Ninety One

Investing for a world of change

Global Macro Alternative

Navigating an Evolving Macro World

Ninety One Strategy
March 2023

Target audience

Audience

This document is being provided for informational purposes for discussion with institutional investors and financial advisors only. Circulation must be restricted accordingly.

Nothing herein should be construed as an offer to enter into any contract, investment advice, a recommendation of any kind, a solicitation of clients, or an offer to invest in any particular fund, product, investment vehicle or derivative.

General risks

The value of investments, and any income generated from them, can fall as well as rise.

Past performance is not a reliable indicator of future results. If any currency differs from the investor's home currency, returns may increase or decrease as a result of currency fluctuations.

Investment objectives and performance targets are subject to change and may not necessarily be achieved, losses may be made.

Target returns are hypothetical returns and do not represent actual performance. Actual returns may differ significantly.

Environmental, social or governance related risk events or factors, if they occur, could cause a negative impact on the value of investments.

Specific strategy risks – Global Macro Alternative

Currency exchange: Changes in the relative values of different currencies may adversely affect the value of investments and any related income.

Default: There is a risk that the issuers of fixed income investments (e.g. bonds) may not be able to meet interest payments nor repay the money they have borrowed. The worse the credit quality of the issuer, the greater the risk of default and therefore investment loss.

Derivatives: The use of derivatives may increase overall risk by magnifying the effect of both gains and losses leading to large changes in value and potentially large financial loss. A counterparty to a derivative transaction may fail to meet its obligations which may also lead to a financial loss.

Emerging market: These markets carry a higher risk of financial loss than more developed markets as they may have less developed legal, political, economic or other systems.

Interest rate: The value of fixed income investments (e.g. bonds) tends to decrease when interest rates rise.

Equity investment: The value of equities (e.g. shares) and equity-related investments may vary according to company profits and future prospects as well as more general market factors. In the event of a company default (e.g. insolvency), the owners of their equity rank last in terms of any financial payment from that company.

Commodity-related investment: Commodity prices can be extremely volatile and losses may be made.

Global Macro Alternative

Strategy overview

A discretionary macro approach, variable beta and correlation over the market cycle

Invests across liquid global fixed income, currency and equity markets without bias

Employs a thematic macro framework to identify long-term investment opportunities

Uses a cyclical macro framework to inform asset class preferences, sensitivities and portfolio risk

No assurance can be given that the Strategy will be successful or that the investors will not lose some or all of their capital.

Global Macro Alternative

Strategy features

Characteristics

Long-term total return
Seeking to deliver in excess +7% p.a. (gross) over the full market cycle

Active risk management
Variable risk budget up to ex ante 25% volatility*. Active hedging to manage macro risks.

Attractive risk-adjusted returns
We combine traditional risk premia and derivative positions to exploit market inefficiencies

Uses

Access to the team's macro views
Transparent positioning reflects the team's high conviction asset allocation views

A liquid alternative allocation / replacement for hedge funds
Complementary allocation to traditional asset class exposures with active use of derivatives. Clear and transparent reporting of positions.

For differentiated total returns
Discretionary macro focussed approach offers variable beta and correlation. Differentiated return profile to traditional equity/bond portfolios over the market cycle.

The use of derivatives may increase overall risk by magnifying the effect of both gains and losses leading to large changes in value and potentially large financial loss.
Performance targets are subject to change and may not be achieved, losses may be made.
*may be exceeded in extreme market conditions. For further information on performance targets, please see the Important information section.

Global Macro strategies investment team

James Elliot
Head of Multi-Asset
Co-Portfolio Manager: Global Macro Allocation & Global Macro Alternative

Iain Cunningham
Co-Portfolio Manager: Global Macro Allocation

Alex Holroyd-Jones
Co-Portfolio Manager: Global Macro Alternative

Members of the wider Multi-Asset team

Income

John Stopford
Head of Multi-Asset Income

Jason Borbora-Sheen
Portfolio Manager

Growth

James Elliot
Head of Multi-Asset

Michael Spinks
Co-Head of Multi-Asset Growth

Iain Cunningham
Co-Head of Multi-Asset Growth

Alex Holroyd-Jones
Portfolio Manager

Sustainable Equity

Deirdre Cooper
Head of Sustainable Equity

Graeme Baker
Portfolio Manager

Matt Evans
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Juliana Hansveden
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Stephanie Niven
Portfolio Manager

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Jake Thomson

Multi-Asset Research Platform

Equities - Team of 22 | Fixed Income & FX - Team of 13 | Macro - Team of 11 | Quantitative Research - Team of 3

Portfolio Specialists

Atul Shinh - Head of Portfolio Specialists

Ellie Clapton

Jennifer Moynihan

Leveraging off a wider investment platform

Equities | Fixed Income | Sustainability | Risk & Performance | Trading

The investment team is subject to change not necessarily with prior notification. As at 31 December 2022.
The total number of individuals that participate in the Multi-Asset Research Platform is 39. For further information on investment team, please see the Important Information section.

Core Investment Philosophy & Beliefs

Differentiators

1 Structural timeframe

- We believe investors pay too much attention to short-term and market noise, and not enough attention to the impact of structural macro forces
- An understanding of the relevant long-term tailwinds and headwinds to asset performance provides an advantage
- We take a research intensive approach to understanding these structural themes

2 Cyclical approach

- We believe that policy leads the growth and inflation outlook and has reflexive implications for asset markets and the real economy
- We consider asset valuations in the context of policy and liquidity. Multiples will contract through tightening episodes and expand as policy is loosened
- Policy and financial market liquidity is our primary cyclical macro research focus

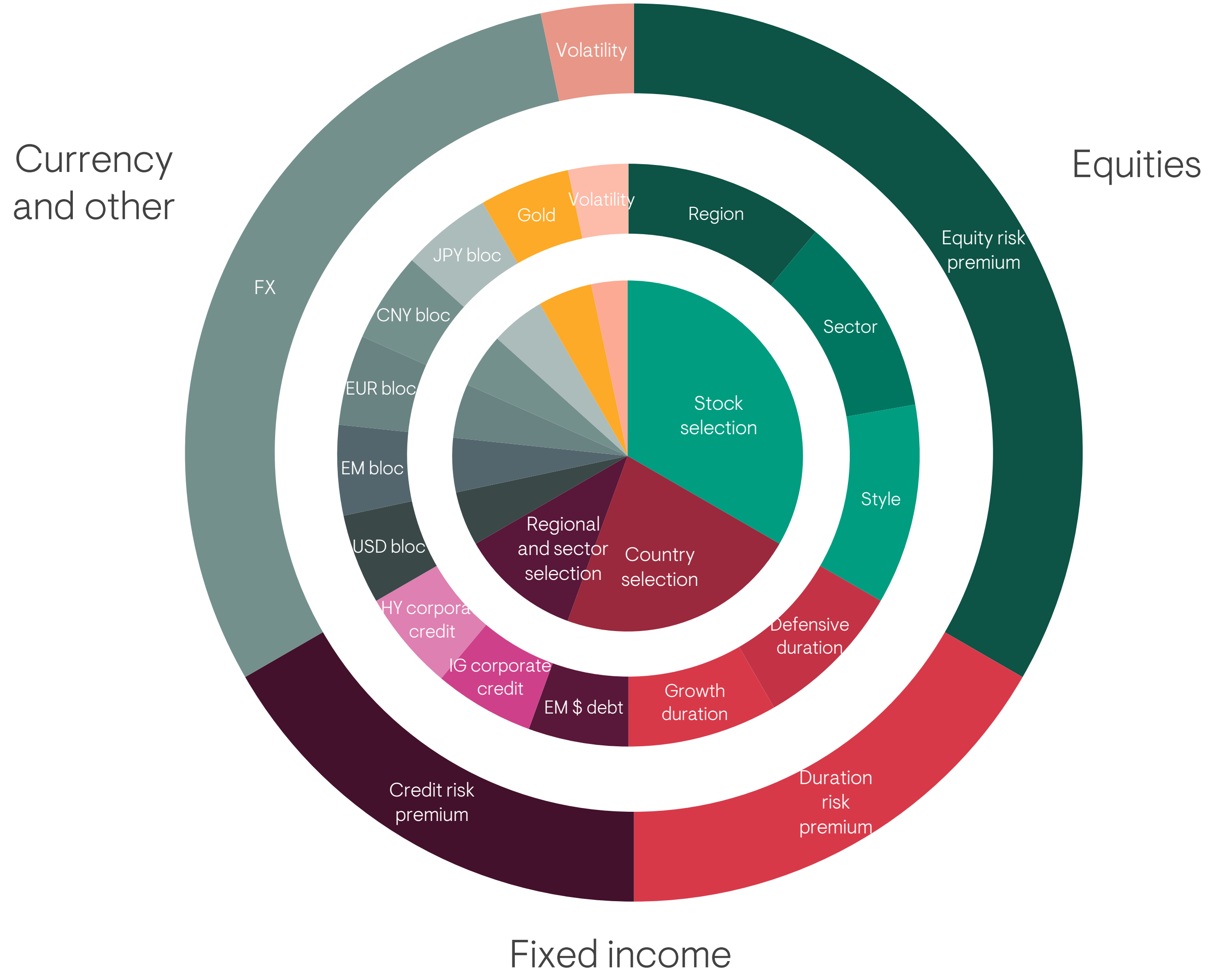
3 Behavioural biases

- Investor biases means they buy assets that have done well and sell assets that have performed poorly
- We employ a countercyclical approach to exploit this behavioural error
- The longer-term thematic roadmap and cyclical focus on policy keep us disciplined and give us the conviction to allocate capital at points of pain for the market

For further information on investment process, please see the Important information section.

Investment opportunity set

Asset class and security analysis according to a bespoke cross asset class framework



Research groups of 30+ investment professionals covering a global opportunity set

We invest without regional or asset class bias

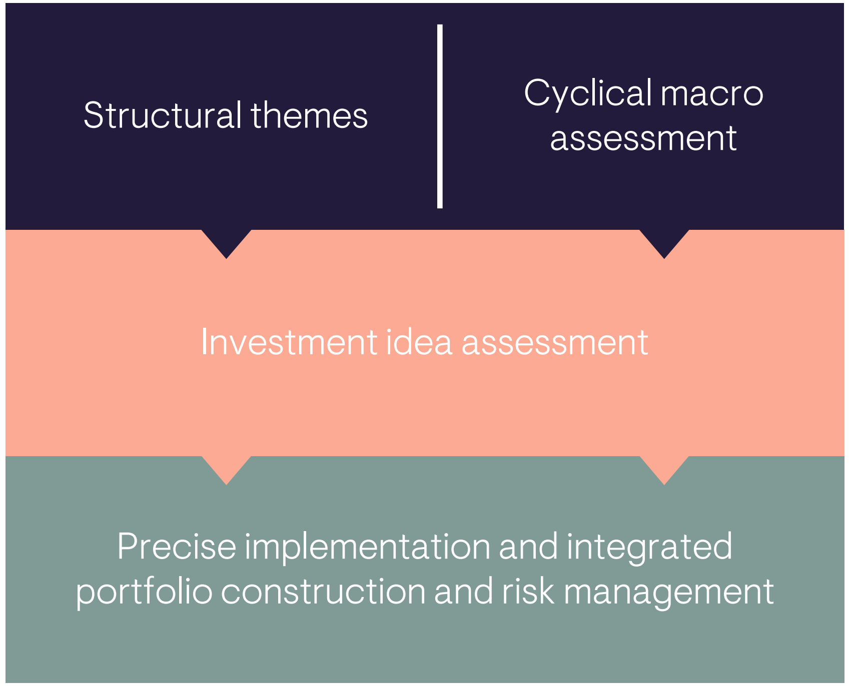
Implemented both directly and through derivatives, utilising both bespoke security baskets and platform active strategies

For further information on investment process, please see the Important information section. For illustrative purposes only.

Investment process

Top-down macro framework, precise security selection and portfolio construction

Three stage process



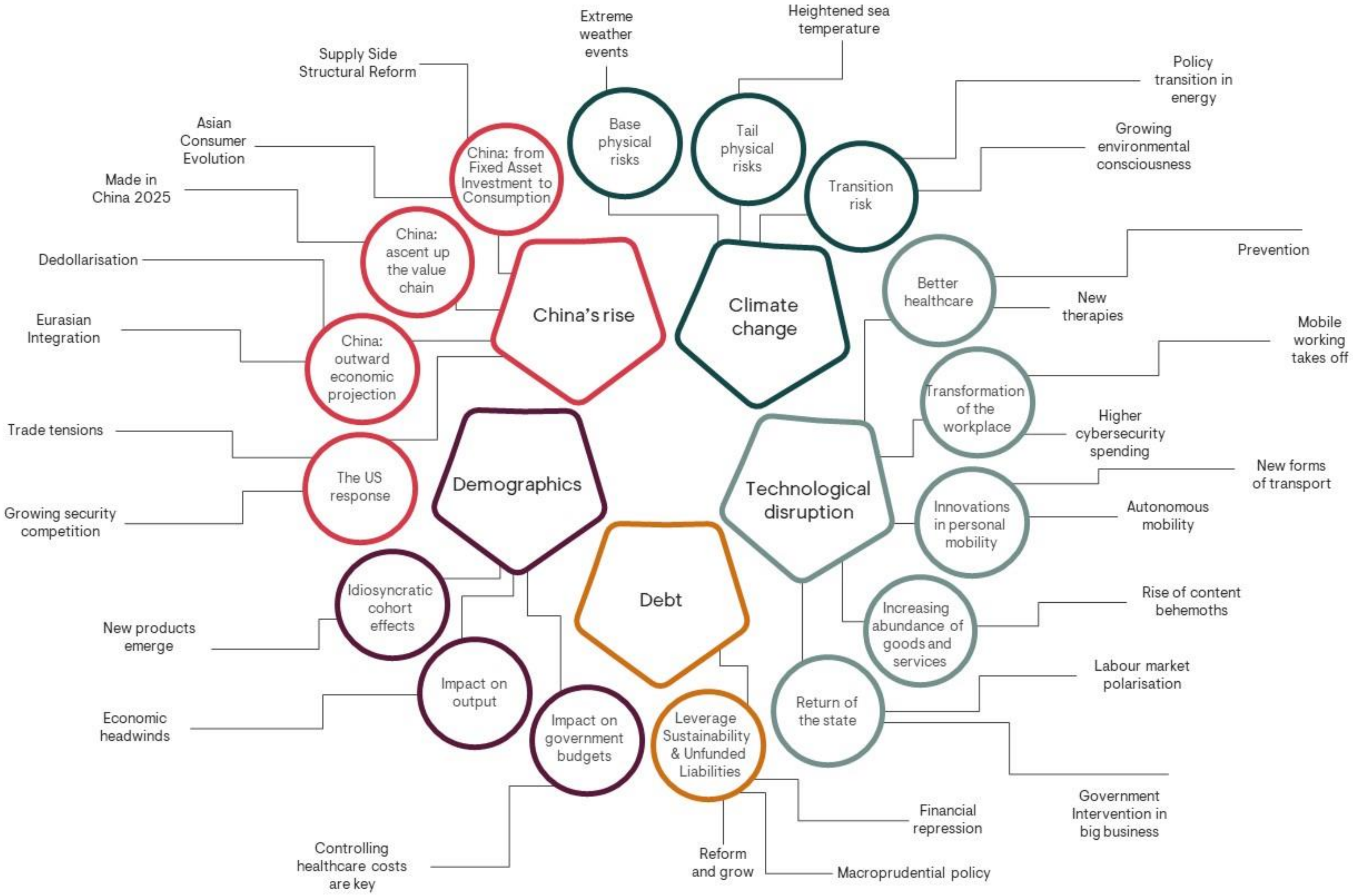
- A macro framework that identifies structural themes influencing economies on a multi-year horizon alongside a cyclical macro assessment focussed on growth, inflation and policy across regions
- Idea assessment leverages bespoke equity, fixed income and FX asset class approaches, with each idea expected to offer a potential positive return and portfolio diversification
- Precise security selection, alongside integrated portfolio construction and risk management aiming to deliver positive returns across market cycles

> A fully integrated approach to asset allocation and security selection preferences

For further information on investment process, please see the Important Information section.

Structural themes

Building a medium-term thematic macro investment framework



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Structural themes

We expect a number of key inflationary forces to play out in the next cycle vs. the old cycle

Major thematic changes:

China's rise

The US response to this and increasing geopolitical risk is driving **deglobalisation** & **defence spending**

Climate Change

A accelerated **energy transition** is underway and requires considerable capital expenditure

Demographics & Debt

US household structural deleveraging cycle complete and **Millennials** in the household formation lifecycle stage

=

A material increase in resource & capital intensity over the next decade

vs.

Significant underinvestment in resources over the past decade

Macro & market implications:

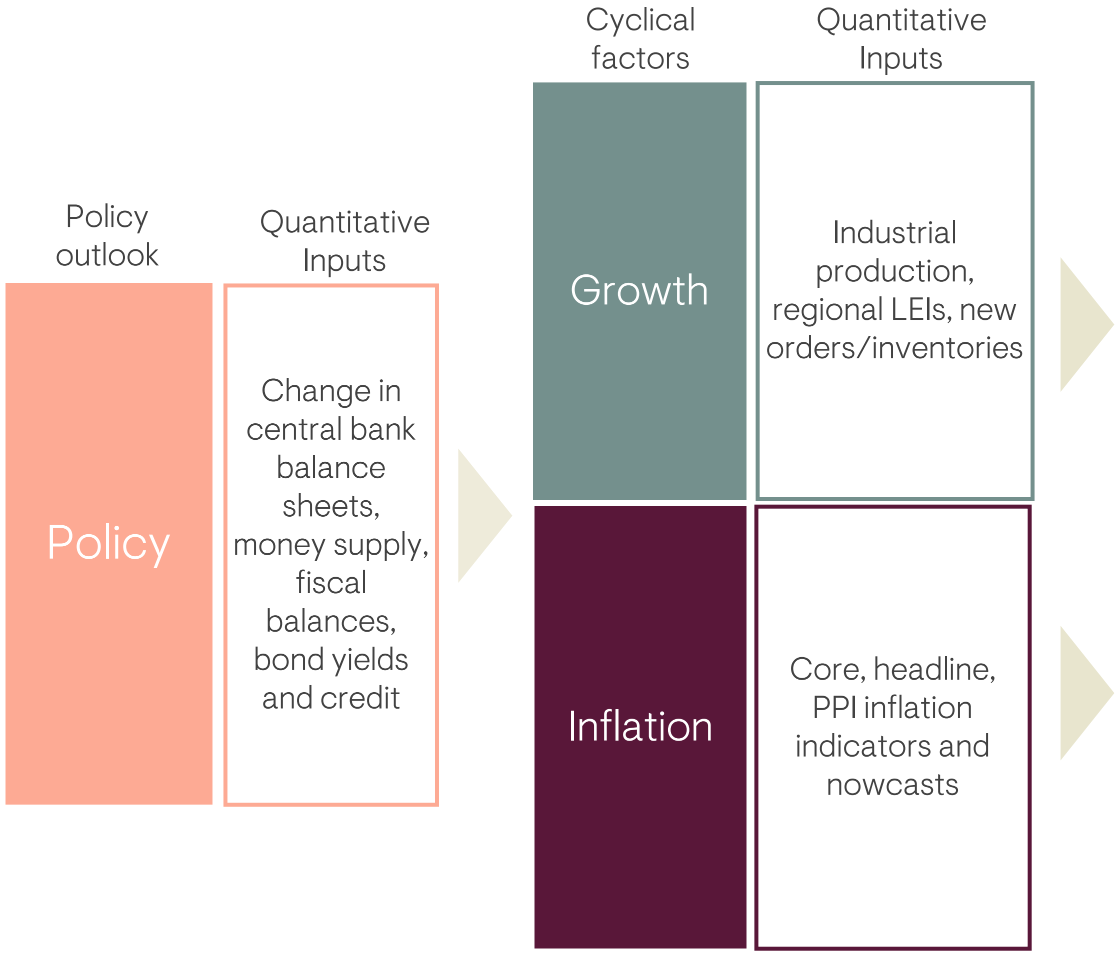
1. A higher and more volatile inflation impulse
2. Increased volatility in rate cycles
3. Higher asset correlations
4. Equity multiple compression and new market leadership
5. Increased cycle divergence: US vs. China

For further information on investment process, please see the Important Information section

Cyclical macro assessment

Policy leads growth and inflation, which informs asset class preferences and portfolio risk

Cyclical macro assessment



Asset class regimes

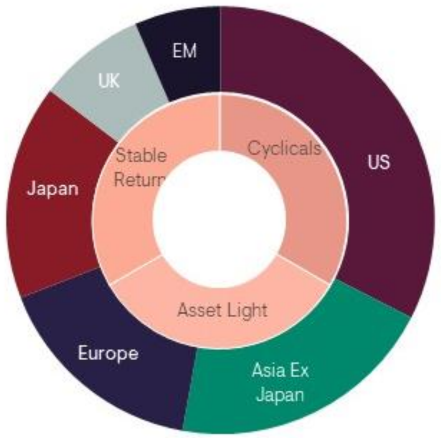
	Growth+ Inflation- Goldilocks	Growth+ Inflation+ Reflation	Growth- Inflation+ Stagflation	Growth- Inflation- Recession
Equity				
MSCI World	7.1%	2.9%	-0.6%	-3.0%
MSCI EM	9.9%	3.9%	-1.5%	-3.1%
Growth	7.3%	2.7%	-0.2%	-1.3%
Value	6.5%	3.3%	0.4%	-3.0%
Staples	8.7%	2.7%	0.5%	-0.9%
Financials	7.9%	5.2%	-1.3%	-4.8%
Commodities				
CRB Commodities	2.6%	2.6%	1.9%	-2.8%
Gold	3.1%	1.5%	2.6%	2.6%
Credit				
US HY	-87	-21	21	40
EM hard currency	-30	-11	2	18
Fixed income				
US 10Y	2	10	0	-27
US 30Y	2	6	0	-21
10Y Breakeven	5	6	2	-13
Currency				
DXY	-1.0%	0.1%	0.2%	0.5%
EUR	0.1%	0.3%	0.2%	0.3%
JPY	-0.9%	-0.8%	0.3%	1.2%
AUD	2.6%	0.0%	-0.1%	-0.6%
EMFX	1.3%	-0.1%	-1.2%	-2.2%
Vol				
Equtiy Vol	-3.8	-0.5	0.8	2.3
Currency Vol	-0.4	-0.3	0.1	0.6
Bond Vol	2.5	-3.2	2.1	1.1

Source: Ninety One, Bloomberg. Data updated to 31 March 2023

Investment idea assessment

Discrete cross - asset class processes

Fixed Income	Currency	Equities
Understanding the component risk premia Real rate Inflation Country Credit	**Focus on medium to long term trends of the key FX blocs:** USD CNY, EUR, JPY EM and $-bloc	**Business model focus: return persistence and return improvement** Asset light Stable return Cyclicals



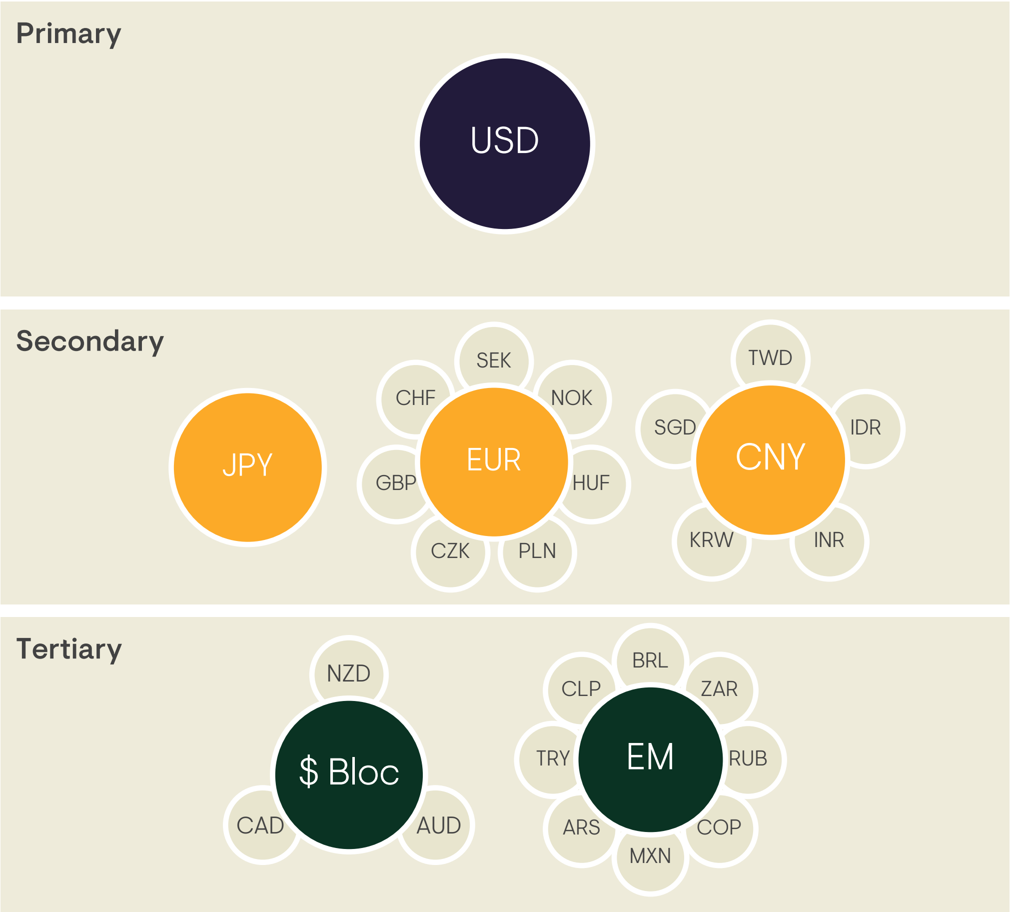
Individual idea assessment applied in the context of our thematic and macro cyclical framework

For further information on investment process, please see the Important information section.

Currency

A robust analytical framework with a focus on the major bloc currencies

Analytical framework
Simplify to major blocs and satellites



Major bloc currency assessment
Identify areas of macro divergence between major blocs

	Long Major bloc currency	vs	Short Major bloc currency
Policy	Tightening		Loosening
Growth	Improving		Weakening
Inflation	Rising		Falling
Valuation	Cheap		Expensive

For further information on investment process, please see the Important Information section.

Investment idea assessment and implementation

Applying our thematic and macro cyclical framework to the investment opportunity set

Macro framework	Structural themes +18 months	Cyclical macro assessment 0-18 months
Idea assessment	Aiming to compound returns across the cycle by investing in attractive cross asset class risk premia	Aiming to benefit from the prevailing cyclical backdrop by shifting asset class exposures and overall risk profile
Implementation	Equity – return persistence ideas Defensive and growth fixed income	Equity – return improvement ideas Derivatives – long and short Currency
Portfolio impact	Return seeking with typically high correlations to traditional equity and bond risk premia	Return seeking or risk management with variable but typically low and diversifying correlation to traditional bond and equity risk premia

← Multi-variate time horizons: structural themes, cyclical macro, risk management →

For further information on investment process, please see the Important information section.

Portfolio positioning and risk

Snapshot by cyclical macro regime

Portfolio snapshot

Reflation

Q1 2021 (average)	
Net equity: 82%	Equity beta: 0.8
Duration: -0.7 years	Bond beta: -0.5
USD: -28%	Volatility: 15%

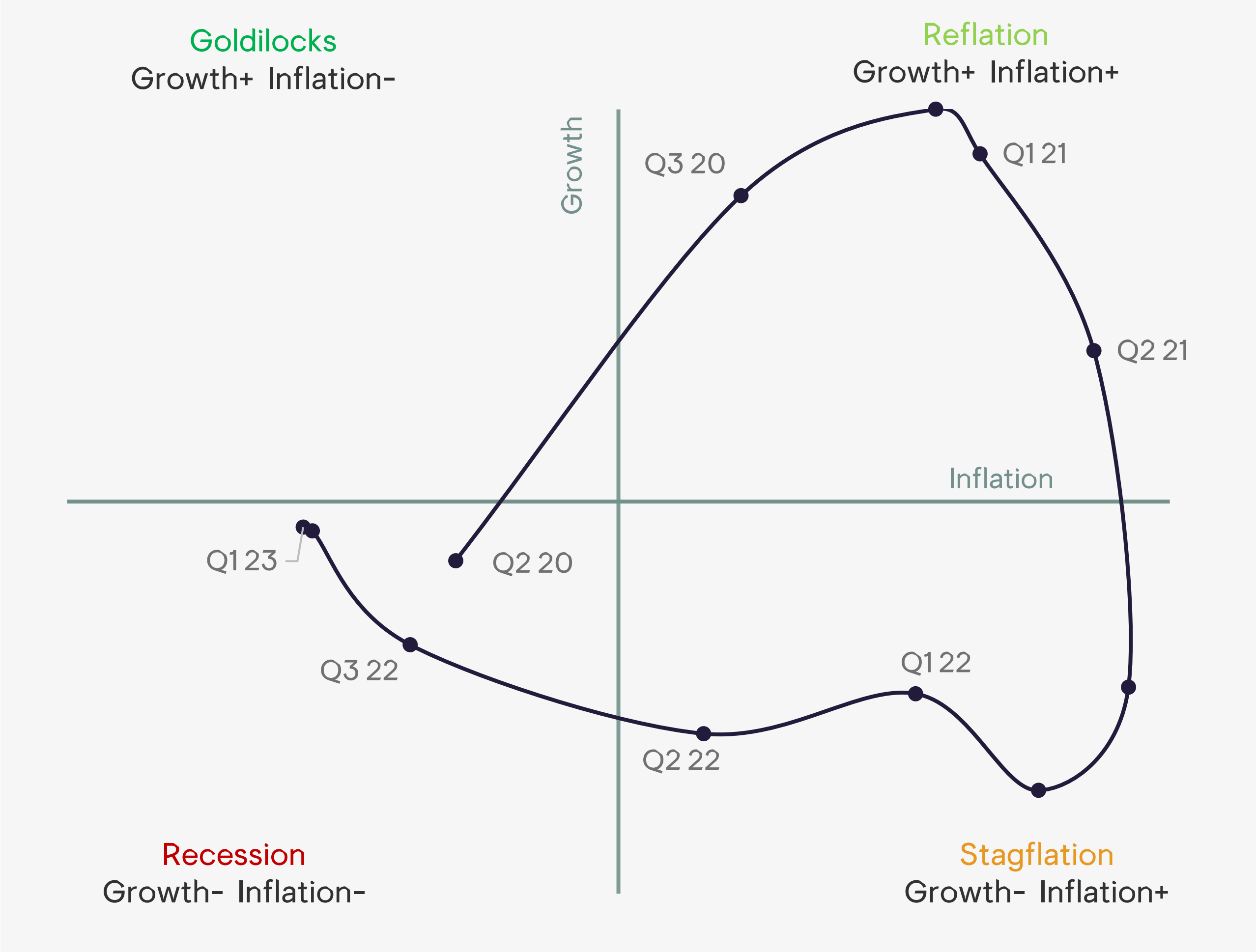
Stagflation

Q1 2022 (average)	
Net equity: 28%	Equity beta: 0.2
Duration: 1.6 years	Bond beta: -0.1
USD: 65%	Volatility: 5.4%

Recession

Current positioning	
Net equity: 13%	Equity beta: -0.2
Duration: 5 years	Bond beta: 0.5
USD: 43%	Volatility: 9.5%

Historical cyclical macro regime



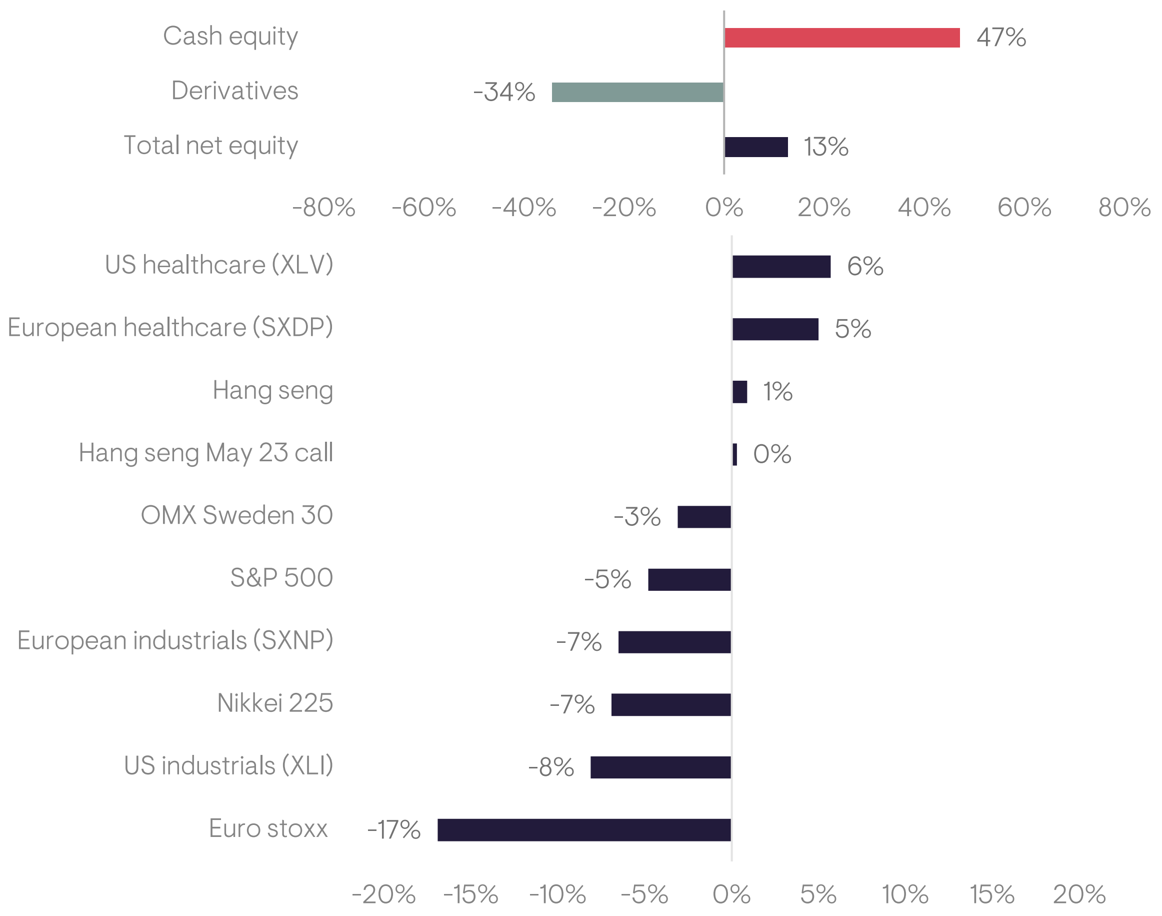
Quarterly cyclical macro regime using process quantitative indicators

Source : Ninety One, based on indicative model portfolio and views as to 30 September 2022. Current positioning reflects live portfolio to 31 March 2023.
For further information on model returns, please see the Global Macro Alternative model: Portfolio risk & return perspectives section. For further information on investment process, please see the Important Information section.

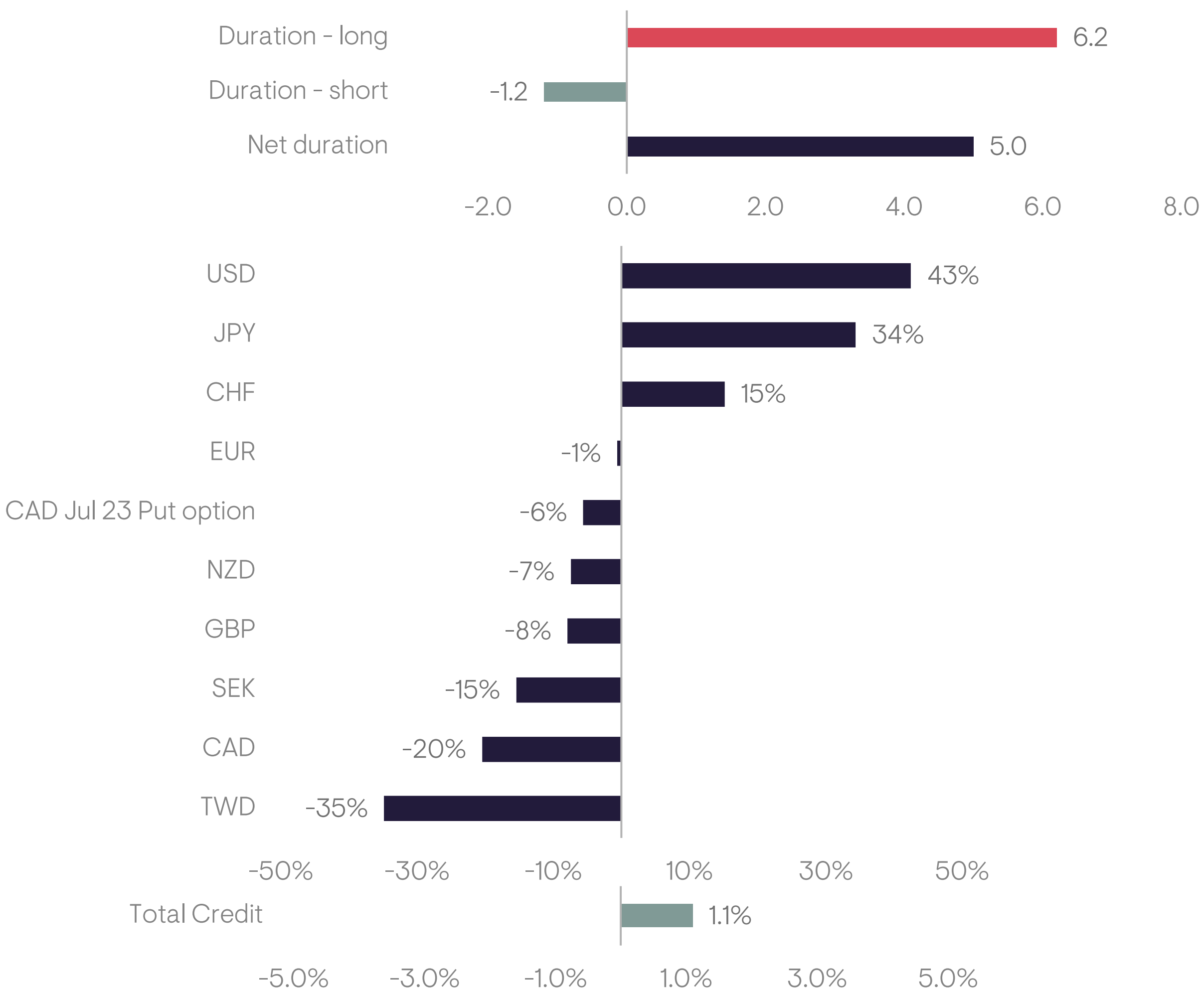
Global Macro Alternative – current portfolio

Current positioning

Equity



Fixed income and currency

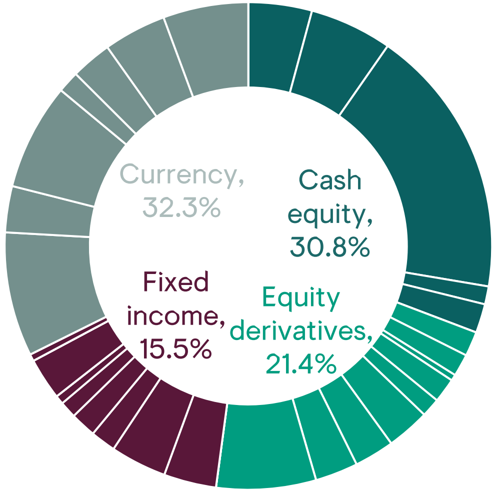


Source : Ninety One, based on portfolio as at 31 March 2023

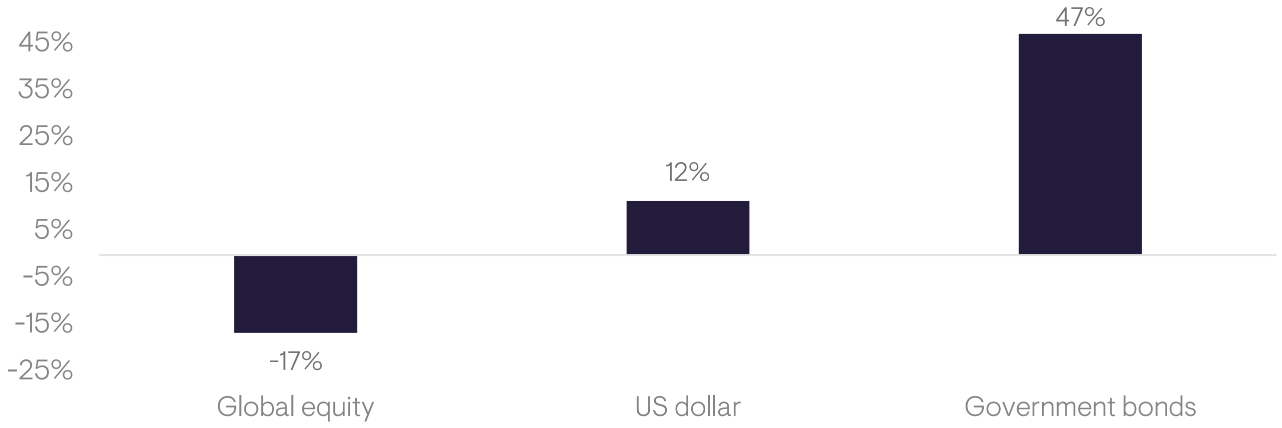
Risk based allocations

Contribution to risk and factor exposure

Standalone vol. risk allocation



Factor exposures (beta)



	Risk based allocation (%)	Contribution to risk (%)
Equity	**52.1%**	**2.7%**
Cash equity	30.8%	-1.0%
North America	4.2%	-0.2%
Europe ex UK	5.5%	-0.7%
Asia ex-Japan	18.0%	0.3%
Japan	1.2%	-0.2%
UK	1.9%	-0.2%
EM	0.0%	0.0%
Derivatives	21.4%	3.7%
Long US healthcare	1.6%	0.0%
Long European healthcare	1.5%	-0.1%
Long HSI	0.4%	0.0%
HSI May 23 call	0.0%	0.0%
Short Sweden OMX	1.3%	0.3%
Short S&P 500	1.6%	0.3%
Short European industrials	2.6%	0.6%
Short NKY	2.8%	0.6%
Short US industrials	2.9%	0.6%
Short Euro stoxx	6.6%	1.5%
Fixed income	**15.5%**	**3.2%**
Defensive	12.3%	3.2%
Long New Zealand	3.7%	1.1%
Long Australia	3.5%	1.1%
Long Germany	1.7%	0.4%
Long South Korea	1.7%	0.4%
Long Sweden	1.1%	0.3%
Short Japan	0.6%	-0.1%
Growth	2.8%	0.0%
Short Italy	2.8%	0.0%
Credit	0.5%	0.0%
Long Asia high yield	0.5%	0.0%
Currency & other	**32.3%**	**3.6%**
Long JPY	8.2%	2.5%
Long USD	7.1%	0.8%
Long CHF	3.1%	0.6%
Short GBP	0.0%	0.0%
Short NZD	1.4%	0.0%
Short SEK	2.7%	0.1%
Short CAD	4.2%	0.2%
Short TWD	5.7%	-0.6%
Total	**100.0%**	**9.5%**

Source : Ninety One, as at 31 March 2023. Data calculated using MSCI Barra point-in-time model and may not add up due to rounding.

Portfolio construction and risk management

A process centred, integrated and forward looking approach

Long-term focus ensures risk management is integrated with idea generation

Thematic macro roadmap
We allocate to assets that are beneficiaries of long-term themes with solid fundamentals that can withstand economic volatility

Cyclical macro framework
We will allocate counter cyclically to assets where the forward view of our macro cyclical framework is supportive

Valuation
We do not overpay for assets and ensure a margin of safety

Understanding cyclical macro dynamics is critical for determining asset correlations and diversification

Policy

Growth

Inflation

Prospective correlations
Diversification is not a constant, but a result of the growth and inflation regime

Positions sized according to volatility and risk contribution; conviction, correlation and time horizon

Contribution to risk
We size investment ideas based on contribution to risk, influenced by prospective correlations

Higher **Conviction** ideas receive larger risk allocations

Low / negative **Correlation** ideas may receive larger risk allocations

Longer **Time horizon** ideas may receive larger risk allocations

Guidelines & risk limits:

Contribution to risk is scaled by portfolio risk / allocation guidelines and limits

What-if analysis

Ongoing risk analysis:

Factor exposures

Stress testing

Scenario analysis

For further information on investment process, please see the Important information section

2023 Cyclical dynamics

Outlook for 2023

- **China** - the Chinese economy is reopening and policy makers are doubling down on stimulus. Recovery expected.
- **Developed world** - will likely suffer the consequences of prior and ongoing tightening, with recession being our central scenario.
- **Value on offer in Asian risk assets & DM rates –** DM risk assets are more reasonably valued but don't yet reflect the high likelihood of earnings downside & ongoing tightness in liquidity conditions.

Portfolio implications:

- **Lower than average equity exposure** - with a notable bias towards China / Hong Kong.
- **Higher than average exposure to defensive duration** – focused on high grade nations with leverage and housing imbalances (Australia, New Zealand, South Korea, & Sweden).
- **Long USD, CHF & JPY vs. CAD, SEK & NZD** - a Chinese recovery represents a headwind for the USD, but strong hedging asymmetry remains in reserve currencies vs. vulnerable $ bloc and Scandi currencies.

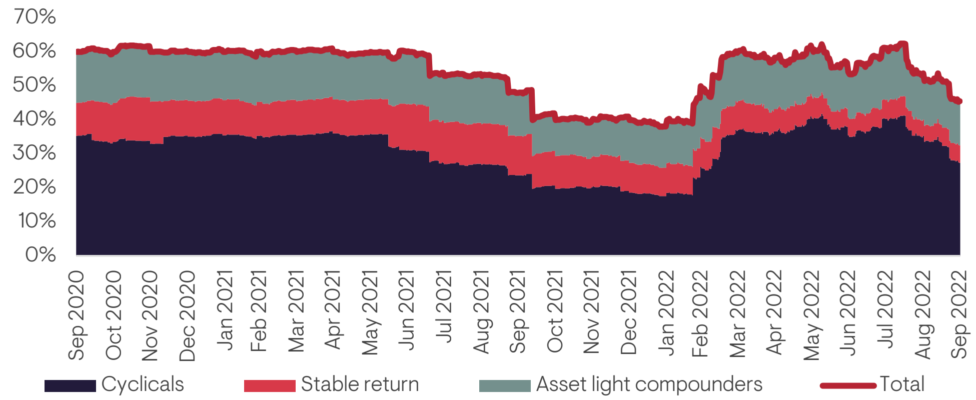
Source: Ninety One, March 2023.
Opinions based on current market conditions; subject to change without notice and without any obligation to update.

Appendix

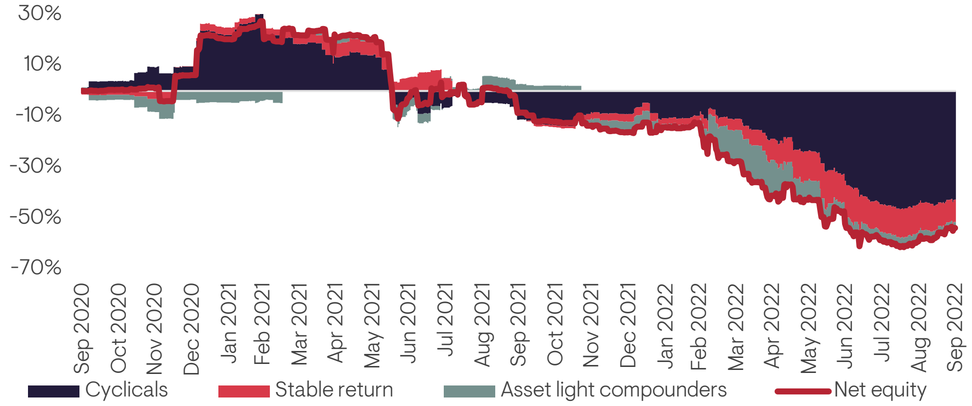
Global Macro Alternative – model portfolio

Flexible asset allocation

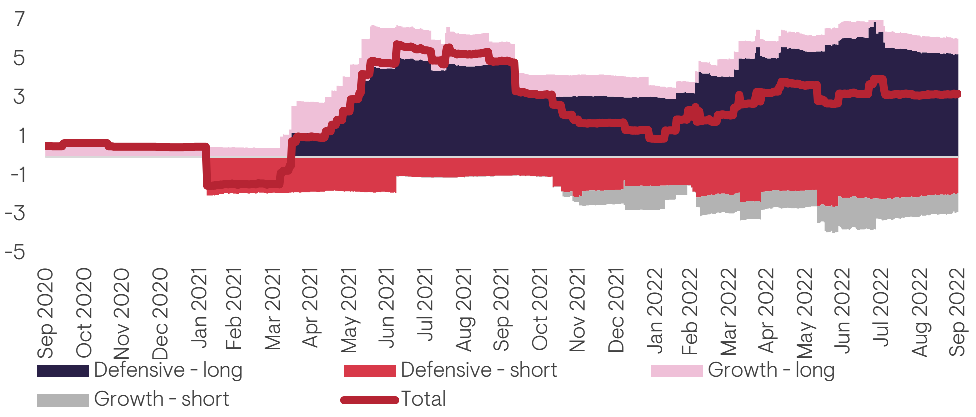
Cash Equity 38% to 62%
Historic allocation



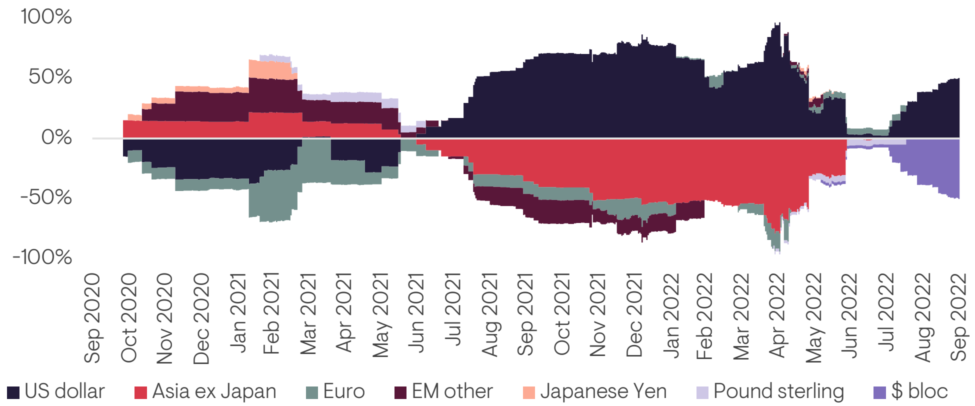
Equity Derivatives -61% to 27%
Historic allocation



Fixed Income -1.5 to 5.8YRS
Historic duration exposure



Foreign Exchange -38% to 96% USD
Historic active FX allocation



Strong risk-adjusted returns

10.1%
Annualised return (gross)

7.1%
Historic realised volatility

-9% to 88%
Net equity range

-2.0 to 4.8
Defensive duration (years)

-0.3 to 0.9
Ex-ante ACWI beta range

-0.7 to 0.4
Ex-ante bond beta range

-0.8 to 0.4
Ex-ante USD beta range

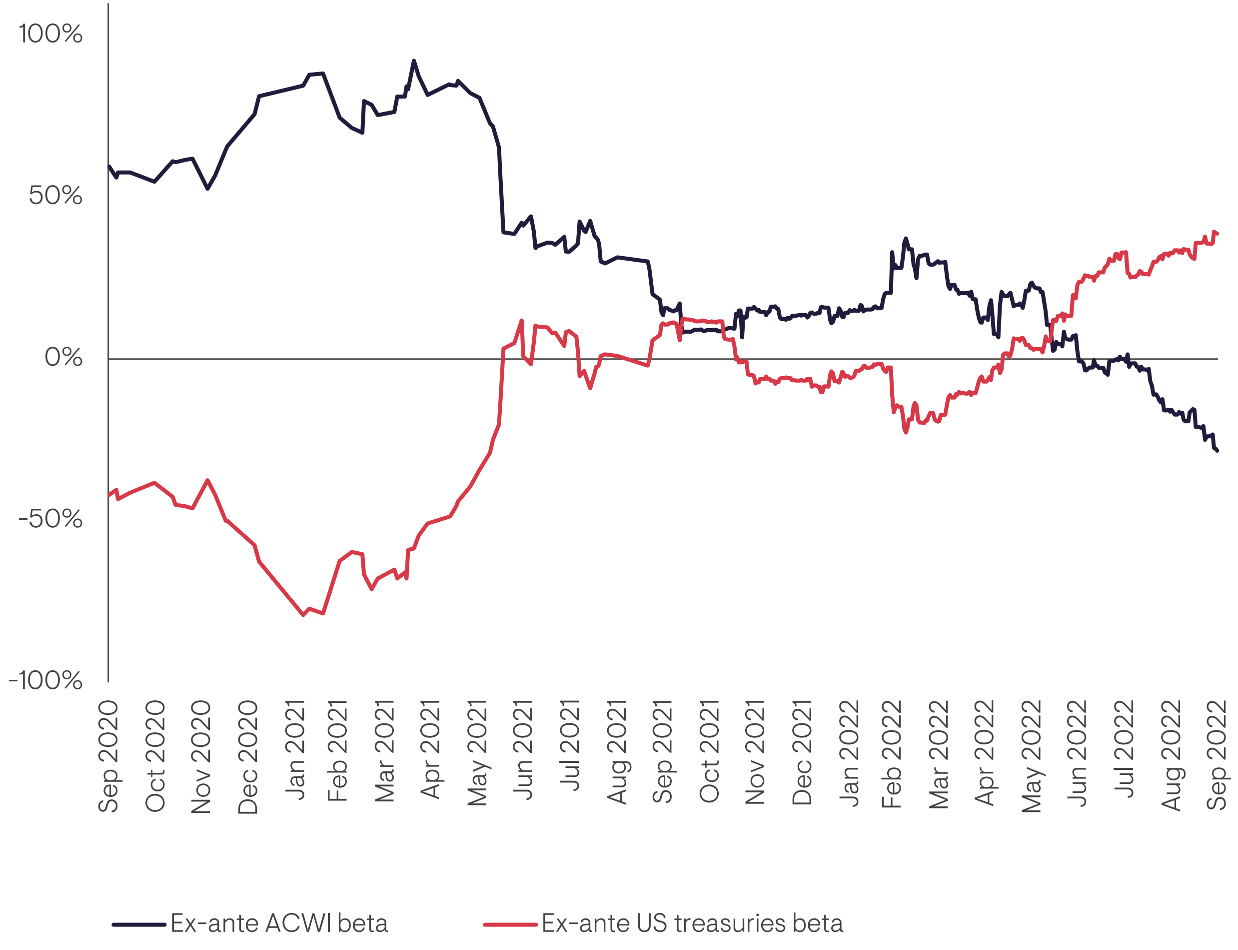
4.3% to 16.5%
Ex-ante vol range

Source : Ninety One, based on indicative model portfolio and views as at 30 September 2022.
For further information on model returns, please see the Global Macro Alternative model: Portfolio risk & return perspectives section.

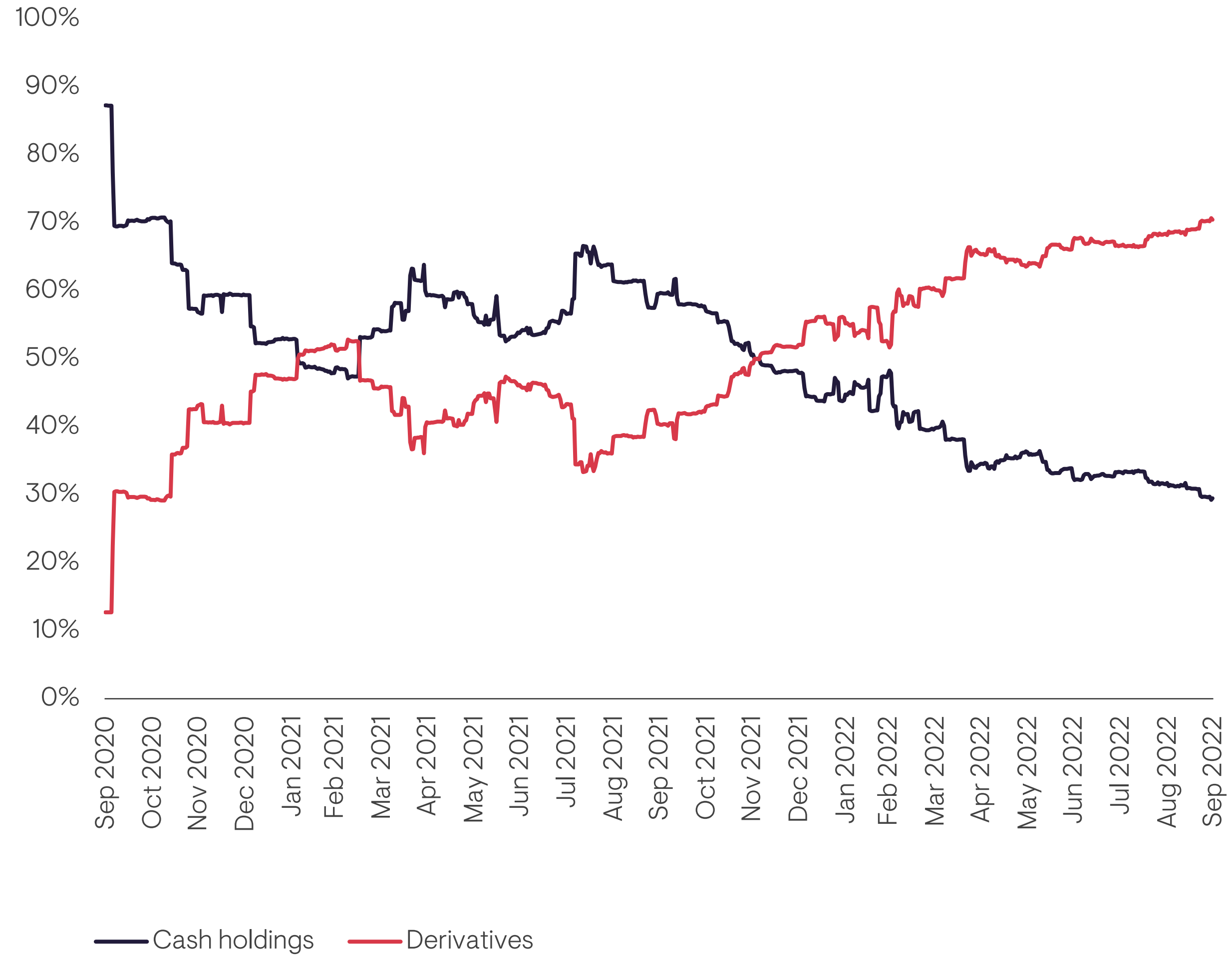
Global Macro Alternative – model portfolio

Variable asset class sensitivity and material use of derivatives

Ex-ante asset betas



% of portfolio gross by cash vs derivatives



Source : Ninety One, based on indicative model portfolio and views as at 30 September 2022. Numbers calculated using MSCI Barra point-in-time model

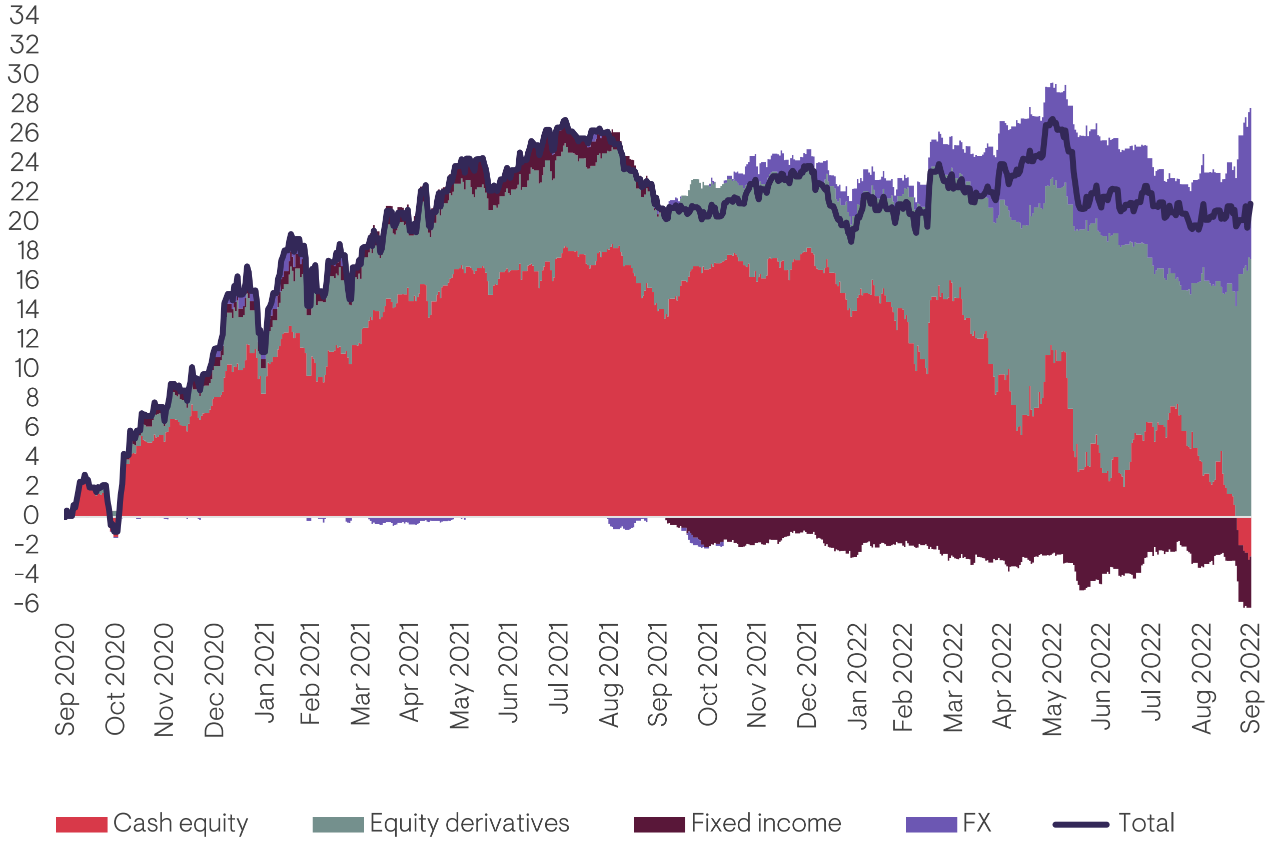
Global Macro Alternative – model portfolio

Historical model portfolio returns

Total returns by asset class (%)

	2022 YTD		2021		Since inception	
	Returns (%)	Volatility (%)	Returns (%)	Volatility (%)	Returns (%)	Volatility (%)
Cash equity	-18.3	9.5	9.1	5.3	-4.4	7.4
Equity derivatives	10.8	7.0	3.2	3.1	19.1	4.8
Fixed income	-2.7	3.3	-1.9	1.5	-4.8	2.3
FX	8.2	2.7	0.8	2.2	11.7	2.3
Total	**-2.1**	**6.2**	**11.2**	**7.4**	**21.3**	**7.1**
ACWI (USD hedged)	-11.8	15.3	20.9	8.7	9.3	11.9
WGBI (USD hedged)	-7.0	5.0	-2.3	2.5	-13.6	3.6

	Model Portfolio	Performance comparator
Since inception return (ann.)	10.1%	7.0%



Past performance is not a guide to the future, losses may be made.

These returns are hypothetical and produced on a best efforts basis, were not attained by any client and are for illustrative purposes only.

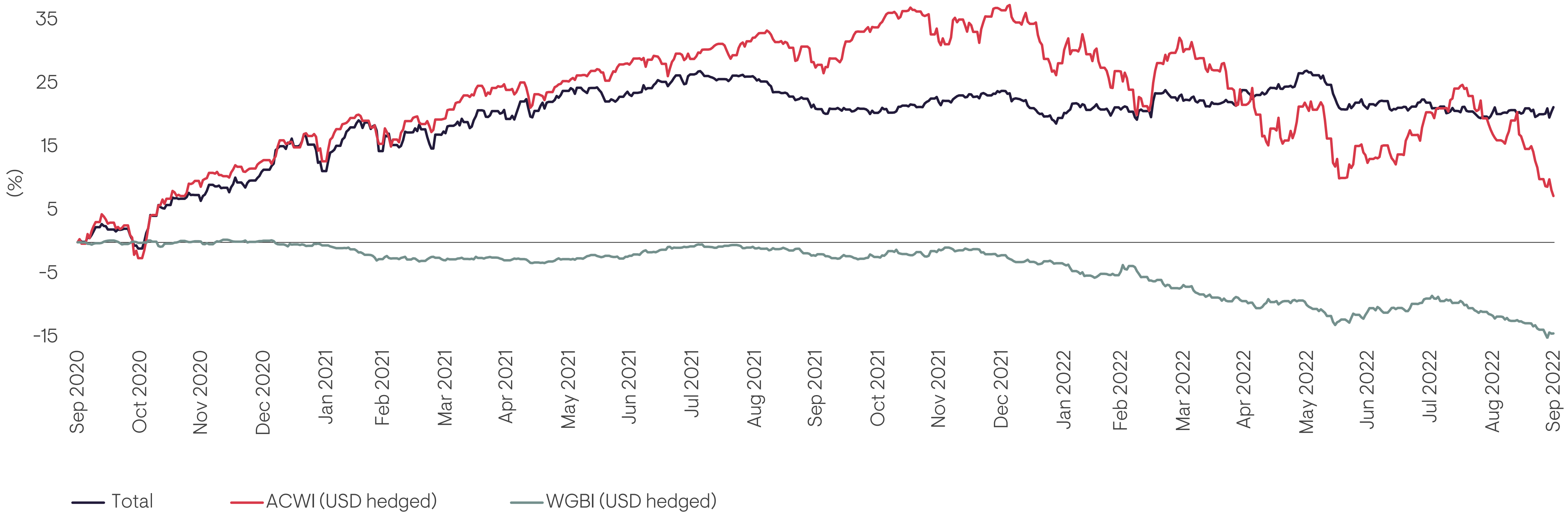
The results do not represent actual trading and they may not reflect the impact that material economic and market factors might have had on the manager's decision-making if the manager were actually managing clients' money. There is no performance impact of trading costs, management fees or other expenses (returns will be reduced by management fees and other expenses incurred. Note numbers may not sum due to compounding and rounding.

Source: Ninety One, Bloomberg, 30 September 2022. Based on model portfolio commencing on 1 October 2020. Income is reinvested, in USD.

For further information on model returns and indices, please see the Important information section.

Global Macro Alternative – model portfolio

Historical model portfolio returns vs major asset classes



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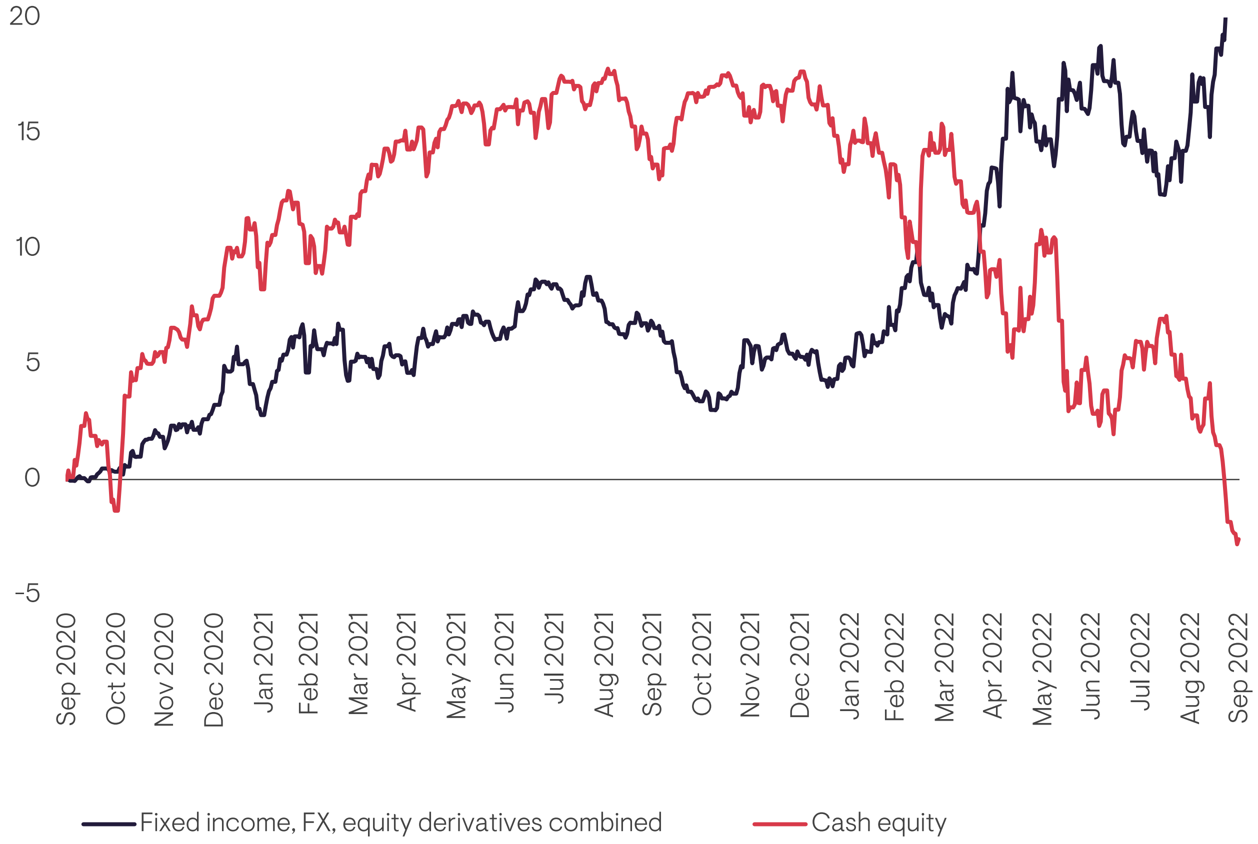
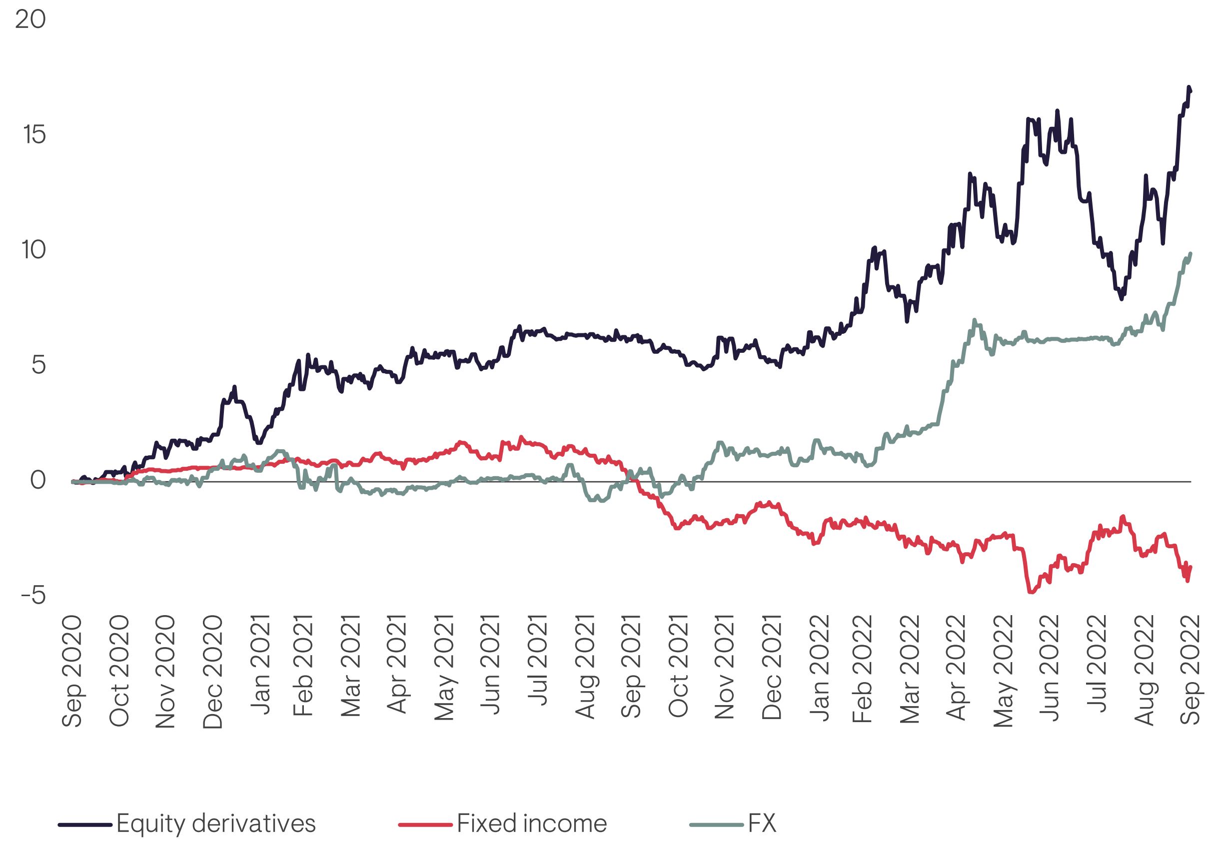
Global Macro Alternative – model portfolio

Historical model portfolio returns – asset class detail

Cash equity, and fixed income, FX, equity derivatives combined returns (%)



Fixed income, FX, equity derivatives discrete returns (%)



Past performance is not a guide to the future, losses may be made.
These returns are hypothetical and produced on a best efforts basis, were not attained by any client and are for illustrative purposes only.
The results do not represent actual trading and they may not reflect the impact that material economic and market factors might have had on the manager's decision-making if the manager were actually managing clients' money. There is no performance impact of trading costs, management fees or other expenses (returns will be reduced by management fees and other expenses incurred. Note numbers may not sum due to compounding and rounding.
Source: Ninety One, Bloomberg, 30 September 2022. Based on model portfolio commencing on 1st October 2020. Income is reinvested, in USD.
For further information on model returns and indices, please see the Important information section.

2022 Cyclical dynamics

Our 3 concerns coming into last year

- China - the Chinese economy was set to suffer the consequences of prior tightening, posing downside risks to growth.
- The Fed in particular appeared materially behind the curve – massive money supply growth, a rapidly tightening labour market and resulting wage growth pointed to inflation not being transitory. We expected the Fed to remove accommodation and tighten quickly.
- Valuations were generally extended

What this meant for our portfolios:

- A low level of equity exposure.
- Limited exposure to duration and credit.
- A high conviction long in the US dollar vs. Asian and European currencies, in anticipation of macro policy divergence.

Conclusion:

- 2022 represented recessionary conditions in China.
- For developed markets it was a valuation reset driven by rising discount rates as central banks moved to fight inflation.

Source: Ninety One, January 2023.
Opinions based on current market conditions; subject to change without notice and without any obligation to update.

2023 Cyclical dynamics

Outlook for 2023

- **China** - the Chinese economy is reopening and policy makers are doubling down on stimulus. Recovery expected.
- **Developed world** - will likely suffer the consequences of prior and ongoing tightening, with recession being our central scenario.
- **Value on offer in Asian risk assets & DM rates –** DM risk assets are more reasonably valued but don't yet reflect the high likelihood of earnings downside & ongoing tightness in liquidity conditions.

Portfolio implications:

- **Lower than average equity exposure** - with a notable bias towards China / Hong Kong.
- **Higher than average exposure to defensive duration** – focused on high grade nations with leverage and housing imbalances (Australia, New Zealand, South Korea, & Sweden).
- **Long USD, CHF & JPY vs. CAD, SEK & NZD** - a Chinese recovery represents a headwind for the USD, but strong hedging asymmetry remains in reserve currencies vs. vulnerable $ bloc and Scandi currencies.

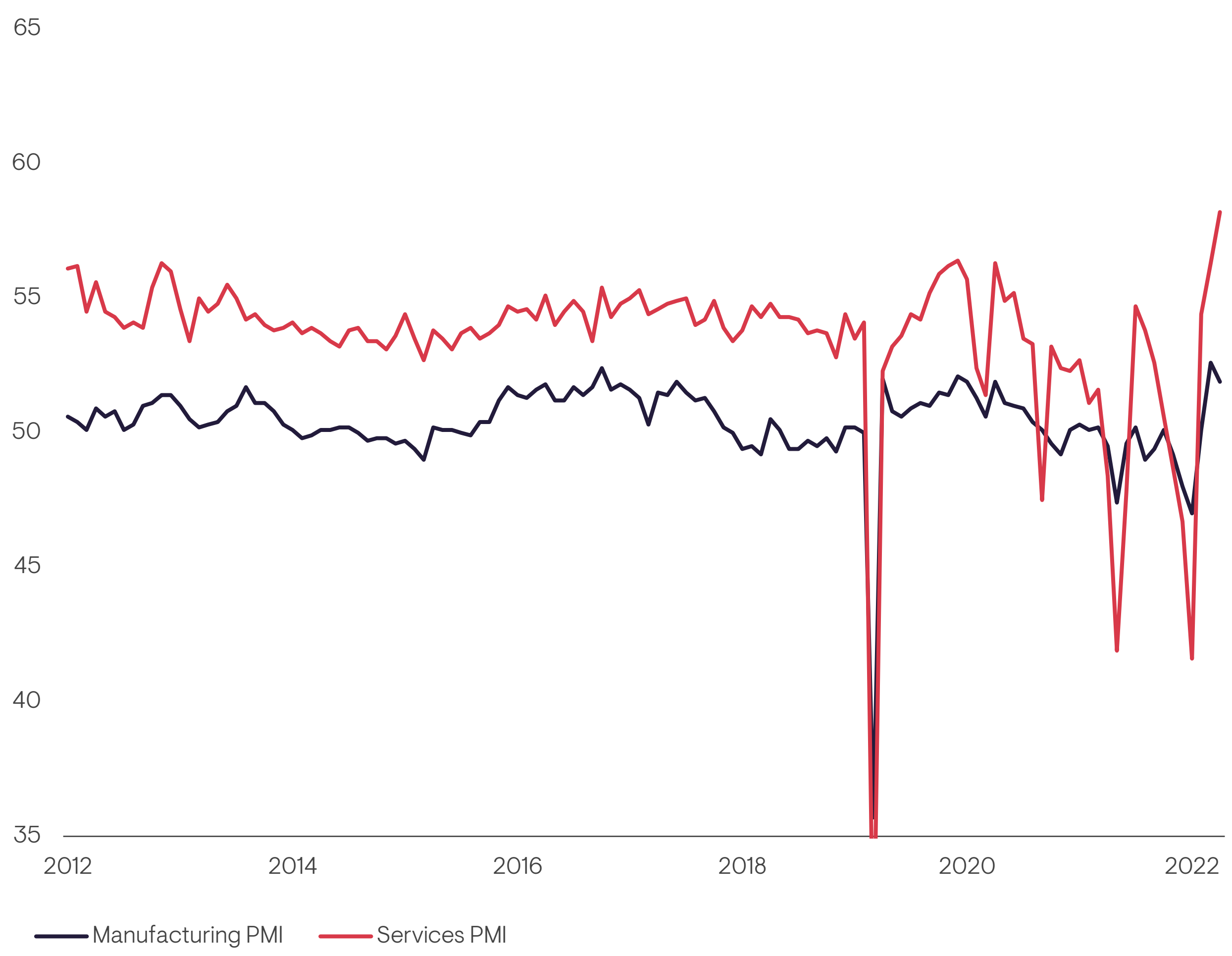
Source: Ninety One, March 2023.
Opinions based on current market conditions; subject to change without notice and without any obligation to update.

China: recovery expected

Evidence building

- China's regulatory cycle peaked in H1 2022.
- The nation's credit cycle troughed in Q4 2021.
- Policy makers actively rowing back on real estate macroprudential regulations.
- Zero-Covid abandoned.
- Chinese households have CNY 10trn of excess savings (c.10% of GDP) and retail sales are 15% below their pre-covid trend.
- Politburo's primary objective for 2023:
  - "significantly boosting market confidence through forceful monetary policy and reinforcing fiscal policy"

China PMIs

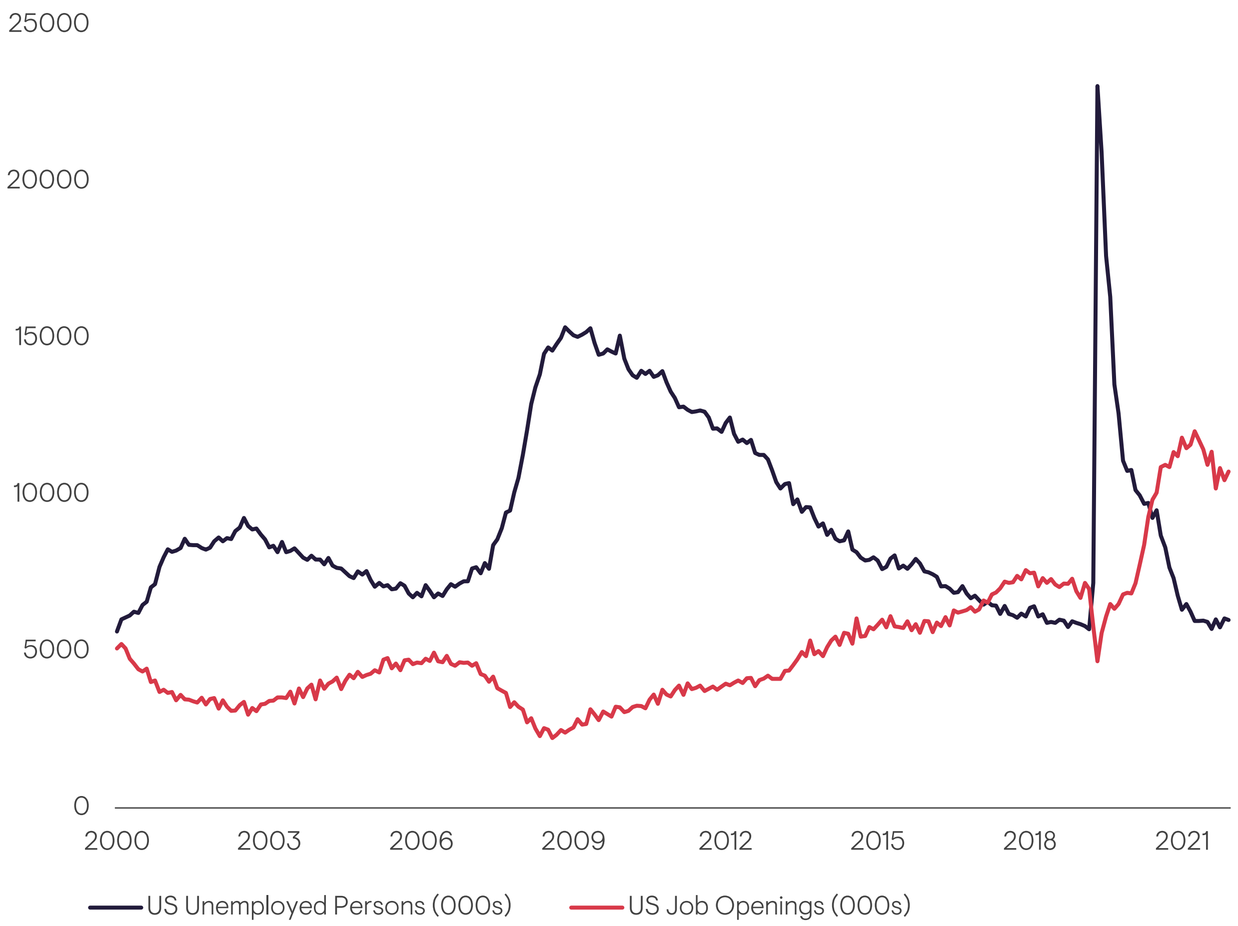


Source: Ninety One, March 2023

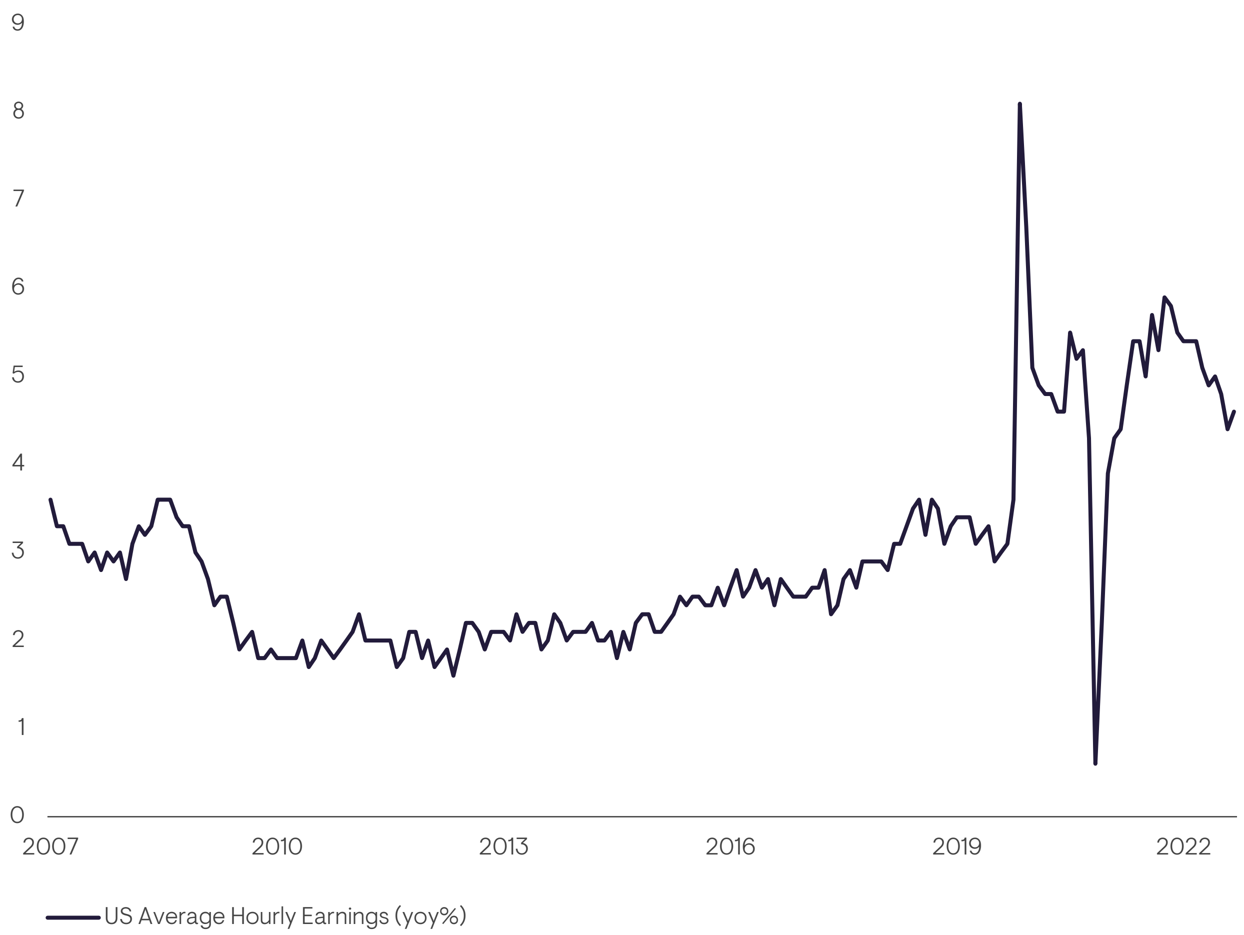
Will the Fed give the market the easing it wants?

Powell: "the level of wage growth remains inconsistent with inflation returning to 2%"

US Job Openings vs. Unemployed People



US Wage Growth (yoy%)

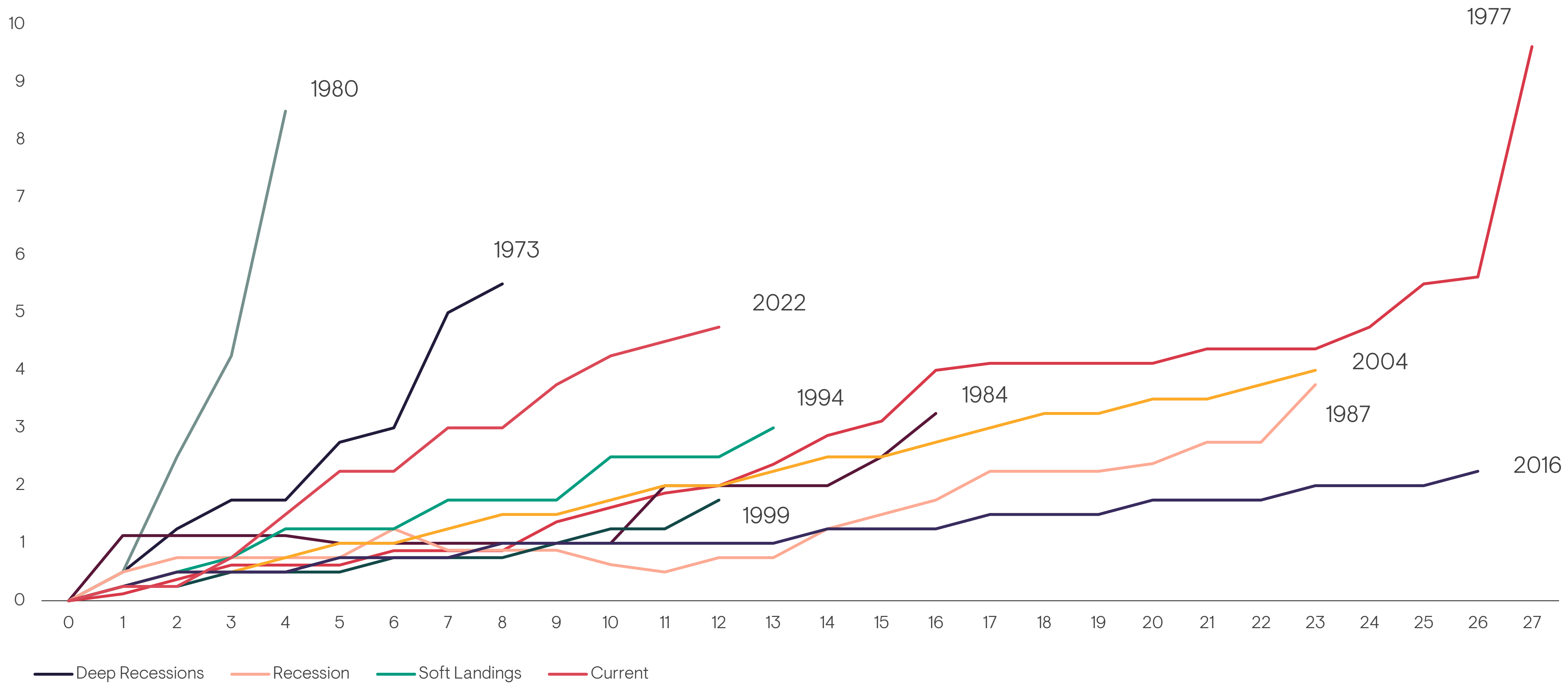


Source: Ninety One, Bloomberg, March 2023

US economy: soft landing?

History implies low odds of a soft landing

Historic Fed hiking cycles (% over months)

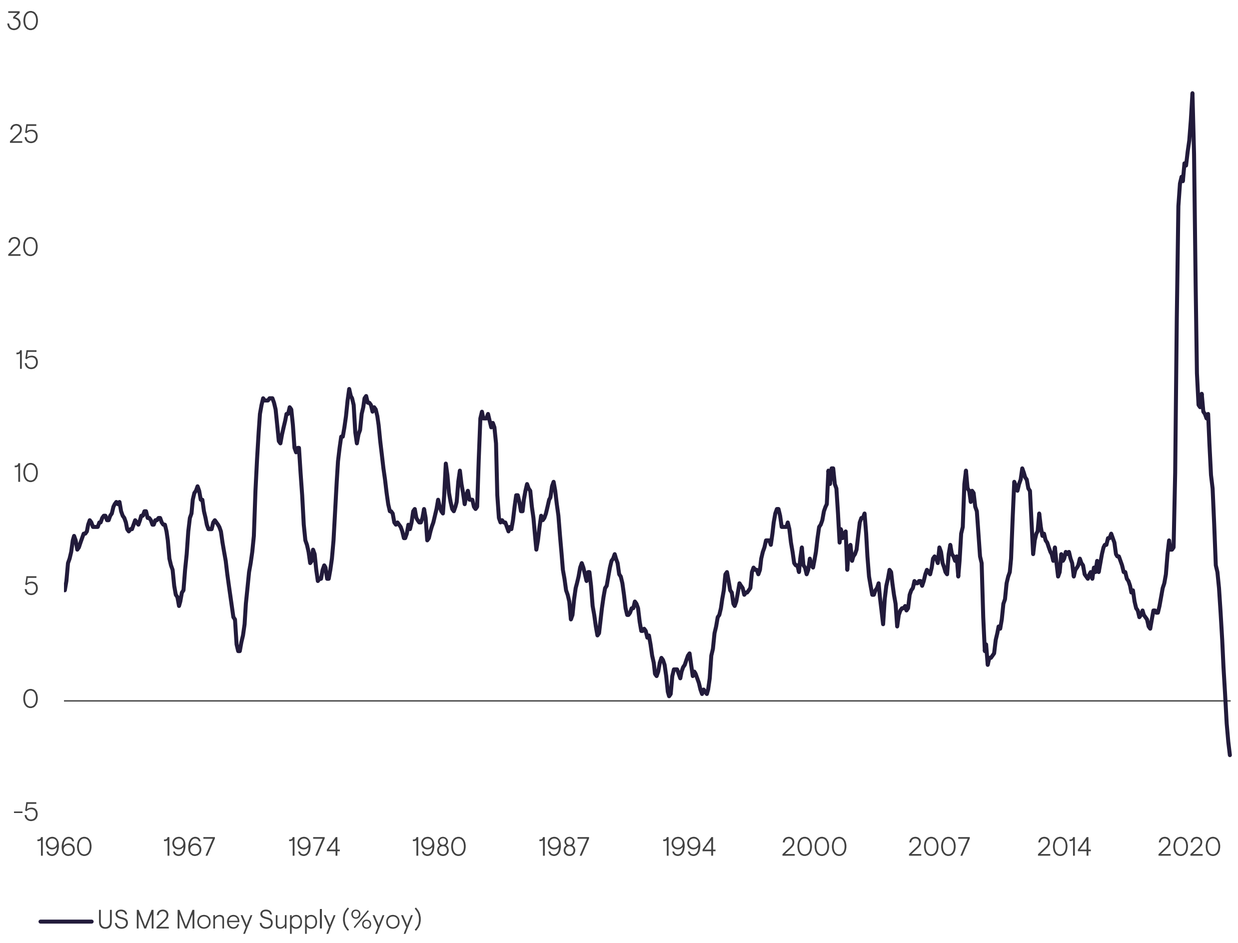


Source: Ninety One, Bloomberg, March 2023

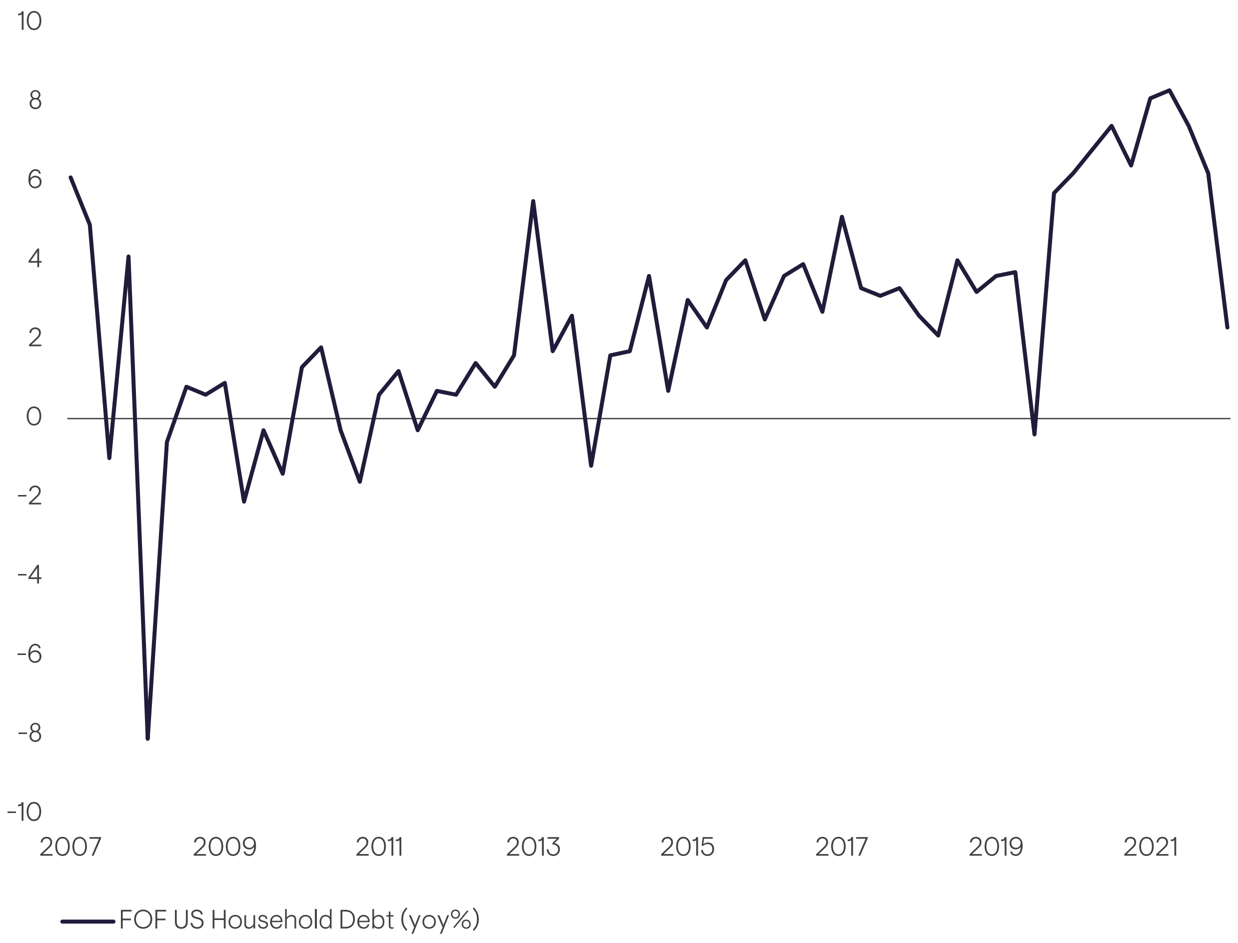
The full effects of this tightening cycle should be felt in H2

US money supply growth contracting and household credit growth slowing sharply

US M2 Money Supply Growth (yoy%)



US Household credit growth

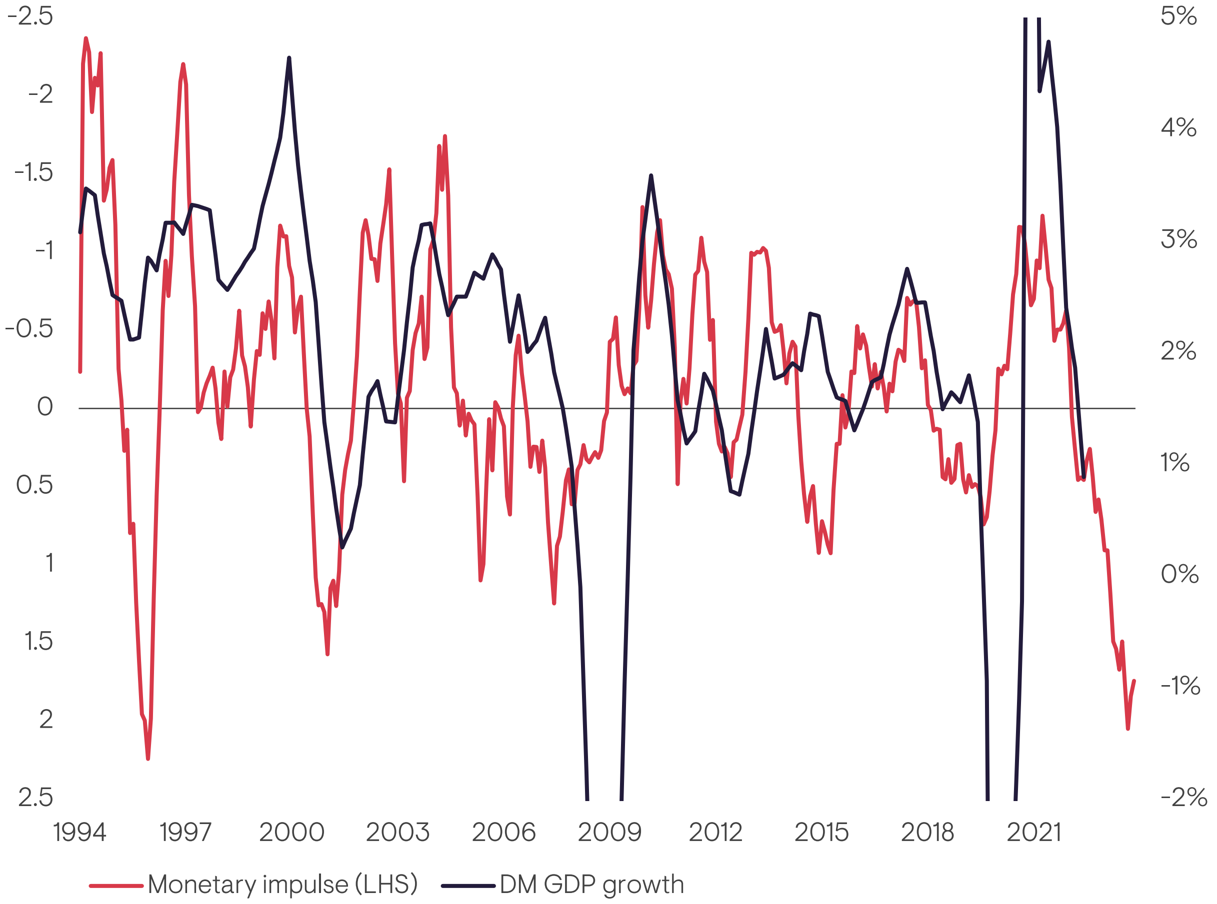


Source: Ninety One, Bloomberg, March 2023

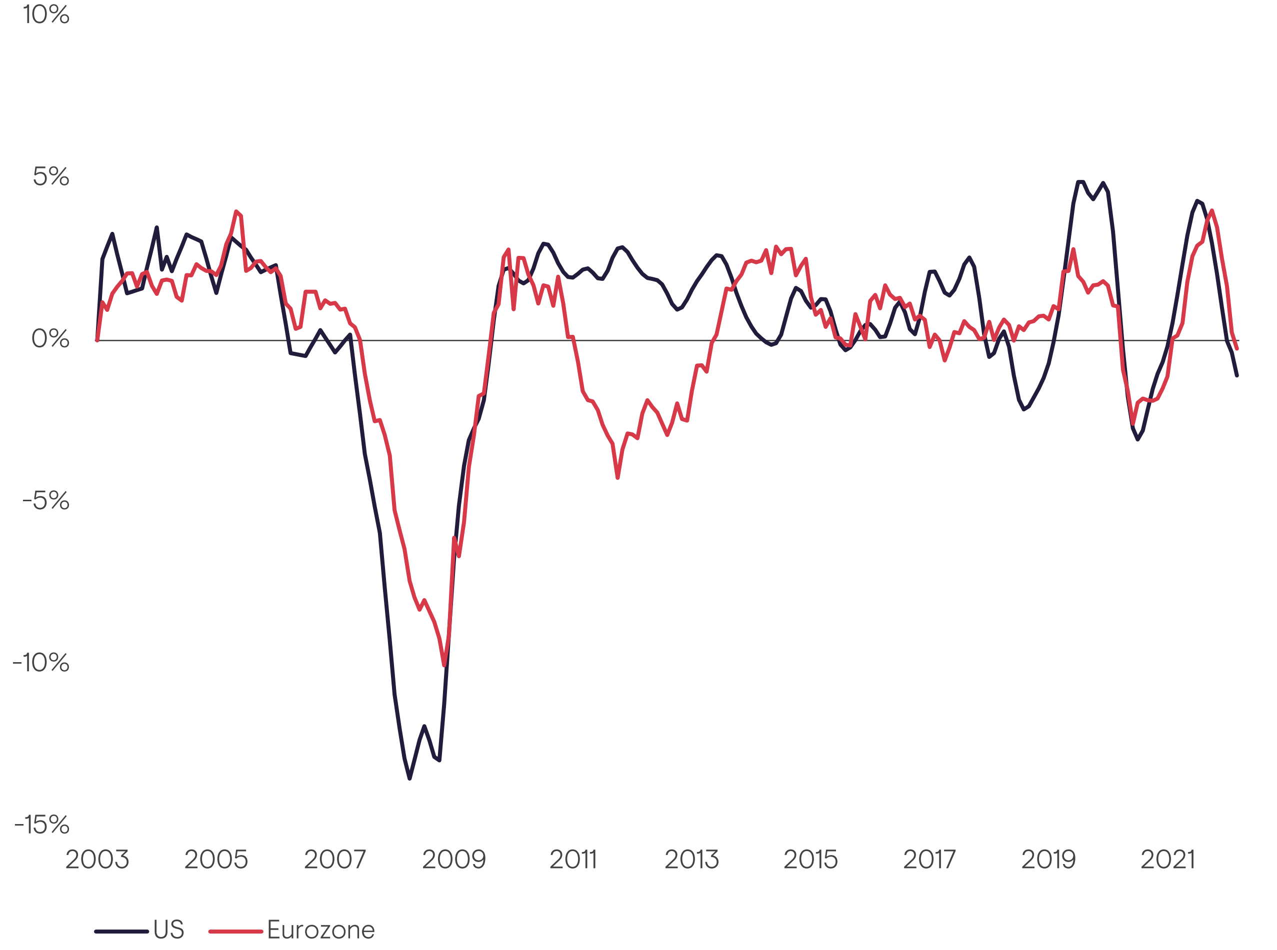
Credit conditions are tightening as we see the lagged impact of tightening

The monetary impulse remains a drag to growth and developed market credit impulses are negative

Monetary impulse vs developed market GDP growth (18m lag)



US and Eurozone credit impulse (% of GDP)



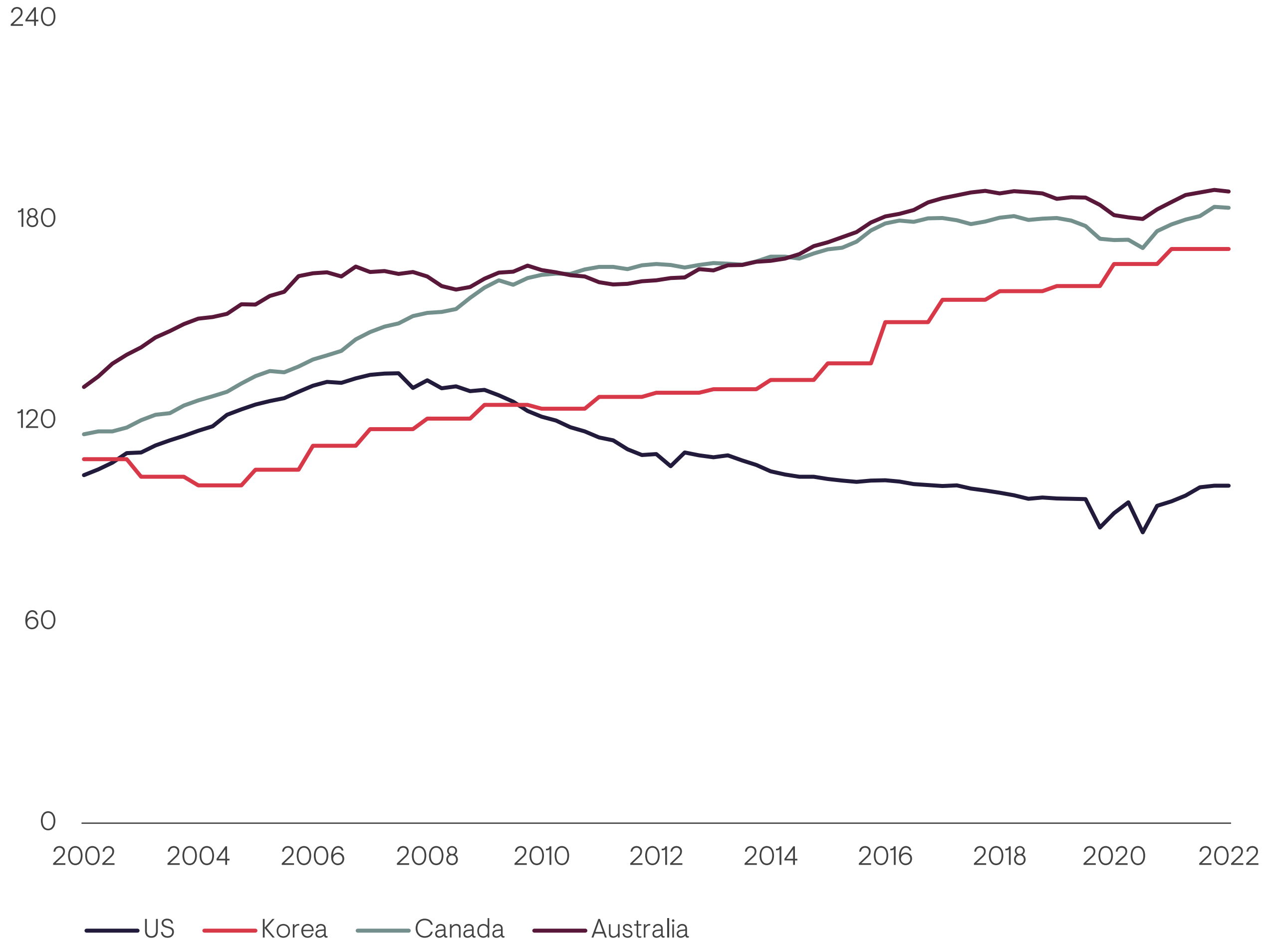
Source: Ninety One, February 2023

Positive real rates present across DM

Compelling opportunities in the rates and FX of nations in false equilibrium

US 10yr real interest rates

Household debt ratios (% disposable income)

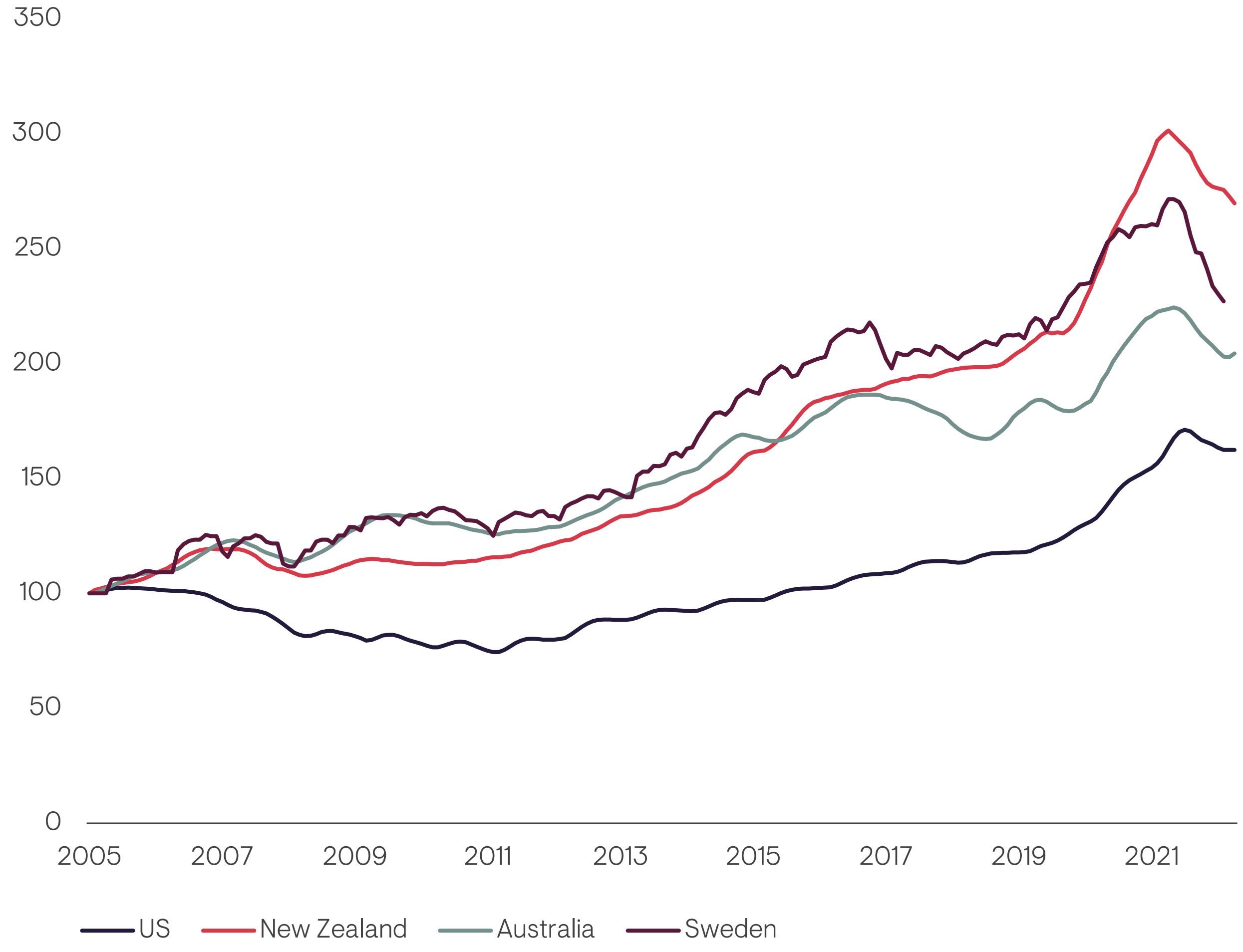


Source: Ninety One, Bloomberg, March 2023
For further information on indices, please see the Important information section.

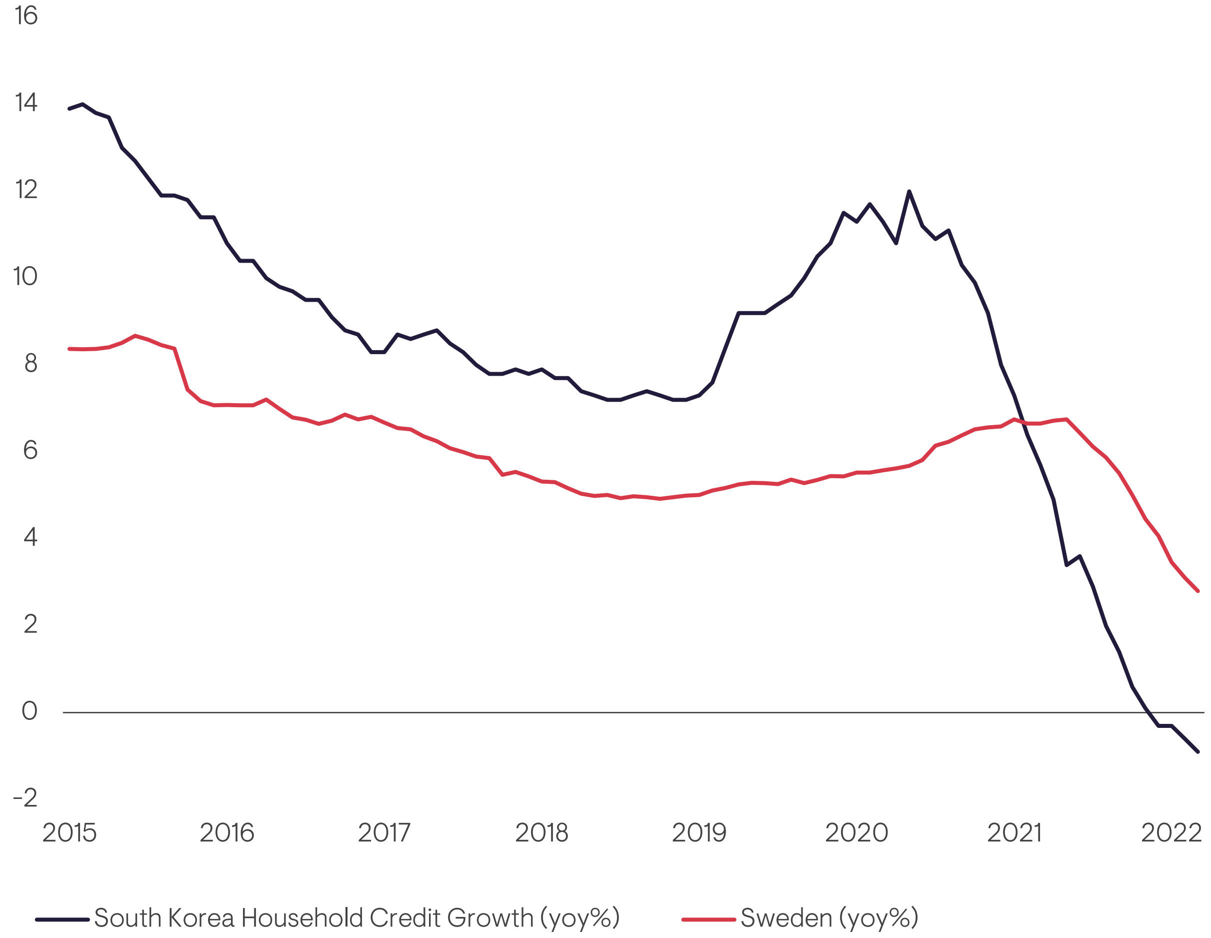
Imbalances in $ bloc, Scandi and South Korea correcting

Likely resulting in domestic deflationary shocks over the next year

House prices



South Korea & Sweden – lending to households (yoy%)

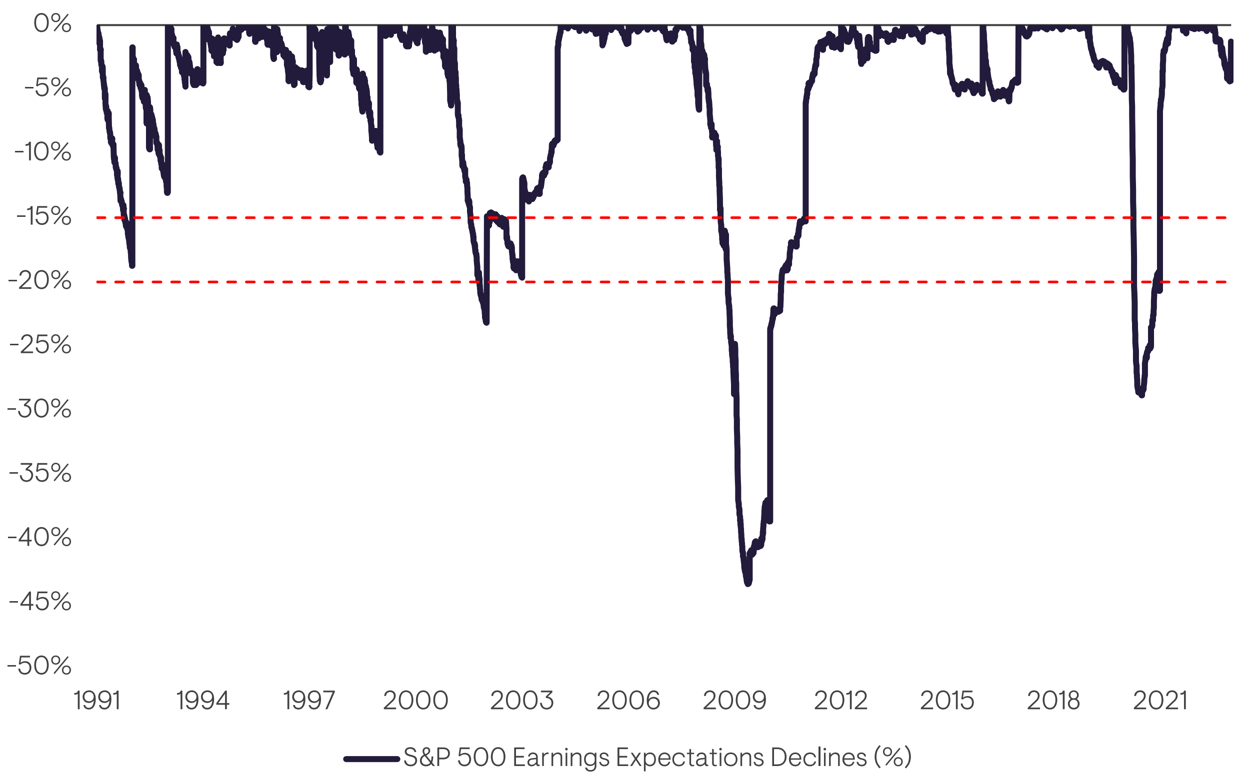


Source: Ninety One, Bloomberg, March 2023
For further information on indices, please see the Important information section.

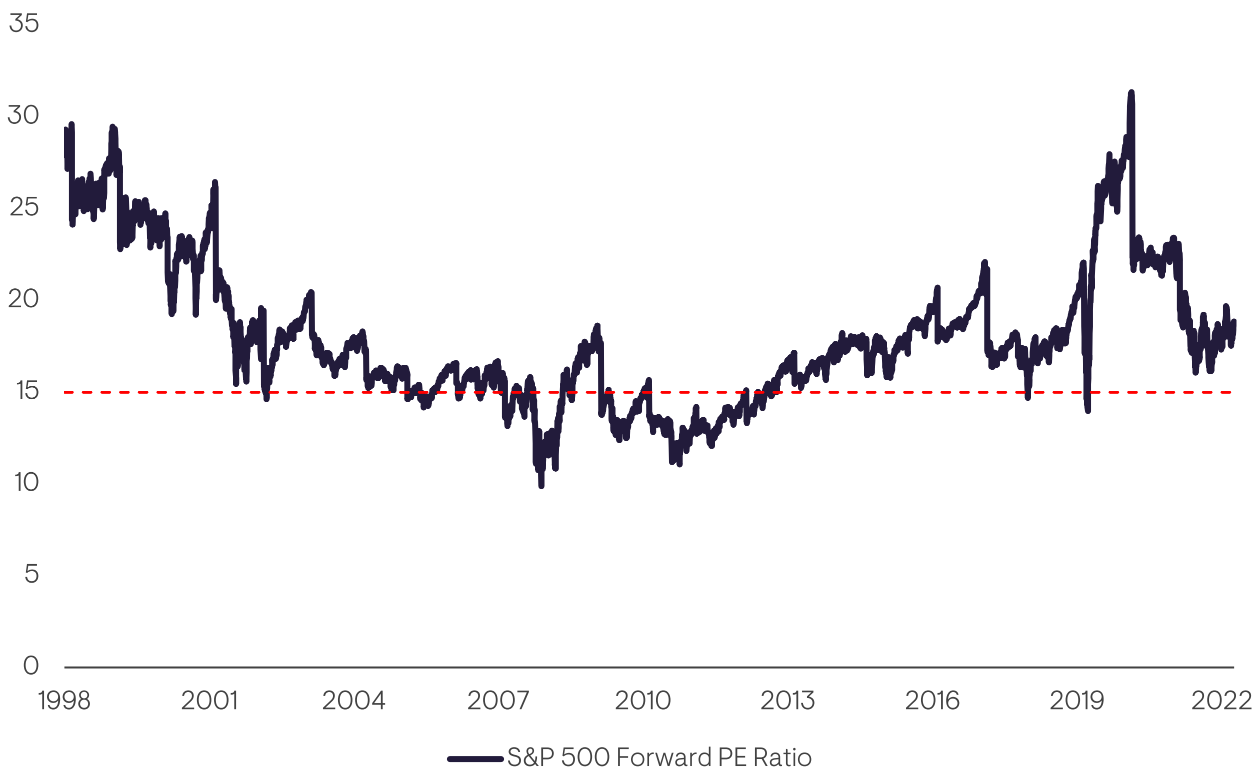
US Equities: valuations have reset toward more reasonable levels..

..but are not yet priced for a downturn in earnings combined with tight liquidity conditions

S&P 500 forward EPS drawdowns



S&P 500 Forward PE Multiple



- Central scenario of a recession = -15-20% expected earnings declines
- Assuming a trough multiple of 15x price to reduced expected earnings = c. S&P 3000 (a further -15-20%)

Source: Ninety One, March 2023

Global Macro Alternative model portfolio methodology

Since inception to 30 September 2022

Trade logging and portfolio management

- At the inception date, a model portfolio was constructed
- Each position at inception was assumed to have been entered at the close of 30/09/2020
- From this point onwards the portfolio has been managed as if it were a live portfolio, with every trade logged with it's entry date, entry price and rationale. This approach ensures the risk of look-back bias is minimised
- On-desk monitoring has been used to monitor positioning on a daily basis as well as to proxy the returns of the portfolio in order to aid portfolio management and mimic the management of a live portfolio
- In order to create a theoretical track record for the model portfolio, a list of historical trades was provided to the performance team to calculate a return stream using a robust methodology completely independently to the portfolio management team

Performance methodology

- The opening weights of the model portfolio were taken from the log of trades provided by the portfolio management team
- For cash equity, daily returns were calculated using the internal performance system (Factset). For each security other than cash equity, daily local total returns were sourced from Bloomberg/Morgan Markets
- Daily returns were calculated on carry adjusted (hedged) basis from 30/09/2020 to 30/09/2022. Carry adjusted returns are calculated using a combination of price return and a carry return for each day
- The portfolio assumed an opening market value of 1,000,000 at the fund on inception date 30/09/2020
- Each day the return of each stock/security is applied to calculate the next day's market value for each position and then added to arrive at the new total market value of the theoretical portfolio
- This methodology was repeated each day until the new trade was implemented, with each new trade assumed to be funded from cash as a balancing item
- This process was carried forward until the end of the performance period 30/09/2022
- Given FX is implemented through forwards, this same process was repeated for FX, with the dollar (base currency) assumed to be the balancing item rather than cash, i.e. new positions are assumed to be funded from base currency on both a long and short basis
- The process provides a total return for each position and the total portfolio, as well as the historical position sizes of each position adjusted for market movement and the movement of other assets in the portfolio
- It is worth noting that this performance methodology assumes no cashflows and entry/exit costs, and is produced on a best efforts basis

Model portfolio historical positioning

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Biographies

James Elliot
Head of Multi-Asset
Joined the firm in 2019
Joined the industry in 1996

James 'Jimmy' is Head of Multi-Asset at Ninety One and is based in London. He is responsible for investment oversight of the portfolio management team and the ongoing development of our multi-asset and investment solutions business.

Jimmy has 24 years of experience in global equities, long/short equity hedge funds and multi-asset investing, which gives him a broad perspective on both security selection and asset allocation as elements of generating sustainable investment returns. He joined the firm from JP Morgan (JPM) Asset Management where he was International Chief Investment Officer (CIO) for their Multi-asset Solutions business with over US$90 billion in client assets. Prior to this he was co-CIO of the European Behavioural Finance and CIO of the Japanese Equity teams at JP Morgan.

Jimmy graduated from Oxford University with an BA Honours degree in Modern History in 1993. He is a CFA® Charterholder.

Iain Cunningham
Co-Head of Multi-Asset Growth
Joined the firm in 2016
Joined the industry in 2007

Iain is Co-Head of Multi-Asset Growth at Ninety One. He is also co-portfolio manager for the Global Multi-Asset Sustainable Growth, Global Macro Allocation, Global Strategic Managed and the Risk Managed strategies. Iain's research responsibilities include macro, equity, fixed income and currency.

Prior to joining the firm in 2016, Iain started his career at Schroders where he was responsible for the management of a number of multi-asset funds and mandates focused on dynamic asset allocation and income.

Iain has a BSc in Economics and an MSc in Economics and Finance (with distinction) from Loughborough University. He is also a Chartered Financial Analyst (CFA®) Charterholder.

Alex Holroyd-Jones
Portfolio Manager
Joined the firm in 2013
Joined the industry in 2011

Alex is a portfolio manager in the Multi-Asset team at Ninety One. Alex's research responsibilities include macro, fixed income and currency.

Prior to joining the firm in 2013 he worked on the Crude Oil and Products finance desk at ConocoPhillips, with a focus on derivatives.

Alex graduated from Loughborough University with a first class Bachelor of Science (Hons) degree in Business Economics and Finance. Alex is also a Chartered Financial Analyst (CFA®) Charterholder.

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Additional information on our investment strategies can be provided on request.

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