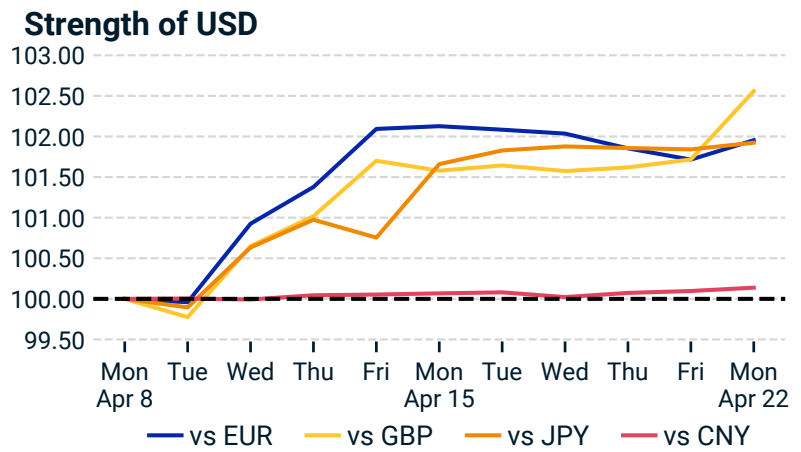
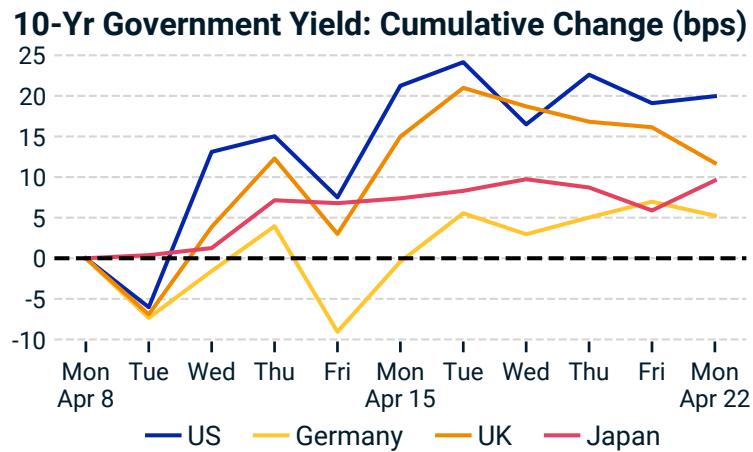
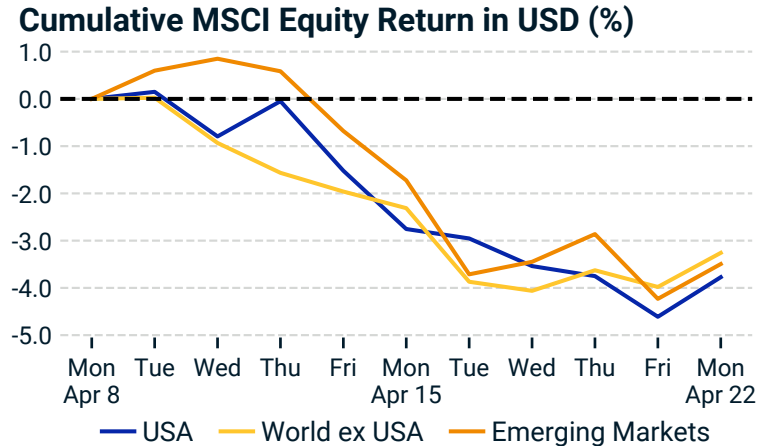
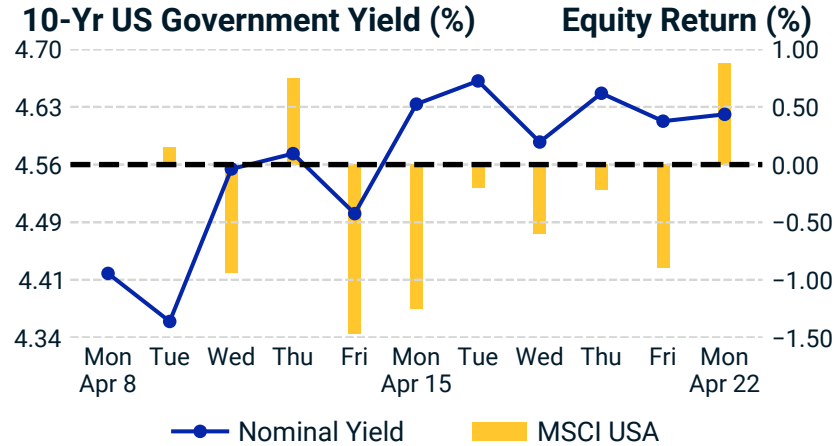


Daily Fixed-Income Insights

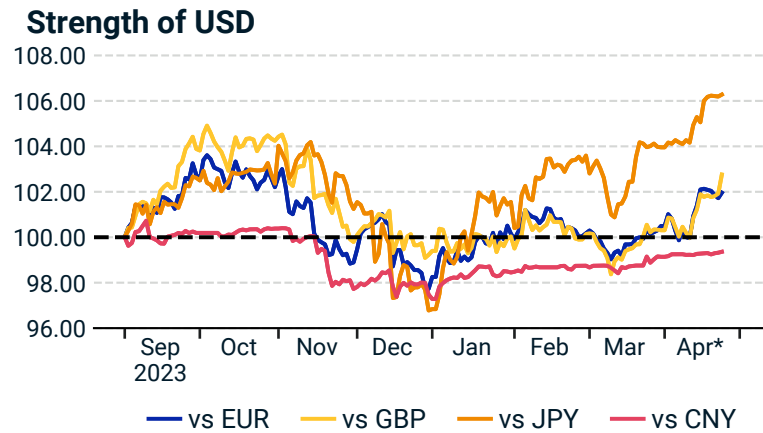
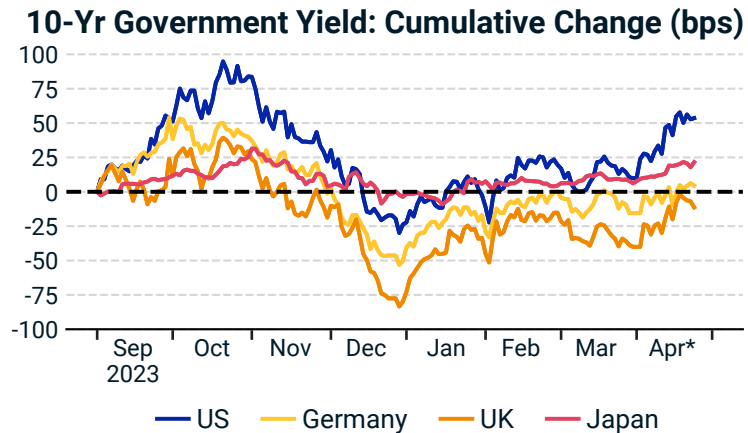
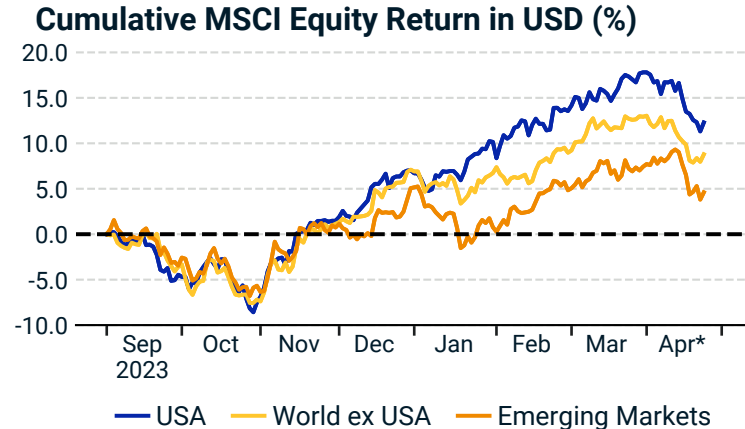
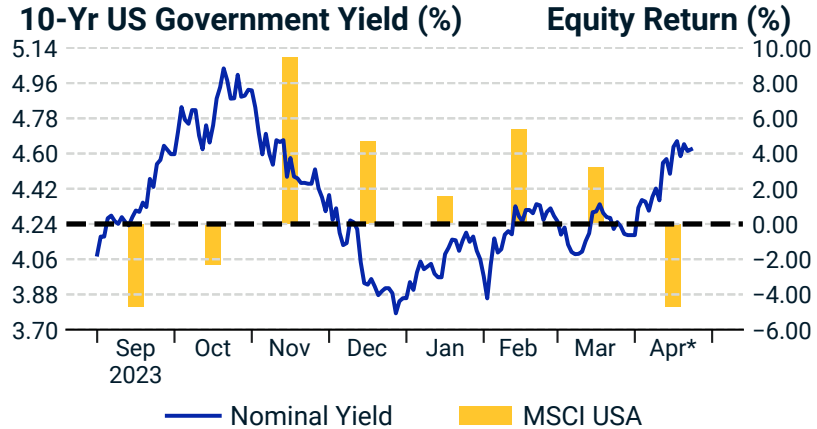
April 22, 2024 (market close)

Daily Trends in Yields, Equity Returns, FX



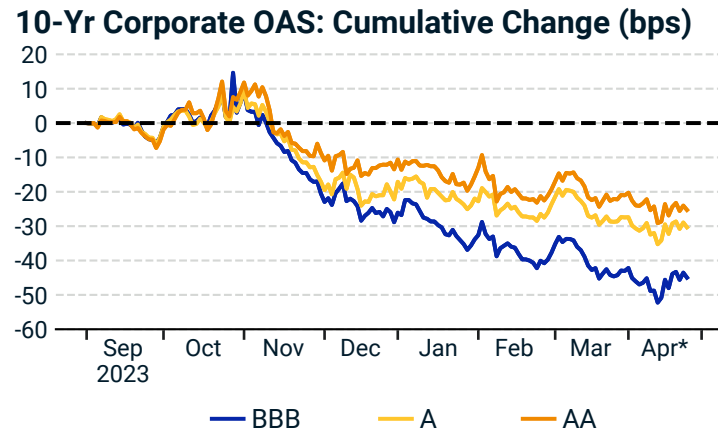
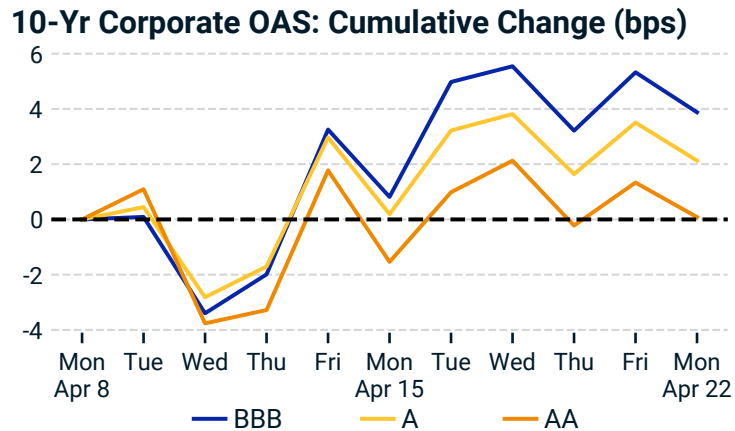
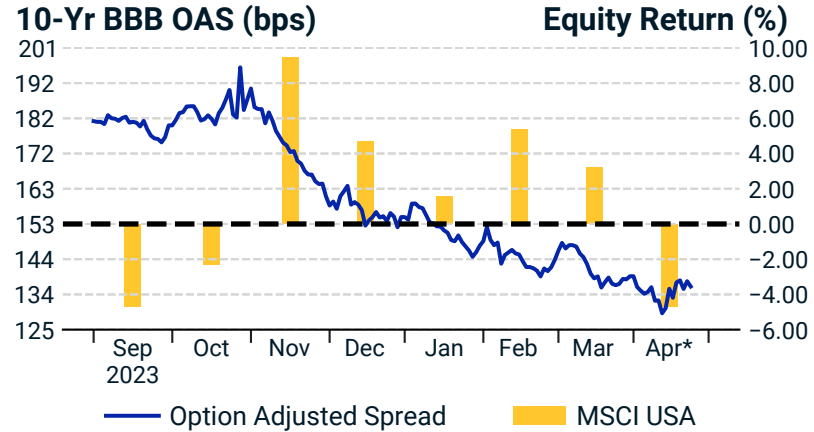
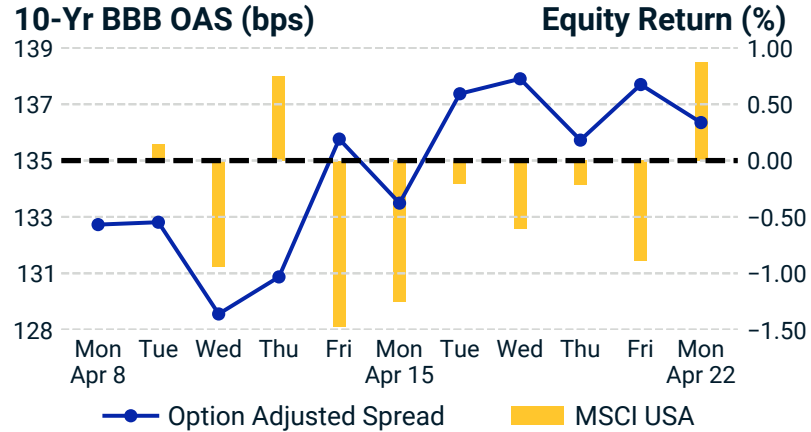
*See Appendix for data sources

Monthly Trends in Yields, Equity Returns, FX



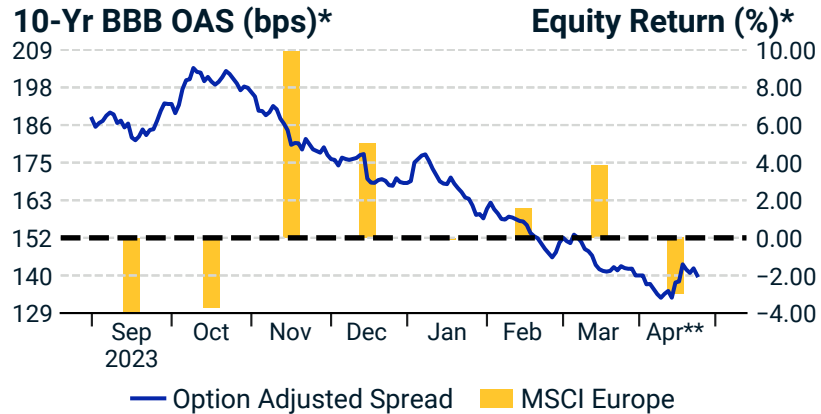
*As of April 22
 **See Appendix for data sources

Daily & Monthly US Corporate Spreads vs Equities

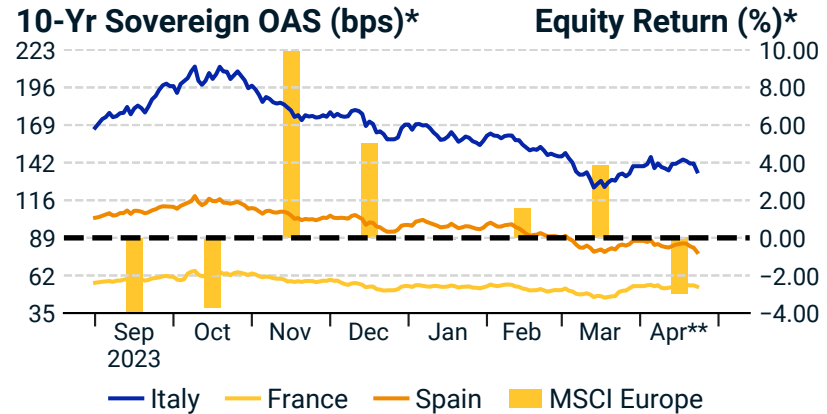


*As of April 22
**See Appendix for data sources

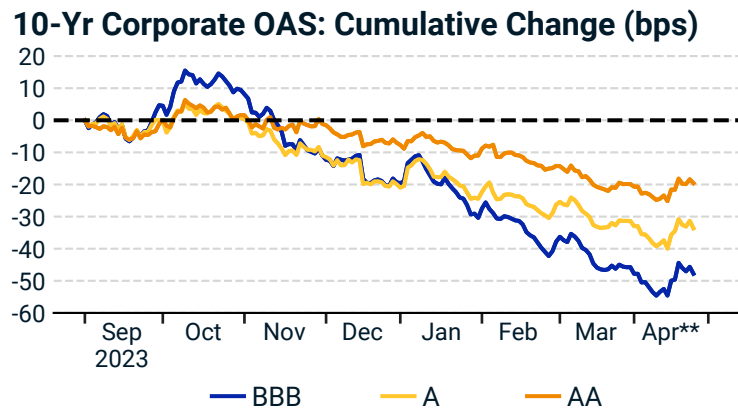
Euro Corporate and Sovereign Spreads vs Equities



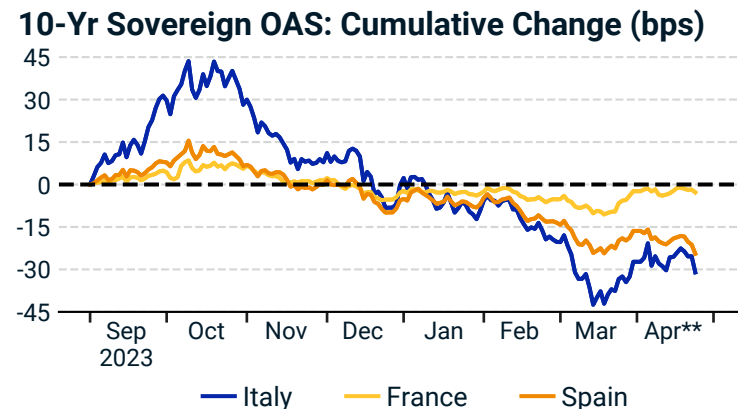
*Option Adjusted Spread in basis points to German government curve.
Equity return expressed in USD



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

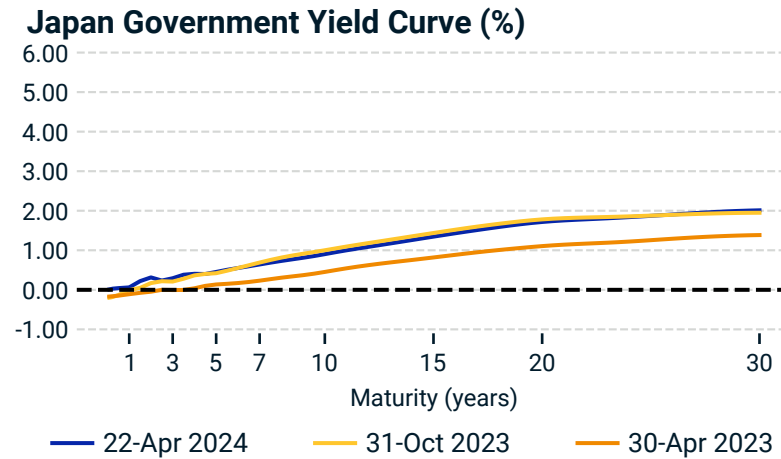
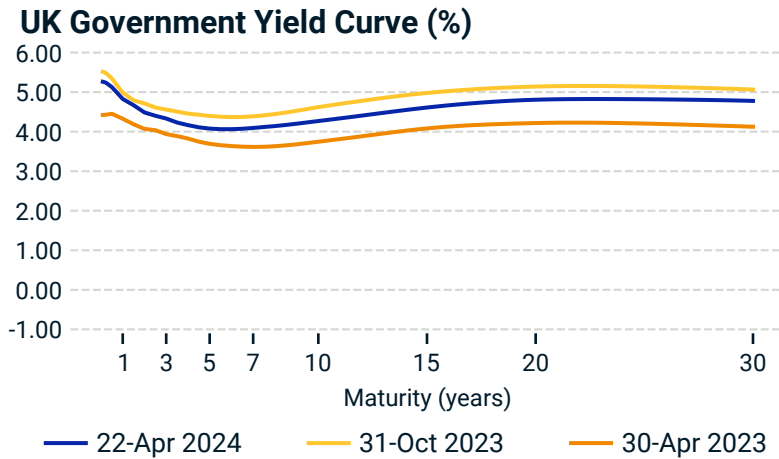
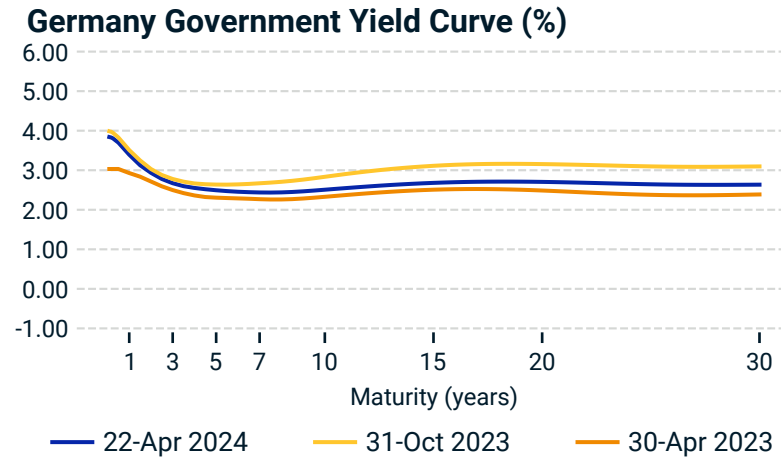
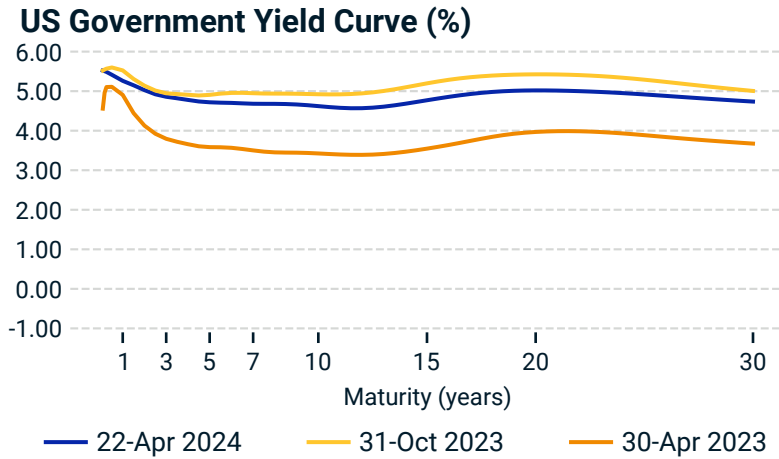


**As of April 22
***See Appendix for data sources



Drilldown: G4 Government Bonds and Rates

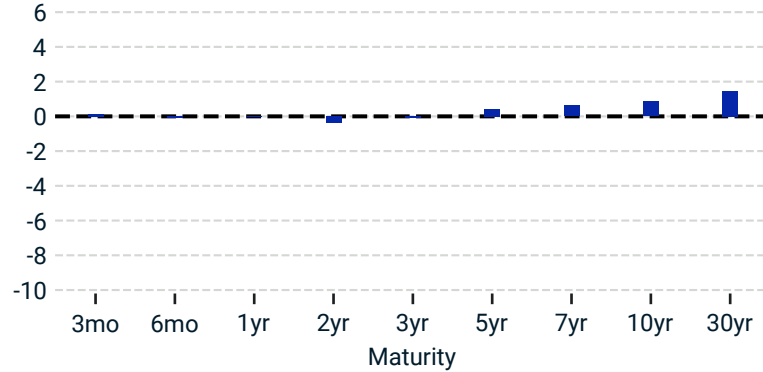
Government Nominal Yield Curves



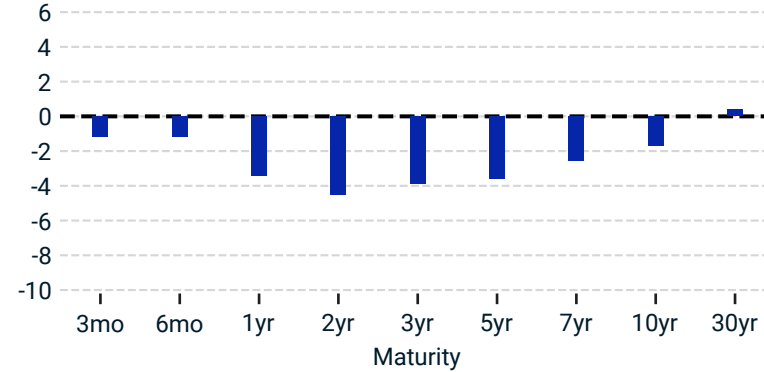
*See Appendix for data sources

Government Yields: 1-Day Changes (Nominal)*

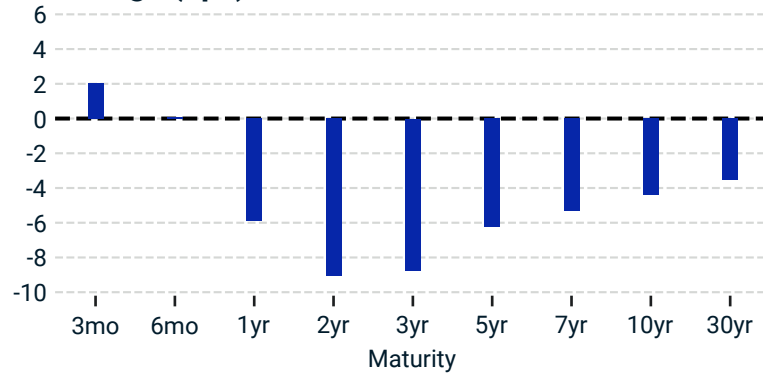
US Change (bps)



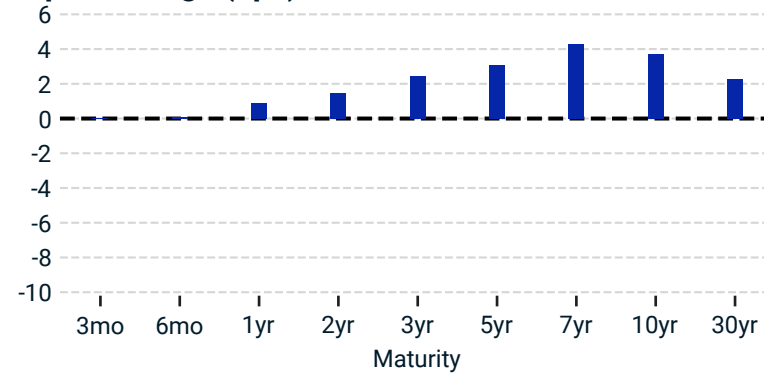
Germany Change (bps)



UK Change (bps)



Japan Change (bps)

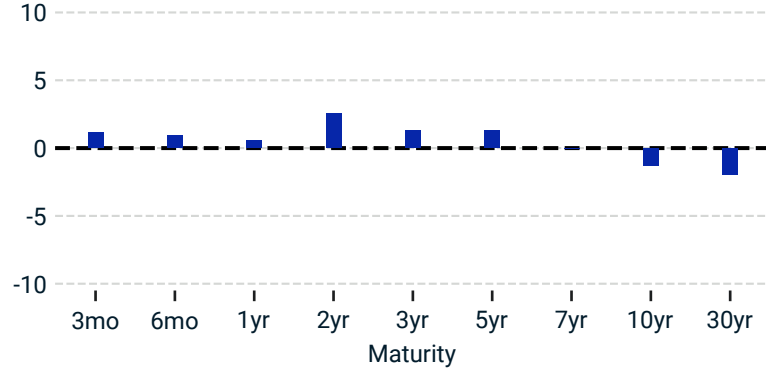


*Change from Apr 19 to Apr 22

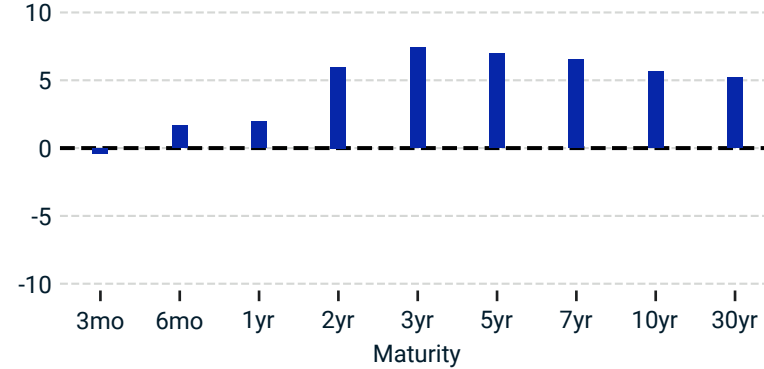
**See Appendix for data sources.

Government Yields: 1-Week Changes (Nominal)*

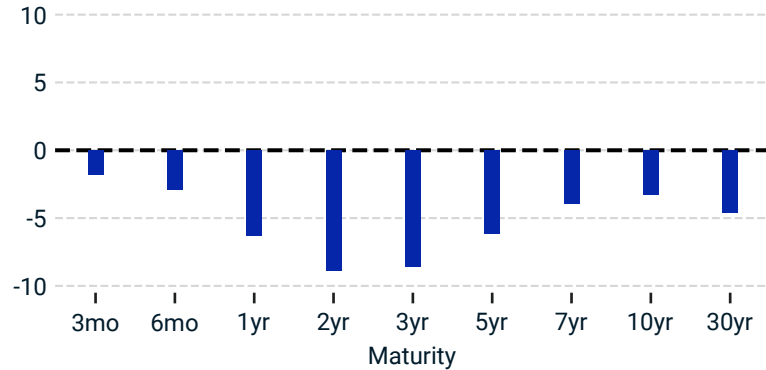
US Change (bps)



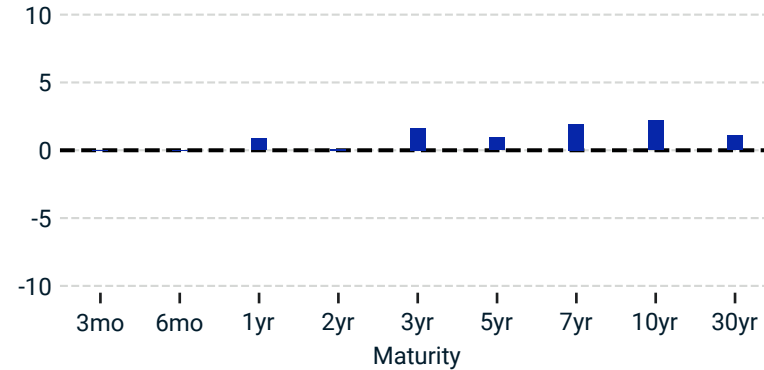
Germany Change (bps)



UK Change (bps)



Japan Change (bps)

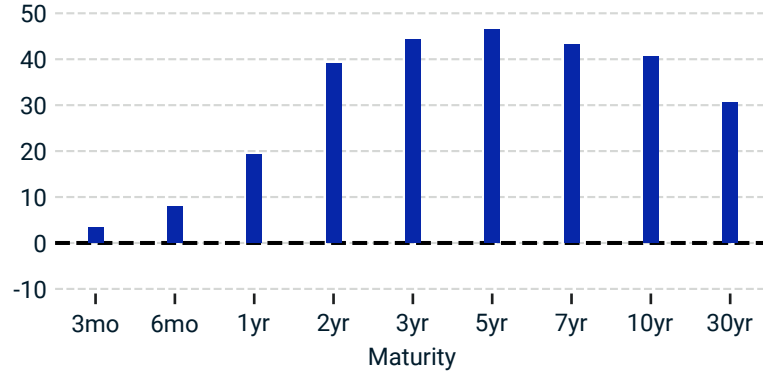


*Change from Apr 15 to Apr 22

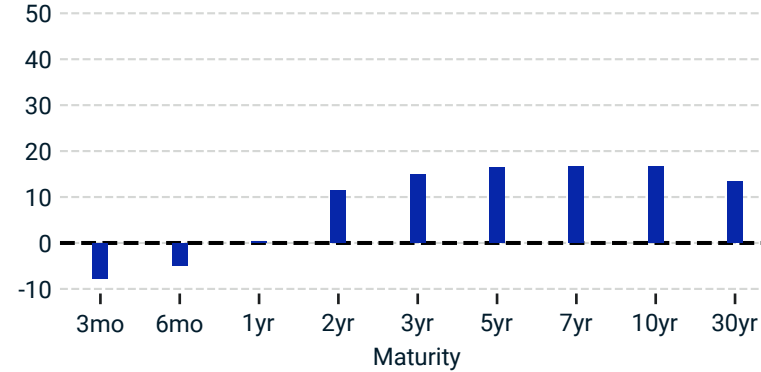
**See Appendix for data sources

Government Yields: 1-Month Changes (Nominal)*

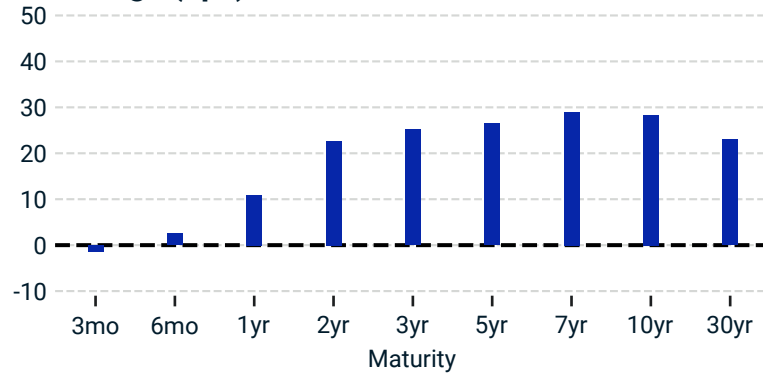
US Change (bps)



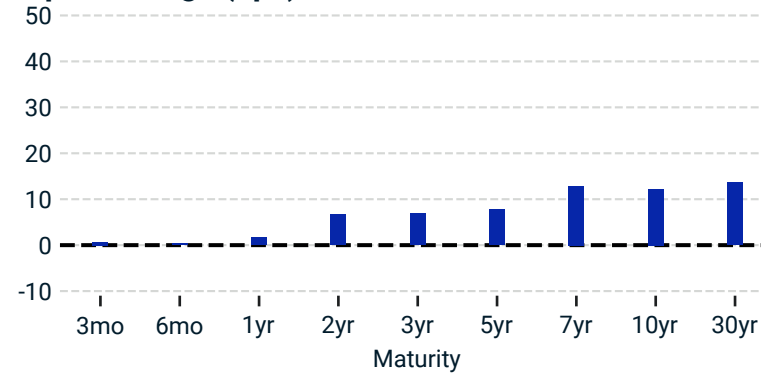
Germany Change (bps)



UK Change (bps)



Japan Change (bps)

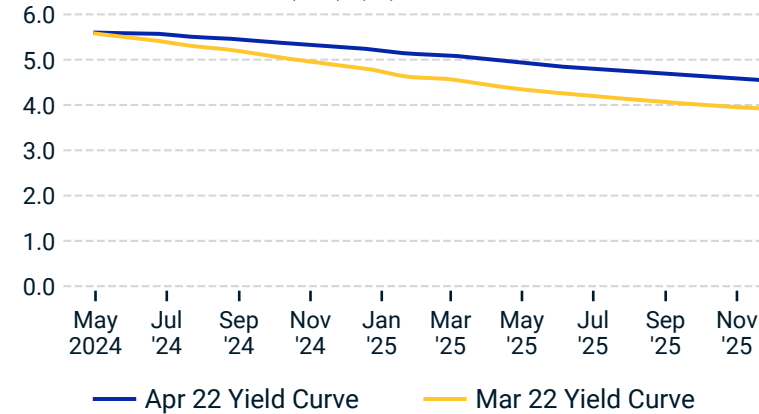


*Change from Mar 22 to Apr 22

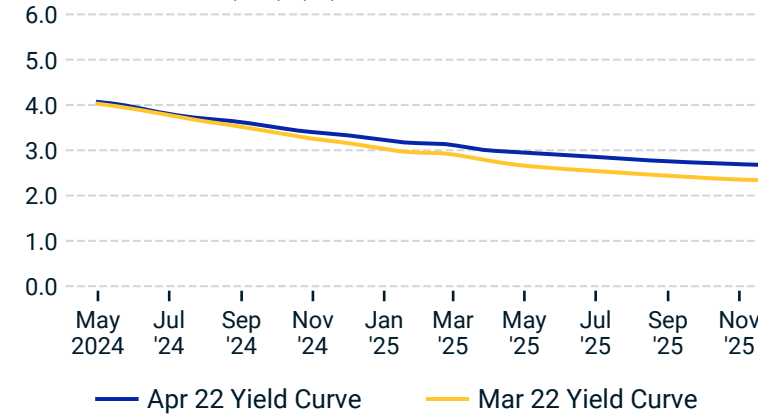
**See Appendix for data sources

1-Month Forward Rates on Futures and Overnight Index Swaps

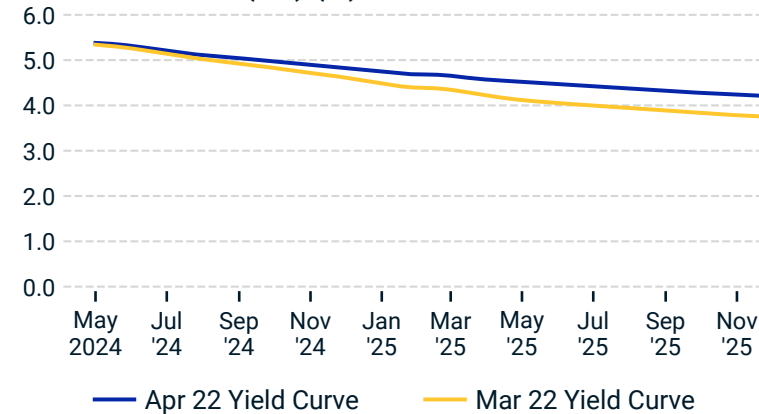
USD SOFR Futures (SP) (%)



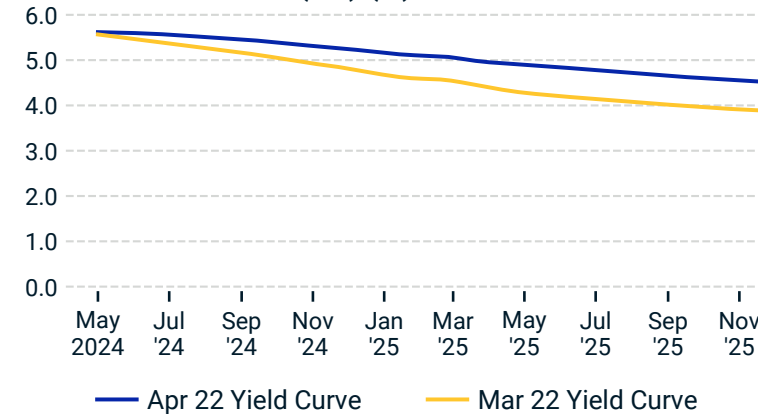
EUR ESTR OIS (SP) (%)



GBP SONIA OIS (SP) (%)

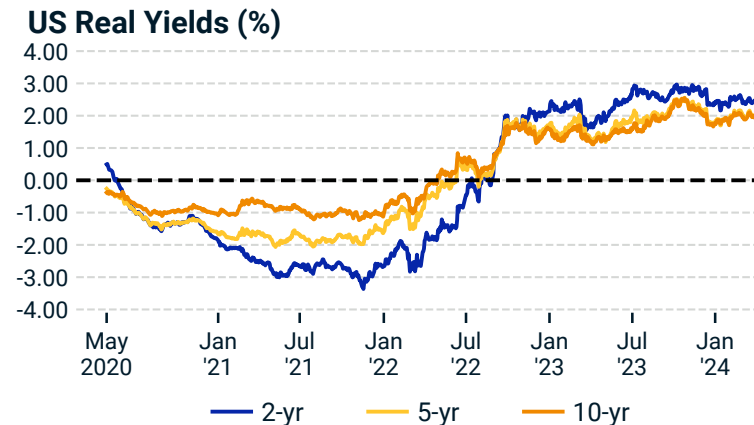
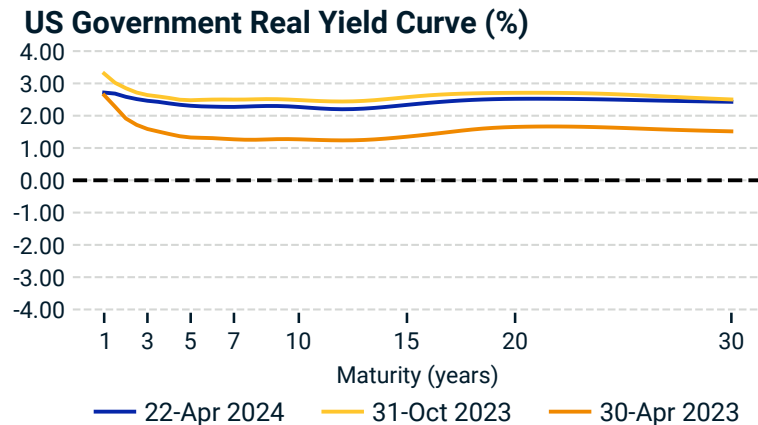
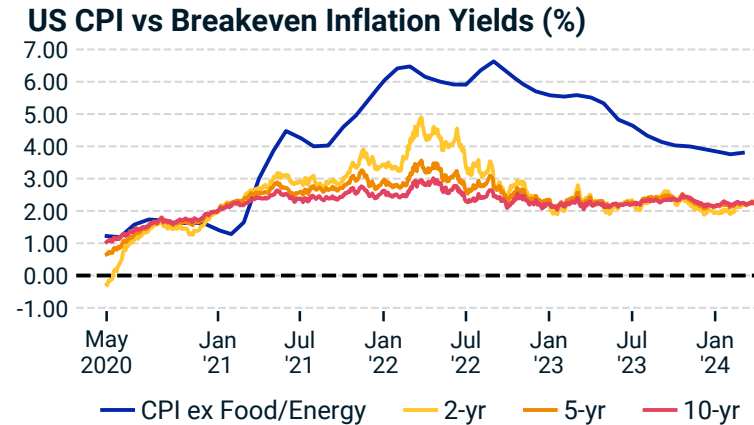
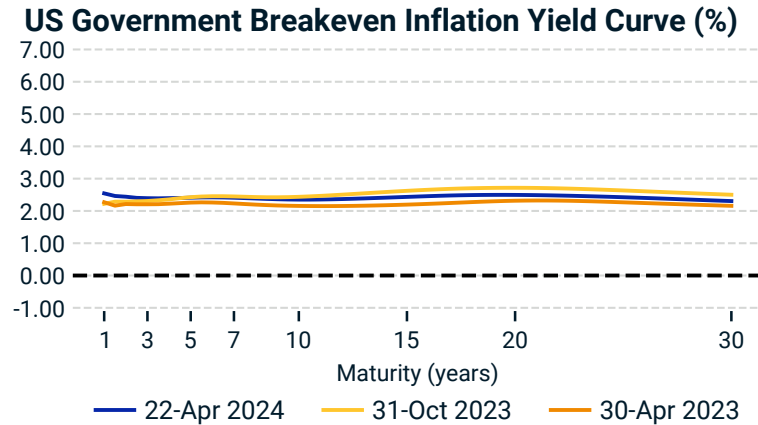


USD Fed Funds OIS (SP) (%)



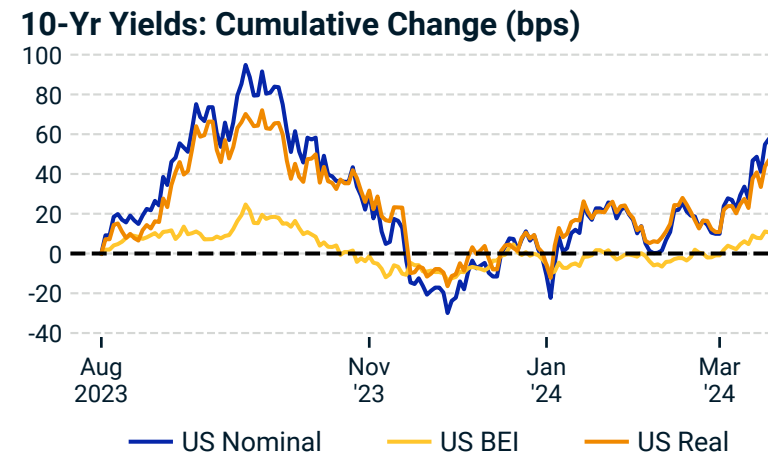
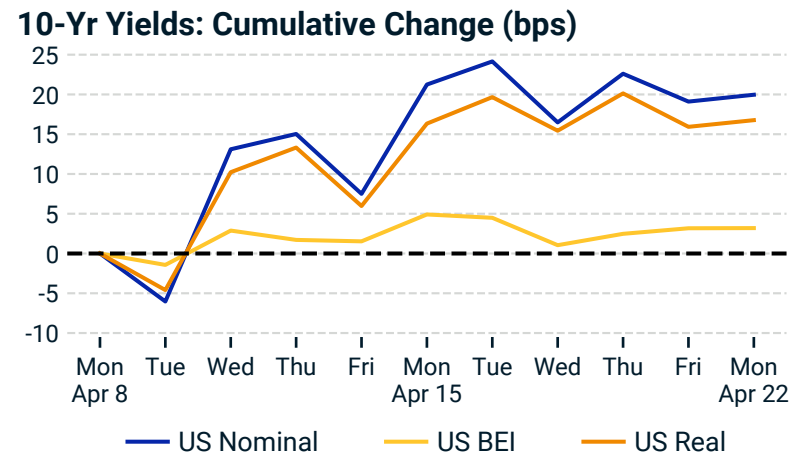
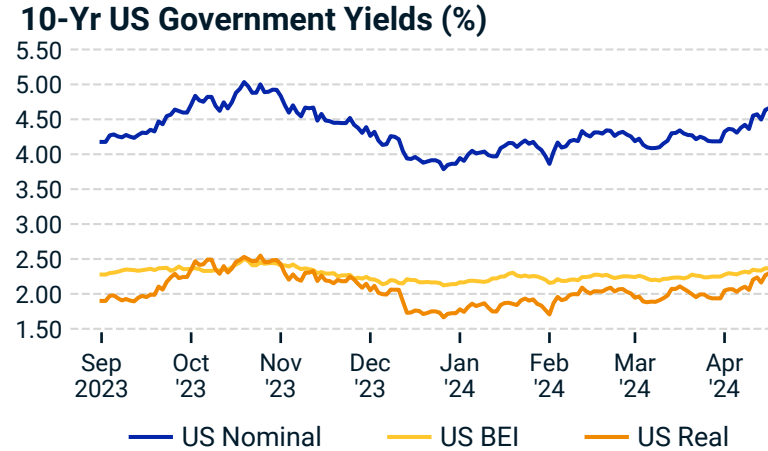
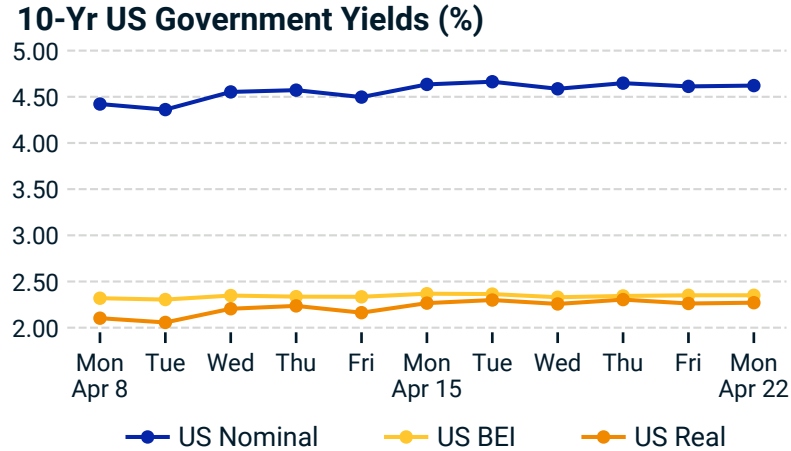
*See Appendix for data sources

US Breakeven Inflation and Real Yields



**See Appendix for data sources

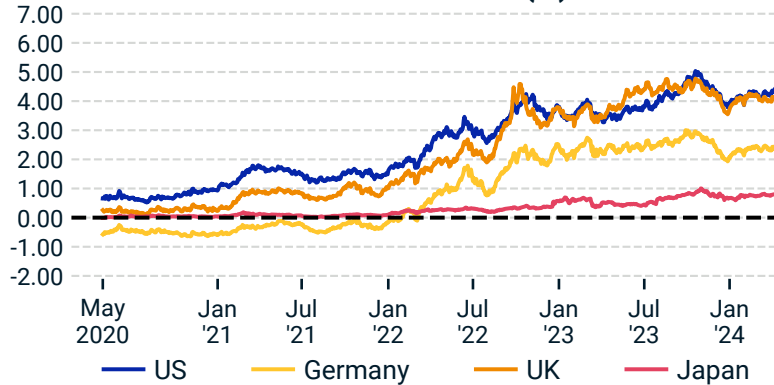
US Government Yields: Nominal, Real and BEI



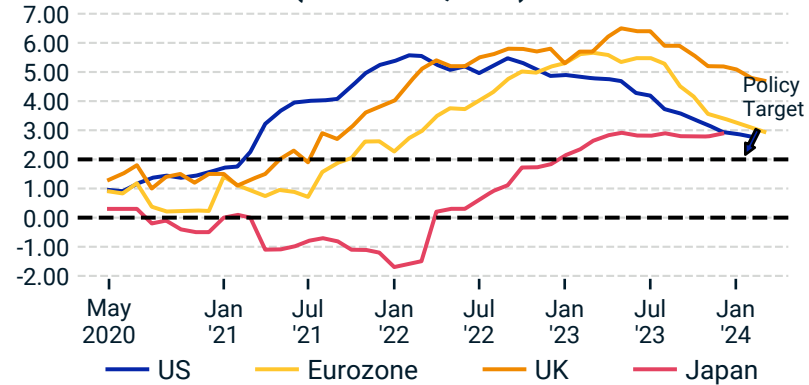
*See Appendix for data sources

4-Year Trends in Government Yields and Inflation

10-Yr Government Nominal Yields (%)

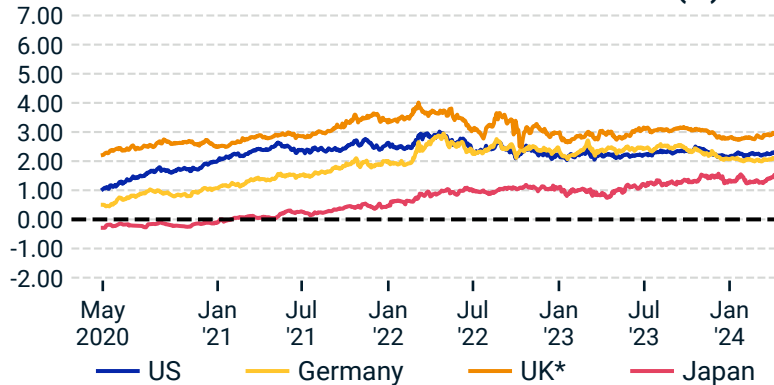


Realized Inflation (12-Month, in %)



*US: PCE ex Food/Energy; Eurozone: HICP ex Food/Energy/Alcohol/Tobacco
 UK: CPIH ex Food/Energy/Alcohol/Tobacco; Japan: CPI ex Food/Energy

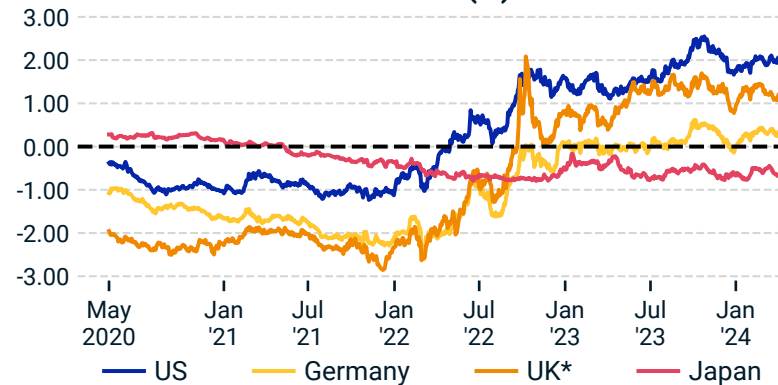
10-Yr Government Breakeven Inflation Yields (%)



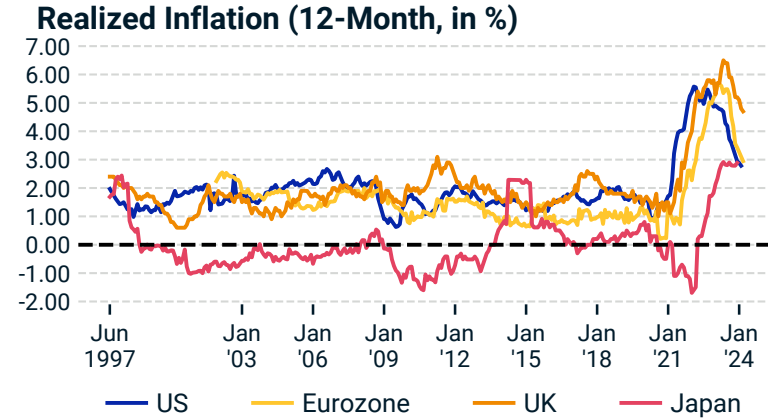
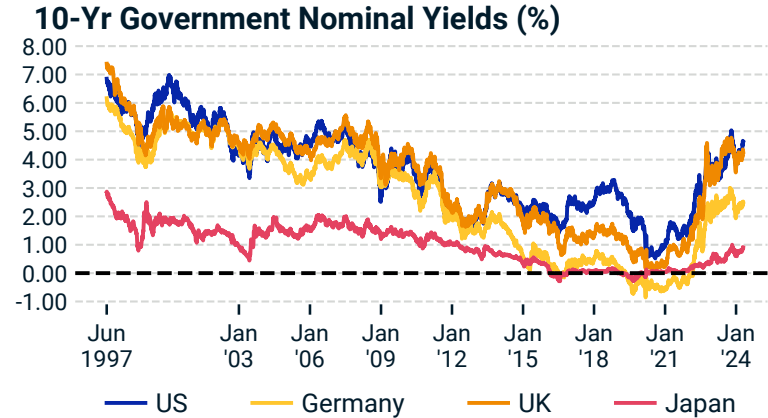
*UK breakeven inflation and real yields are adjusted to reflect historical differences between the Retail Price Index (RPI) and the Consumer Price Index (CPI)

**See Appendix for data sources

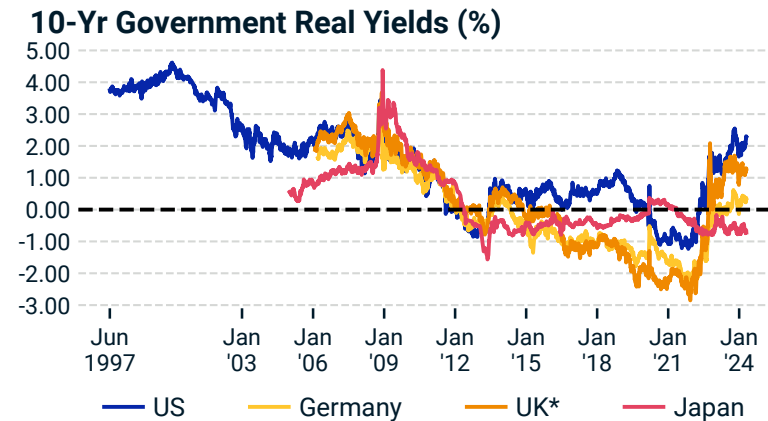
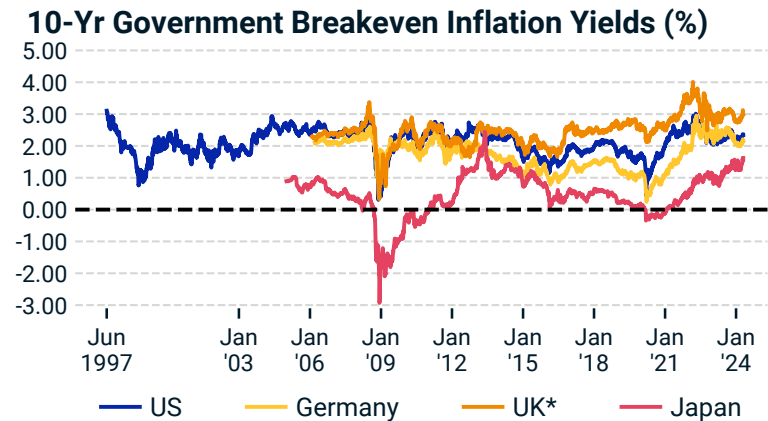
10-Yr Government Real Yields (%)



Long-Run Trends in Yields and Inflation

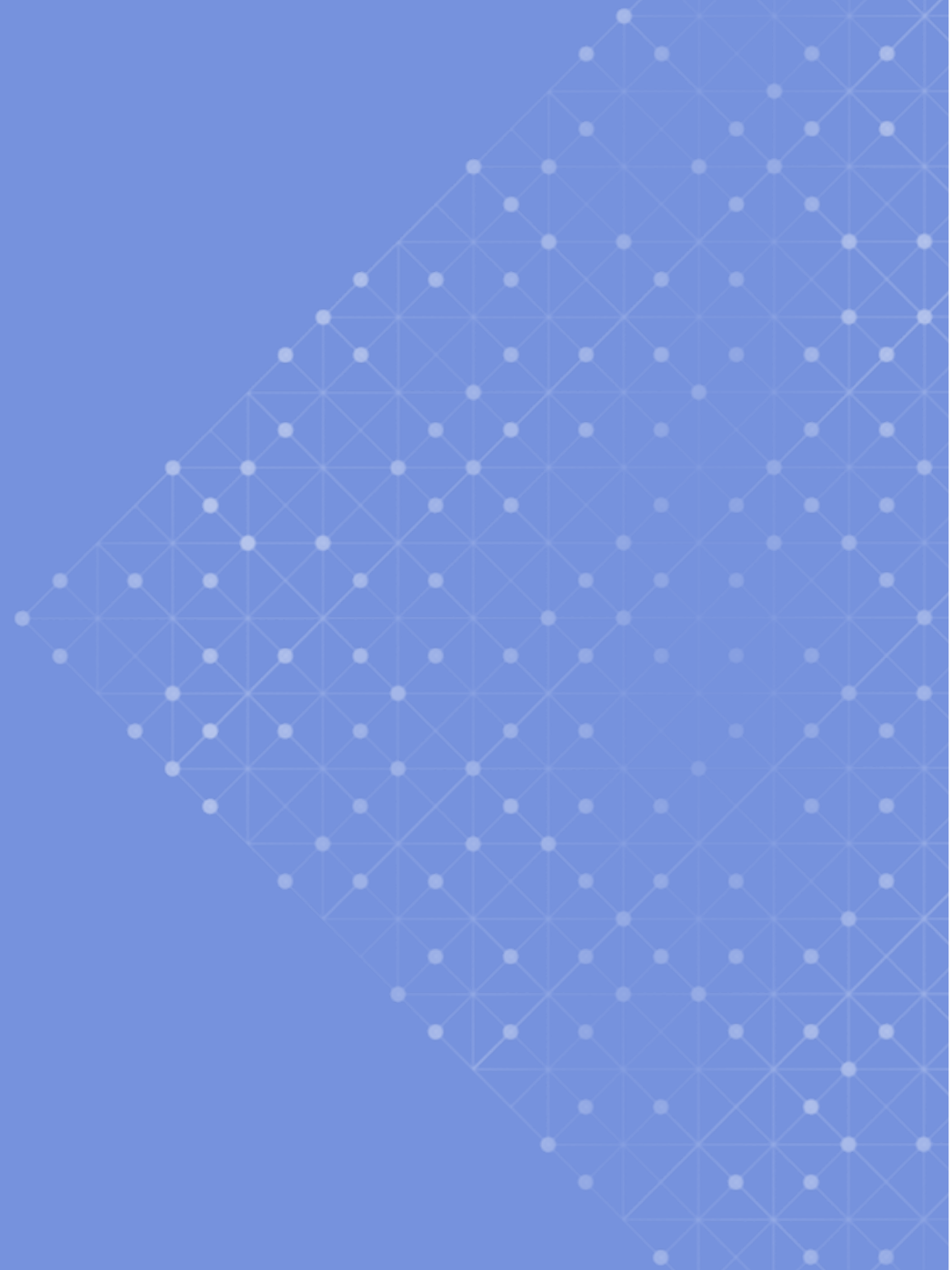


*US: PCE ex Food/Energy; Eurozone: HICP ex Food/Energy/Alcohol/Tobacco
 UK: CPIH ex Food/Energy/Alcohol/Tobacco; Japan: CPI ex Food/Energy



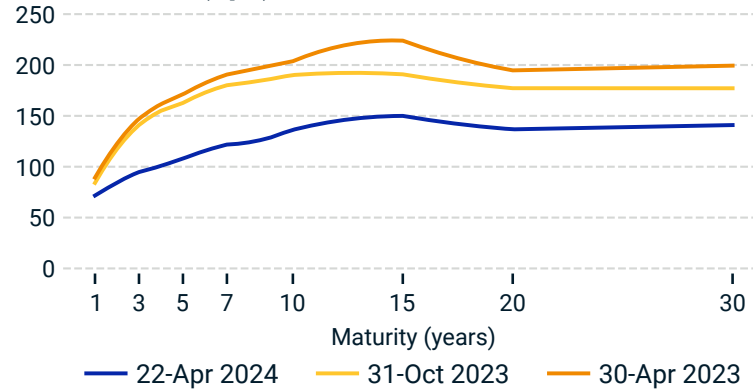
*UK breakeven inflation and real yields are adjusted to reflect historical differences between the Retail Price Index (RPI) and the Consumer Price Index (CPI)
 **See Appendix for data sources

Drilldown: Credit

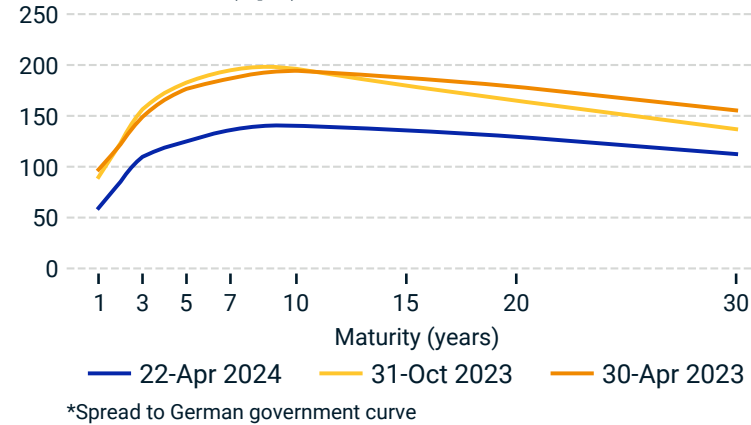


Spread Term Structure: BBB Corporates & Sovereigns

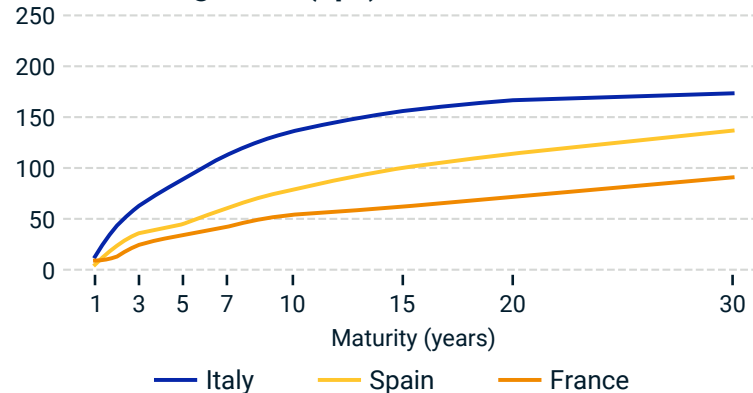
US BBB OAS (bps)



Euro BBB OAS (bps)*

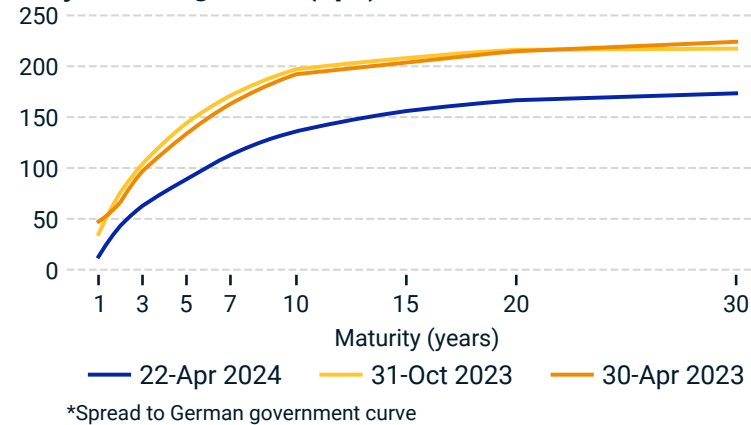


Euro Sovereign OAS (bps)*



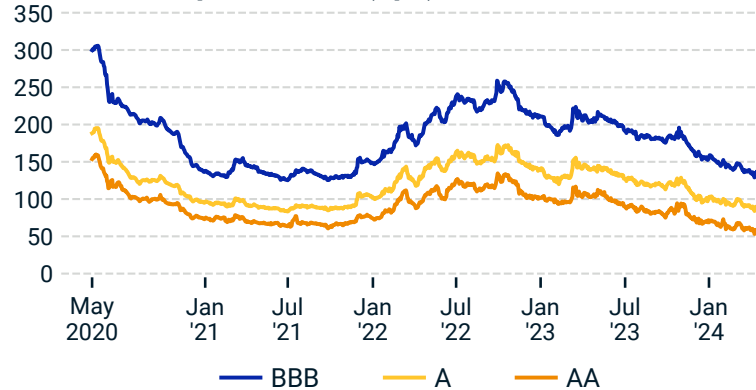
*Spread to German government curve as of April 22
 **See Appendix for data sources

Italy Sovereign OAS (bps)*

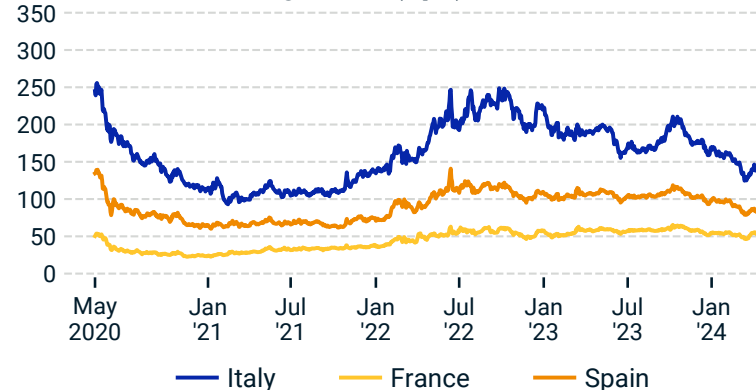


4-Year Spread Trends on Corporates & Euro / EM Sovereigns

10-Yr US Corporate OAS (bps)



10-Yr Euro Sovereign OAS (bps)*



*Spread to German government curve

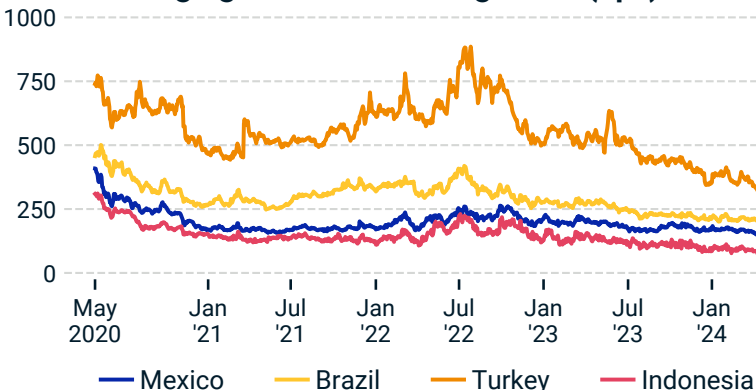
10-Yr Euro OAS (bps)*



*Spread to German government curve

**See Appendix for data sources

10-Yr Emerging Markets Sovereign OAS (bps)*



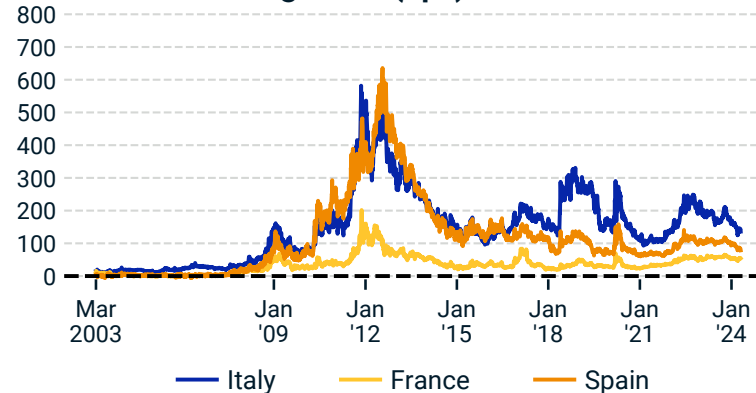
*Spread to US Treasury curve

Long-Run Trends in Spreads

10-Yr US Corporate OAS (bps)

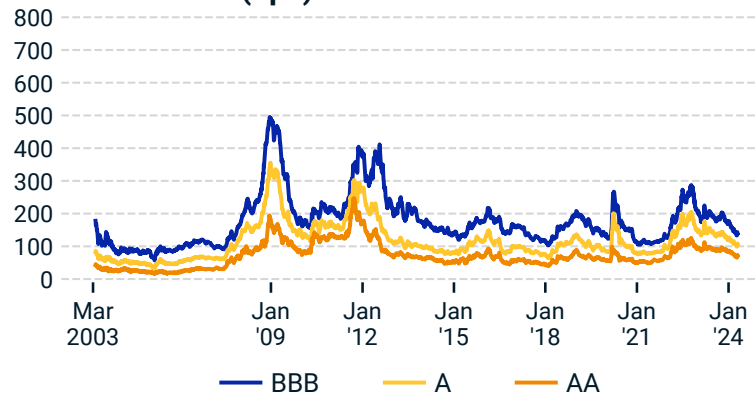


10-Yr Euro Sovereign OAS (bps)*



*Spread to German government curve

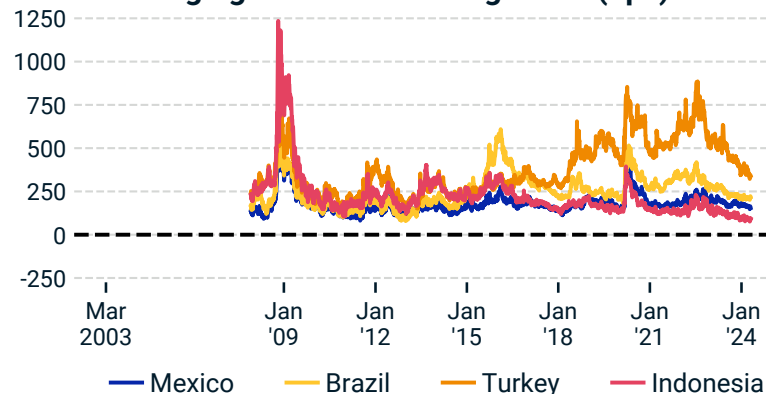
10-Yr Euro OAS (bps)*



*Spread to German government curve

**See Appendix for data sources

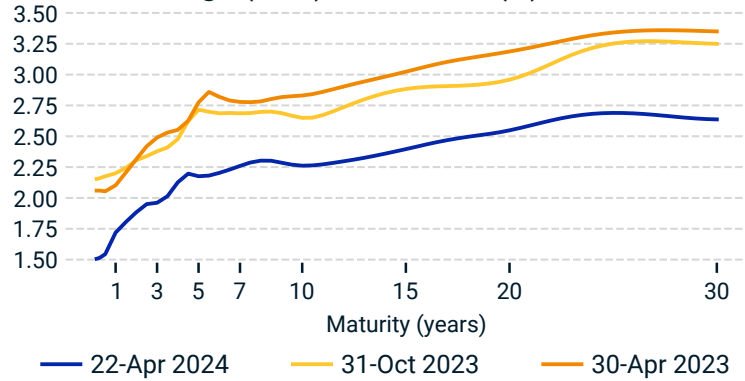
10-Yr Emerging Markets Sovereign OAS (bps)*



*Spread to US Treasury curve

China Government Bond Drilldown

China Sovereign (CNY) Yield Curve (%)

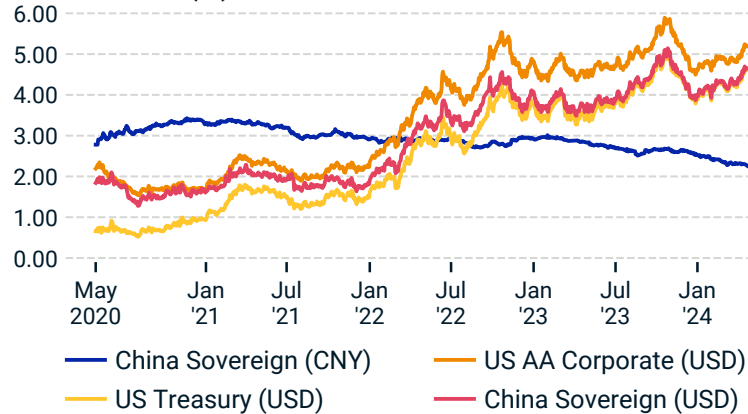


10-Yr China Sovereign Yield (%)



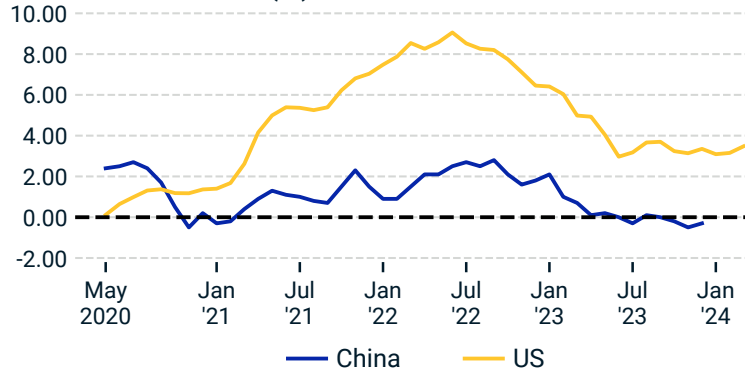
*As of April 22. Equity return in USD

10-Yr Yields (%)



***See Appendix for data sources

Realized Inflation (%)**

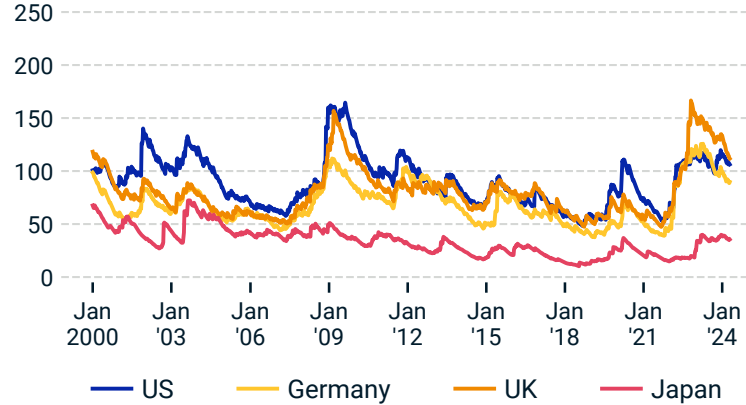


**China inflation (yoy) -0.3% as of Dec 2023
Inflation measured by All Items CPI includes food and energy prices

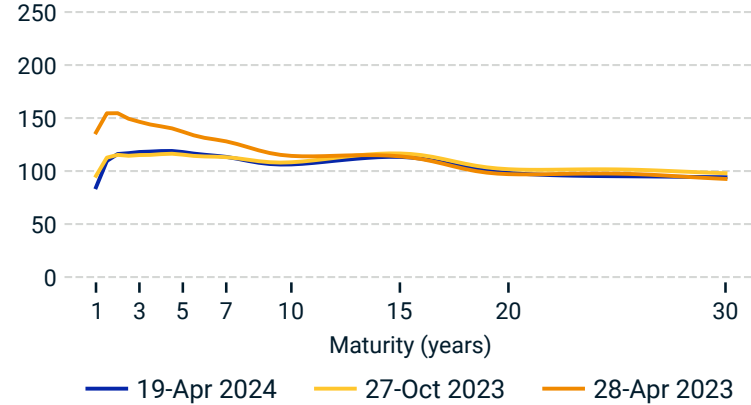
Volatilities, Correlations, FX

Trends in Yield and Return Volatilities

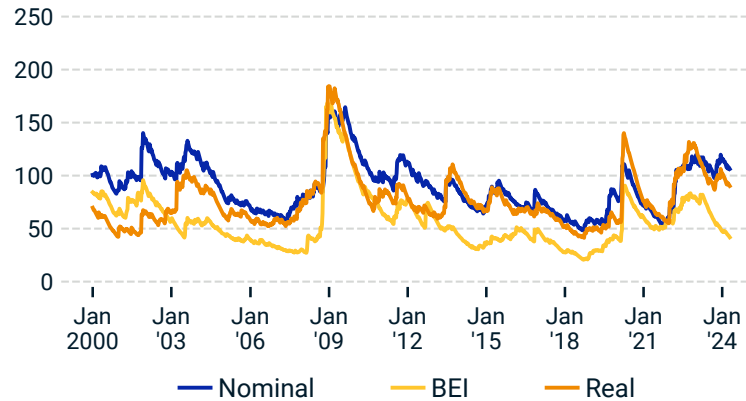
10-Yr Government Nominal Yield Volatility (bps)*



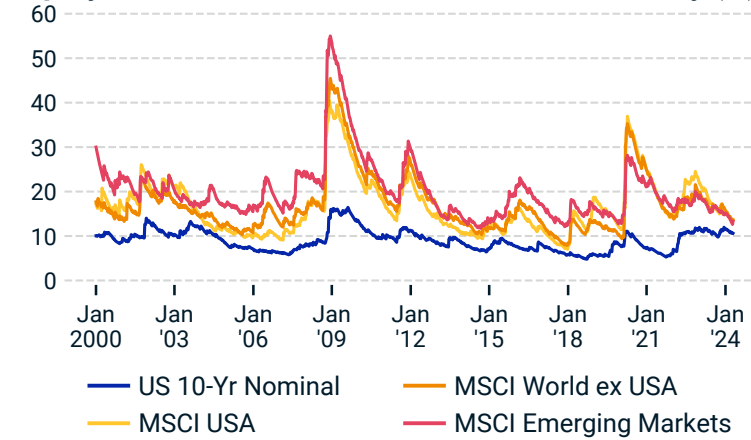
US Nominal Yield Volatility Curve (bps)*



10-Yr US Yield Volatility (bps)*



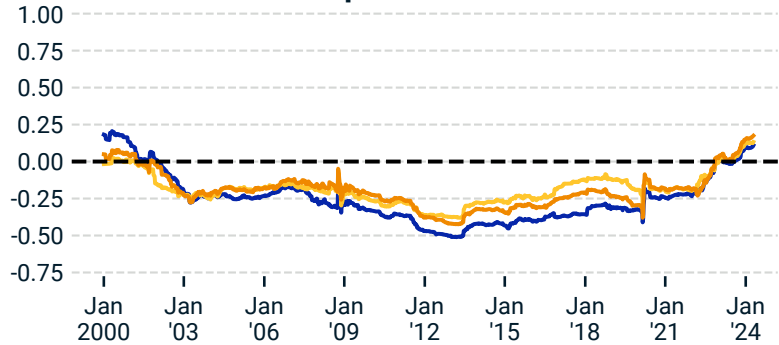
Equity and 10-Yr US Government Return Volatility (%)*



*Realized volatility using exponential time decay with half life of 18-weeks
**See Appendix for data sources

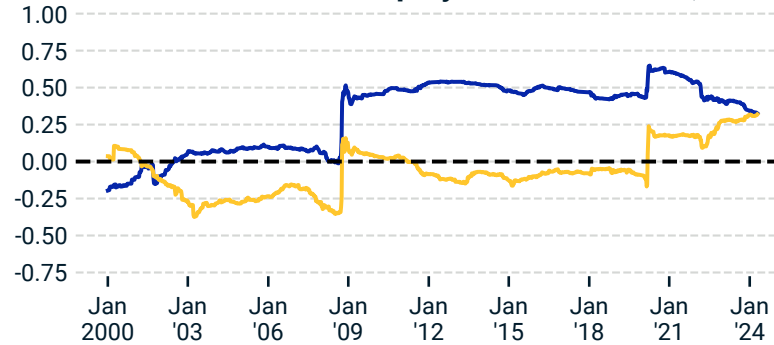
Trends in Correlations and Yield Curve Slope

Return Correlations: Equities & 10-Yr US Government*



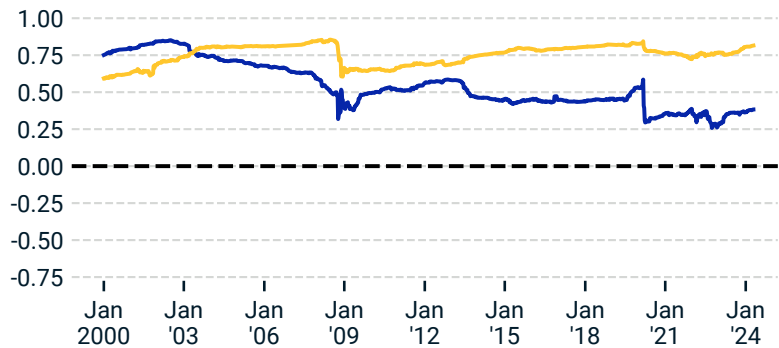
10-Yr Nominal vs: — MSCI USA — MSCI World ex USA
— MSCI Emerging Markets

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



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

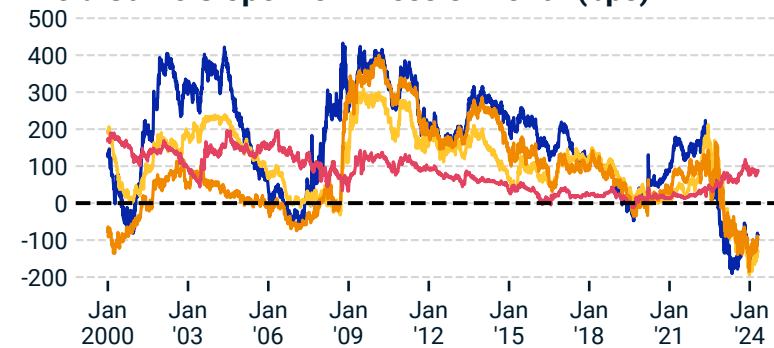
Yield Correlations: 10-Yr US Government*



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

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

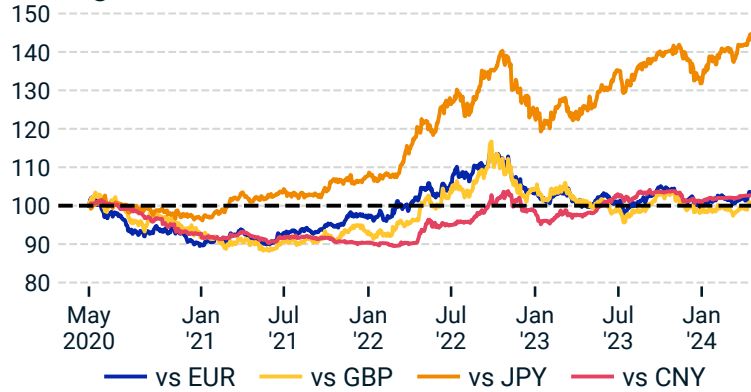
Yield Curve Slope: 10-Yr less 3-Month (bps)



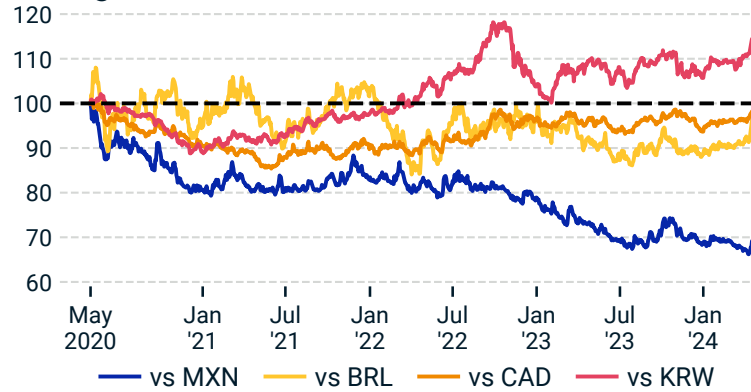
— US — Germany — UK — Japan

FX Trends

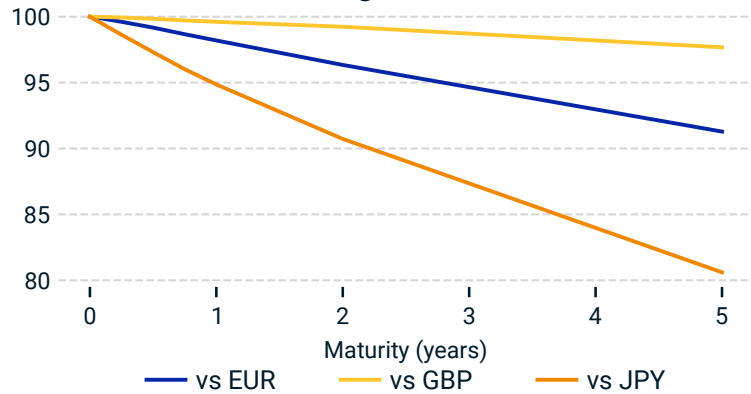
Strength of US Dollar



Strength of US Dollar



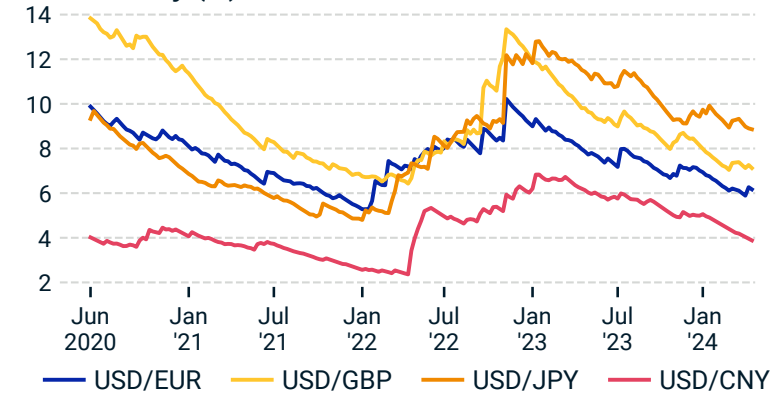
FX Forward Curve: Strength of US Dollar*



*As of April 22

***See Appendix for data sources

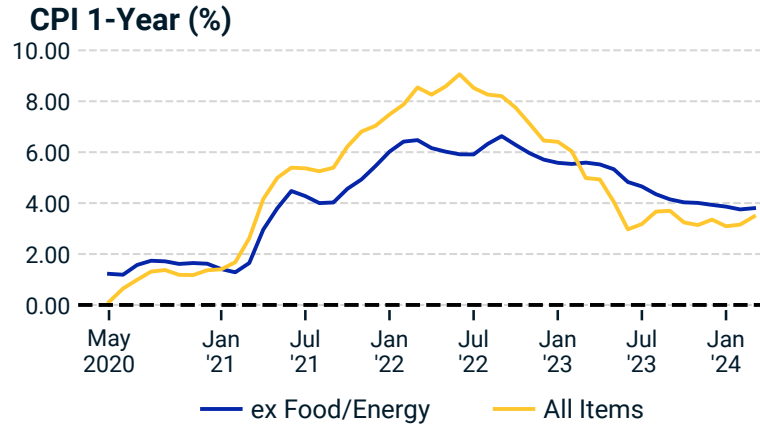
FX Volatility (%)**



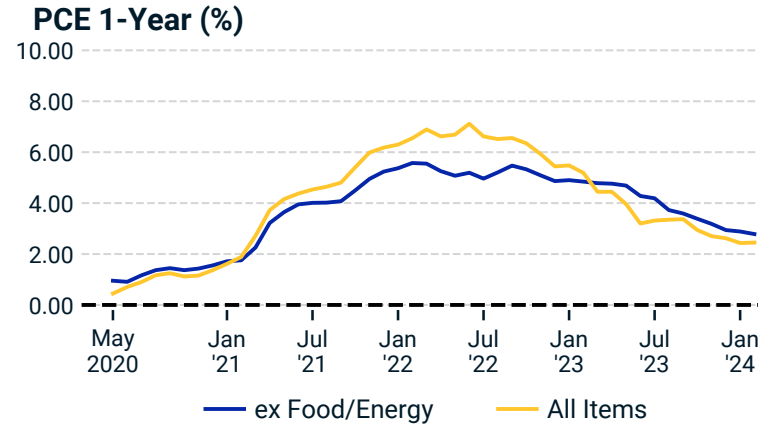
**Realized volatility using exponential time decay with half life of 18-weeks

Historical Inflation and GDP

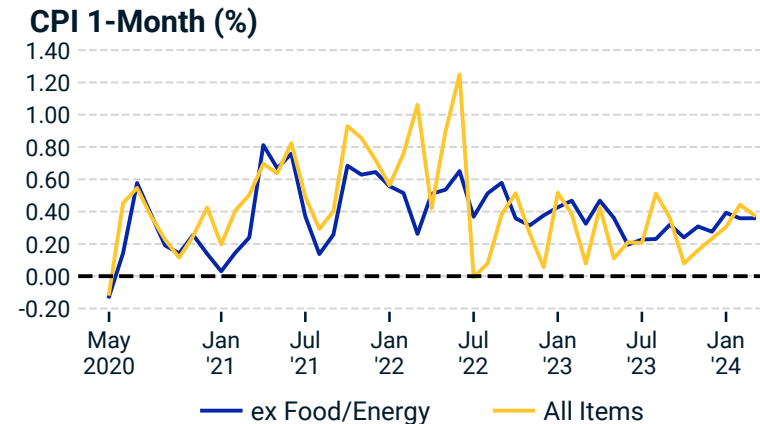
US Inflation: Annual and Monthly (CPI and PCE)



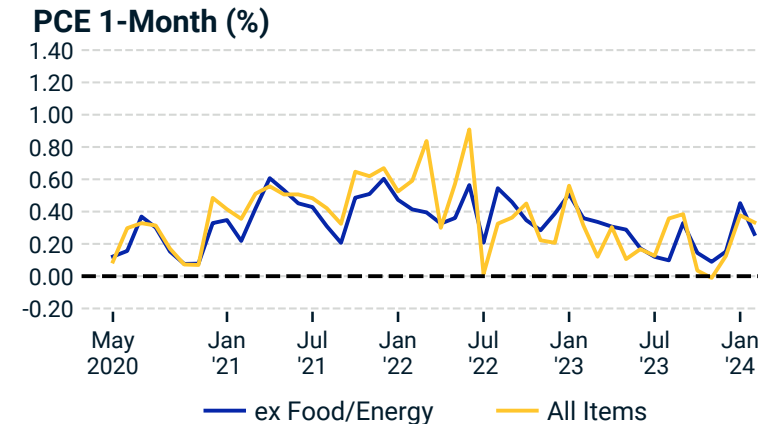
*As of Mar 2024: 3.8 for ex Food/Energy and 3.5 for All Items



*As of Feb 2024: 2.8 for ex Food/Energy and 2.5 for All Items



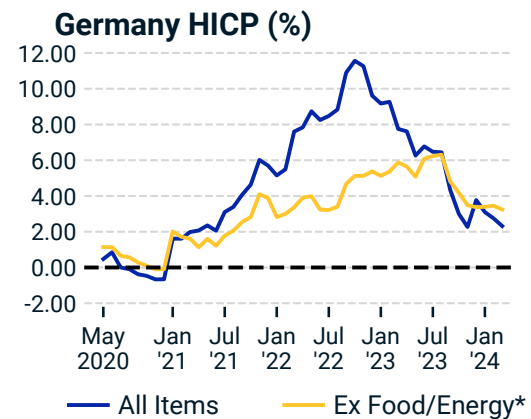
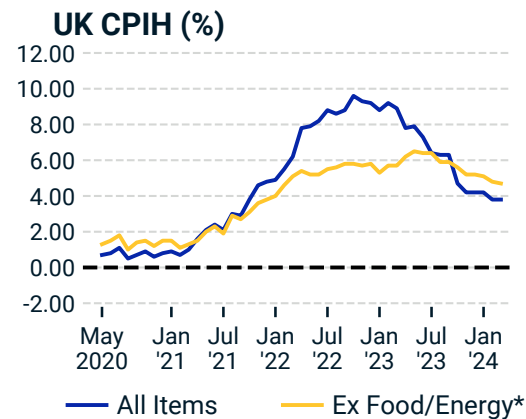
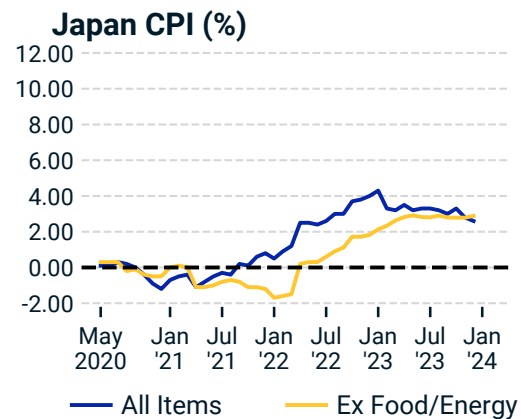
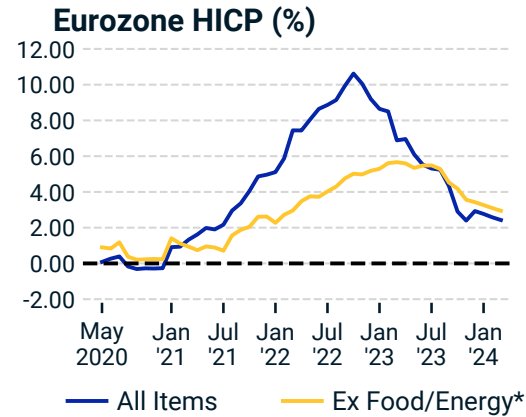
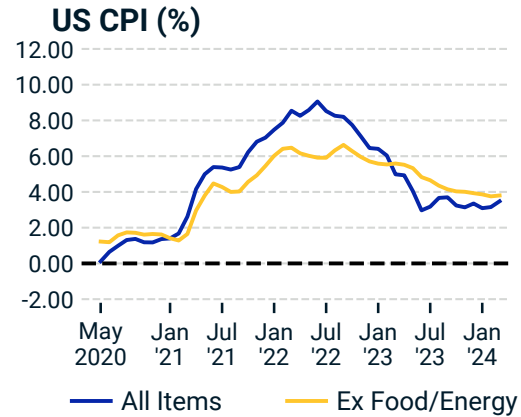
*As of Mar 2024: 0.4 for ex Food/Energy and 0.4 for All Items



*As of Feb 2024: 0.3 for ex Food/Energy and 0.3 for All Items

**See Appendix for data sources

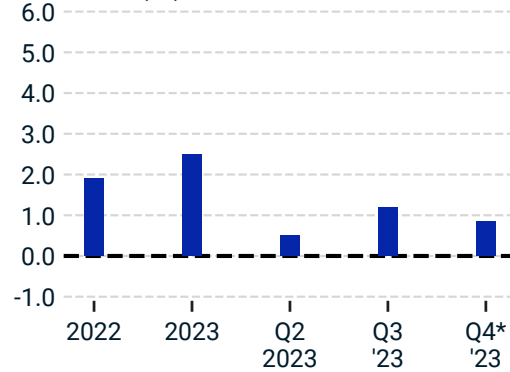
Global Inflation: Annual



*Also excludes Alcohol and Tobacco
 **See Appendix for data sources

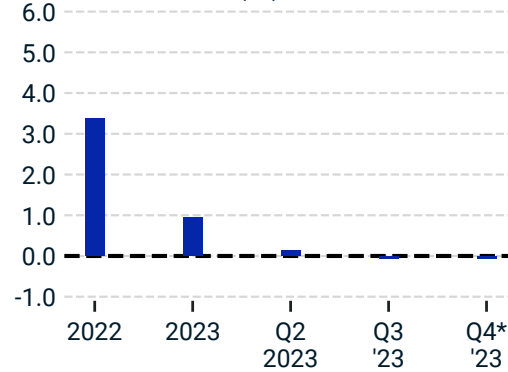
GDP

US GDP (%)



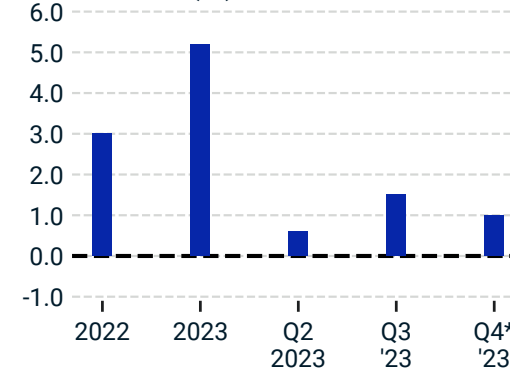
*Most recent quarterly GDP: 0.8

Eurozone GDP (%)



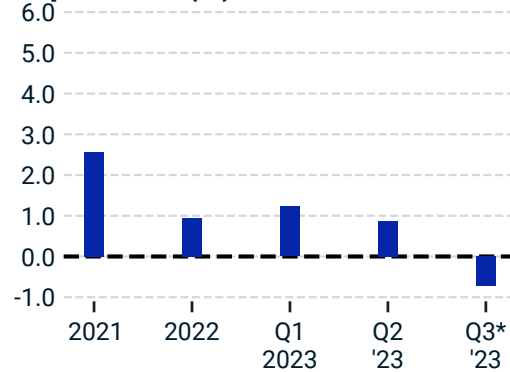
*Most recent quarterly GDP: -0.1

China GDP (%)



*Most recent quarterly GDP: 1.0

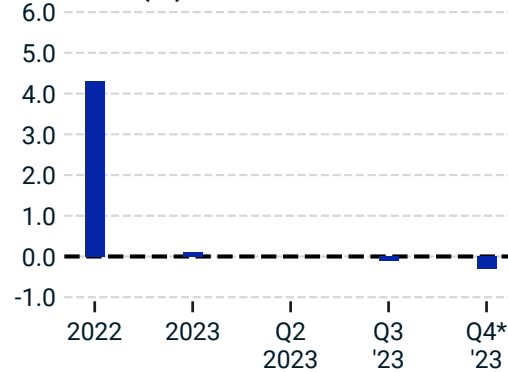
Japan GDP (%)



*Most recent quarterly GDP: -0.7

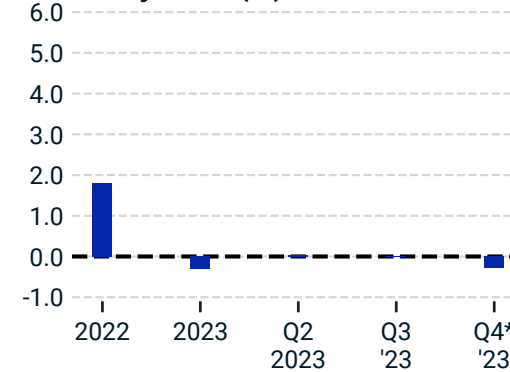
**See Appendix for data sources

UK GDP (%)



*Most recent quarterly GDP: -0.3

Germany GDP (%)



*Most recent quarterly GDP: -0.3

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, US Bureau of Economic Analysis, US Bureau of Labor Statistics, National Bureau of Statistics China

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