Macro Rate Markets Outlook

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United States
Resilient Growth and a More Dovish Fed

**US Data Surprising Positively as FCI Eases**

GS US MAP Score and GS US FCI

- Easier Financial Conditions, Better Growth

**FOMC Converging to Market Expectations**

FOMC March and December FOMC ‘Dots’ and US$ OIS

**Core Inflation Trending Higher**

US Headline CPI Inflation and Trend in US Service Inflation

**Real Rates Driving the Rally in Nominals**

Decomposition of Change in US Treasury Yields Since Dec FOMC

Source: Bloomberg, Haver Analytics, Goldman Sachs Global Investment Research
Euro Area

ECB Still the Marginal Price Setter for Euro Rates

**Activity Data Improving from Lows**

GS Euro Area MAP Score and GS Euro Area FCI

**Inflation Dynamics Remain Subdued**

Euro Area Headline Inflation and Trend in Service Inflation

**Market is No Longer Expecting Further Rate Cuts**

EONIA Curve Pre and Post ECB March Meeting

**Steep Term Structure of Periphery Spreads**

Euro Area Core Periphery Spread and Germany 10 Year Yield

* Germany and France constitute core; Italy and Spain make up periphery

Source: Bloomberg, Haver Analytics, Goldman Sachs Global Investment Research
Japan

Negative Rates Result in Tighter Financial Conditions

Activity Data Still Weak

GS Japan MAP Score and GS Japan FCI

Core Inflation Is Stabilizing

Japan Headline Inflation and Trend in Service Inflation

NIRP has Dragged JGBs Lower...

JPY OIS 1m and 10-Year JGB

...And Led to an Increase in Market Volatility

JPY Swaption Implied Volatility and Realized
Japan in the ‘Driving Seat’ of Global Rate Rally

Yields in G-4 Have Co-Moved Since the Start of Year

10-yr nominal bond yields in G-4 countries

JGBs have Been in the Driving Seat Since Last November

Idiosyncratic ‘shocks’ originating in each market, estimated through a methodology based on Rigobon (2003)

Source: Bloomberg, Haver Analytics, Goldman Sachs Global Investment Research
Investors Fear Further Bond Rally More than Selloff

In Spite of Lower Yields, Investors Fear a Further Rally More than a Selloff...

...Both in the US and the Euro area

Source: Bloomberg, Goldman Sachs Global Investment Research
The Market Prices Persistent Low-flation

Market Still Assigns High Probability to Moderate Inflation in the US…

Option-implied probability distribution of 5-year inflation by strike ‘clusters’: low inflation (≤1%), medium, and high (≥3%)

...But Sees Very High Chance of Persistent Low-flation in the Euro area

Option-implied probability distribution of 5-year inflation by strike ‘clusters’: low inflation (≤1%), medium, and high (≥3%)

Source: Bloomberg, Goldman Sachs Global Investment Research
Central Bank Bond Purchases Create ‘Fiscal Space’

Government Debt Moves onto Official Sector Balance Sheet

Central Bank Ownership of Government Debt as % of Stock Outstanding

- **Japan**: 45%
- **UK**: 35%
- **Euro Area**: 20%
- **US**: 15%

**Median**: 25%

Central Bank Bond Purchases Create ‘Fiscal Space’

From ‘End of Austerity’ (2014-15) to Synchronous Modest Fiscal Expansion

Estimates of contribution of fiscal policy annual real GDP growth in selected countries

- **USA**: 2015: 120 bp, 2016: 140 bp
- **Euro Area**: 2015: 100 bp, 2016: 120 bp
- **Japan**: 2015: 80 bp, 2016: 100 bp
- **China**: 2015: 60 bp, 2016: 80 bp

Source: Bloomberg, Goldman Sachs Global Investment Research
Global Risk Sentiment Sensitive to Oil Prices

Oil Market Imbalances to Narrow from H2-16 Onwards

Broader Asset Classes Increasingly Correlated to Oil

3m Rolling Absolute Correlation of Weekly Returns to WTI

Source: IEA, EIA, JODI, China NBS, Datastream, Haver Analytics, Goldman Sachs Global Investment Research
The ECB Is Gluing EMU Bond Markets Together

**ECB is Absorbing a Large Share of Gross Government Issuance**

Estimated ECB purchases under PSPP for 2016 as percentage of gross bond issuance

**The Inclusion of Corporates Should Mitigate ‘Scarcity’ Issues**

Breakdown of Pool of Corporate Credit Eligible for ECB Purchase

Source: Haver Analytics, Goldman Sachs Global Investment Research
‘Brexit’ Risk For Now Mostly Limited to UK Assets

Polls Still Too-Close-To-Call
30 Day Average of Brexit Polls
Source: ORB, YouGov, BMG Research, ICM, ComRes, Survation, Ipsos Mori, The Times, TNS, Panelbase, GQR, Pew, Opinium, TNS-BMRB

..& Driven Cross-Currency Basis Lower
GBP USD plotted with 1y1y Cross Currency Basis

Brexit Concerns have Increased GBP Vols
GBP USD plotted with GBP USD 1y1y Implied Vol

UK Equities Are Pricing Brexit Risk
UK Equity Performance After EU Referendum Announcement

Source: DataStream, Bloomberg, Haver Analytics, Goldman Sachs Global Investment Research
European Government Bond Liquidity
A Case Study of BTPs on ECB Meeting Day

Source: MTS Market Data
European Government Bond Liquidity
A Case Study of BTPs on ECB Meeting Day
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