



Institute
and Faculty
of Actuaries

Life Conference 2022

23-25 November, ACC Liverpool

#LifeConf





Institute
and Faculty
of Actuaries

Uncertainty abounds!

Lesley-Ann Morgan, FIA
Schroders

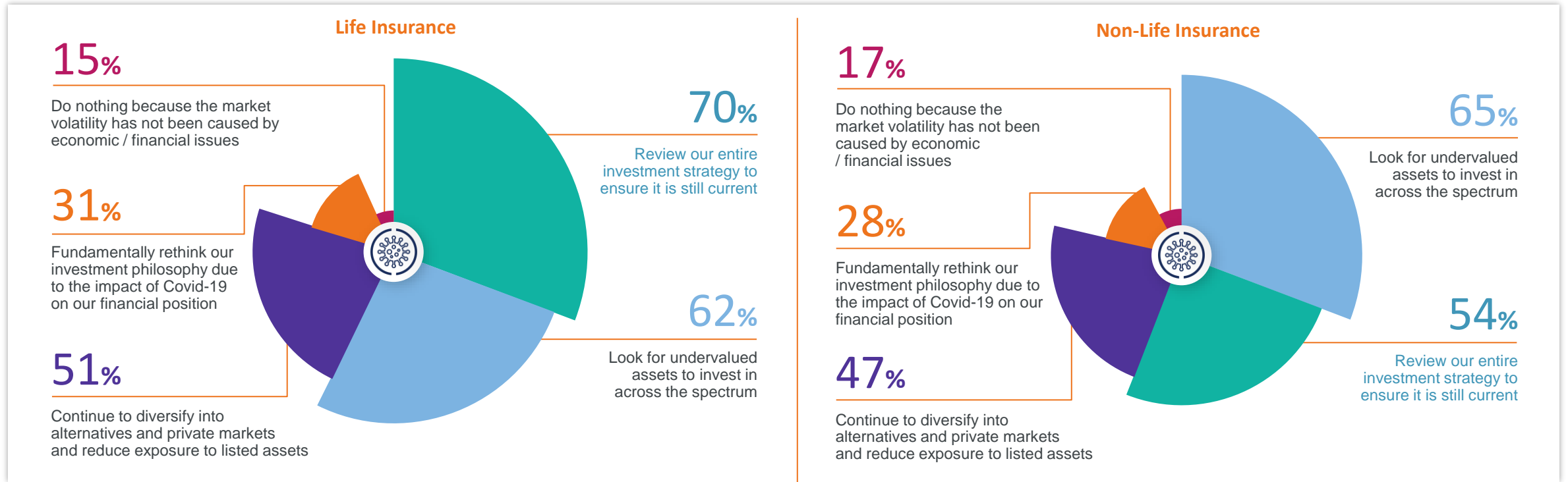
#LifeConf



Post Covid-19 impact – medium to longer term

Seeking undervalued assets and reviewing investment strategy prominent

Looking at your future investment strategy, to what extent are you likely to do the following based on your current assessment of the economic and financial impact of the Covid-19 pandemic?



Source: Schroders Institutional Investor Study 2021. Respondents were asked to rate on a scale of 1-10 where 1 = Very unlikely to do this and 10 = Very likely to do this. % Likely to do (7 – 10).

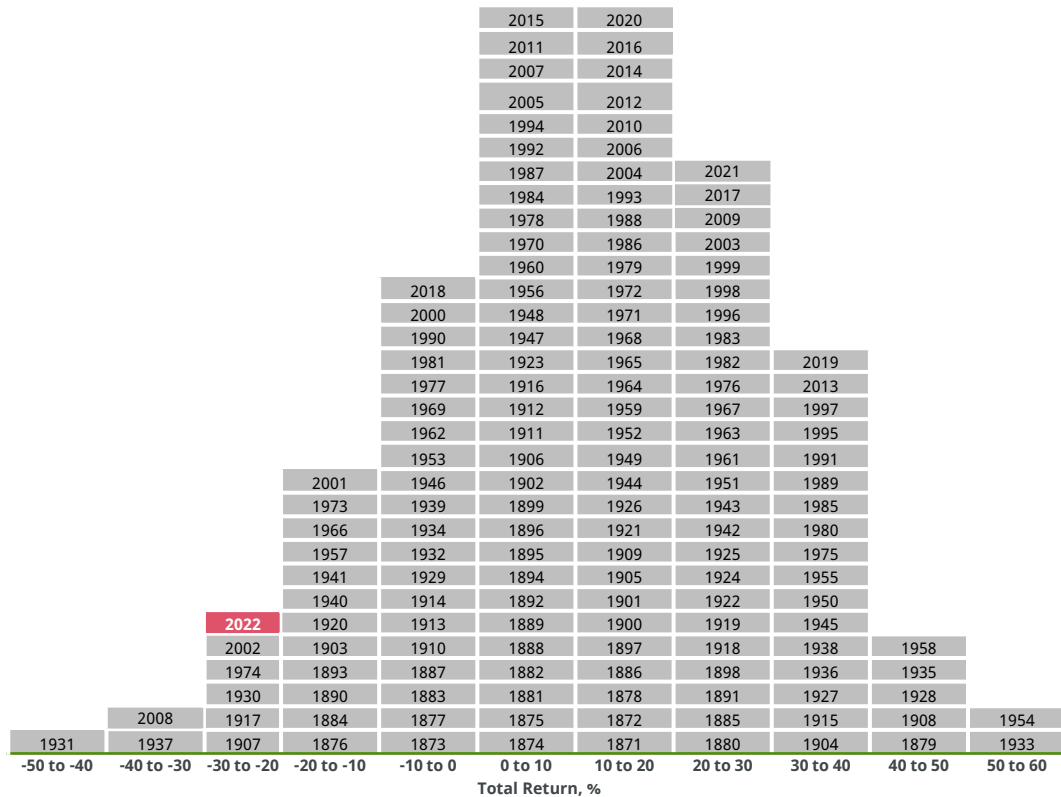


Institute and Faculty of Actuaries

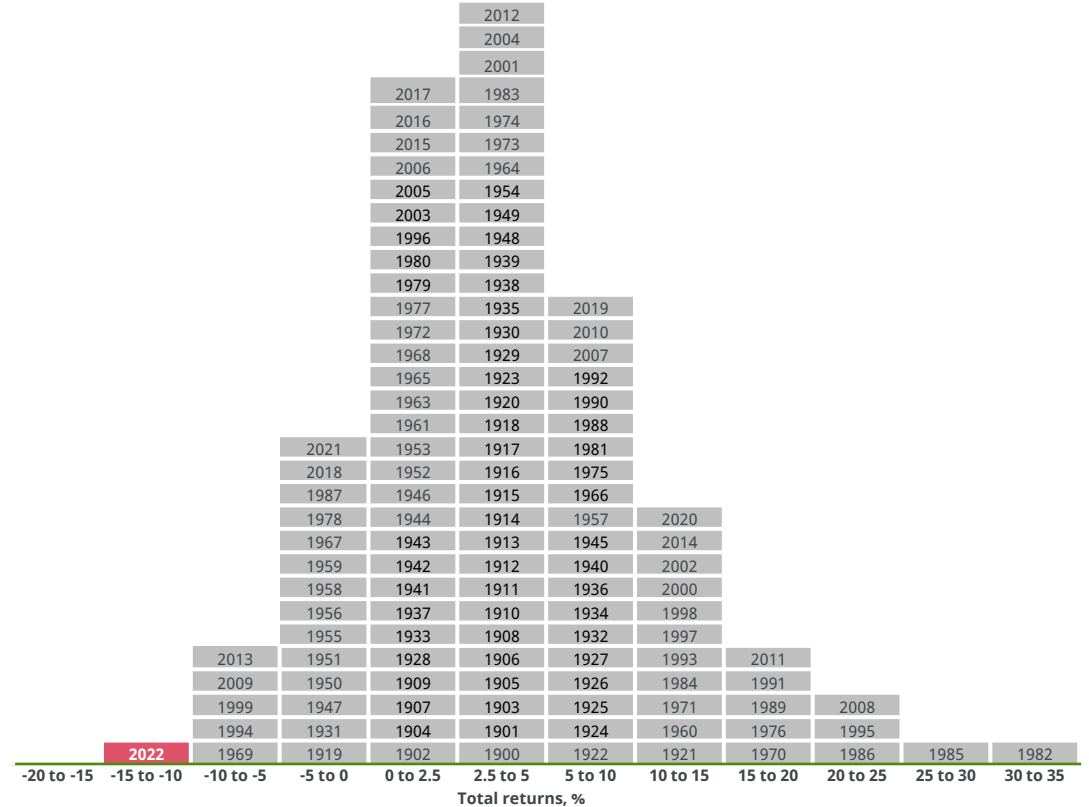
A perfect storm across the pond

Significant falls in both equity and bond prices year-to-date

S&P 500 returns



US 10-year Treasury bond returns



Source: Schroders Economics Group, Refinitiv, Global Financial Data, 10 Oct 2022. Note: S&P500 from 1871, US 10-year Treasuries from 1900. 2022 return YTD to 10 Oct - 23.64% S&P, -14.50% US 10-year Treasuries.



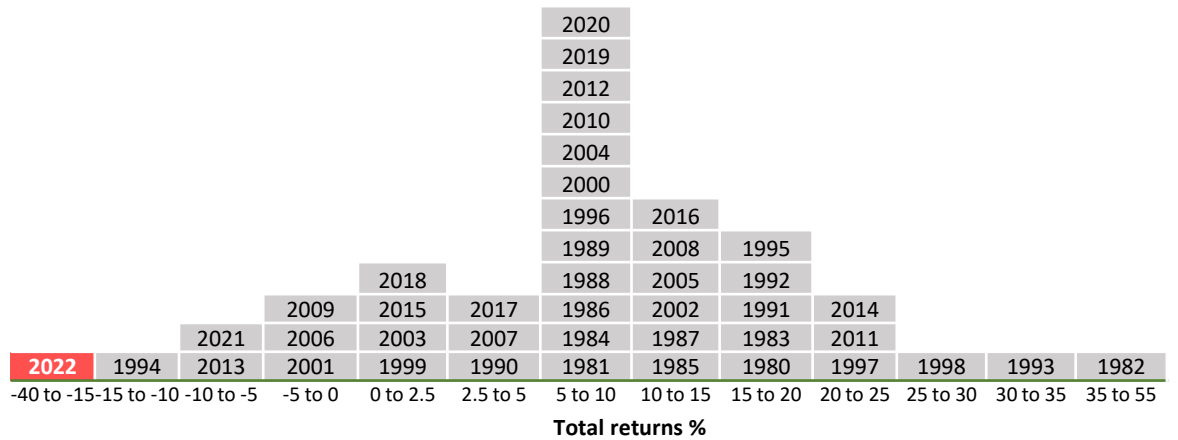
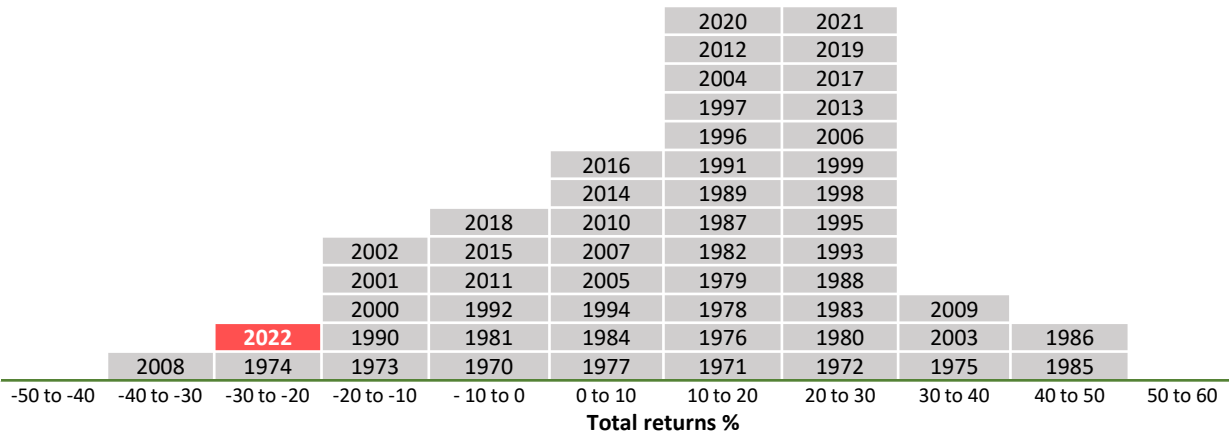
Institute and Faculty of Actuaries

And a worse one in the UK

Significant falls in both equity and bond prices year-to-date

Global equities returns

20-year Gilt bond returns



Source: Schroders Economics Group, Refinitiv, Global Financial Data, 13 Oct 2022. Note: Global equities from 1970, 20-year Gilt from 1980. 2022 return YTD to 13 Oct -26.74% Global equities, -38% 20-year Gilt.



Looking forward - where to start?



Net zero

Gilt market intervention

Post-covid recovery

UKRAINE

'Mini'-budget

Inflation

Equity market weakness

Supply chain issues

Valuations

Negative sentiment

Source: Schroders, October 2022.



Institute and Faculty of Actuaries

Where to start?

Amongst the noise, a framework brings calm



Source: Schroders, October 2022.

Stick to your philosophy

- Valuation in the context of the economic cycle

Figure out where you are in the cycle

- Not as easy as you might think...

You are unlikely to be 100% correct

- What's your central/base case?
- What are the possible unknowns – scenario planning
- What about the unknown unknowns?
- Be humble!



Institute
and Faculty
of Actuaries



Institute
and Faculty
of Actuaries

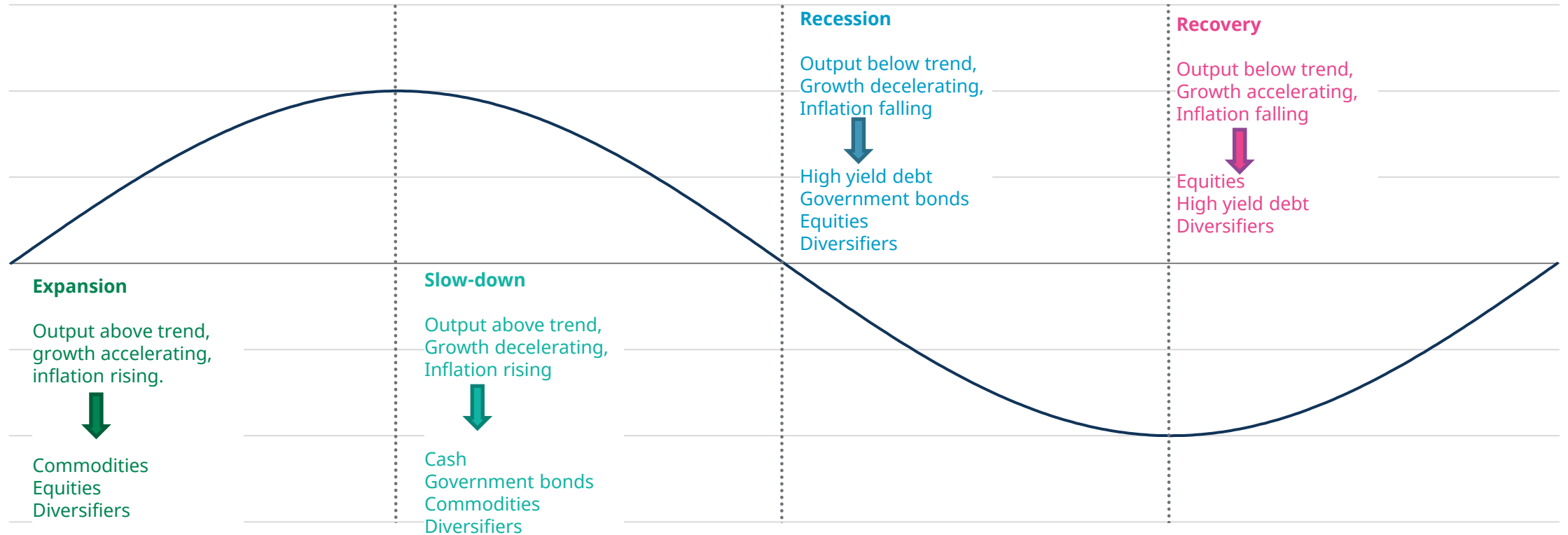
The cycle and why it matters

#LifeConf



Valuations conditioned by the cycle

Accessing opportunities through the cycle



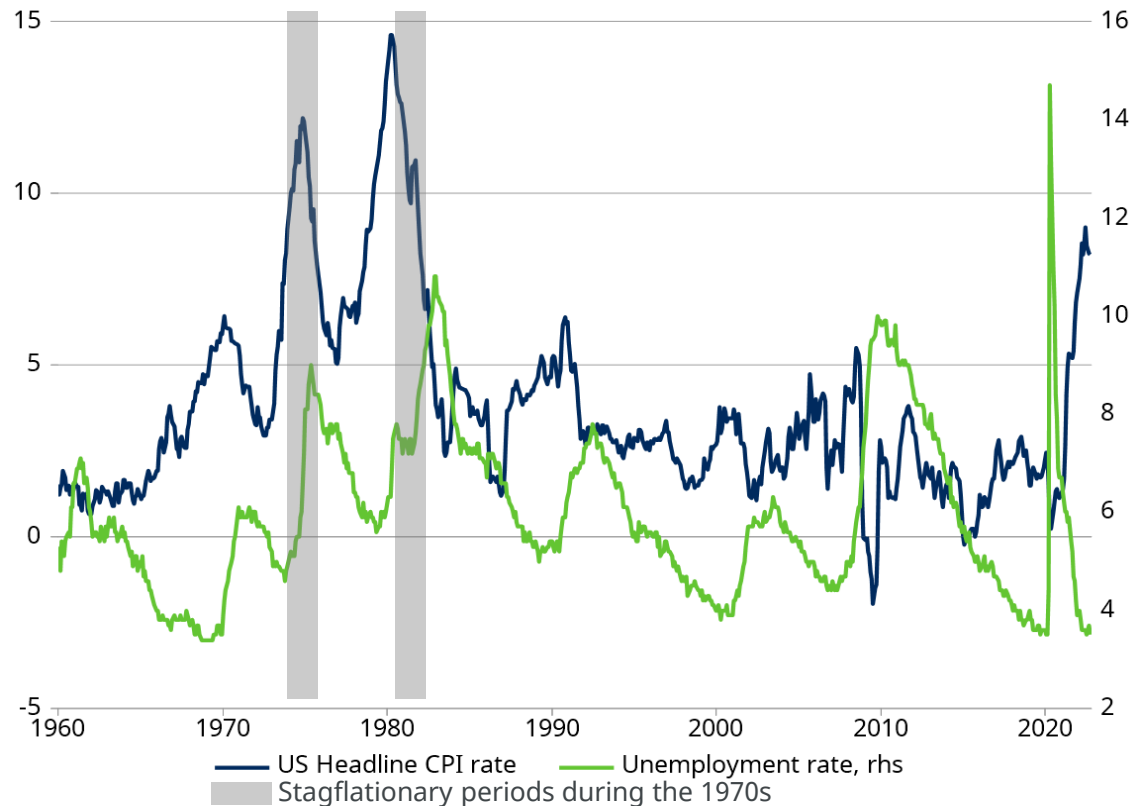
Source: Schroders. Shown for illustrative purposes only and does not guarantee outcomes.



Institute and Faculty of Actuaries

It's hard to pinpoint where we are in the market cycle

Inflation like the 1970s but not the labour market



No two economic cycles are the same

- Increasingly difficult to draw parallels from the past
- Unemployment rate is at multi-decade low, not resembling that of an impending recession
- Inflation exacerbated by Ukraine-Russia war and supply chain disruptions resulting from China's zero-Covid policy
- Will we see some semblance of normality once the US economy goes into recession?

Source: Refinitiv, Schroders Economics Group, 27 September 2022.

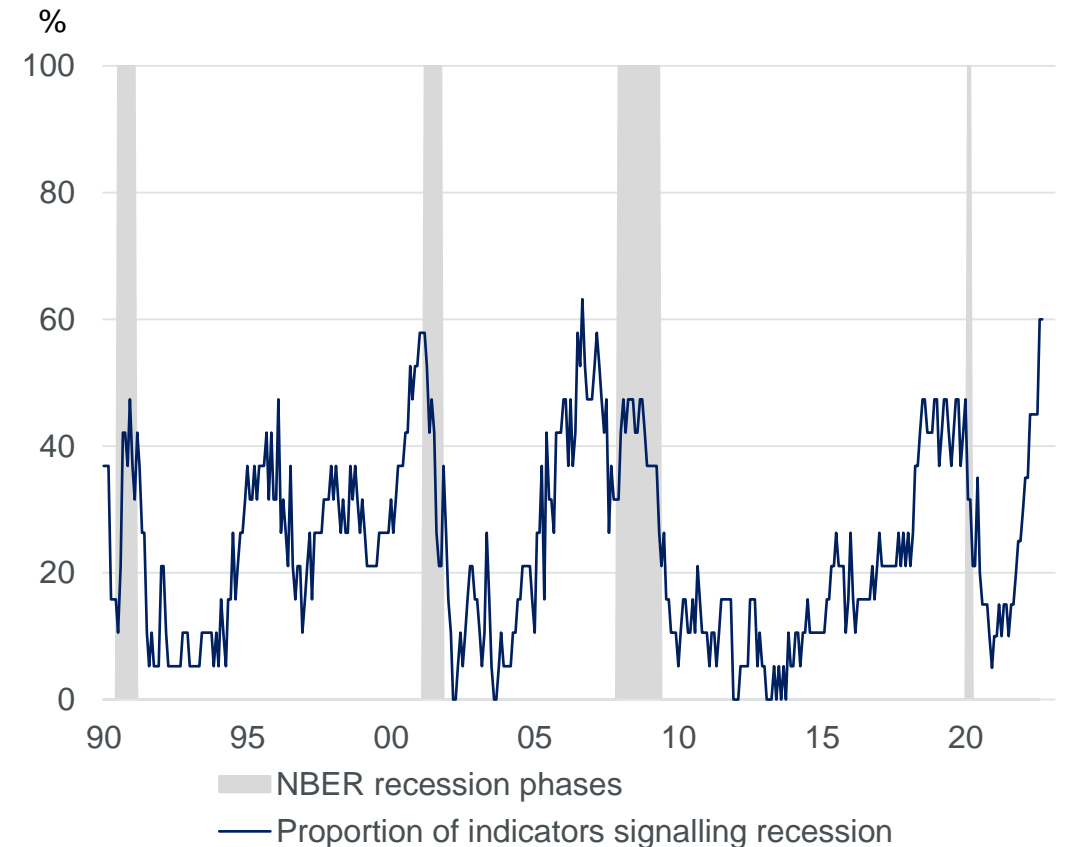


Institute
and Faculty
of Actuaries

Data and tools to point the way

	Indicator	Signalling recession Yes (Y) or No (N)	Typical lead time in signalling recession (months)
INFLATIONARY	Truck sales	Y	24
	Output gap	N	24
	Initial jobless claims	Y	23
	Capacity utilisation	N	21
	Unemployment gap	Y	17
MONETARY	Commodity prices y/y%	Y	15
	Yield curve (10yr minus 3 month Treasury bill)	Y	13
	Fed funds rate, change over the last two years	Y	12
	Fed fund rate relative to cycle low	N	12
	Real money base, y/y%	Y	9
	Real narrow money supply, y/y%	Y	6
NEAR-TERM MACRO AND FINANCIAL MARKETS	Real bread money supply, y/y%	Y	5
	ISM new orders, six month change %	Y	5
	Private house permits, y/y%	N	3
	S&P 500, six month return, %	Y	2
	ISM new orders	Y	1
	VIX Index	N	1
	Average weekly hours (manufacturing sector) y/y%	N	1
	Chicago Fed activity index	N	1
Manufacturing goods new orders y/y%	N	1	
Proportion of indicators signalling recession			60%

Proportion of indicators signalling recession



Source: Schroders Economics Group, 31 August 2022.





























Will it be different this time?



Institute
and Faculty
of Actuaries

What does history tell us about investing in high inflation?

% of rolling 12 – month periods when asset class returns exceed inflation rate, 1997 to 2022

Inflation regime	Rate of occurrence	US Equities	US Treasuries	Cash	Commodities	Gold	REITs	TIPS
Low (<3%) and rising	43%	 88%	 64%	 32%	 53%	 58%	 70%	 72%
High (>3%) and rising	9%	 67%	 52%	 41%	 89%	 59%	 78%	 56%
High (>3%) and falling	14%	 48%	 80%	 53%	 55%	 78%	 75%	 68%
Low (<3%) and falling	34%	 79%	 77%	 41%	 33%	 58%	 73%	 80%

Source: Schroders, Refinitiv. Data from March 1997 to June 2022. Notes: based on monthly rolling annual returns relative to the contemporaneous rate of inflation, where frequency <50% (red), 50%<X<67% (amber), >67% (green). Low/high inflation is defined as the average inflation rate over the preceding 12-month period. Rising/falling is defined as the change in the inflation rate over 12 months. Rate of occurrence refers to number of rolling 12-month periods in each inflation regime. Shown for illustrative purposes only and does not guarantee outcomes.



Institute
and Faculty
of Actuaries



Institute
and Faculty
of Actuaries

Simple!
**Anything else worth
considering?**

#LifeConf

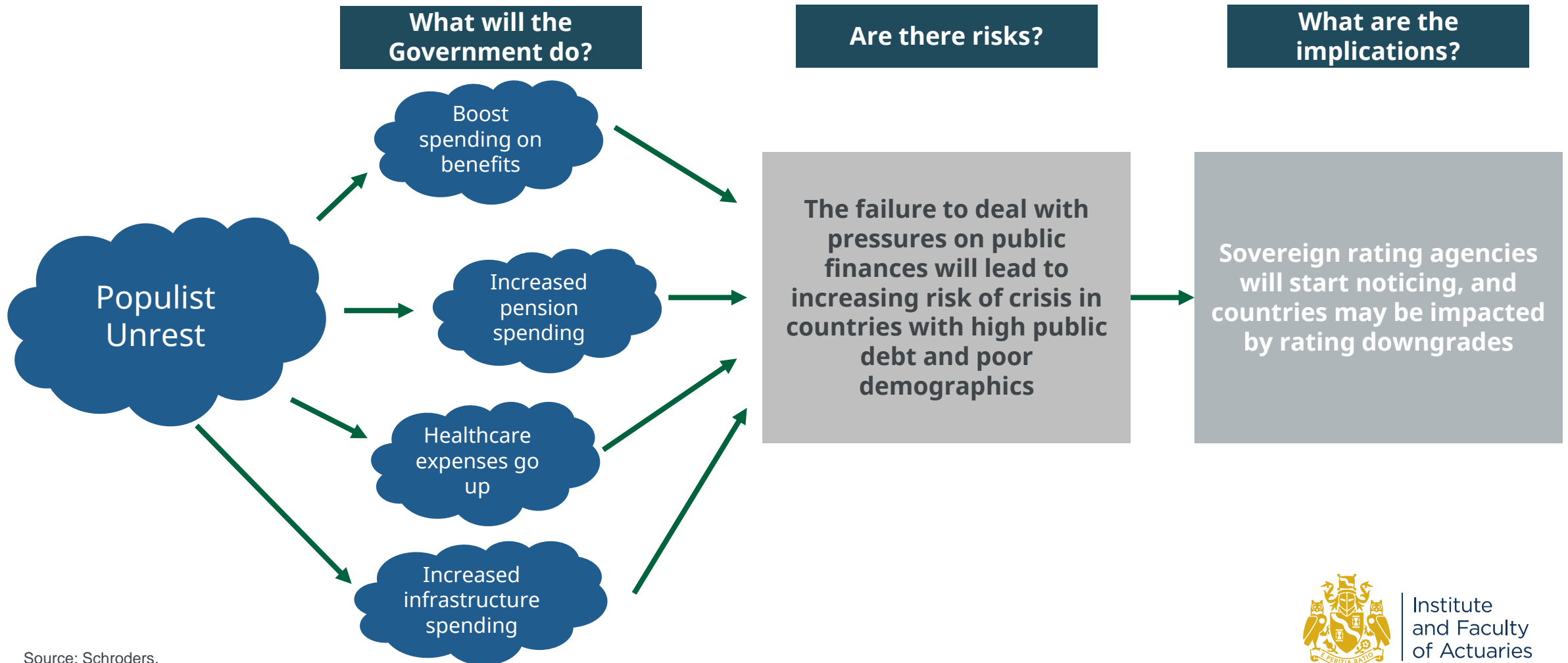


What else should we consider?

- The impact of politics
- The impact of economic data
 - Shorter term e.g. will there be a recession?
 - Longer term e.g. demographics
- The march to net zero
- Inclusion of illiquid assets
- Portfolio construction in a new regime
- Changes in regulation



How do politics impact asset allocation decisions?



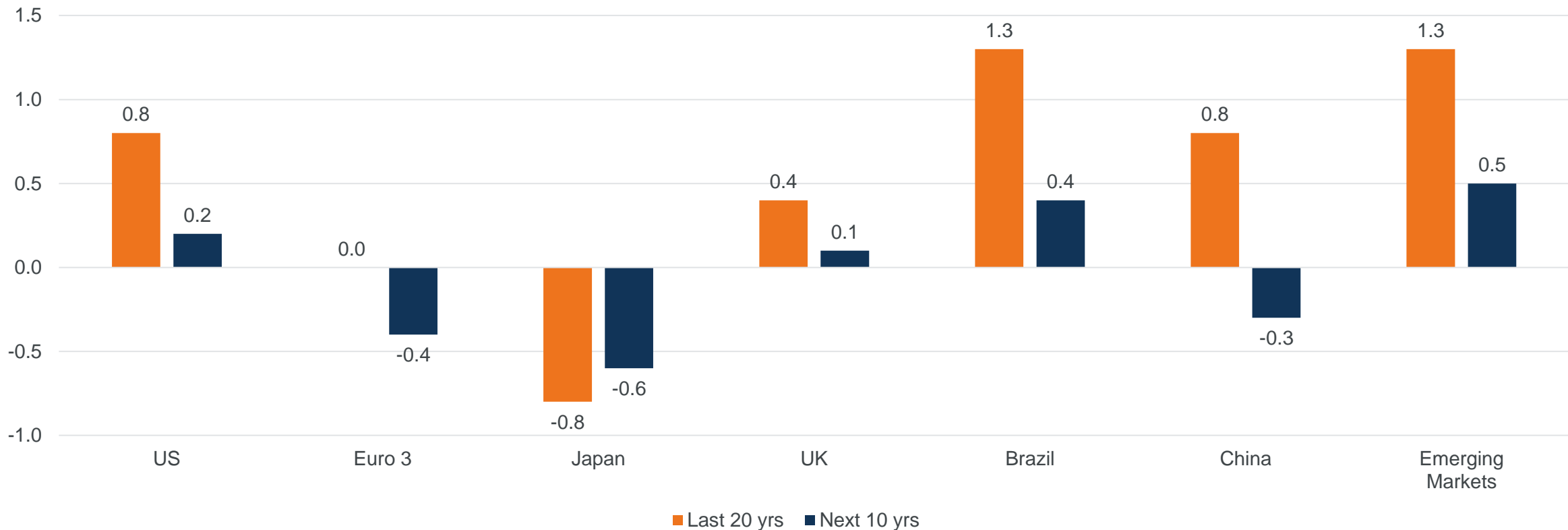
Source: Schroders.



Institute
and Faculty
of Actuaries

How does the economic backdrop affect asset allocation?

Global labour force growth will decline



Source: US Census Bureau, Oxford Economics, Schroders Economics Group.

Note: Last 20 years = 1998–2018, Next 10 years = 2019–28F. Emerging markets includes China, Brazil, Russia, India, Mexico and Korea. Euro 3 refers to Germany, France and Italy.



Institute
and Faculty
of Actuaries

Are shifting demographics deflationary or inflationary?

Remains open to debate, but we suspect the net impact will be deflationary

Emerging school of thought that ageing populations will be inflationary
(Goodhart and Pradhan, 2020):

1. Higher health expenditure, lower dependency ratio
2. Labour shortages increase employee bargaining
3. Savings fall to greater extent than investment



But mainstream view is that it is deflationary:

1. Dampens dynamism
2. Increases tax burden
3. Lowers investment returns





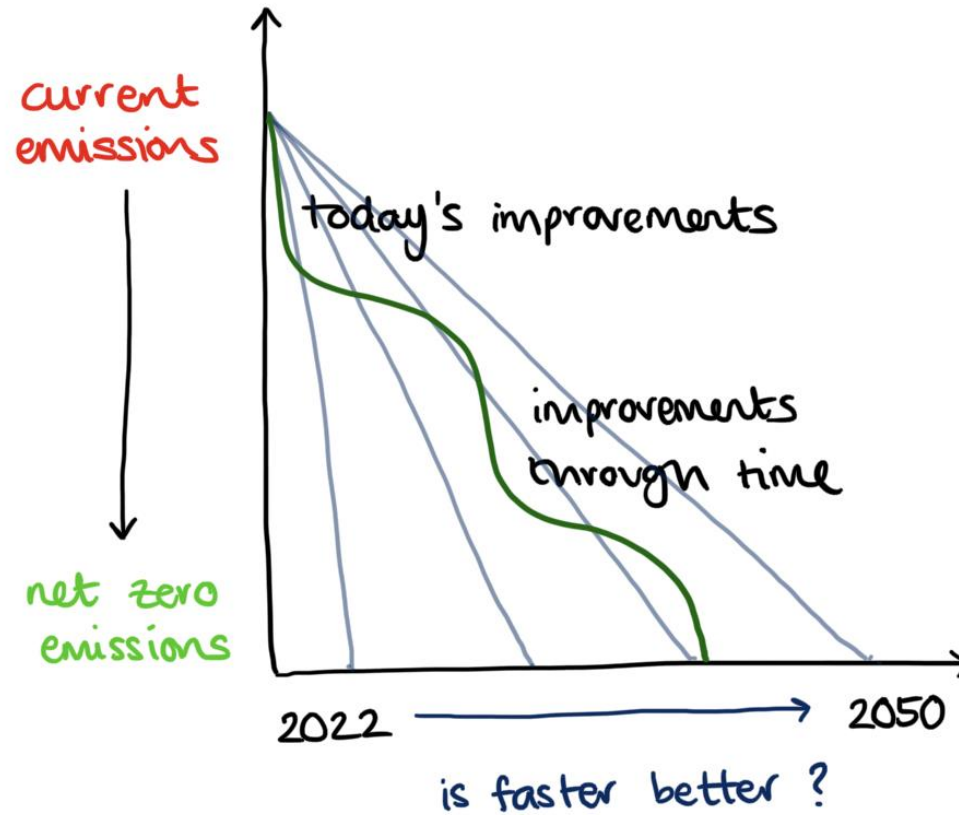
Institute
and Faculty
of Actuaries

The impact of climate



#LifeConf

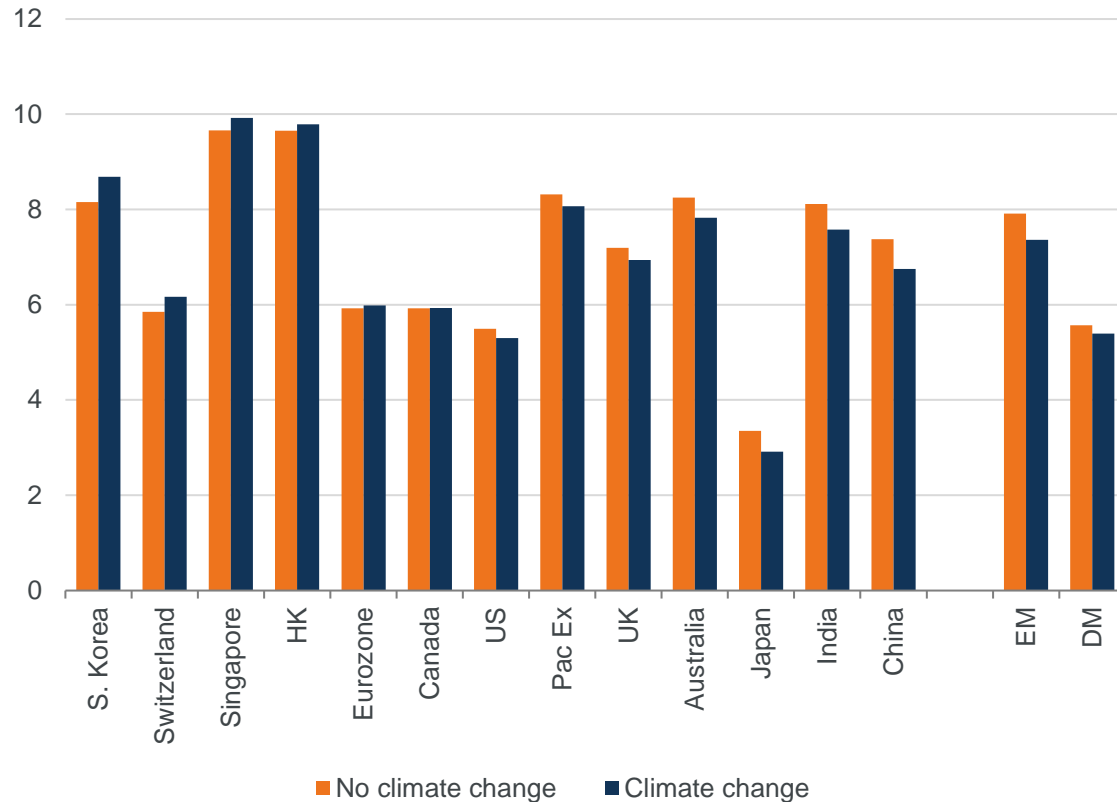
The path to net zero will not be straight



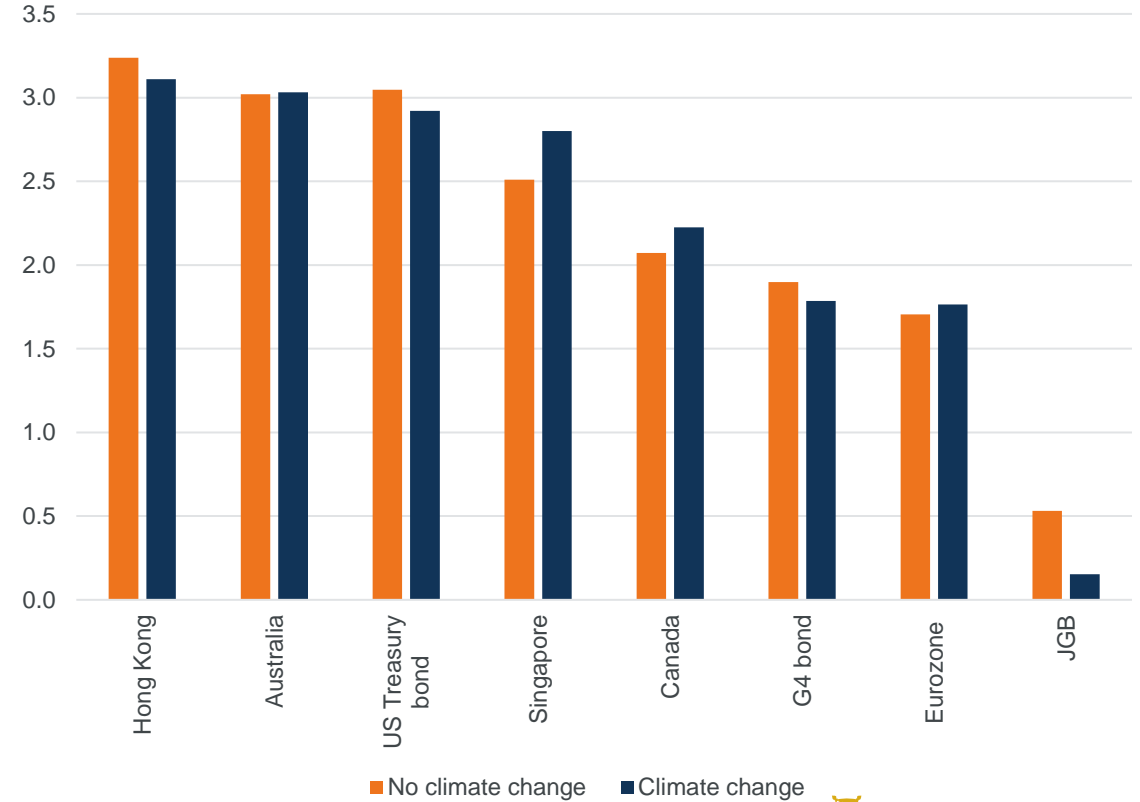
The impact of climate

Large reductions in some countries

Nominal equity returns (% p.a. 2022–2051)



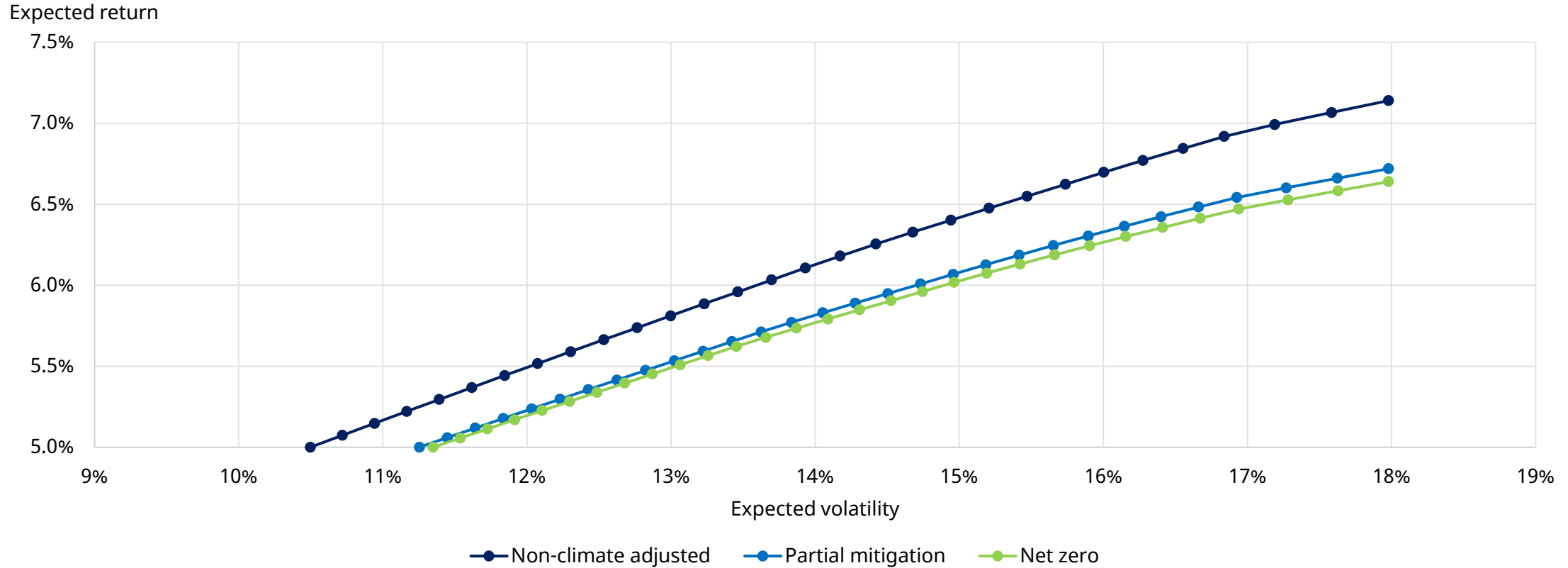
Nominal bond returns (% p.a. 2022–2051)



Source: Cambridge Econometrics, Schroders Economics Group. January 2022.
Shown for illustrative purposes only and does not guarantee outcomes



Overall returns reduced at all risk levels

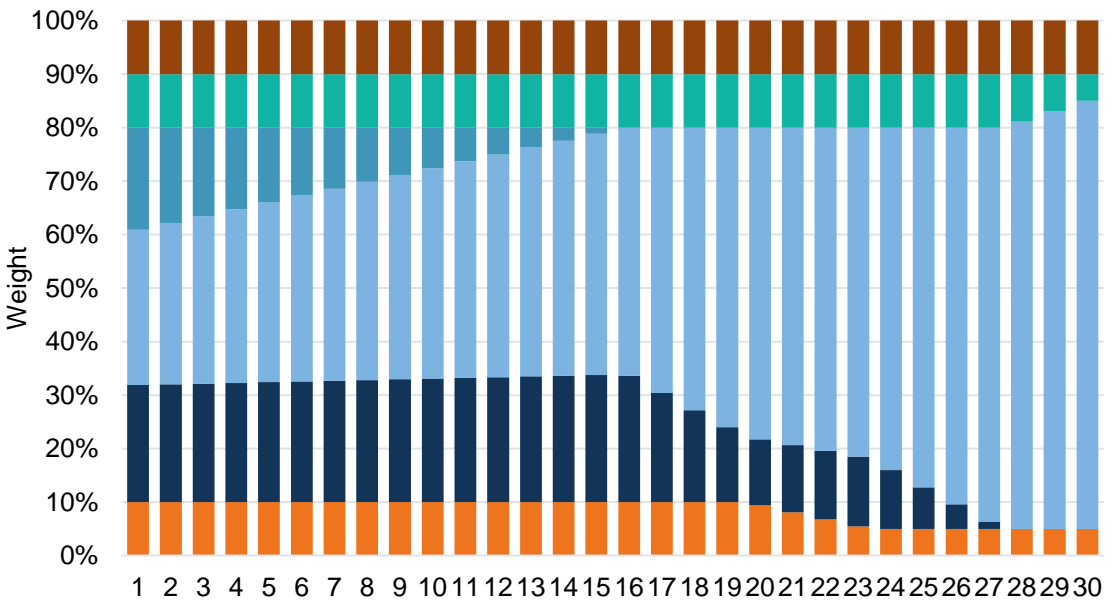


Source: Schroders, April 2022. Note: Risk is measured as expected volatility of the portfolio returns. An efficient frontier is the portfolios that offer the higher return for a given amount of risk (or the lowest risk for a given amount of return). Returns are in local currency. Efficient frontiers built with a universe of regional equities and bonds, optimized to achieve a minimum return of 5%, with maximum 80% equities, maximum 20% credit, maximum 30% government bonds, and cash between 5% and 10%. For illustration only. The results shown are hypothetical. Forecast and assumptions may not materialize and should not be relied upon to predict future returns.

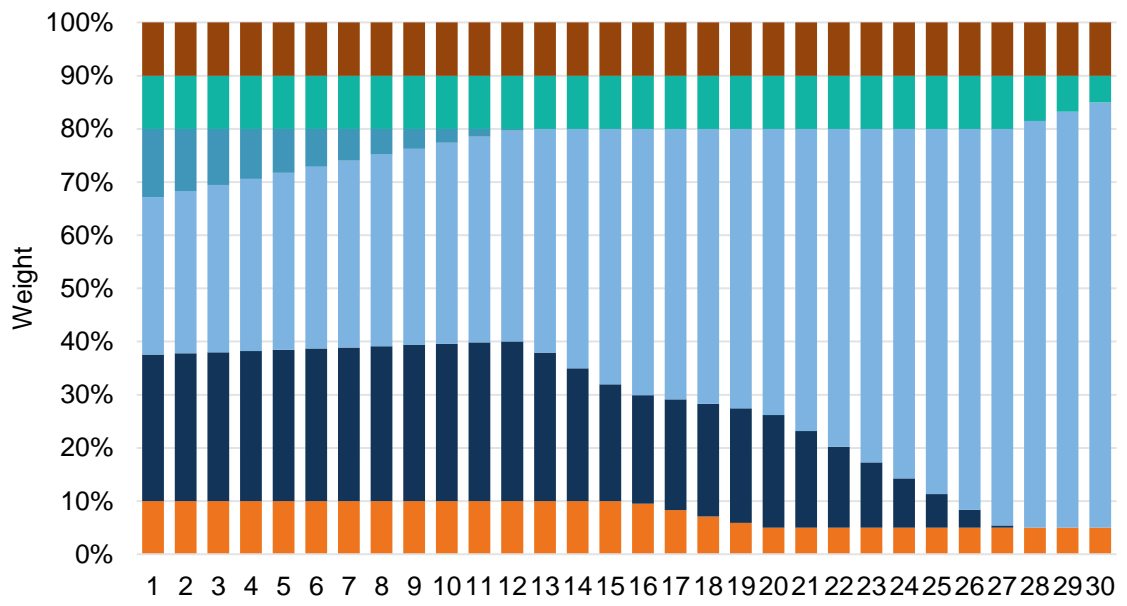


Lower risk portfolios broadly unchanged

Non-climate adjusted



Climate adjusted



Portfolio # (increasing in risk from left to right)

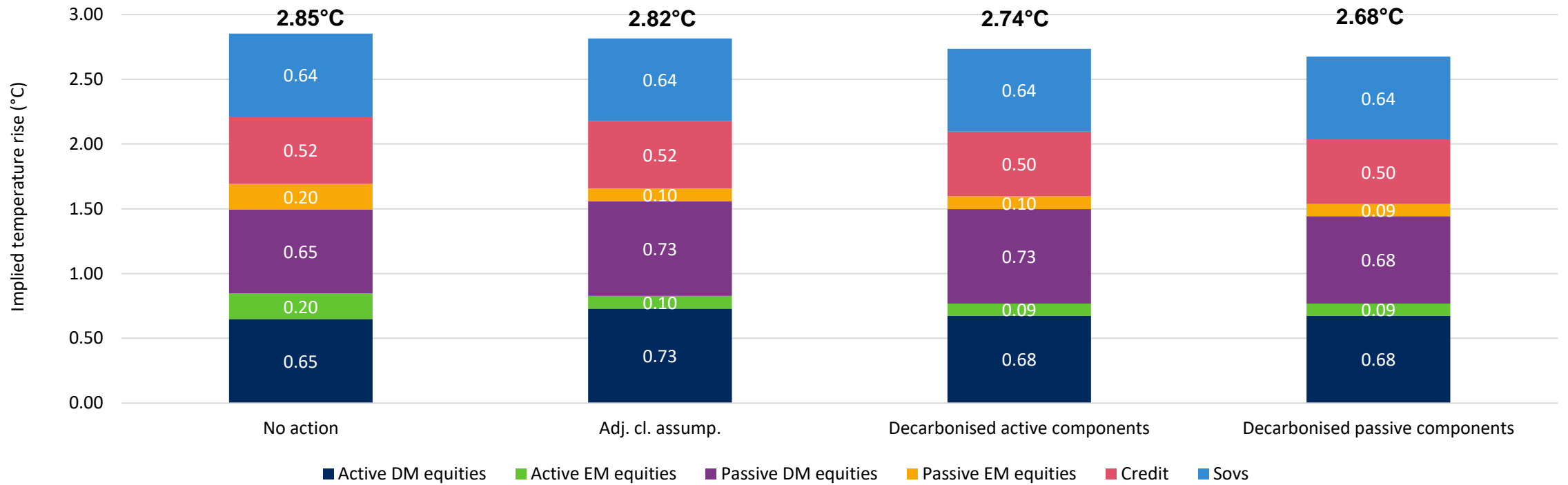
- US Cash
- Global Developed Equities
- Emerging Equities
- Global Govt Bonds
- US Investment Grade
- Euro Investment Grade
- EMD Composite

Source: Schroders, April 2022. Note: portfolios built with a universe of regional equities and bonds, optimised to achieve a minimum return of 5%, with maximum 80% equities, maximum 20% credit, maximum 30% government bonds, and cash between 5 and 10%. For illustration only. The results shown are hypothetical. Forecast and assumptions may not materialise and should not be relied upon to predict future results.



Point-in-time portfolio decarbonisation

Reduce implied temperature rises today and position for future benefits

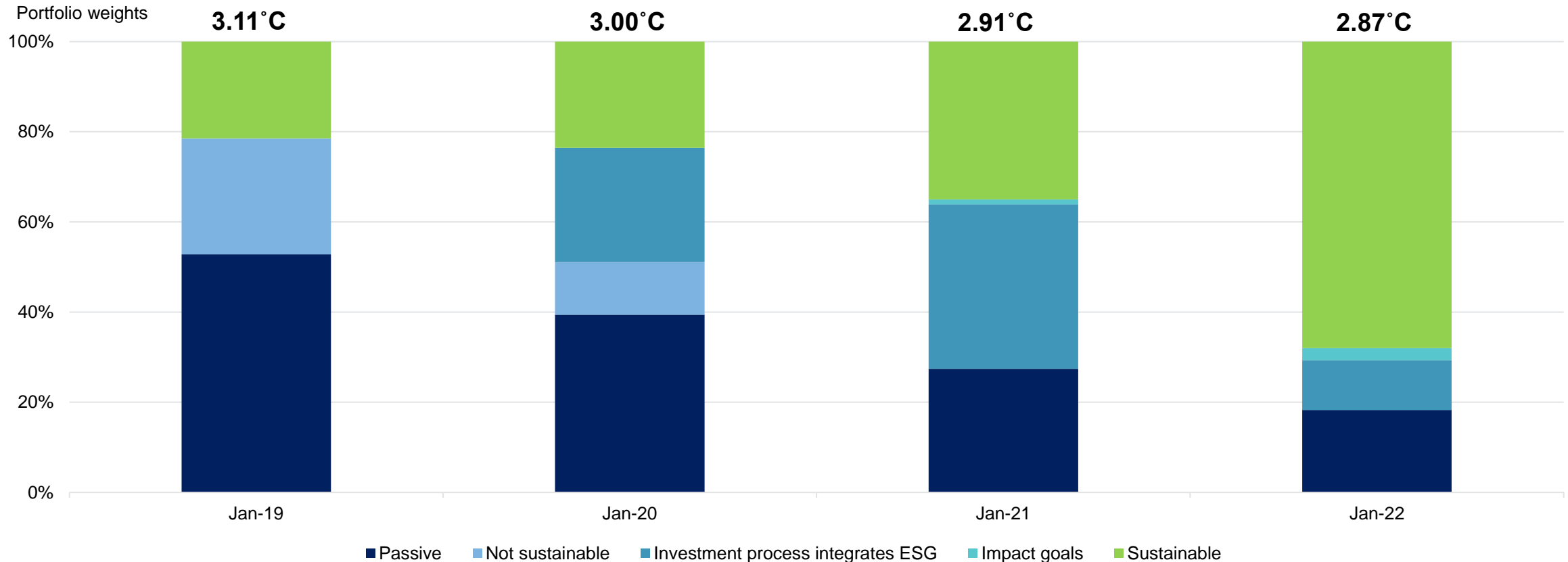


Source: Schroders. The 'No action' portfolio has a split of 60% equities (48% DM + 12% EM, split 50/50 between active and passive), 20% credit and 20% sovereigns. The other portfolios change the equity split between DM and EM to 54% DM + 6% EM and keep everything else the same. The reduction in implied temperature rise (ITR) from left to right is cumulative. For lack of ability to measure accurately, sovereign bonds are given a default ITR value of 3.2°C throughout, reflecting current estimates of the trajectory of global warming. 'No action' implied temperature rises are calculated using passive indices: MSCI World, MSCI EM and Bloomberg Global Corporate. The '30Y-adj' portfolio uses 30Y climate-adjusted forecasts which lead to a re-weighting away from EM to DM, but with no changes to the ITR of the components. The 'Decarbonised active components' portfolio uses 30Y-adjusted weightings, with an assumption that active components have a reduced ITR, reflecting what is realistically feasible in modeling by Schroders Multi-Asset team. The 'Decarbonised passive components' portfolio further reduces the ITR in the passive components, to a level that was risk-optimal in modelling by Schroders Multi-Asset team. Shown for illustrative purposes only and does not guarantee outcomes.



What's possible in real life

By changing underlying active components, portfolio sustainability can be improved



Source: Schroders, April 2022. Example multi-asset portfolio shifting to more sustainable components over time. Non-sustainable components assumed ITR of 3.2°C. Integrated and sustainable components are assumed ITR of 2.8°C. Impact goals assumed ITR of 2.6°C. Shown for illustrative purposes only and does not guarantee outcomes.





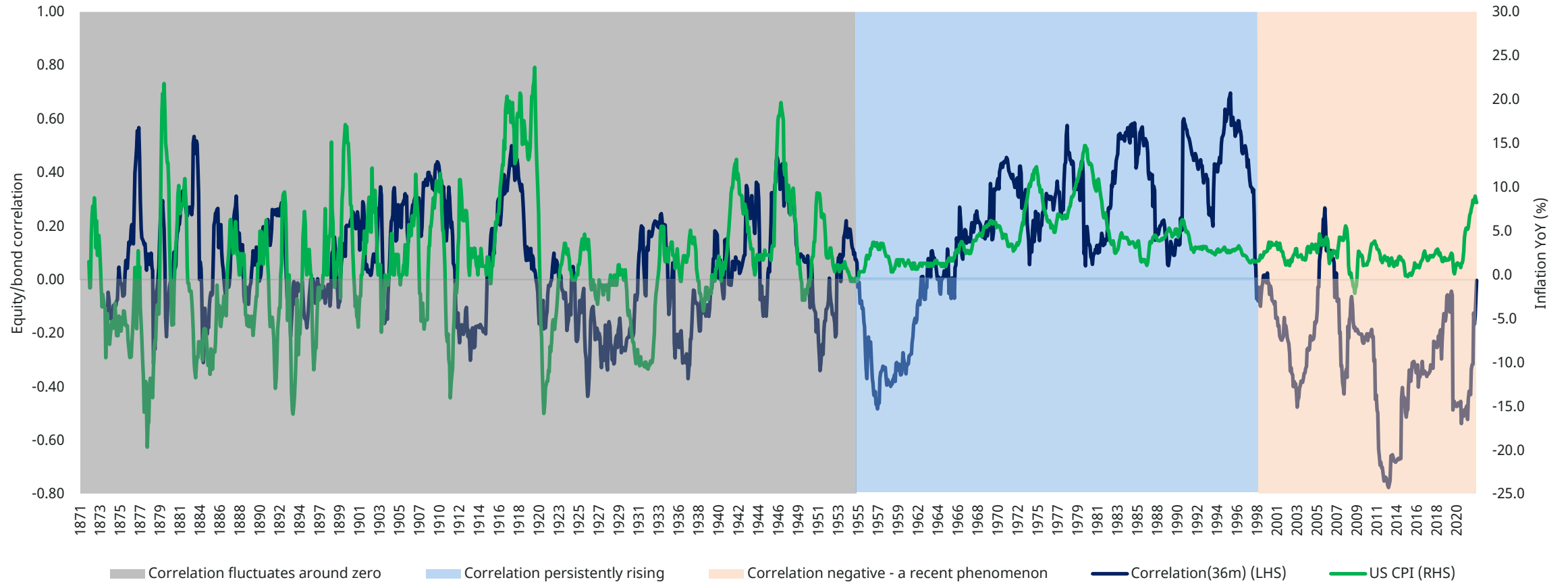
Institute
and Faculty
of Actuaries

**An extra wrinkle...
(or two or three)**

#LifeConf



Is the era of negative correlations over?

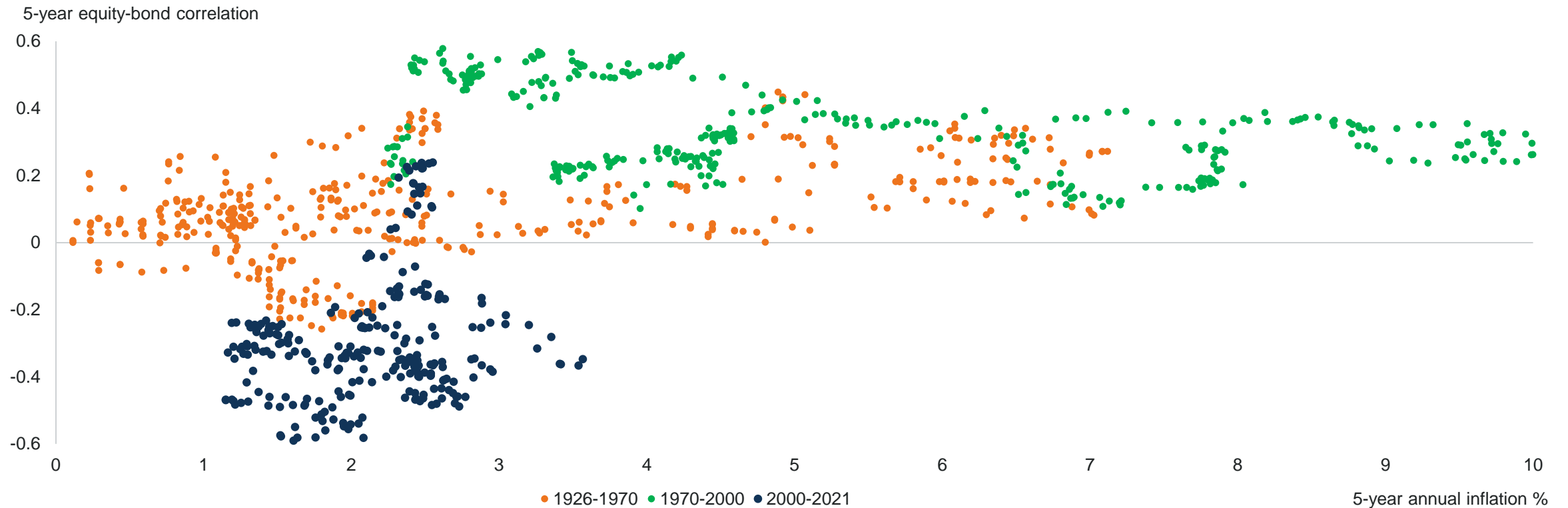


Source: Schroders, Refinitiv Datastream for data 2021 onwards. Prior to 2021, stock market data extracted from "Irrational Exuberance" Princeton University Press, 2000, 2005, 2015, updated. Shown for illustrative purposes only and does not guarantee outcomes.



Institute and Faculty of Actuaries

Persistently high inflation has been associated with positive equity-bond correlations



What might this mean for portfolio construction?

Source: CFA Institute, Robert Schiller, Datastream Refinitiv and Schroders. Data to 31 December 2021. Notes: equity are US large-cap equities, bonds are 10-year US Treasuries, inflation is US CPI. Shown for illustrative purposes only and does not guarantee outcomes.



Institute
and Faculty
of Actuaries

Insurers are increasingly allocating to private assets

Funded by new business

Illiquidity premium/
higher returns

Lower volatility

Regulatory eligibility

Greater diversification

Liquidity considerations

ESG considerations
? Investing in the transition?

Proposed impact of changes to SII?



Regulatory change...

- Local country equivalents of Solvency II in Asia
 - Increased capital charge for non-hedged currency
 - Some insurers will aim to manage maximum loss for non-matching asset portfolios
- Ongoing Solvency II matching adjustment reform in the UK
 - Increase pro-cyclical volatility?
 - Support for the transition to net zero
 - Broader asset class eligibility
 - The SII announcement last week is likely to increase demand for illiquid assets, allowing UK insurance to better support the levelling up agenda and the transition to Net Zero



Institute
and Faculty
of Actuaries

Be humble

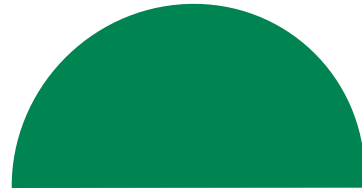
#LifeConf



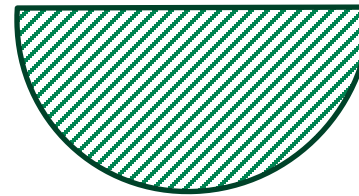
Scenario analysis – figuring out what you don't know

Information asymmetry

Known Unknowns



- While all possibilities are theoretically known, you typically don't know the answer
- For example, while we expect the US economy to face a recession, it is impossible for us to say 100% when/if it will happen (or the depth)
- The skill is to narrow down the range of possibilities, and assign a likely probability

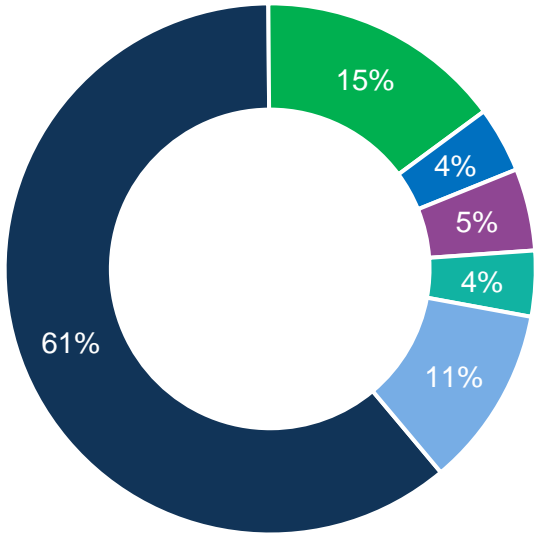


Unknown Unknowns

- Sometimes we simply don't know what we don't know
- For example, Ukraine war
- React or wait?

Working around the known unknowns

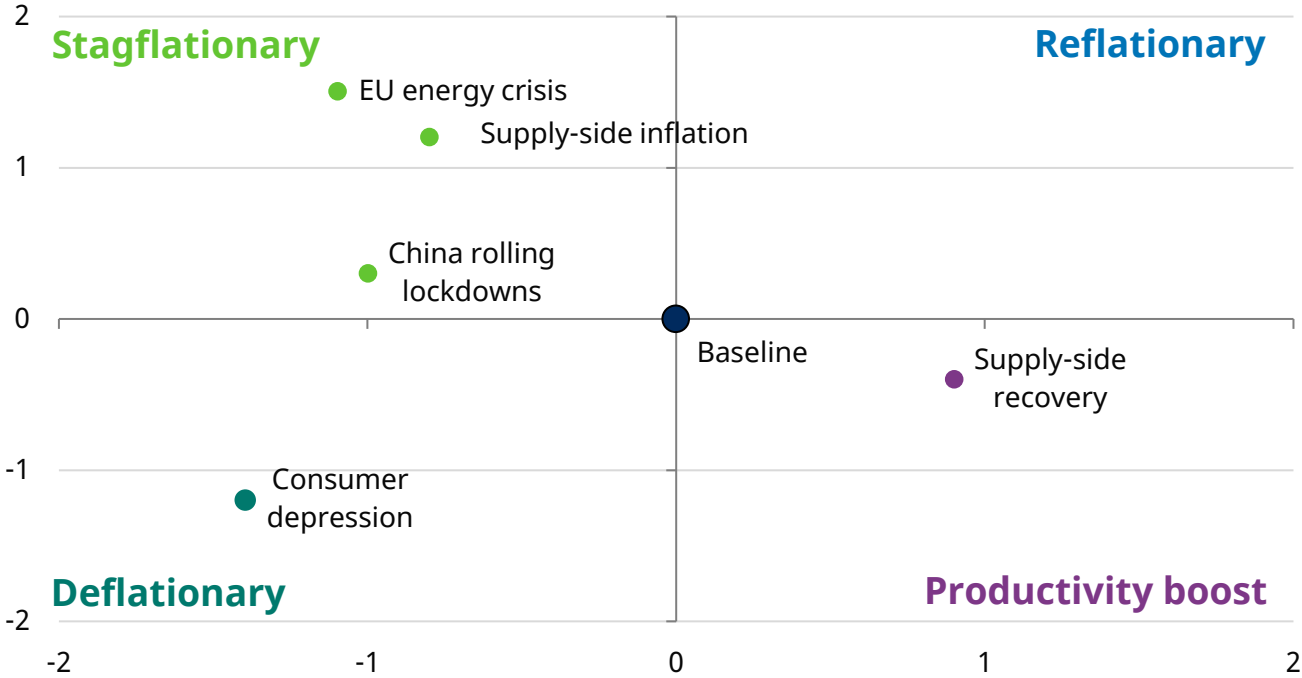
1. Giving probabilities to scenarios



- Baseline
- EU energy crisis
- Supply-side recovery
- China rolling lockdowns
- Consumer depression
- Supply-side inflation

2. Working through growth vs inflation forecasts

Cumulative 2022/23 inflation vs. baseline forecast



Cumulative 2022/23 growth vs. baseline forecast

Source: Schroder Economics Group, 22 August 2022. Group baseline forecast: 2022: 2.6% growth, 7.2% CPI inflation. The forecasts included should not be relied upon, are not guaranteed and are provided only as at the date of issue. Our forecasts are based on our own assumptions which may change. We accept no responsibility for any errors of fact or opinion and assume no obligation to provide you with any changes to our assumptions or forecasts. Forecasts and assumptions may be affected by external economic or other factors.



Institute and Faculty of Actuaries

The human factor – investing in tough times

- People are the key
- Coping with mistakes
 - Accountability
 - Skin in the game
 - Size of the decision making team
 - Creating healthy rivalry
 - Diversity of thought
- Trust



Source: Schroders. 'Multi-asset investing in tough times: the human factors to consider'
Johanna Kyrklund, CIO and Head of Multi-Asset, 2019.



Institute
and Faculty
of Actuaries



Institute
and Faculty
of Actuaries

Positioning

#LifeConf



In the end you have to position the portfolio...

- The Federal Reserve has reiterated its commitment to quelling inflation; we expect the pace of rate hikes to slow.
- **Overweight high yield and local emerging market debt** to benefit from attractive yields. These assets offer cushion against weaker economic growth. In a similar vein, we are also **now positive on US TIPS**.
- **Neutral in equities** as we see a tactical window where greater interest rate stability takes the pressure off equity valuations. Nevertheless, **we remain cautious on the equity outlook** heading into 2023 due to recessionary risks and the threat that poses to corporate earnings.
- We have a **value bias** within equities.
- We **remain overweight commodities** (focused on energy and agriculture) due to tight supply conditions.
- We still see some risks in 2023 - expectations of Fed rate cuts in the second half might be too optimistic and the potential for a rate-induced hard landing remains.



Positive

Neutral

Negative

Institute
and Faculty
of Actuaries

Source: Schroders, November 2022. For illustrative purposes only and should not be viewed as a recommendation to buy or sell.



Managing assets when uncertainty abounds



Stick to your philosophy.
But be flexible.



What lessons can be learnt from the past?



How might the future differ?



A formula won't be the whole answer.
Humans bring the skill.



You are unlikely to be 100% correct - so plan for the unknowns.





Institute
and Faculty
of Actuaries

Thank you

#LifeConf





Institute
and Faculty
of Actuaries

Market Outlook

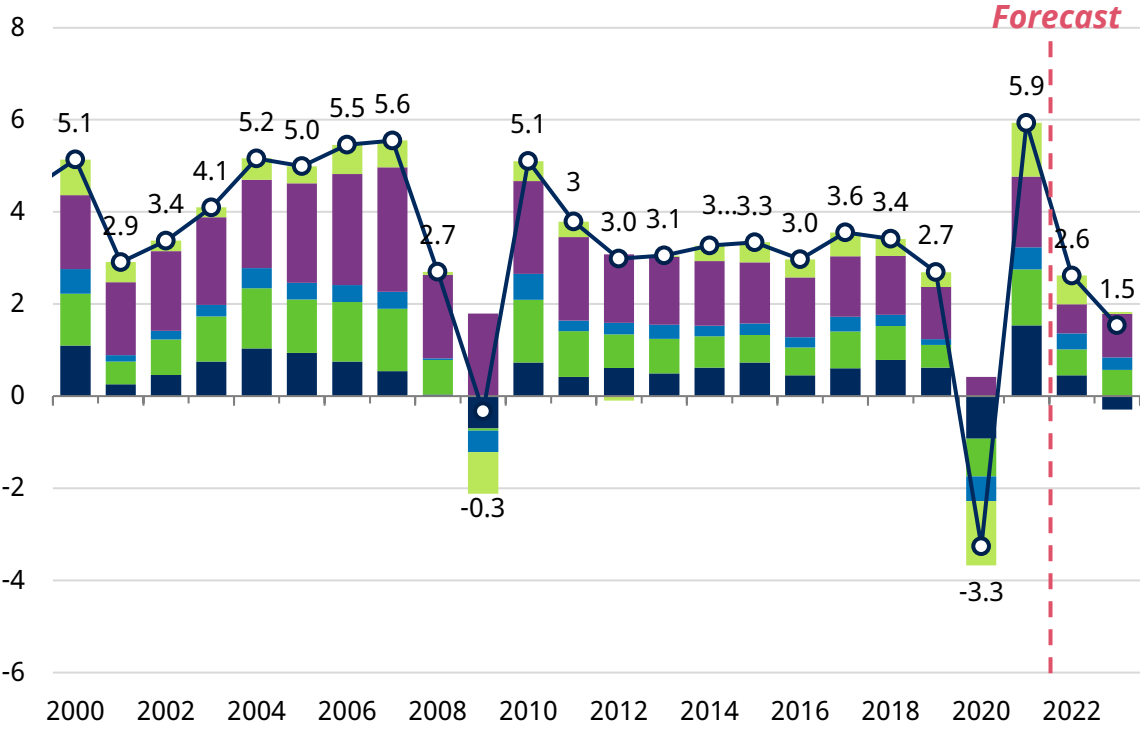
#LifeConf



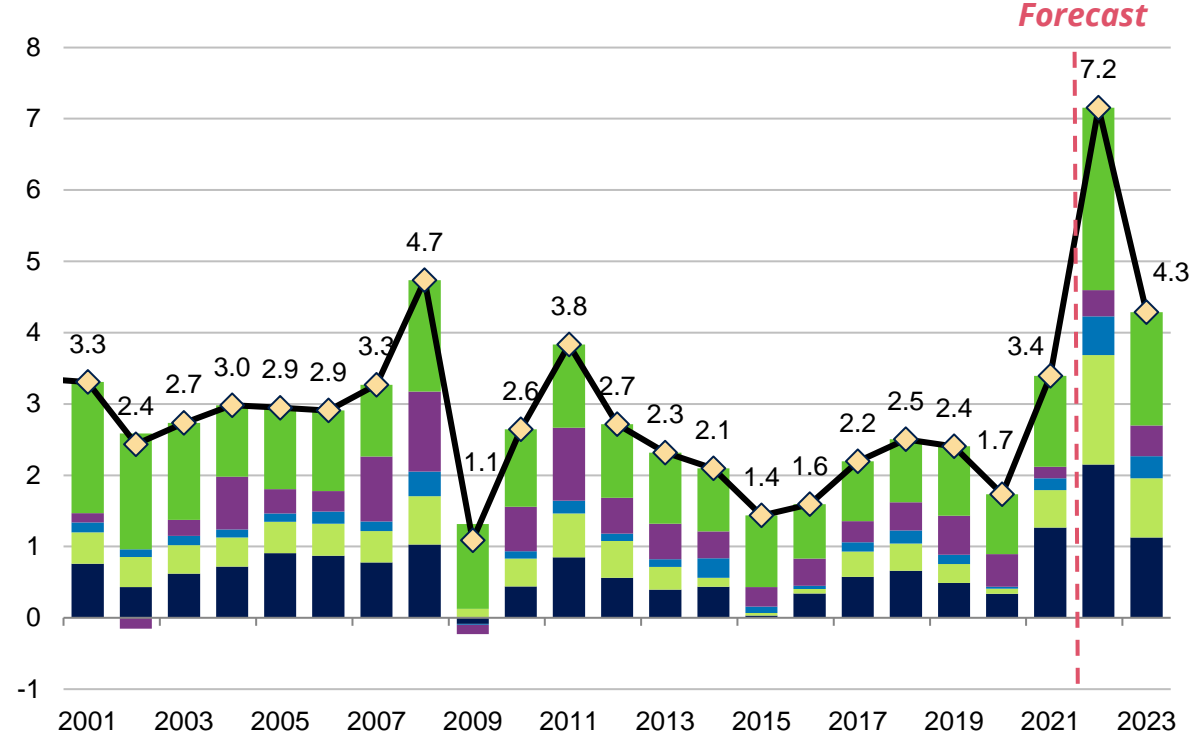
Recession for US and Europe in 2023

Baseline forecast of lower growth and still high inflation

Contributions to World GDP growth (y/y)



Contributions to World Inflation (y/y)



US Rest of emerging Rest of advanced China Europe World

US Europe Rest of advanced China Rest of emerging World

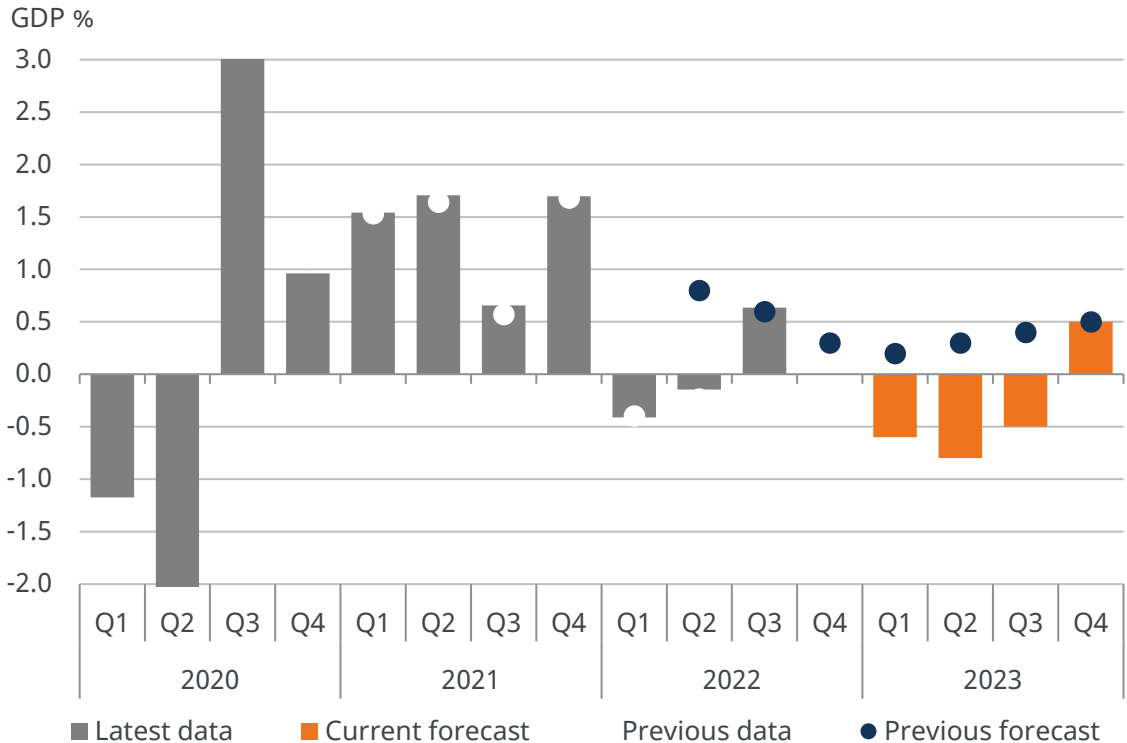
Source: Schroders Economics Group, 22 August 2022. For illustrative purposes only and should not be viewed as a recommendation to buy or sell. Forecast may not be realised.



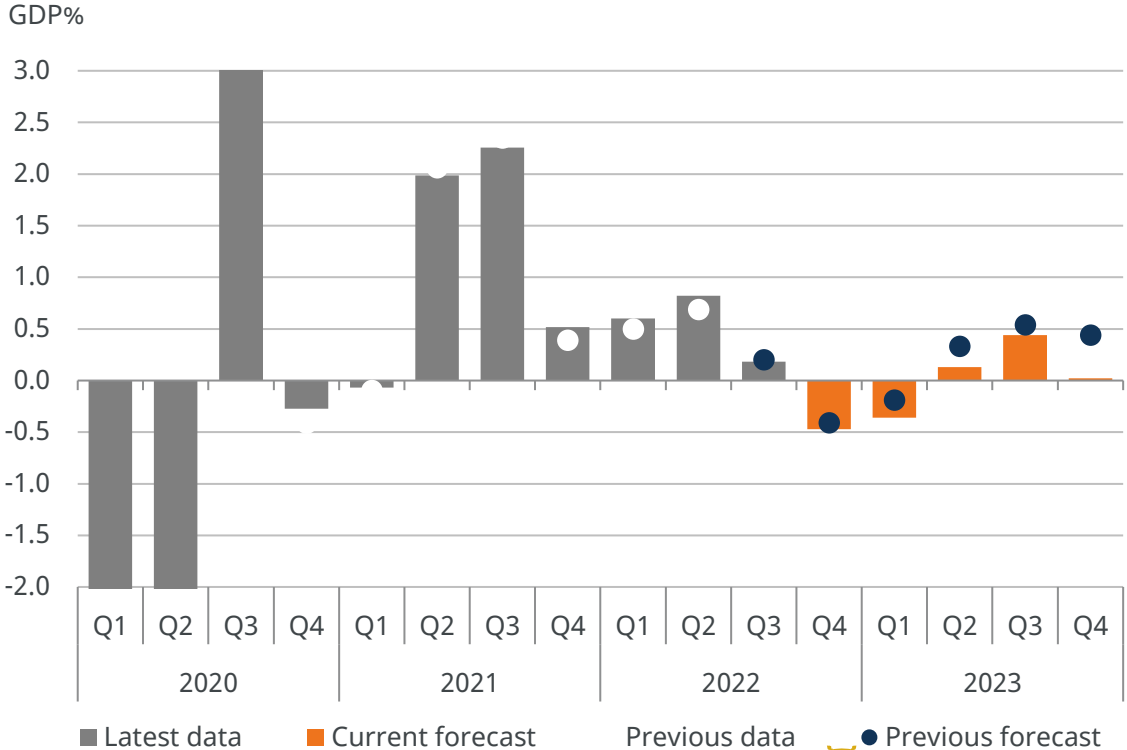
Differing causes of likely recessions

Europe expected to exit recession earlier than the US

Internally-driven: by domestically generated inflation and higher rates



Externally-driven: primarily by volatility in energy costs since invasion in Ukraine



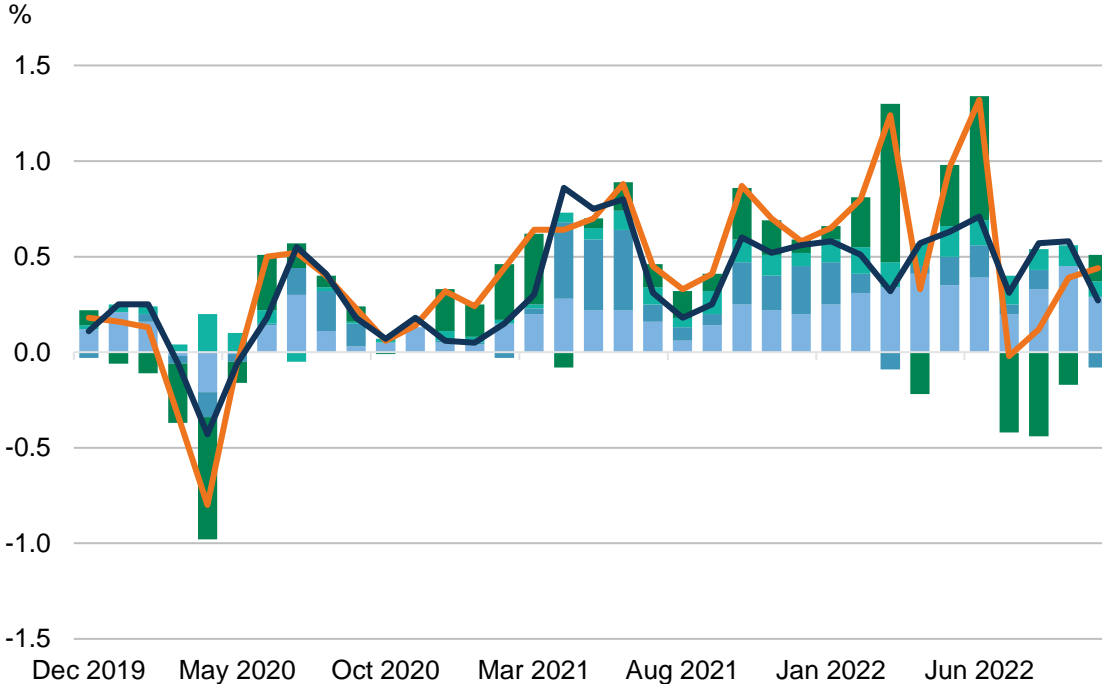
Source: Schroders Economics Group. GDP data: "Latest" as of 14 November 2022 and "Previous" as of August 2022. Forecasts: "Latest" as of August 2022 and "Previous" as of May 2022. For illustrative purposes only and should not be viewed as a recommendation to buy or sell. Forecast may not be realised.



Core inflation has cooled, with goods inflation negative

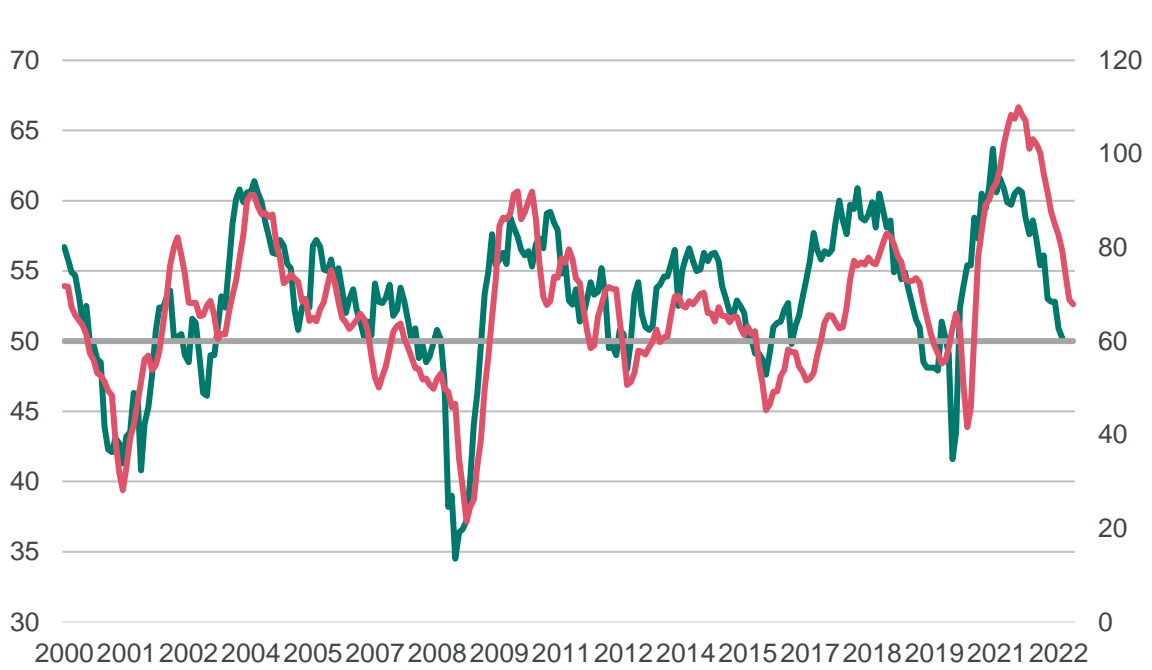
Are we starting to see the lagged effects of higher rates?

First negative print for core good prices since March 2022



- Services (Ex Food & Energy)
- Food
- Goods (Ex Food & Energy)
- Energy
- Headline MoM%
- Core MoM%

Could the inventory cycle turning down be one reason?



- ISM Manufacturing Survey
- ISM Orders - Customer Inventories, 3M lag (RHS)

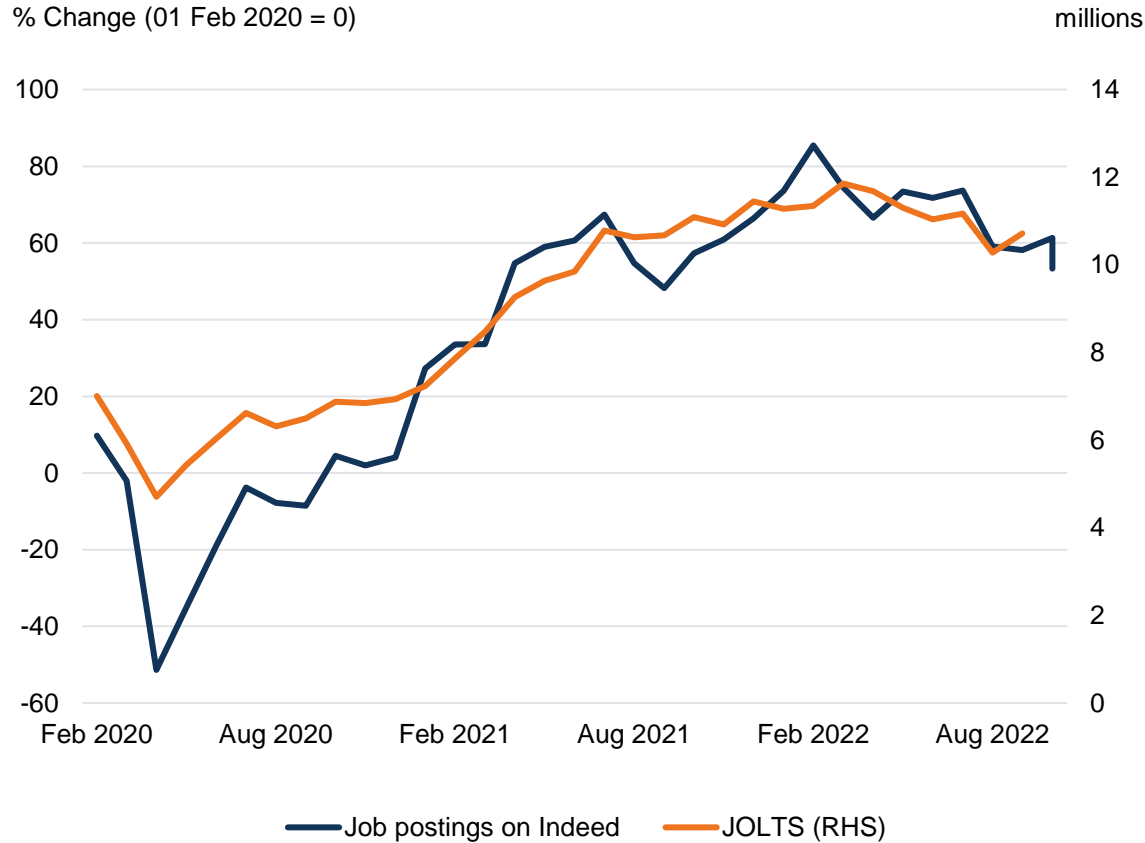
Source: Schroders, Refinitiv Datastream, 10 November 2022.



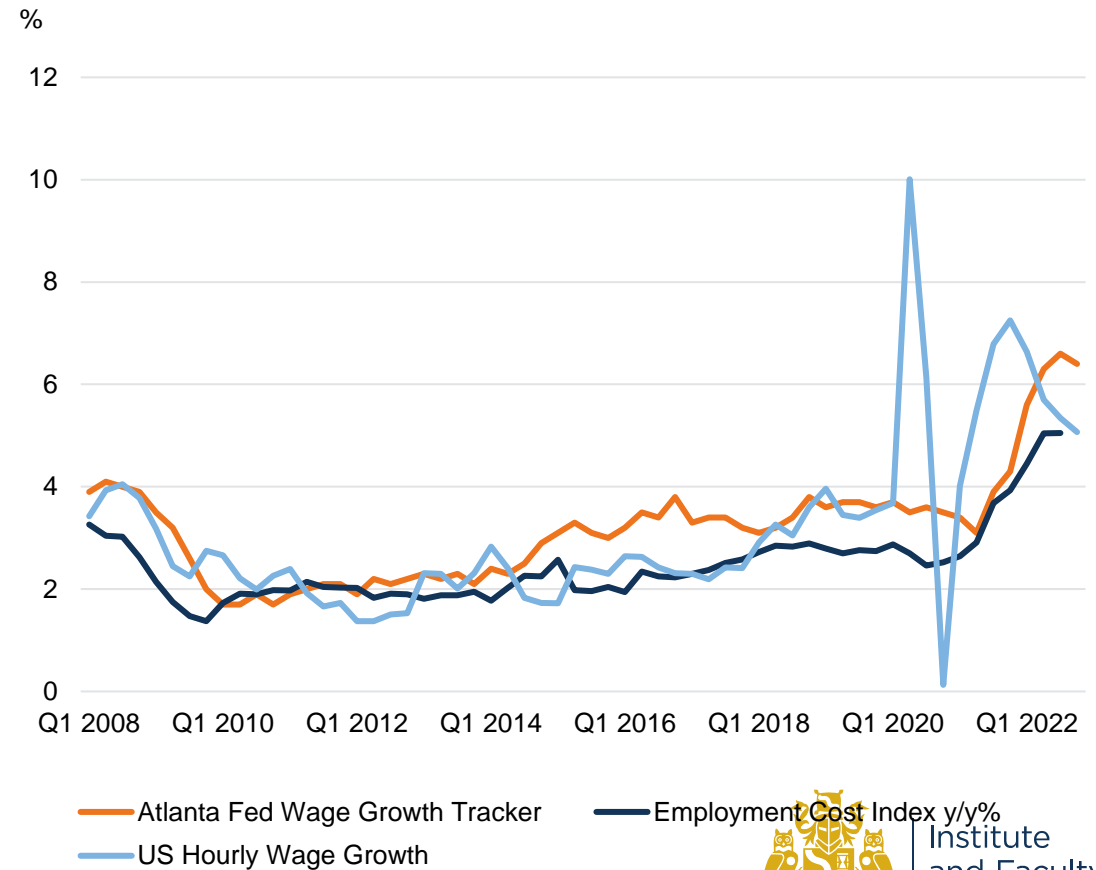
Signs of peaking in the labour market from very tight levels

Are these early indicators of inflation coming down?

Job openings declined sharply in October



Wage growth slowing but still at elevated levels

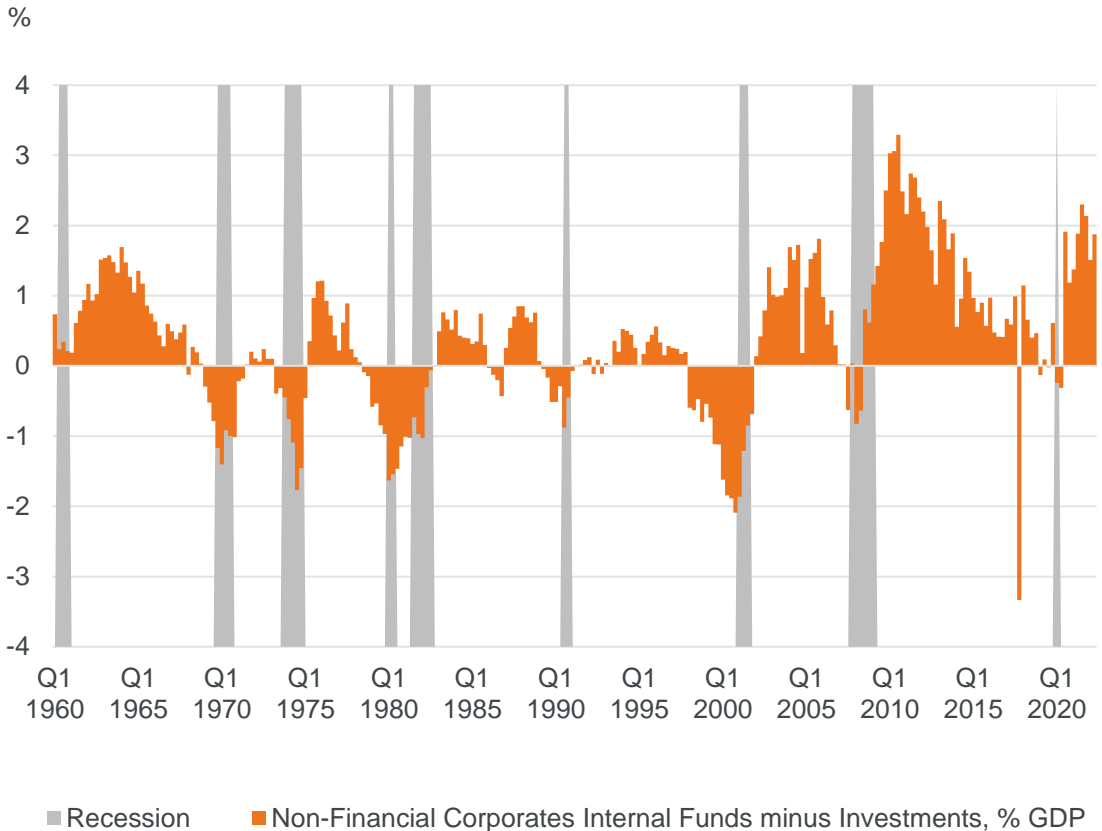


Source: (LHS) Refinitiv, St Louis Fed, FRED, 8 November 2022. (RHS) Schroders, Datastream, 4 November 2022.

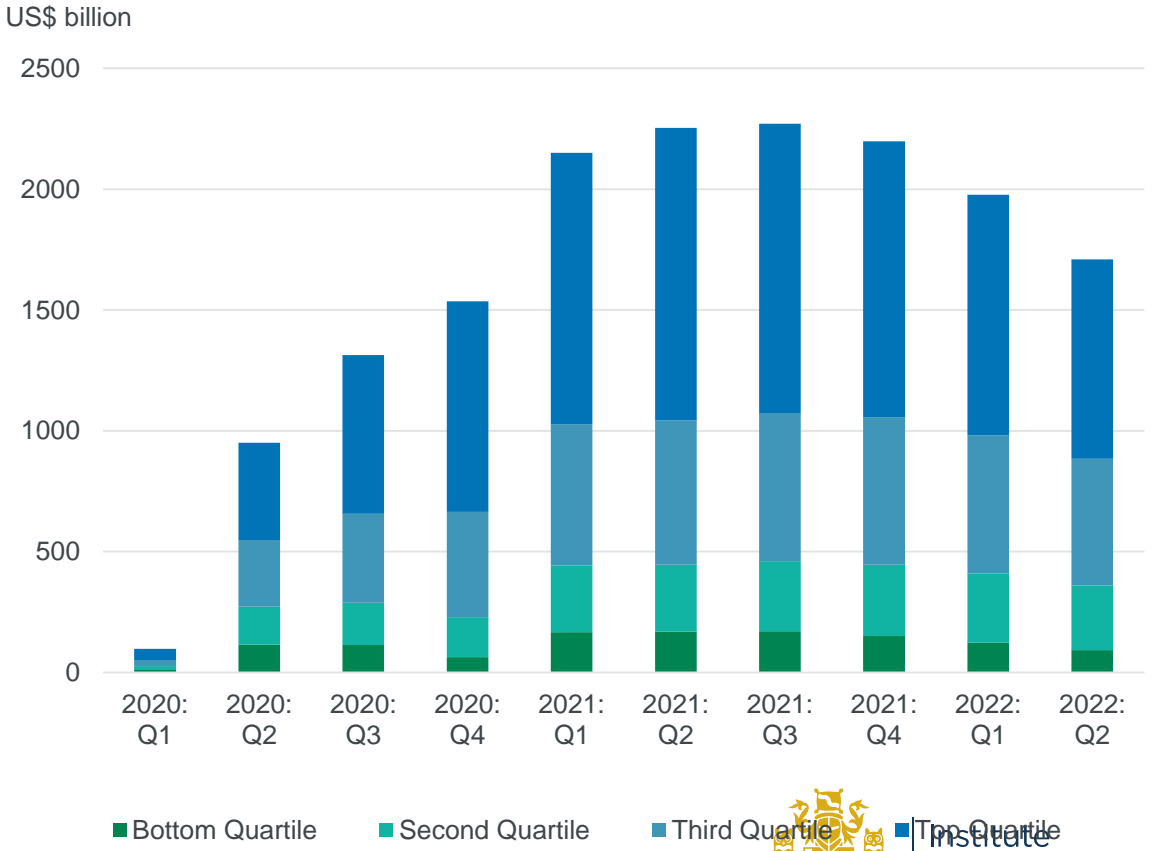
How is the labor market remaining so resilient?

Ample cash buffer for corporates and individuals

Corporate sector continue to generate excess cash



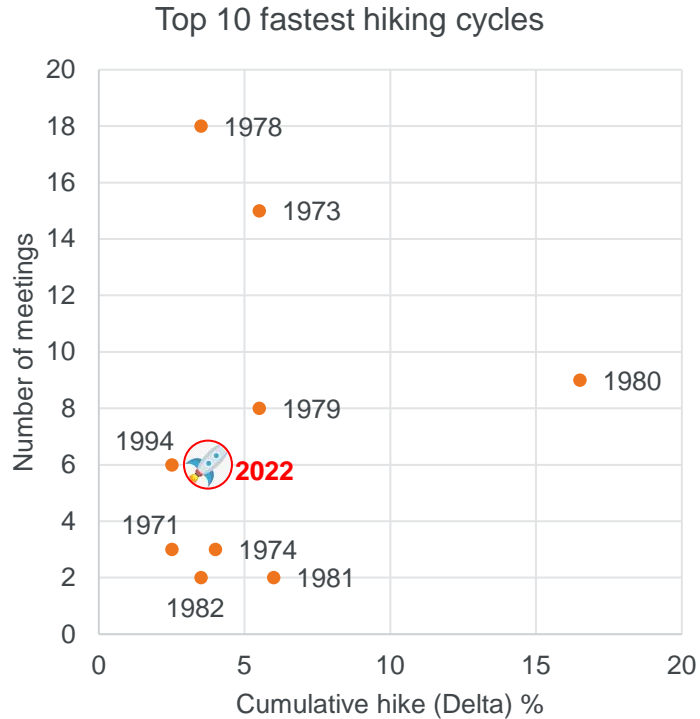
There is still >\$1.5 trillion of excess savings available



Source: Schroders, Refinitiv Datastream, US Federal Reserve, 10 November 2022.

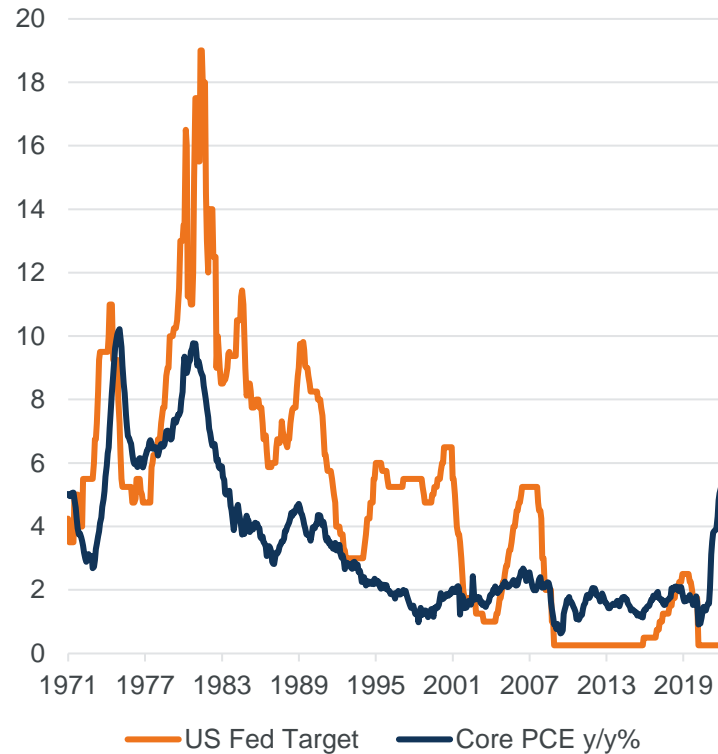
Where does this leave the Federal Reserve?

How fast to go?



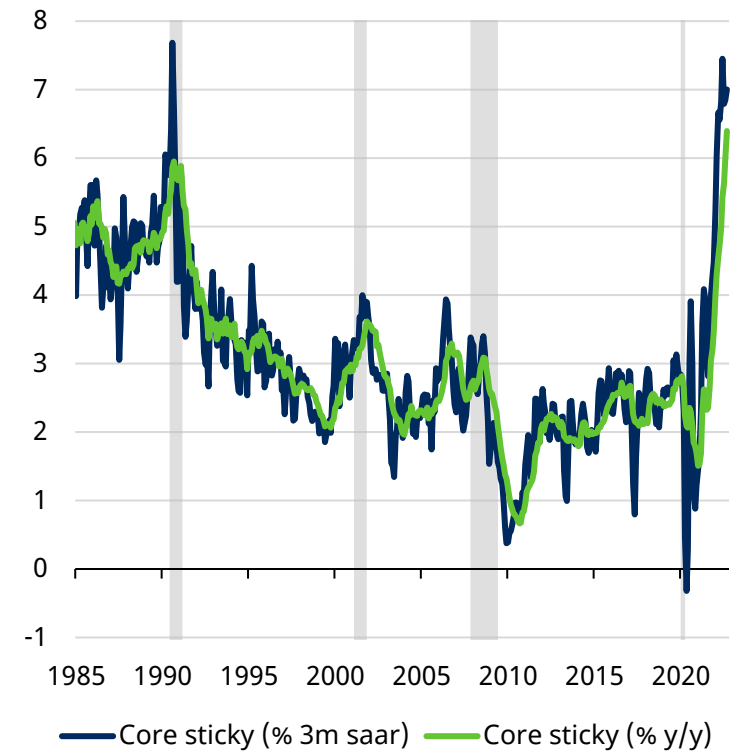
Can we finally get of the '75bp a meeting' hamster wheel?

How high to go?



The Fed wants **positive real rates**, so rates need to be at least above core PCE

How long to stay there?



Historical evidence suggests (core) inflation will take time to come down

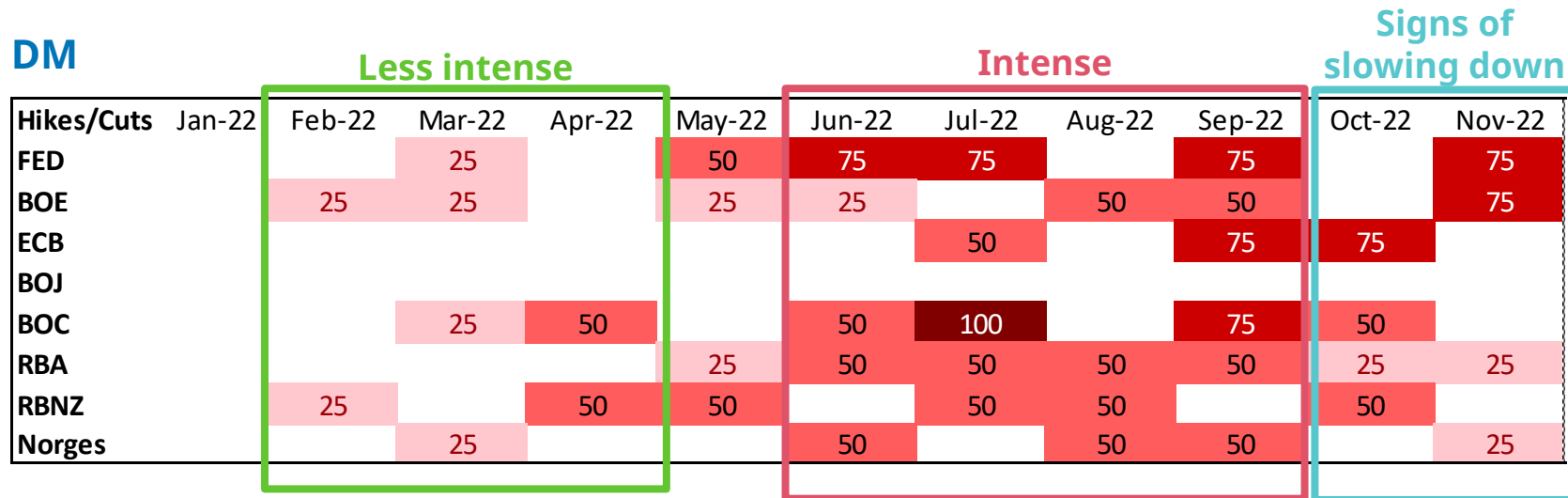
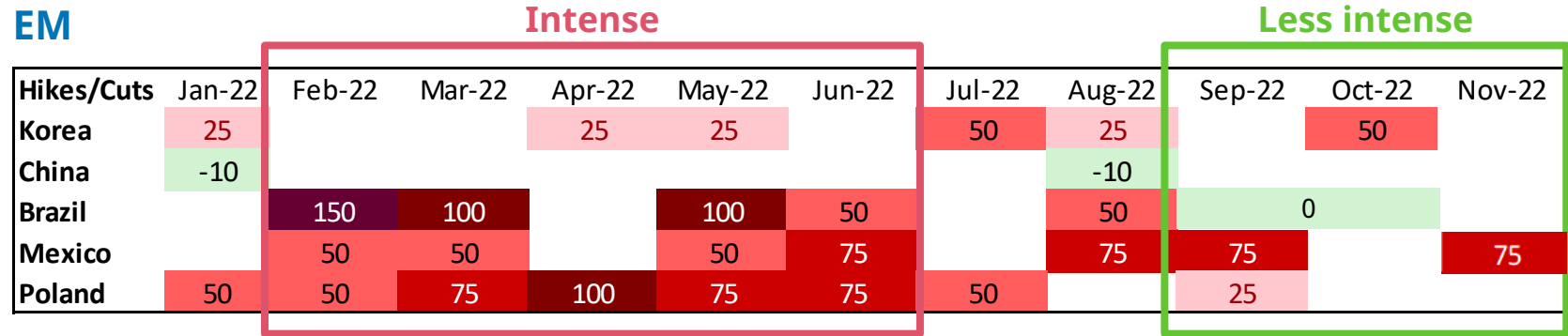


Institute and Faculty of Actuaries

Source: Bloomberg, Deutsche Bank, Refinitiv Datastream, 4 November 2022.

What about other Central Banks?

EM have hiked aggressively earlier, and is now reducing increases with DM starting to slow



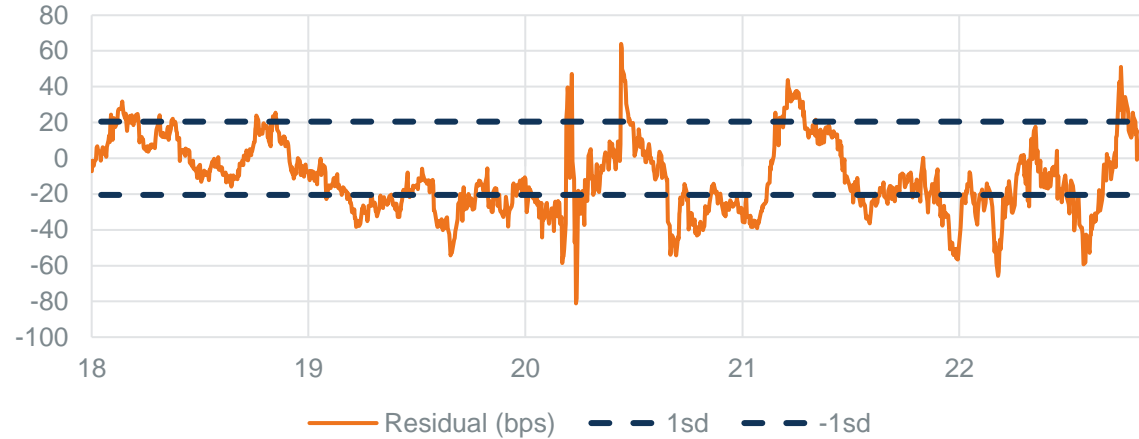
Source: Schroders, Bloomberg, 8 November 2022.



Remain neutral on duration

Monetary policy still focused on inflation rather than growth

Valuations are fair



Diversification properties still absent

3M daily correlation to Equities



If you want yield, you don't have to take duration

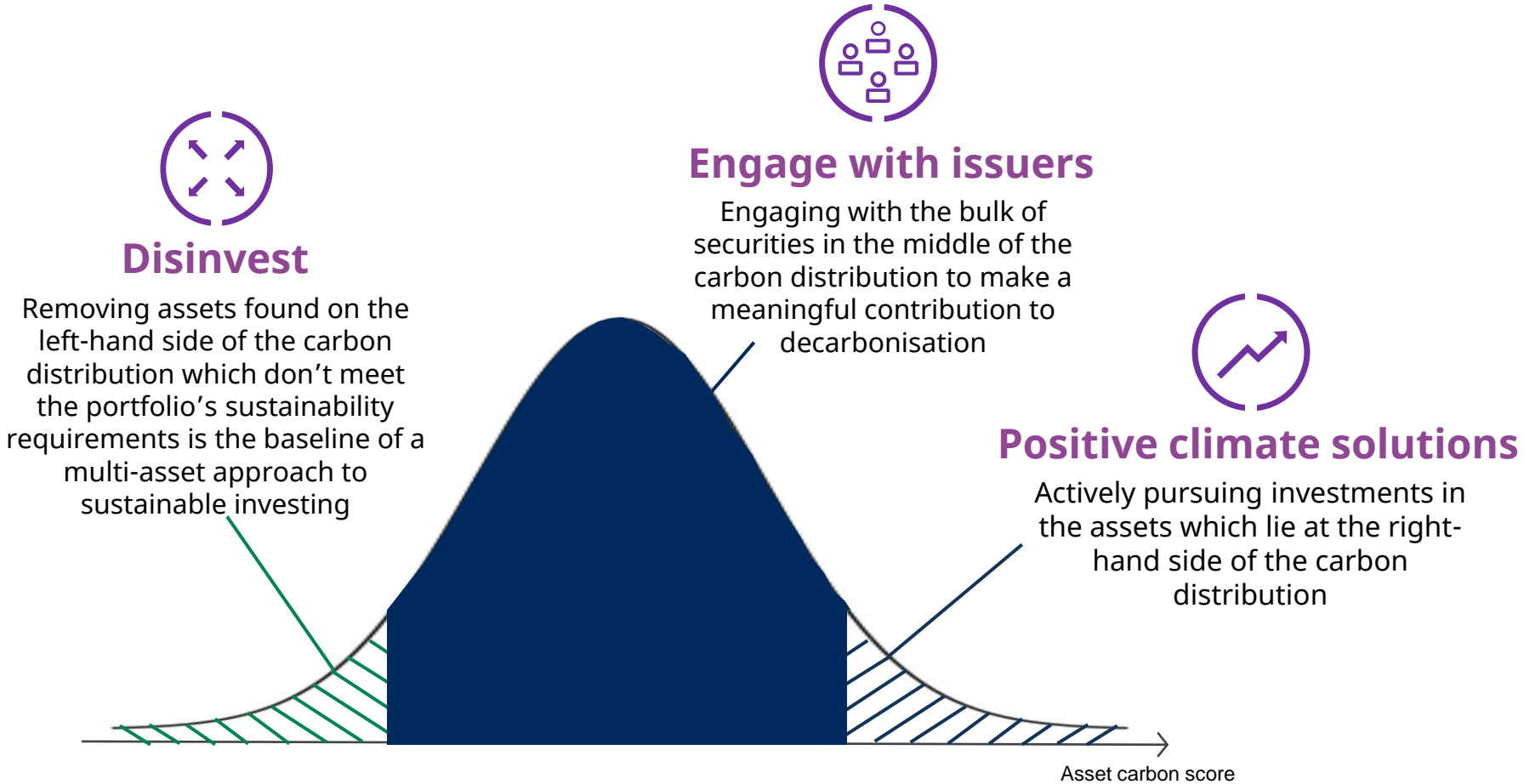
Carry & Roll: bps / 1y dur	Bond Country									
	US	GE	FR	SP	IT	UK	JP	OZ	CA	
Bond Tenor 2	37	39	72	95	137	149	2	31	0	
3	29	31	50	58	110	71	0	28	-5	
5	9	28	31	55	75	40	7	21	-19	
7	2	17	27	39	67	21	8	22	-6	
10	-1	17	31	37	46	24	9	15	-4	
30	-1	4	7	14	17	4	8	6	-2	

Source: Schroders, Bloomberg, 2 November 2022.



Staying on the path and meeting the target

The four tools that asset owners and managers can use to decarbonise a portfolio



Use carbon offsets

Once we have reduced portfolio emissions to a point where further reductions would place too much pressure on investment integrity we can voluntarily pay for the cost of residual emissions

We suggest using a combination of these

Source: Schroders.

Important information

Marketing material for professional clients only.

This presentation is intended to be for information purposes only and it is not intended as promotional material in any respect. The presentation is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The presentation is not intended to provide, and should not be relied on for, accounting, legal or tax advice, or investment recommendations. Information herein is believed to be reliable but Schroders does not warrant its completeness or accuracy. No responsibility can be accepted for errors of fact or opinion. Reliance should not be placed on the views and information in the presentation when taking individual investment and/or strategic decisions.

This information is not an offer, solicitation or recommendation to buy or sell any financial instrument or to adopt any investment strategy.

Any references to securities, sectors, regions and/or countries are for illustrative purposes only.

The views and opinions contained herein are those of Schroders Multi-Asset Team, and may not necessarily represent views expressed or reflected in other Schroders communications, strategies or funds.

Past Performance is not a guide to future performance and may not be repeated. The value of investments and the income from them may go down as well as up and investors may not get back the amounts originally invested. Exchange rate changes may cause the value of investments to fall as well as rise.

Third party data is owned by the applicable third party identified above and is provided for your internal use only. Such data may not be reproduced or re-disseminated and may not be used to create any financial instruments or products or any indices. Such data is provided without any warranties of any kind. Neither the third party data owner nor any other party involved in the publication of this presentation can be held liable for any error. The terms of the third party's specific disclaimers are set forth in the terms of use at www.schroders.com.

The forecasts included are not guaranteed; they are provided only as at the date of issue and should not be relied upon. Our forecasts are based on our own assumptions which may change. We accept no responsibility for any errors of fact or opinion and assume no obligation to provide you with any changes to our assumptions or forecasts. Forecasts and assumptions may be affected by external economic or other factors. This document may contain "forward-looking" information, such as forecasts or projections. Please note that any such information is not a guarantee of any future performance and there is no assurance that any forecast or projection will be realised.

This presentation is issued in October 2022 by Schroder Investment Management Limited, 1 London Wall Place, London EC2Y 5DH, who is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. For your security, communications may be taped or monitored.

