

Goldman Sachs Research

Macro Rate Markets Outlook

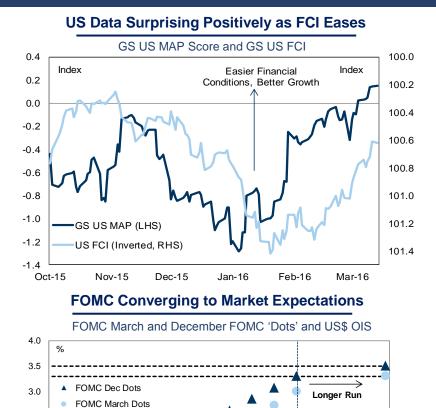
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Frankfurt, 7th April 2016

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United States Resilient Growth and a More Dovish Fed



2.5

2.0

1.5

1.0

0.5

0.0

Mar-16

-USD OIS 1m

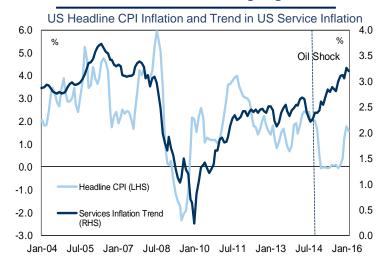
Sep-16

Mar-17

Sep-17

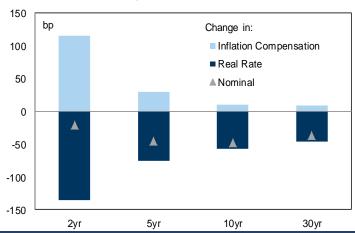
Mar-18

Core Inflation Trending Higher



Real Rates Driving the Rally in Nominals

Decomposition of Change in US Treasury Yields Since Dec FOMC

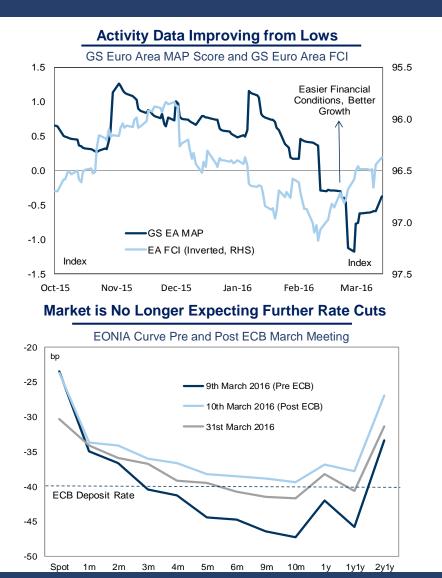


Mar-19

Sep-19

Euro Area

ECB Still the Marginal Price Setter for Euro Rates

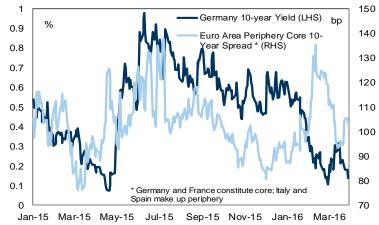


Inflation Dynamics Remain Subdued Euro Area Headline Inflation and Trend in Service Inflation 4.0 3 % 2.5 3.0 2 2.0 1.5 1.0 1 Headline CPI (LHS) 0.0 0.5 Services Inflation Trend (RHS) -1.0 0

Jan-04 Jul-05 Jan-07 Jul-08 Jan-10 Jul-11 Jan-13 Jul-14 Jan-16

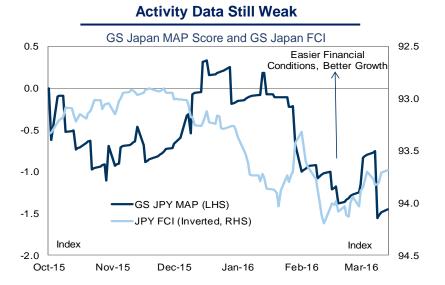
Steep Term Structure of Periphery Spreads

Euro Area Core Periphery Spread and Germany 10 Year Yield

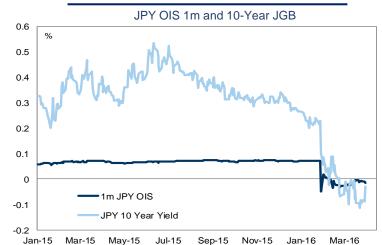


Japan

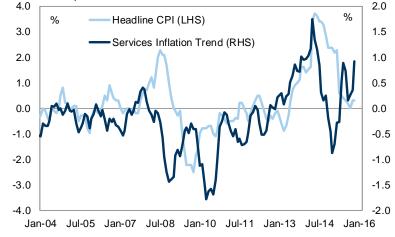
Negative Rates Result in Tighter Financial Conditions



NIRP has Dragged JGBs Lower..



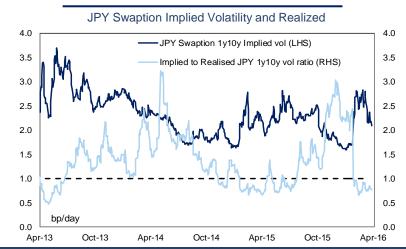
4.0



Core Inflation Is Stabilizing

Japan Headline Inflation and Trend in Service Inflation

...And Led to an Increase in Market Volatility

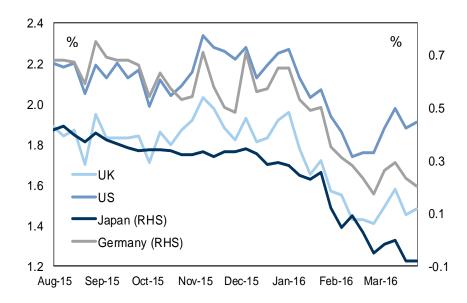


Goldman Sachs Global Investment Research Source: Bloomberg, Haver Analytics, Goldman Sachs Global Investment Research

Japan in the 'Driving Seat' of Global Rate Rally



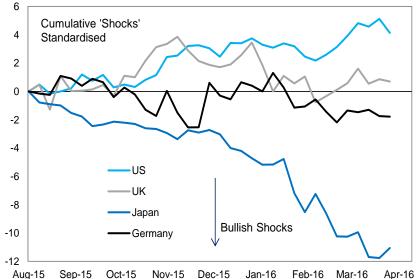
Yields in G-4 Have Co-Moved Since the Start of Year



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)

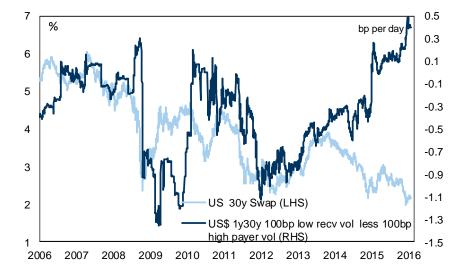


Source: Bloomberg, Haver Analytics, Goldman Sachs Global Investment Research

Investors Fear Further Bond Rally More than Selloff

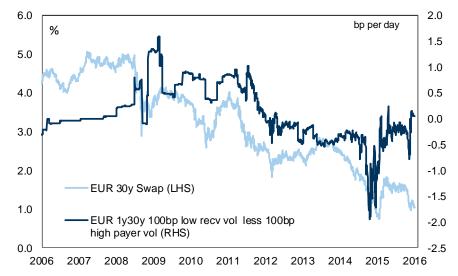


US\$ 30y swap plotted against 1y30y 100bp out-of-the-money low recv. vol less1y30y 100 bp out-of-the-money high payer vol



...Both in the US and the Euro area

EUR 30y swap plotted against 1y30y 100bp out-of-the-money low recv. vol less1y30y 100 bp out-of-the-money high payer vol



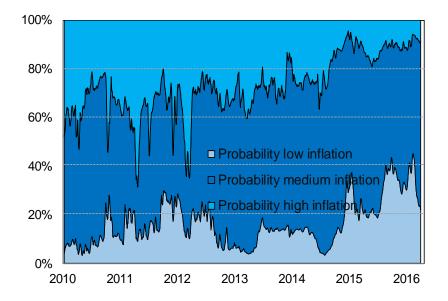
Source: Bloomberg, Goldman Sachs Global Investment Research

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The Market Prices Persistent Low-flation

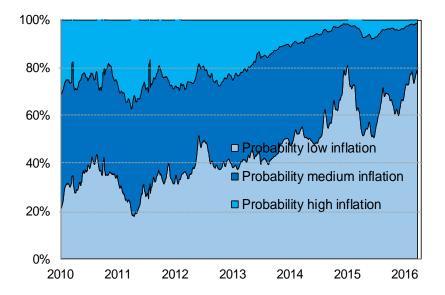


Option-implied probability distribution of 5-year inflation by strike 'clusters': low inflation (≤1%), medium, and high (≥3%)



...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

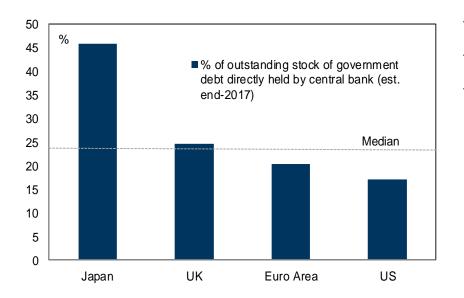


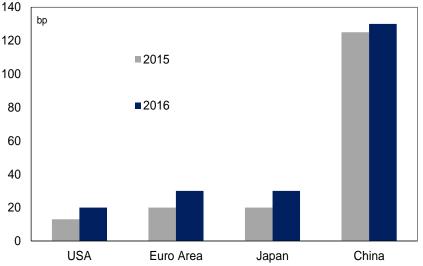
Government Debt Moves onto Official Sector Balance Sheet

Central Bank Ownership of Government Debt as % of Stock Outstanding

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

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





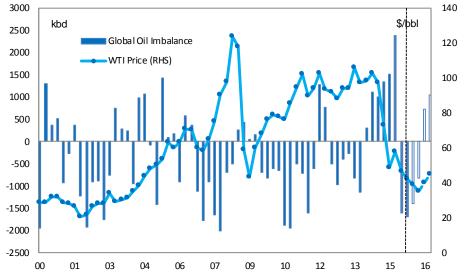
Source: Bloomberg, Goldman Sachs Global Investment Research

Global Risk Sentiment Sensitive to Oil Prices

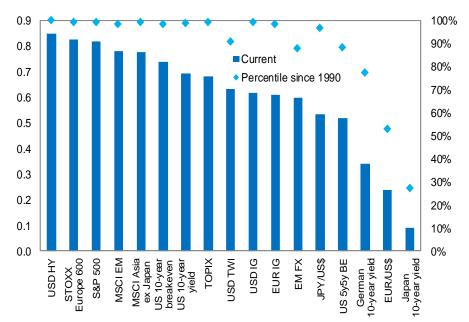
Oil Market Imbalances to Narrow from H2-16 Onwards

Broader Asset Classes Increasingly Correlated to Oil





3m Rolling Absolute Correlation of Weekly Returns to WTI



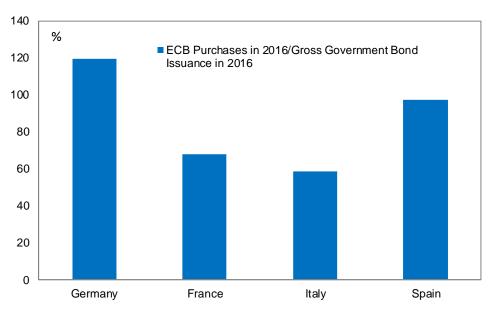
Source: IEA, EIA, JODI, China NBS, Datastream, Haver Analytics, Goldman Sachs Global Investment Research

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The ECB Is Gluing EMU Bond Markets Together

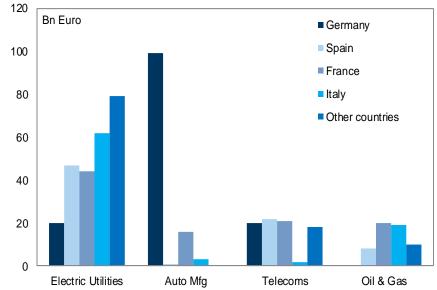


Estimated ECB purchases under PSPP for 2016 as percentage of gross bond issuance



The Inclusion of Corporates Should Mitigate 'Scarcity' Issues

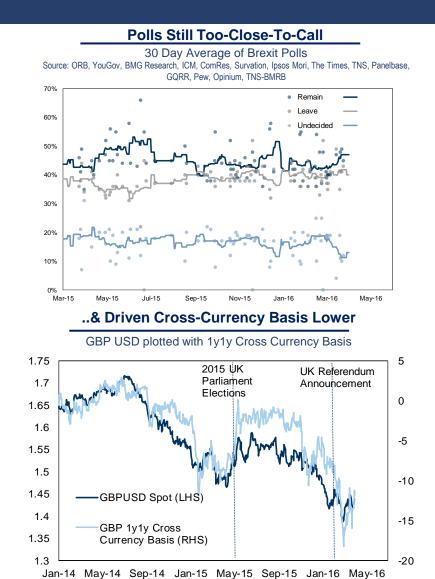




Source: Haver Analytics, Goldman Sachs Global Investment Research

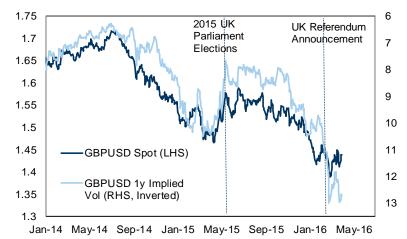
'Brexit' Risk For Now Mostly Limited to UK Assets



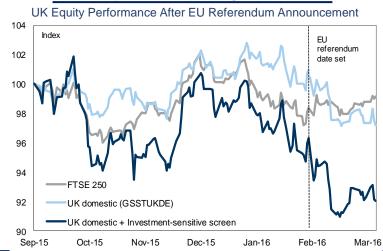


Brexit Concerns have Increased GBP Vols



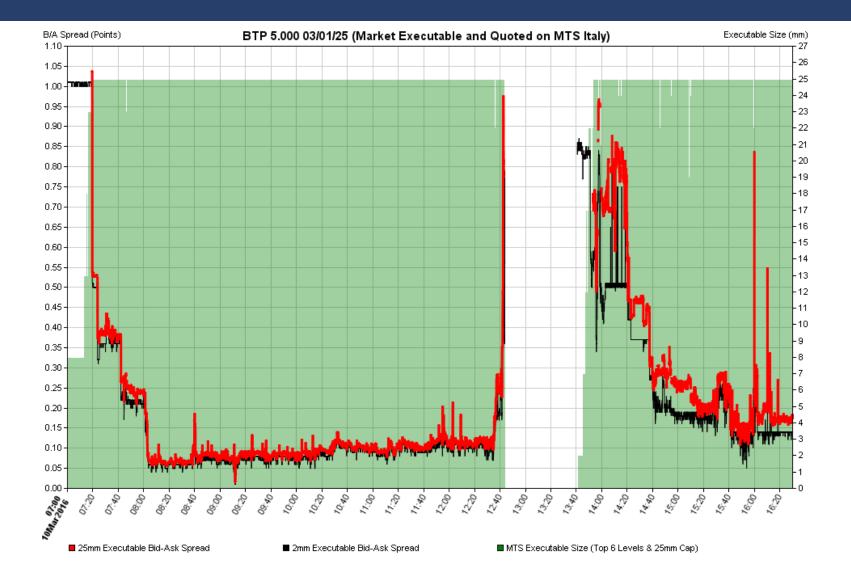


UK Equities Are Pricing Brexit Risk



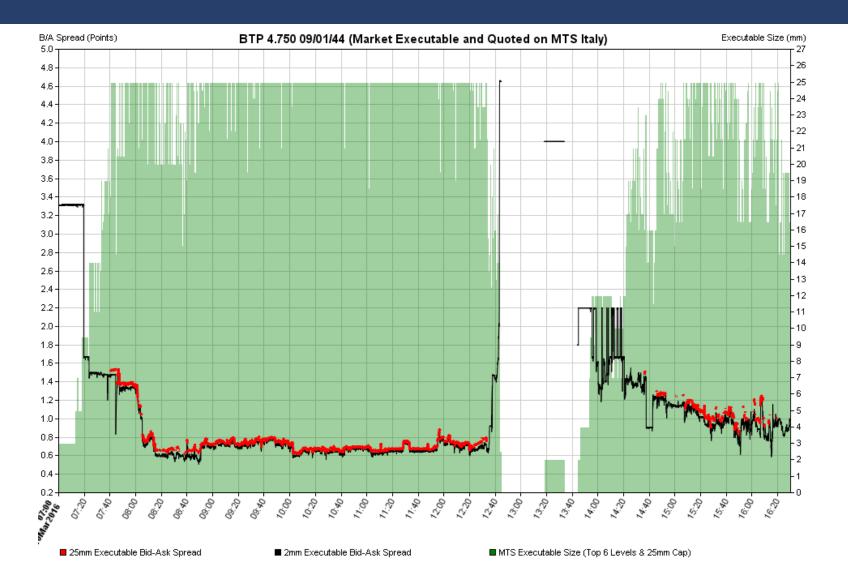
European Government Bond Liquidity A Case Study of BTPs on ECB Meeting Day





European Government Bond Liquidity A Case Study of BTPs on ECB Meeting Day







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