



Outlook 2023

CIO Office



Martin Lefebvre
Chief Investment Officer

Alberta, January 2023



Agenda

- › 2022 in a nutshell
- › Outlook 2023 : Slippery road ahead
 - Inflation
 - Labor markets
 - Interest rates
 - Recession risks
- › Key takeaways

**2022
in a
nutshell**

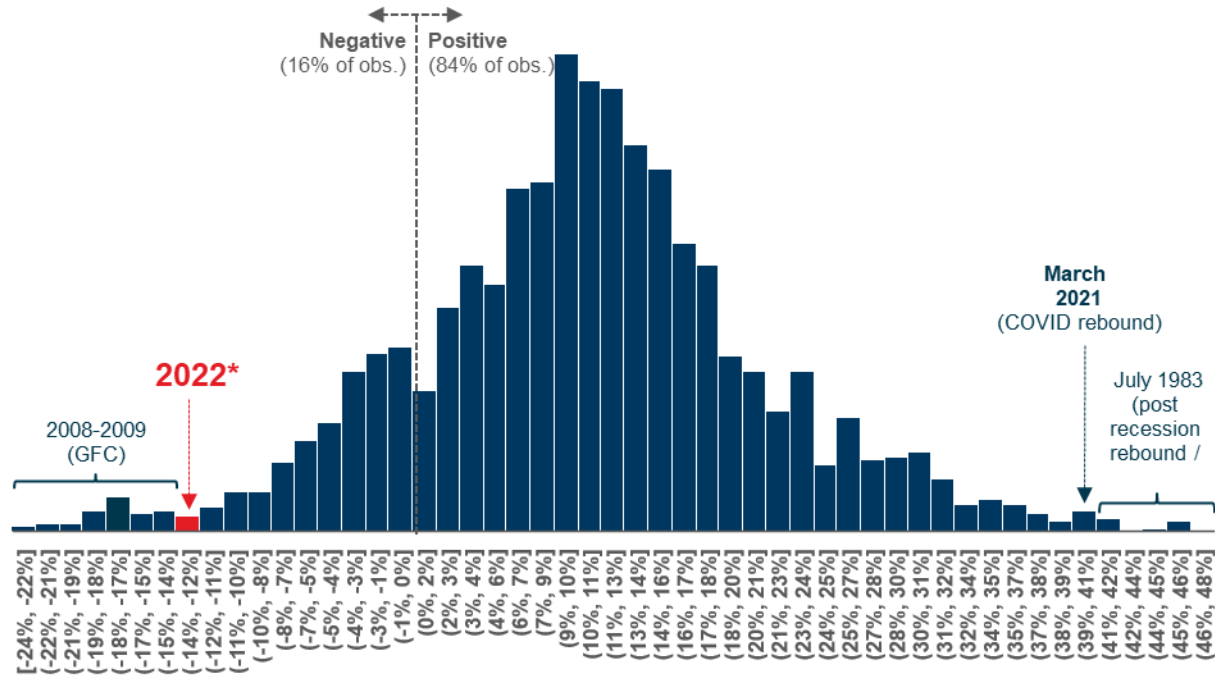


2022: fifty shades of red... and a bit of green

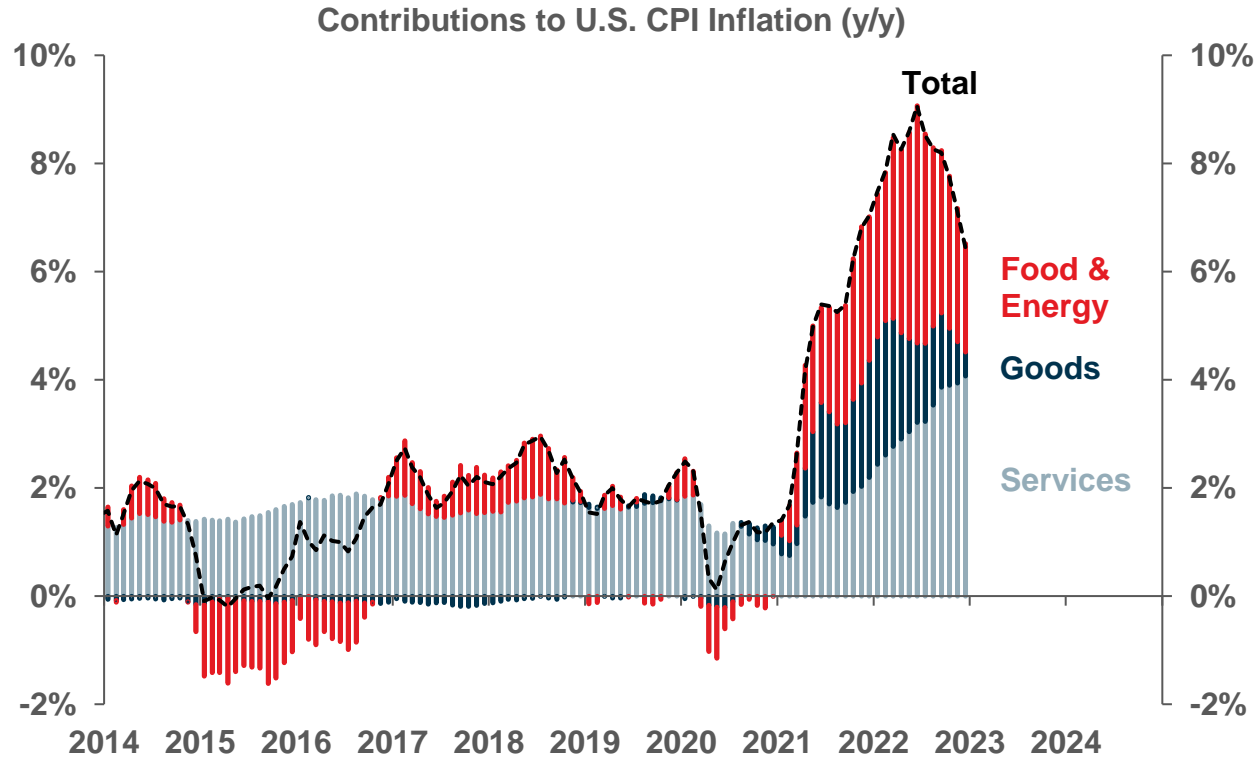
2022 Total Returns						
Cross Asset	Fixed Income*	S&P/TSX Sectors	S&P 500 Sectors	Equity Regions (C\$)	Canada Factors	US Factors
Commodities	Cash	Energy	Energy	Latin America	Momentum	High Dividend
26.0%	1.4%	30.3%	65.7%	17.5%	3.6%	-3.8%
Cash	Short Term	Consumer Staples	Utilities	Canada	High Dividend	Value
1.4%	-4.0%	10.1%	1.6%	-5.8%	0.6%	-6.2%
Gold	Federal Gov.	Materials	Consumer Staples	EAFE	Value	Low Vol.
-0.7%	-9.2%	1.7%	-0.6%	-7.8%	-0.3%	-14.2%
S&P/TSX	Mid Term	Industrials	Health Care	Europe	Low Vol.	Small Caps
-5.8%	-10.0%	1.4%	-2.0%	-8.3%	-1.1%	-17.2%
CADUSD	Corporate	Comm. Services	Industrials	Japan	Quality	Momentum
-6.8%	-10.1%	-2.6%	-5.5%	-8.7%	-4.8%	-17.4%
Balanced*	High Yield (US)	S&P/TSX	Financials	World	MSCI Canada	MSCI USA
-10.1%	-11.2%	-5.8%	-10.5%	-12.0%	-5.8%	-19.5%
US High Yield	Overall Universe	Consumer Disc.	Materials	United States	Large Caps	Large Caps
-11.2%	-11.5%	-6.0%	-12.3%	-12.2%	-6.2%	-19.7%
Canadian Bonds	Treasuries (US)	Financials	S&P 500	Emerging Markets	Small Caps	Quality
-11.5%	-12.9%	-9.4%	-18.1%	-13.9%	-9.3%	-22.7%
MSCI EAFE	Provi. & Muni.	Utilities	Real Estate	Asia (EM)	Growth	Growth
-14.0%	-13.3%	-10.6%	-26.1%	-15.0%	-14.0%	-32.0%
Can. Pref. Shares	Corporate (US)	Real Estate	Info. Tech.	EMEA (EM)		
-18.1%	-15.4%	-21.5%	-28.2%	-22.8%		
S&P 500	Preferred shares	Info. Tech.	Consumer Disc.			
-18.1%	-18.1%	-52.0%	-37.0%			
MSCI Emerging	Long Term	Health Care	Comm. Services			
-19.7%	-21.5%	-61.6%	-39.9%			

One of the worst YoY performance for balanced funds

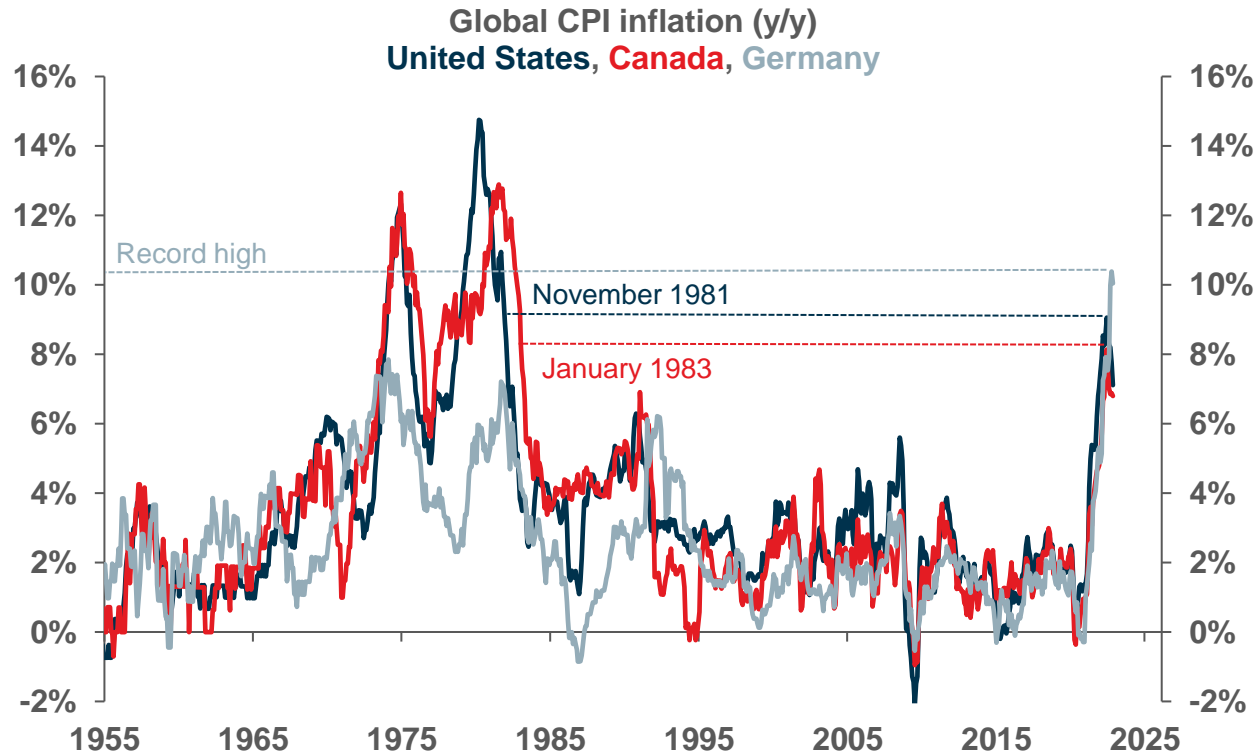
Balanced portfolio annual return distribution (1975 - 2022)*



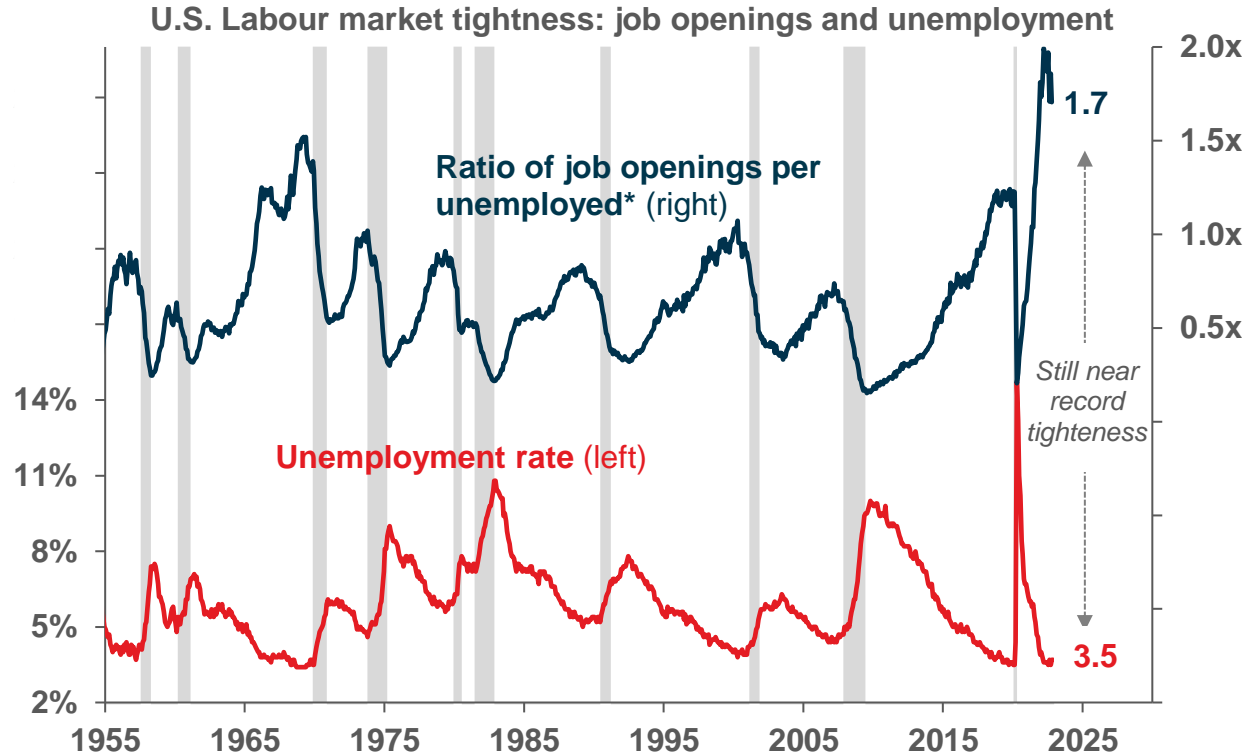
A perfect inflationary storm...



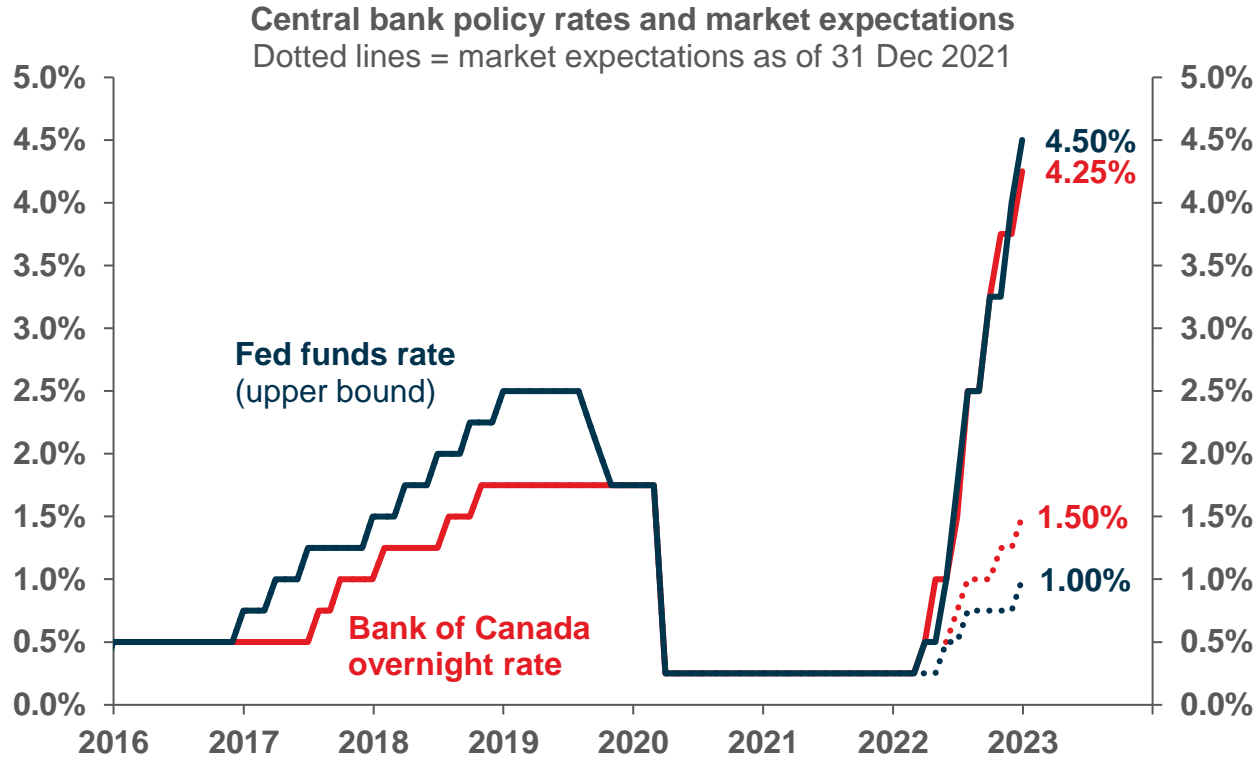
... pushed inflation to record highs...



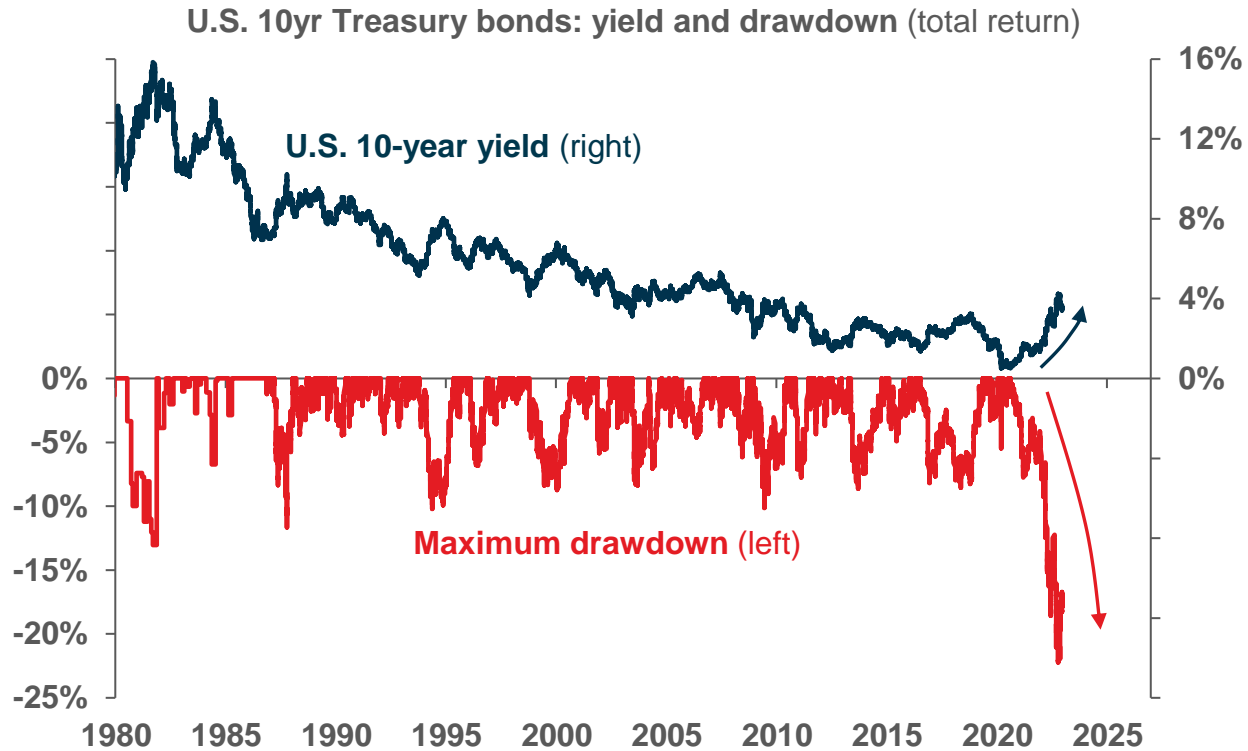
... while overheating risks mounted...



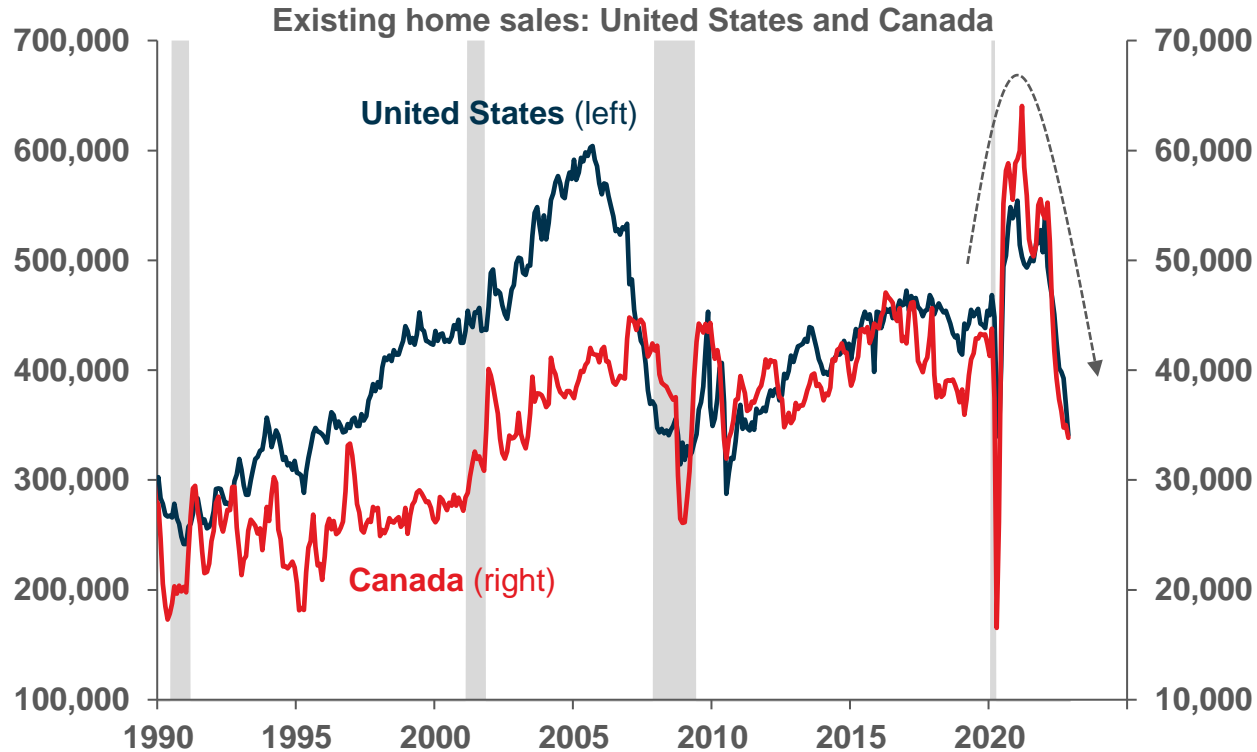
... inciting central banks to tighten policy markedly...



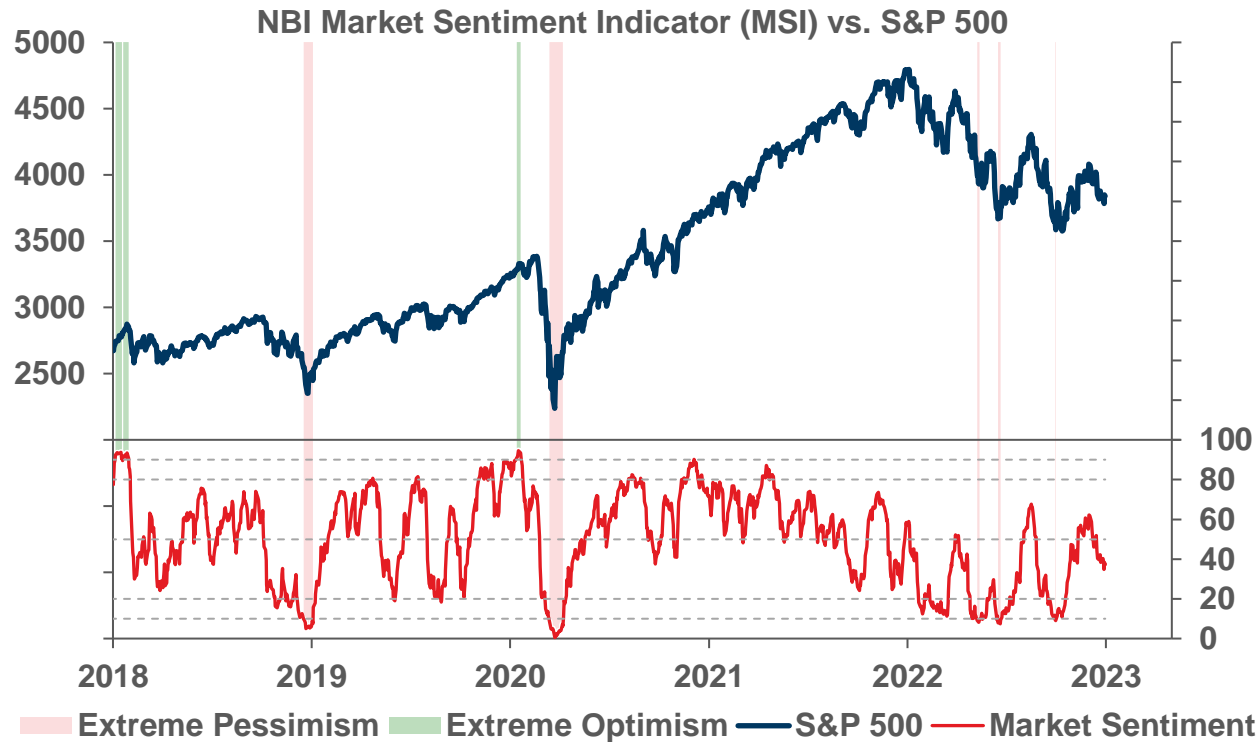
... resulting in steep losses for bonds...



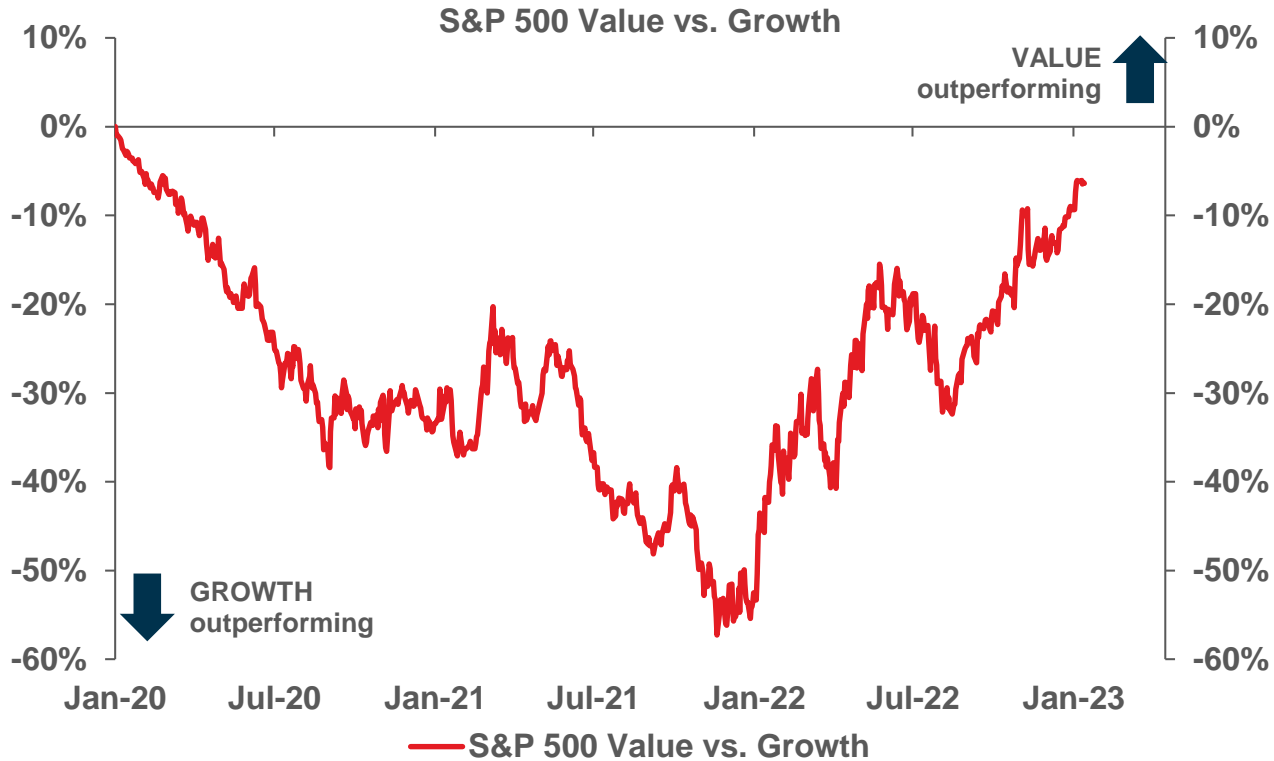
... a significant pullback in real estate...



... increased equity market volatility...



... and a major factor rotation



Outlook 2023





Quarterly outlook

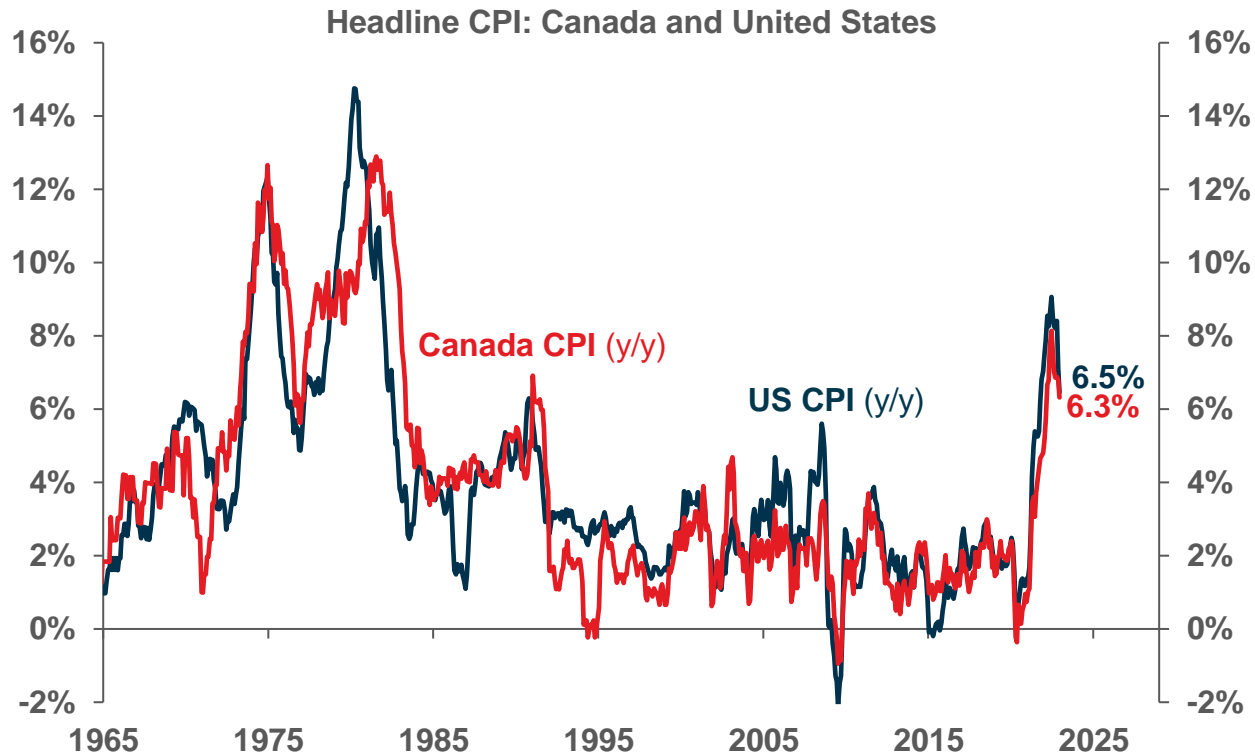
Slippery road ahead

January 2023

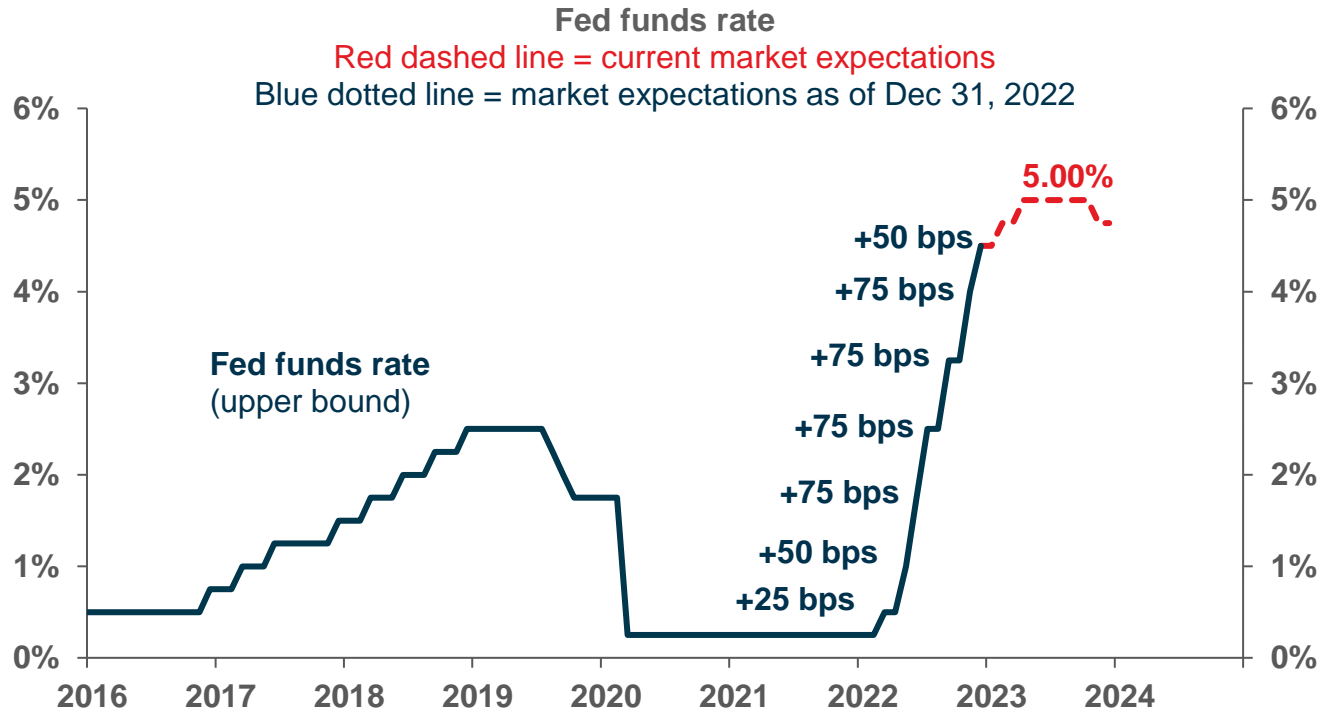
Markets off to a good start...



... as inflation finally started to decelerate...



... pushing markets to expect the end of tightening is nigh

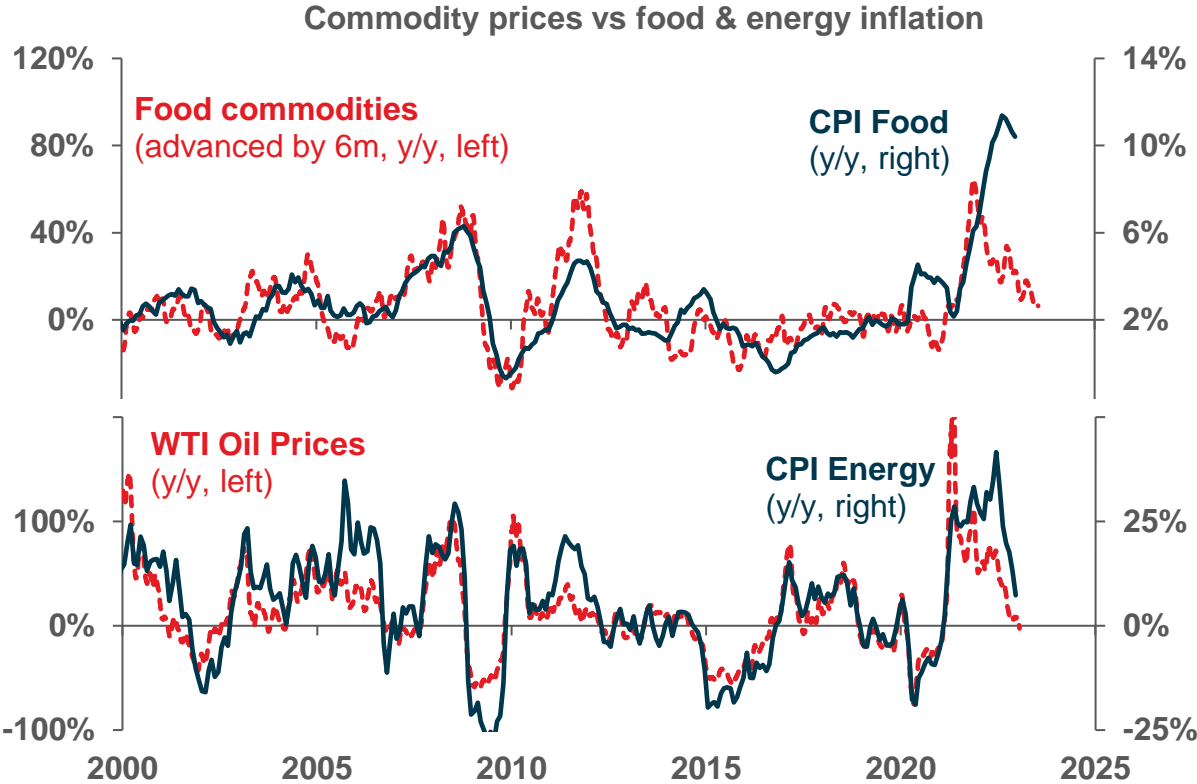


Knowing when to start, stop and pivot

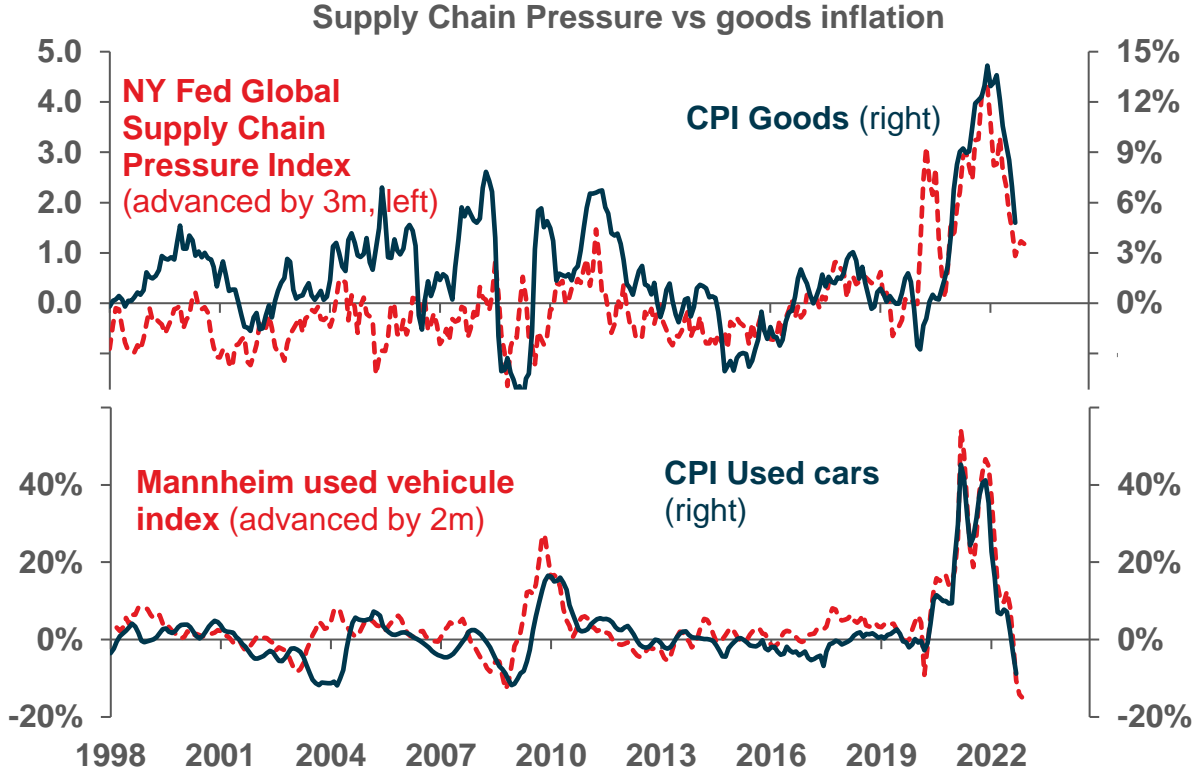
Federal Reserve rate-hike cycles since 1972

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 -->	-4.5%	?	?
Average		1.3%		3.5%		2.9%

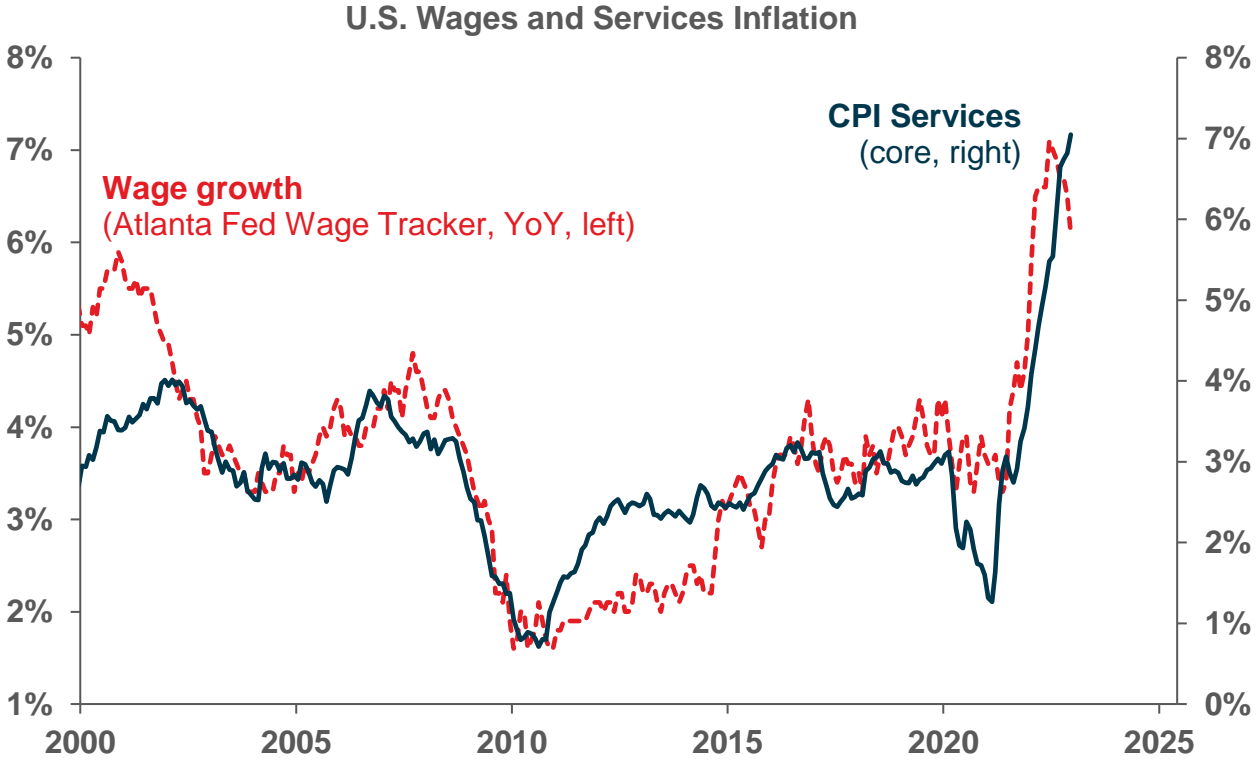
Commodity prices on the mend



Less pressure on supply chains



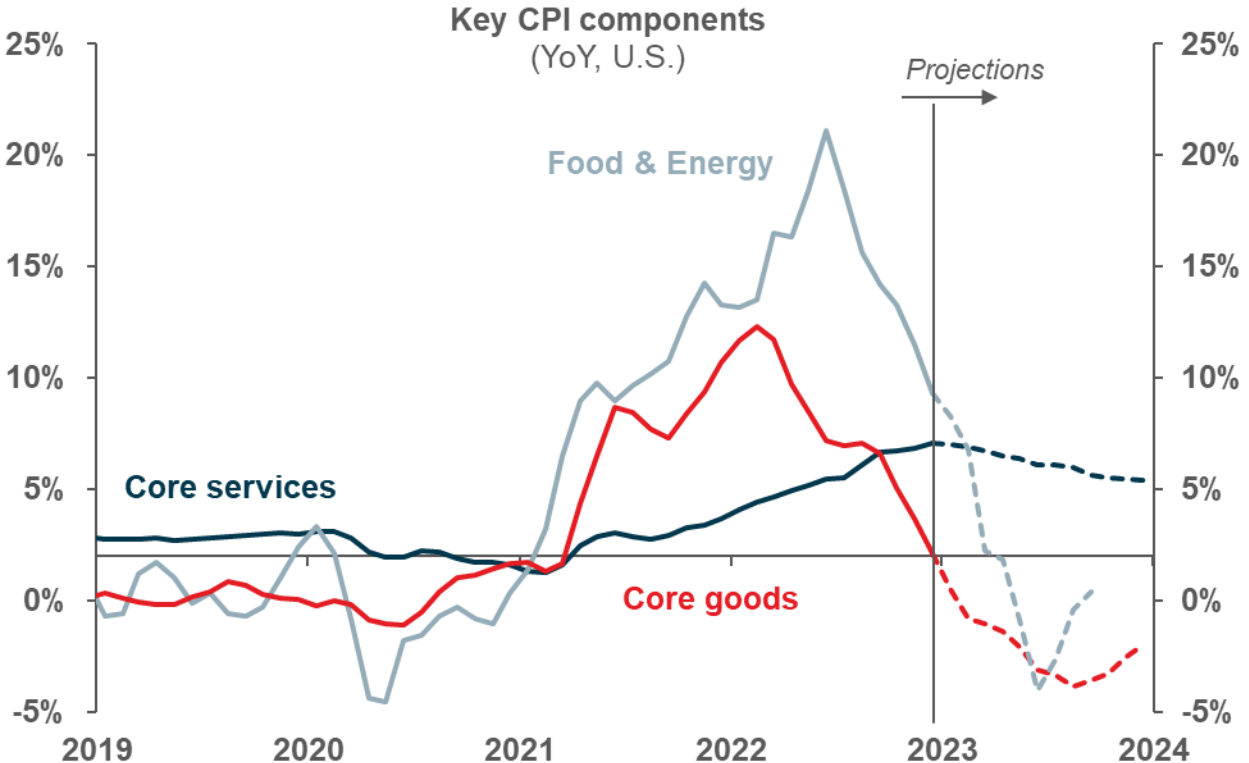
Inflation in services remains pressured by wage growth...



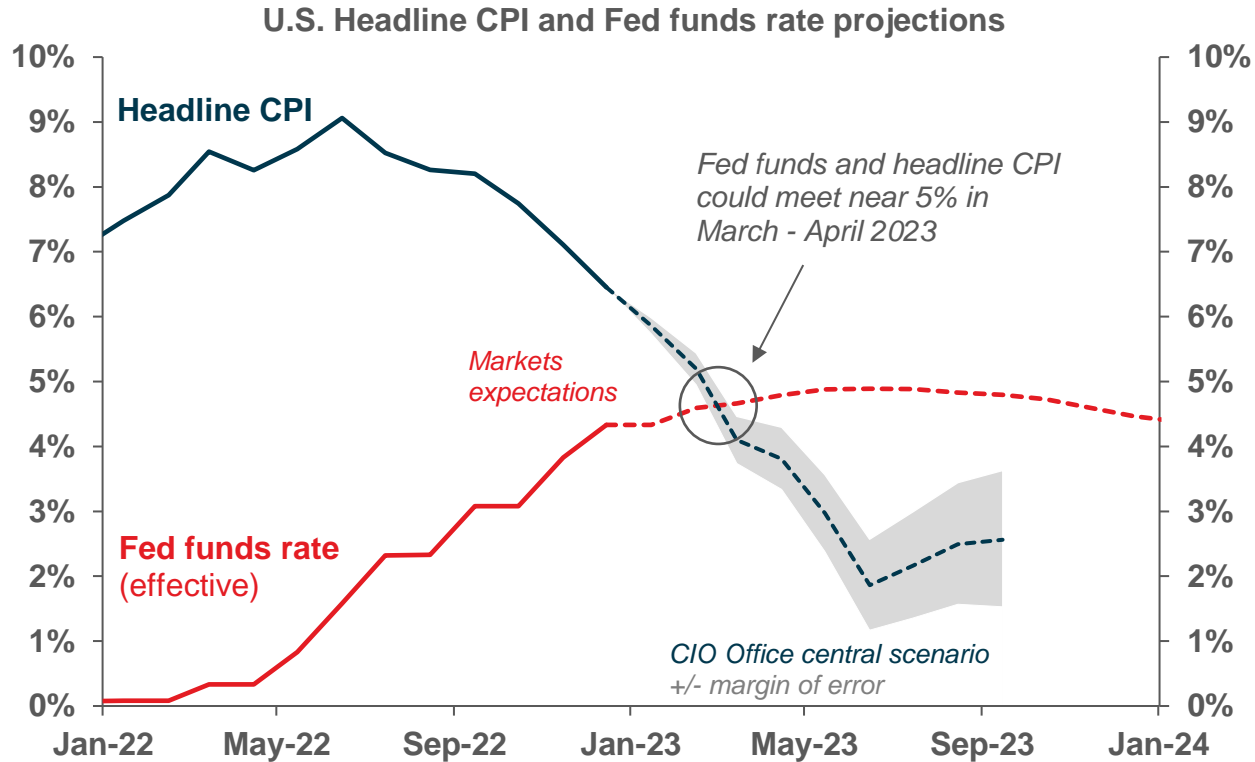
... but peak looming ahead of us



Inflation should continue to abate further...



... enabling the Fed to lift its foot off the brake pedal

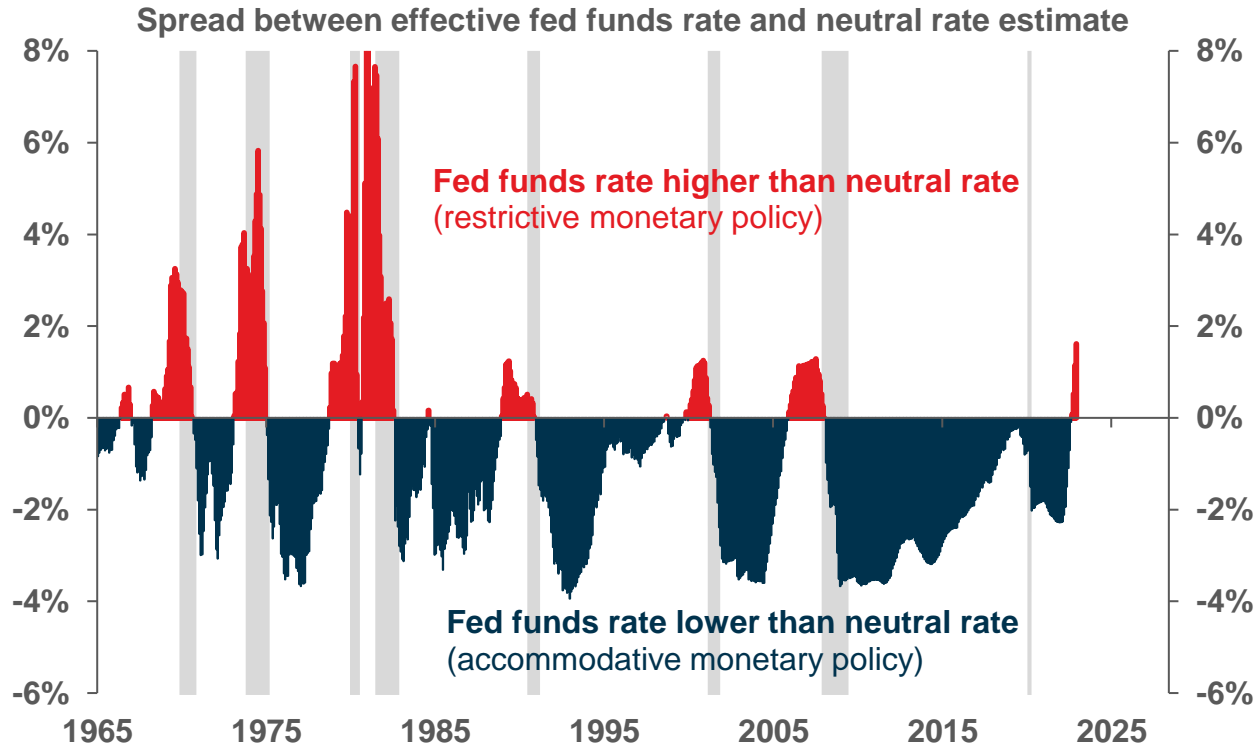


But bear market shouldn't be over until they cut rates

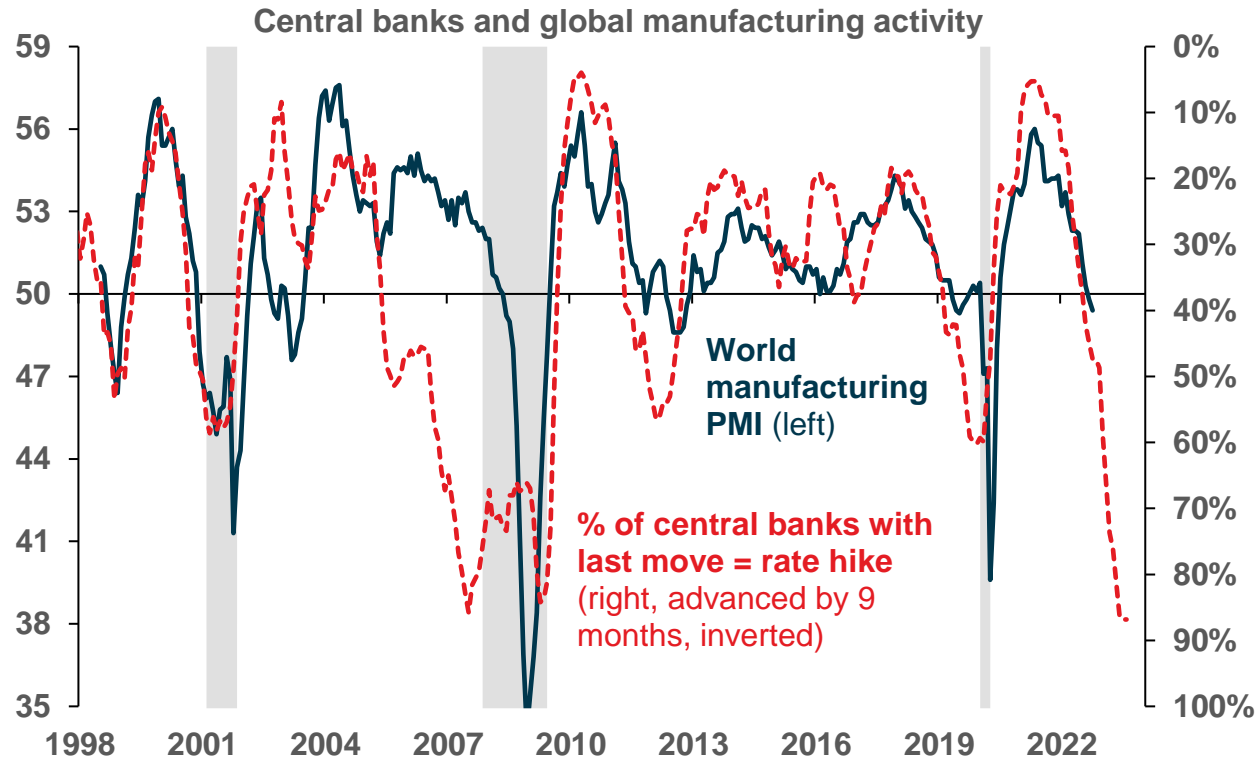
Economic and financial conditions during S&P 500 bear market bottoms

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%
<i>October 12, 2022*</i>	-25%	9	+124 bps	<i>Hike</i>	-	-4.5%

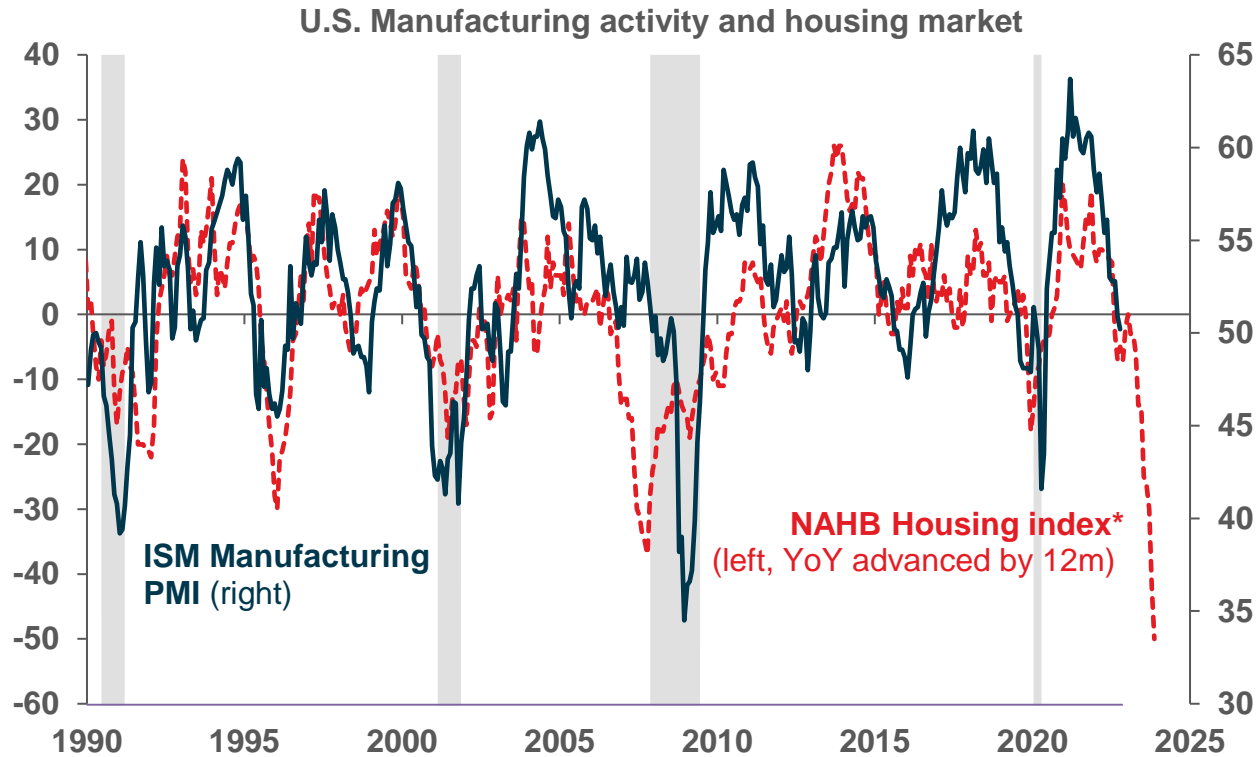
Due to restrictive monetary policy...



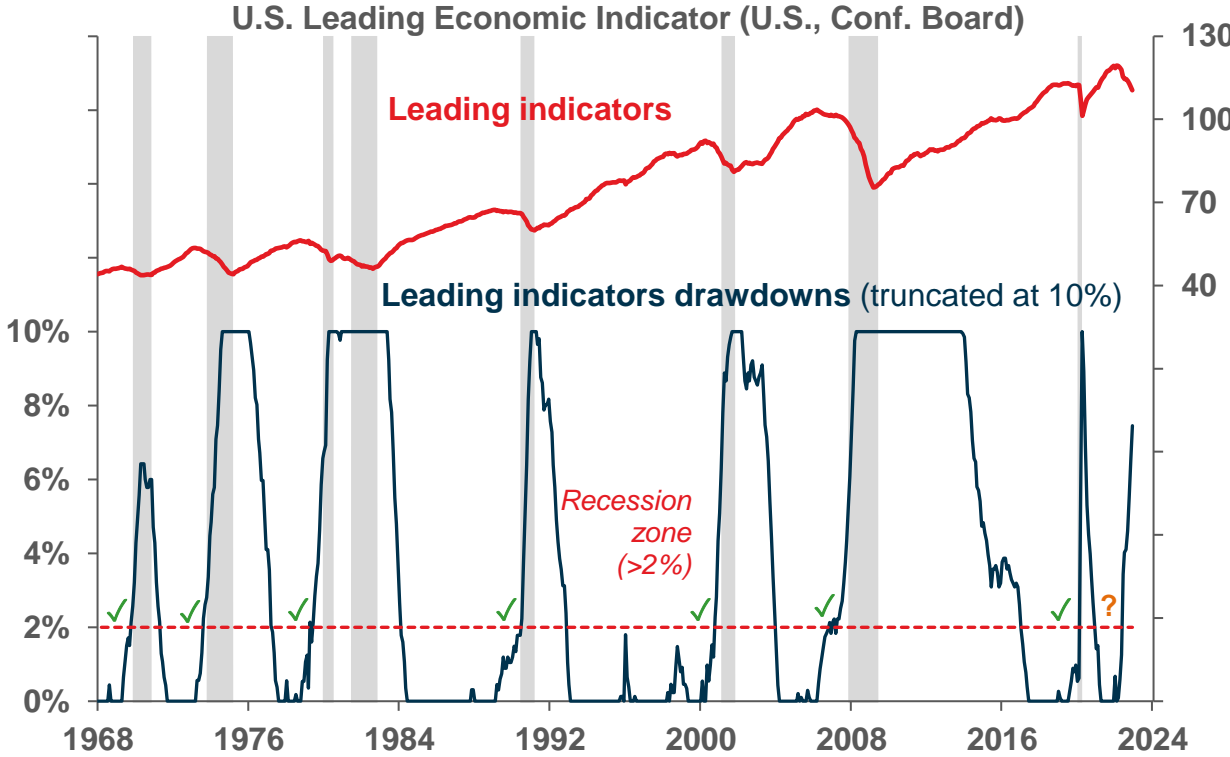
... a global slowdown is underway...



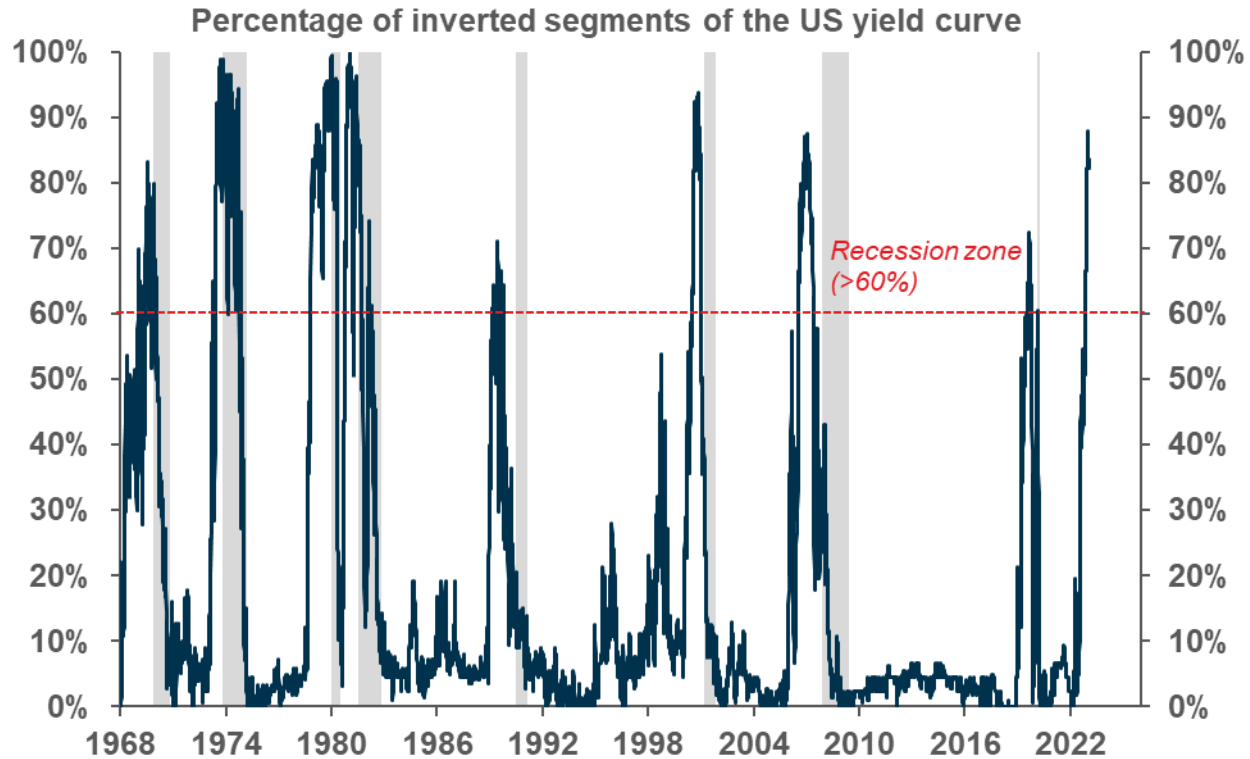
... mostly visible in housing activity for now



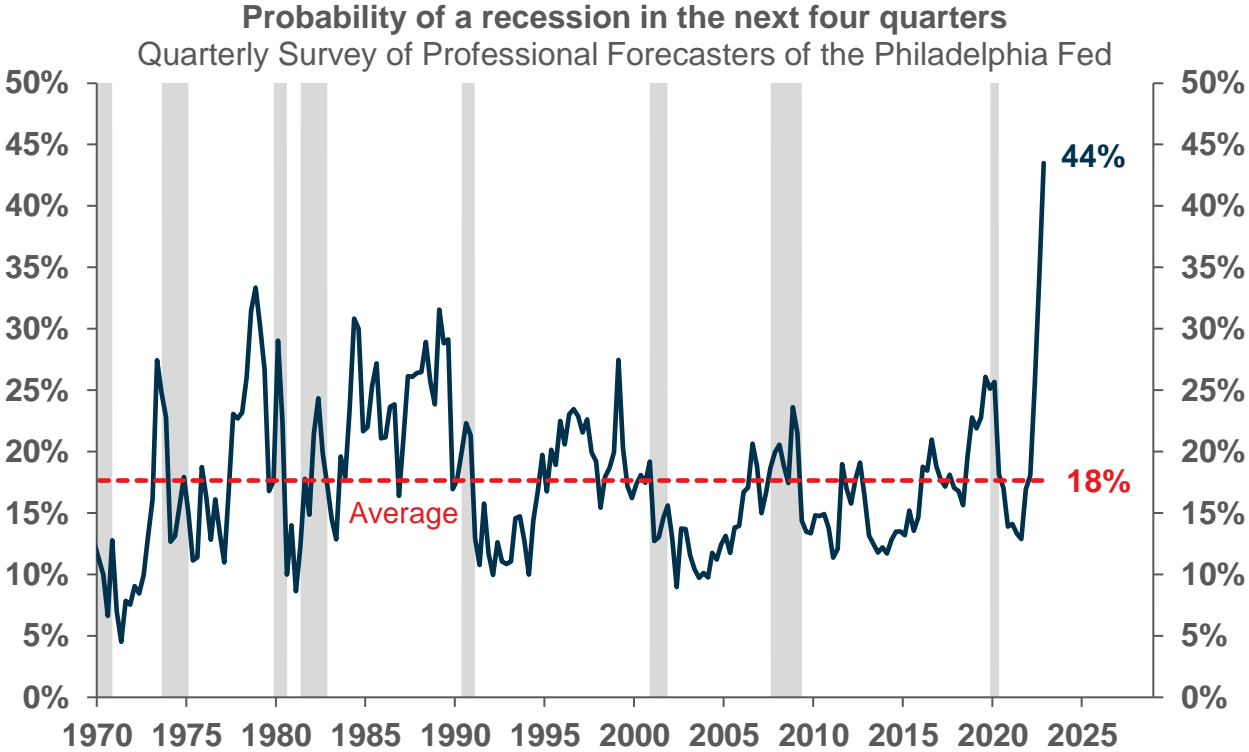
Many leading indicators flashing 'red'...



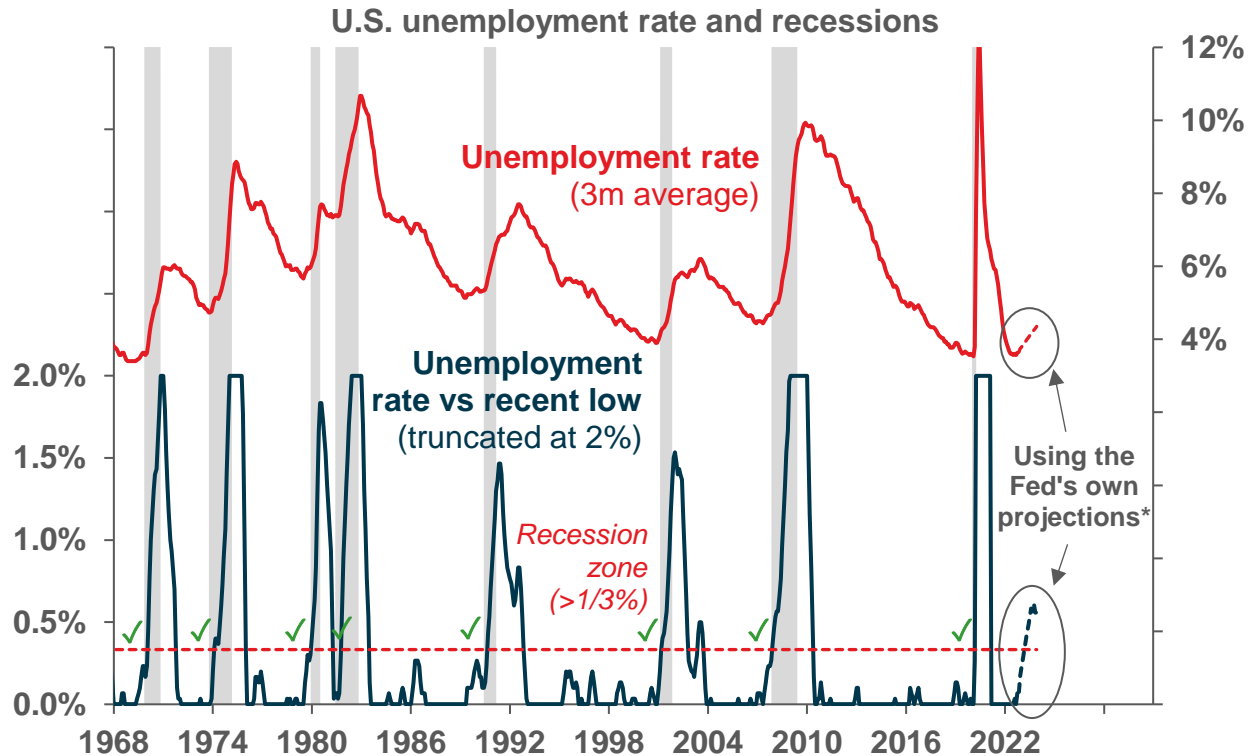
... as the yield curve gets inverted



The most foreseen slowdown in history...



... still must be confirmed by the labor market



Economic scenario (probability)

	Previous	Current	Key elements and investment implications
Bull case	Sub-trend growth (10%)	→ Sub-trend growth (10%)	<ul style="list-style-type: none"> • Inflation decelerates much faster than anticipated; central banks set the stage for rate cuts in 2023. • Labour markets cool down, but without a sharp increase in layoffs: job openings drop, wage pressures ease. • Russia and Ukraine resume talks toward a potential conflict resolution. • Beijing's retreat from zero-COVID and additional stimulus measures support China's economic recovery. • Household consumption proves resilient, supported by solid balance sheets and improving purchasing power. <p>Economic implications: Below-potential but positive real GDP growth. Market implications: ↑Equities ↓Bond yields ↓↓USD ; U.S. & EM > Canada & EAFE</p>
Base case	Stagnation (50%)	→ Stagnation (50%)	<ul style="list-style-type: none"> • Inflation slows down thanks to lower goods prices and a gradual moderation in services inflation. • Labour markets start softening but remain tight on a historical basis. • The Bank of Canada and the Fed keep their monetary policy into restrictive territory. • Corporate earnings are under pressure from rising wages, higher borrowing costs and weakening consumer demand. • Strong household balance sheets limit the extent of the economic slowdown. <p>Economic implications: Stagnation; zero GDP growth and moderate increase in unemployment. Market implications: ↓Equities ↑Bond yields ↑USD ; Canada & U.S. > EM & EAFE</p>
Bear case	Recession (40%)	→ Recession (40%)	<ul style="list-style-type: none"> • Headline inflation decelerates, but core components and wage growth remain stubbornly high. • Major central banks keep their monetary policy deeper into restrictive territory. • Geopolitical tensions escalate, leading to renewed commodity disruptions. • Chinese growth falters as zero-COVID retreat leads to a major contagion wave. • Facing elevated inflation and still rising interest rates, consumers tighten their belt and cut discretionary spending. • Unknown financial markets fragilities are revealed, putting pressure on monetary and fiscal policy makers. <p>Economic implications: Recession; GDP contraction, job losses, sharp increase in unemployment. Market implications: ↓↓Equities ↓Bond yields ↑USD ; Canada & U.S. > EM & EAFE</p>

Three key takeaways

#1

What to monitor?

Labor market conditions, Fed guidance

#2

Base-case scenario

Lower inflation, central banks' pause, growth stagnation

#3

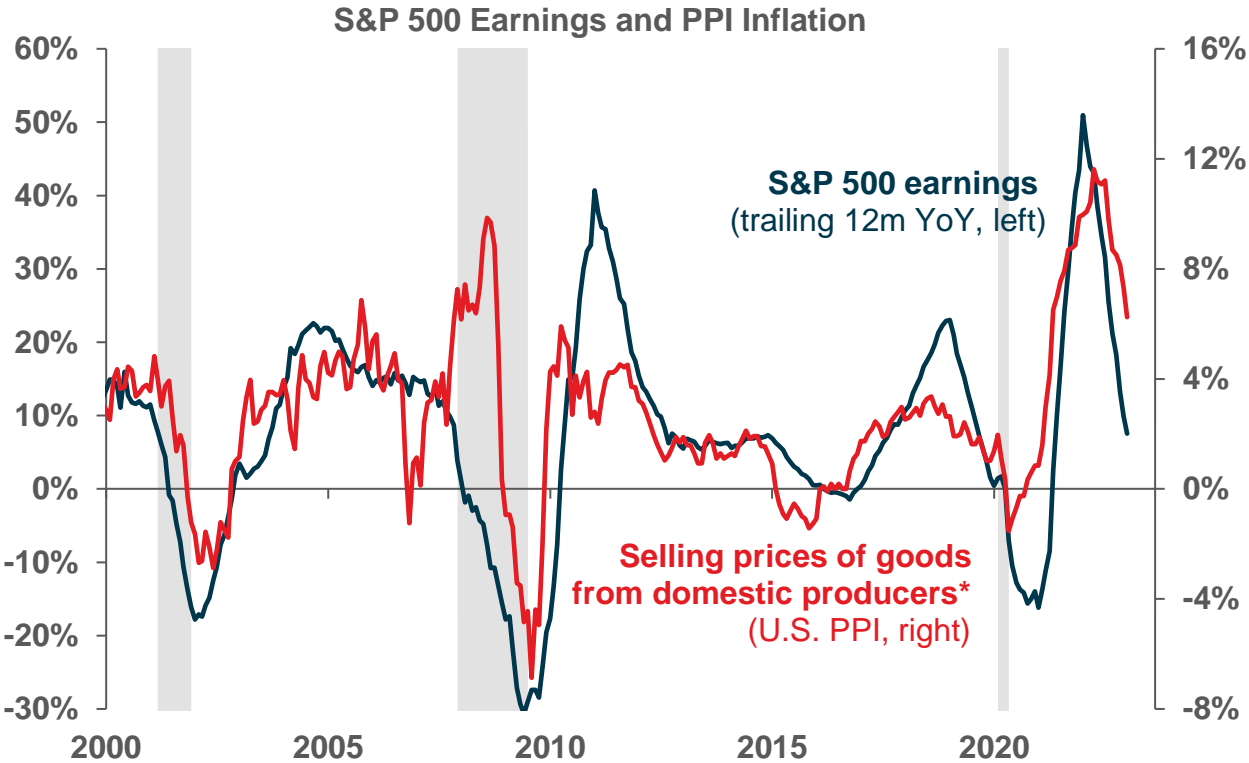
Markets

High volatility, caution, resilience

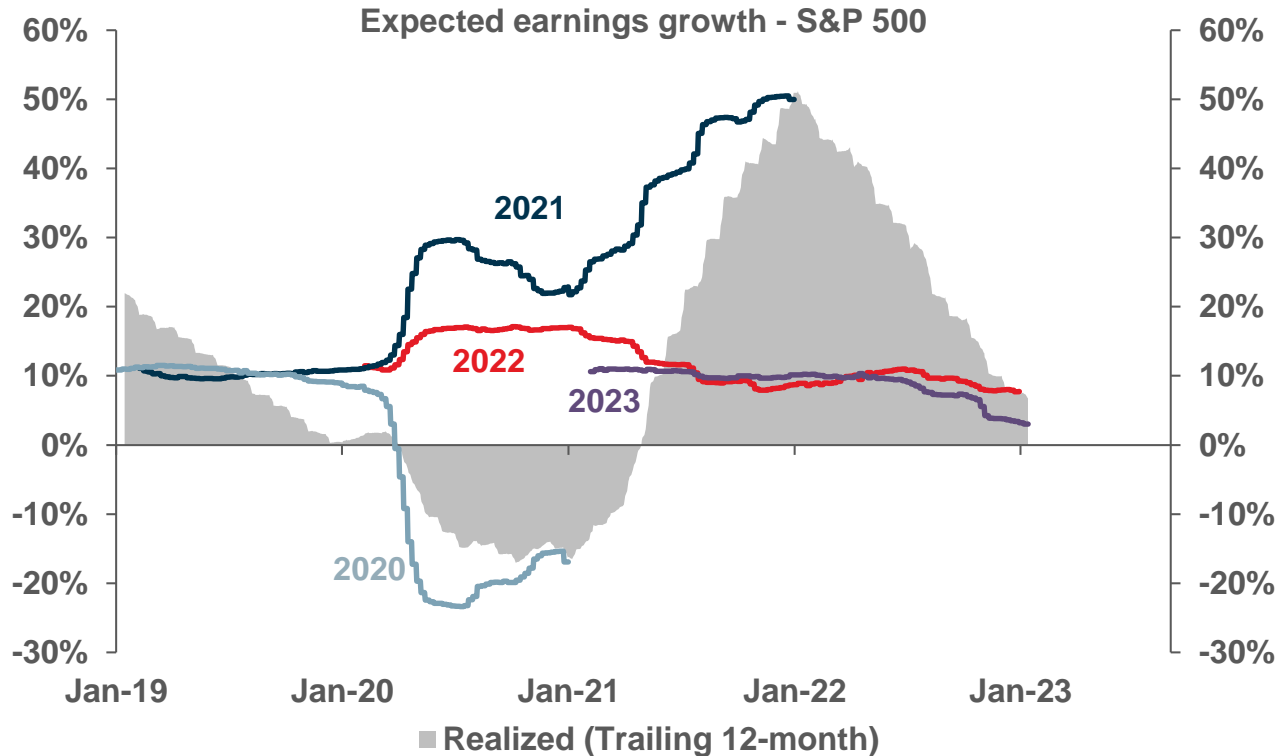
Questions?



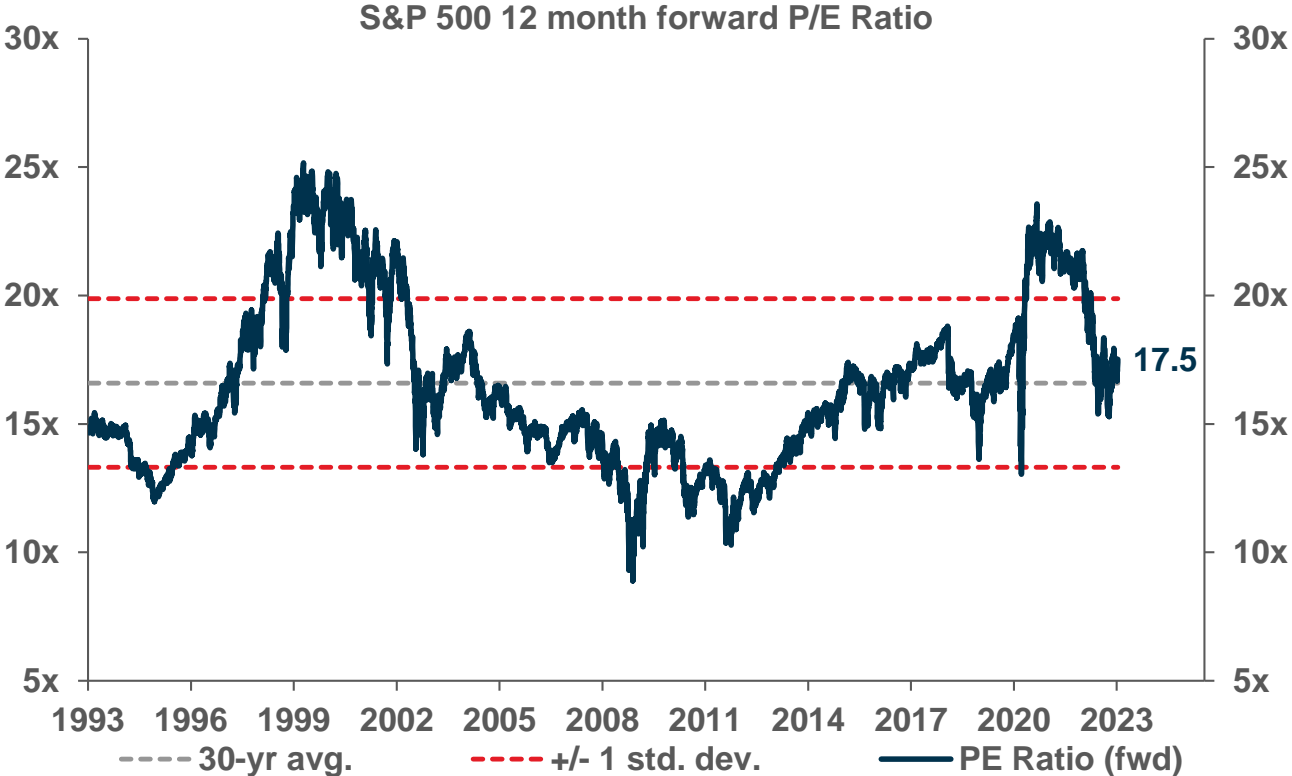
Lower inflation would impact earnings...



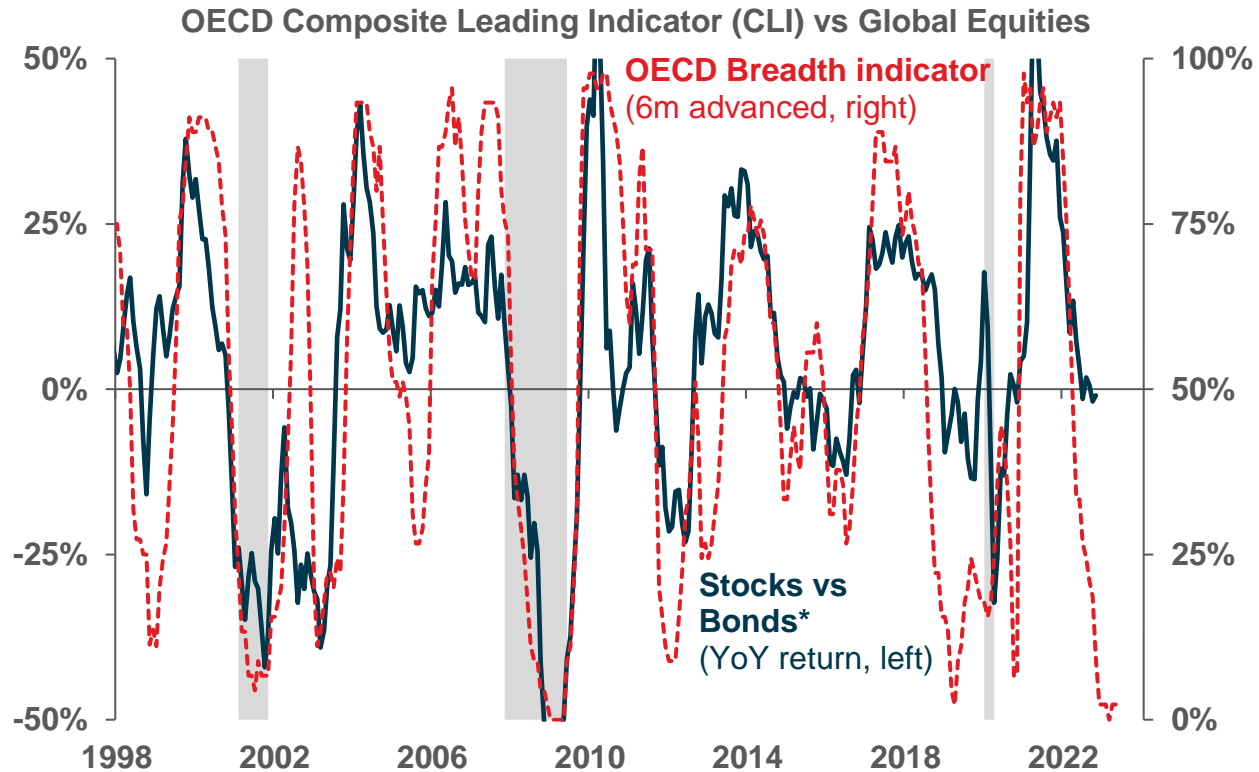
... which should continue to be revised lower



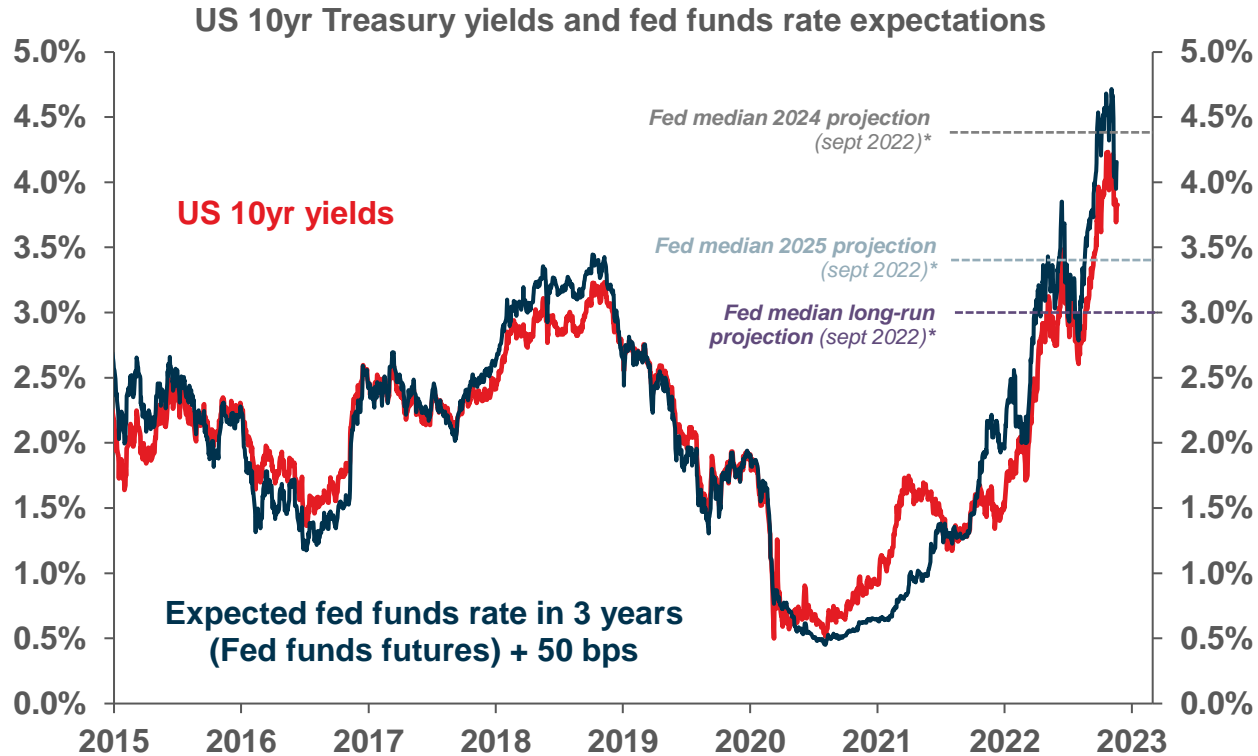
US markets are still expensive



Environment favorable to bond outperformance



Bond yields could increase a little further...

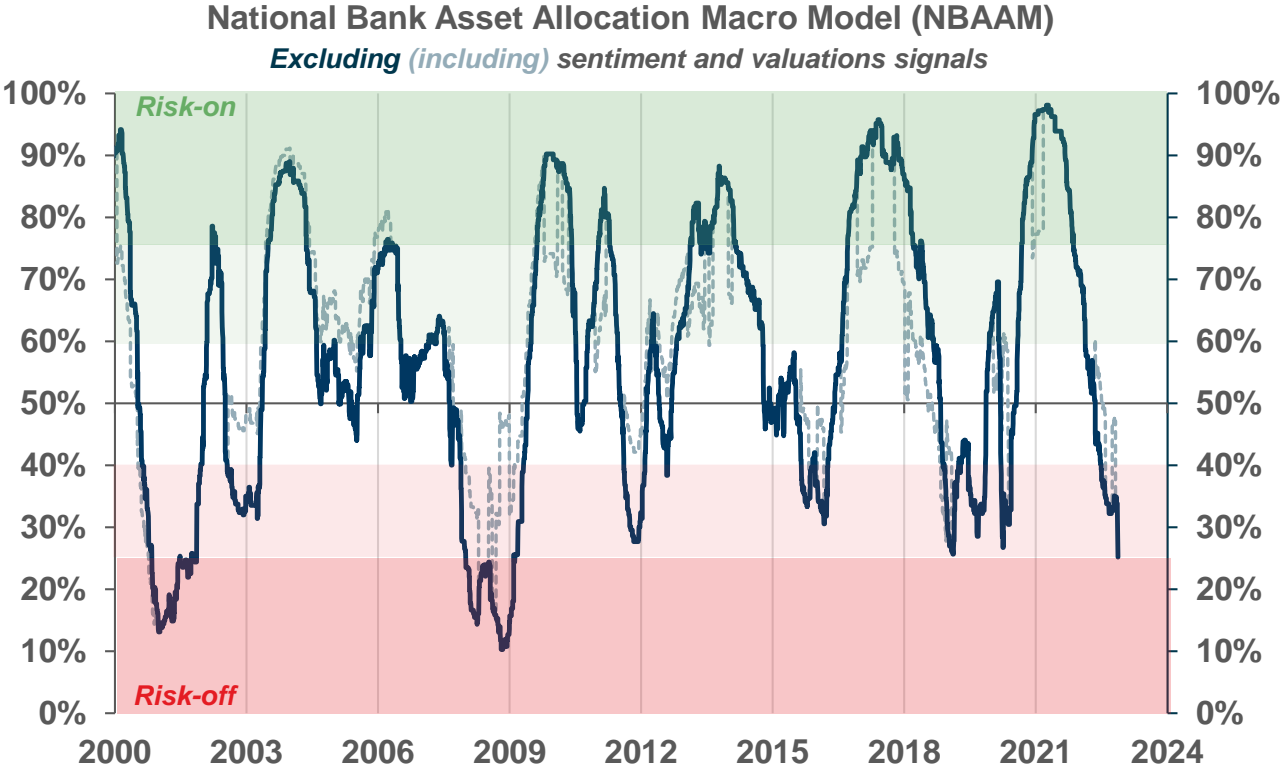


... but the worst is likely behind us

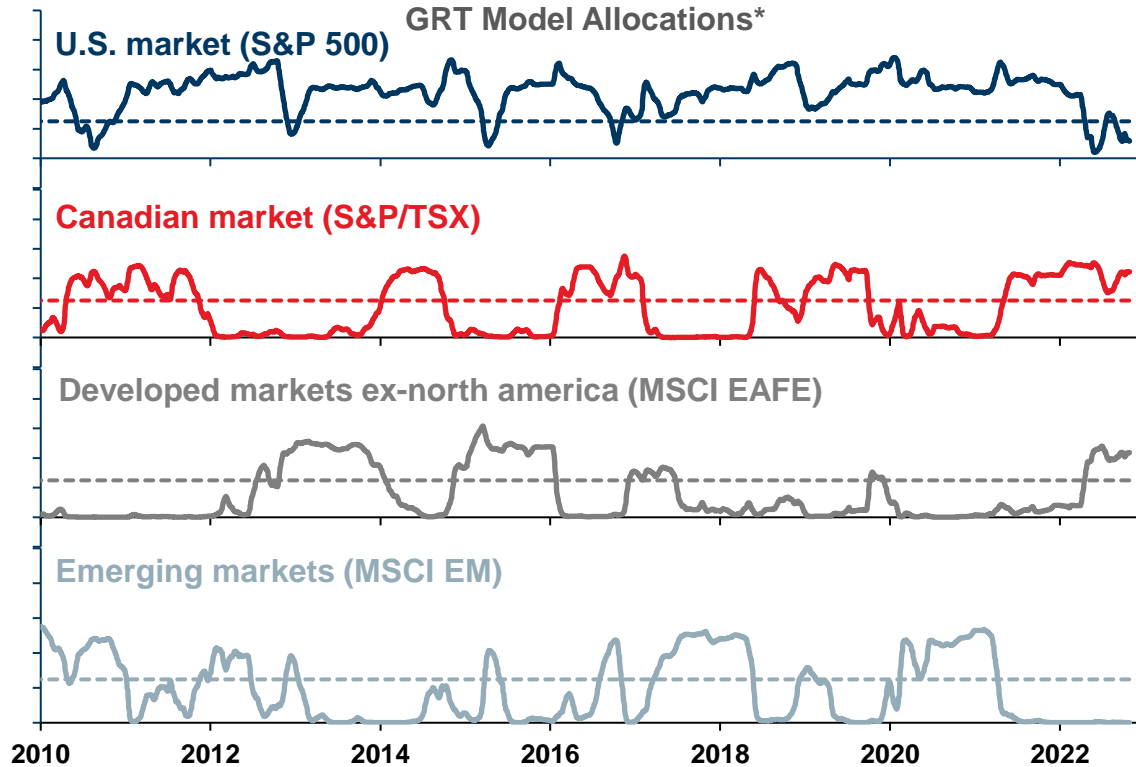
Expected 1-year Total Return from Interest Rate Changes

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%

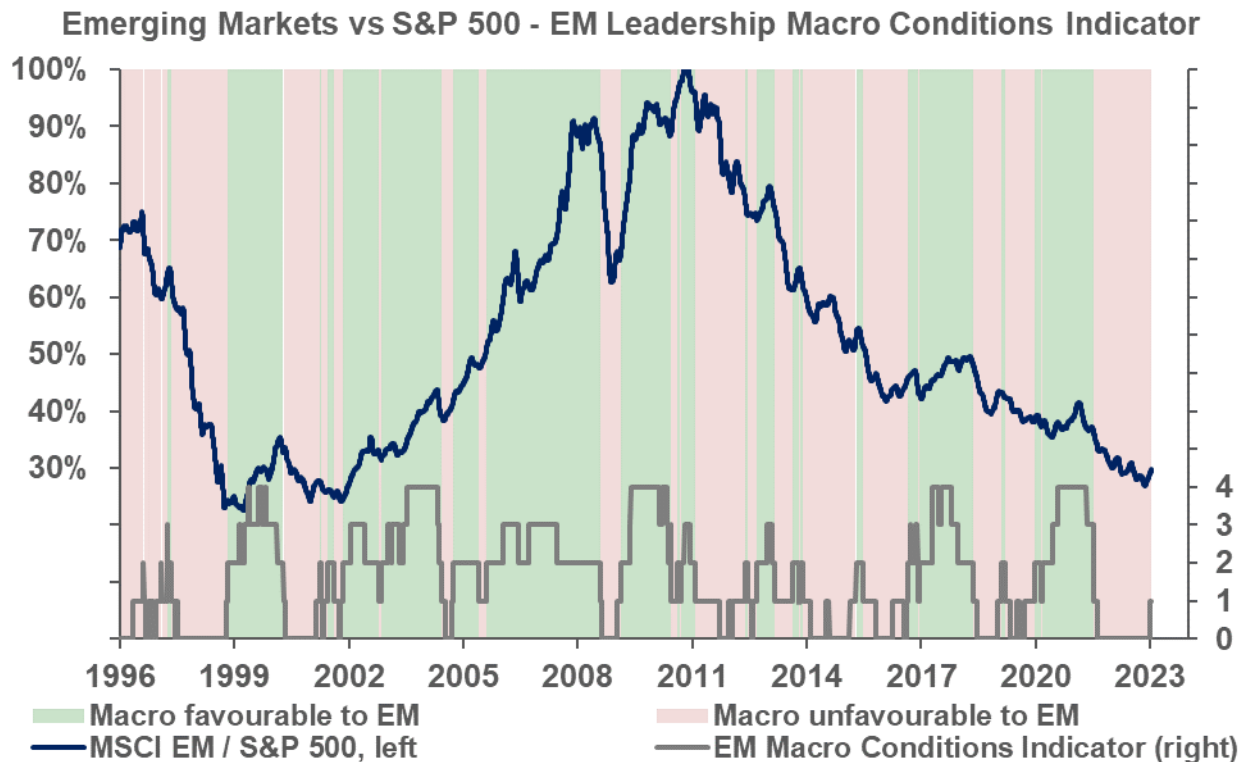
NBAAM model shies away from equities



Relative momentum still in Canadian equities



Too early for a sustained rally in EM?



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Open architecture.
Endless opportunities.



National Bank Investments



Our structure of

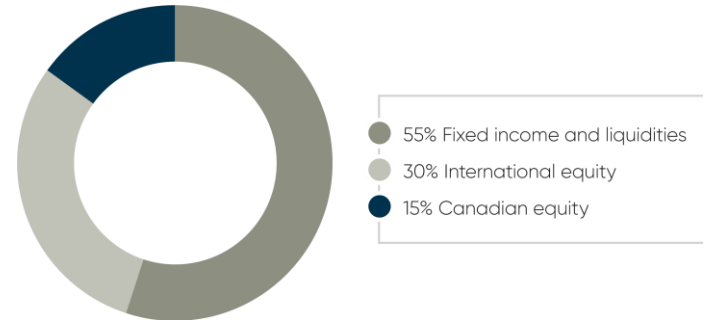
open architecture

National Bank Investments is a top-tier investment fund management firm committed to manufacturing and distributing investment solutions and services designed to help investors meet their financial goals.

As a reputable top-tier asset manager, NBI selects first-rate investment talent from top global management firms.

NBI aims to be an accelerator promoting the growth and development of investment solutions and services with the objective of positively impacting the lives of investors.

Over \$74 billion in assets under management

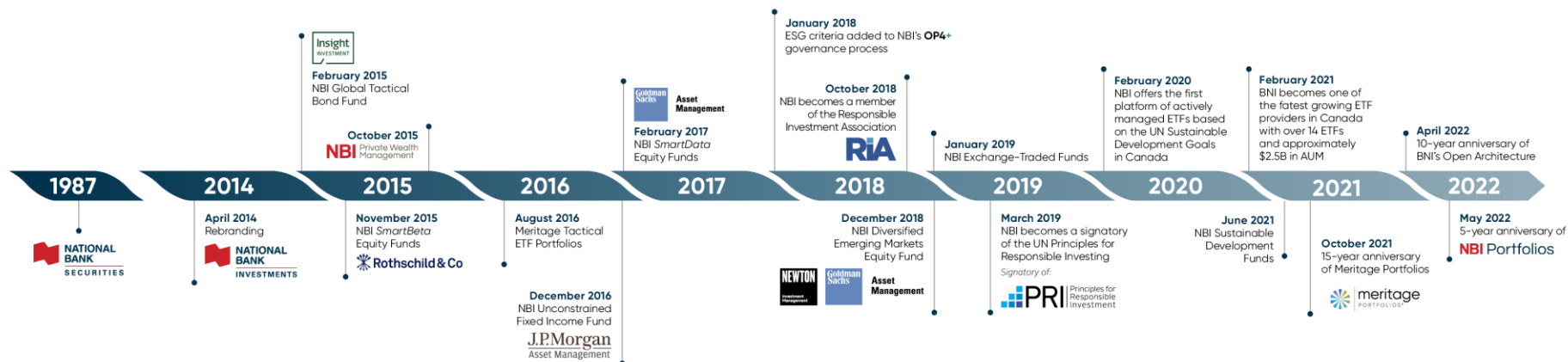


As at September 30, 2022



A unique approach

to investing



42 elite portfolio managers


85 proven portfolio management teams

Over 175 in-person oversight meetings with portfolio managers annually

Our OP4+ criteria for excellence

in portfolio management

More than 25 well-defined criteria

 <p>Organization Strong organization with top-tier investment culture</p>	<ul style="list-style-type: none"> › Organizational culture › Access to equity for employees › Financial stability
 <p>People Stable team of investment professionals</p>	<ul style="list-style-type: none"> › Experience of senior managers and analysts › Key staff stability/Clear succession plan › Alignment of manager's and analysts' financial interests › Enough analysts to thoroughly cover the investment universe › Diversity within the investment team (gender, origin and experience)
 <p>Process Proven management processes to select securities, build portfolios and manage risk</p>	<ul style="list-style-type: none"> › The managers are able to establish the competitive advantage of their products › The process is clear and repeatable, but flexible to adapt to structural market changes › Accountability in the decision-making process › Debate investment ideas in committee › The sell or revision process is well-defined › Risk management is an integral part of the portfolio construction process › Learn from past mistakes › Performance monitoring by an observer external to the investment team
 <p>Portfolio Optimized portfolio construction that follows the investment process and ensures sound diversification</p>	<ul style="list-style-type: none"> › Coherence between the process and the actual portfolio › Sound diversification › Current size of the portfolio and liquidity of the positions › Diligent use of cash in hand
 <p>Performance Strong and predictable risk-adjusted returns</p>	<ul style="list-style-type: none"> › The portfolio behaves as anticipated in different market conditions › Competitive pricing
 <p>+ Integration of Environmental, Social and Governance factors</p>	<ul style="list-style-type: none"> › Signatory of the United Nations Principles for Responsible Investment (or similar organizations) › Incorporation of ESG factors for value creation and risk management › Resources dedicated to responsible investment › Proxy voting and engagement in line with investment objectives › Measure of portfolio footprint and targets › Stewardship activities

NBI's responsible investment

approach

The approaches adopted by our portfolio managers

- › Responsible investing (RI) is part of our research and portfolio construction work. Most of the investment solutions that make up our platform incorporate RI considerations.

Exclusion	ESG investing	Best-in-class	Sustainable portfolio creation
			
Involves excluding companies, sectors or even countries that are not compatible with an investor's mission or values.	Involves incorporating data on environmental, social and governance criteria into the investment processes.	Involves investing in leading securities based on environmental, social and governance criteria.	Involves investing in securities that contribute to the achievement of one or more of the United Nations (UN) Sustainable Development Goals.

Integrating the UN Sustainable Development Goals (SDGs) at NBI

- › NBI offers the first platform of actively managed ETFs based on the UN SDGs in Canada.
- › As part of our open architecture structure, portfolio managers who are responsible for subadvising our sustainable investment solutions must ensure that they invest in securities that contribute to achieving one or more of the SDGs.

The 17 SDGs are as follows:



Setting ourselves apart with our

large network of expert

Empowerment, agility and complicity are at the heart of our mission and at the service of your clients' assets.

Being the leading open architecture provider in Canada, NBI is committed to providing diversified investment solutions to meet evolving client needs through our reputable partners.

Active Strategy



ALLIANCEBERNSTEIN

AlphaFixe
Capital



BEUTELGOODMAN
Investment Counsel



BLACK CREEK
INVESTMENT MANAGEMENT INC.

BMO Global Asset Management



CAMBRIDGE
GLOBAL ASSET MANAGEMENT



CAPITAL
GROUP



GLOBAL ASSET
MANAGEMENT



EDGEPOINT



Fidelity



FIERACAPITAL



Goldman Sachs
Asset
Management



[intact]



JARISLOWSKY FRASER
GLOBAL INVESTMENT MANAGEMENT

J.P.Morgan
Asset Management



MACKENZIE
Investments

Manulife Investment Management



MELLON



MONRUSCO
BOLTON



NEWTON
Investment
Management



RBC
Global Asset
Management



TD
Asset
Management

Smart Beta Strategy



Rothschild & Co

Index-Tracking Strategy



BMO Exchange Traded Funds



HORIZONS ETFs
by Mirae Asset



Invesco



iShares
by BLACKROCK

Fully invested

in a culture of excellence

Our investment resources draw on talented teams to continuously optimize our open architecture structure. To innovate and grow, we leverage human interactions and capabilities in order to deliver optimal risk-return investment solutions.

Our teams

Portfolio Construction Committee

- › Research initiatives
- › Portfolio construction

CIO Office

- › Fundamental analysis
- › Strategic & Tactical asset allocation
- › Communications

Risk and Performance Management

- › NBI Risk and Execution Management Team
- › OP4+ Research

Portfolio Solutions

- › NBI Investment Solutions and Business Strategies Team

Development and Alternative Investments

- › NBI Strategy and Research Team

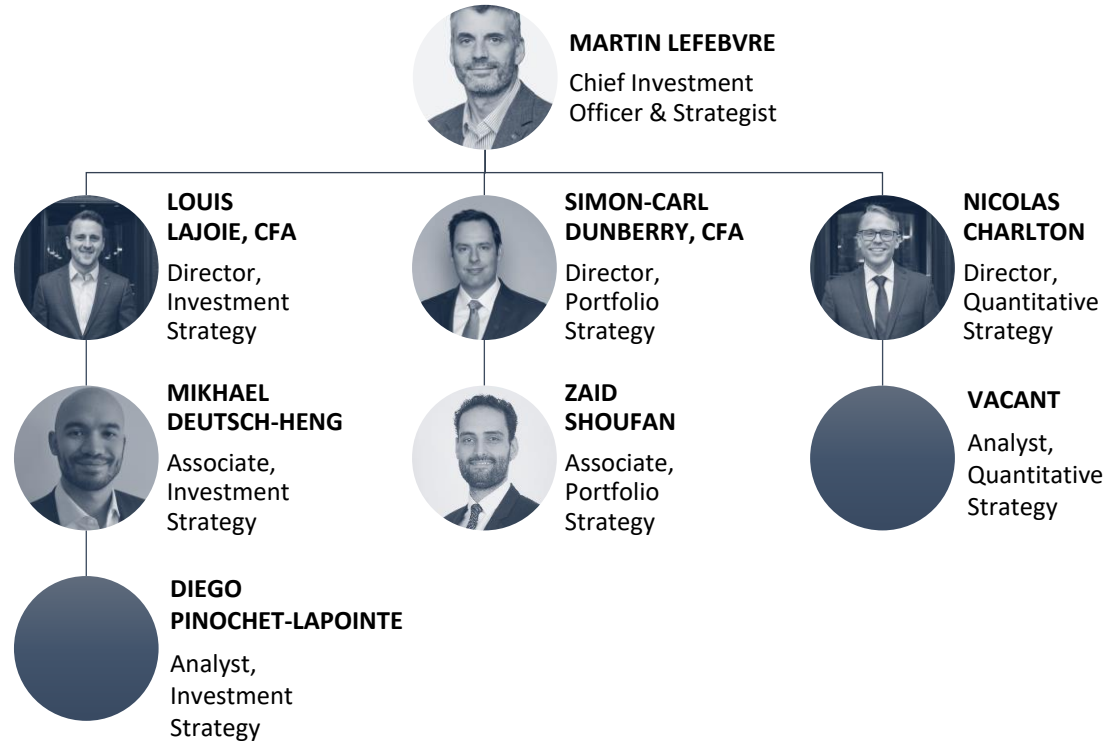
Research Teams

- › NBCFM ETF and Financial Product Research Team
- › NBC Economy and Strategy Team

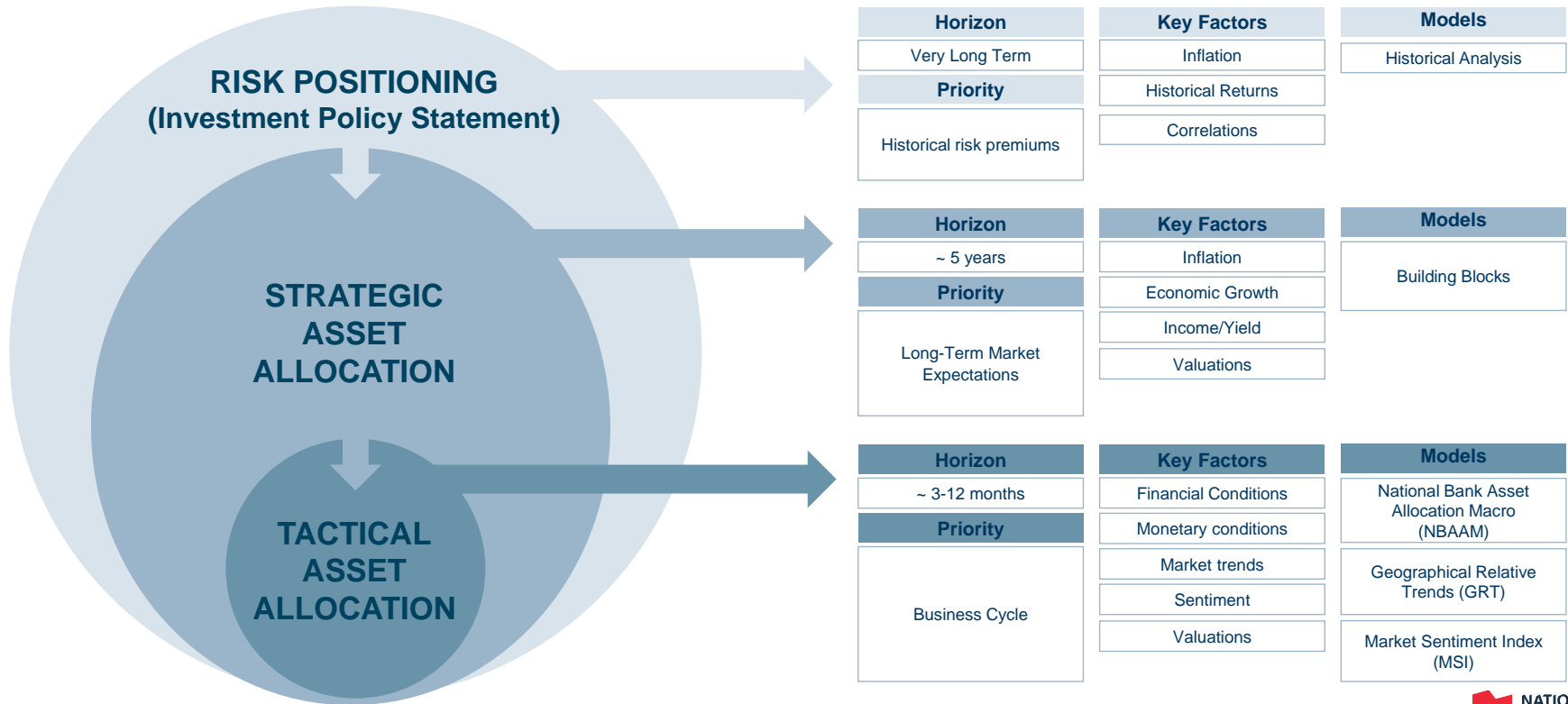
CIO office



The CIO Office Team



Our Asset Allocation Process

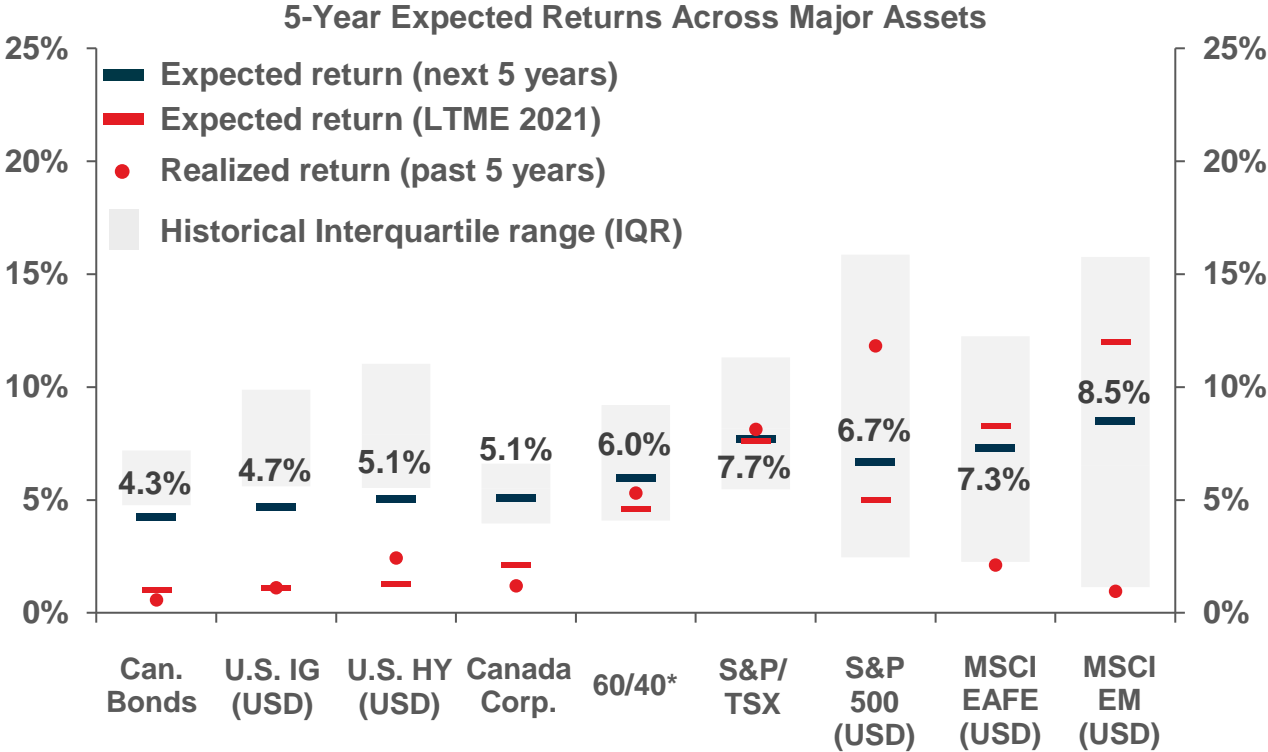


Long-term Market Expectations 2022-2027

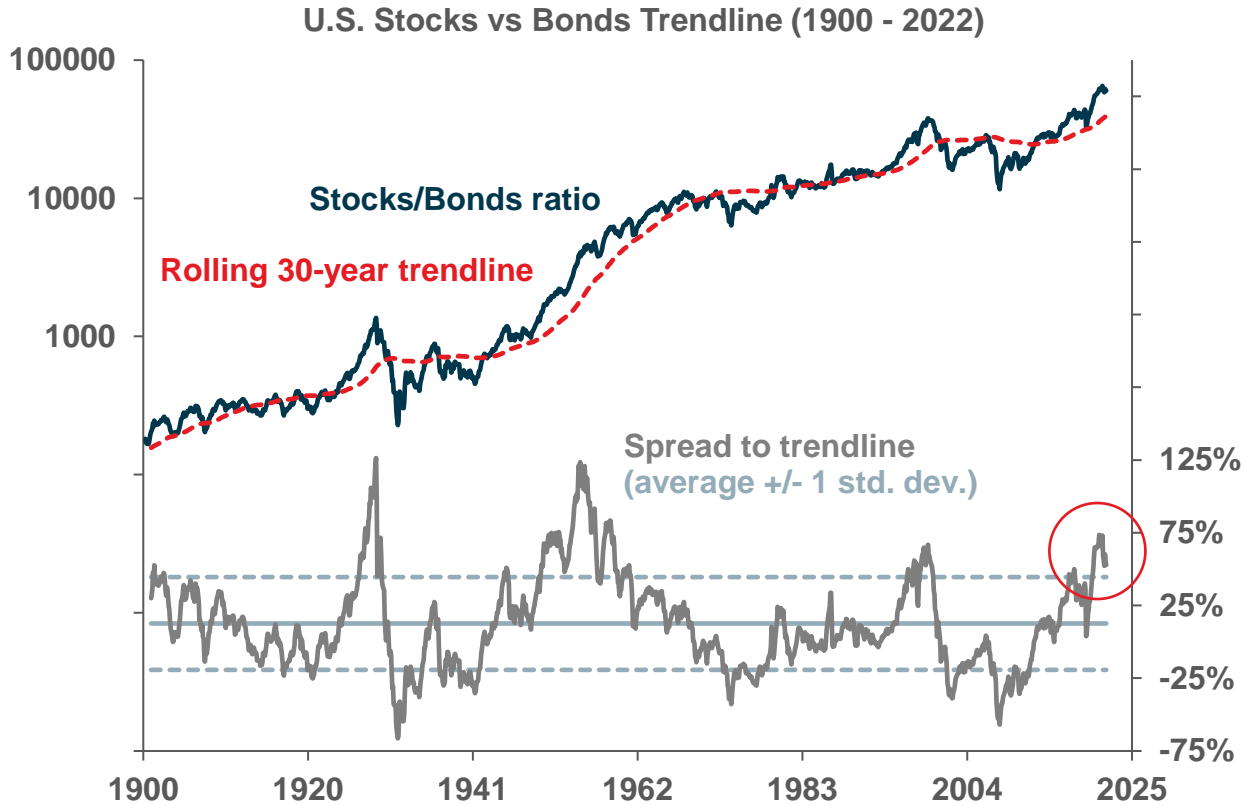
Navigating troubled waters



Significant improvement in the outlook for bonds



Equity outperformance looks stretched on a secular basis



Four key takeaways for investors

1 **Inflation:** Persistently higher, certainly more volatile

2 **Bonds:** Significant improvement in return prospects; deterioration in diversification effects.

3 **Equities:** Narrowing differences between stock market regions; North American markets exhibit attractive properties.

4 **Balanced portfolios:** Better performance, higher volatility; Large equity vs. bond overweight appear less attractive.

Tactical Asset Allocation



Our Philosophy

1 Keep it simple



Stocks / bonds / cash / geo can generate significant VA with large deviations

2 Stay rational



Allocations are discretionary but supported by quantitative models acting as a reference point

3 Stay focused



Position for the next 3 to 12 months balancing all five macro pillars; accept to be wrong from one day/week to the other.

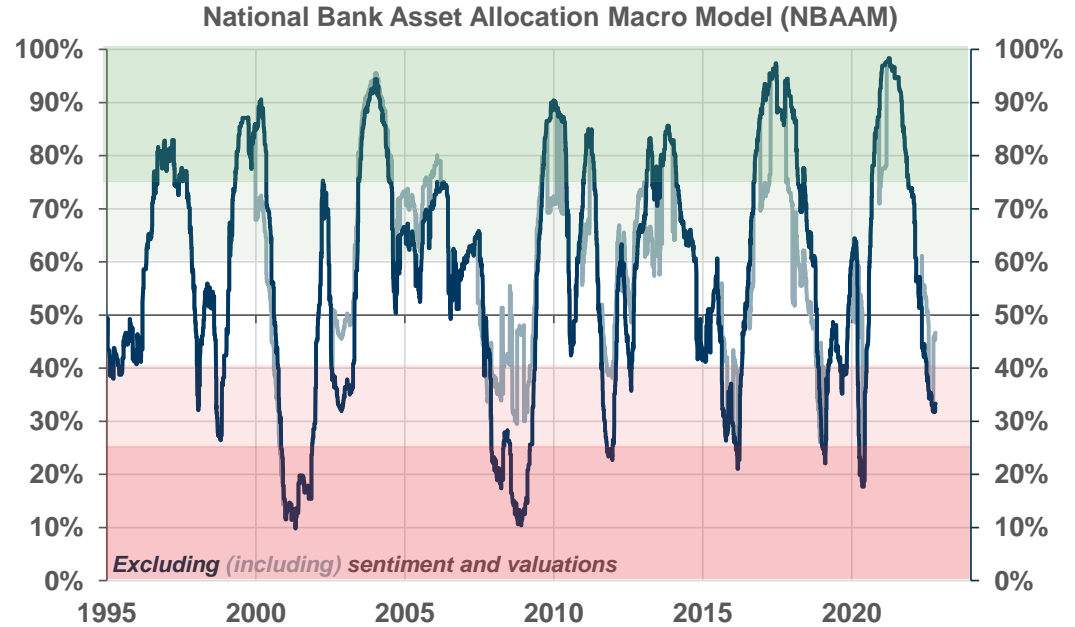
4 Don't overtrade



~ 4 to 10 changes per year (cyclical outlook shouldn't change every month)

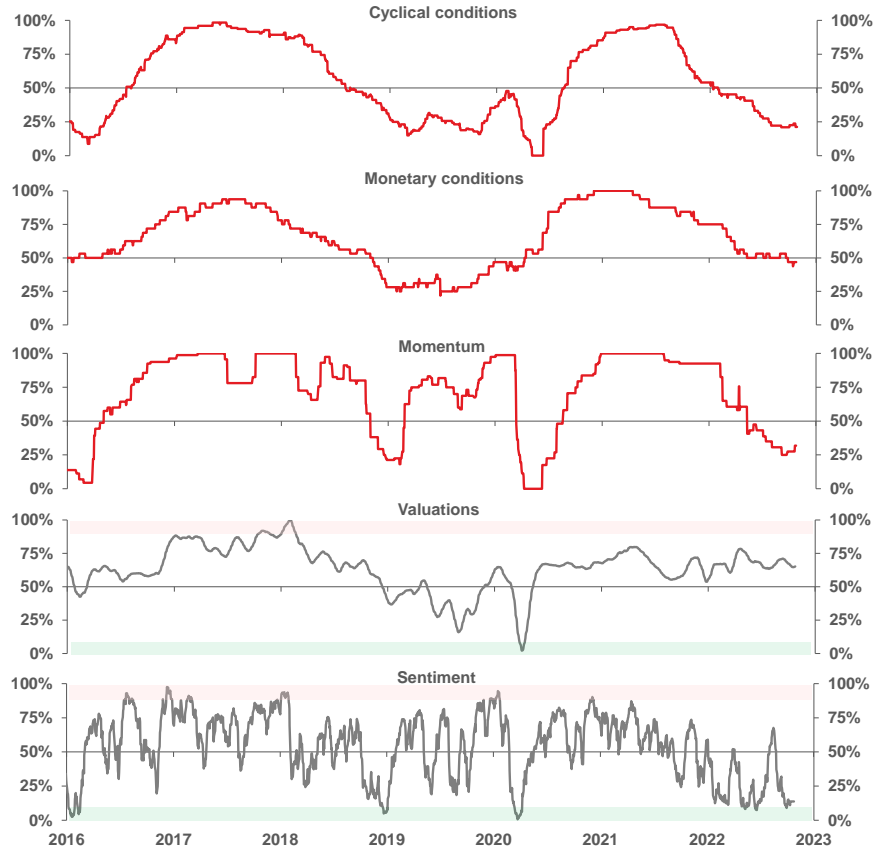
NBAAM (National Bank Asset Allocation Macro) Model

National Bank Asset Allocation Macro Model (NBAAM)		
Indicator name	Level	Week chg
NBAAM		▲
Cyclical conditions		▼
U.S. Economy		
Global Economy		
Financial Markets		
Monetary conditions		
Quantity of money		
Cost of money		
Momentum		▲
Valuations	neutral	
Sentiment		

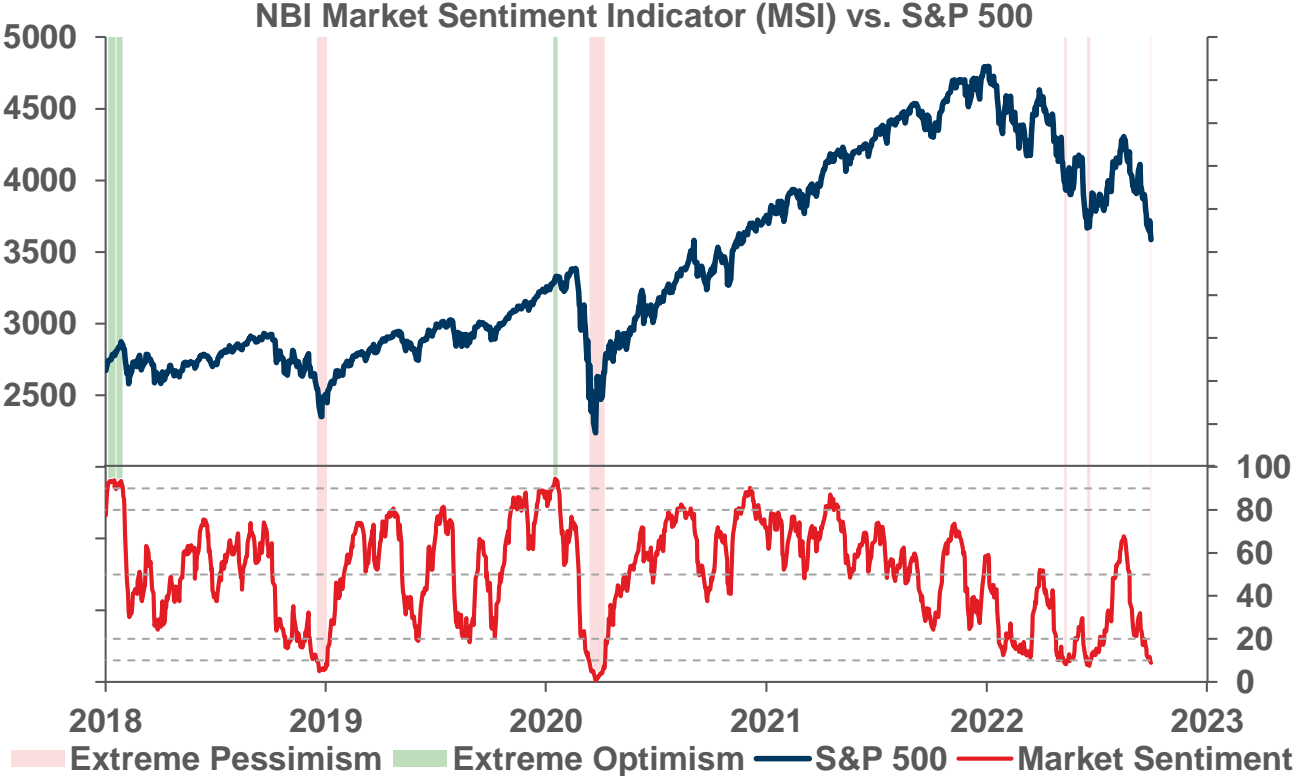


NBAAM Model (National Bank Asset Allocation Macro Model)

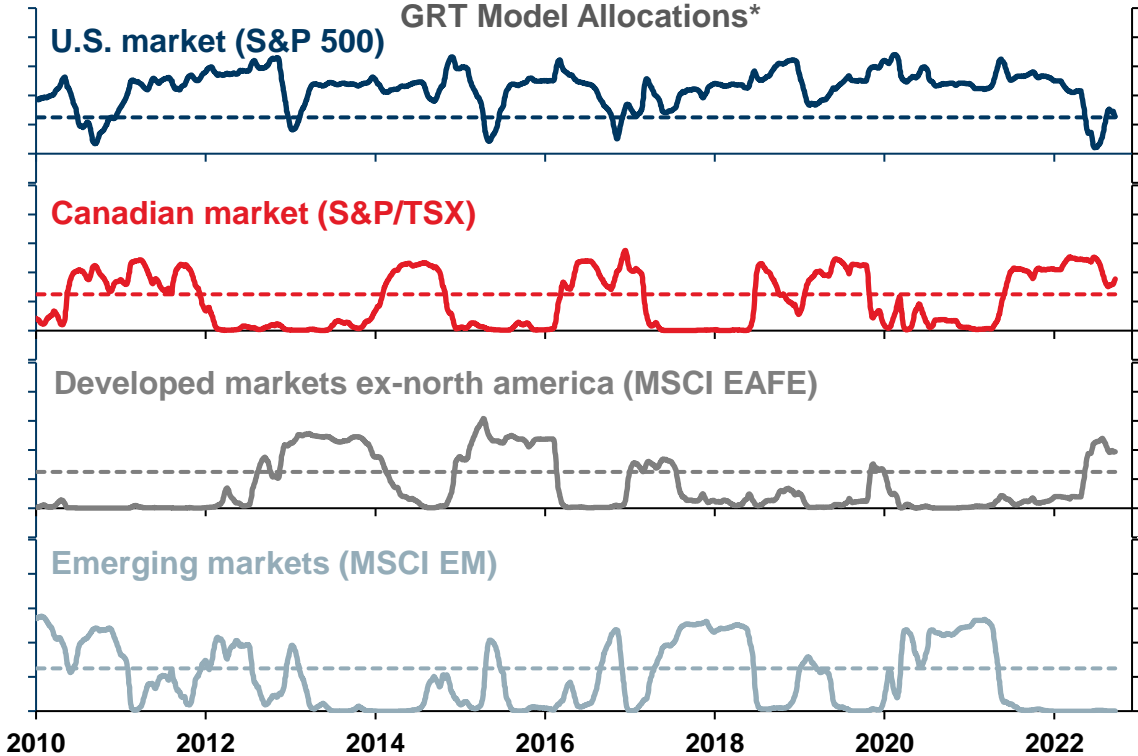
National Bank Asset Allocation Macro Model (NBAAM)		
Indicator name	Level	Week chg
NBAAM		▲
Cyclical conditions		▼
U.S. Economy		
Manufacturing (US)		
Corporate earnings (US)		
Labour market		
Consumers		
Global Economy		▼
Manufacturing (GL)		
Corporate earnings (GL)		▼
Economic surprises		
Global growth breadth		
Financial Markets		
Foreign Exchanges		
Commodities		
Bonds		
Monetary conditions		
Quantity of money		
Global narrow money		
Central banks assets		
US excess liquidity		
China credit impulse		
Cost of money		
Central banks policy rates		
Long-term interest rates		
Yield curve		
Credit conditions		
Momentum		▲
Relative momentum		▲
United States (R)		▲
Canada (R)		
EAFE (R)		
Emerging Markets (R)		
Absolute momentum		
United States (A)		
Canada (A)		
EAFE (A)		
Emerging Markets (A)		



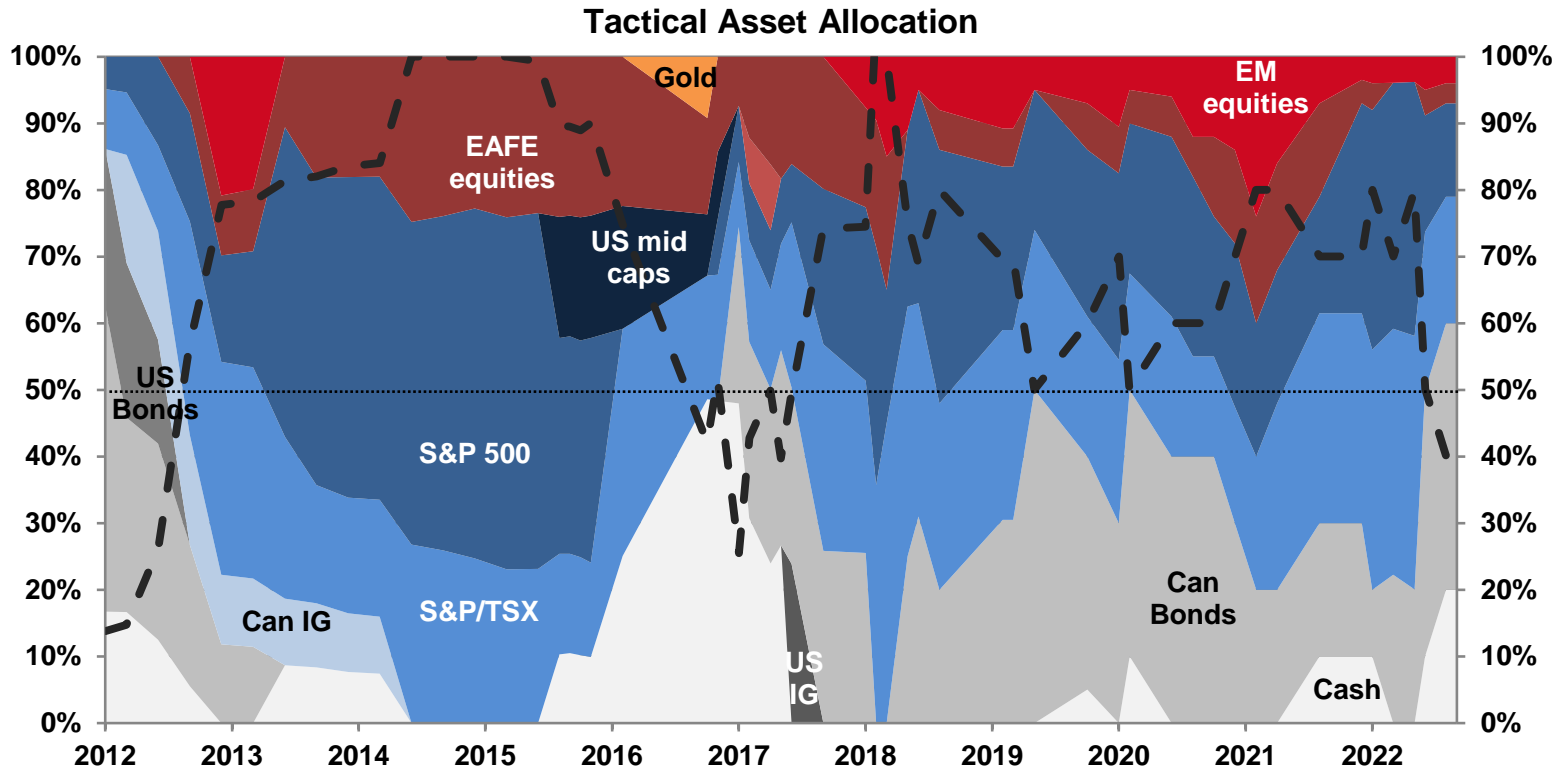
NBI Market Sentiment Indicator



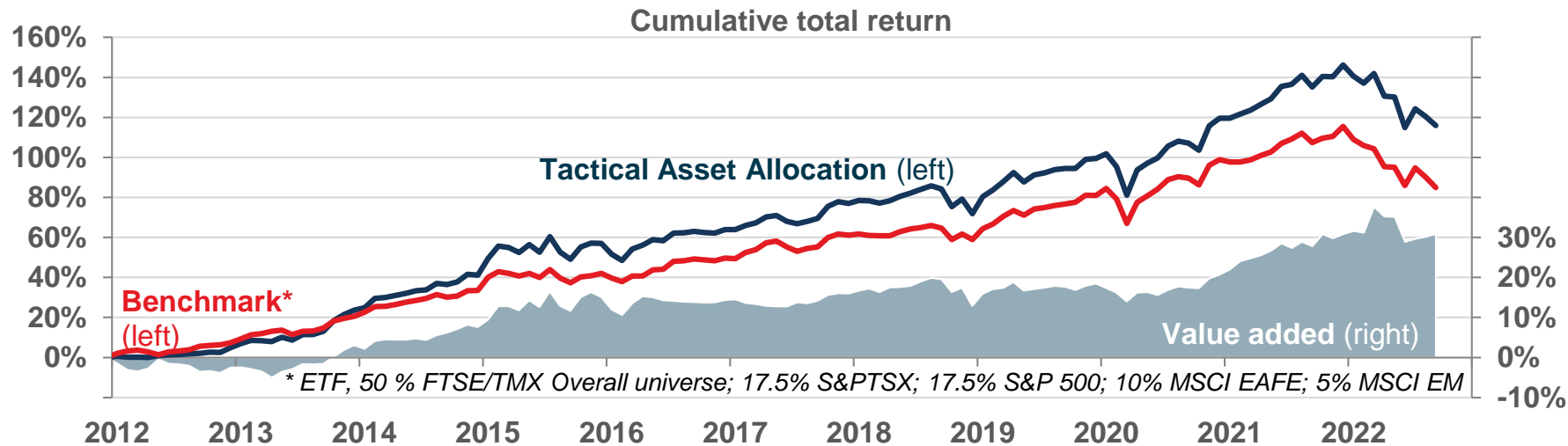
NBI Geographical Relative Trend (GRT) Model



Dynamic asset allocation



Our track record



Performance (September 2022)

	3-mth	YTD	1 year	3 years	5 years	Start	2021	2020	2019	2018	2017	2016	2015	2014	2013
TAA*	0.5%	-12.3%	-8.2%	3.6%	5.0%	7.6%	12.1%	10.1%	16.0%	-2.9%	8.0%	4.4%	11.3%	14.1%	17.9%
ETF Benchmark	-0.5%	-14.1%	-10.8%	1.5%	3.6%	5.8%	8.3%	9.9%	13.8%	-1.3%	7.6%	5.4%	6.4%	10.7%	12.3%
Value added	0.98%	1.80%	2.59%	2.02%	1.39%	1.75%	3.81%	0.21%	2.20%	-1.62%	0.34%	-0.99%	4.95%	3.41%	5.64%