

Pushing on a string

Anshul Pradhan
+1 212 412 3681
anshul.pradhan@barclays.com
BCI, US

Amrut Nashikkar
+1 212 412 1848
amrut.nashikkar@barclays.com
BCI, US

Andres Mok, CFA
+1 212 526 8690
andres.mok@barclays.com
BCI, US

Tong Jin
+1 212 526 1262
tong.jin@barclays.com
BCI, US

With the unusually high volatility in the markets, we address key questions our clients have been asking

With investors downgrading the economic outlook, long-term Treasury yields are rapidly falling. Far more worrisome is that with central banks closer to the effective lower bound, the decline also reflects the view that monetary policy is increasingly becoming ineffective. With the unusually high volatility in the markets, we address some of the key questions our clients have been asking.

US Treasuries yields have plummeted over the past week amid a rapid rise in COVID-19 cases outside China and the Fed's delivering an inter-meeting cut of 50bp with a commitment to "use its tools and act as appropriate to support the economy." As of March 5, there were about 2750 cases outside China, almost 50% more than a week ago. The stronger-than-expected payroll report barely made a dent in the market sentiment. Figure 1 shows that Treasury yields fell across the curve by 40-45bp in almost a parallel fashion. With other central banks also cutting rates (for instance, Bank of Canada cut the policy rate 50bp and Reserve Bank of Australia 25bp), global bond markets rallied as well. Equities are almost 1.5pp lower over the week but more importantly they have been quite volatile, with VIX rising to almost 50pp. Signs of stress are now showing up in credit markets, with HY and IG CDS spreads widening to 450bp and 85bp respectively.

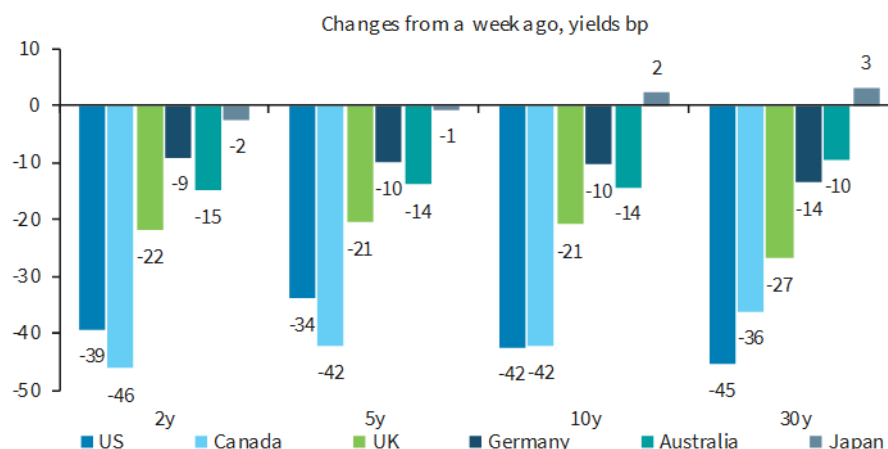
With investors downgrading the economic outlook, long-term yields are rapidly falling. Far more worrisome is that with central banks closer to the effective lower bound, the decline also reflects the view that monetary policy is increasingly becoming ineffective. Central banks are merely pushing on a string and with every cut are simply perpetuating the "lower forever" environment. With the unusually high volatility in the markets, we address key questions our clients have been asking:

What are short-term markets telling us about potential Fed cuts?

The Fed has clearly shown no appetite to push back against market pricing and even a willingness to surprise to the dovish side. Hence, it is informative to see what is already priced in. The market is pricing in the effective fed funds rate to average roughly 60bp below the current level during April and another 12bp lower during May. This likely reflects a near certainty of a 50bp cut at the March meeting and some probability of an inter-meeting cut after that, since the April meeting is quite far away (on the 29th). However, the money

FIGURE 1

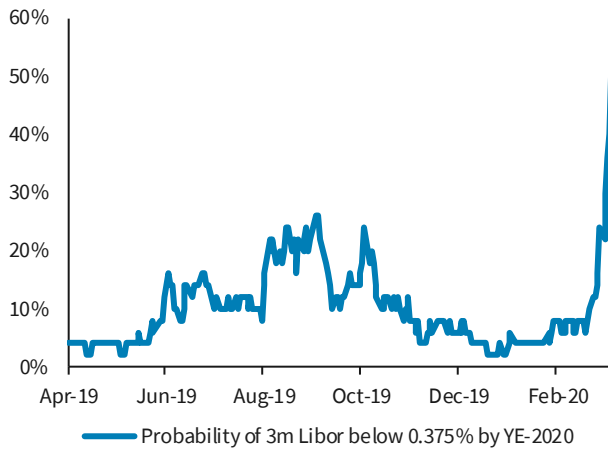
The entire US Treasury curve shifted down 40-50bp last week



Source: Bloomberg, Barclays Research

FIGURE 2

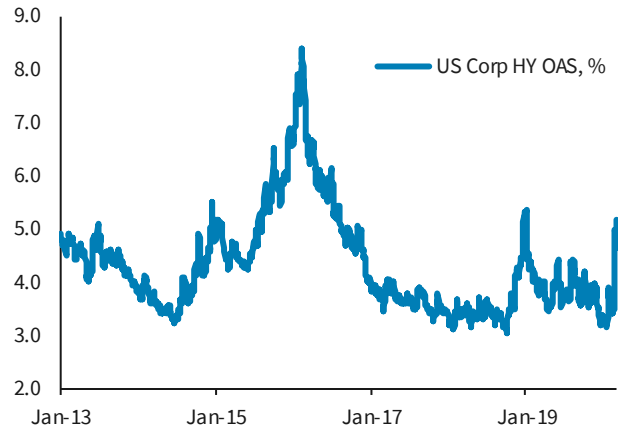
The market is pricing in a very high likelihood of the Fed's easing to the ZLB



Source: Bloomberg, Barclays Research

FIGURE 3

Credit spreads have widened sharply, but the current level suggests that recession is not the market's base case



Source: Bloomberg, Barclays Research

market curve is still downward sloping after that. We believe that reflects a material likelihood of the Fed's ultimately easing to the zero lower bound by the end of the year. Figure 2 shows that the market is pricing in a roughly 50% probability of 3m Libor falling below 0.375% by year-end. Should the fallout worsen, this would likely go higher.

While rising worries about a downturn are playing a role in pushing yields lower, in our view, rates investors are primarily questioning the effectiveness of monetary policy

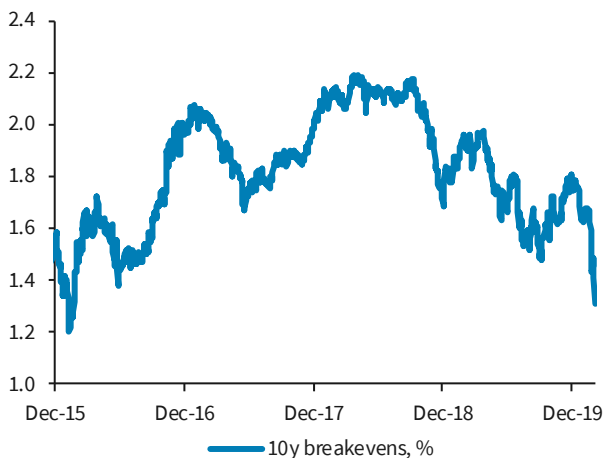
What are long-term yields telling us about the economic outlook?

One could look at 10y Treasury yields at 75bp and say that the Treasury market is already predicting a recession. We would caution against that interpretation. Were investors already bracing for a recession, credit spreads would be much wider than they are (Figure 3). While they have certainly widened from the lows, the levels are not far from where they were at the beginning of 2019. So why are yield levels so low?

While rising worries about a downturn are playing a role in pushing yields lower, in our view, rates investors are primarily questioning the effectiveness of monetary policy. Figure 4 shows 10y breakeven have tightened to 1.3%. Even as policy is expected to become quite stimulative (with the nominal fed funds rate expected to drop well below current inflation), investors do not see that as leading to higher inflation down the road. Further, with the

FIGURE 4

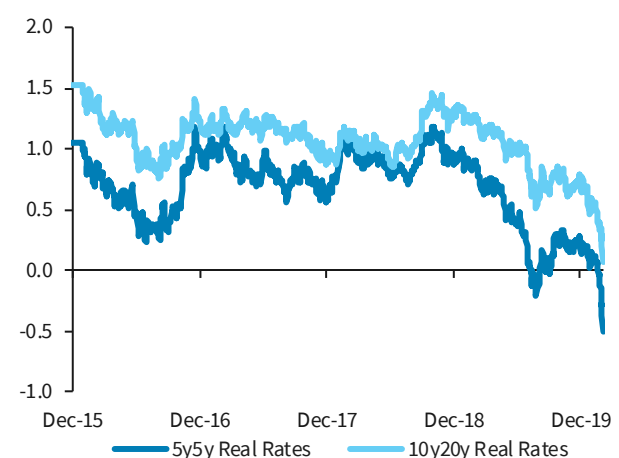
Breakevens have tightened sharply in this rally



Source: Bloomberg, Barclays Research

FIGURE 5

Longer-term real yields are deeply in negative territory



Source: Bloomberg, Barclays Research

importance of inflation rising in the Fed reaction function as it shifts to a makeup strategy, why should the Fed hike if inflation is expected to remain so low? Reflecting this, longer-term real yields are now in negative territory, with the 5y5y TIPS real yield at -50bp and 30y TIPS real yields at -25bp (Figure 5).

One could argue that it is too early to dismiss the effectiveness of monetary policy in the US and when the US economy rebounds from the virus-induced drag, the stimulative effects will kick in. However, in the meantime, should the US economy actually go into a recession, widening credit spreads and falling equities can still push yields lower. And as we argued in *Framework Review: One small step for the Fed*, February 26, should the US economy go into a recession at this juncture, with low rates and the Fed moving to a makeup framework, investors would need to assume that the Fed would be stuck at the ZLB for many years.

Our updated yield forecasts reflect the market's switching from its current view of an economic slowdown towards our modal view of activity rebounding in H2

In light of recent developments, we have updated our yield forecasts. In our baseline view, we expect 10y yields to remain around current levels in the near term, but rise to 1.15% by the end of the year (see the global bond yield forecast table). Our forecasts reflect the market's switching from its current view of an economic slowdown towards our modal view of activity rebounding in H2. However, even in that case, we believe the Fed would be slow to reverse these cuts amid low inflation. Hence, we have pencilled in yields reversing only part of the move, led by the long end. Needless to say, there is significant uncertainty about the economic effect of the virus and therefore yields. Should there be a material slowdown, yields would likely be well below our year-end forecasts.

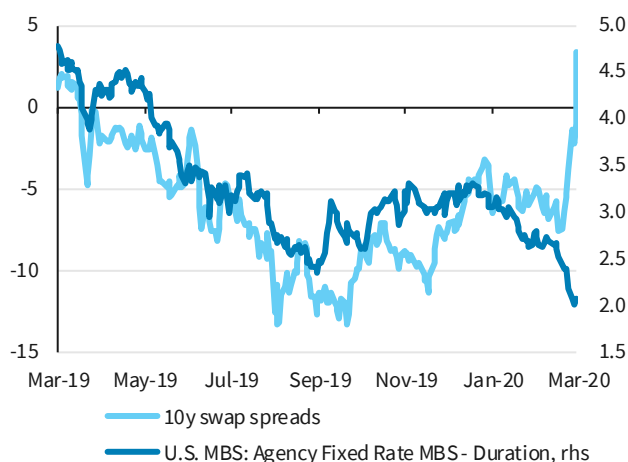
Are the markets beginning to price in new policy tools?

There are already signs that investors have started to entertain the possibility of the Fed's moving beyond simply cutting rates to asset purchases and potentially even negative rates

Should the Fed find itself at the ZLB, it may want to re-engage "unconventional" policy tools to stimulate the economy. In fact, there are already signs that investors have started to entertain the possibility of the Fed's moving beyond simply cutting rates to asset purchases and potentially even negative rates.

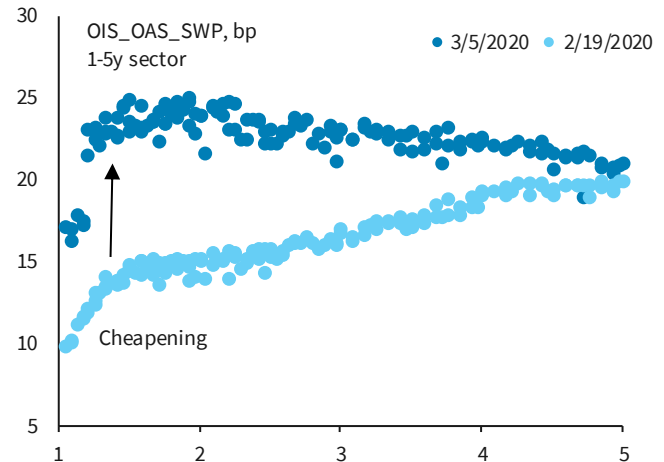
Asset purchases: A tell-tale sign is the widening of intermediate sector swap spreads despite the rally. In recent years, 10y swap spreads have typically tightened in a rally, reflecting potential receiving flows from mortgage investors. However, Figure 6 shows that they have sharply widened recently. While some of that reflects the widening in the L-OIS basis, intermediate Treasuries have indeed richened to OIS. Were the Fed to start buying Treasuries beyond just T-bills, that would free up dealer balance sheets and could lead to wider swap spreads. However, at the very front end, Treasuries are trading cheaper to OIS, which, in our view, reflects the current heaviness in repo rates (Figure 7). Should the Fed

FIGURE 6
10y swap spreads have widened in the rally...



Source: Barclays Research

FIGURE 7
... but front-end Treasuries have cheapened to OIS



Source: Barclays Research

The market is increasingly pricing in some risk premium for the possibility of negative rates

We believe that the market should attach a higher probability to the Fed's adopting yield caps than pushing rates into negative territory

engage in asset purchases, reserve balances would rise thus generally keeping a lid on repo rates. We have been recommending 2y swap spread wideners and we maintain that recommendation (current: 13bp, entry 3bp). The widening from the lows so far has largely been about repricing Libor-OIS expectations.

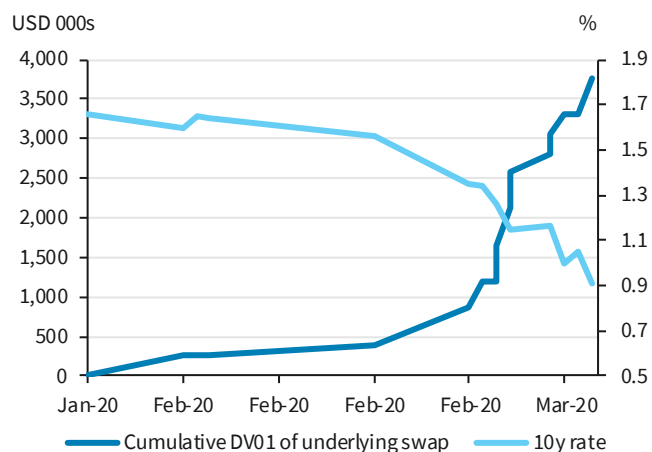
Negative Rates: The market is increasingly pricing in some risk premium for the possibility of negative rates. SDR data reveal a dramatic increase in structures with strikes implying negative policy rates by the Fed, mostly in the 5y and 10y part of the curve, over the past two-three weeks. This can be seen in Figure 8, which plots the DV01 notional for all swaptions with a strike below 0.25% for the Libor rate. This suggests that there is increasing demand for protection against low rates in this sector. The need for protection may also be responsible for another somewhat odd phenomenon: despite the fact that rates have rallied substantially, low strike volatility in swaptions on short tenor rates is still somewhat richer than higher strike volatility. The difference in volatility between ATM+50 and ATM-50 strikes in 1y1y swaptions (forward rate around 55bps) is currently negative (Figure 9). This is dramatically different from what was the case when the 1y1y forward rates was at comparable levels in 2012, when high-strike options were much more expensive than low strike one. To us, this suggests that the market is far more concerned about negative rates. This is also reflected in the increase in the price of Eurodollar calls struck at 100 (or 3m Libor below 0%, Figure 10).

Yield Caps: Another policy tool some Fed speakers have talked about is putting a cap on yields. In a speech, Fed Governor Brainard noted, "Based on its assessment of how long it is likely to take to achieve full employment and target inflation, the committee would commit to capping rates out the yield curve for a period consistent with its expectation for the duration of the outcome-based forward guidance." We believe that the market should attach a higher probability to the Fed's adopting yield caps than pushing rates into negative territory. 0% strike vols being elevated suggests that the market is doing the opposite. Hence, when the markets begin to stabilize, low-strike vols may begin to fall.

Have flows exacerbated the market moves?

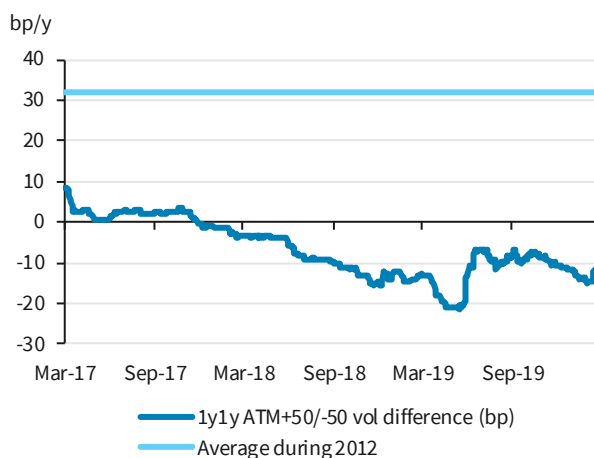
We do find evidence that this is the case, particularly at the long end, which has led to a sharp bull-flattening of the swap curve, even in far forward space.

FIGURE 8
Rising interest in low-strike receivers



Source: Barclays Research

FIGURE 9
Low-strike volatility is elevated, despite low rates suggesting investors are considering negative rates as a possibility



Source: Federal Barclays Research

Our positioning indicator suggests that real money investors have actually not been caught offside in this move, but CTA/Macro funds have likely been

Banks have tended to be buyers of Treasuries and MBS when rates have fallen

We think that there has likely been large-scale insurance receiving driving the long end of the curve

Asset Managers

Our positioning indicator suggests that real money investors have actually not been caught offside in this move. Figure 11 shows the estimated duration gap vs. the benchmark for major fixed income funds (measured using the relative performance and market moves). As can be seen, they have largely been close to home on duration. CTA/macro funds, on the other hand, may have been too quick to fade the rally. Figure 12 shows that after accounting for the returns related to exposure to equities, they have been short duration recently. Hence, some of the rally in intermediate yields may reflect short covering flows.

Mortgage hedgers

Much of the discussion about hedging in US rates rallies typically revolves around MBS hedging. Our mortgage strategists have made the case that well over 50% of the mortgage universe is now potentially refinancable and prepayments are likely to jump over the coming months. However, they also suggest that the mortgage universe is not as convex as in September 2019. Nevertheless, the duration of the fixed-rate mortgage index has fallen about 1y since the beginning of the year. This begs the question why MBS convexity hedging is not making its presence felt in typical market variables such as 10y swap spreads, which have widened, rather than tightened, this year. The answer could be that other flows may not all be occurring in swaps, but rather in Treasuries.

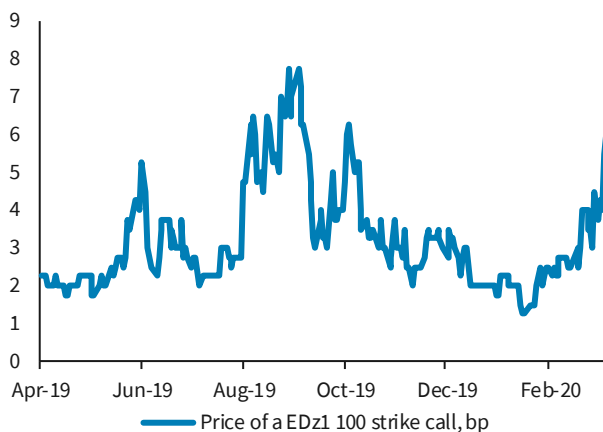
Banks

Banks have tended to be buyers of Treasuries and MBS when rates have fallen. One explanation is that they are implicitly short a floor on rates: asset yields can fall, but beyond a point deposits cannot be repriced lower. This is reflected in the sensitivity of interest income that is reported by banks; earnings typically fall when rates fall, and vice versa. One way to offset this is to add duration through securities purchases. Together with the flight to quality and the need for liquidity going into a potential credit crunch, this may be leading to purchases of Treasuries by banks and may partially explain why 10y spreads have not tightened from receiving flows in swaps (see the Derivatives section for details).

Insurance companies

30y swap spreads, unlike other points on the curve, have not widened substantially over the past two weeks. Far forward swap curves such as 5y5y-10y10y have flattened dramatically as well. We think that the likely explanation is that there is large-scale insurance receiving driving the long end of the curve. Our measure of VA hedging needs is near multi-year lows, which suggests strong receiving needs from VA hedgers. This has occurred because the

FIGURE 10
Market attaching some probability to 3m Libor falling below 0



Source: Barclays Research

FIGURE 11
Real money investors have been close to home on duration



Source: Bloomberg, Barclays Research

We do find evidence of an increase in the liquidity premium

combination of rate rally and sell-off in stocks would have substantially extended the duration of any minimum guarantees embedded in VA products, requiring insurers to catch up by adding duration overlays through swaps or futures. Average volume in swaps in the >10y sector in March has been more than double typical average volume, which suggests long-end receiving, in our view. (see the Derivatives section)

Has there been an increase in preference for liquid securities?

Yes, as we discuss in the US Treasury section, we do find evidence of an increase in the liquidity premium. On-the-runs have richened and Treasury futures have also modestly richened to the CTDs. More broadly, the dispersion around our Treasury spline has increased, suggesting rising arbitrage constraints. Other measures such as the cross-currency basis, as well as the corporate cash-CDS basis, also show some balance sheet stress. Figure 13 shows our measure of market dislocations. While it is still low, it has certainly risen in the spike in volatility.

Market Views

Duration

- We expect 2y and 10y yields to remain around current levels in the near term, but rise to 0.55% and 1.15% by the end of the year, with risk skewed towards lower yields.
- We are neutral on duration, given the uncertainty about the effect of the virus on the US economy.

Curve/curvature

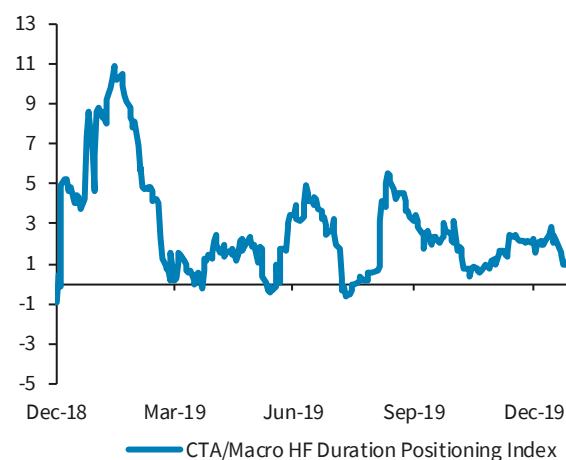
- We are closing our belly-long end curve-steepener recommendations (such as 1yf 2s30s and 5s30s), given the sharp bull-flattening. At current yield levels, such curves have become directional with rates.
- The flattening of the 10s30s curve in the rally is surprising but we believe that reflects the role long end flows have played in the recent move.

Swap spreads

- We maintain our recommendation to buy 2y swap spread wideners, given the risks of repo trading below and Libor-OIS still remaining above what markets are still pricing.

FIGURE 12

CTA/macro funds were likely caught offside in the latest move lower in yields



Source: Bloomberg, Barclays Research

FIGURE 13

Market dislocations have risen from the lows



Source: Bloomberg, Barclays Research

- We are neutral on back-end swap spreads

Volatility

- We believe that there is latent demand for vega and maintain our long 2yf 1y*30y forward vol view.
- We maintain our recommendation to buy 1y*2y-1y*30y ATM+17 bear-steepeners because large sell-offs are likely to be led by the long end.
- We maintain our recommendation to be long 2y*5s30s curve vol given that the changing monetary policy regime means a more volatile curve.

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