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Inversion diversions

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Highlights

- The 2-year Treasury yield now exceeds the 10-year yield, an occurrence which has historically been followed by a recession.
- While the 10-2 Treasury yield curve inversion can be an ominous sign for the global economy, alternative yield curve signals are not yet flashing red.
- Inversions do well historically at foreshadowing recessions but they are much less precise about the timing of the eventual downturn. In the past, recessions have on average occurred more than a year after a sustained inversion.
- Equity returns are not significantly lower than average in the months following a Treasury curve inversion, especially for Canadian stocks.

The yield on 2-year Treasuries now exceeds the yield on 10-year Treasuries, the conclusion of a year-long flattening trend in the yield curve. An inverted 10-2 Treasury yield curve has preceded the past eight recessions, going all the way back to 1970. In the world of economic indicators, the batting average of the inversion signal is impressive, although it is difficult to disentangle correlation from causation. Even the most confident disciple of the inversion signal would stop short of suggesting the 2019 inversion predicted the Covid-related recession in 2020. At the same time, the inversion signal is not just a statistical quirk. There are convincing economic reasons why curve inversions are associated with a recession.

We see “macro” and “micro” explanations for why an inverted yield curve signals a recession:

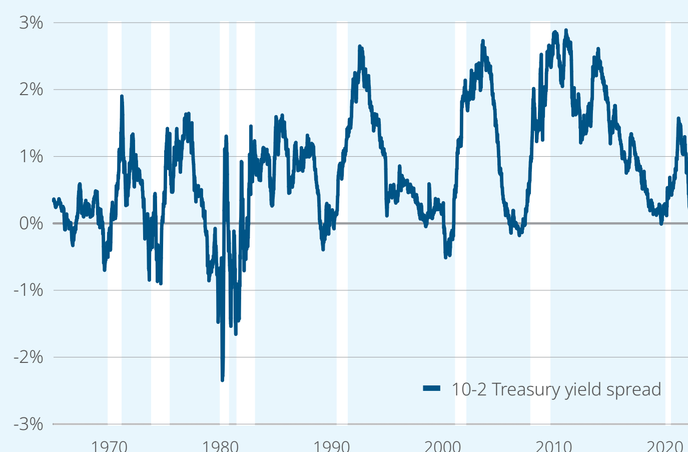
- **At the macro level**, Treasury yields reflect the bond market’s expectation of the Federal Reserve’s future interest rate path. The 10-year Treasury yield is an average of short-term interest rates over the next 10 years (this is a simplification, more on that later). Historically, inversions occur as inflation-targeting central banks hike short-term interest rates to reduce inflationary pressures. Credible central banks kept long-term inflation expectations anchored near the 2% target, limiting the increase in long-term yields relative to short-term rates. However, interest rates are a blunt tool and central banks have tended to overshoot by raising short-term rates more than the economy can sustain, leading to a “hard landing”. In this way, an inverted curve can suggest that the Fed will need to cut rates in the longer term.
- **At the micro level**, when individual businesses and consumers lose confidence in the economic outlook, they consume less and save more. The higher supply of savings puts downward pressure on long-term interest rates. Because short-term rates are pinned down by the Fed’s rate policy, an inversion of the yield curve follows as long-end yields dip below “fixed” short-end yields. Understanding these micro and macro drivers is key to recognizing why the current inversion signal might be flashing yellow, rather than red.

Could this time be different? The list of caveats around the upcoming 10-2 inversion as a recession signal is longer than usual. We highlight three main caveats to be cautious in forecasting a recession based on the expected 10-2 inversion:

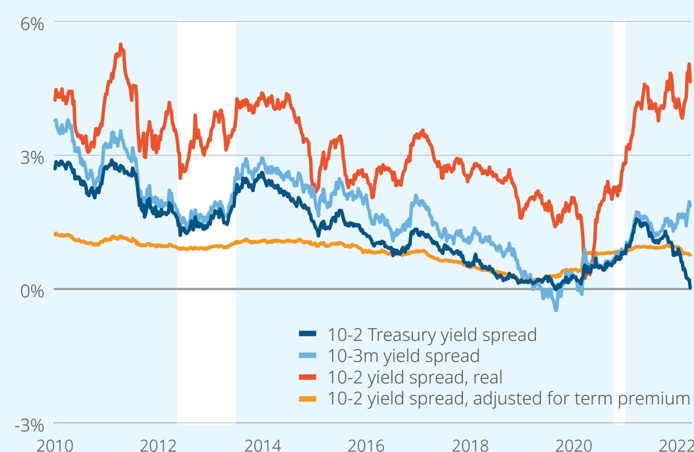
1. **Other key yield curve spreads are not close to negative territory.** The spread that replaces the 2-year yield with the 3m T-bill yield is arguably even stronger at predicting recessions. Historically, the 10-2 spread and 10-3m spread track each other closely. But this is not the case today. As Figure 1 shows, the 10-3m portion of the curve is far from inverting.
2. **The US Treasury yield curve adjusted for inflation is still steep.** Interest rates *after inflation* are what matter for lenders and borrowers. And it's hard to argue that the Fed is overtightening since its policy rate adjusted for expected inflation is *negative* over the next two years. Figure 1 shows that the "real" 10-2 spread is close to historical highs rather than negative.
3. **Quantitative Easing (QE) muddies the signal.** We mentioned above that the 10-year Treasury yield is the average of short-term interest rates over the next 10 years. But investors also get compensated for the risks of holding long-term bonds rather than simply rolling over short-term bonds (i.e., the "term premium"). By most estimates, the term premium has decreased in the past few decades and is now *negative*, with QE by central banks seen by many as the potential culprit for distorting the price signal. Excluding the negative term premium, the 10-2 curve is still far from inverting (Figure 1).

Figure 1. The Treasury curve is sending mixed signals as to the likelihood of a recession

The 10-2 yield curve is very close to inversion



But alternative curve-based indicators paint a different picture



Notes: All data via Bloomberg. Shaded regions represent recessions, as dated by the National Bureau of Economic Research. In the chart on the right, the Adrian, Crump and Moench (2013) estimate is used to subtract term premiums from the 10-2 spread.

While the inversion signal's track record at forecasting an eventual recession is strong, its usefulness for predicting the timing of downturns is mixed. The last eight recessions occurred on average 13 months after the 10-2 curve inverted. The 2008 recession began two years after the first curve inversion. In this context, investors should use the yield curve signal cautiously since historically stock markets continued to deliver gains after the yield curve inverted. On average, in the 6 months following the yield curve inversions that forecasted the last 8 recessions, the S&P 500 returned 3.0% and the TSX returned 6.4%. These results compare to an average 6-month return of 3.5% for both indices over the total period.

The inversion of the 10-2 Treasury curve has historically been a powerful warning sign of recessions, but it is not a cause for concern… yet. An important lesson for investors is to treat this signal cautiously because stock market returns have historically performed well for many months following a curve inversion. In our view, an inversion signal is most powerful when combined with other leading indicators of the economic and market outlook, such as long-term valuations, business cycle signals and sentiment indicators.

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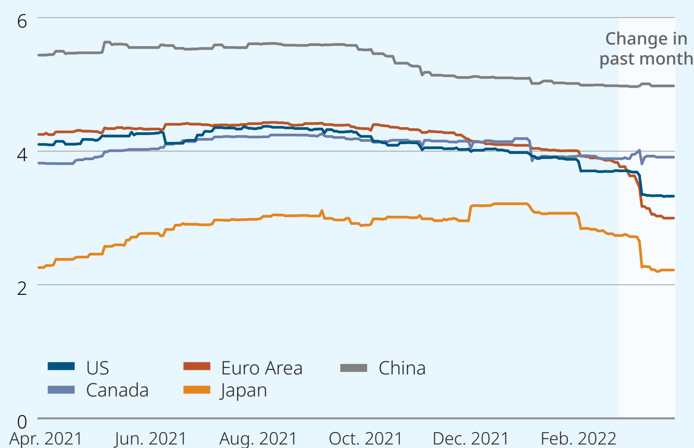
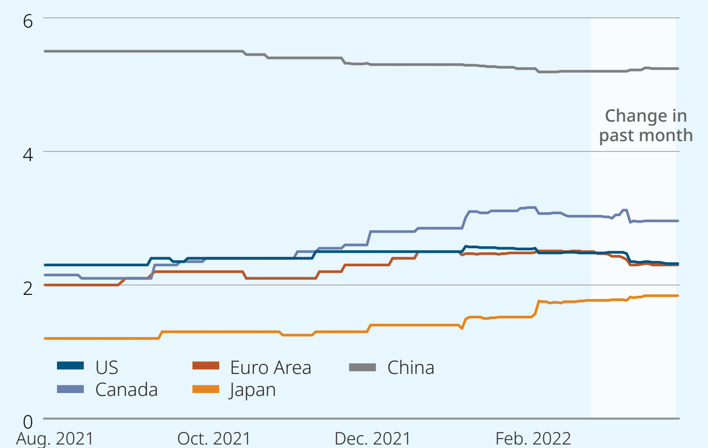
Global macro update

- For the past few quarters, **2022 growth forecasts** for the US, Europe and Canada had tracked each other closely, hovering around 4%. This changed in recent weeks, with economists now expecting 3.9% GDP growth in Canada this year, against only 3.3% in the US and 2.9% in Europe. As we discussed in last month's commentary, because Canada's commodity production profile resembles that of Russia and Ukraine's, its economic growth prospects are less impacted by the invasion. But Canada is also ending Q1 on very strong macro footing, with a booming economy and a tight labour market. The Canadian economy created an incredible 336k jobs in February, erasing the 200k lost jobs from Omicron lockdowns in January, and then some.
- A week after the upside surprise in job creation, **Canadian CPI inflation** for February came in hot at 5.7% year-on-year. With the Bank of Canada having embarked on a steady path of rate hikes, inflation forecasters' eyes now turn to fiscal policy, as the federal government prepares to release its 2022 budget. The 2021 budget trumpeted a spending package of $100 billion over three years, much of which has yet to be detailed. The macro portrait has changed a lot since spring 2021, as a locked-down economy has made way to inflation and a stretched labour market. Will the government stick to its spending plans and risk overheating the economy?

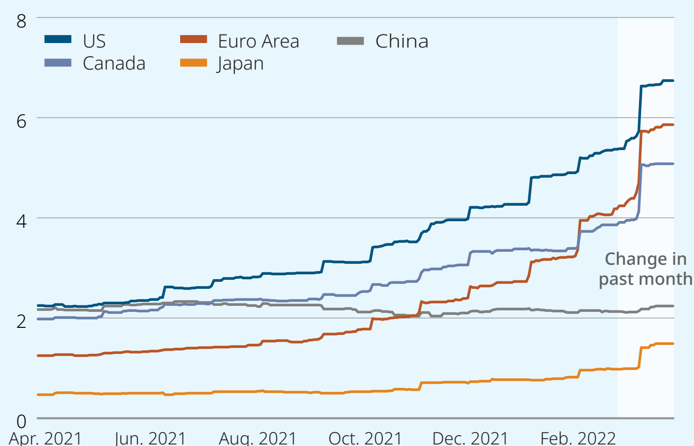
2022 real GDP growth forecast (%, consensus)



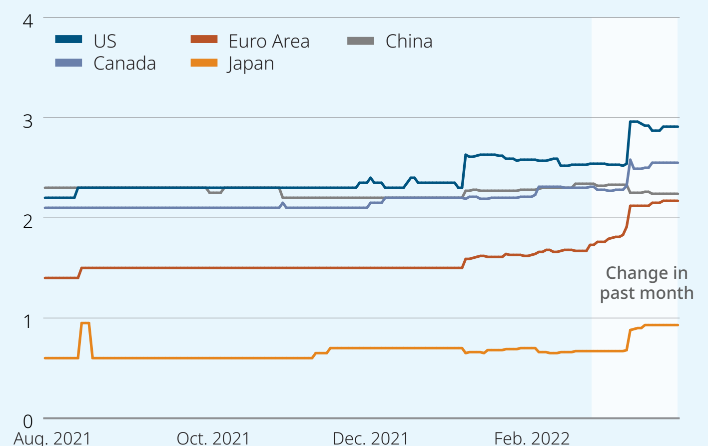
2023 real GDP growth forecast (%, consensus)



2022 inflation forecast (%, consensus)



2023 inflation forecast (%, consensus)



Notes: Forecasts from Consensus Economics as of March 31, 2022.

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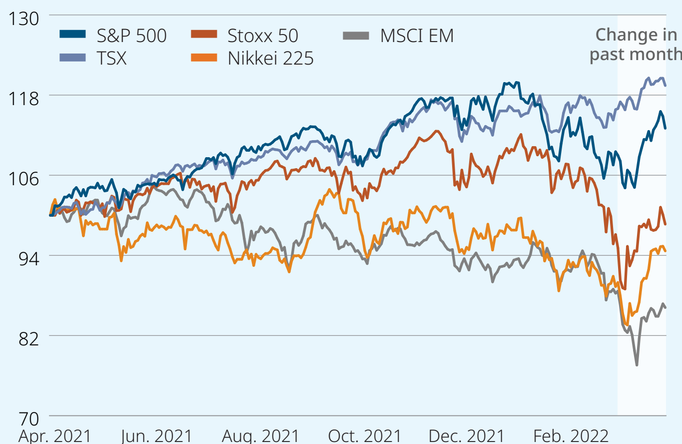
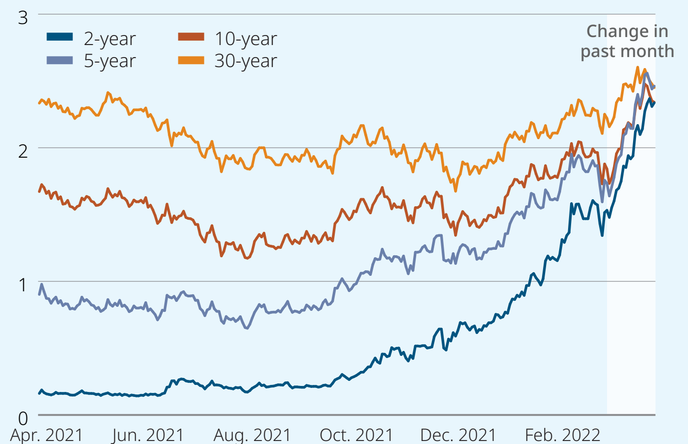
Capital markets update

- **Equity markets** rallied strongly in the second half of March, with US, Europe, Japan and Emerging market stock indices ending the month at least 10% off the month's lows. Canadian stocks were once again among the most resilient performers globally, closing March up 4.5%, while avoiding the drawdowns experienced by other markets.
- **Yields on US Treasury bonds surged** across the curve, with shorter-term bonds seeing the most impressive moves. Yields on 2-year Treasuries (+90bps) and 5-year Treasuries (+74bps) had not jumped this much in a month since the 1980s. Short-term bonds will likely remain volatile over the next few months, given the uncertainty around the Federal Reserve's pace of rate normalization. Markets currently expect the equivalent of eight additional 25bps rate hikes this year, implying a pace of hiking not seen since 1994.
- **The Canadian dollar** was the best-performing G5 currency in March, gaining 1.3% against the US dollar. Continued growth in commodity prices explains much of the CAD's strength, with the Bank of Canada's commodity exports index rising 11% last month. At the other end of the spectrum, the Japanese yen lost 5.5% against the US dollar, as the Bank of Japan signalled it would be keeping interest rates lower for longer, going against the grain of other major central banks' tightening of policy.

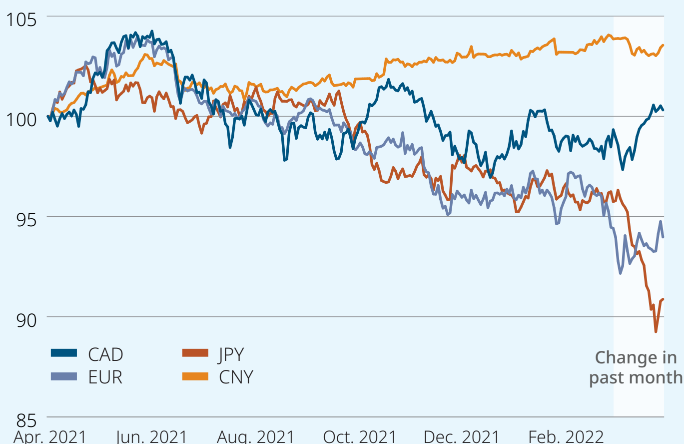
Equity indices (one year ago=100)



US Treasury yields (%)



Currencies (relative to USD, one year ago=100)



Commodity prices (in USD)

Notes: Financial data from Bloomberg as of March 31, 2022. Total return equity indices are in local currencies, except MSCI EM, which is denominated in USD.

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What we'll be watching in April

April 12: March US Consumer Price Index (CPI) release

- The headline inflation rate for March should break recent records, driven by a 15-20% rise in gasoline prices statewide. But the move in core prices is the more interesting one to watch.
- As covered in the Emerging Theme below, while we will probably begin to see in the March core CPI data a softening of some of the longer-running sources of price pressures (transportation, used cars), rents and service-sector prices should more than pick up the slack.

April 17: Bank of Canada policy decision

- The Bank of Canada hiked its policy rate by 25 bps on March 2nd, bringing the rate at which it pays interest to banks to 0.5%. We expect the BoC to hike again in April, this time by 50 bps. The last time it hiked by more than 25bps in one decision was in May 2000.
- Given the Federal Reserve is contemplating raising rates by 50 bps, the Bank of Canada is more than justified to take that step as well. Compared to its neighbour to the south, Canada's labour market is tighter, its housing market is hotter, its economy is less impacted by the Ukraine invasion and its growth rate is expected to be higher in 2022 and 2023, especially in nominal terms.

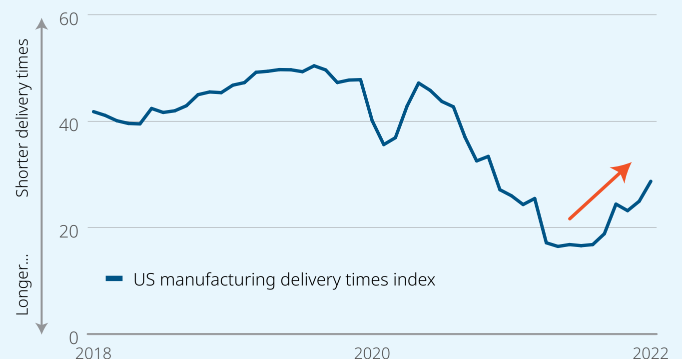
April 17: China Q1 GDP release

- China's 6.4% annualized GDP growth for 2022 Q4 was an upside surprise, as the government stepped in to limit the contagion from the country's real estate crisis to the broader economy. But the residential sector's woes will continue to weigh on growth throughout 2022, and the government will keep stimulating exports and business investment to compensate.

Emerging theme

- Among March's headlines of surging commodity prices and rising inflation expectations, many missed the **generalized improvement in supply chain indicators.** March was the first month since the start of the pandemic that we saw an easing in arguably the three most oft-quoted US supply chain indicators: manufacturing delivery times, Shanghai-Los Angeles freight rates and the Manheim used car price index. Alternative measures of delivery delays, freight rates and used car prices showed similar improvements.
- We've often repeated that the bottlenecks causing price pressures were concentrated in the "transportation" portion of the supply chain, not the "production" portion. Except in a few key sectors like cars, manufacturing capacity is not overwhelmed, both in the US and abroad. **It is mostly transportation capacity that is causing low inventories and gouged prices.** As this normalizes, manufacturing inventories will become retail inventories, relieving shortages. Trucking is the best example of this nascent normalization. Spot prices for trucking services are dropping, while driver rejection rates for trucking contracts are at an 18-month low, 15% vs. 23% just 3 months ago.
- Unfortunately, with inflation broadening out in recent months, **price pressures are not confined to the supply chain-constrained durable goods sector anymore**, so a potential respite in that sector would likely not be enough for core inflation to moderate significantly.

Supply chain indicators quietly improved in March



Notes: Data from Markit.

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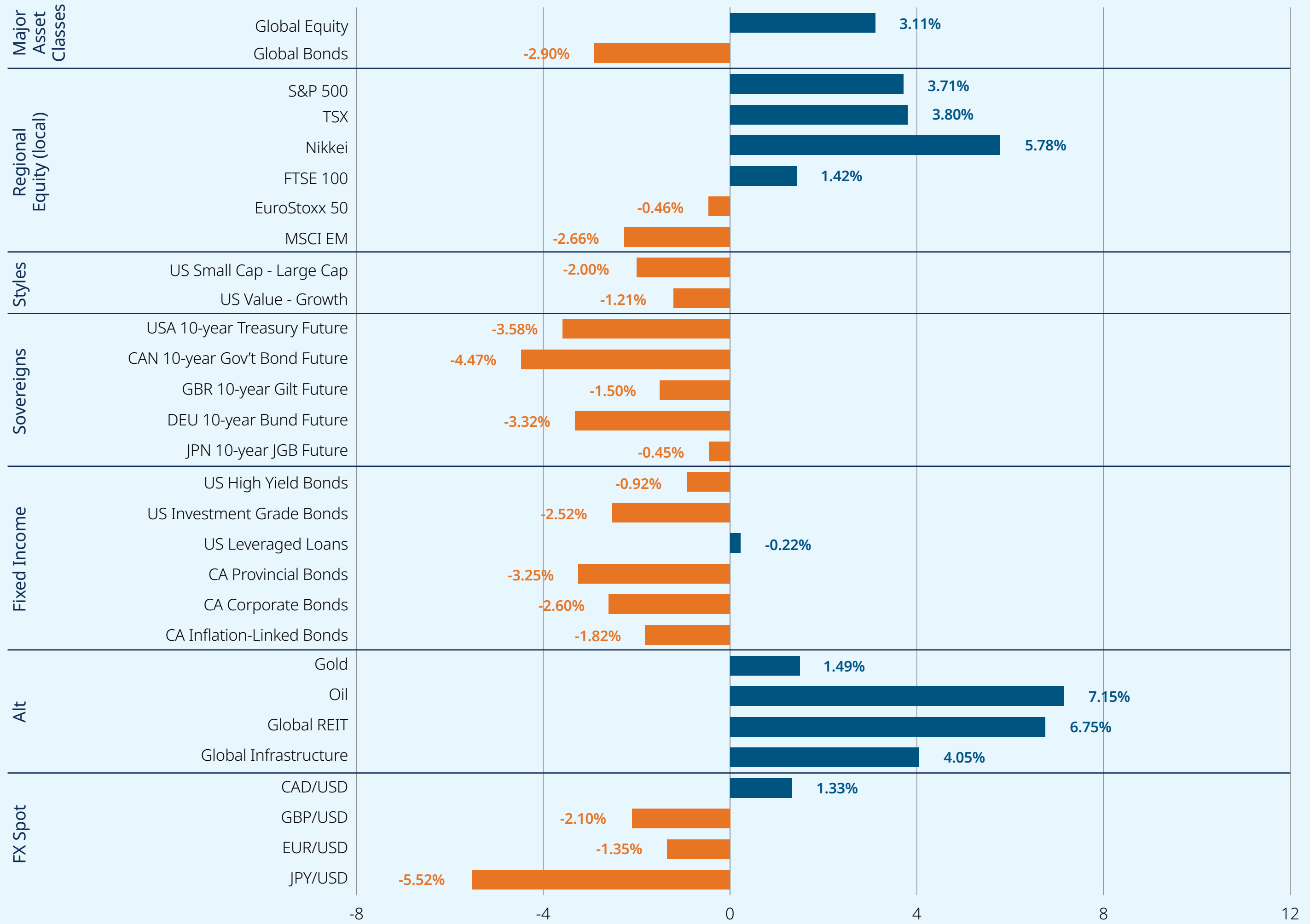
Capital market returns in March



Notes: Market data from Bloomberg as of March 31, 2022. Index returns are for the period: 2022-03-01 to 2022-03-31. In order, the indices are: MSCI World (lcl), BBG Barclays Multiverse, S&P 500 (USD), TSX Composite 60 (CAD), Nikkei 225 (JPY), FTSE 100 (GBP), EuroStoxx 50 (EUR), MSCI EM (lcl), Russell 2000 - Russell 1000, Russell 1000 Value - Russell 1000 Growth, USA 10-year Treasury Future, CAN 10-year Gov't Bond Future, GBR 10-year Gilt Future, DEU 10-year Bund Future, JPN 10-year JGB Future, BAML HY Master II, iBoxx US Liquid IG, Leveraged Loans BBG (USD), Provincial Bonds (FTSE/TMX Universe), BAML Canada Corp, BAML Canada IL, BBG Gold, BBG WTI, REIT (MSCI Local), Infrastructure (MSCI Local), BBG CADUSD, BBG GBPUSD, BBG EURUSD, BBG JPYUSD.

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