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Strategist



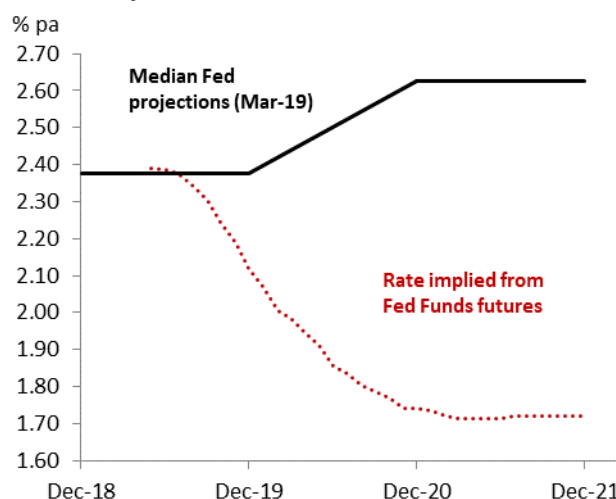
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- Idea of markets expecting 2-3 Fed cuts is primarily taken from Fed Funds or Eurodollar futures.
- Futures prices represent markets' probability-weighted expectation of the entire range of possible Fed outcomes, not markets' base case.
- Professional forecasters see an on-hold Fed as the most likely outcome.
- Eurodollar options markets are somewhat divided. About one-third probability is assigned to the Fed remaining pat in 2019, while around 40% probability is assigned to 1 or 2 cuts this year.
- The probability distribution is more spread out for 2020, but once again, expectations of rate cuts add up to only 55%.
- **Implication for forecast and investors** – There is little conviction about the baseline, with the market tilting toward rate cuts but not entirely convinced. Given how low rates already are, the curve looks rich to us.

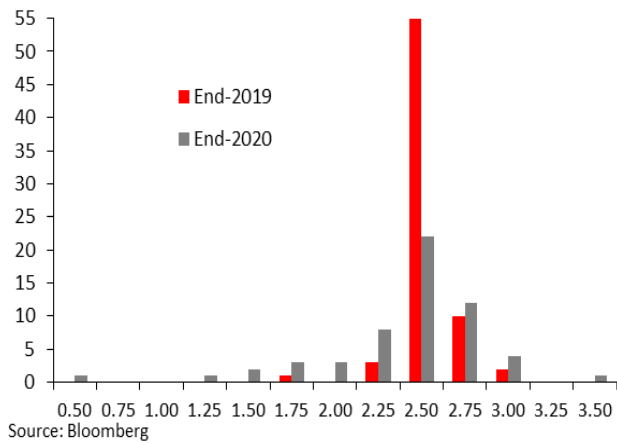
**US Rates: Will the Fed cut or not cut?**

The prevalent idea of markets expecting 2-3 cuts by end-2020 is primarily taken from Fed Funds or Eurodollar futures. At present, Fed Funds futures prices are implying that the future rates at end-2019 and end-2020 would be below current rate by 31bps and 65bps respectively. Fundamentally, these implied future rates do not reflect markets' base case (i.e. most likely outcome as seen by markets). **What they really represent, are markets' probability-weighted expectations of the entire range of possible Fed outcomes.**

**FOMC dot plot vs Fed fund futures**

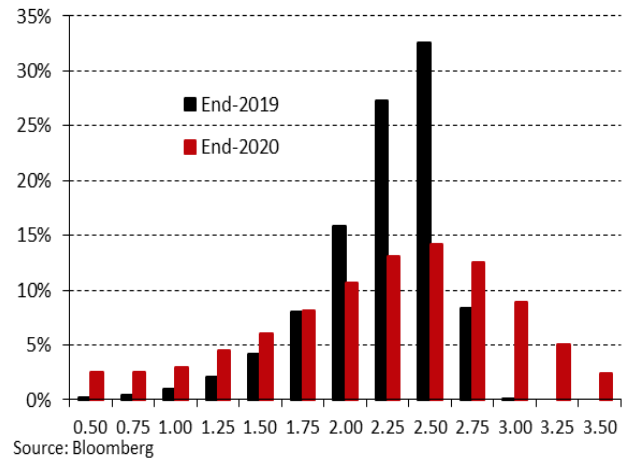
In Bloomberg's survey of professional forecasters, as of May 9<sup>th</sup>, 77% of forecasters expect the Fed Funds target range to be unchanged at 2.25-2.50% come end-2019. For end-2020, a lower proportion of 38%, but still a majority, expect so. The professional forecasters, therefore, are far more sanguine about the outlook than their counterparts in the markets

Histogram of Analyst Forecast - Fed Funds (Upper Bound)



The Eurodollar options market, by offering a range of strikes, would best provide a granular view of market expectations. From option prices, markets' interpretation of the probabilities of various possible Fed outcomes at different points in time can be backed out. The end-2019 and end-2020 implied probability distributions shows that markets' base case is for the Fed to stay on hold (2.25-2.50% target range holds the highest probability). Notably, both distributions are skewed to lower rate ranges (left tails are longer). **Markets seem to think Fed rates, if they decline, could be by a lot. On the other hand, any rise in rates is likely to be capped.** Interestingly, the end-2019 distribution is much less symmetric compared to end-2020 distribution. **Markets are assigning much higher probabilities to cut scenarios than hike scenarios in 2019.**

Distribution of Fed Funds (Upper Bound) - Implied from Options



Considering that Eurodollar futures are the underlyings for Eurodollar options, it is safe to assume that the futures markets are pricing in very similar set of probabilities. **Market expectations appear to be quite appropriate** given the current Fed outlook. With US economic momentum still strong and inflation weakness "transitory" per Fed, the hurdle for the Fed to shift from a "patient" stance to signalling hikes or cuts is probably high. However, slowing global growth and more protracted than expected trade wars likely mean risks are asymmetric, skewing towards cut scenarios.

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**Sources:** Data for all charts and tables are from CEIC, Bloomberg and DBS Group Research (forecasts and transformations).

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