Global Markets Daily: Q&A: Interest Rates and the Reflation Theme

- The atypical nature of recent US yield curve flattening so far in advance of likely Fed hikes has given life to a range of commonly offered theories. In this *Daily*, we consider some of these lines of argument for the decline in longer term yields, and also look at what might induce a market reassessment back towards fair value.
- Reduced expectations for fiscal expansion in the US, outbreaks of the delta variant, and positioning could each have played a role in the recent rally, but these factors seem insufficient to explain the roughly 60bp decline in long-end yields since the end of March. The hawkish pivot from the Fed at the June FOMC meeting has contributed to a flatter curve, but is not a compelling explanation for falling distant forward rates, in our view.
- We continue to expect yields to rebound into year-end, and have maintained our end-2021 forecast for 10-year Treasury yields of 1.9%. While domestic GDP growth is set to slow after Q3, market confidence about the global economic recovery should improve as we move past the peak of the latest COVID outbreaks. Moreover, the rapid decline in the unemployment rate our economists expect in 2H21 could exert a fairly powerful "level" effect on yields.

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Q&A: Interest Rates and the Reflation Theme

In this report, we answer the most frequently asked questions related to price action in bond markets over the past month or so, what it may (or may not) be telling us about the state of the recovery, and how the Fed's messaging at the June FOMC has filtered through.

Q: The reflation theme in markets seems to be unwinding, led by bonds. What is recent price action signaling about the recovery?

A: Since the recent Mid-may highs, both 10y and 30y US Treasury yields have declined by about 40-50bp. Over the same time, 5y yields have declined by a more modest 10-15bp. Both the 2s10s and 5s30s curve are 45bp and 35bp flatter respectively, and below levels seen before the February surge. Given that the reflation trade has been associated with higher yields and steeper curves, the bond market's reversal appears to be signaling some concern along this front. We note that this isn't purely a bond market story—underneath headline index levels, there appears to have been a significant equity rotation out of "value" and small caps,

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both categories expected to outperform in a reflationary environment. Commodities also appear to have put in a local peak.

More recently, our macro PCA factor attribution model suggests that the price movements across asset classes have been associated with shifts in growth assessment, and with only a marginal contribution from a hawkish Fed pivot (Exhibit 1). However, until this week, the repricing was somewhat unusual in that front-end hike pricing was somewhat sticky even as longer maturity yields witnessed a sharp decline. This suggested that markets were pricing a weaker recovery in a few years (perhaps once the fiscal stimulus faded), but a near term inflation path that was worrisome enough to cause the Fed to tighten, at least for a while. That particular scenario, while a possibility, does not appear an appropriate central case to us, at least based on current data, our economists' forecasts for future years, and the Fed's apparent willingness in looking through near term price pressures. We would note that price action this week is converging to a more traditional weak growth narrative, with some front-end hike pricing being reversed.

Q: Concerns about the COVID delta variant appear to be weighing on markets. Is the magnitude of repricing reasonable given the facts? Are there other factors driving the growth worries?

A: While the variant has led to a surge in new cases in many regions, hospitalizations and fatalities remain relatively low in areas with high vaccination rates. As a result, we think the economic impact for the US, Europe (and China) will be limited, although some parts of the world could see a greater hit to growth. Indeed, our US economists find that high frequency data suggest only a modest impact, and globally we see only about a 0.3pp hit to global growth this year, and none next year. Still, virus variant risk is clearly something markets are worried about, especially over the past few days as some countries with relatively high vaccination rates have reimposed some restrictions. However, we do not expect a re-imposition of large scale restrictions in the larger economies, nor do we expect voluntary pull-back in activity in these economies on a surge in caseloads on the scale seen in previous such episodes.

Other than COVID variant fears, lowered expectations for additional fiscal stimulus in the US could also be a factor driving a growth reassessment. This narrative better matches yield curve behavior over the past month given that a smaller infrastructure package reduces growth in future years as opposed to the delta variant, which would have a more immediate impact. Our economists recently noted that the $3.5tn budget proposal signals downside risk to fiscal assumptions—without additional deficit financing, the size of the reconciliation package could be limited to around $1.5tn (though dynamic scoring could perhaps allow for something bigger). But here too, while material, the numbers aren't all that severe, with 2023-24 US growth rates still likely to hover around 2%. To be sure, there are growth concerns outside of the US—that policy easing in China could be suggestive of a slowdown. However, our China economists actually expect sequential growth to pick up in 2H21. Put differently, it isn't clear to us that large growth-driven repricing of interest rates—5y5y nominal rates have declined nearly 70bp from recent highs, and are close to the *lows from the last cycle* (Exhibit 2)—is justified.

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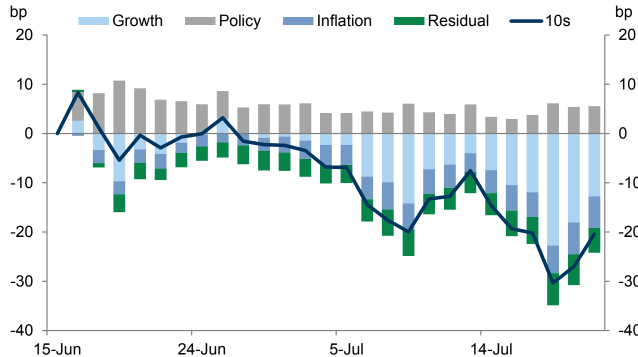
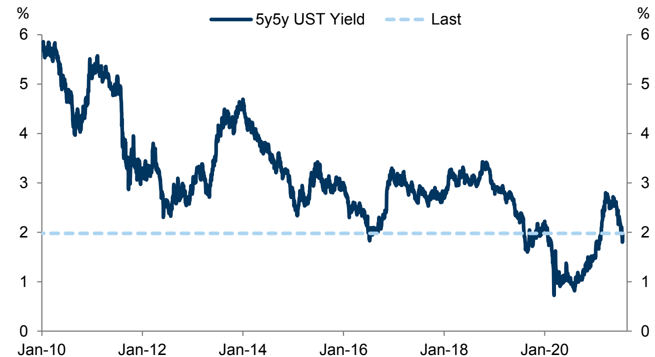
Exhibit 1: Shifts in the assessment of risks around growth have been the clear driver of recent price action in US yields
Contribution to 10y yield change by macro factor



Source: Goldman Sachs Global Investment Research

Exhibit 2: 5y5y nominal rates are close to the lows from last cycle, which featured a weaker recovery, inflation and external environment
5y5y nominal UST yield



Source: Haver Analytics, Goldman Sachs Global Investment Research

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Q: The flattening of the yield curve accelerated following the June FOMC meeting. How much of recent yield curve behavior can be explained by a "hawkish" Fed?

A: The trouble with the curve isn't that it is flattening on strong data—indeed, our post-June FOMC analysis suggested as much. After all, bear flattening is typical behavior when a central bank is expected to tighten policy. However, typical bear flattening of the curve isn't accompanied by a decline in medium and longer maturities yields; rather, the flattening occurs because front-end yields sell off by more than those maturities. One explanation for the difference is the evolving interpretation of AIT. Prior to the June FOMC, investors likely assumed a higher inflation threshold for Fed tightening, resulting in pricing of a later-but-steeper path for hikes. It is then natural to reason that a lower inflation threshold—and by extension earlier hikes—could mean the Fed wouldn't have to hike quite as much, and therefore the terminal rate ought to be revised lower.

However, this line of reasoning ignores a few key facts. While the dot plot was hawkish relative to expectations going into the meeting, once the accompanying labor market and inflation projections are taken into account, the median fed funds path is still clearly dovish when compared to past normalization cycles, including the last one. Taken in the context of the economic projections, information in the dot plot isn't a reason to price in a lower terminal rate, in our view. Indeed, current pricing is substantially below the Fed's projection for "long run" rates, suggesting that markets either have a different view of this rate, are assuming a truncated hiking cycle, or are placing relatively high odds of downside risks to the economy in the future.

Q: A return to the "secular stagnation" narrative could be a reason for the drop in the terminal policy rate implied by the yield curve. Are current levels reasonable, and how much lower can they go?

A: Using current economic data (and forecasts), and reversing our curve model suggests that a very low natural rate (r*) assumption would be needed to justify the shape of the curve. Given that it is unobserved, and acknowledging the problems with

properly identifying such a rate, we use the 5y5y nominal rate as a crude proxy of "nominal r*", and as observed earlier in Exhibit 2, noted that current levels are close to the lows from the last cycle. In a recent report, our economists argue that the average short term real rate in the last cycle was unusually low when compared to prior cycles, and might not be an appropriate benchmark for the current recovery. Indeed, several drivers that may have kept these levels low the last cycle, such as much lower levels of fiscal (and at least initially, monetary) support, look quite different this time around. The external environment is also stronger this time; unlike during the global reset lower in 2014-16, which coincided with a much sharper slowdown in China, and Europe and Japan cutting rates into negative territory, foreign yields are likely to be less of an anchor to US rates (more on this below).

Of course, there could be other reasons to expect a low terminal rate: once the supply-related surge in inflation resolves, we could return to the post-GFC world of low inflation; or a debt overhang could prevent the Fed from raising rates, or rate differentials could get too large, leading to tightening of US financial conditions, i.e., the recovery is fragile to sustain more than a modest number of hikes. Starting with the anticipation of soft inflation in the future, while certainly not impossible, it is hard to envision especially large shortfalls in the current recovery as a base case, and it should be noted that market pricing implies yearly CPI prints remaining north of 2.3% for at least the next five years. In addition to a much more rapid closing of output and labor market gaps, commodity prices are likely less exposed to potential weakness from China this cycle. On policy, our AIT read-through from the June FOMC is that there is at once a lower threshold for liftoff than previously thought and a reduced hurdle to continue hiking once the cycle has begun, lowering the importance of any modest future shortfalls in inflation.

We don't put too much stock in the argument that heavy debt loads could prevent the central bank from raising rates—unlike the last time, private sector balance sheets are fairly healthy coming out of this recession. Much of the debt accumulated over the past few years has been in the public sector; at least for the US, analysis by our economists suggests that yields would have to rise substantially (well above the Fed's 2.5% long run rate) for debt servicing to be an issue.

As for rate differentials getting too wide versus non-US yields, as noted above, the external environment is expected to be considerably stronger this time around. And unlike the last cycle, many other central banks are likely to be tightening in tandem (we expect some DM and EM central banks to tighten ahead of the Fed). Even in economies where liftoff is delayed, we think less negative risk premia will allow higher yields, thereby allowing a higher average global yield level. The current set of data also do not suggest that a few hikes would likely induce sufficient tightening in financial conditions to derail the recovery—conditions appear substantially easier than through the entirety of the last cycle.

Overall, we think the current terminal rate levels implied by the yield curve are simply too low, and while there could certainly be a further undershoot, we believe there is substantial asymmetry to being short at current levels for reasons discussed above.

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Q: Could a shortage of safe assets be causing the decline in intermediate yields? Are excess savings being recycled into US Treasuries?

A: Our debt supply projections do indeed show that central bank purchases will keep net supply negative for most European sovereigns, and somewhat flat in Japan. This leaves the US by far the largest supplier of safe assets to the world, though EU net supply (to fund SURE and NGEU disbursements) remains substantially positive, and is likely to be the biggest source of EUR duration. Still, these supply dynamics were known prior to the recent decline in yields, i.e., there were no surprises on this front in the last two months, and as we noted in a recent report, markets tend to price any known supply in advance of the actual issuance. Of course, reduced expectations for US supply could be a factor, but the fact that issuance related to the infrastructure package is spread out over a 10y window means that the impact on annual coupon issuance is relatively modest—the difference between a $1.5tn and a $3tn package is $150bn of UST supply annually (worth roughly $70-100bn in 10y equivalents depending on compositional assumptions). Our prior analysis suggests that should have only about 10-15bp impact on 10y yield levels, suggesting something else may be afoot.

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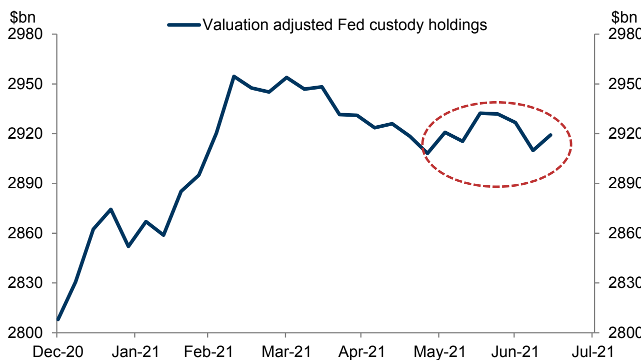
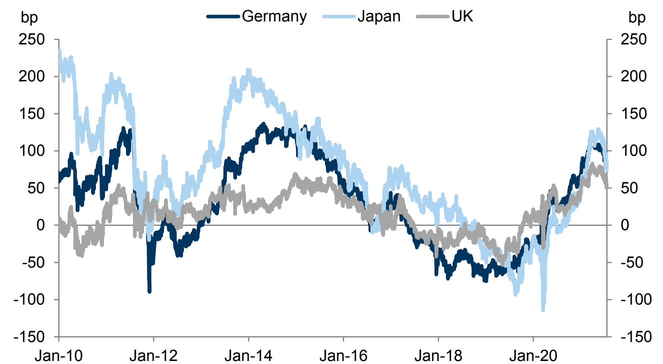
Exhibit 3: Fed custody holdings data suggest relatively flat foreign official sector demand over the period when yields declined
Valuation-adjusted Fed custody holdings



Source: Goldman Sachs Global Investment Research

Exhibit 4: The relatively elevated hedged yield pick-up of USTs provides an incentive to foreign private investors, but evidence of such flows is limited
FX-hedged yield pick-up of 10y UST vs rest of G4 (rolling 6m hedge)



Source: Goldman Sachs Global Investment Research

Of course, beyond the stock effect, there could be localized flow effects that are temporary. Could it be that excess savings are being recycled into sovereign debt? While there were likely some flow effects, these were unlikely to be all that large—large, price insensitive flows are typically observable in swap spreads, and these spreads have traded in a narrow range relative to the yield moves over the past two months, with 10y UST-OIS spreads having remained firmly in a -25 to -22bp range. We do not as yet see evidence of structural flows from the large UST investor categories that are big enough to keep yields at current levels. As noted above, sovereign debt issuance outside of the US once central bank purchasing is accounted for isn't large, suggesting a strong foreign bid is a possibility. Indeed, we expect the foreign official sector to be the largest buyers of USTs outside of the Fed. Still, it is hard to point to this source of demand as a driver of the rally since June—custody holdings data suggest relatively flat demand over the period when yields declined (Exhibit 3). Could foreign private investors be a factor? The relatively high level of hedged yield pick-up (Exhibit 4)

means a strong incentive exists for these investors, but here too, where higher frequency data is available, the evidence of flows remains insufficient—MoF data does not show a notable uptick in purchases.

We do not see other large categories such as commercial banks having bought large amounts over this period either. Fed H.8 data show all commercial banks (domestic and FBOs) added only about $20bn of USTs from mid-June through the last available data point (July 7). By contrast, from late April through early June, these investors added about $50bn. This leaves other large investors like pensions, insurers, asset managers and levered investors that were either structurally underweight/short duration or short convexity, who had to cover these positions, as most likely responsible for any flow imbalances.

Q: If there isn't evidence of structural flows, can the yield move be pinned on positioning?

A: While positioning likely played a role, our near term positioning indicator based on options activity (OPI) did not measure extreme levels of bearishness. Still, it is likely that a sizable short base accumulated over 1Q21 among both real money and levered investors, a large portion of which was likely unwound over the second quarter. Given the tepid market response to very large upside surprises to inflation data, and the absence of a clear near term catalyst to take yields back towards higher equilibrium levels, conviction on a reversal of recent moves remains low.

In addition to position squaring, it is likely that the move lower has been exacerbated by hedging flows and momentum accounts like CTAs. With yields having broken through key levels, these latter accounts likely switched from being short to adding longs in duration.

Q: If yields are indeed too rich, what will bring them back up to equilibrium? Won't the slowing growth momentum prevent upward repricing of yields?

A: Although there is no readily identifiable near term catalyst, we believe the conundrum of sticky front-end rates and declining long-end yields could be resolved in the coming months. An important reason we believe this to be the case is the rapid absorption of resource slack that we expect over the remainder of the year—our economists expect the unemployment rate to decline from the current 5.9% level to 4.2% by year-end. While markets tend to focus on second derivatives such as changes in growth momentum in the short run, the cumulative recovery in terms of levels should serve to reset yields towards equilibrium levels.

To examine these potentially powerful level effects on yields that an economy moving to operating closer to potential has had historically, we study the "effective monetary stimulus" that markets have priced in different scenarios. Our proxy, shown in Exhibit 5, for the effective stimulus implied by the curve is simply the area under the curve between forward rates and model-based estimates of the neutral rate over a 10y horizon, thereby capturing the deviation across the curve rather than simply at the short

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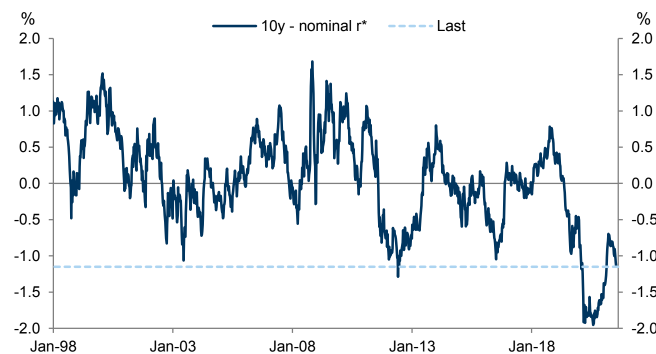
rate (along the lines discussed in Krippner et al[1]). Because the average of forwards is simply the spot rate, this measure translates into the difference of the spot 10y rate and an expected nominal neutral rate measure. Using this measure to assess the maximal stimulus that markets have been willing to price over the past two decades leading up to the COVID shock under different degrees of labor market slack, we find that markets typically see less reason to price a highly accommodative stance well into the future if the Fed is substantially closer to meeting a component of its mandate. In spot yield terms, this translates into 10y yields that converge towards the natural rate. An additional element to keep in mind is that the gap between 10y yields and the natural rate, currently at about -120bp, is lower than the maximal difference in the 1998-2019 period—using that historical gap would imply something closer to 1.6% on 10s.

The above observations strengthen when filtered for periods when the Fed isn't too far away from its inflation mandate. In periods where core PCE exceeds 1.7% (roughly the trough our economists see in y/y core PCE in 2022) and the unemployment gap is less than between 0% and 1%, the pattern holds (Exhibit 6). When considering average (as opposed to maximal) levels of effective stimulus priced in the curve, the richness of current levels becomes even clearer (also Exhibit 6). As the economy recovers and the labor market gap closes with inflation close to 2%, the 10y has traded with an average discount of only 15bp to the neutral rate, suggesting significant upside risk to yields from current levels in coming years. This direction of travel of yields (towards the neutral rate) with an ongoing recovery has held even in periods of growth deceleration, so long as it remains in expansionary territory.

Exhibit 5: The yield curve is implying either substantial accommodation well into the future or a low r*

Effective stimulus in the yield curve

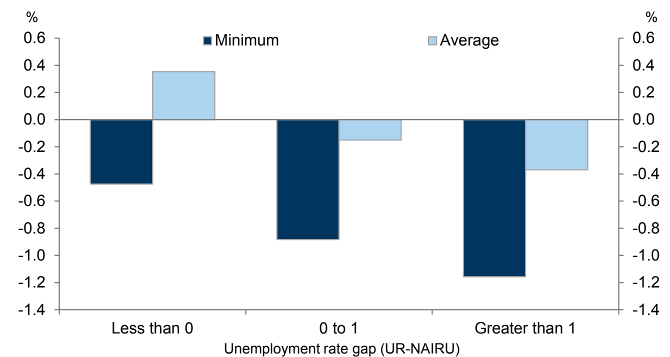


Nominal r*computed as HLW r* estimate plus 2% inflation. For more recent values, we use the average from late last cycle.

Source: Goldman Sachs Global Investment Research

Exhibit 6: Markets have historically priced less effective stimulus in the curve as labor market slack has diminished

Minimum and average (10y - nominal r*) levels under various labor market scenarios, conditional on core PCE > 1.7%; from 1999-2019



Source: Goldman Sachs Global Investment Research

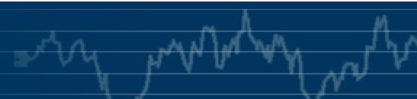
To be sure, the neutral rate could be lower than our assumption (which we set to estimates from late last cycle), but as discussed above, we think the risks are actually in the opposite direction. We should acknowledge that neutral rate estimates come with several caveats, so we would treat these more as a means to anchor the level of yields,

[1] The effect of conventional and unconventional Euro area monetary policy on macroeconomic variables, Arne Halberstadt and Leo Krippner.

and not as a precise estimate. One obvious pitfall to using historical analysis is that it doesn't incorporate any AIT-related differences. However, the read-through from the June FOMC for the policy rate path is that might not be all that different; indeed, our economists note the September SEP could show another 100bp of hikes through 2024, substantially higher than current market pricing.

A second possible (but less clear) trigger for an upward reassessment of yields is an uptick in survey-based measures of inflation expectations. We've noted in the past that these measures have a powerful effect on the pricing of traded inflation. To be sure, high market conviction on an easy Fed could mean higher traded inflation translates into lower real yields, but we believe it will be hard to maintain conviction on an easy Fed in a scenario of rising inflation expectations. Minutes from the last meeting suggest at least some FOMC participants were concerned that persistently elevated inflation readings, even if caused by temporary factors, could spill over into expectations measures. While we haven't seen this happen thus far, to the extent it does, it will be hard for markets to continue to price an easy stance or a low long run nominal rate.

TRADE IDEAS



Best Trade Ideas Across Assets

For pricing, charts, and a list of previous recommendations, please visit our Trade Ideas page.

1. Stay long MYR vs short THB, opened on October 21, 2020, at 7.52, with a target of 8.0, and a revised stop of 7.60, currently trading at 7.77.
2. Stay long SGD vs short TWD, opened on October 29, 2020, at 20.95 (indexed at 100), with a total return target of 106, and a revised stop of 103, currently trading at 104.16.
3. Stay long CMBX 6 BBB- vs. CDX HY index at a 1 to 1.25x notional ratio, opened on February 10, 2021, at 0%, with a target of +10% and a stop of -10%, currently trading at -3.97%.
4. Stay positioned for wider 10-year POLGBs bond-swap spreads, opened on March 19, 2021, at -26bps, with a target of 10bp and a revised stop of 4bp, currently trading at 5bp.
5. Stay long South Africa and Russia equities, indexed to 100 on March 26, 2021, with a target of 115 and a stop of 92, currently trading at 102.73.
6. Stay long INR versus TWD, opened on April 23, 2021, at 0.374 (indexed at 100), with a target of 108 and a revised stop of 101, currently trading at 102.73.
7. Stay long 7y UST-OIS spreads on the 2s7s20s spread fly, opened on May 14, 2021, at 0.04%, with a 3bp trailing stop (currently 0.12%), currently trading at
8. Stay short 2y3y GBP real yields, opened on May 21, 2021, at -3.05%, with a target of -2.50%, and a stop of -3.30%, currently trading at -3.09%.
9. Stay long EUR vs CHF, opened on May 24, 2021, at 1.09, with a target of 1.14, and a

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stop of 1.08, currently trading at 1.082.

10. Stay long 5-year KRW IRS payers, opened on May 26, 2021, at 1.51%, with a target of 1.90% and a stop of 1.25%, currently trading at 1.47%.
11. Stay long an equal-weighted basket of RUB and BRL vs USD, opened at a level of 100 on June 9, 2021, with a total return target of 108, and a stop of 96, currently trading at 97.85.
12. Stay long an EM HY ESG basket, selected based on countries which score high on a 75/25 split of the level and momentum of their ESG scores (Jamaica, Costa Rica, Kenya, Senegal, Ukraine, Dominican Republic, Angola and Oman) for a +2.5% total return target, and a -2% stop loss, currently trading at -0.42%.
13. Stay long MSCI EM vs short EMBIG-Div (1 to 1.5 ratio), indexed to 100 on June 30, 2021, with a target of 112, and a stop of 94, currently trading at 96.57.
14. Stay long 10y PGBs and BGBs vs BTPs and RAGBs, indexed to 0 on July 2, 2021, with a total return target of 1%, and a stop of -0.5%, currently trading at 0.25%.

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Reg AC

We, Praveen Korapaty, William Marshall and Avisha Thakkar, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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