

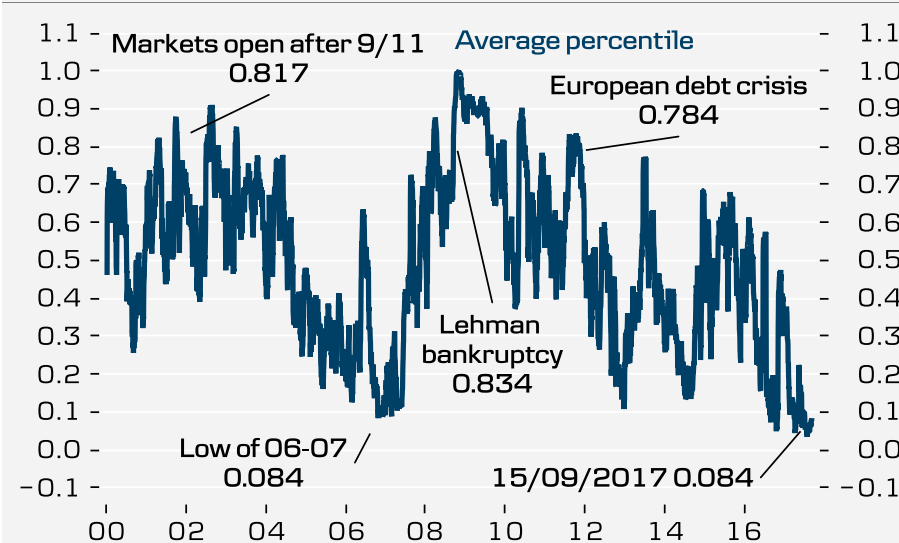
# Strategy

## Why risk premiums have collapsed and why this may change

On Wednesday, the FOMC took an historic step and began the long process of unwinding its balance sheet. Financial market volatility rose slightly following the decision but the reaction was short-lived and the VIX volatility index closed on Thursday at lower levels than just before the FOMC decision. Interestingly, at a time when geopolitical risks keep popping up and central banks are moving towards exit, market volatility is at rock bottom. This year is the first year since 2005 that the S&P 500 has not seen a single daily move of more than 2% (see Chart 1), while the VIX volatility index is close to an historical low (Chart 2).

Volatility in bond and FX markets is also at rock bottom, while the 10Y UST term premium, a measure of bond risk premium, is negative (see Chart 3). Currently, **average risk premiums across asset classes are at exactly the same level as the pre-Lehman Brothers low** (see Chart 4). The multi-decade bottom was reached on 3 August, just before the intensification of the North Korean crisis. The correlation between risk premiums for different asset classes has been rising since 2015 (see Chart 5). However, correlations are still some way from the historical highs of 2008-09. Typically, a high correlation between risk measures will reflect either (1) that risk premiums are low and markets are quietly moving along or (2) that risk premiums are high and markets are in risk-off mode. **Combined with charts 3 and 4, the rising correlations show that risk premiums are low across asset classes and markets are quietly moving along. Between asset classes, it appears that risk premiums in bond markets are currently at the most extreme levels, while FX volatility has risen** (See Chart 6).

Chart 4: Risk premiums across asset classes are at pre-Lehman Brothers low\*



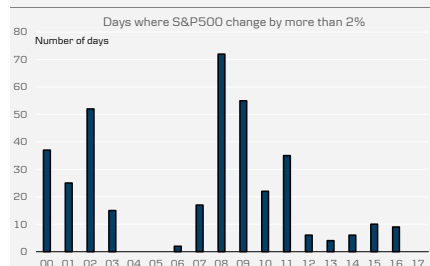
\* Calculated by first finding the percentile for each of the four series in Chart 3 and then taking a simple average of those percentiles

Source: Macrobond Financial, Danske Bank's own calculations

### Today's key points

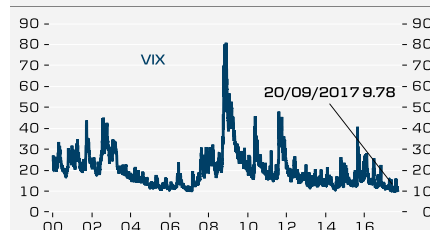
- Risk premiums across asset classes are currently at pre-Lehman Brothers lows.
- High GDP growth relative to short-term interest rates supports low risk premiums.
- As US interest rates rise towards the natural rate, financial volatility and risk premiums should rise.
- This could play out in Q4.

Chart 1: No days of S&P 500 2% moves for the first time since 2005



Source: Macrobond Financial, Danske Bank

Chart 2: The 'Fear Index' is at a historically low level



Source: Macrobond Financial, Danske Bank

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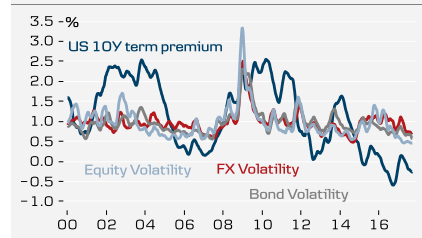
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Why are risk premiums so low? One explanation is that nominal GDP growth is currently high relative to short-term interest rates. High growth relative to funding costs supports higher expected returns and higher valuations of equity, credit and other risky assets, which tends to depress risk premiums (see Chart 8). Over the period 2005-07 (and again now), the world was awash with cash, with an abundance of liquidity looking for a home. In our view, this could go some way to explaining the record-low risk premiums.

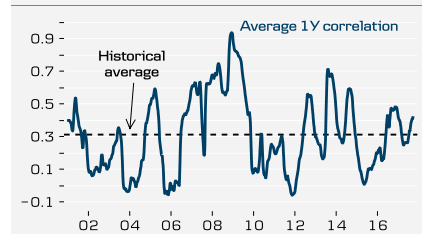
**The million-dollar question is what is the trigger for risk premiums to rise?** We doubt that North Korean tensions will be a substantial and permanent driver of higher risk premiums. A military confrontation between the US and North Korea remains a low-probability but high-impact event for markets (see *Strategy: Don't get carried away by North Korean market volatility*, 11 August). **Instead, we see the Fed unwinding its balance sheets and hiking rates as a more likely candidate.** Interestingly, the natural rate of interest, i.e. the real interest rate consistent with real GDP equalling its potential level, is falling in the US at the same time as the FOMC is determined to tighten (see Chart 7). **As US nominal interest rates rise towards the natural rate, we believe financial volatility and risk premiums across asset classes should rise. This could play out over coming months.**

**Chart 3: Measures of risk premiums are close to historical lows across asset classes (3M MAs)**



Source: IIMA data, Macrobond Financial, Danske Bank

**Chart 5: Correlations are rising but are still some way from historical highs**



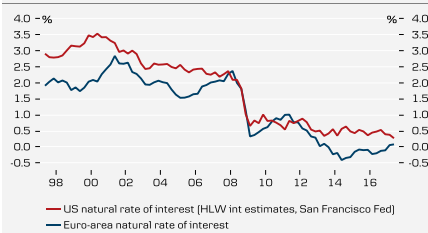
Source: Macrobond Financial

**Chart 6: Average percentiles during September 2017**

FX Vol	0.21
US 10Y term premium	0.03
Bond Vol	0.01
Stock Vol	0.04

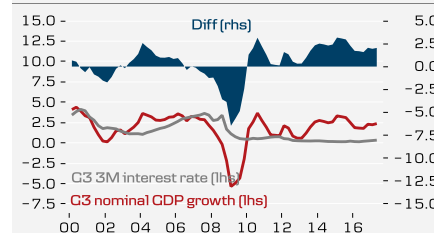
Source: IIMA data, Macrobond Financial, Danske Bank calculations

**Chart 7: US neutral rate is falling**



Source: Macrobond Financial, Danske Bank

**Chart 8: Nominal GDP growth is high relative to short-term interest rates**



Source: Macrobond Financial, Danske Bank

**Global market views**

Asset class	Main factors
<b>Equities</b> Our short-term trading opportunity stance (0-1month): buy on dips Our strategy stance (3-6M): neutral on equities vs cash	We keep our short-term buy-on dips stance, as we think the fundamental factors (the global cycle and earnings) are still strong. So far, history shows that geopolitical shocks are not able to offset the equity markets as long as the cycle is strong. On a 3-6M basis, we remain neutral on equities, as we have been since April this year.
<b>Bond market</b> German/Scandi yields – set to stay in recent range for now, higher on 12M horizon EU curve – 2Y 10Y set to steepen when long yields rise again US-euro spread set to widen marginally Peripheral spreads – tightening but still some factors to watch	Inflation set to stay subdued despite decent growth. Stronger euro keeps euro inflation outlook down. ECB set to normalise gradually only, due to lack of wage pressure and stronger euro. Focus on possible tapering but that is more of a 2018 story. The ECB keeps a tight leash on the short end of the curve. With 10Y yields stable, the curve should change little on a 3-6M horizon. Risk is skewed towards a steeper curve earlier than we forecast. The Fed's QT programme (balance sheet reduction) is set to happen at a very gradual pace and the impact on the Treasury market should be benign. Yet, market pricing for Fed hikes is very dovish and yields should edge higher on a 12M horizon. The market is positioned for lower US yields and vulnerable if we see a fixed income sell-off. We expect economic recovery, ECB stimuli, better fundamentals, particularly in Portugal and Spain, and an improved political picture to lead to further tightening despite the recent strong moves. Italy is the big risk factor. However, very expensive to be short Italian bonds.
<b>FX</b> EUR/USD – consolidating near term but upside risks in 2018 EUR/GBP – upside risks remain but GBP set to strengthen eventually USD/JPY – gradually higher longer term but challenged near term EUR/SEK – consolidation near term, gradually lower further out EUR/NOK – range-bound near term, then gradually lower	EUR/USD has turned for the good as the ECB has reluctantly allowed 'reverse gravity' to kick in but upward momentum should wear off near term. Upside risks dominate in 2018. Deteriorating growth prospects and Bank of England November hike close to fully priced. See limited near-term downside potential from current levels. Policy normalisation at the Fed and eventually at the ECB while BoJ is in it for the long run means support for EUR/JPY and USD/JPY alike throughout our forecast horizon. Gradually lower in the longer term on fundamentals but near term further SEK potential is limited by a cautious Riksbank. Positioning and oil price serve as near-term NOK headwinds but longer term NOK rebound on valuation, growth and real-rate differentials normalising.
<b>Commodities</b> Oil price – downside risk Metal prices – falling back Gold price – range-bound Agriculturals – bouncing back	Supported by OPEC-Russia talks on extending cuts, recovery in US crude demand after Harvey and concerns about outlook for Iran nuclear deal. Sentiment turning negative again as China set to slow again after National Congress. Tug of war between safe-haven demand from rising global geopolitical tensions and negative impact of hawkish Federal Reserve. Supply concerns supporting prices again.

Source: Danske Bank

## Disclosures

This research report has been prepared by Danske Bank A/S ('Danske Bank'). The authors of this research report are Thomas Harr, Global Head of FICC Research, and Nicolai Pertou Ringkøbing, Assistant Analyst.

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