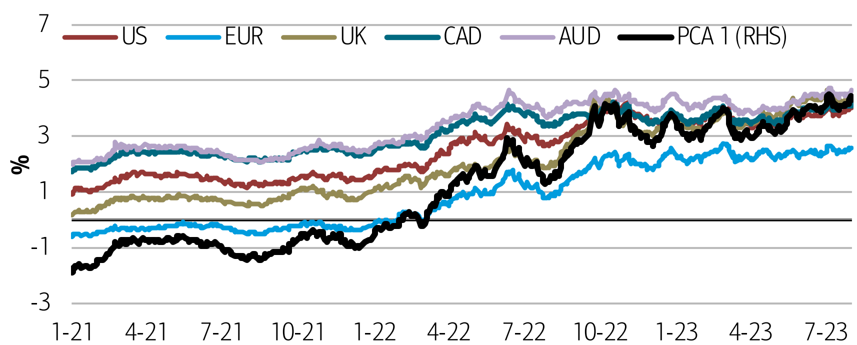
Finding a higher "neutral" ground

Key takeaways

- A common factor explains 96% of the variance in 10y rates across US, GER, UK, AUD, CAD since 2021.
- This is despite large differences in govt bond supply, growth, inflation, central bank policies, and market technicals.
- The driver could be the neutral rate, proxied by the 3y1y OIS forward. Higher neutral rates threaten our long duration bias.

By R. Axel, M. Cabana, M. Swiber, B. Braizinha

Chart of the day: Global 10y rates are highly correlated despite country differences
Different deficit paths and economics performances, yet a common global driver is in play



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Global 10y rates: more similar than different

Despite divergent fiscal deficit paths and gov't bond supply expectations, differences in economic performance, inflation, and central bank paths, global 10y rates remain highly correlated. A principal component analysis of 10y rates back to 2021 suggests that a single factor accounts for 96% of the variance in 10y rates (Chart of the Day).

We believe the common factor could be the global neutral rate which has increased recently. The neutral rate is the rate level markets price central banks to settle after the hikes and cuts are done. While the "right" neutral rate is subject to academic debate, central banks – and rate markets that predict their policies – take a practical approach, monitoring their stance to decide whether they are restrictive or easy.

The keyword for central banks this cycle has been "resilience" which might translate into higher neutral rates and higher long-term rates. Continued resilience and higher neutral rates pose a threat to our bias to be long duration in backups.

10 August 2023

Rates and Currencies Research
Global

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MLI (UK)

Ralph Axel
Rates Strategist
BofAS
ralph.axel@bofa.com

Mark Cabana, CFA
Rates Strategist
BofAS
+1 646 855 9591
mark.cabana@bofa.com

Meghan Swiber, CFA
Rates Strategist
BofAS
+1 646 855 9877
meghan.swiber@bofa.com

Bruno Braizinha, CFA
Rates Strategist
BofAS
+1 646 855 8949
bruno.braizinha@bofa.com

Adarsh Sinha
FX Strategist
Merrill Lynch (Hong Kong)
+852 3508 7155
adarsh.sinha@bofa.com

Janice Xue
Rates Strategist
Merrill Lynch (Hong Kong)
+852 3508 8587
janice.xue@bofa.com

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Strong commonality despite large differences

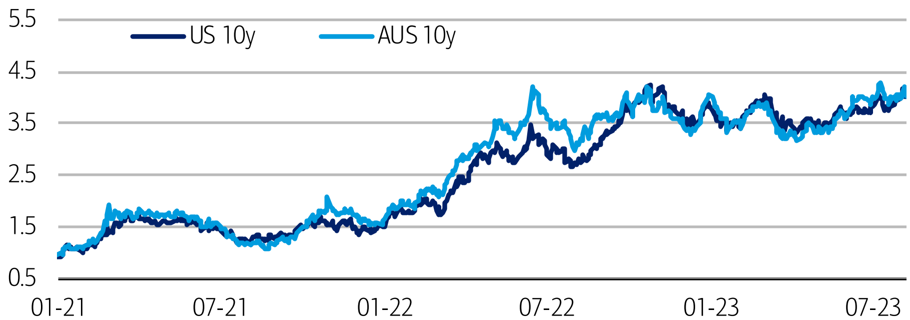
The US and Australia provide a good example of large supply differences yet strong commonality in 10y rates. The US was recently downgraded by Fitch to reflect "the expected fiscal deterioration over the next three years" and "a high and growing general government debt burden." Concerns over US government bond supply were amplified when the Treasury recently surprised markets with larger auction sizes. Investor concern around who will buy the US debt has increased in recent years along with related concerns of the US losing dollar reserve status.

Australian government finances, by contrast, show the opposite story. Australia has greatly reduced its deficits since the pandemic and produced a government surplus in the fiscal year ending June 2023. Our AUD team expects another surplus in the current fiscal year, barring unforeseen shocks. Yet with this vast difference in govt debt supply, Australian and US rates are almost exactly the same, and have been for years (Exhibit 1).

While there is little doubt that supply differences have short-term impacts in rate markets, especially in swap spreads, Exhibit 1 makes it difficult to argue that supply is a major determinant of government bond yield differentials for those countries who issue their own currency without restriction.

Exhibit 1: 10y rates in US and AUD very similar despite vast differences in debt supply path

The US was recently downgraded for growing debt burden while Australia is running surpluses.



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A possible candidate for commonality: the neutral rate

While the theoretical neutral rate is not observable, we can look at proxies for how the markets price it. One proxy for the neutral rate is the 1y OIS rate 3 years forward, or the 3y1y rate. Markets price the bulk of cuts next year, with a small amount in 2025, and then forward rates generally stabilize. The 3y1y is a proxy for this stable location.

While models can be used to estimate a risk-neutral expectation component and a term premium component embedded within the market 3y1y rate, we stick with the market 3y1y as a proxy for how markets price central banks after the near-term hikes and cuts. Long term rates such as 10y and 30y rates are mostly a function of 3y1y, since term rates are compounded 1y forwards through the maturity date and forward curves have been pretty flat beyond the 3-year point in recent years. 3y1y rates rose across countries in the last month, which led to a bear steeping of global bond curves.

Various short-term explanations have pointed to the resilient data, the BoJ's relaxation of YCC, the Fitch downgrade of the US, and positioning and supply factors. In this episode we have seen very little change in the near-term pricing of the Fed path: 1y rates are essentially unchanged since mid-July while 10y US rates increased 20bp. Markets have increased their perception of the neutral rate for a variety of reasons; whether this continues will likely be a function of how long the resilience continues.

In the US, the 10y Treasury rate closely tracks the 3y1y OIS swap rate as seen in Exhibit 2. But this is true globally as well: we find that the first PCA factor of global 10y rates closely tracks the first PCA factor of global 3y1y rates (Exhibit 3). In addition, the first

PCA factor of global 3y1y rates is similar to the Fed's estimate of the US nominal neutral rate (net of term premium) derived from their DKW model (D'Amico, Kim, and Wei). The combined evidence shows that despite differences in supply, flows, positioning, and macro outlooks across countries over time, there is a global market neutral rate proxied by 3y1y that plays a large role in global term rate levels.

Exhibit 2: US 10y UST rate closely tracking US 3y1y OIS rate
This is due to the very flat term structure of 1y forwards beyond 3y

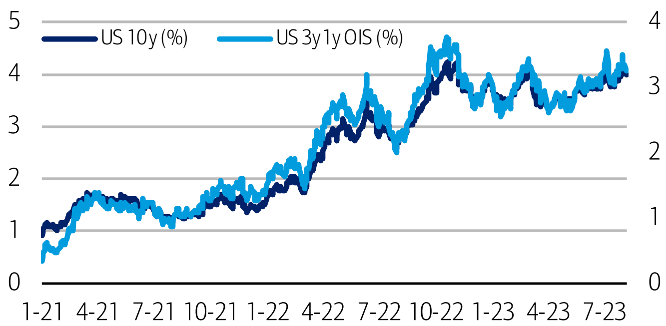

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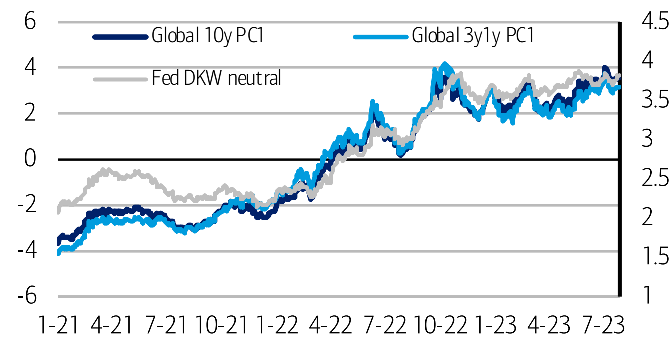
Exhibit 3: Global 10y is also mostly the 3y1y
Also shown is the Fed's estimate of nominal US market neutral rate



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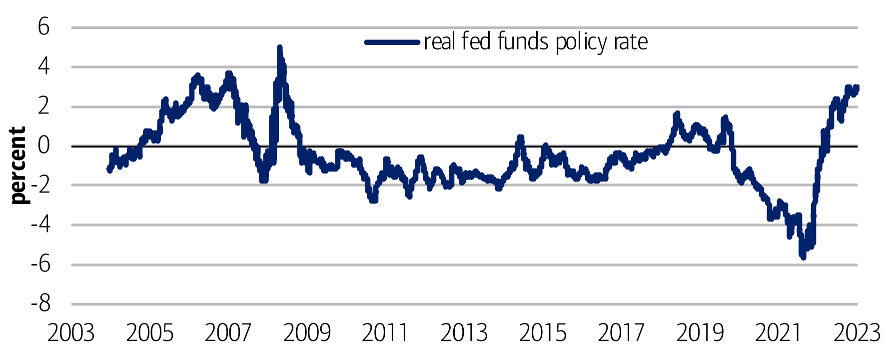
Resilience means neutral could be higher – but conviction in neutral is low

Central bankers across developed markets this year have noted economic resilience. The Fed in particular has expressed surprise at how well labor markets and growth have held up despite the rapid tightening cycle which lifted the real policy rate almost 900bp from -5.7% in early 2022 to 3% today, using 1y inflation swaps to convert from nominal to real (Exhibit 4). Our Economics team recently revised their outlook to incorporate this better-then-expected performance (see [US Economic Viewpoint: US outlook: Imagine no recession, it's easy if you try 02 August 2023]).

To fight this resilience, the Fed adopted a message of finding the sufficiently restrictive policy level to cool down activity and inflation. In their quarterly dot plot, the Fed pencils in a long-run dot level of about 2.5% which is their guidance around the nominal neutral rate. The distribution of those dots began tilting upwards in the last 3 quarters: top of the range increased from 3% to 3.7% while bottom of the range increased from 2% to 2.25%.

Exhibit 4: Real Fed policy level has increased almost 900bp since March 2022
Despite the hikes, the economy appears to be resilient, but with vulnerabilities



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As resilience has continued, with US real GDP growth increasing from Q1 to Q2, global rates markets have reflected expectations for higher neutral policy rates, as proxied by 3y1y. Whether this continues is key for the duration call. The outlook depends on the lagged impact of higher rates. We might discover in a few months that policy is more restrictive than today's backward-looking data suggest. Evidence so far suggests that neutral may be rising, at least temporarily. A recent NY Fed paper supports this view.

Neutral rate: unknown until after it has been reached

The neutral rate is arguably the single most important factor for central bank policy setting and interest rate pricing. It is also arguably the most difficult economic variable to understand since it is unobservable and can vary over time.

There are a variety of ways to estimate the neutral rate. BofA economists estimate nominal neutral at 2.5-2.75%, FOMC participants' long-run median dot is at 2.5%, & Laubach-Williams estimates suggest neutral at 3.1% (note: the L-W estimate was not available for years after the pandemic due to "extreme economic volatility and the elevated uncertainty about how the pandemic would evolve"). Clearly, some well-respected neutral measures are non-stationary. A paper this week from the NY Fed also shows increasing discrepancy between neutral estimates in short & longer run.

We believe the clearest neutral rate evidence comes from economic and financial condition feedback: the economy tends to slow & financial conditions tighten the more policy exceeds the neutral rate. The neutral rate is typically only known ex-post; the market won't know the neutral rate has been reached in advance, it only knows after it has been exceeded based on economic & financial market feedback.

There appears to be strong evidence of shifting views on the neutral rate with evolving economic & market conditions. The Fed's long run dot generally tracked market expectations for 5y5y USD OIS from 2012-2020 (Exhibit 5). The market's estimate of the real neutral using 5y5y or 3y1y USD real rates appears largely a function of the real policy rate (Exhibit 6). In essence, the market revises higher its estimate for neutral with evidence of economic resilience to higher rates.

Exhibit 5: USD 5y5y nominal OIS & Fed LR dot (%)

Fed LR dot largely followed market moves from 2012-2020

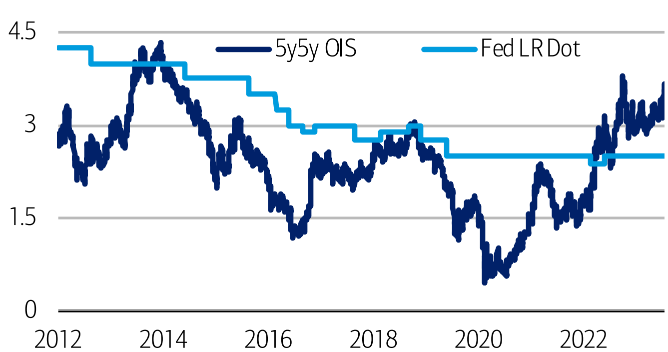

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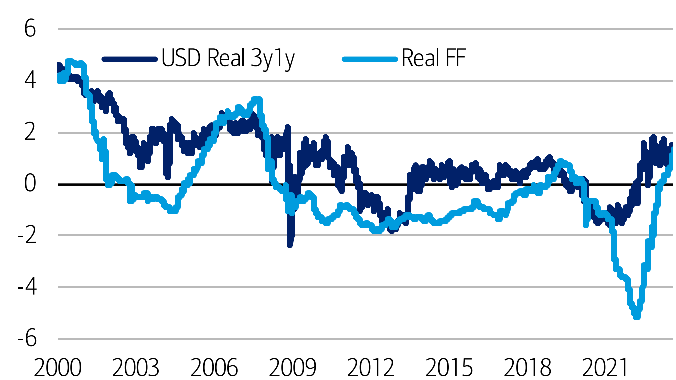
Exhibit 6: Real 3y1y & real FF rate (%)

Higher real funds rate often translates into higher real 3y1y



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A resilient economy today that realizes a higher nominal & real fed funds rate risks the market pricing a higher neutral rate over time. A higher neutral rate would challenge our base case for longer-dated US rates to decline as the Fed eventually pauses and starts cutting in '24. However, our base case views are predicated on a lower neutral policy rate in the future. This crucial assumption justifies our bias to trade US duration tactically from the long side.

Bottom line: A common factor explains 96% of the variance in 10y rates across US, GER, UK, AUD, CAD since 2021.Despite large differences in govt bond supply, economic performance, and inflation, a common rates driver is at work. The driver could be the neutral rate, proxied with the 3y1y fwd. Our rate forecasts and long duration bias are underpinned by a relatively stable & low neutral rate. Persistent economic resilience and higher neutral rates threaten our long duration bias.

Notable Rates and FX Research

- **Global Rates, FX & EM Year Ahead 2023 –** Year Ahead 2023: Pivot ≠ Peak, 20 Nov 2022
- Every week a new narrative **Global FX Weekly**, 04 Aug 2023
- Steep demand curve **Global Rates Weekly**, 04 Aug 2023
- Q3 so far, **Liquid Cross Border Flows**, 31 July 2023

Rates, FX & EM trades for 2023

For a complete list of our open trade recommendations, as well as our trade recommendations closed over the past 12 months, see the reports below:

Global FX weekly: Every week a new narrative 04 August 2023

Global Rates Weekly: Steep demand curve 04 August 2023

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Research Analysts

US

Ralph Axel
Rates Strategist
BofAS
+1 646 855 6226
ralph.axel@bofa.com

Paul Ciana, CMT
Technical Strategist
BofAS
+1 646 855 6007
paul.ciana@bofa.com

John Shin
FX Strategist
BofAS
+1 646 855 9342
joong.s.shin@bofa.com

Vadim Iaralov
FX Strategist
BofAS
+1 646 855 8732
vadim.iaralov@bofa.com

Mark Cabana, CFA
Rates Strategist
BofAS
+1 646 855 9591
mark.cabana@bofa.com

Bruno Braizinha, CFA
Rates Strategist
BofAS
+1 646 855 8949
bruno.braizinha@bofa.com

Meghan Swiber, CFA
Rates Strategist
BofAS
+1 646 855 9877
meghan.swiber@bofa.com

Europe

Ralf Preusser, CFA
Rates Strategist
MLI (UK)
+44 20 7995 7331
ralf.preusser@bofa.com

Ruben Segura-Cayuela
Europe Economist
BofA Europe (Madrid)
+34 91 514 3053
ruben.segura-cayuela@bofa.com

Mark Capleton
Rates Strategist
MLI (UK)
+44 20 7995 6118
mark.capleton@bofa.com

Athanasios Vamvakidis
FX Strategist
MLI (UK)
+44 020 7995 0279
athanasios.vamvakidis@bofa.com

Sphia Salim
Rates Strategist
MLI (UK)
+44 20 7996 2227
sphia.salim@bofa.com

Kamal Sharma
FX Strategist
MLI (UK)
+44 20 7996 4855
ksharma32@bofa.com

Ronald Man
Rates Strategist
MLI (UK)
+44 20 7995 1143
ronald.man@bofa.com

Michalis Rousakis
FX Strategist
MLI (UK)
+44 20 7995 0336
michalis.rousakis@bofa.com

Pac Rim

Adarsh Sinha
FX Strategist
Merrill Lynch (Hong Kong)
+852 3508 7155
adarsh.sinha@bofa.com

Janice Xue
Rates Strategist
Merrill Lynch (Hong Kong)
+852 3508 8587
janice.xue@bofa.com

Shusuke Yamada, CFA
FX/Rates Strategist
BofAS Japan
+81 3 6225 8515
shusuke.yamada@bofa.com