Daily 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

*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 April 2
**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 (%)

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

10-Yr BBB OAS (bps)

Equity Return (%)

10-Yr BBB OAS (bps)

Equity Return (%)

10-Yr Corporate OAS: Cumulative Change (bps)

10-Yr Corporate OAS: Cumulative Change (bps)

*As of April 1
**See Appendix for data sources
Euro Corporate and Sovereign Spreads vs Equities

10-Yr BBB OAS (bps)*

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

10-Yr Sovereign OAS (bps)*

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

**As of April 1

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

**US BBB OAS (bps)**

- 01-Apr 2021
- 31-Oct 2020
- 30-Apr 2020

**Euro BBB OAS (bps)**

- 01-Apr 2021
- 31-Oct 2020
- 30-Apr 2020

*Spread to German government curve as of April 02

**Euro Sovereign OAS (bps)**

- Italy
- Spain
- France

**Italy Sovereign OAS (bps)**

- 02-Apr 2021
- 31-Oct 2020
- 30-Apr 2020

*Spread to German government curve

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

10-Yr Government Nominal Yields (%)

-1.00 -0.50 0.00 0.50 1.00 1.50 2.00 2.50 3.00 3.50

-1.00 -0.50 0.00 0.50 1.00 1.50 2.00 2.50 3.00 3.50

May 2017 Jan '18 Jul '18 Jan '19 Jul '19 Jan '20 Jul '20 Jan '21

US Germany UK Japan

Realized Inflation (%)

Policy Target

10-Yr Government Breakeven Inflation Yields (%)

-2.50 -2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00 1.50 2.00 2.50 3.00 3.50

-2.50 -2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00 1.50 2.00 2.50 3.00 3.50

Apr 2017 Jan '18 Jul '18 Jan '19 Jul '19 Jan '20 Jul '20 Jan '21

US Germany UK* Japan

10-Yr Government Real Yields (%)

1.50 1.00 0.50 0.00 -0.50 -1.00 -1.50 -2.00 -2.50

1.50 1.00 0.50 0.00 -0.50 -1.00 -1.50 -2.00 -2.50

Apr 2017 Jan '18 Jul '18 Jan '19 Jul '19 Jan '20 Jul '20 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
Spreads on Corporates & Euro / EM Sovereigns

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

*Spread to US Treasury curve

MSCI
Inflation: US Market Implied (BEI) and Actual CPI / PCE

**US Government Breakeven Inflation Yield Curve (%)**

- 02-Apr 2021
- 31-Oct 2020
- 30-Apr 2020

**US CPI vs Breakeven Inflation Yields (%)**

- CPI ex food/energy
- 2-yr
- 5-yr
- 10-yr

*US CPI ex food/energy inflation (yoy) 1.3% as of Feb 2021*

**US CPI (%)**

- CPI all items
- CPI ex food/energy

*US CPI all items inflation (yoy) 1.7% as of Feb 2021*

**US Inflation: CPI vs PCE (%)**

- PCE ex food/energy
- CPI ex food/energy

*PCE ex food/energy inflation (yoy) 1.4% as of Feb 2021*

**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 (%)

Maturity (years)

1.00 1.50 2.00 2.50 3.00 3.50 4.00

02-Apr 2021 31-Oct 2020 30-Apr 2020

10-Yr China Sovereign Yield (%)

Yield (CNY) MSCI China

*As of April 2. Equity return in USD

Equity Return (%)*

Realized Inflation (%)**

China US

**China inflation (yoy) -0.2% as of Feb 2021
Inflation measured by All Items CPI includes food and energy prices

MSCI

***See Appendix for data sources

China Sovereign (USD)

US AA Corporate (USD)

US Treasury (USD)

China Sovereign (USD)

-0.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00

-8.00 -6.00 -4.00 -2.00 0.00 2.00 4.00 6.00 8.00

Equity Return (%)*

MSCI China

May 2017 Jan '18 Jul '18 Jan '19 Jul '19 Jan '20 Jul '20 Jan '21

Equity return in USD

0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00

-1.00 -0.50 0.00 0.50 1.00 1.50 2.00 2.50 3.00

02-Apr 2021 31-Oct 2020 30-Apr 2020

10-Yr Yields (%)

0.00 0.50 1.00 1.50 2.00 2.50 3.00 3.50 4.00

Apr 2017 Jan '18 Jul '18 Jan '19 Jul '19 Jan '20 Jul '20 Jan '21

China Sovereign (CNY) US AA Corporate (USD) US Treasury (USD)

***See Appendix for data sources

China Inflation (yoy) -0.2% as of Feb 2021
Inflation measured by All Items CPI includes food and energy prices

0.00 0.50 1.00 1.50 2.00 2.50 3.00 3.50 4.00

Apr 2017 Jan '18 Jul '18 Jan '19 Jul '19 Jan '20 Jul '20 Jan '21

China Sovereign Yield (%)

*As of April 2.
**Long-Run Trends in Yields and Inflation**

10-Yr Government Nominal Yields (%)

10-Yr Government Breakeven Inflation Yields (%)

10-Yr Government Real Yields (%)

Realized Inflation (%)

*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

*Spread to US Treasury curve

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

10-Yr Government Nominal Yield Volatility (bps)*

US Nominal Yield Volatility Curve (bps)*

10-Yr US Yield Volatility (bps)*

Equity and 10-Yr US Government Return Volatility (%)*

*Realized volatility using exponential time decay with half life of 18-weeks
**See Appendix for data sources
Trends in Correlations and Yield Curve Slope

Return Correlations: Equities & 10-Yr US Government*

10-Yr Nominal vs: MSCI USA, MSCI World ex USA, MSCI Emerging Markets

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

MSCI USA vs: 10-Yr Government BEI, 10-Yr Government Real

Yield Correlations: 10-Yr US Government*

10-Yr Nominal vs: 10-Yr BEI, 10-Yr Real

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

10-Yr Nominal vs: US, Germany, UK, Japan

*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, GBP, JPY, CNY

FX Forward Curve: Strength of US Dollar*

FX Volatility (%)**

*As of April 02
***See Appendix for data sources

**Realized volatility using exponential time decay with half life of 18-weeks
**US GDP (%)**

*Most recent quarterly GDP: 1.1

**Eurozone GDP (%)**

*Most recent quarterly GDP: -0.7

**China GDP (%)**

*Most recent quarterly GDP: 2.6

**Japan GDP (%)**

*Most recent quarterly GDP: -2.8
**See Appendix for data sources

**UK GDP (%)**

*Most recent quarterly GDP: 1.3

**Germany GDP (%)**

*Most recent quarterly GDP: 0.3

**See Appendix for data sources**
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
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