Daily Trends in Yields, Equity Returns, FX

**10-Yr US Government Yield (%)**
- Nominal Yield
- MSCI USA

**Equity Return (%)**

**Cumulative MSCI Equity Return in USD (%)**

**10-Yr Government Yield: Cumulative Change (bps)**
- US
- Germany
- UK
- Japan

**Strength of USD**
- vs EUR
- vs GBP
- vs JPY
- vs CNY

*See Appendix for data sources*
Monthly Trends in Yields, Equity Returns, FX

10-Yr US Government Yield (%)

- Equity Return (%)

- Cumulative MSCI Equity Return in USD (%)

- 10-Yr Government Yield: Cumulative Change (bps)

- Strength of USD

*As of November 11

**See Appendix for data sources
Government Nominal Yield Curves

US Government Yield Curve (%)

Germany Government Yield Curve (%)

UK Government Yield Curve (%)

Japan Government Yield Curve (%)

*MSee Appendix for data sources*
Daily & Monthly US Corporate Spreads vs Equities

10-Yr BBB OAS (bps) vs Equity Return (%)

10-Yr Corporate OAS: Cumulative Change (bps)

*As of November 11

**See Appendix for data sources
Euro Corporate and Sovereign Spreads vs Equities

10-Yr BBB OAS (bps)*

10-Yr Sovereign OAS (bps)*

10-Yr Corporate OAS: Cumulative Change (bps)

10-Yr Sovereign OAS: Cumulative Change (bps)

*Option Adjusted Spread in basis points to German government curve.
Equity return expressed in USD

**As of November 11

***See Appendix for data sources
Spread Term Structure: BBB Corporates & Sovereigns

US BBB OAS (bps)

Euro BBB OAS (bps)*

Euro Sovereign OAS (bps)*

Italy Sovereign OAS (bps)*

*Spread to German government curve

**See Appendix for data sources
Trends in Government Yields and Actual Inflation

10-Yr Government Nominal Yields (%)

Realized Inflation (12-Month, in %)

10-Yr Government Breakeven Inflation Yields (%)

10-Yr Government Real Yields (%)

*UK breakeven inflation and real yields are adjusted to reflect historical differences between the Retail Price Index (RPI) and the Consumer Price Index (CPI)

**See Appendix for data sources
US Govt Yield Drilldown: Nominal, Real and BEI

*See Appendix for data sources*
China Government Bond Drilldown

China Sovereign (CNY) Yield Curve (%)

10-Yr China Sovereign Yield (%)  
Equity Return (%)*

Realized Inflation (%)**

***See Appendix for data sources

**China inflation (yoy) 0.7% as of Sep 2021
Inflation measured by All Items CPI includes food and energy prices
Long-Run Trends in Yields and Inflation

10-Yr Government Nominal Yields (%)

-1.00 0.00 1.00 2.00 3.00 4.00

Jun 1997 Jan '03 Jan '06 Jan '09 Jan '12 Jan '15 Jan '18 Jan '21

US Germany UK Japan

Realized Inflation (12-Month, in %)

-2.00 -1.00 0.00 1.00 2.00 3.00 4.00

Jun 1997 Jan '03 Jan '06 Jan '09 Jan '12 Jan '15 Jan '18 Jan '21

US Eurozone UK Japan

10-Yr Government Breakeven Inflation Yields (%)

-3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00

Jun 1997 Jan '03 Jan '06 Jan '09 Jan '12 Jan '15 Jan '18 Jan '21

US Germany UK Japan

10-Yr Government Real Yields (%)

-3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00

Jun 1997 Jan '03 Jan '06 Jan '09 Jan '12 Jan '15 Jan '18 Jan '21

US Germany UK Japan

*UK breakeven inflation and real yields are adjusted to reflect historical differences between the Retail Price Index (RPI) and the Consumer Price Index (CPI).
**See Appendix for data sources
Long-Run Trends in Spreads

10-Yr US Corporate OAS (bps)

10-Yr Euro Sovereign OAS (bps)*

10-Yr Euro OAS (bps)*

10-Yr Emerging Markets Sovereign OAS (bps)*

*Spread to German government curve

**See Appendix for data sources
**Trends in Yield and Return Volatilities**

### 10-Yr Government Nominal Yield Volatility (bps)*
- **US**: Blue line
- **Germany**: Orange line
- **UK**: Red line
- **Japan**: Green line

*Realized volatility using exponential time decay with half life of 18-weeks*

### US Nominal Yield Volatility Curve (bps)*
- **05-Nov 2021**: Blue line
- **28-May 2021**: Orange line
- **27-Nov 2020**: Red line

### 10-Yr US Yield Volatility (bps)*
- **Nominal**: Blue line
- **BEI**: Orange line
- **Real**: Red line

*Realized volatility using exponential time decay with half life of 18-weeks*

### Equity and 10-Yr US Government Return Volatility (%)*
- **US 10-Yr Nominal**: Blue line
- **MSCI USA**: Orange line
- **MSCI World ex USA**: Red line
- **MSCI Emerging Markets**: Green line

**See Appendix for data sources**
Trends in Correlations and Yield Curve Slope

Return Correlations: Equities & 10-Yr US Government*

Return Correlations: US Equity & 10-Yr US Real, BEI*

Yield Correlations: 10-Yr US Government*

Yield Curve Slope: 10-Yr less 3-Month (bps)

*Realized correlation using exponential time decay with half life of 2-years
**See Appendix for data sources
FX Trends

**Strength of US Dollar**

- vs EUR
- vs GBP
- vs JPY
- vs CNY

**FX Forward Curve: Strength of US Dollar***

*As of November 11

***See Appendix for data sources

**FX Volatility (%)**

**Realized volatility using exponential time decay with half life of 18-weeks**

- USD/EUR
- USD/GBP
- USD/JPY
- USD/CNY
**GDP**

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<th>Region</th>
<th>2019</th>
<th>2020</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3*</th>
<th>Q4</th>
<th>Q1</th>
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<td><strong>US GDP (%)</strong></td>
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<td><strong>UK GDP (%)</strong></td>
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<td><strong>Germany GDP (%)</strong></td>
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*Most recent quarterly GDP: 0.5

*Most recent quarterly GDP: 2.2

*Most recent quarterly GDP: 0.2

*Most recent quarterly GDP: 1.3

*Most recent quarterly GDP: 1.8

**See Appendix for data sources**
Appendix
Data Sources

Yields and Spreads
MSCI zero coupon yield and spread curves

Indexes
MSCI USA Index, MSCI World ex USA Index, MSCI Europe Index,
MSCI China, MSCI Emerging Market Index

Relative Strength of Currencies
MSCI

Inflation and GDP
OECD, Eurostat, UK Office of National Statistics, Cabinet Office of Japan,
National Bureau of Statistics China
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<th>ASIA PACIFIC</th>
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<td>Americas</td>
<td>+ 1 888 588 4567 *</td>
<td>China North</td>
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