Daily Trends in Yields, Equity Returns, FX

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

Equity Return (%)

Cumulative MSCI Equity Return in USD (%)
- USA
- World ex USA
- Emerging Markets

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

Strength of USD
- vs EUR
- vs GBP
- vs JPY
- vs CNH

*As of September 23
**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 (%)

Maturity (years)

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

**10-Yr BBB OAS (bps)**

- **Equity Return (%):** 3.00

**10-Yr Corporate OAS: Cumulative Change (bps)**

- **BBB**
- **A**
- **AA**

*As of September 23

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

**10-Yr BBB OAS (bps)**

- Feb 2020: 113
- Mar 2020: 146
- Apr 2020: 179
- May 2020: 212
- Jun 2020: 245
- Jul 2020: 278
- Aug 2020: 308
- Sep 2020: 341

**Equity Return (%)**

- Feb 2020: 10.00
- Mar 2020: 5.00
- Apr 2020: 0.00
- May 2020: -5.00
- Jun 2020: -10.00
- Jul 2020: -15.00
- Aug 2020: -20.00
- Sep 2020: -25.00

**10-Yr Sovereign OAS (bps)**

- Italy: -15
- France: -10
- Spain: -5
- MSCI Europe: 0

**Equity Return (%)**

- Italy: 7
- France: 67
- Spain: 127
- MSCI Europe: 187

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

**10-Yr Corporate OAS: Cumulative Change (bps)**

- Feb 2020: 25
- Mar 2020: 50
- Apr 2020: 75
- May 2020: 100
- Jun 2020: 125
- Jul 2020: 150
- Aug 2020: 175
- Sep 2020: 200

**10-Yr Sovereign OAS: Cumulative Change (bps)**

- Italy: 7
- France: 67
- Spain: 127
- MSCI Europe: 187

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

**As of September 23**

**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 as of September 23
**See Appendix for data sources

*Spread to German government curve

Maturity (years)

Maturity (years)

Maturity (years)

Maturity (years)
Trends in Government Yields and Actual Inflation

10-Yr Government Nominal Yields (%)

10-Yr Government Breakeven Inflation Yields (%)

10-Yr Government Real Yields (%)

Realized Inflation (%)

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

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

- **Maturity (years)**: 1, 3, 5, 7, 10, 15, 20, 30
- **Yield (%)**:
  - 23-Sep 2020
  - 31-Mar 2020
  - 30-Sep 2019

**US CPI (%)**

- **CPI all items inflation (yoy) 1.3% as of Aug 2020**
- **CPI ex food/energy**

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

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

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

- **PCE ex food/energy**, CPI ex food/energy

**Notes**:
- *CPI all items inflation (yoy) 1.3% as of Aug 2020
- *CPI ex food/energy inflation (yoy) 1.7% as of Aug 2020
- **See Appendix for data sources**

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**MSCI**
US Govt Yield Drilldown: Nominal, Real and BEI

10-Yr US Government Yields (%)

-1.50
-1.00
-0.50
0.00
0.50
1.00
1.50
2.00

Wed
Thu
Fri
Mon
Tue
Wed
Thu
Fri
Mon
Tue
Wed
Sep 9
Sep 16
Sep 23

US Nominal
US BEI
US Real

10-Yr US Government Yields (%)

-1.50
-1.00
-0.50
0.00
0.50
1.00
1.50
2.00

Feb
Mar
Apr
May
Jun
Jul
Aug
Sep '20

US Nominal
US BEI
US Real

10-Yr Yields: Cumulative Change (bps)

-15
-10
-5
0
5
10

Wed
Thu
Fri
Mon
Tue
Wed
Thu
Fri
Mon
Tue
Wed
Sep 9
Sep 16
Sep 23

US Nominal
US BEI
US Real

10-Yr Yields: Cumulative Change (bps)

-150
-100
-50
0
50
100

Feb
Mar
Apr
May
Jun
Jul
Aug
Sep '20

US Nominal
US BEI
US Real

*See Appendix for data sources
Long-Run Trends in Yields and Inflation

10-Yr Government Nominal Yields (%)

10-Yr Government Breakeven Inflation Yields (%)

Realized Inflation (%)

10-Yr Government Real Yields (%)

*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

*Spread to US Treasury curve
Trends in Yield Volatilities and Yield Curve Slope

**10-Yr Government Nominal Yield Volatility (bps)**

- US
- Germany
- UK
- Japan

**US Nominal Yield Volatility Curve (bps)**

- 18-Sep 2020
- 27-Mar 2020
- 27-Sep 2019

**10-Yr US Yield Volatility (bps)**

- Nominal
- BEI
- Real

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

- US
- Germany
- UK
- Japan

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

**See Appendix for data sources**
FX Trends

**Strength of US Dollar**

Jan '17 - Jul '20

- vs EUR
- vs GBP
- vs JPY
- vs CNH

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

Maturity (years)

- vs EUR
- vs GBP
- vs JPY

*As of September 23

**FX Volatility (%)**

Jan '17 - Jul '20

- vs MXN
- vs BRL
- vs CAD
- vs KRW

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

**See Appendix for data sources
US GDP (% change from previous period)

*Most recent quarterly GDP: -9.1

Eurozone GDP (% change from previous period)

*Most recent quarterly GDP: -11.8

UK GDP (% change from previous period)

*Most recent quarterly GDP: -20.4
**See Appendix for data sources

Japan GDP (% change from previous period)

*Most recent quarterly GDP: -7.9

**See Appendix for data sources
Data Sources

Yields and Spreads
MSCI yield and spread curves

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

Relative Strength of Currencies
MSCI

Inflation and GDP
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