Implications and Determinants of Term Premium

March 2023

Considerations of inflation expectations, Treasury supply and demand dynamics, and rate cut justification are pivotal in influencing the term premium. Overall, we believe the risk of term premium is limiting.

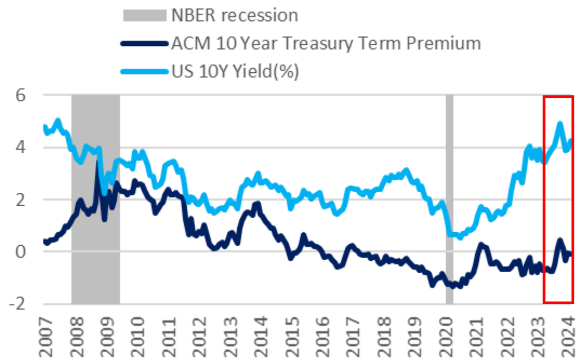
By Cathay SITE

What is term premium?

The term premium is the amount by which the yield on a long-term bond is greater than the yield on shorter-term bonds.The term premium reflects the amount investors expect to be compensated for bearing the risks of holding a long-term bond instead of a series of shorter-term bonds. Risks include (1) inflation expectations, (2) macro & policy uncertainties, (3) volatility, and (4) QE or QT impact.

Since the term premium is not directly observable, below analysis is based on term premium estimates derived from ACM model.

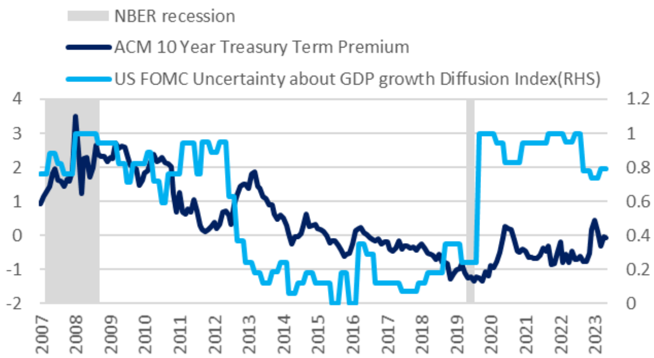
It can be seen from the chart below that term premium has been in a downtrend since Fed's QE after the financial crisis, and the trend was reversed when the pandemic hit. The bond market drawdown in 2023Q3 can mostly be explained by the rise in term premium.



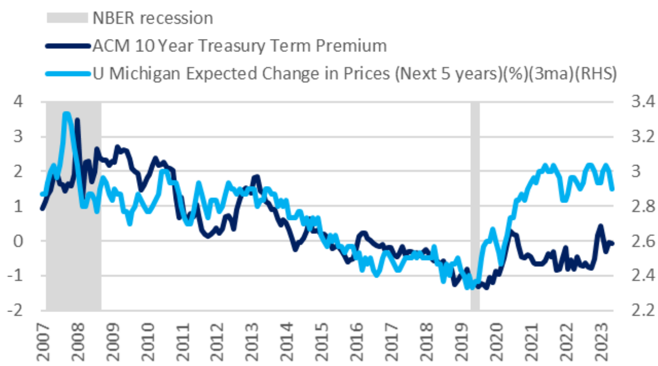
Source: NY FED, compiled by Cathay SITE

Subdued inflation expectations

First of all, inflation expectations are positively correlated with term premium. According to the Fed SEP Diffusion indexes – Core PCE inflation as well as the expected change in prices (next 5 years) by Consumer Sentiment Index - University of Michigan, inflation expectations show signs of peaking and slowing. In our opinion, it is difficult for term premium to rise significantly when the Fed & consumers both expect inflation to fall.

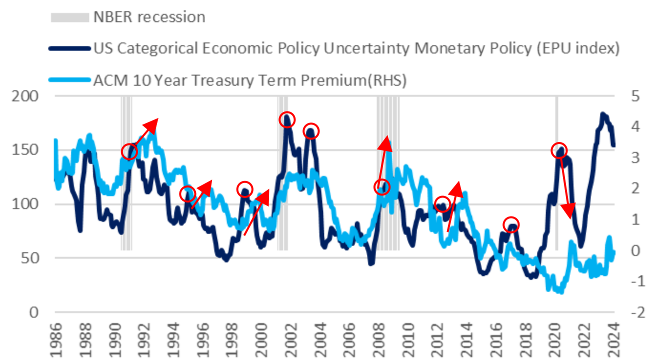


Source: FED, compiled by Cathay SITE



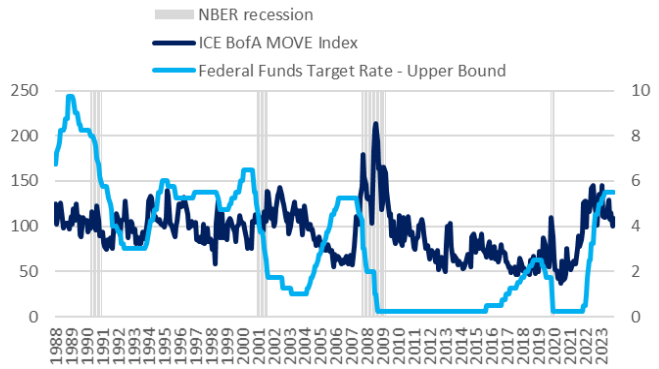
Source: University of Michigan, compiled by Cathay SITE

Inflation is a main driver of monetary policy. Baker et al's Economic Policy Uncertainty (EPU) has a predictive power on the term premium. Looking ahead, as inflation continues to fall and monetary policy uncertainty decreases, term premium is likely to decline.

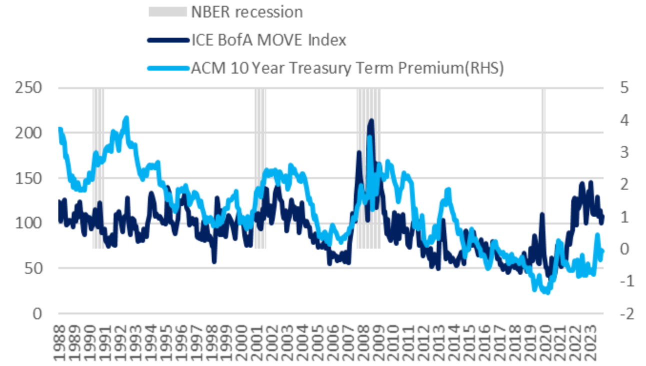


Source: Baker et al, compiled by Cathay SITE

Volatility is also positively correlated with the term premium. The MOVE index, a crucial gauge of interest rate volatility, usually will go down after the Fed is done hiking. As the US economy approaches soft landing, a lower interest rate volatility will decrease the premium that investors require for bearing duration risk (i.e. Term premium).



Source: Bloomberg, compiled by Cathay SITE



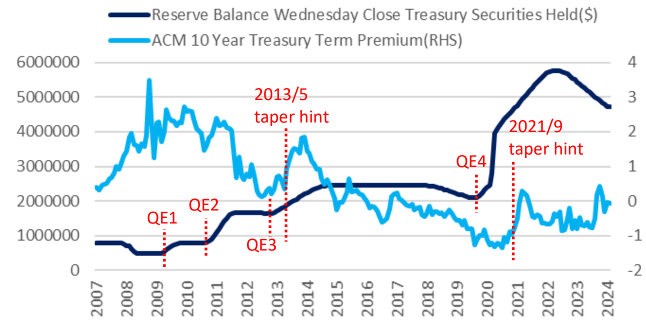
Source: Bloomberg, compiled by Cathay SITE

Supply-demand situation

Treasury auction sizes will increase by US$ 959 billion in 2024 across the yield curve, with 82% of the new issuance in the front-end. The supply of longer maturities will increase moderately.

Before the global financial crisis (GFC), foreign governments including Europe, Japan and China were the biggest buyers of US Treasuries. After the GFC, the US began QE, making the Federal Reserve the major US Treasury holder.

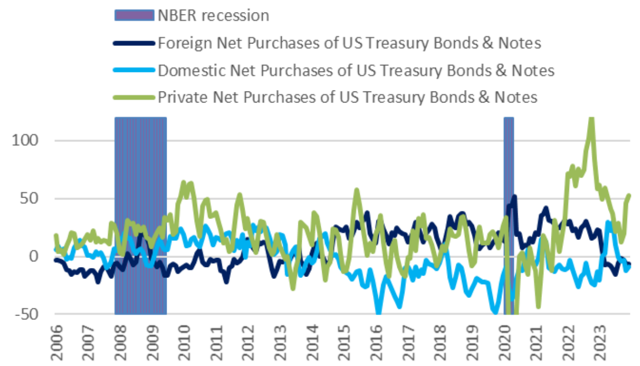
The long and persistent QE since the GFC compressed the term premium. Only when the FED signaled that tapering was on the horizon would term premium rise.



Source: Bloomberg, compiled by Cathay SITE

The Fed is expected to stop QT in mid-2024. By then, the Fed's balance sheet will still be far above pre-pandemic size, limiting the upside risk of term premium.

With QT, steady-handed investors including foreign government and the Fed are increasing absent, while private sector such as insurers, pensions and mutual funds are piling in during the past six months, as attracted by soaring yields.



Source: TIC, compiled by Cathay SITE

Interest rate normalization

There are three primary reasons for rate cuts: (1) interest rate normalization, (2) preemptively in response to data that shows the economy is losing steam, (3) recession. Among them, interest rate normalization following the slow down of inflation is our base case for rate cuts. Soft landing occurred in 1984, 1989, and 1995, at times when economic prospects were certain on the positive front. Therefore, term premium stayed flat or only went down slightly.

Considerations of inflation expectations, Treasury supply and demand dynamics, and rate cut justification are pivotal in influencing the term premium. We believe the risk of term premium is limiting for these reasons:

- Inflation & risk are reducing: The Fed & consumer inflation expectations have subdued. The Fed forecasted three rate cuts this year. Therefore, monetary policy uncertainty and bond volatility are both declining.

- Supply and demand: The funding is moving toward the front-end, putting less pressure on the long-end. The demand for US treasury remains stable with the private sector piling in to take the place of foreign governments and the Fed.

- Rate cuts for Interest rate normalization: based on experience, term premium tended to be flat or down slightly.