Asset Allocation Strategy

CIO Office | December 2022

Slippery road ahead

Outlook 2023

NATIONAL BANK
INVESTMENTS

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Highlights

- If the story of 2022 was that of central banks slamming on the monetary brakes, blindsided by the persistence of inflation (much to the dismay of stocks and bonds), what can we expect for 2023?
- With inflation slowing markedly, the coming year should see the Fed first ease the pace of rate hikes and then pause in restrictive territory before Summer. This suggests a period of economic stagnation, with high risks of a recession.
- For markets, history tends to indicate that a pause in a rate hike cycle is generally good news. However, with inflation at its highest since the early 1980s, the playbook of recent cycles may prove misleading. Besides, since 1970, no bear market has ever concluded without the Fed first cutting its target rate.
- With earnings under pressure, 2023 should see a gap open up in favour of fixed income relative to equities, as signalled by our quantitative model. For now, we still promote a slightly shorter duration given the risk that sustained combative Fed rhetoric will lead to long yields revisiting their recent highs. However, an opportunity to increase duration should arise in 2023. Within equities, the environment looks more challenging for emerging markets than in North America, while our view supports more defensive strategies.
- Finally, it should be emphasized that these prospects come with a set of key risks, both to the upside and the downside. As such, a key success factor in 2023 will be our ability to remain nimble in a rapidly changing environment. For investors whose investment horizons span years, this should not be confounded with the ultimate driver of success in the long term: the ability to stay the course in periods of turbulence, which may continue to be put to test for some time.

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.

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Market Review

Fixed Income

- The Canadian fixed-income universe had a strong monthly performance, buoyed by a sizeable decline in long-term bond yields as inflation decelerated on both sides of the border.
- In the U.S., investment-grade corporate bonds (+4.9%) outperformed riskier high-yield securities (+1.9%).

Equities

- Equity returns showed wide geographic dispersion during the month of November. While the S&P/TSX (+5.5%) and the S&P 500 (+5.6%) had good performances, the EAFE region (+11.3%) and Emerging Markets (+14.8%) posted downright spectacular monthly gains. The appreciation of EAFE (euro, pound, yen) and EM currencies contributed to this significant overperformance.
- In the U.S., sectors with a "growth" bias (Consumer Discretionary, Communication Services, Technology) underperformed cyclical sectors (Materials, Industrials, Financials), a trend that has been observed since the beginning of the year.

FX & Commodities

- The price of oil fell significantly in November. Prospects of a sharp slowdown in the global economy (particularly in China) suggest weaker demand for oil, pulling prices down.
- Lower-than-expected October inflation led markets to expect a less hawkish Federal Reserve, resulting in significant depreciation of the U.S. dollar, particularly against the euro, the British pound and the Japanese yen.

Table 2 Market Total Returns

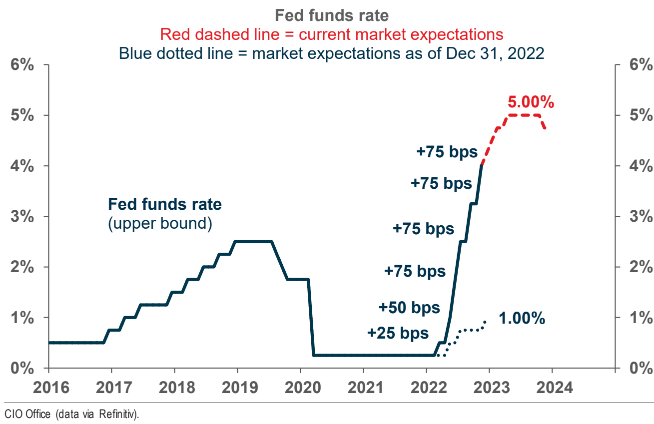
Asset Classes	Nov	YTD	12M
Cash (S&P Canada T-bill)	**0.3%**	**1.2%**	**1.2%**
Bonds (ICE BofA Canada Universe)	**2.3%**	**-10.4%**	**-9.0%**
Short Term	0.6%	-4.0%	-3.7%
Mid Term	2.3%	-8.7%	-7.9%
Long Term	4.8%	-19.2%	-16.4%
Federal Government	1.8%	-8.1%	-7.1%
Corporate	2.2%	-9.7%	-8.8%
S&P/TSX Preferred shares	-0.6%	-16.6%	-15.5%
U.S. Corporate (ICE BofA US$)	4.9%	-15.3%	-15.4%
U.S. High Yield (ICE BofA US$)	1.9%	-10.5%	-8.9%
Canadian Equities (S&P/TSX)	**5.5%**	**-1.0%**	**2.0%**
Communication Services	4.4%	0.5%	4.4%
Consumer Discretionary	5.2%	-1.8%	5.4%
Consumer Staples	4.9%	12.3%	22.6%
Energy	1.4%	38.1%	41.7%
Financials	6.2%	-4.0%	1.9%
Health Care	-0.1%	-53.8%	-56.4%
Industrials	6.4%	7.6%	7.4%
Information Technology	9.5%	-48.3%	-51.7%
Materials	11.0%	3.6%	7.2%
Real Estate	6.9%	-19.4%	-14.1%
Utilities	-0.6%	-6.3%	-0.8%
S&P/TSX Small Caps	6.4%	-7.6%	-6.5%
U.S. Equities (S&P 500 US$)	**5.6%**	**-13.1%**	**-9.2%**
Communication Services	6.9%	-34.8%	-33.1%
Consumer Discretionary	1.0%	-29.0%	-29.2%
Consumer Staples	6.4%	2.3%	12.8%
Energy	1.3%	70.7%	76.0%
Financials	7.0%	-5.6%	-2.5%
Health Care	4.8%	0.0%	8.9%
Industrials	7.9%	-2.6%	2.6%
Information Technology	6.0%	-21.6%	-19.0%
Materials	11.8%	-7.1%	-0.1%
Real Estate	6.9%	-22.4%	-14.4%
Utilities	7.0%	2.1%	11.9%
Russell 2000 (US$)	2.3%	-14.9%	-13.0%
World Equities (MSCI ACWI US$)	**7.8%**	**-14.6%**	**-11.2%**
MSCI EAFE (US$)	11.3%	-14.1%	-9.7%
MSCI Emerging Markets (US$)	14.8%	-18.6%	-17.1%
Commodities (GSCI US$)	**-1.7%**	**27.7%**	**37.4%**
WTI Oil (US$/barrel)	-7.0%	7.0%	21.6%
Gold (US$/oz)	7.0%	-3.9%	-1.6%
Copper (US$/tonne)	9.4%	-15.5%	-13.5%
Forex (US$ Index DXY)	**-5.0%**	**10.4%**	**10.4%**
USD per EUR	4.2%	-9.5%	-8.5%
CAD per USD	-1.6%	6.1%	4.9%

CIO Office (data via Refinitiv, as of 2022-11-30)

After slamming on the brakes…

At this time last year, while the main theme of our annual outlook was the impending shift in central bank policy, little did we know that it was, in fact, a full-blown slamming on of the monetary brakes that was on the horizon for 2022. Thus, it is not 75 bps of hikes that the Federal Reserve has delivered this year (as anticipated by the markets as of December 31, 2021), but a whopping 375 bps... and counting (**Chart 1**).

1 | Central banks slammed on the breaks…



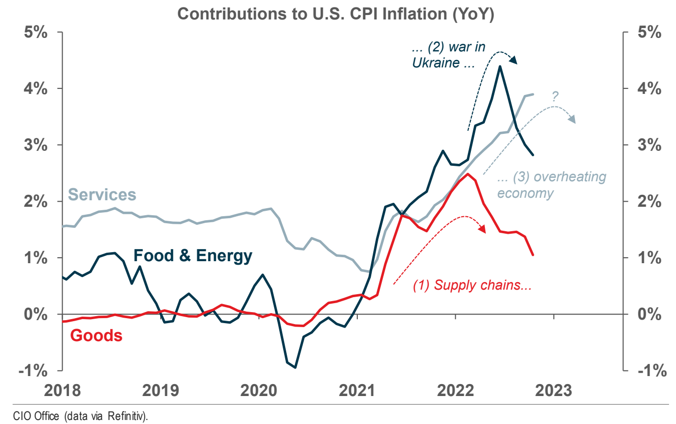
CIO Office (data via Refinitiv).

Clearly, the Fed was caught off guard by the persistence of inflationary pressures. After starting in 2021 on the goods side (supply chains) followed by food and energy (exacerbated by the war in Ukraine that started in early 2022), inflation eventually migrated to services during the year, a symptom of an overheated economy (**Chart 2**). The consequence of this inflationary trifecta: a four-decade high for the Consumer Price Index (CPI) (**Chart 3**).

For investors, this hostile environment has left few places to hide, with most market segments posting losses after 11 months in 2022 (**Chart 4**).

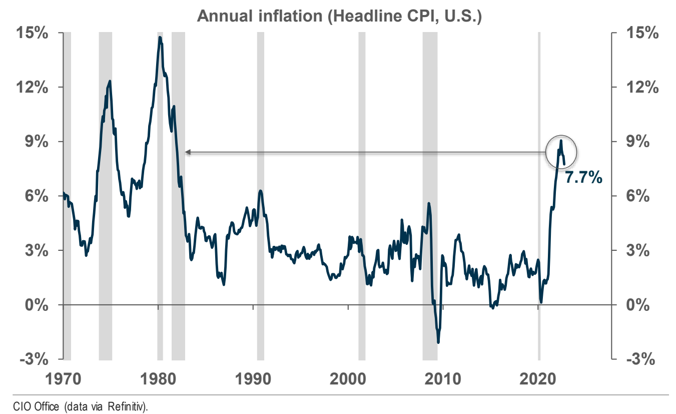
This is not the first time that stocks have experienced declines, and returns are no longer as negative following the strong rebound of recent months. For example, the Canadian market (-1.0%) has fared rather well, thanks in part to the good performance of the energy sector (+38.1%).

2 | … in the face of an inflationary trifecta…



CIO Office (data via Refinitiv).

3 | ... which brought CPI to a four-decade high



CIO Office (data via Refinitiv).

4 | Few places to hide in 2022...

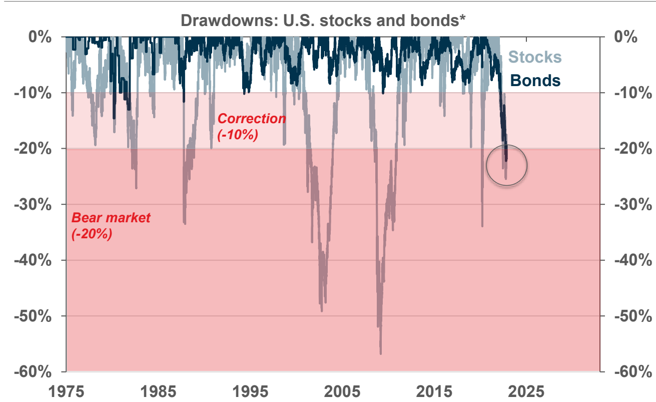
2022 Total Returns (YTD)

Cross Asset	Fixed Income*	S&P/TSX Sectors	S&P 500 Sectors	Equity Regions (C$)	Canada Factors	US Factors
Commodities 27.7%	Cash 1.2%	Energy 38.1%	Energy 70.7%	Latin America 22.3%	Momentum 8.1%	High Dividend -0.7%
Cash 1.2%	Short Term -4.0%	Consumer Staples 12.3%	Consumer Staples 2.3%	Canada -1.0%	High Dividend 4.9%	Value -2.6%
S&P/TSX -1.0%	Federal Gov. -8.1%	Industrials 7.6%	Utilities 2.1%	United States -6.7%	Value 4.5%	Low Vol. -9.2%
Gold -4.7%	Mid Term -8.7%	Materials 3.6%	Health Care 0.0%	EAFE -7.8%	Low Vol. 2.4%	Small Caps -11.9%
CADUSD -5.8%	Corporate -9.7%	Comm. Services 0.5%	Industrials -2.6%	Europe -8.3%	Quality 0.1%	Momentum -14.1%
Balanced* -7.5%	Overall Universe -10.4%	S&P/TSX -1.0%	Financials -5.6%	World -8.4%	Large Caps -0.9%	MSCI USA -14.4%
Canadian Bonds -10.4%	*High Yield (US)* -10.5%	Consumer Disc. -1.8%	Materials -7.1%	Japan -9.5%	MSCI Canada -0.9%	Large Caps -14.5%
US High Yield -10.5%	Provi. & Muni. -12.0%	Financials -4.0%	S&P 500 -13.1%	Emerging Markets -12.7%	Small Caps -7.6%	Quality -18.4%
S&P 500 -13.1%	*Treasuries (US)* -12.4%	Utilities -6.3%	Info. Tech. -21.6%	Asia (EM) -14.3%	Growth -9.1%	Growth -25.9%
MSCI EAFE -14.1%	*Corporate (US)* -15.3%	Real Estate -19.4%	Real Estate -22.4%	EMEA (EM) -20.3%		
Can. Pref. Shares -16.6%	Preferred shares -16.6%	Info. Tech. -48.3%	Consumer Disc. -29.0%			
MSCI Emerging -18.6%	Long Term -19.2%	Health Care -53.8%	Comm. Services -34.8%			

CIO Office (data via Refinitiv). As of November 30, 2022.

What is special this time, however, is that equity declines have occurred simultaneously with unprecedented losses for bonds (**Chart 5**, next page).

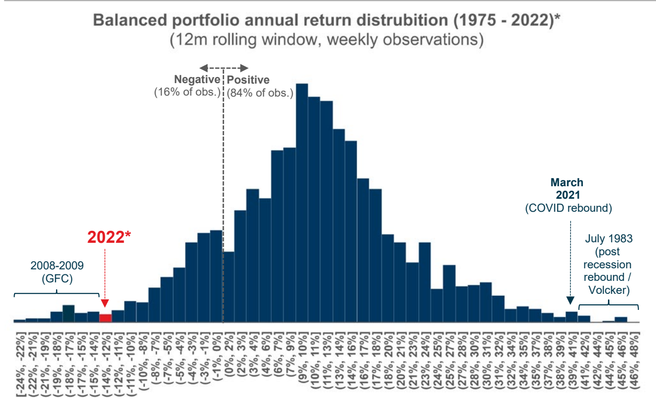
5 | … with both stocks and bonds in a bear market



CIO Office (data via Refinitiv). *Stocks = S&P 500, Bonds = U.S. 7 to 10-year Treasury bonds.

As a result, and to put things in perspective, the 12-month return on a reference balanced portfolio made of U.S. stocks and bonds is near its worst level since 1975; only the 2008-2009 financial crisis saw lower year-over-year performances. On the other hand, recall that this year's challenging backdrop followed a phenomenal rebound in 2020-2021 that was also virtually unprecedented (**Chart 6**).

6 | 2022: a(nother) rather abnormal year



CIO Office (data via Refinitiv). *60% S&P 500, 40% US 7 to 10-yr Treasury bonds (total return), weekly observations. 2022 = YoY as of November 29, 2022.

Now, after a challenging year, what can investors expect? A simple reversion to the mean leading to gains? Or are there other factors to consider?

We will begin with a brief overview of the economic outlook for 2023. We then conclude with market implications for investors.

… a pause on the shoulder lane?

While the primary story of 2022 was central banks playing catch-up against inflation, 2023 should see them first slowing the pace of rate hikes and, ultimately, pausing to assess the effects of their restrictive monetary policy. In essence, this is what Fed Chairman Jerome Powell alluded to in his most recent press conference:[1]

> *So I think you can think about our tightening program as really addressing three questions, the first of which was, and has been,* ***how fast*** *to go. The second is* ***how high*** *to raise our policy rate. And the third will be, eventually,* ***how long*** *to remain at a restrictive level.*
>
> - *Jerome Powell, November 2, 2022.*

Given weaker than expected inflation numbers in September, markets are anticipating that the Fed could reduce the pace of rate hikes as early as this month, with an increase of "only" 50 bps.

As for the peak in the policy rate, a look at history makes two things clear. First, the Fed has never started a monetary tightening cycle so late when considering its real rate, as measured against inflation over the previous 12 months. Second, and more importantly, the Central Bank has never concluded a series of rate hikes without first pushing its policy rate above realized inflation, which is still far from being the case (**Chart 7**, next page).

Fortunately, the good news is that a multitude of factors point to a continued slowdown in inflation in 2023.

On the food and energy side (~22% of CPI), the fact that key commodity prices remain below their

[1] See the *transcript* of Jerome Powell's speech on November 2, 2022.

7 | Still some distance before the Fed can pause

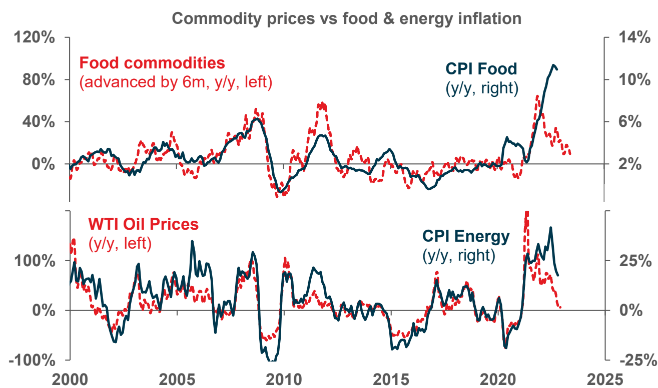
Federal Reserve rate-hike cycles since 1972*

Fed Chair	First hike		Last hike		First cut	
	Date	Real rate	Date	Real rate	Date	Real rate
Burns	Mar-72	2.0%	Apr-74	0.9%	Jul-74	-2.3%
Miller - Volcker	Aug-77	-0.6%	Mar-80	1.7%	Apr-80	1.3%
Volcker	Aug-80	-1.9%	May-81	9.2%	Jun-81	9.4%
Volcker	Jun-83	6.4%	Aug-84	7.1%	Sep-84	6.7%
Volcker - Greenspan	Apr-87	2.7%	Sep-87	3.0%	Nov-87	2.3%
Greenspan	Mar-88	2.8%	Feb-89	4.9%	May-89	4.4%
Greenspan	Feb-94	0.7%	Feb-95	3.1%	Jul-95	3.0%
Greenspan	Jun-99	3.0%	May-00	3.3%	Jan-01	1.8%
Bernanke	Jun-04	-2.0%	Jun-06	0.9%	Sep-07	2.0%
Yellen - Powell	Dec-15	-0.2%	Dec-18	0.6%	Jul-19	0.7%
Powell	*Mar-22*	*-8.0%*	*Current -->*	*-3.7%*	*?*	*?*
Average		1.3%		3.5%		2.9%

CIO Office (data via Refinitiv). *Need at least two consecutive moves in two different months of at least 25 bps each to change cycle.
Real rate = target policy rate less headline CPI YoY.

recent highs bodes well, although the situation remains subject to a high degree of geopolitical uncertainty (**Chart 8**).

8 | Food and energy inflation is likely to slow…

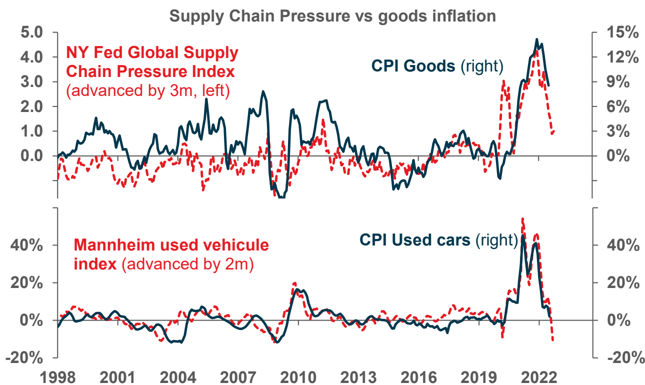


CIO Office (data via Refinitiv). Food commodities = S&P GSCI Agriculture, Grains, Livestock.

With respect to goods prices (~21% of CPI), the sustained decline in the New York Fed index quantifying global supply-chain pressures is also an encouraging sign. This trend is consistent with the sharp decline in used-car prices which were among the first to jump at the very beginning of the inflationary wave back (**Chart 9**).

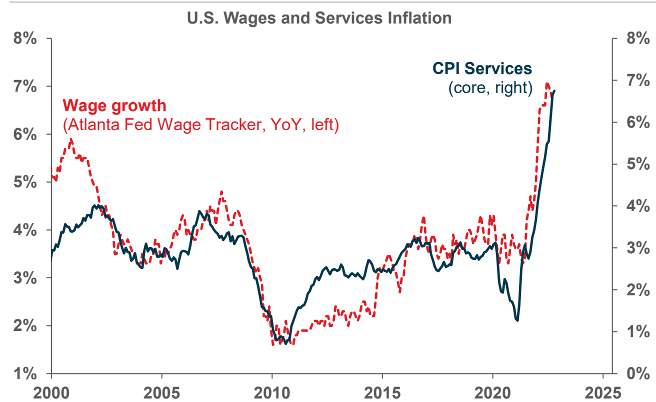
Finally, services inflation (~57 percent of the CPI) – a fundamental component closely linked to wage growth – still remains strong on an annual basis (**Chart 10**). Nevertheless, some signs of a slowdown are beginning to emerge. These include the ratio of job openings per unemployed worker

9 | … along with goods prices



CIO Office (data via Refinitiv).

10 | Services (and wages) inflation remains high...



CIO Office (data via Refinitiv).

which appears to have peaked, and the percentage of consumers reporting an abundance of jobs which is back to its pre-pandemic level (**Chart 11**). These labour market indicators will certainly be among the

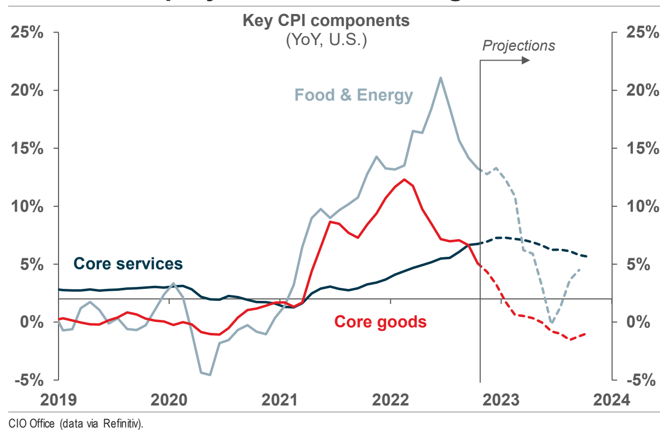
11 | … but a deceleration is also in sight

CIO Office (data via Refinitiv).

data to watch closely in the coming year given their importance to Fed officials.

In light of these emerging trends, we have attempted the exercise of projecting a reasonable path for the annual growth of these three main CPI components (food and energy, goods, and services) over the next 12 months. This suggests that while some deflation is to be expected for goods and, potentially, even for food and energy (notably given base effects), the slowdown should take longer for services which exhibit more inertia (**Chart 12**).

12 | Inflation projection: our working thesis...



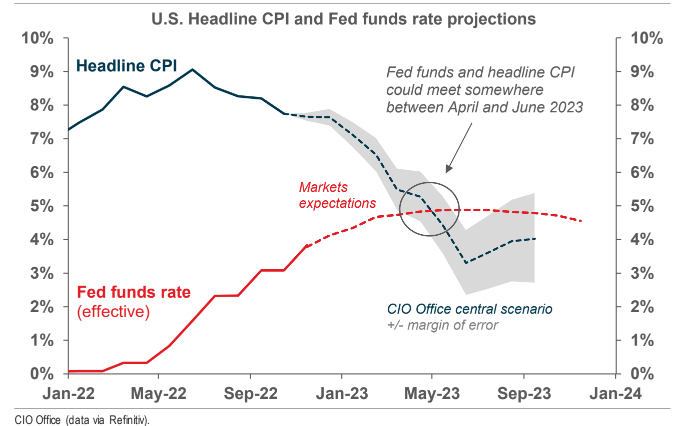
CIO Office (data via Refinitiv).

Putting these projections together with a certain margin of error, we thus obtain a potential crossover between annual inflation and the Fed's effective rate near 5% somewhere between April and June of 2023, at which point the Central Bank could therefore begin to "pause" its rate-hike cycle (**Chart 13**).

To be clear, the path of rate hikes is anything but certain and the Fed's updated projections scheduled for December 14 should shed more light. However, for now, market expectations (+50 bps in December, +25 bps in February, +25 bps in March, +25 bps in May) [2] seem reasonable.

So, if a pause in rate hikes is expected by mid-2023, what can history teach us about how markets react in such circumstances?

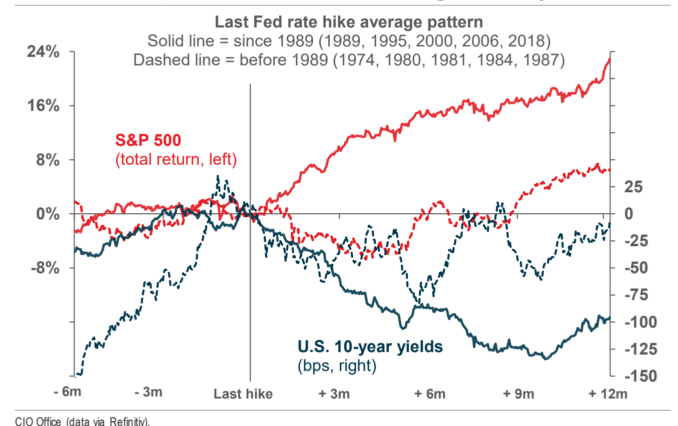
13 | ... should meet the fed funds rate by the mid-2023



CIO Office (data via Refinitiv).

For equities, we note that, on average, the following 12 months were positive, although faltering in the 1970s and 1980s (when inflation was more often a problem). For bonds, we also note a generally positive period with a peak in 10-year yields reached less than three months before the last rate hike. However, as with equities, the trends were not as clear-cut before 1989 (**Chart 14**), back when the Fed was not explicitly targeting inflation.

14 | While a pause in rate hikes is generally bullish…



CIO Office (data via Refinitiv).

In today's context, with financial markets probably more anticipatory than in the past, one can assume that the recent equity rebound can be explained, in part, by the expectation of an eventual end to the rate-hike cycle. However, to use a term now proscribed at the Fed, odds are that this wind of optimism will end up being "transitory."

[2] This path would result in a peak range of 5% to 5.25% for the Fed funds rate.

Indeed, with inflation at its highest level since the early 1980s, the playbook of the most recent rate-hike cycles could prove misleading. But, more importantly, we are currently in an equity bear market[3] and, since the 1970s, none has ever concluded without the Fed first lowering its reference rate (**Chart 15**).

15 | … bear markets historically need cuts to bottom

Economic and financial conditions during S&P 500 bear market bottoms

Bear market bottom (R = recession)	S&P 500 peak-trough (in %)	S&P 500 peak-trough (in months)	2-yr yields change (past 3m)[1]	Last Fed move	Months since first rate cut[2]	Real policy rate[3]
May-1970 (R)	-36%	17	-175 bps	Cut	0	1.8%
Oct-1974 (R)	-48%	20	-253 bps	Cut	2	-2.8%
Aug-1982 (R)	-27%	20	-87 bps	Cut	13	3.1%
Dec-1987	-34%	3	-54 bps	Cut	1	2.4%
Oct-2002 (R)	-49%	30	-103 bps	Cut	21	-0.3%
Mar-2009 (R)	-57%	17	+11 bps	Cut	16	0.6%
Mar-2020 (R)	-34%	1	-136 bps	Cut	0	-1.3%
Average	**-41%**	**15**	**-114 bps**	-	8	**0.5%**
*October 12, 2022**	*-25%*	*9*	*+124 bps*	***Hike***	-	*-4.5%*
November 30, 2022	*-15%*	*10*	*+91 bps*	***Hike***	-	*-3.7%*

CIO Office (data via Refinitiv). 1. Effective fed funds rate before 1976, 2. Since the bear market started, 3. Target policy rate less headline CPI YoY, *: Bottom as of November 30, 2022.

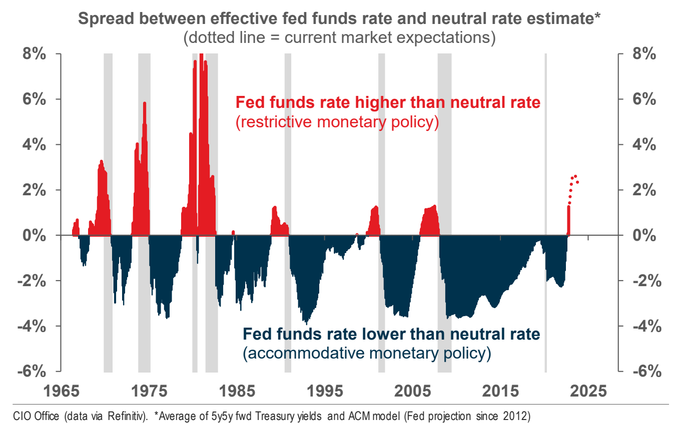
Despite this convincing observation, could the stock market bottom out before a rate cut for the first time in over 50 years? Absolutely. Once again, markets are discounting machines, especially nowadays. However, to use a term recently favoured at the Fed, betting on rate cuts seems "premature" at this point.

After all, we have just crossed into restrictive monetary policy territory – a generally more difficult environment for equities[4] – and the Fed's intentions to continue tightening in the coming months are clear (**Chart 16**). Meanwhile, the list of leading indicators sending cautionary signals continues to grow.

"Check engine" light on

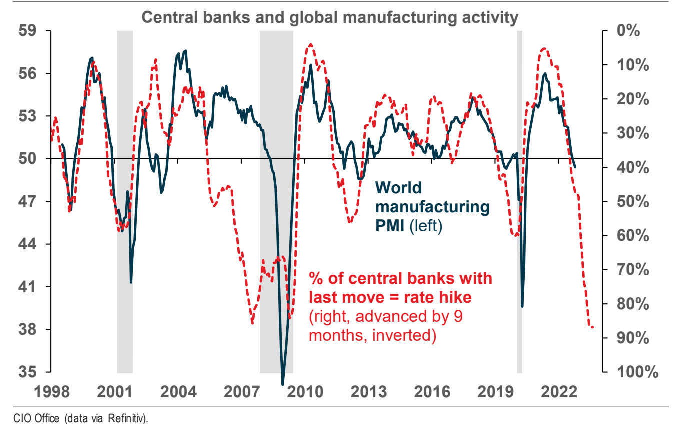
It is well known that monetary policy works with a time lag. Accordingly, with almost all central banks in "rate hike" mode for the past few months (nine months in the case of the Fed and the Bank of Canada), the coming year should provide a better assessment of the impact of monetary tightening on global growth (**Chart 17**).

16 | Monetary policy just turned restrictive



CIO Office (data via Refinitiv). *Average of 5y5y fwd Treasury yields and ACM model (Fed projection since 2012)

17 | Rate hikes will weigh on global growth in 2023…



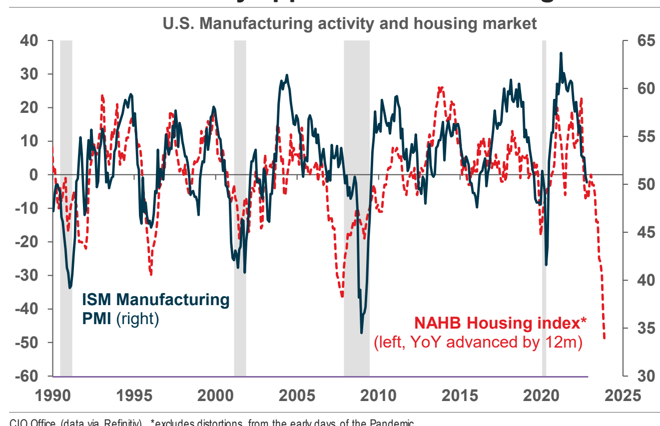
CIO Office (data via Refinitiv).

Naturally, not all sectors of the economy are equally sensitive to interest rates. But, if the sudden halt in activity in the real estate sector – one of the most sensitive to monetary policy changes – is anything to go by, a generalized economic slowdown is to be expected (**Chart 18**, next page).

As for corporate earnings, recent months have featured a clear slowdown, especially when we exclude the energy sector. However, for 2023 and beyond, analysts' consensus is essentially projecting a very brief stagnation followed by a rebound close to the historical average, an outlook

[3] Defined as a drawdown of at least 20% in the S&P 500.
[4] See our latest strategic report "Monetary Policy and Rate Increases: Why, and so what?" for more details on this topic.

18 | … as is already apparent in the housing sector



CIO Office (data via Refinitiv). *excludes distortions from the early days of the Pandemic.

that is likely to be revised downward, especially if a recession were to occur over that time horizon (**Chart 19**).

19 | Earnings growth expectations too optimistic?

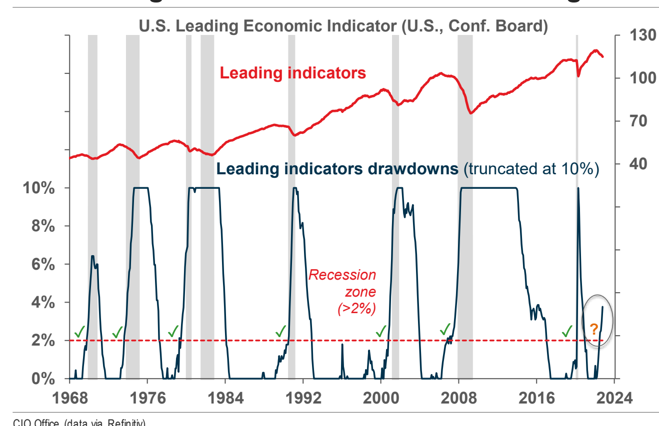
CIO Office (data via Refinitiv).

On this last point, recall that several recession indicators are in the red. First, since last August, the Conference Board's Leading Economic Indicator (LEI) has been sending a recession signal that has never been wrong in 50 years (**Chart 20**).

Moreover, the broad inversion of the yield curve, another reliable indicator of a coming economic slowdown, has now also been sending a signal of recession since last month (**Chart 21**).

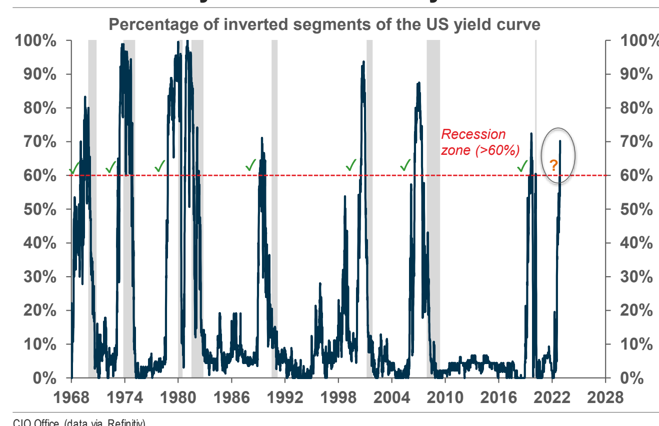
Eventually, these signals could be confirmed by an increase in the unemployment rate, which has a perfect track record of signalling a recession.[5] While this is not yet the case, the irony is that the Fed's

20 | Leading economic indicators are flashing red…



CIO Office (data via Refinitiv).

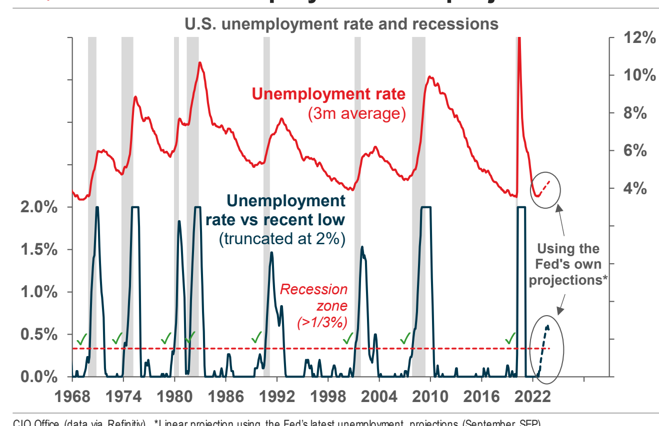
21 | … with the yield curve broadly inverted…



CIO Office (data via Refinitiv).

own projection for the unemployment rate, if it were to materialize, would raise the recession flag (**Chart 22**).

22 | … and the unemployment rate projected to rise



CIO Office (data via Refinitiv). *Linear projection using the Fed's latest unemployment projections (September SEP).

[5] When the 3-month average of the unemployment rate increases by more than 1/3% from its recent low.

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In short, while it is not crystal clear that a recession will occur in 2023, the odds could hardly be higher. For discussion purposes, taking the historical average lags of the three signals just mentioned, we get a hypothetical recession start in Q2 2023 (**Chart 23**).

23 | Recessions risks could hardly be higher

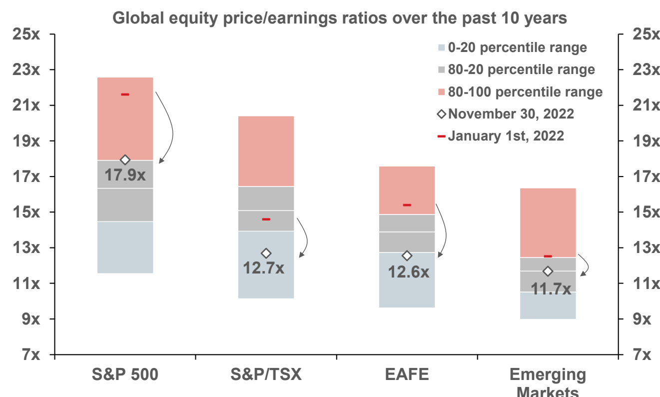
Recession signposts

Recession start	Yield curve signal		LEI signal		Unemployment rate confirmation	
	Date	Lead time (months)	Date	Lead time (months)	Date	Lead time (months)
Jan 1970	Jan 1969	✓ 12	Nov 1969	✓ 1	Mar 1970	✓ -3
Dec 1973	Apr 1973	✓ 8	Sep 1973	✓ 3	Mar 1974	✓ -4
Feb 1980	Nov 1978	✓ 15	May 1979	✓ 9	Feb 1980	✓ -1
Aug 1981	Oct 1980	✓ 10	Mar 1981	✓ 5	Dec 1981	✓ -5
Aug 1990	Mar 1989	✓ 17	Aug 1990	✓ 0	Oct 1990	✓ -3
Apr 2001	Jul 2000	✓ 8	Nov 2000	✓ 5	Apr 2001	✓ -1
Jan 2008	Jul 2006	✓ 17	Dec 2006	✓ 13	Jan 2008	✓ -1
Mar 2020	Aug 2019	✓ 7	Apr 2020	✓ -1	May 2020	✓ -3
*Apr 2023**	Nov 2022	✓ …	Aug 2022	✓ …	*Apr 2023***	?
Average	-	**12**	-	**4**	-	**-3**

CIO Office (data via Refinitiv). *Average of the average lead time per recession signal. **Linear projection using the Fed's latest unemployment projections (September SEP).

Now, as investors, the key question remains to know what's already discounted by markets. With equity multiples having corrected significantly in 2022, one would assume that downside risk is relatively limited from here (**Chart 24**).

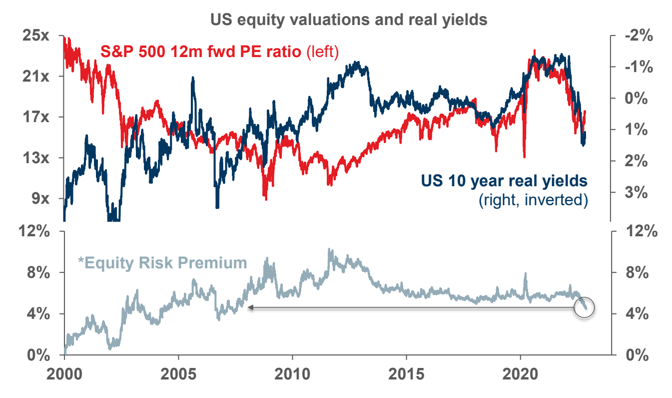
24 | Equity valuations are more attractive…



CIO Office (data via Refinitiv).

However, as an asset allocator, we are more concerned about valuation measures between asset classes and, relative to bonds which have also suffered in 2022, equities do not appear especially attractive. In fact, the equity risk premium – essentially the price-earnings ratio adjusted for the level of interest rates – is at its lowest level in 15 years (**Chart 25**).

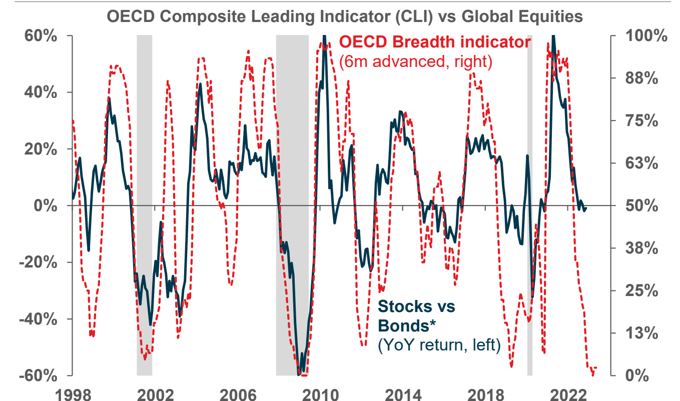
25 | … but at their worse in 15 years relative to bonds



CIO Office (data via Refinitiv). *Earnings yield (1/PE) less 10y TIPS yield.

This, combined with a general slowdown in global economic growth that is expected to continue into 2023, suggests that equities will underperform bonds (**Chart 26**).

26 | Global growth points to stocks underperformance



CIO Office (data via Refinitiv). *MSCI World vs US 10yr Treasury bonds.

The Bottom Line: Implications for investment strategy

On the economic front, our baseline scenario for 2023 calls for a marked slowdown in inflation and a period of stagnation for GDP growth in North America. This outlook is accompanied by significant risks of recession beyond the seemingly inevitable one in Europe.

Between asset classes, the story of the coming year is likely to contain several different chapters as volatility looks set to remain high. However, after a difficult period for both equities and bonds, the next few months should ultimately see a gap emerge in favour of fixed income as conditions for a sustained stock market recovery – centred around a monetary pivot – do not appear to be in place.

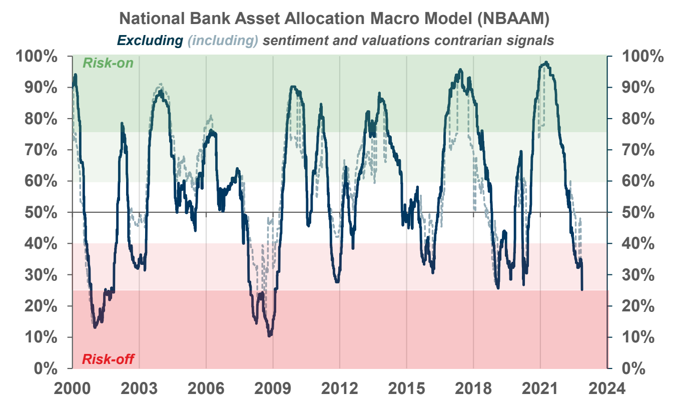
To this end, our quantitative model, whose objective is to convert a series of macro-financial indicators into a risk-taking recommendation over a tactical horizon, indicates that while the excess pessimism recorded at the end of September signalled a strong potential for a stock market rebound (as mentioned at the time), the realization of this rally, combined with increasingly restrictive monetary conditions, now sends a clear signal of caution (more details on this model in early 2023, **Chart 27**). As a result, and in line with our intentions expressed in our last two monthly reports, we took the opportunity to reduce our equity allocation by one notch in exchange for bonds.

Within fixed income, we still favour a slightly shorter duration than our benchmark, given the risk that continuing combative Fed rhetoric could lead long-term yields to revisit their recent highs (**Chart 28**). That said, an opportunity to increase duration should present itself in 2023 as we approach the end of the rate-hike cycle. In any case, the risk/reward ratio of bonds looks increasingly attractive, especially for investment-grade corporate bonds which are strong candidates for outperformance next year (**Chart 29**, next page).

On the equity side, the backdrop still looks difficult for Emerging Markets (EM), which generally need accommodative monetary policies and accelerating global growth to outperform (**Chart 30**, next page) – the opposite of what we expect for 2023.

Thus, considering the 10%+ rebound recorded by the region in recent weeks, we took the opportunity to reduce our allocation in EM equities, thus moving closer to the recommendation of our relative momentum model (**Chart 31**, next page). On the other hand, we have slightly reduced our underweight in the EAFE region, also in order not to deviate too much from our model which measures trends in local currency, although we are still not very optimistic for the region given the weak growth prospects in Europe.

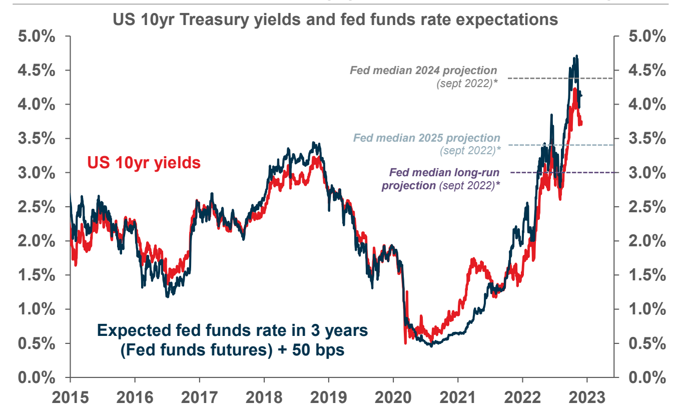
27 | The global macro backdrop is risk-off



National Bank Asset Allocation Macro Model (beta version)		
Indicator	Signal	Brief description and components
NBAAM		Converts global macro indicators into a tactical recommendation between stocks (risk-on) and bonds (risk-off).
Cyclical conditions		Monitors business cycle indicators.
U.S. Economy		*Labour market, earnings, consumption, manufacturing*
Global Economy		*Global growth, earnings, eco surprises, manufacturing*
Financial Markets		*Equities, bonds, foreign exchange, commodities*
Monetary conditions		Monitors global monetary indicators.
Quantity of money		*Money aggregates, central banks assets, credit growth*
Cost of money		*Policy rates, long-term rates, yield curve, credit spreads*
Momentum		Monitors global stocks & bonds trends.
Valuations	neutral	Watch for stocks & bonds valuations overshoots.
Sentiment	neutral	Watch for investors' sentiment overshoots.

CIO Office (data via Refinitiv).

28 | A sharp decline in 10y yields seems unlikely…



CIO Office (data via Refinitiv). *Fed projection plus 50 bps (average spread between 3-yr ahead fed funds expectations and 10y yields).

NATIONAL BANK INVESTMENTS

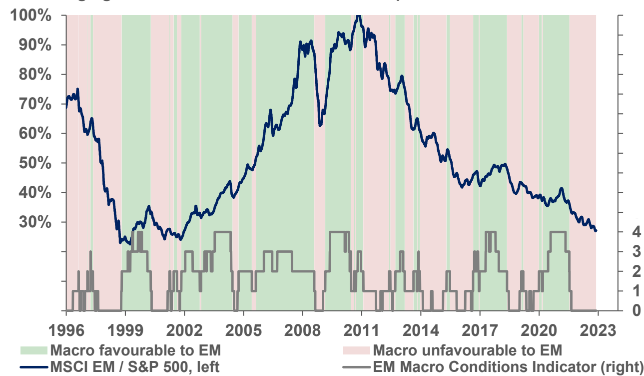
29 | ... but the risk/reward of bonds is compelling

Expected 1-year Total Return from Interest Rate Changes

Rate Change	U.S. 10-year Bond	U.S. 30-year Bond	Canada 10-year Bond	Canadian Corporate*	Canadian Universe*
100bps	-4.6%	-15.0%	-5.3%	-0.4%	-3.2%
80bps	-3.0%	-11.4%	-3.7%	0.7%	-1.8%
60bps	-1.3%	-7.8%	-2.0%	1.9%	-0.3%
40bps	0.3%	-4.1%	-0.3%	3.0%	1.2%
20bps	1.9%	-0.5%	1.4%	4.2%	2.6%
0bps	3.5%	3.1%	3.1%	5.3%	4.1%
-20bps	5.2%	6.7%	4.7%	6.5%	5.6%
-40bps	6.8%	10.3%	6.4%	7.7%	7.0%
-60bps	8.4%	13.9%	8.1%	8.8%	8.5%
-80bps	10.1%	17.5%	9.8%	10.0%	10.0%
-100bps	11.7%	21.1%	11.5%	11.1%	11.4%

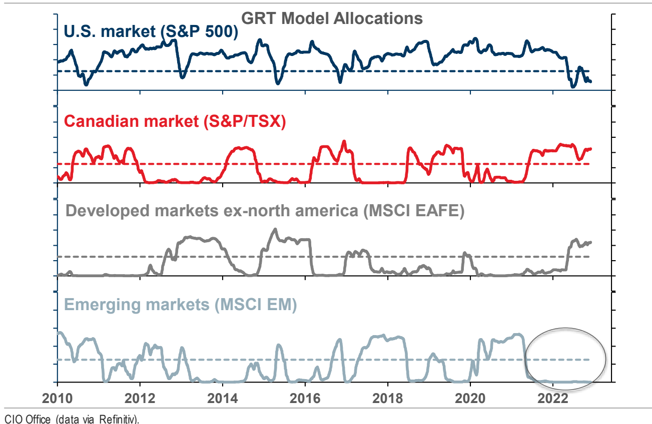
CIO Office (data via Refinitiv). Total Return is measured as the sum of Starting Yield, Roll Yield, and Rate Change impact (assuming only parallel shifts in the yield curve). *For IG bonds (representing approximately 30% of the Universe index) we assume no change in their spread against government securities. As of November 29, 2022.

30 | Macro conditions are playing against EM…



CIO Office (data via Refinitiv). The indicator measures 4 conditions: (1) USD on a downtrend, (2) broad-based global growth, (3) large majority of central banks accommodative, (4) EM positive relative momentum.

31 | The trend is your friend… but not in EM

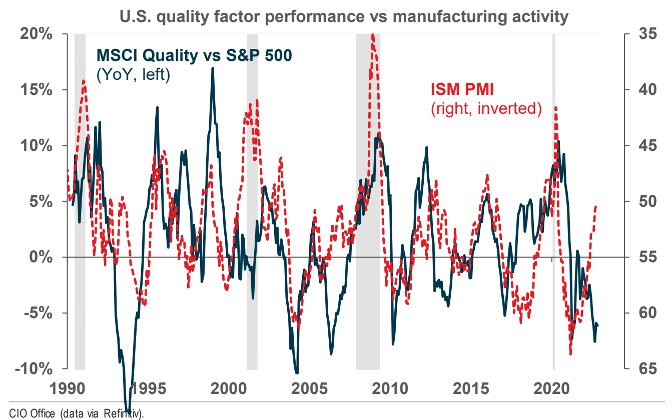


CIO Office (data via Refinitiv).

Besides, we continue to view the Canadian stock market as well-positioned to outperform in 2023, provided that commodity prices remain supported, helping to ensure some resilience for the local economy. Combined with U.S. equities, which have a lower cyclical exposure – thanks in part to the ensuing Greenback exposure – the diversified properties of the North American market should remain assets.

In terms of equity style, our economic outlook favours more defensive strategies. As an example, the U.S. quality factor, which suffered from the sharp rise in bond yields in 2022, should regain leadership if next year results in a pronounced economic slowdown (**Chart 32**).

32 | Quality stocks set to outperform?

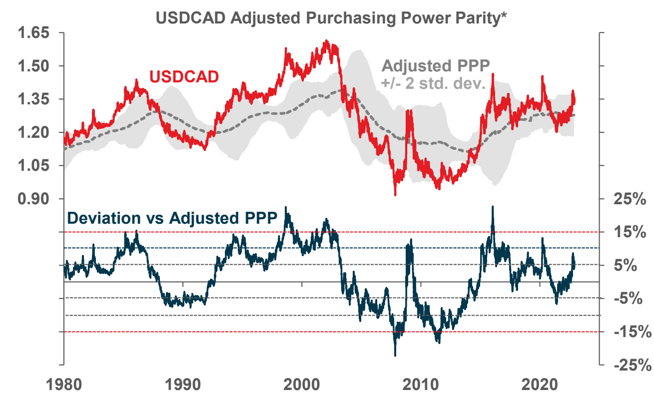


CIO Office (data via Refinitiv).

For currencies, if the spectacular rise of the U.S. dollar seems due for a pause, a sustained downward trend is hard to envision as long as a bottom in global growth is not in sight. Nevertheless, as a Canadian investor, we continue to see the Greenback as an important risk management ally, as it demonstrated once again in 2022 (+6.1% for the USD/CAD year-to-date). A significant deviation from an intrinsic value measure could eventually justify a different stance, but this is not currently the case (**Chart 33**, next page).

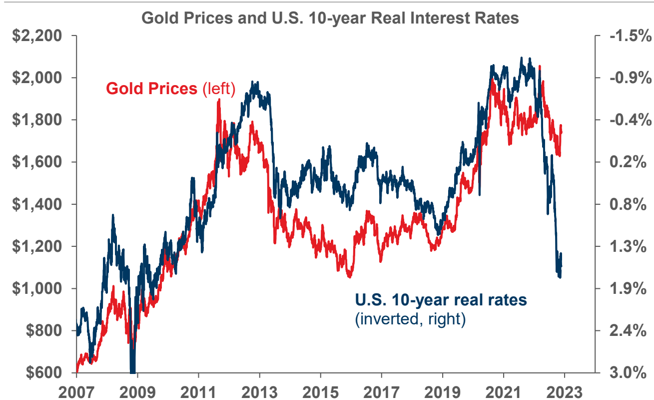
As for alternative assets, gold prices have shown impressive resilience in 2022, outperforming the majority of stock and bond indices, especially in Canadian dollars (-3.9% in US$, +2.0% in C$). Nevertheless, the current high-interest-rate environment implies a greater opportunity cost for this non-yielding asset, and downside risks will remain significant until rates convincingly change direction (**Chart 34**, next page). Alternatively, a quantitative strategy with a performance overlaid on

33 | USDCAD slightly overvalued... nothing more



CIO Office (data via Refinitiv). *Average of PPP (OECD) and long-term moving verage.

34 | The opportunity cost of gold is high



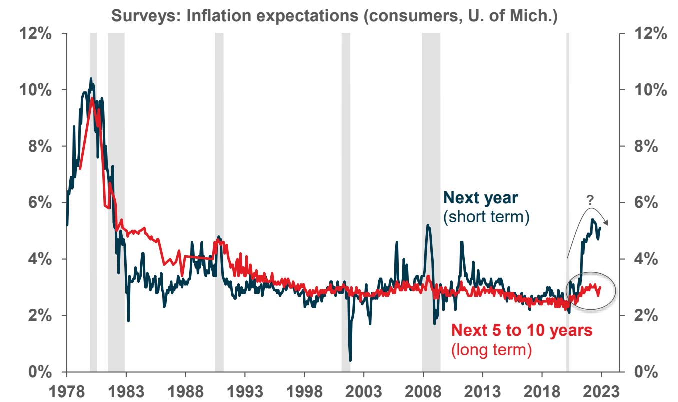
CIO Office (data via Refinitiv).

risk-free rates makes it possible to benefit from higher yields, while playing an important diversifying role.

Finally, as with every year, it should be emphasized that this outlook is not a prophecy. Rather, in addition to the inevitable surprises, our reading of what lies ahead for the economy and markets in 2023 comes with a set of **key risks**, both to the upside and the downside.

In this regard, the most optimistic scenario seems to be that of a much-faster-than-expected slowdown in core inflationary pressures, which would prompt the Fed – comforted by low and stable inflation expectations (**Chart 35**) – to stop (or even reverse) its monetary tightening cycle earlier than expected.

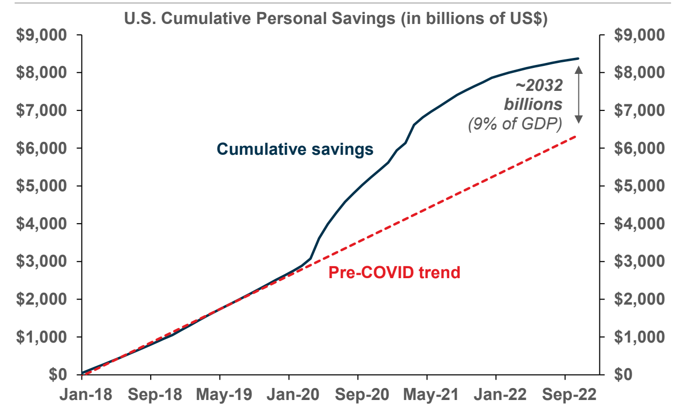
35 | Long-term inflation expectations are stable



CIO Office (data via Refinitiv).

In parallel, resilient labour demand and healthy household balance sheets – built on a large savings surplus since the pandemic[6] (**Chart 36**) – would limit the severity of the economic slowdown that a vast majority of economists and investors are anticipating. In this scenario, both bonds and equities would appreciate.

36 | Excess savings are still significant



CIO Office (data via Refinitiv).

On the other hand, a non-negligible risk factor is that of excessive tightening of monetary conditions by a Federal Reserve which simply cannot afford to underestimate, once again, inflationary pressures. Indeed, while low inflation between 2015 and 2020 undeniably prompted the Fed to take the risk of "over stimulating" the economy in 2021, the recent rise in prices – which more than made up for the weakness in inflation of the previous years

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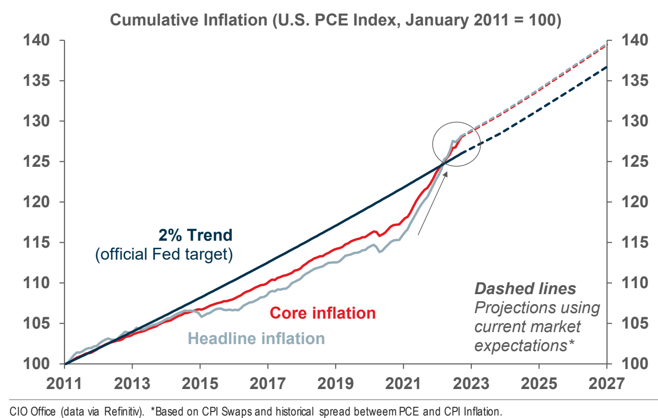
[6] Although down about ¼ of a percent over the past year according to the Fed, excess savings remain significant for a majority of households. For more details, see: *Excess Savings during the COVID-19 Pandemic, Federal Reserve, October 21, 2022.*

(**Chart 37**) – essentially flipped this paradigm upside down. In other words, even if inflation were to decelerate faster than expected, the Fed's stubbornness in maintaining a restrictive policy could surprise, thereby risking a more significant economic slowdown and raising the discontent of markets, politicians, and the population.

37 | Paradigm shift at the Federal Reserve?

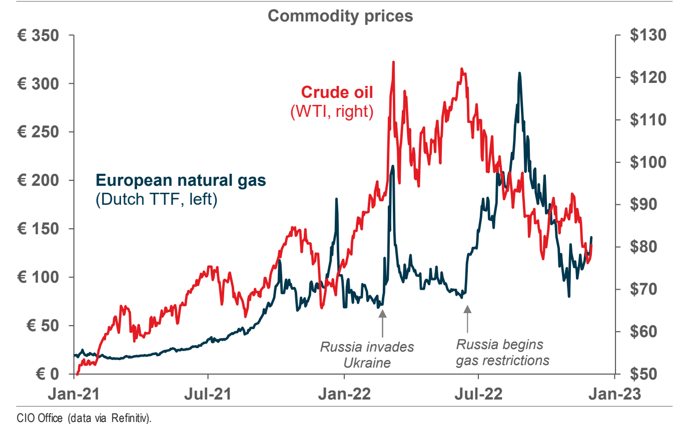


CIO Office (data via Refinitiv). *Based on CPI Swaps and historical spread betweem PCE and CPI Inflation.

Finally, the geopolitical environment is also likely to occupy the markets' attention in 2023. Will peace talks between Russia and Ukraine succeed? [7] Will China finally find the right balance in its still very strict zero-COVID policy? [8] What will the consequences be of tectonic shifts in relations between major oil producing nations, including an impending attempt to cap Russian oil prices? [9] In general, investors are better off ignoring geopolitical issues which are often distractions. However, the nuances this time are their overriding influences on commodity prices, which are key to inflation. For now, the good news is that both European natural gas and oil prices are about 55% and 35% below their recent highs, respectively (**Chart 38**). But, the situation remains precarious.

One thing is certain: as analysts, a key success factor in 2023 will be our ability to remain nimble in a rapidly changing environment. For investors whose investment horizons span years, this should not be confounded with the ultimate driver of

38 | Commodity prices: a key risk factor for 2023



CIO Office (data via Refinitiv).

success in the long term: the ability to stay the course in periods of turbulence, which may continue to be put to test for some time.

[7] *Ukraine Peace Talks Remain Distant Even as Moscow Signals a Retreat*, *New York Times*, November 9, 2022.
[8] '*No way we can open': China's zero-Covid exit plans unravel*, Financial Times, November 24, 2022.
[9] *The week that could unravel the global oil market*, Financial Times, November 27, 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%	-	3.0%	3.0%	-	-	With global growth expected to trend below potential and non-trivial recession risks, the outlook for equities is precarious in the short term, while longer-term prospects remain more attractive than those for bonds. Alternatives and cash allow for better control of the total risk of the portfolio and offer some protection against sustained inflation.
Fixed Income	40%	-	36.0%	-4.0%	-	-	
Equities	60%	-	58.0%	-2.0%	-	-	
Alternatives	0%	-	3.0%	3.0%	-	-	
Fixed Income							
Government	29%	74%	19.9%	-9.6%	55%	-18.4%	Attractive yields and strong balance sheets should lead corporate bonds to outperform government securities. For risk control purposes, we are sticking to investment grade credit. Treasury yieldsare likely to revisit their recent highs but should ultimately stabilize as the monetary tightening cycle nears its end.
Investment Grade	11%	26%	16.1%	5.6%	45%	18.4%	
High Yield	0%	0%	0.0%	0.0%	0%	0.0%	
Duration	*7.5 yrs*	-	*6.7 yrs*	-0.8 yrs	-	-	
Equities							
Canada	21%	35%	22.0%	1.0%	38%	2.9%	Canada's valuations and peristent momentum are tailwinds, but an allocation to the low volatility factor helps reduce cyclical exposure. In EM, while monetary conditions are a constraint, we favour value sectors with less exposure to China (RAFI Fundamental). In the U.S, we favour the high-quality and dividend-paying (Div. Aristocrats) companies for their diversified and defensive properties.
United States	21%	35%	21.0%	0.0%	36%	1.2%	
EAFE	12%	20%	11.0%	-1.0%	19%	-1.0%	
Emerging markets	6%	10%	4.0%	-2.0%	7%	-3.1%	
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, while offering exposure to high risk-free rates.
Gold	0%	0%	0.0%	0.0%	0%	0.0%	
Non-Traditional FI	0%	0%	0.0%	0.0%	0%	0.0%	
Uncorrelated Strategies	0%	0%	3.0%	3.0%	100%	100.0%	
Foreign Exchange							
Canadian Dollar	61%	-	64.0%	3.0%	-	-	Our overall portfolio strategy places us neutral in U.S. dollars and sligthly underweight in other foreign exchanges versus our benchmark. This positioning is not the expression of specific views on currencies, but rather reflects our willingness to maintain a minimum exposure to the U.S. dollar for risk-management purposes, as well as our preference for Canadian equities over EM.
U.S. Dollar	21%	-	21.0%	0.0%	-	-	
Euro	5%	-	4.2%	-0.4%	-	-	
Japanese Yen	3%	-	2.8%	-0.3%	-	-	
British Pound	2%	-	1.5%	-0.1%	-	-	
Others	9%	-	6.5%	-2.2%	-	-	

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).

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General

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