

Asset Allocation Strategy

CIO Office | April 2022

When conflict between nations rhymes with inflation

Highlights

- After a first quarter marked by increasingly hawkish central banks and the Russian invasion of Ukraine, Canadian equities are practically standing alone in positive territory, while other major equity markets and even bond markets are lower.
- We continue to view the economic environment as supportive for risk assets. While the conflict in Ukraine will push up energy and food prices over the coming months, inflation should ultimately begin to moderate later this year. Economic growth is bound to slow, but the strength of the manufacturing sector and the positive outlook for earnings growth should continue to be supportive for equities. Moreover, stocks seem to have already discounted a significant portion of the upcoming monetary tightening.
- Nevertheless, the economic uncertainty surrounding our base-case scenario has undeniably increased in recent weeks, as the knock-on effects from the situation in Ukraine and international sanctions against Russia remain hard to quantify. In addition, the recent surge in Treasury yields – a 2.0 standard-deviation move, technically stretched – has improved the defensive properties of bonds, while an easing of inflationary pressures and aggressive rate hike expectations could also see bonds rebound along with stocks.
- Under the circumstances, on March 28 we took the opportunity to materialize gains and reduce our overweight in equity markets by one notch through a higher allocation to bonds. Geographically, we also added to our bias toward Canadian and U.S. equities (where growth prospects are strongest) and reduced our exposure to EAFE equities (where recession risks are more prevalent).

Table 1 Global Asset Allocation Views

| | - | ← | = | → | + | Δ |
|------------------------------|---|---|---|---|---|---|
| Asset Classes | | | | | | |
| Cash | | | | | | |
| Fixed Income | | | | | | ↑ |
| Equities | | | | | | ↓ |
| Alternatives | | | | | | |
| Fixed Income | | | | | | |
| Government | | | | | | |
| Investment Grade | | | | | | |
| High Yield | | | | | | |
| Duration | | | | | | |
| Equities | | | | | | |
| Canada | | | | | | ↑ |
| United States | | | | | | ↑ |
| EAFE | | | | | | ↓ |
| Emerging Markets | | | | | | |
| Value (vs. Growth) | | | | | | |
| Small (vs. Large) | | | | | | |
| Cyclicals (vs. Defensives) | | | | | | |
| Alternatives & FX | | | | | | |
| Inflation Protection | | | | | | |
| Gold | | | | | | |
| Non-Traditional FI | | | | | | |
| Uncorrelated Strategies | | | | | | |
| Canadian Dollar | | | | | | |

This table is for illustration purposes only. Bars represent the degree of preference of an asset relative to the maximum deviation allowed from a reference index. The further to the right (left) they are, the more bullish (bearish) our outlook for the asset is. No bars indicate a neutral view. The column under the delta sign (Δ) displays when our outlook has improved (↑) or worsened (↓) from the previous month. Consult Table 3 to see how they translate into a model balanced portfolio.

CIO Office

Market Review

Fixed Income

- Following a difficult month of February, fixed-income securities continued to suffer significant losses in March. The pivot by central banks to a more restrictive monetary policy has led to a rapid rise in interest rates. The Canadian bond universe is down 6.8% year-to-date, its worst quarterly performance ever.
- Because of their longer duration, long- and medium-term bonds were hit the hardest. On the corporate side, the least risky bonds (investment grade) declined the most, as their low coupon value made them more sensitive to interest rate movements.

Equities

- The first two weeks of March were difficult for global equities, with the Ukrainian conflict bringing its share of worries. However, market sentiment made a fairly drastic about-face mid-month; volatility fell and stock markets soared. In the end, the S&P 500 closed the month up 3.7%, outperforming the Russell 2000 which is made up of small-cap companies.
- The Canadian equity market continued its strong performance with the flagship S&P/TSX Index gaining 3.8% in Q1 while U.S., EAFE, and emerging market equities experienced losses over the same period.

FX & Commodities

- Oil prices rose again in March, enjoying a strong geopolitical risk premium.
- The U.S. dollar appreciated, benefitting from its status as a safe-haven currency in times of instability. However, the Canadian dollar strengthened against the Greenback supported by rising commodity prices, most importantly, crude oil.

Table 2 Market Total Returns

| Asset Classes | March | Q1 | 12 MTH |
|-------------------------------------|--------------|--------------|--------------|
| Cash (S&P Canada T-bill) | -0.1% | -0.1% | 0.1% |
| Bonds (BofA CA Univ.) | -3.0% | -6.8% | -4.2% |
| BofA CA Short term | -1.9% | -2.9% | -3.2% |
| BofA CA Mid term | -4.0% | -6.7% | -4.8% |
| BofA CA Long term | -3.5% | -11.5% | -5.2% |
| BofA CA Government | -2.8% | -5.6% | -4.2% |
| BofA CA Corporate | -3.2% | -6.5% | -4.1% |
| BofA Inv. Grade (\$US) | -2.6% | -7.7% | -4.3% |
| BofA High-Yield (\$US) | -0.9% | -4.5% | -0.3% |
| Preferred Shares | -0.3% | -2.5% | 6.9% |
| CA Equities (S&P/TSX) | 4.0% | 3.8% | 20.2% |
| Energy | 7.0% | 28.7% | 59.3% |
| Industrials | 8.2% | 3.9% | 13.5% |
| Financials | -0.7% | 2.2% | 22.4% |
| Materials | 10.1% | 20.1% | 34.1% |
| Utilities | 6.9% | 5.0% | 13.3% |
| Cons. Disc | -1.7% | -7.7% | -2.8% |
| Cons. Staples | 10.1% | 5.4% | 25.7% |
| Healthcare | 3.4% | -8.5% | -46.7% |
| IT | -1.2% | -35.5% | -22.7% |
| Comm. Svc. | 4.9% | 8.8% | 26.8% |
| REITs | 2.0% | -4.7% | 19.1% |
| S&P/TSX Small Cap | 3.9% | 8.4% | 18.8% |
| US Equities (S&P500 USD) | 3.7% | -4.6% | 15.6% |
| Energy | 9.0% | 39.0% | 64.3% |
| Industrials | 3.4% | -2.4% | 6.1% |
| Financials | -0.2% | -1.5% | 14.7% |
| Materials | 6.1% | -2.4% | 13.9% |
| Utilities | 10.4% | 4.8% | 19.9% |
| Cons. Disc | 4.9% | -9.0% | 9.8% |
| Cons. Staples | 1.8% | -1.0% | 16.1% |
| Healthcare | 5.6% | -2.6% | 19.1% |
| IT | 3.5% | -8.4% | 20.9% |
| Comm. Svc. | 1.0% | -11.9% | -0.9% |
| REITs | 7.8% | -6.2% | 25.8% |
| Russell 2000 (USD) | 1.2% | -7.5% | -5.8% |
| World Eq. (MSCI ACWI) | 2.2% | -5.3% | 7.7% |
| MSCI EAFE (USD) | 0.8% | -5.8% | 1.6% |
| MSCI EM (USD) | -2.2% | -6.9% | -11.1% |
| Commodities (CRB index) | 9.7% | 27.1% | 59.8% |
| WTI Oil (US\$/barrel) | 4.8% | 33.3% | 69.5% |
| Gold (US\$/ounce) | 2.0% | 6.5% | 13.9% |
| Copper (US\$/tonne) | 4.5% | 6.4% | 18.0% |
| Forex (DXY - USD index) | 1.7% | 2.4% | 5.4% |
| USD per EUR | -0.9% | -2.2% | -5.3% |
| CAD per USD | -1.4% | -1.1% | -0.5% |

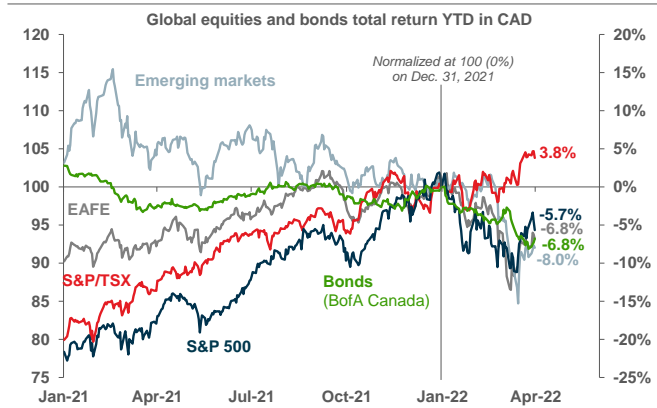
Data via Refinitiv

2022-03-31

An eventful first quarter

After a first quarter marked by increasingly hawkish central banks and the Russian invasion of Ukraine, Canadian equities are practically standing alone in positive territory, while other major equity markets and even bond markets are lower (**Chart 1**).

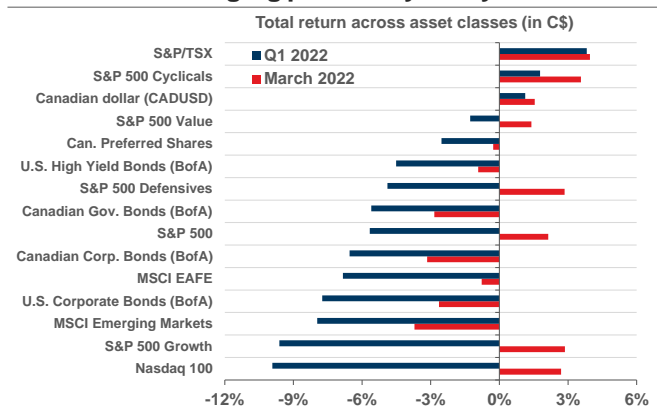
1 | A positive first quarter for Canadian stocks...



CIO Office (data via Refinitiv).

Despite this, U.S. equities performed well in March and not only within cyclical sectors, but also with growth stocks, although the latter are lagging significantly year-to-date. In contrast, the situation remained challenging for emerging markets and bonds, both of which posted a third consecutive month of losses (**Chart 2**).

2 | ... but challenging practically everywhere else...

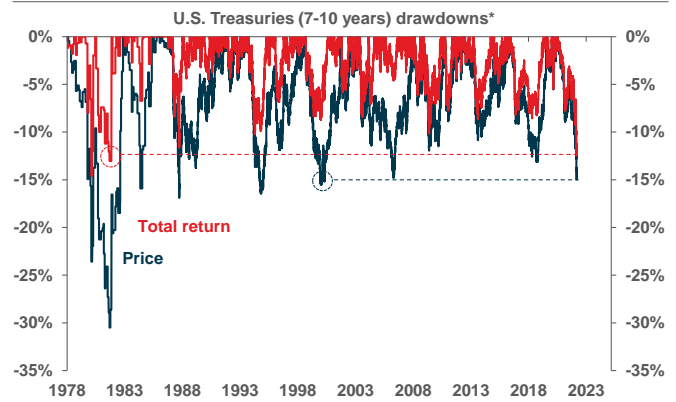


CIO Office (data via Refinitiv).

While moves of this magnitude are not unusual for stocks, bond declines are far less frequent. In fact, the retreat in U.S. Treasuries from their most recent peak is the largest since 2000 in prices (-15%) and

since 1981 when income (much less prominent these days) is included (-12.5%) (**Chart 3**).

3 | ... especially in the bond market



CIO Office (data via Refinitiv). *3-yr rolling window.

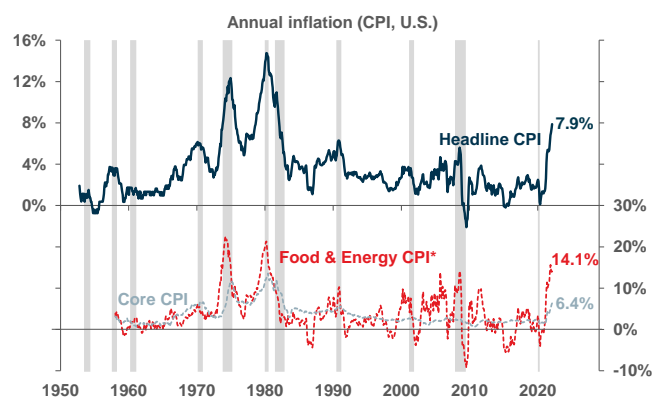
Overall, these developments proved particularly beneficial for our tactical asset allocation strategy: underweight bonds against an overweight in North American equities and cash. Under the circumstances, on March 28 we used this opportunity to materialize gains and recalibrate our risk exposure in the face of a fundamentally more uncertain economic environment. We will come back to this in our conclusion, but for now, let's briefly review the two macroeconomic issues of the day: inflation and monetary policy.

Food and Energy

One month into the Russian invasion, the atrocities from a human standpoint are clear, but the economic impact remains difficult to quantify given the wide range of scenarios to follow. What we do know, however, is that the importance of Russia and Ukraine in the production of many commodities will have an impact on inflation, particularly for food and energy (**Chart 4**, next page).

Now, this doesn't mean we should throw out the prospects for a slowdown in year-over-year inflation. In fact, although we probably haven't seen the peak yet, the pace of food price increases coming out of the pandemic is so blistering that it is virtually guaranteed to slow over a 12-month horizon. Despite their sharp rise since the start of

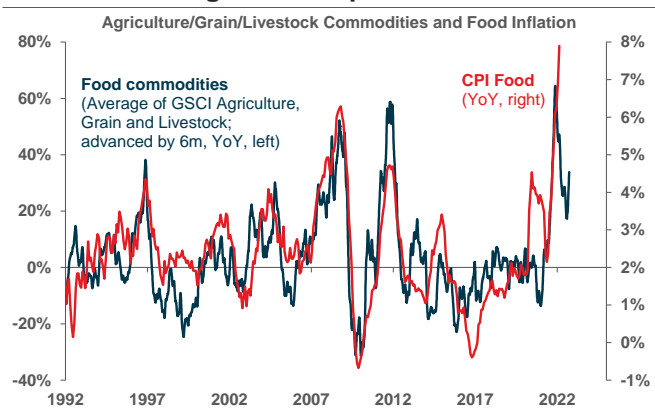
4 | Inflation remains the key issue



CIO Office (data via Refinitiv). * Weighted average: 35% energy / 65% food

the war, this is still what commodity prices in the agriculture, grain, and livestock sectors suggest (**Chart 5**).

5 | The bar is high for food prices...

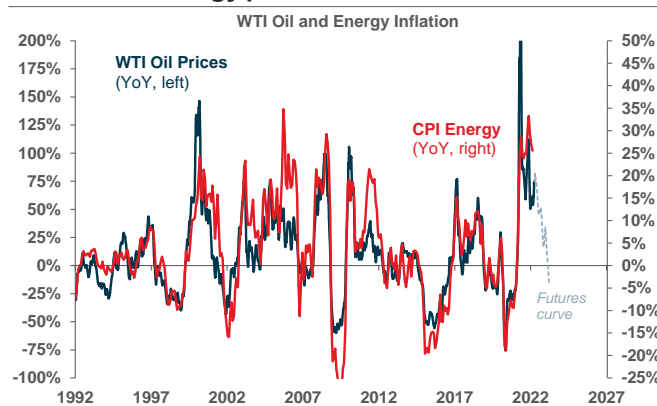


CIO Office (data via Refinitiv).

Similar observations can be made for energy inflation (consisting mostly of gasoline prices) which predictably tends to follow the evolution of oil prices very closely. To achieve a pace of growth as high as what we have just experienced, WTI prices would essentially have to reach \$200 per barrel over the next 12 months (i.e. roughly double today's level). Nothing is impossible; recall that prices fell into negative territory in April 2020. However, judging from the futures curve,¹ it seems more likely prices will be lower a year from now (**Chart 6**).

¹ The futures curve is not a forecast per se, but primarily a reflection of producer hedging activity. However, the discount between the price in 12 months and the price in 1 month is close to an all-time high, reflecting the exceptional and potentially temporary nature of prices currently influenced by geopolitical uncertainty.

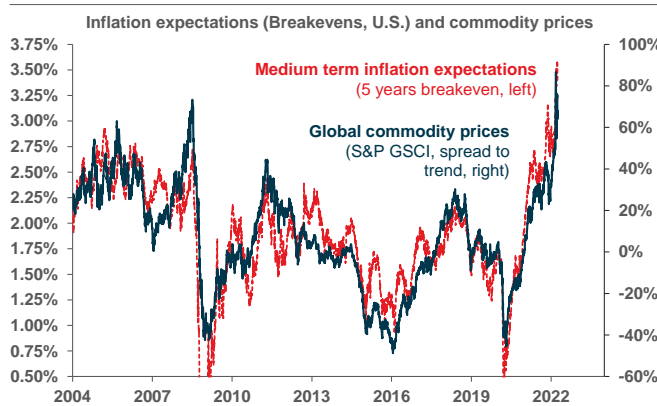
6 | ... and energy prices...



CIO Office (data via Refinitiv).

For central banks, the eventual turnaround in annual inflation will certainly be welcome, but the situation is likely to remain uncomfortable for some time. Indeed, market expectations of medium-term inflation (highly correlated with commodity prices) have recently reached an all-time high (**Chart 7**), a sign that the return to target for inflation may take longer than originally hoped.

7 | ... but the return on target may take some time



CIO Office (data via Refinitiv).

Fortunately, longer-term inflation expectations remain within the Fed's target range (**Chart 8**, next page), suggesting that despite everything, markets haven't lost confidence in the Central Bank's ability to meet its price stability mandate. To ensure this remains the case, the Fed now believes it will need

8 | Markets have not lost confidence in the Fed

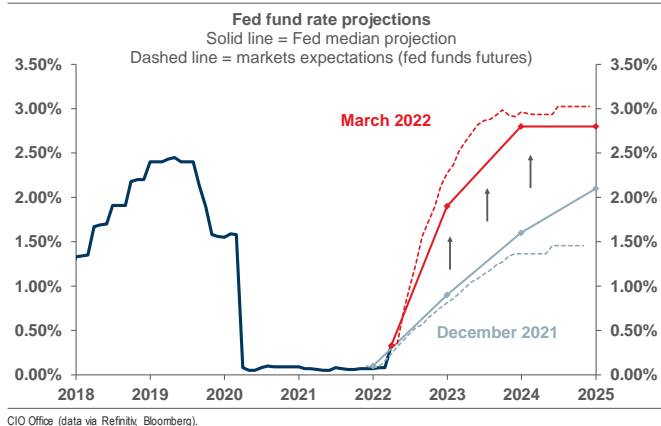


to quickly normalize its monetary policy, and this is what is in store for the coming quarters.

Yields surge, curves plunge

No doubt about it: the Federal Reserve considers that the state of inflation and the job market no longer justify the current level of monetary accommodation. Thus, in addition to delivering its first rate hike in March (unsurprisingly), it is now projecting 6 more increases in 2022, that is at each of its upcoming meetings. For their part, markets are even assuming that 2 of these 6 hikes will be of 50 bps, for a grand total of 225 bps in rate increases in 2022. This is slightly more than double what was expected last December (Chart 9).

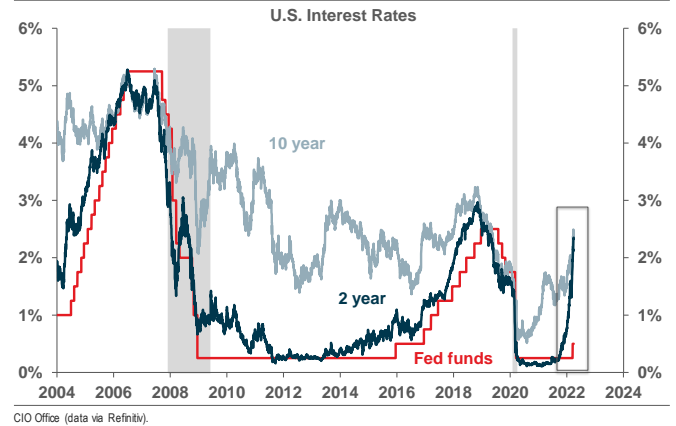
9 | Rate hike projections have doubled...



These circumstances led to a meteoric rise in 2-year yields, which settled a few basis points below

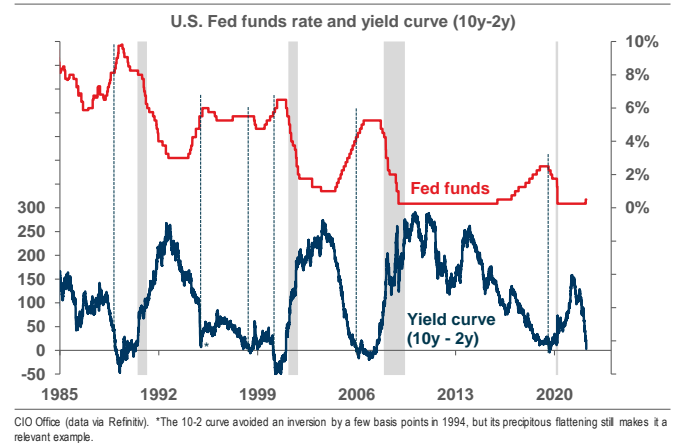
their 10-year counterpart, also up sharply (Chart 10).

10 | ... prompting major moves in the bond market



At these levels, it wouldn't take much for the curve to invert. Historically, such a signal has often been followed by a recession within a 6 to 24 month time frame, so it would likely cause concern for many investors. Yet, a nuance is in order. In reality, this phenomenon mostly indicates the market is already starting to anticipate the eventuality that the Fed will be forced to backtrack on its monetary tightening. This always heralds an economic slowdown, but not necessarily a recession (Chart 11).

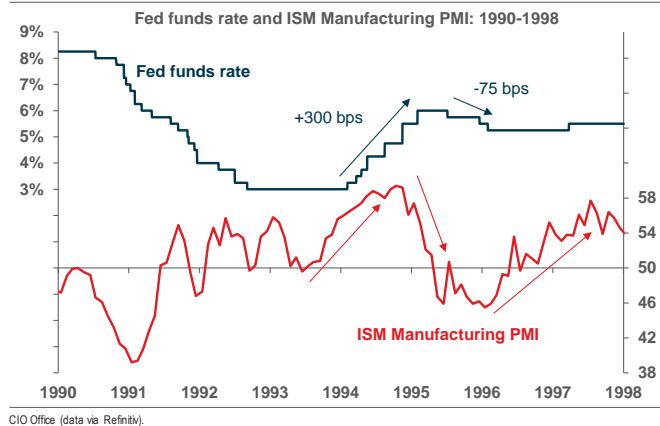
11 | What signal is the yield curve sending us?



For instance, the 2019 inversion essentially coincided with the first of 3 rate cuts by the Fed this year. Yet, were it not for the pandemic, it is highly likely that the U.S. economy would have continued to expand in 2020, regardless of the inversion.

Also revealing is the rapid tightening of monetary conditions in 1994 – a period that the influential St. Louis Federal Reserve President James Bullard claims is "the best analogy here." Back then, fearing overheating, the Fed raised its benchmark rate by a grand total of 300 bps in 13 months, a move that also resulted in a precipitous flattening of the 10-2 year curve (stopping a few basis points short of an inversion). Subsequently, economic activity slowed, the Fed backed off its benchmark rate by 75 bps in 1995-96, and the economic expansion continued apace (Chart 12).

12 | 1994: a case study of rapid policy tightening

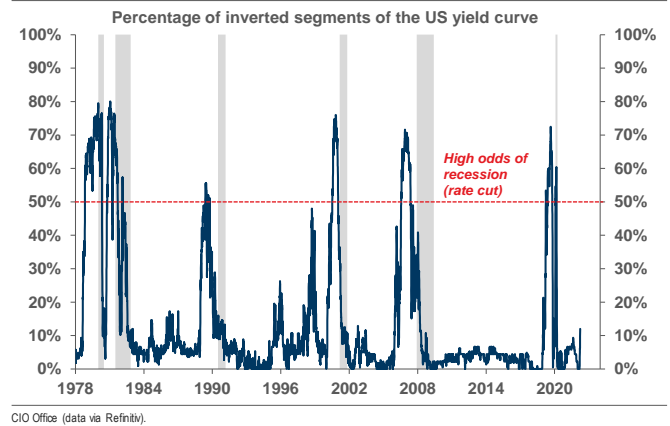


This time, will the Fed manage to engineer a normalization of monetary policy – or even a brief period above the neutral rate as Bullard seems to recommend – without causing a recession? The magnitude of the Fed's and the markets' projected monetary tightening raises the risk of a sharp economic slowdown, but talks of a recession seem premature at this stage.

After all, the Central Bank is just starting its rate-hike process and the last few months have shown that its projections are anything but certain. As such, the Fed will have the opportunity to revise its intentions (which could hardly be more hawkish than what the markets currently expect) based on the evolution of the economy. In any event, it would take a much more broad-based inversion of the yield curve for us to significantly increase the odds of a recession. Inversions with maturities below 2

years could bring this about, but we are not there yet (Chart 13).

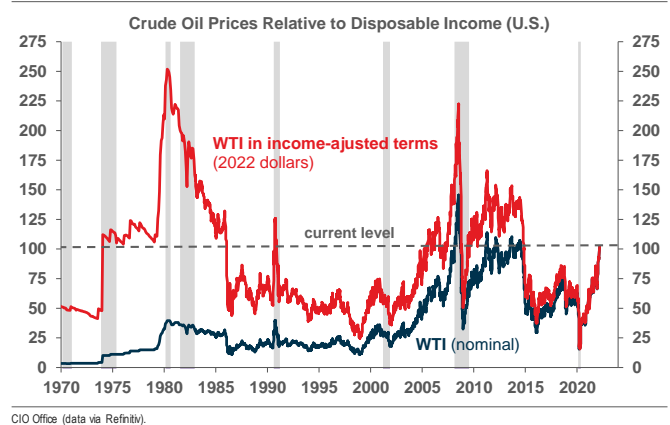
13 | Recession risks remain low



The Bottom Line

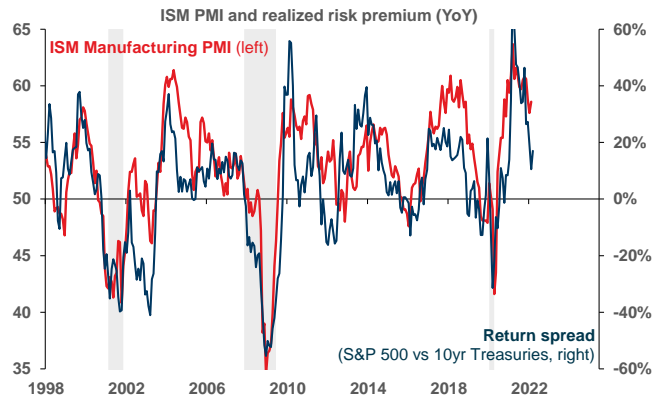
We continue to view the economic environment as supportive for risk assets. While the crisis in Ukraine will push up energy and food prices over the coming months, inflation should ultimately begin to moderate later this year. Of course, the sustained rise in energy prices is a burden on consumers' spending capacity. Yet, a longer-term look at oil relative to disposable income indicates that, for now, prices may not be as constraining as one might think (Chart 14). More on this to come in a strategic report we expect to release during the week of April 4.

14 | Oil prices: a matter of perspective



Economic growth is bound to slow, but the strength of the manufacturing sector (**Chart 15**) and the positive outlook for earnings growth (**Chart 16**) should continue to be supportive for equities. Moreover, stocks seem to have already discounted a significant portion of the upcoming monetary tightening, assuming that the Fed will refrain from pushing real yields above zero (**Chart 17**).

15 | The backdrop remains supportive for risk assets...



CIO Office (data via Refinitiv).

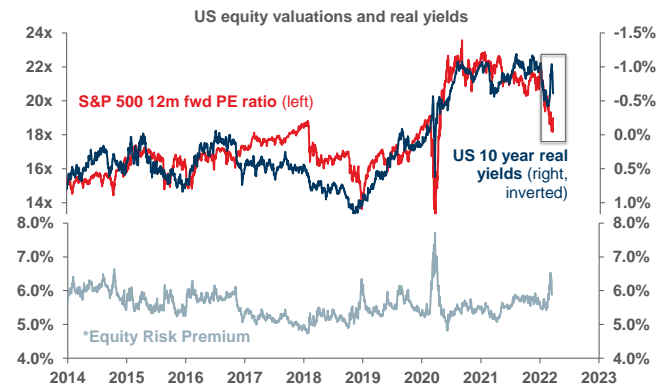
16 | ... with earnings on a strong footing



CIO Office (data via Refinitiv).

Nevertheless, the economic uncertainty surrounding our base-case scenario has undeniably increased in recent weeks, as the knock-on effects from the situation in Ukraine and international sanctions against Russia remain hard to quantify. In addition, while the latest FOMC rate projections still point to further upside potential for Treasury rates over a

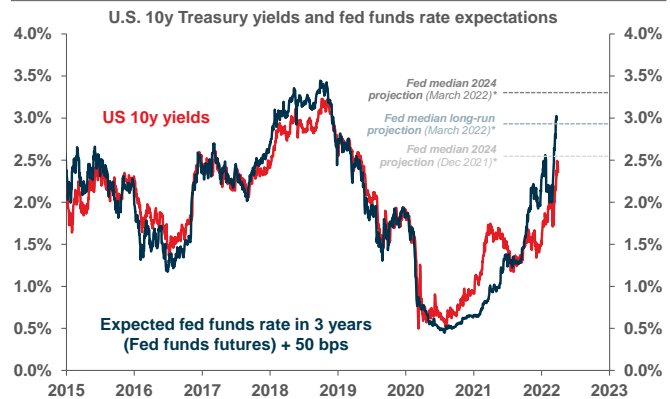
17 | A lot of monetary tightening seems discounted



CIO Office (data via Refinitiv). *Difference between S&P 500 earnings yield (1/PE) and U.S. 10-year TIPS yield.

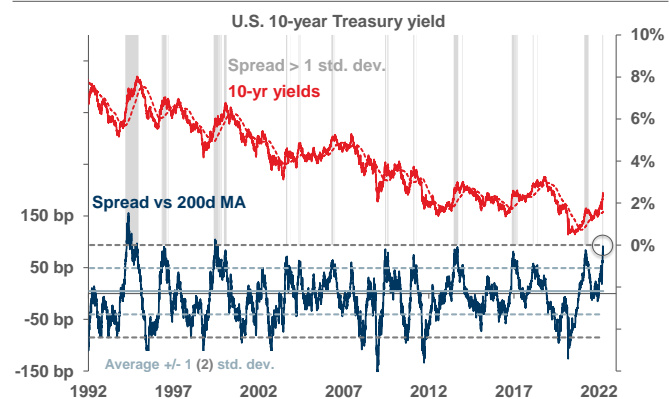
12-month horizon (**Chart 18**), their recent surge – a 2.0 standard deviation move (**Chart 19**) – calls for a pause or even a trend reversal in the near term.

18 | Treasury yields still have upside...



CIO Office (data via Refinitiv). *Median projection of FOMC members plus 50 bps, i.e. the average spread between the expected fed funds rate in 3 years and US 10-year yields.

19 | ... but are due for a pause in the near term



CIO Office (data via Refinitiv).

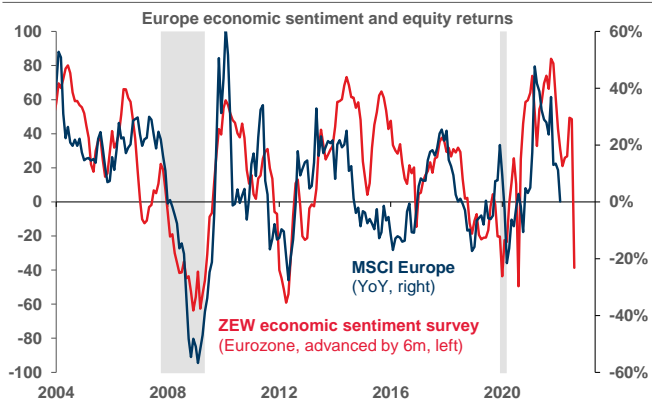
At these levels, the defensive properties of bonds in the event of a negative surprise are more attractive,

while an easing of inflationary pressures and rate hike expectations could also see them rebound along with stocks.

Under the circumstances, we took the opportunity to materialize gains and reduce our overweight in equity markets by a notch through a higher allocation to bonds. Geographically, we also added to our bias toward Canadian and U.S. equities (where growth prospects are strongest) and reduced our exposure to EAFE equities (where recession risks are more prevalent).

We are mindful that a ceasefire in Ukraine followed by a sharp decline in energy prices would likely see European equities rebound quickly. However, the possibility of an interruption in the flow of Russian natural gas, on which Europe is largely dependent, seems to be increasing by the day.² And, in any event, the longer the uncertainty persists, the higher are the chances that economic indicators will continue to deteriorate in the region, thereby limiting the potential for a sustained rally (**Chart 20**).

20 | The economic climate is fragile in Europe



CIO Office (data via Refinitiv).

² EU and Russia in stand-off over rouble payments for gas, Financial Times, March 29, 2022.

Table 3 Global Asset Allocation - Model Portfolio Weights (in CAD)

| | Benchmark | | Model Portfolio | | | | Comments |
|-------------------------|-----------|-------------|-----------------|---------------|-------------|---------------|---|
| | Total | Asset Class | Total | | Asset Class | | |
| | | | Allocation | Active Weight | Allocation | Active Weight | |
| Asset Classes | | | | | | | |
| Cash | 0% | - | 2.0% | 2.0% | - | - | With above-trend global growth and limited recession-risk, the outlook for equities compares favourably to bond markets. Alternatives allow for better control of the total risk of the portfolio and offers protection against sustained inflation. A modest cash position provides an extra level of prudence, given relatively low risk-reward prospects across asset classes and heightened geopolitical uncertainties. |
| Fixed Income | 40% | - | 31.0% | -9.0% | - | - | |
| Equities | 60% | - | 63.0% | 3.0% | - | - | |
| Alternatives | 0% | - | 4.0% | 4.0% | - | - | |
| Fixed Income | | | | | | | |
| Government | 28% | 73% | 17.0% | -11.0% | 55% | -18.2% | Accommodative monetary conditions and strong economic activity should lead corporate bonds to outperform government securities. For risk control purposes, we are sticking to investment grade credit. Treasury yields should rise modestly as central banks normalize their policies, but we expect real yields to remain negative. |
| Investment Grade | 12% | 27% | 14.0% | 2.0% | 45% | 18.2% | |
| High Yield | 0% | 0% | 0.0% | 0.0% | 0% | 0.0% | |
| Duration | 7.9 yrs | - | 7.1 yrs | -0.8 yrs | - | - | |
| Equities | | | | | | | |
| Canada | 21% | 35% | 24.0% | 3.0% | 38% | 3.1% | Prevailing uncertainty argues for a diversified approach. Canada and the U.S. should outperform under a backdrop of slowing but strong global growth and heightened geopolitical tensions in Europe. In EM, we favour cyclical and value sectors (RAFI Fundamental). In the U.S, we favour the high-quality (MSCI Quality) dividend-paying (Div. Aristocrats) companies and the equal weight index for their diversified and cyclical properties. |
| United States | 21% | 35% | 24.0% | 3.0% | 38% | 3.1% | |
| EAFE | 12% | 20% | 10.0% | -2.0% | 16% | -4.1% | |
| Emerging markets | 6% | 10% | 5.0% | -1.0% | 8% | -2.1% | |
| Alternatives | | | | | | | |
| Inflation Protection | 0% | 0% | 0.0% | 0.0% | 0% | 0.0% | A systematic quantitative strategy that takes advantage of market trends while aiming for maximum decorrelation with equities and tight control of volatility (NALT) play an important role as diversifier. Gold prices may underperform if real yields rise, but remain an inexpensive insurance against the possibility that inflation continues to surprise to the upside. |
| Gold | 0% | 0% | 2.0% | 2.0% | 50% | 50.0% | |
| Non-Traditional FI | 0% | 0% | 0.0% | 0.0% | 0% | 0.0% | |
| Uncorrelated Strategies | 0% | 0% | 2.0% | 2.0% | 50% | 50.0% | |
| Foreign Exchange | | | | | | | |
| Canadian Dollar | 61% | - | 59.0% | -2.0% | - | - | Our overall portfolio strategy places us overweight in U.S. dollars versus our benchmark. Although we don't expect the Canadian dollar to depreciate significantly, we maintain this positioning for risk management purposes as the U.S. dollar offers attractive historical properties from a portfolio construction standpoint, especially paired with gold. |
| U.S. Dollar | 21% | - | 26.0% | 5.0% | - | - | |
| Euro | 5% | - | 3.8% | -0.8% | - | - | |
| Japanese Yen | 3% | - | 2.5% | -0.5% | - | - | |
| British Pound | 2% | - | 1.4% | -0.3% | - | - | |
| Others | 9% | - | 7.3% | -1.5% | - | - | |

CIO Office. The fixed income benchmark is 100% FTSE Canada Universe. There are no alternative assets in the benchmark as their inclusion is conditional on improving the risk/return properties of traditional assets (60/40). The amplitude of the color bars under the "Active Weight" columns are proportional to the maximum deviations of the portfolio (+/- 10% for stocks and bonds, +10% in cash, +20% in alternative assets).

CIO Office
CIO-Office@nbc.ca

Martin Lefebvre
Chief Investment Officer
martin.lefebvre@nbc.ca

Louis Lajoie
Director
Investment Strategy
louis.lajoie@nbc.ca

Simon-Carl Dunberry
Director
Portfolio Strategy
simon-carl.dunberry@nbc.ca

Nicolas Charlton
Associate
Quantitative Strategy
nicolas.charlton@nbc.ca

Mikhael Deutsch-Heng
Associate
Investment Strategy
mikhael.deutschheng@nbc.ca

Zaid Shoufan
Associate
Portfolio Strategy
zaid.shoufan@nbc.ca

Christophe Faucher-Courchesne
Associate
Quantitative Strategy
christophe.faucher-courchesne@nbc.ca

General

The present document was prepared by National Bank Investments Inc. (NBI), a wholly owned subsidiary of National Bank of Canada. National Bank of Canada is a public company listed on the Toronto Stock Exchange (NA: TSX).

The information and the data supplied in the present document, including those supplied by third parties, are considered accurate at the time of their printing and were obtained from sources which we considered reliable. We reserve the right to modify them without advance notice. This information and data are supplied as informative content only. No representation or guarantee, explicit or implicit, is made as for the exactness, the quality and the complete character of this information and these data. The opinions expressed are not to be construed as solicitation or offer to buy or sell shares mentioned herein and should not be considered as recommendations. The opinions are not intended as investment advice nor are they provided to promote any particular investments and should in no way form the basis for your investment decisions. National Bank Investments Inc. has taken the necessary measures to ensure the quality and accuracy of the information contained herein at the time of publication. It does not, however, guarantee that the information is accurate or complete, and this communication creates no legal or contractual obligation on the part of National Bank Investments Inc.

NBI or its affiliates often act as financial advisor, agent or underwriter for certain issuers mentioned herein and may receive remuneration for its services. As well NBI and its affiliates and/or their officers, directors, representatives, associates, may have a position in the securities mentioned herein and may make purchases and/or sales of these securities from time to time in the open market or otherwise.

This document is for distribution only under such circumstances in Canada and to residents of Canada as may be permitted by applicable law. This document is not directed at you if NBI or any affiliate distributing this document is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that NBI is permitted to provide this document to you under relevant legislation and regulations.

Commissions, trailing commissions, management fees and expenses all may be associated with mutual fund investments (the "Funds"). Please read the prospectus of the Funds before investing. The Funds' securities are not insured by the Canada Deposit Insurance Corporation or by any other government deposit insurer. The Funds are not guaranteed, their values change frequently and past performance may not be repeated.

© NATIONAL BANK INVESTMENTS is a registered trademark of National Bank of Canada, used under license by National Bank Investments Inc.

© 2022 National Bank Investments Inc. All rights reserved. Any reproduction, in whole or in part, is strictly prohibited without the prior written consent of National Bank Investments Inc