

# Knowledge Transfer Program

Module 1 –  
Navigating Challenging Fixed Income Markets  
Global Sovereign Markets



# UBS Asset Management: A centre of excellence for Sovereign institutions

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35+ years' experience in partnering with Central Banks, SWFs, National Pension Funds, and other government agencies

## Key strengths

- Managing over USD 169bn AUM on behalf of public institutions
- Global insight and expertise allows us to integrate our comprehensive range of investment capabilities in tailored solutions for you
- A flexible range of advisory services to help you meet your long-term goals – including HF advisory experience
- UBS AM is a member of the One Planet Sovereign Wealth Fund initiative
- Knowledge partnerships and training with dedicated teams, tailored to sovereign clients
  - Research papers and publications
  - Financial Markets training courses
  - Sovereign Trainee Programs

## Dedicated Sovereign Client Solutions

- Advisory services
- Asset Management
- Asset/Liability matching
- Risk Management
- Manager Selection
- Knowledge Partnership
- Training and development
- Dedicated research team

## Dedicated Global Sovereign Markets team

- London
- New York
- Zurich
- Singapore
- Beijing
- Taipei
- Hong Kong
- Dubai

Source: UBS Asset Management. Data as of 30 September 2020 unless otherwise stated.

# Knowledge transfer is one our key strengths

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## Sharing industry know-how and investment expertise

- The emphasis of an on-the-desk training program is to facilitate a knowledge-sharing environment whereby the participant is encouraged to openly engage with the investment professional and actively participate in the day-to-day activities of the team that they are seated with.
- Ultimately, participants are equipped with the tools to learn and enhance practical skills for trading and investment and gain key industry insights into current developments across financial markets.

### Examples of on-the-desk trainings:

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#### Fixed Income

- Sovereign overview; Active global sovereign bond management; Introduction to passive fixed income
- Credit overview; Credit research with an analyst; Global credit investment process
- Foreign Exchange overview; Managing foreign exchange execution



#### Investment solutions

- Strategic Asset Allocation
- Tactical Asset Allocation
- Currency exposure and hedging
- Scenario Analysis



#### Equities

- Equity markets and the drivers
- Stocks and stock valuation, equity research
- Equity indices and passive investing
- Implementation of best execution



#### Risk Management

- Case studies demonstrating how to use the UBS AM's multi asset risk system in the context of the above scenarios

# UBS Knowledge transfer program

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UBS AM is an experienced long-term partner to sovereign clients

## Key seminars offered to our Sovereign Clients:

- Reserve Management Seminar, Switzerland: a forum for central bankers, multilateral organisations, finance ministries, frequent borrowers and representatives of SWFs to discuss and exchange ideas on best practices for managing reserves
- Sovereign Investment Circle, Singapore: joint event between UBS AM and IMD, a leading business school, focusing long-term investing themes
- Investment Training Seminar, Chicago: discussions on economic growth, fiscal and monetary policy and their impact on global markets
- Greater China annual Conference, Shanghai: addressing latest investment trends/developments and providing access to China specialists
- **Topical research papers and development opportunities** that could be tailored to your needs

**Client seminars: provide forum to discuss investment topics and an opportunity to meet peers**

**Greater China Conference**  
China



**Reserve Management Seminar**  
Switzerland



**UBS AM Sovereign Investment Circle**  
Singapore



**Investment Training Seminar**  
United States



**2x Reinvesting Bretton Woods Seminar**  
United States



January

June

September

October/November

April & October

# Training material available on demand on our website

<https://www.ubs.com/global/en/asset-management/global-sovereign-markets/overview.html>



Global Sovereign Markets

Select domicile ▾

Locations



UBS logins ▾

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## Knowledge Transfer Program

Introducing our new training program



The world that will emerge from COVID-19 will be very different. Some old challenges will remain the same and new ones are already emerging. But there will also be opportunities. We believe that Central banks, sovereign wealth funds and other state-controlled investment vehicles should focus on how to best deal with these challenges and how to grasp the opportunities.

In addition to our best-in-class offering of events, conference and ad-hoc advisory, UBS AM Global Sovereign Markets – Strategy & Advice is pleased to present a dedicated knowledge transfer program.

We will be offering a series of modules including those listed below. Please do check back as we will add details of more dedicated modules.

- ✦ Module 1 - Lower forever: How to deal with low/negative yields
- ✦ Module 2 - Asset Allocation and Capital Market Expectations

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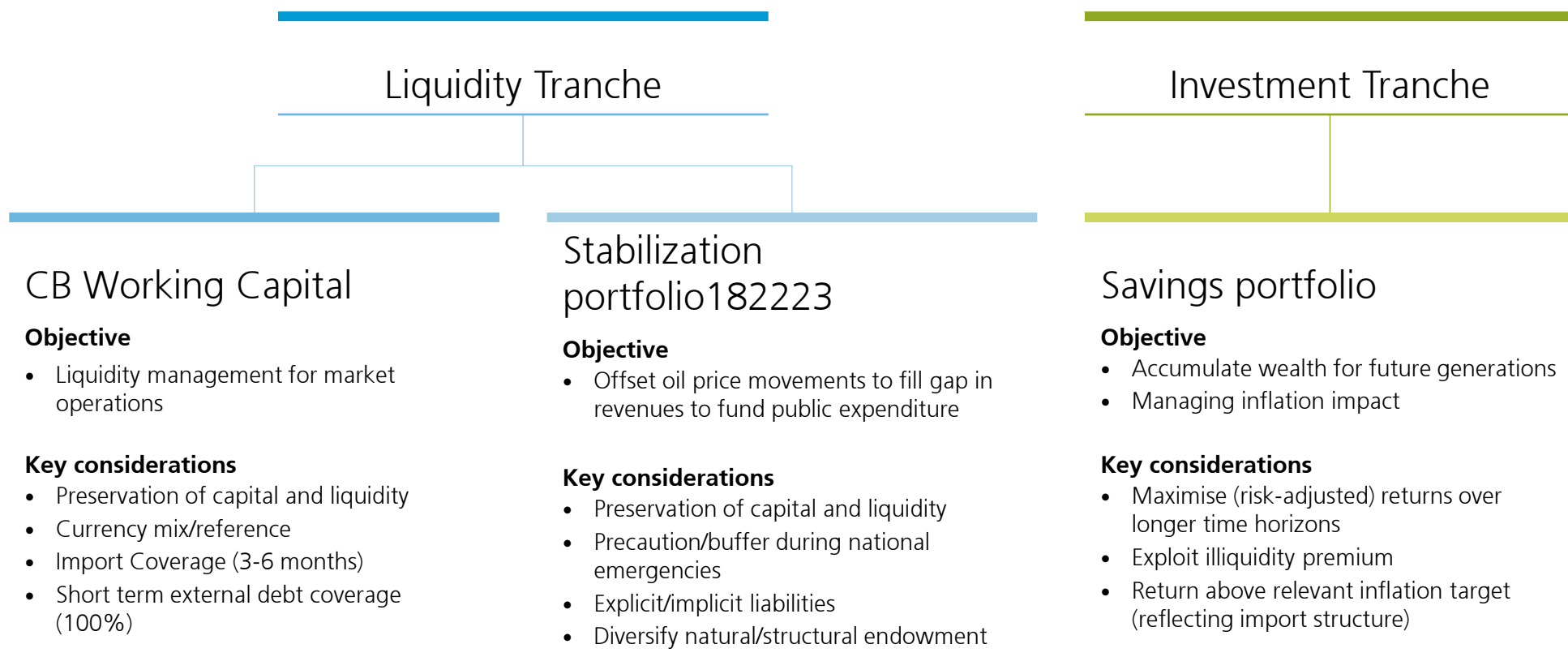
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Section 1

# Navigating Challenging Fixed Income Markets— Massimiliano Castelli

# Sovereign Portfolios: Different portfolios and different goals

## Liquidity and investment tranche separation



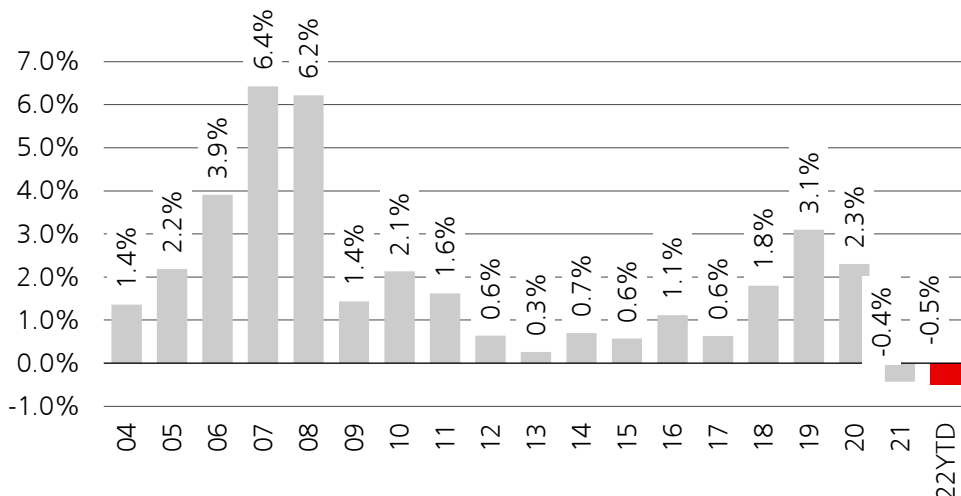
Source: UBS AM. For illustrative purposes only.



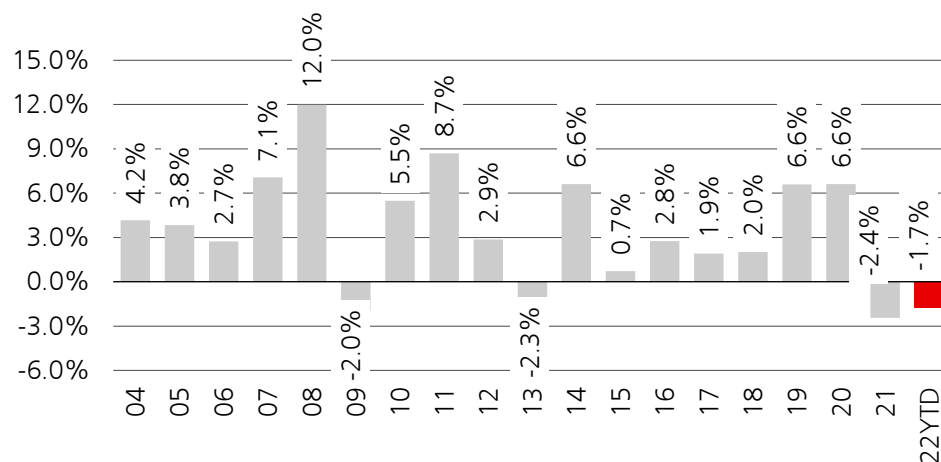
# Government Bonds: Sample Portfolios

Advanced economies' government bonds are and will remain a key asset class in sovereign institutions portfolios

**Global Government Bond Short Duration (GGB 1 – 3), Hypothetical Returns, %**

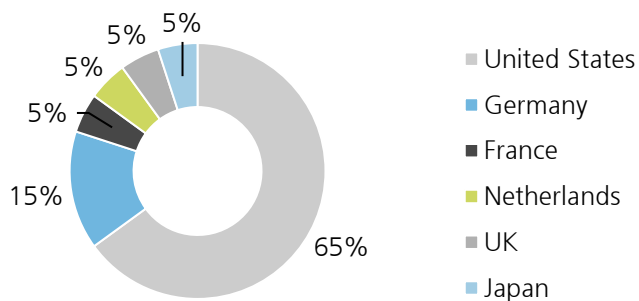


**Global Government Bond Long Duration (GGB), Hypothetical Returns, %**



**Key features**










- Broadly resembling the currency composition of global FX reserves
- Non-USD indexes all hedged in USD



Source: UBS AM, Bloomberg. Data as of end of January 2022. For illustrative purposes only. See Appendix for details on the composition of different portfolios.

# Sample Portfolios (1) – Liquid Portfolios

Sample portfolios have different levels of risk tolerance and diversification

			<b>Liquidity</b> Most liquid – CB working capital management	<b>Fixed Income Diversification</b> Diversification across fixed income to improve risk-adjusted returns			<b>Equity Diversification</b> Liquid equity to boost risk-adjusted returns	<b>Equity and more EMD</b> Equity and EMD to boost risk-adjusted returns
			<b>CB1</b>	<b>CB2</b>	<b>CB3</b>	<b>CB4</b>	<b>CB5</b>	
Liquidity	Cash		50	10	10	10	10	
	GGB 1 – 3		50	50	30	30	25	
Division	GGB			10	10	10	10	
	Spread							
Spread	Supranationals			10	10	8	5	
	Corporates			10	10	8	5	
	Securitized			10	10	8	5	
Inflation hedge	TIPS				10	8	5	
Risk premium	EMD				10	3	15	
	Equities					15	20	

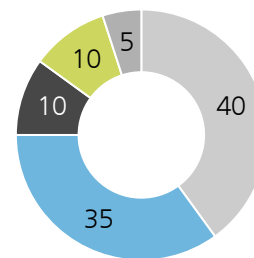
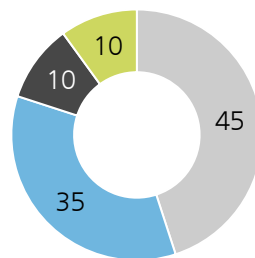
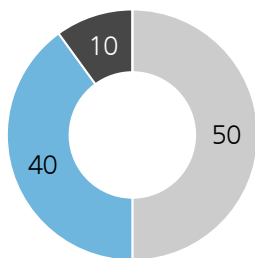


Source: UBS AM. For illustrative purposes only.

# Sample Portfolios (2) – Stabilization Funds

Majority of assets invested into liquid and high-grade government bonds but longer duration to boost returns and also investing in equity and real estate

		<b>Liquidity</b> 50% in liquid GGB 1 – 3; GGB/Corporates to boost returns	<b>+ Equity</b> Equity to boost risk – adjusted returns	<b>+ Equity and RE</b> Equity + RE to boost risk – adjusted returns	
		<b>Stab1</b>	<b>Stab2</b>	<b>Stab3</b>	
Liquidity	GCB 1 – 3	50	45	40	<i>Investment grade</i>
Division	GGB	40	35	35	
Spread	Corporates	10	10	10	
Risk premium	Equities		10	10	
	Real Estate			5	

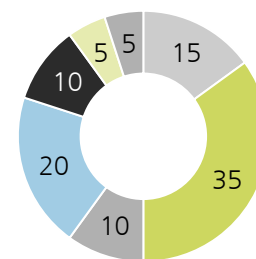
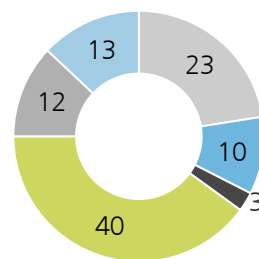
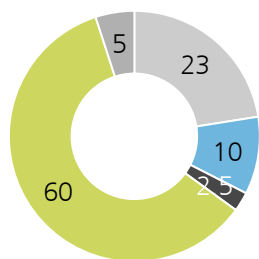


Source: UBS AM. For illustrative purposes only.

# Sample Portfolios (3) – Saving Funds

High risk tolerance but implementation can differ in terms of allocation to illiquid asset classes

		<b>Listed liquid Assets</b> <i>Norwegian</i> model majority of assets in liquid public markets	<b>+ Alternatives</b> Equity to boost risk – adjusted returns	<b>Large allocation to illiquid assets</b> <i>Endowment</i> model Large allocation to alternatives	
		<b>Sav1</b>	<b>Sav2</b>	<b>Sav3</b>	
Duration	GGB	22.5	22.5	15	<i>Investment grade</i>
Spread	Corporates	10	10		
Risk premium	EMD	2.5	2.5		
	Equities	60	40	35	
	Real Estate	5	12	10	
	Private Equity		13	20	
	Hedge Funds			10	
	Infrastructure			5	
	Commodity			5	

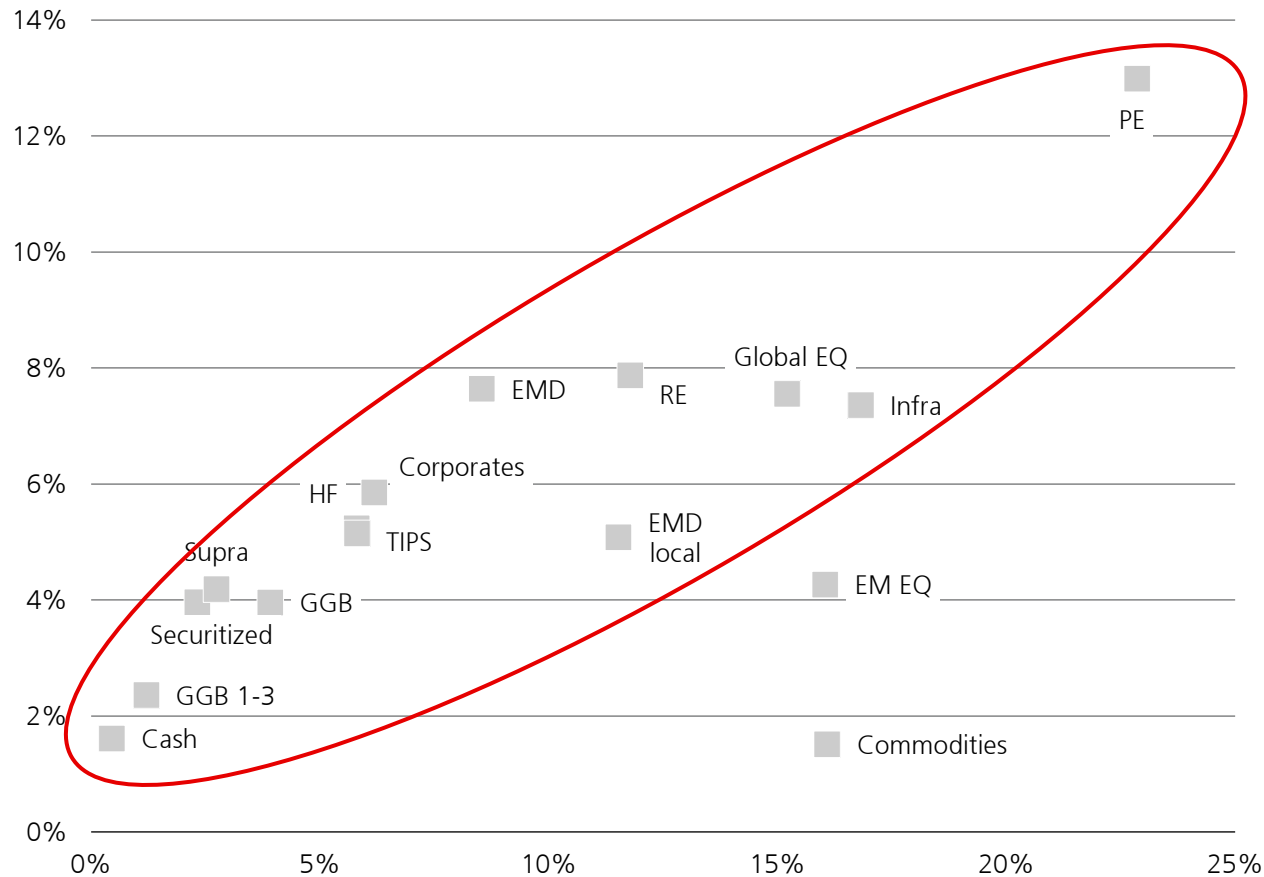


Source: UBS AM. For illustrative purposes only.

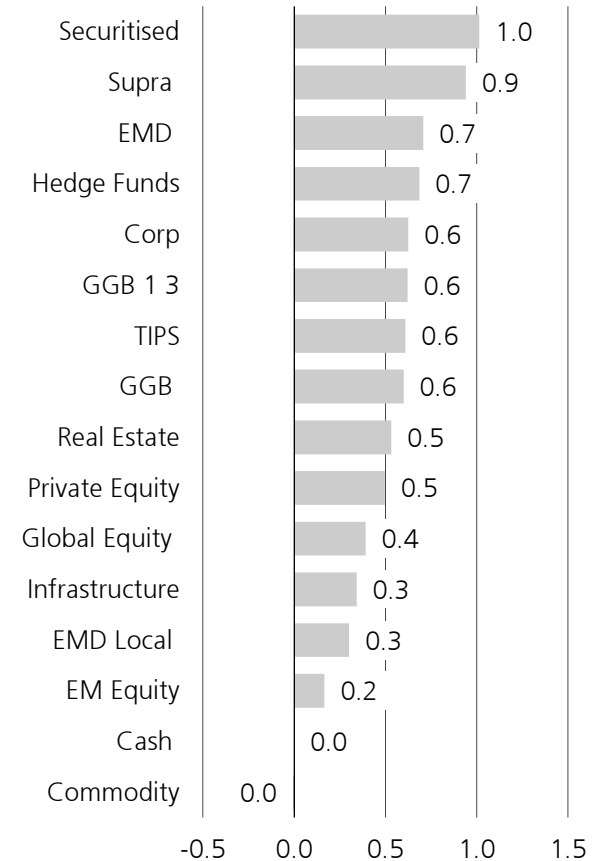
# Asset classes: high returns in fixed income

In risk-adjusted terms, fixed income assets performed strongly

**Historical Returns and Standard Deviation, 2002 – 2022YTD**



**Sharpe Ratios, 2002 – 2022YTD**

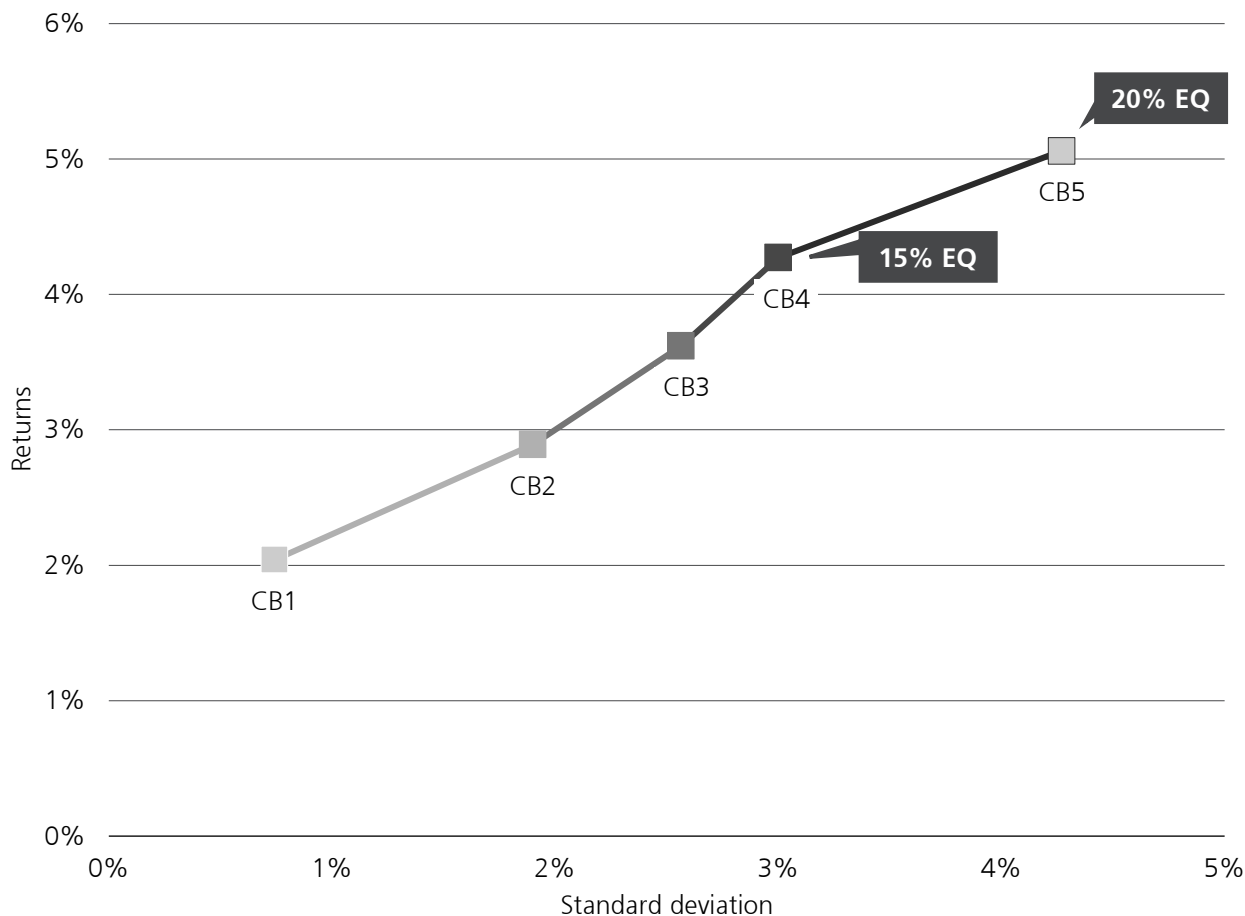


Source: UBS AM. Please note that past performance is not a guide to the future. Data as of end of January 2022.

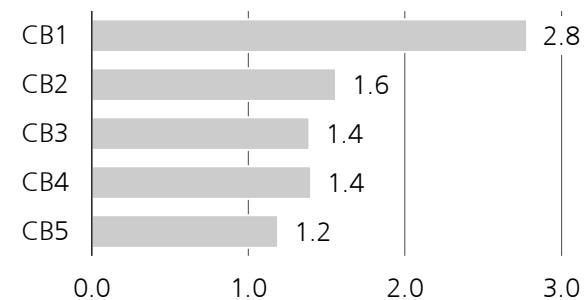
# Diversification to improve returns (1)

Diversification across fixed income and equity provided a substantial increase in returns while keeping risk/return relationships relatively stable

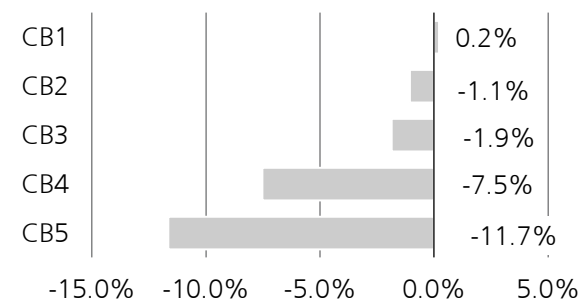
**Historical Returns and Standard Deviation, 2002 – 2022YTD**



**Return/Risk, 2002 – 2022YTD**



**Worst 12 months, 2002 – 2022YTD**

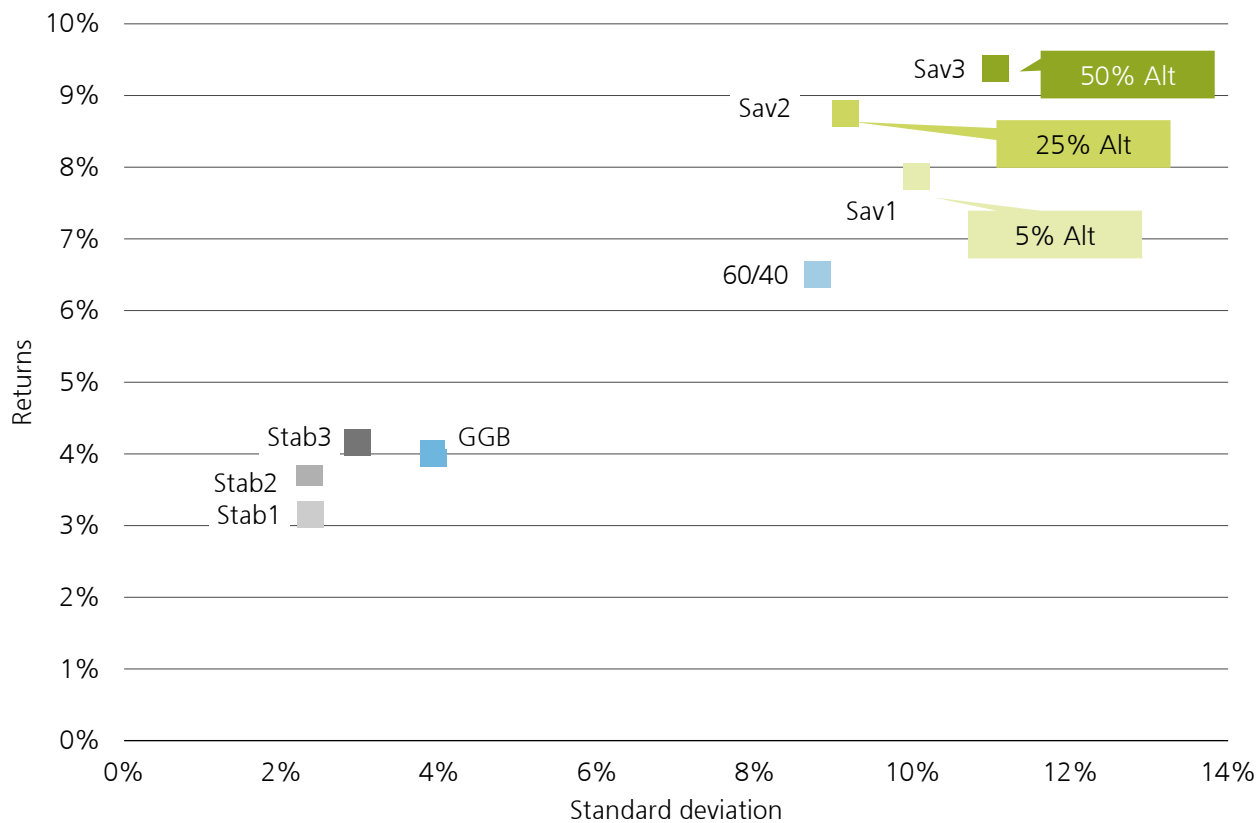


Source: UBS AM. Please note that past performance is not a guide to the future. Data as of end of January 2022.

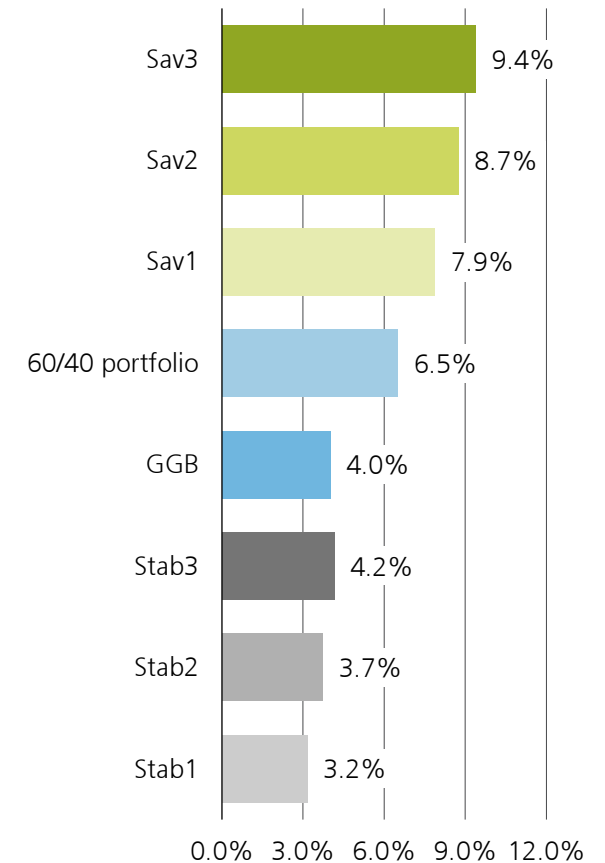
# Diversification to improve returns (2)

Based on historical analysis, diversified portfolios provided higher returns; diversification into alternatives boosted returns in saving portfolios

**Historical Returns and Standard Deviation, 2002 – 2022YTD**



**Returns, 2002 – 2022YTD**



Source: UBS AM. Please note that past performance is not a guide to the future. Data as of end of January 2022.

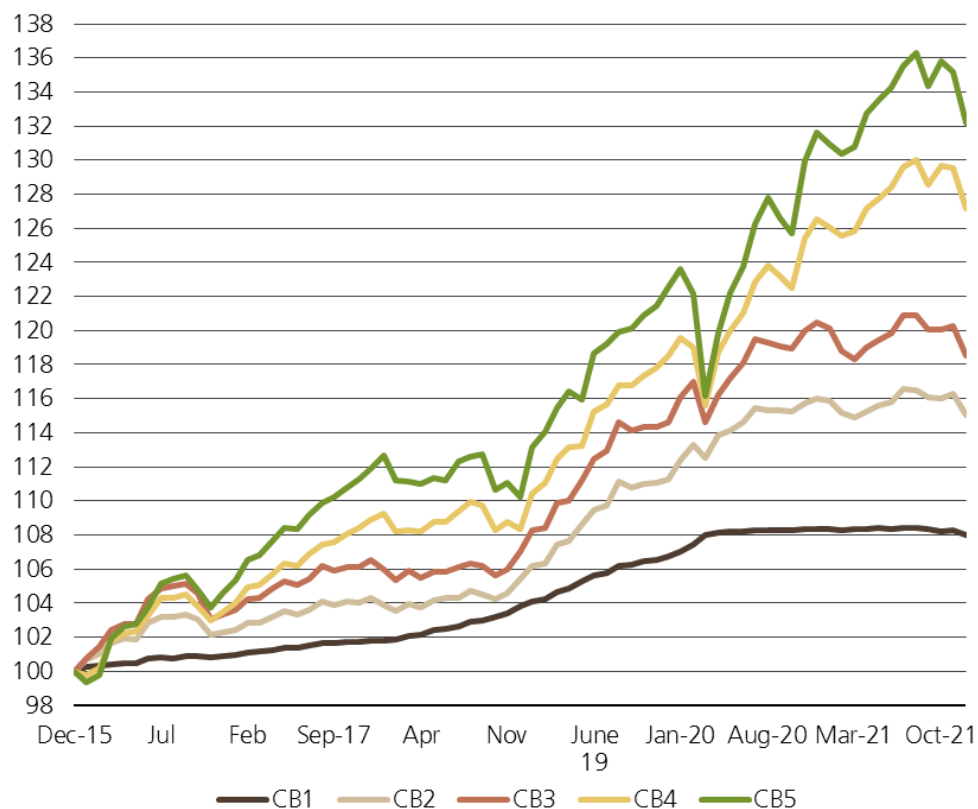
# Central Bank portfolios: Recent market performance

While portfolios that included spread products or equities suffered during the Coronavirus crisis, they more than offset these losses in the dramatic rally in risk assets that started in April 2020.

## Sample central bank portfolios tracking model output

	CB1	CB2	CB3	CB4	CB5
2022 January	-0.25%	-1.07%	-1.43%	-1.86%	-2.19%
<b>Performance 2022 YTD</b>	<b>-0.25%</b>	<b>-1.07%</b>	<b>-1.43%</b>	<b>-1.86%</b>	<b>-2.19%</b>
Performance 2021	-0.18%	0.11%	-0.23%	2.91%	3.66%
Performance 2020	1.52%	4.28%	5.14%	6.81%	7.36%
Performance 2019	2.76%	5.56%	7.10%	9.33%	11.20%
Performance 2018	2.00%	1.04%	0.46%	-0.47%	-1.47%
Performance 2017	0.90%	2.00%	3.07%	5.22%	7.01%
Performance 2016	0.91%	2.29%	3.34%	3.50%	4.55%
Performance 2015	0.51%	0.31%	0.39%	0.29%	0.39%
Performance 2014	0.46%	2.84%	4.13%	3.89%	4.26%
Performance 2013	0.29%	-1.06%	-1.86%	2.38%	3.34%
Performance 2012	0.52%	3.10%	4.96%	5.63%	7.61%
Performance 2011	0.95%	4.08%	5.41%	3.52%	3.09%
Performance 2010	1.23%	3.60%	4.94%	5.61%	6.85%
Performance 2009	1.19%	4.76%	7.04%	8.80%	12.47%
Performance 2008	4.91%	4.19%	2.95%	-3.70%	-7.88%
Performance 2007	6.03%	6.67%	6.70%	7.12%	7.15%
Performance 2006	4.58%	3.80%	4.26%	6.23%	7.81%

## CB sample portfolio performance (indexed, 31.12.2015 = 100)



Source: UBS AM model based on publicly available information, using broad indices and funds to replicate CBs and SWF portfolios. For illustrative purposes only. Please see appendix for more information on portfolios. Please note that past performance is not a guide to the future.



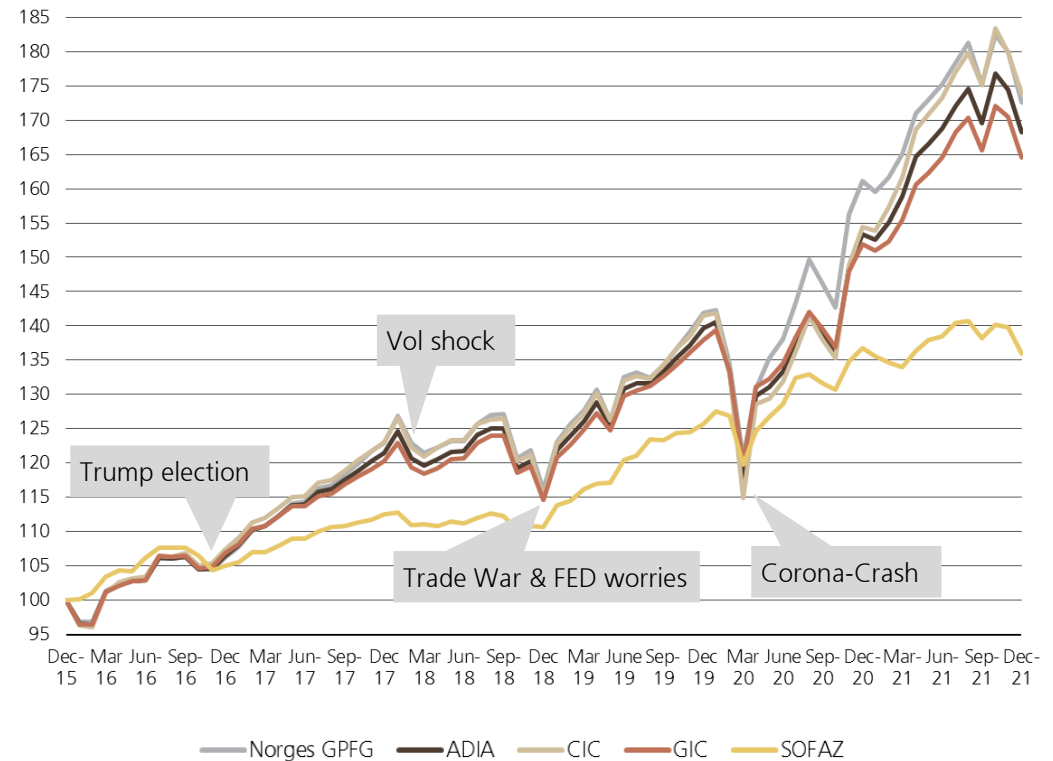
# SWF portfolios: Recent market performance

Our model portfolios replicating the SAAs of several key SWFs show that key saving funds performed well in 2020 due to a dramatic recovery in risk assets.

## Replicated Sovereign portfolios tracking model output

	<i>Sofaz</i>	<i>Norges GPFG</i>	<i>ADIA</i>	<i>CIC</i>	<i>GIC</i>
2022 January	-2.70%	-4.14%	-3.53%	-3.23%	-3.50%
<b>Performance 2022 YTD</b>	<b>-2.70%</b>	<b>-4.14%</b>	<b>-3.53%</b>	<b>-3.23%</b>	<b>-3.50%</b>
Performance 2021	3.15%	15.09%	16.66%	20.03%	14.70%
Performance 2020	8.83%	13.48%	9.86%	9.06%	10.07%
Performance 2019	13.54%	22.23%	21.55%	23.18%	20.41%
Performance 2018	-1.61%	-5.85%	-4.48%	-5.33%	-3.76%
Performance 2017	7.43%	16.45%	13.62%	14.47%	12.19%
Performance 2016	5.08%	6.52%	6.71%	7.70%	6.38%
Performance 2015	-0.71%	-0.32%	0.12%	-1.44%	0.45%
Performance 2014	5.83%	5.83%	6.82%	5.99%	6.91%
Performance 2013	0.53%	17.33%	14.96%	15.96%	12.28%
Performance 2012	8.86%	13.32%	13.62%	14.22%	13.01%
Performance 2011	4.59%	-1.48%	-2.54%	-4.30%	-0.39%
Performance 2010	9.51%	10.96%	12.72%	14.03%	12.29%
Performance 2009	16.19%	23.10%	23.86%	26.51%	21.45%
Performance 2008	-8.19%	-29.75%	-31.11%	-35.81%	-27.12%
Performance 2007	7.06%	8.01%	5.65%	6.14%	5.43%
Performance 2006	9.61%	15.74%	16.65%	17.96%	14.13%

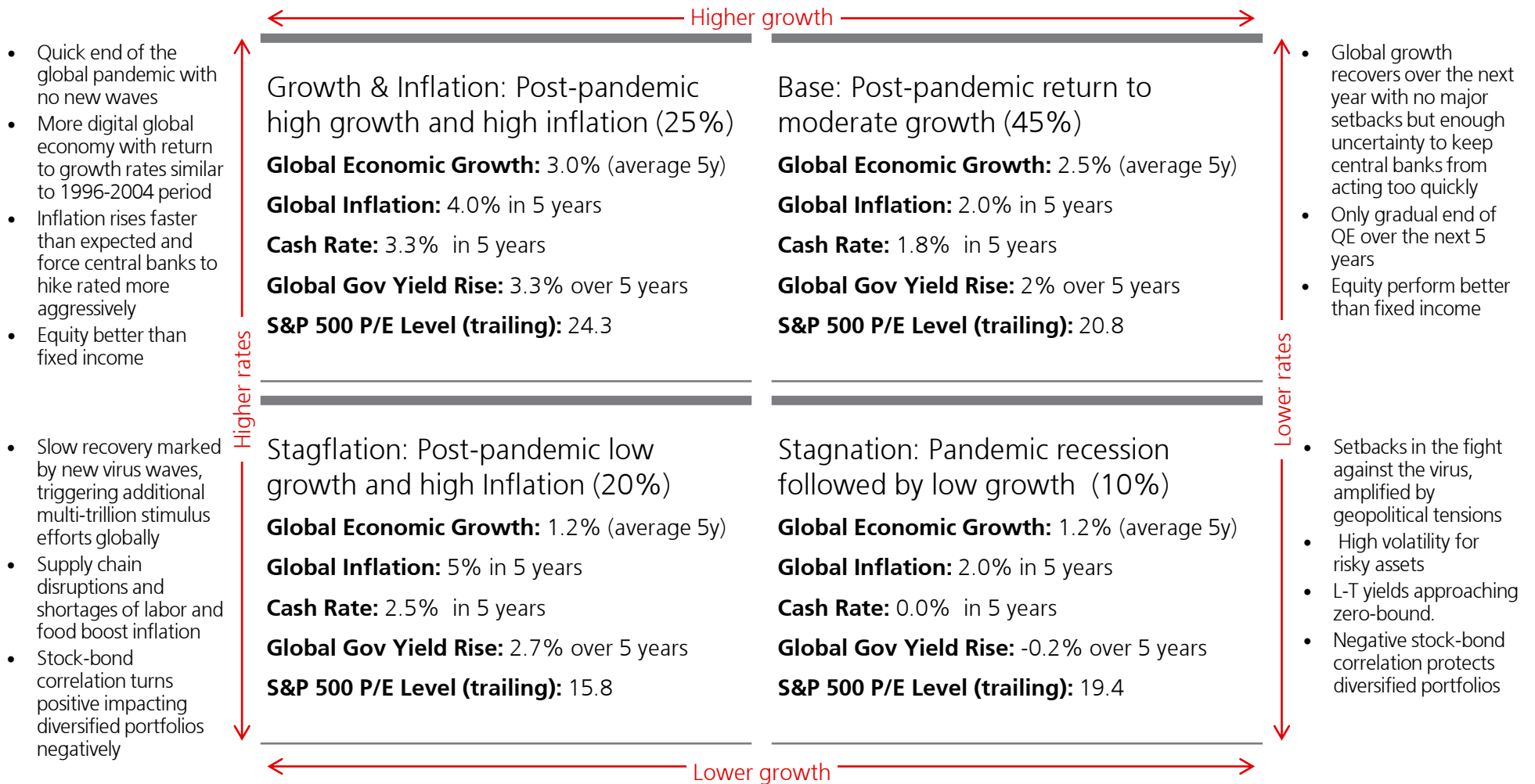
## SWF sample portfolio performance (indexed, 31.12.2015 = 100)



Source: UBS AM model based on publicly available information, using broad indices and listed instruments to replicate monthly performance of SWF portfolios. For illustrative purposes only. Please note that past performance is not a guide to the future.

# Economic scenarios

Uncertainty with regards to the end of the pandemic and the inflation outlook remains high but the probability of a prolonged recession has fallen



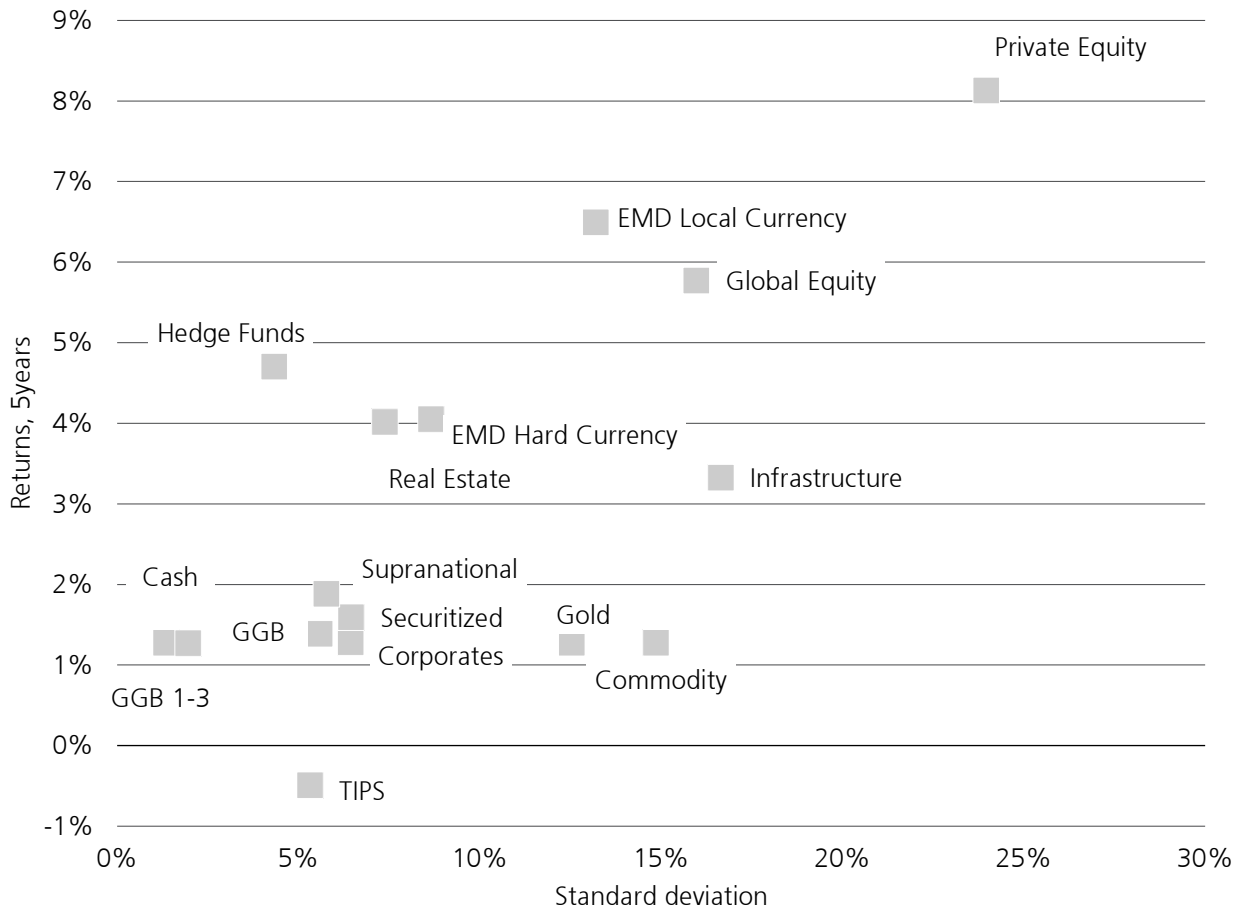
Source: UBS AM as of 4Q 2021. This does not constitute a guarantee by UBS AG, Asset Management.

# Base: Return to moderate growth (45%)

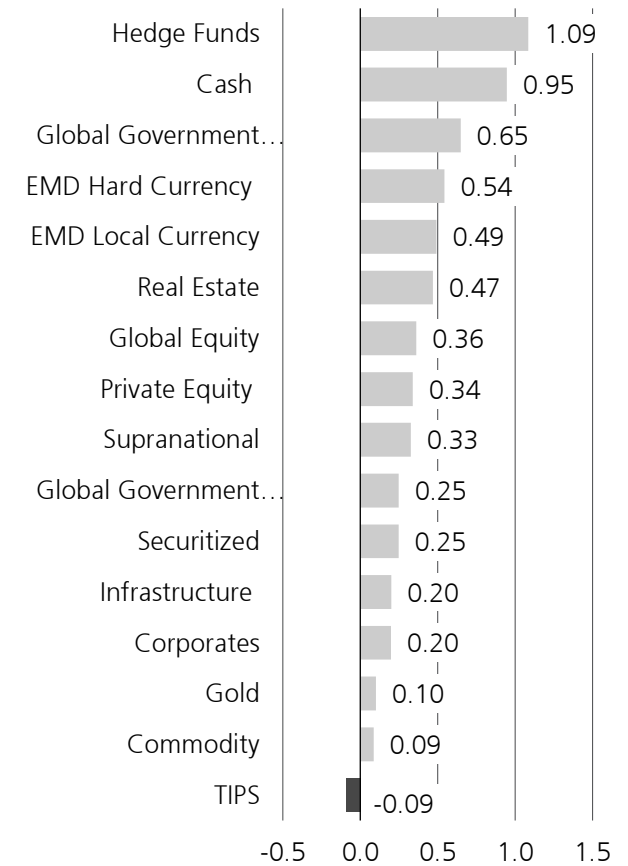


Fixed income with low real returns; equity/alternatives outperform

## Expected Returns 5 years and Standard Deviation, %

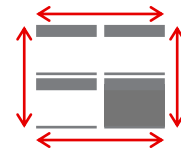


## Return/Risk profile



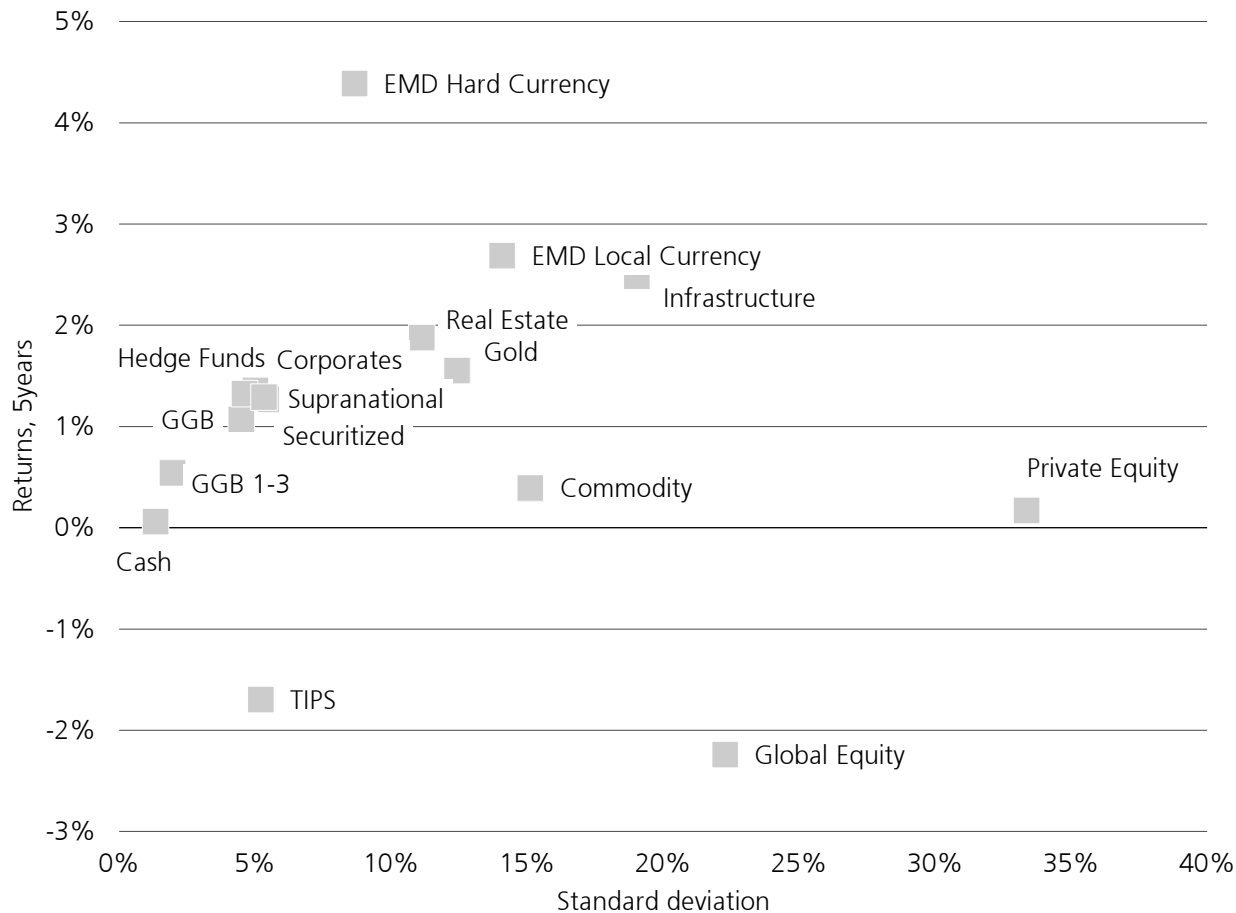
Source: UBS AM. See Appendix for details about sources. Projections as of 4Q 2021. Past performance of investments is not necessarily an indicator of future results.

# Stagnation: Recession followed by low growth (10%)

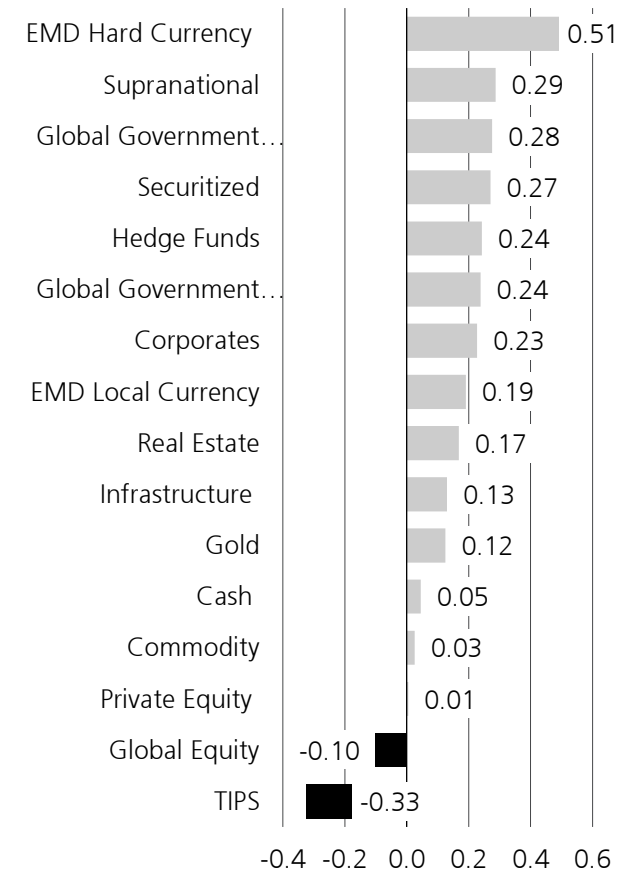


Equity underperform; fixed income assets and certain alternatives preserve capital

**Expected Returns 5 years and Standard Deviation, %**



**Return/Risk profile**



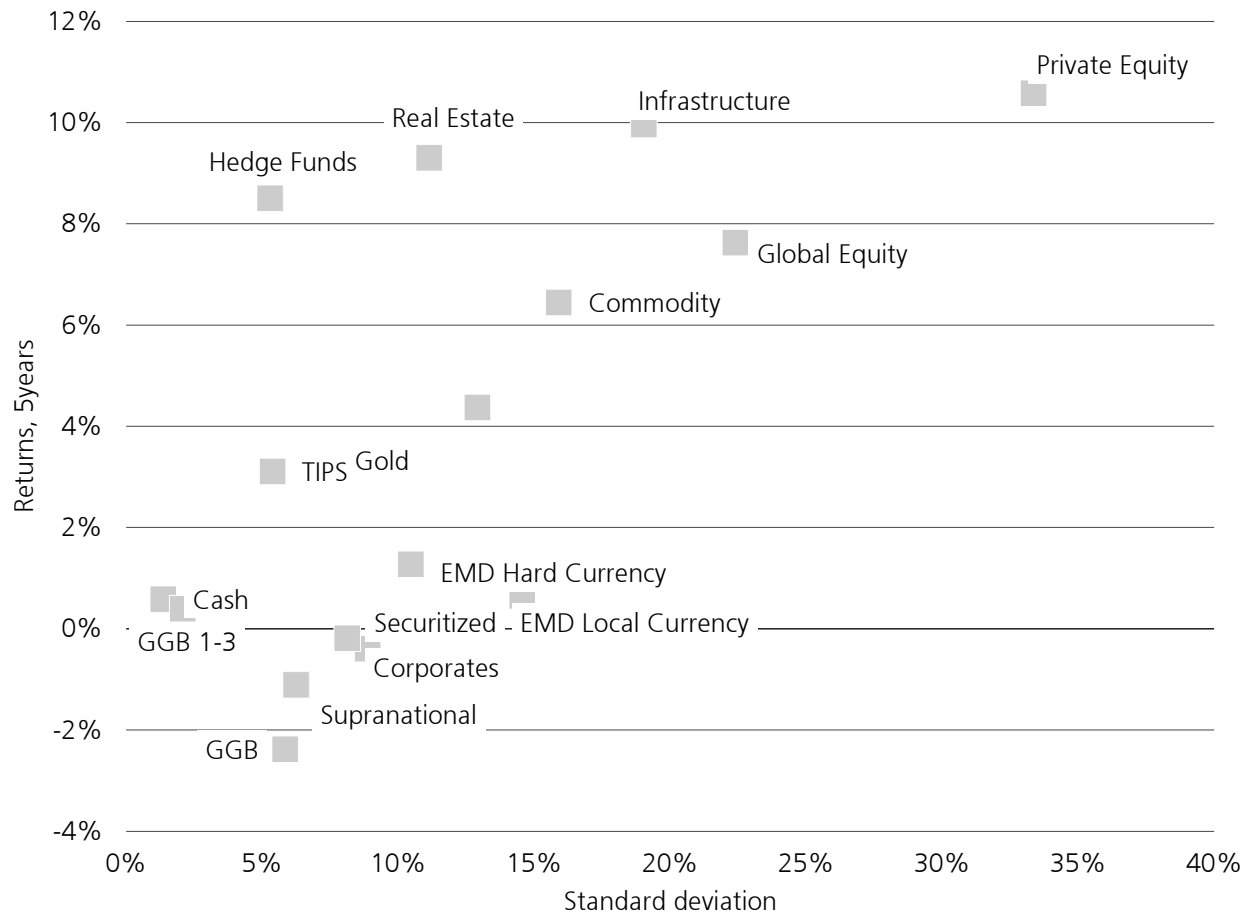
Source: UBS AM. See Appendix for details about sources. Projections as of 4Q 2021. Past performance of investments is not necessarily an indicator of future results.

# Stagflation: Low growth and high Inflation (20%)

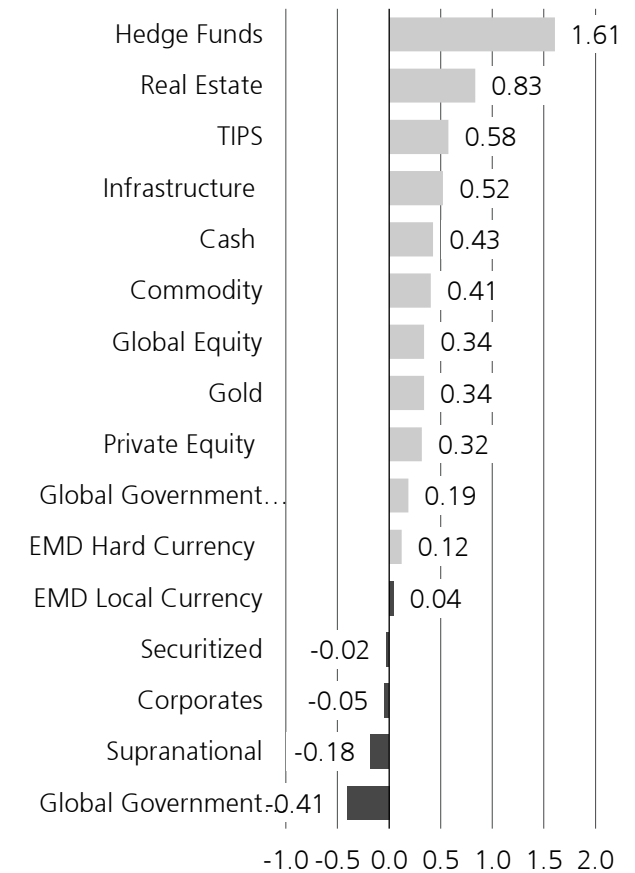


Real assets perform well, but most asset classes show negative real returns

**Expected Returns 5 years and Standard Deviation, %**



**Return/Risk profile**



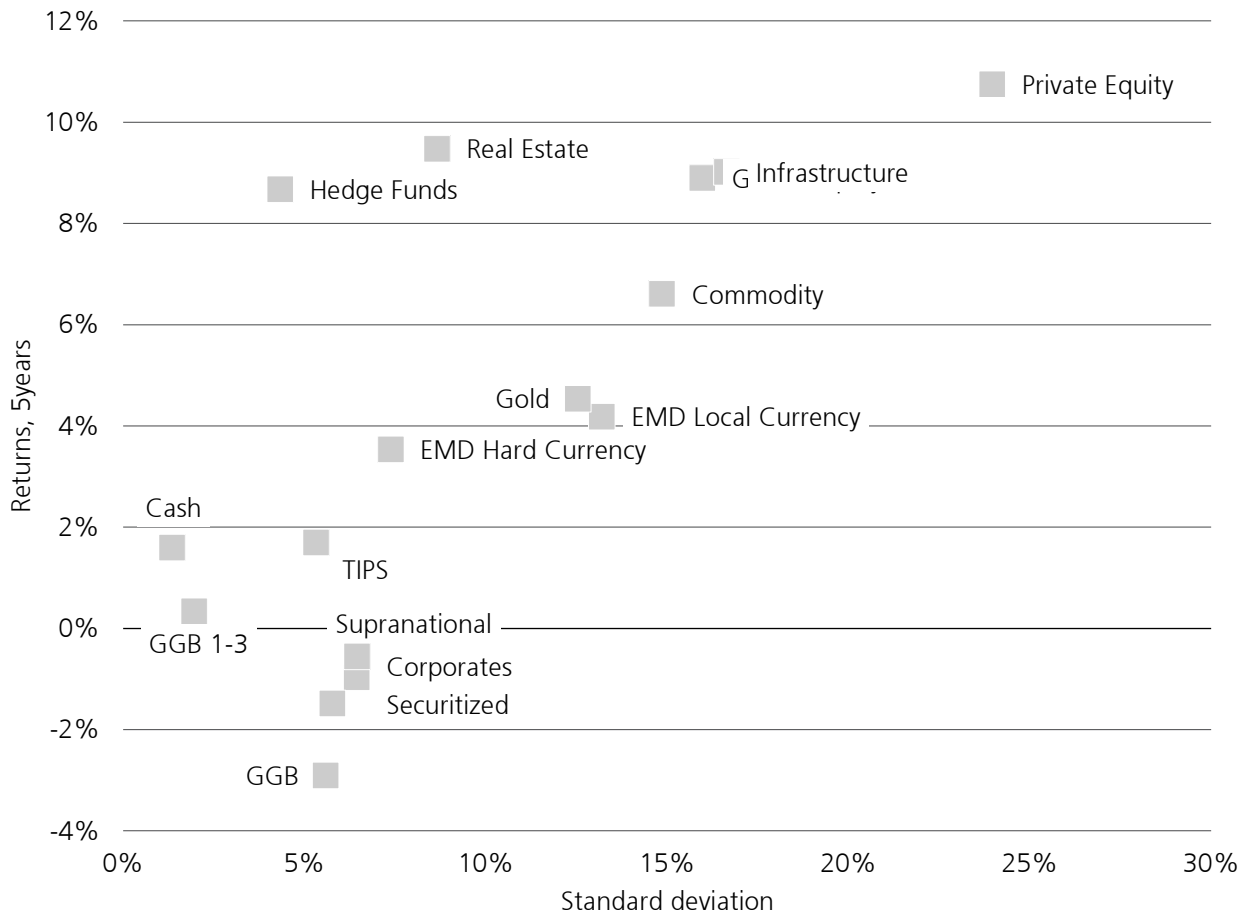
Source: UBS AM. See Appendix for details about sources. Projections as of 4Q 2021. Past performance of investments is not necessarily an indicator of future results.

# Growth & Inflation: High growth and inflation (25%)

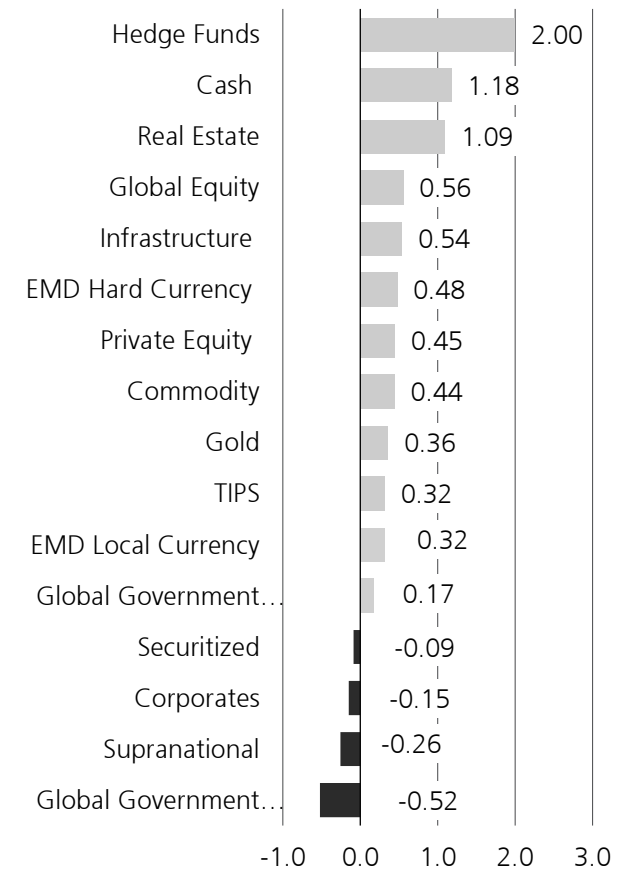


Risk assets do well, while government bonds perform poorly

**Expected Returns 5 years and Standard Deviation, %**



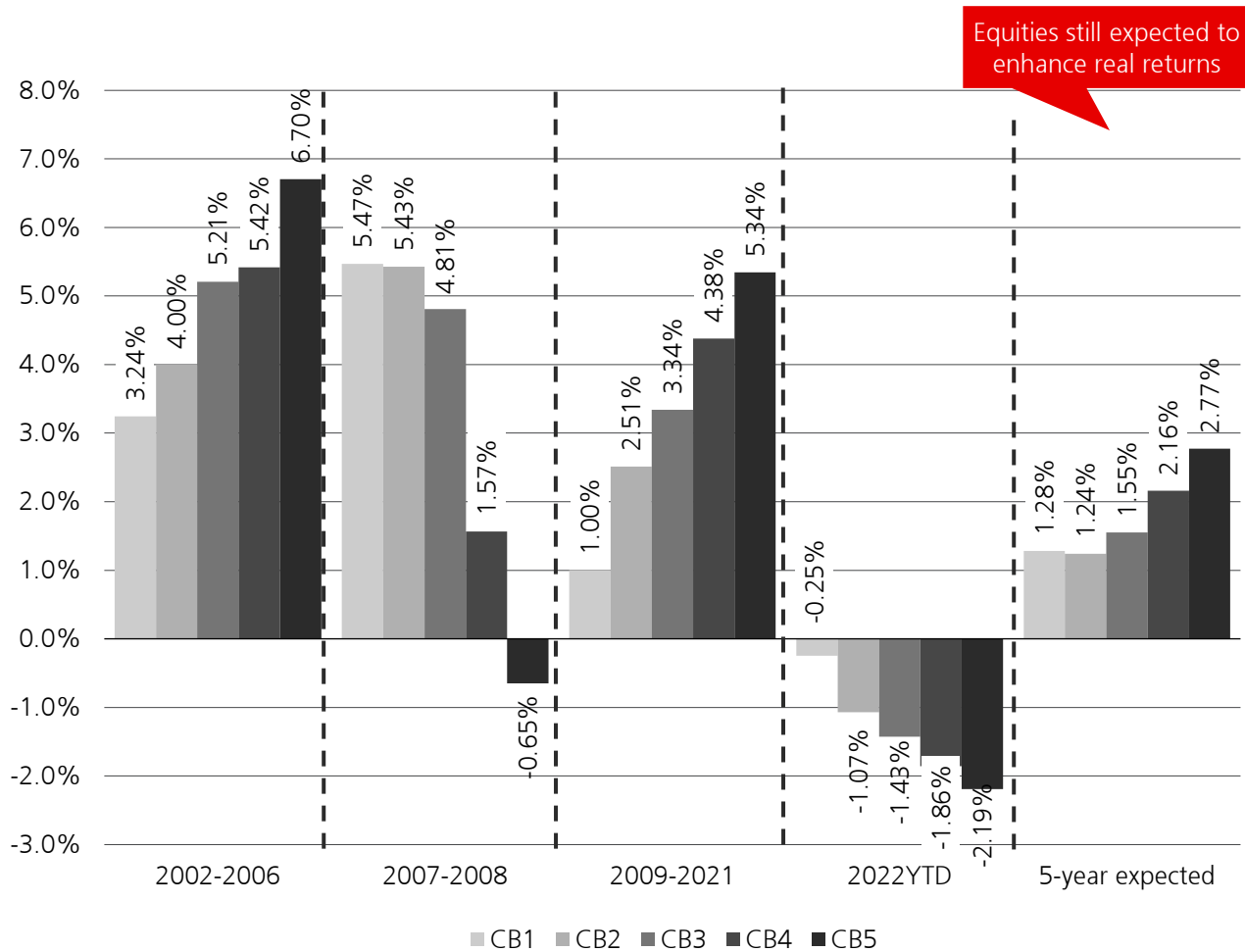
**Return/Risk profile**



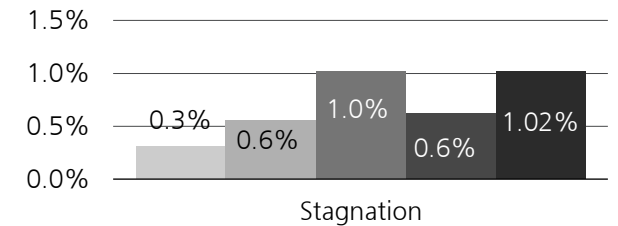
Source: UBS AM. See Appendix for details about sources. Projections as of 4Q 2021. Past performance of investments is not necessarily an indicator of future results.

# Sovereign Portfolios – Scenario performances

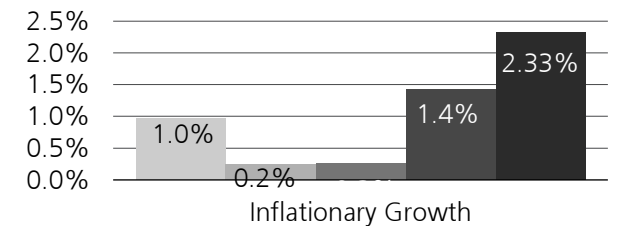
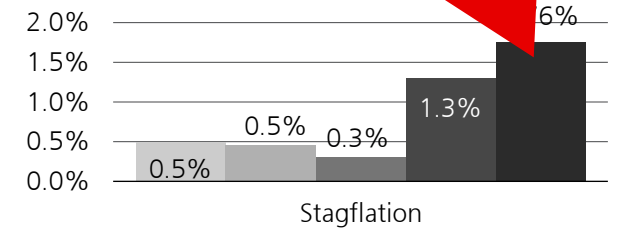
## Comparison of Central Bank sample portfolio performance



## 5-year expected Alternative scenarios



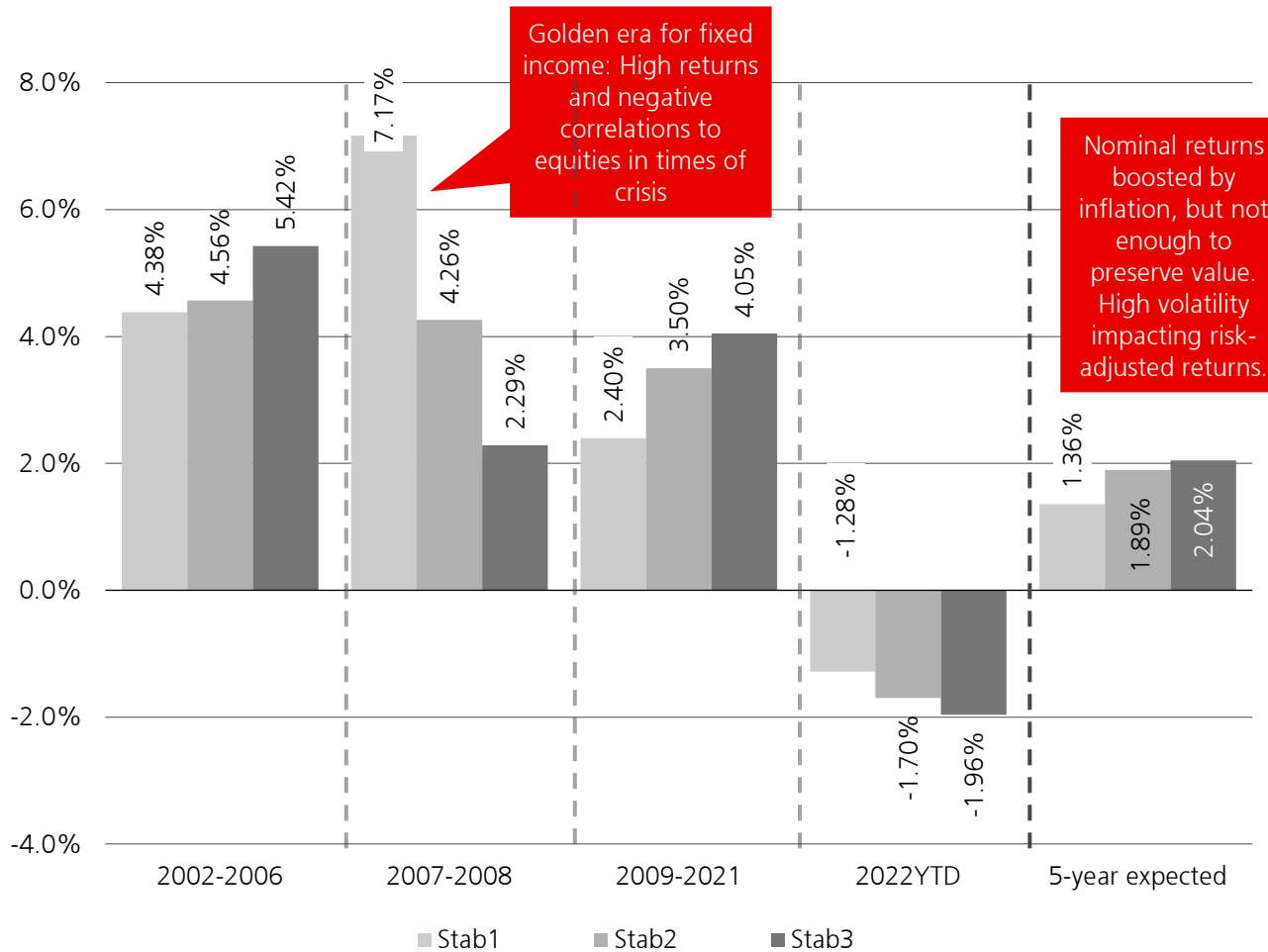
Returns expected to be not adequate in a high inflation environment



Source: UBS AM. For illustrative purposes only. Projections as of 4Q 2021. Past performance of investments is not necessarily an indicator of future results.

# Sovereign Portfolios – Scenario performances

## Comparison of Stabilization Fund sample portfolio performance



### 5-year expected Alternative scenarios

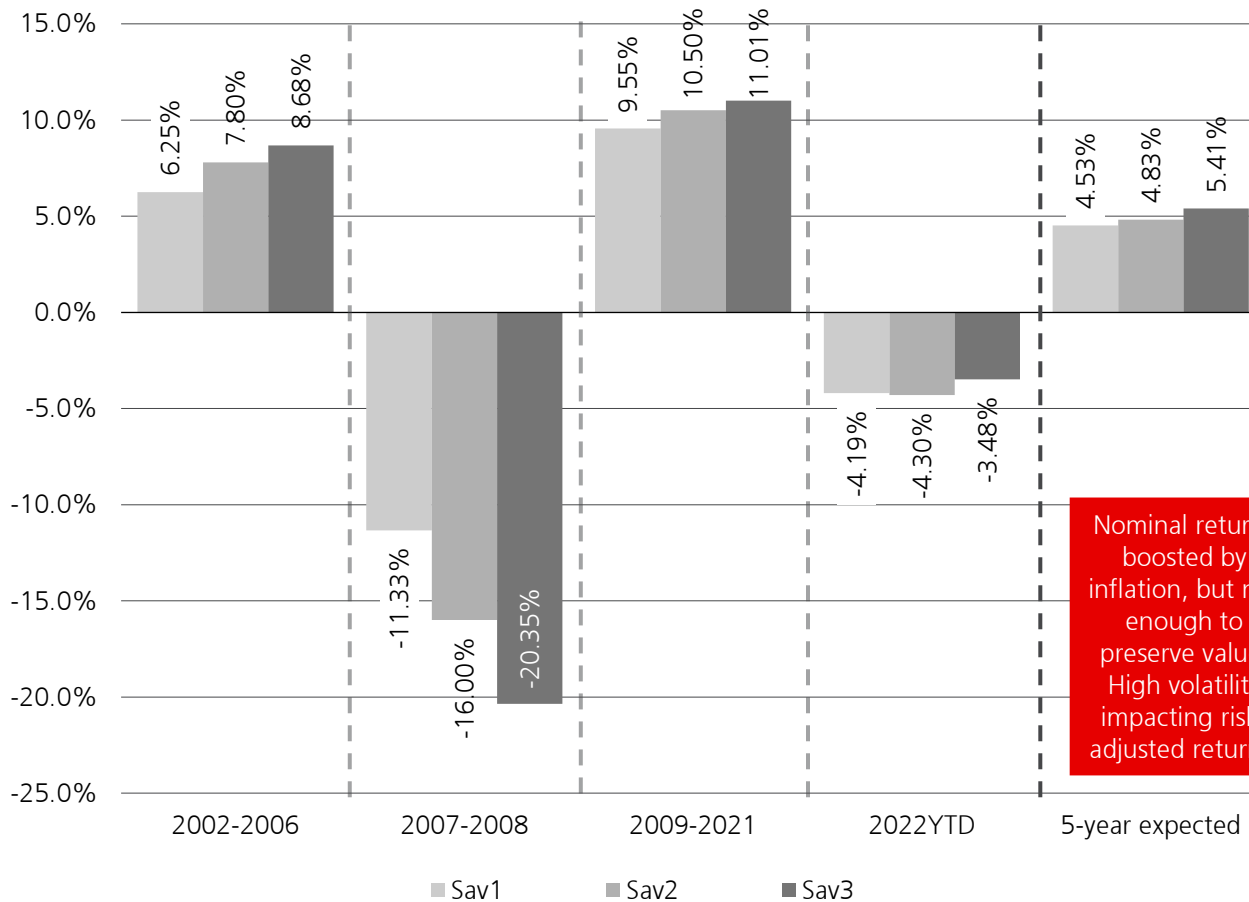


Source: UBS AM. For illustrative purposes only. Projections as of 4Q 2021. Past performance of investments is not necessarily an indicator of future results.



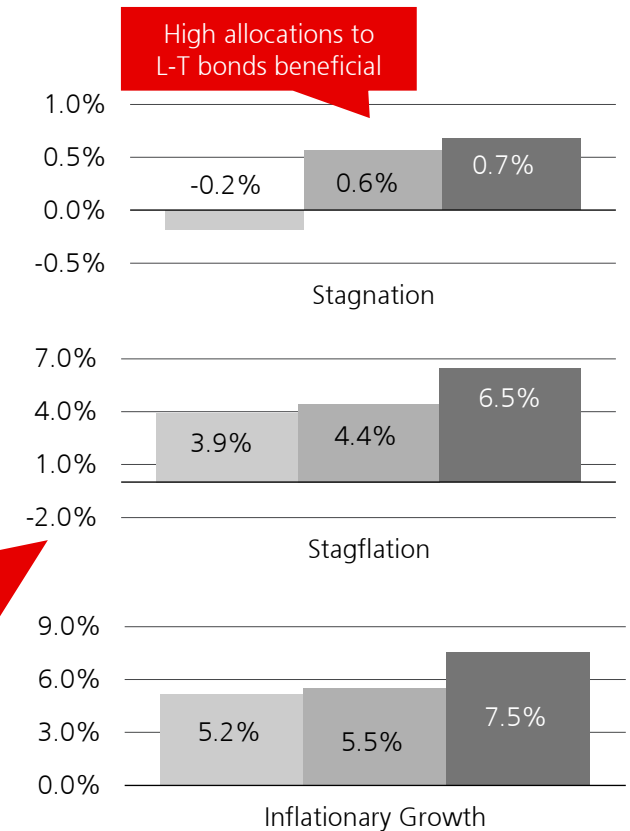
# Sovereign Portfolios – Scenario performances

Comparison saving fund sample portfolio performance



Nominal returns boosted by inflation, but not enough to preserve value. High volatility impacting risk-adjusted returns.

## 5-year expected Alternative scenarios



Source: UBS AM. For illustrative purposes only. Projections as of 4Q 2021. Past performance of investments is not necessarily an indicator of future results.

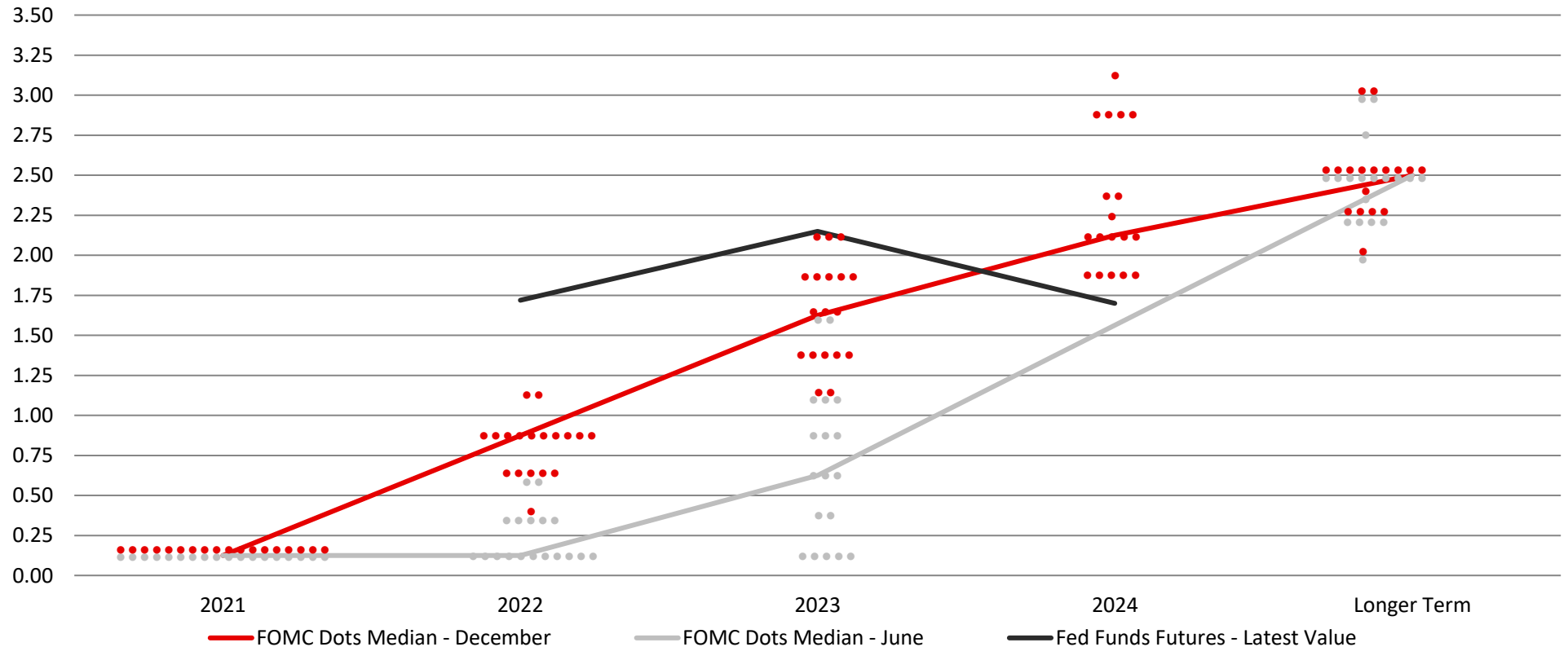
Section 2

# Bond Bites: Into the Unknown – Jonathan Gregory

# FOMC dot projections and market pricing

## Distribution of FOMC members projections for Fed Funds rate

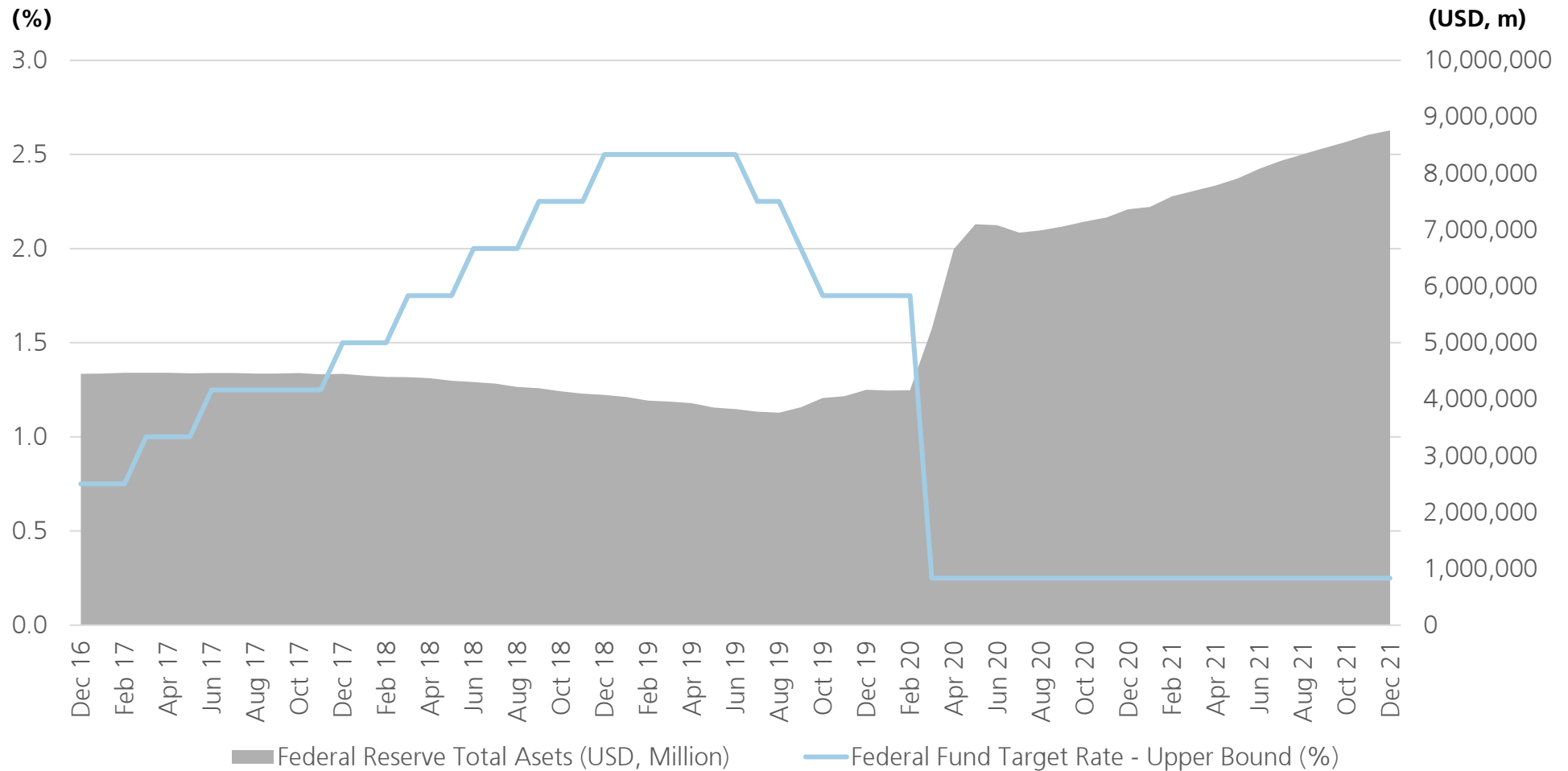
Meeting dates: 06/16/2021 & 12/15/2021



Source: Federal Reserve, as of February 11, 2022

# US Fed funds rate and the balance sheet

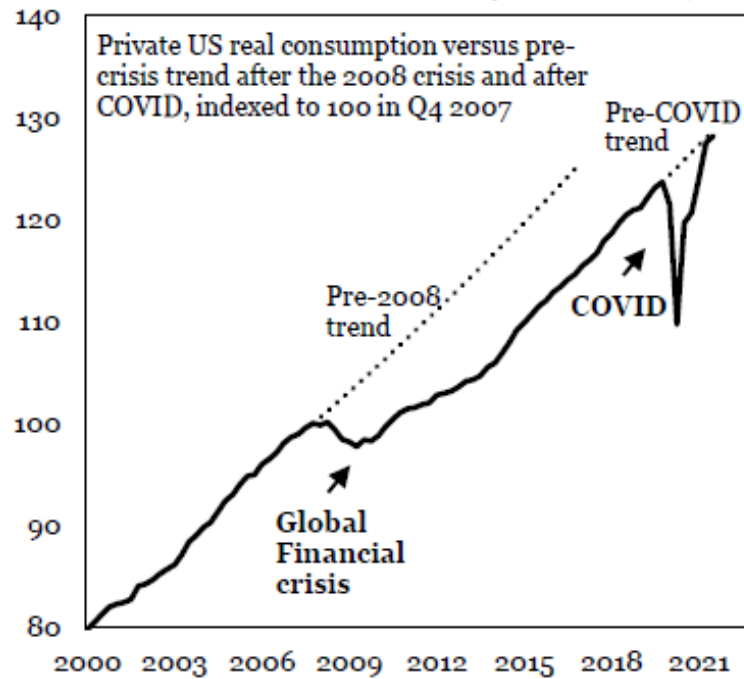
As of 31 December 2021



Source: Bloomberg, as of 21 January 2022.

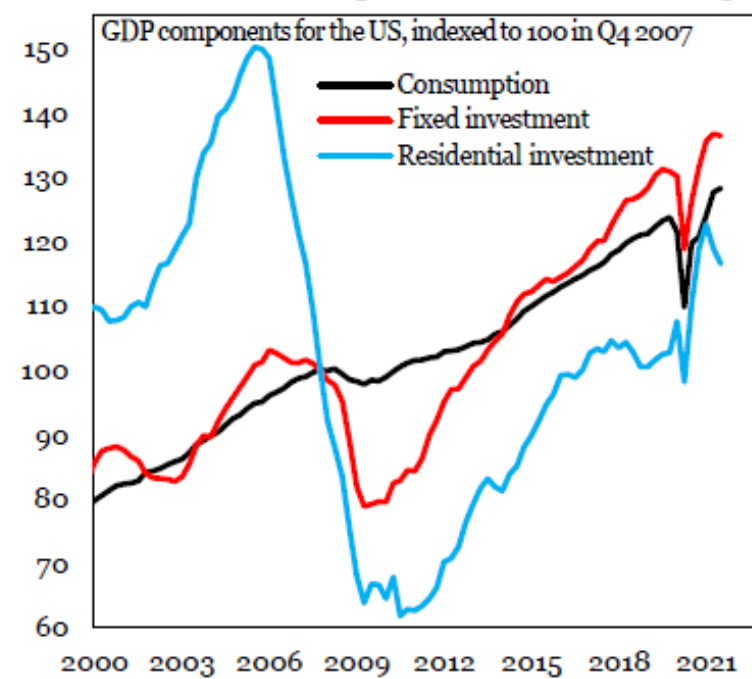
# IIF data shows the strength of the US recovery

**Exhibit 1. The US has recovered fully from COVID, ...**



Source: Haver, IIF

**Exhibit 2. ... with consumption and investment strong.**

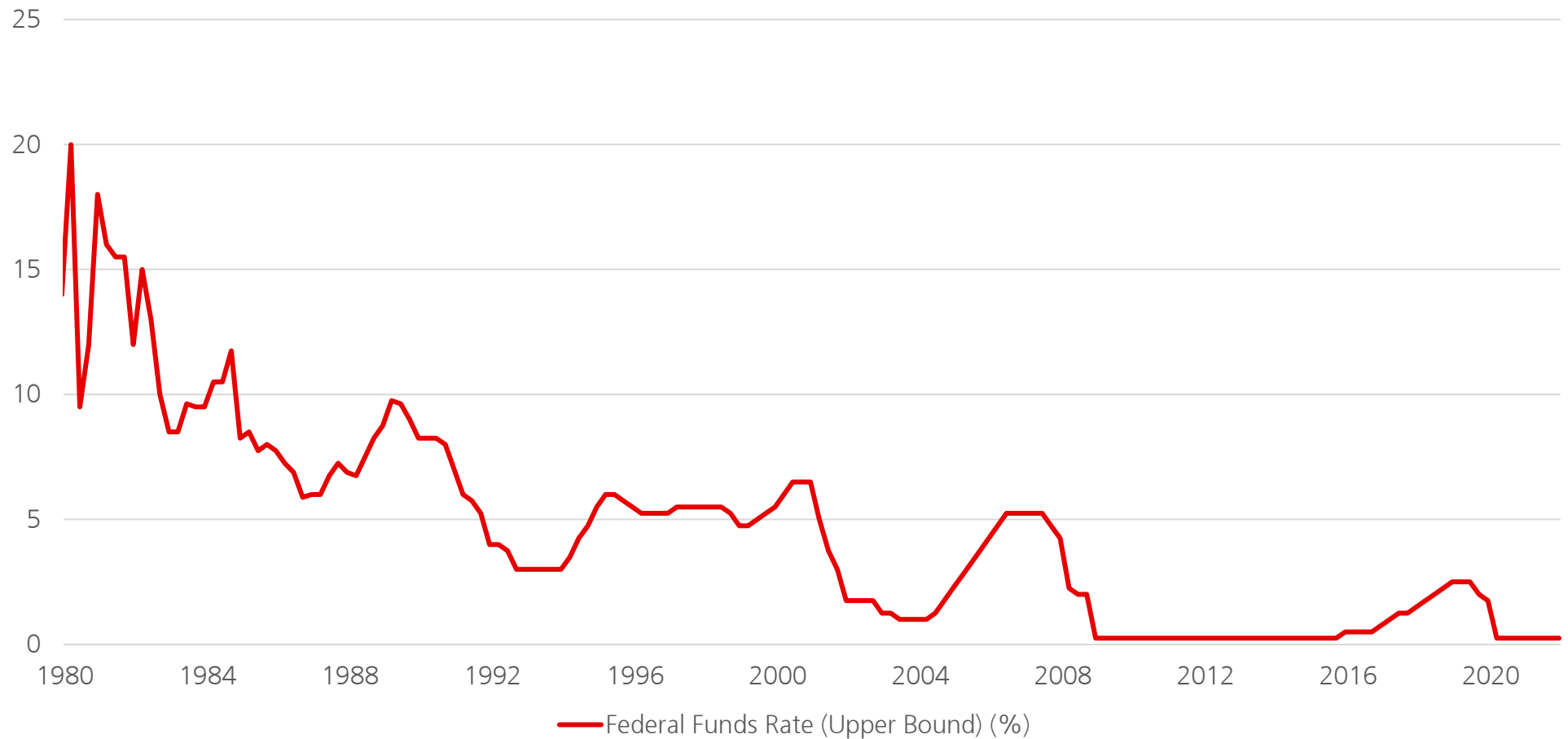


Source: Haver, IIF

# Fed Funds Rate

As of 31st December 2021

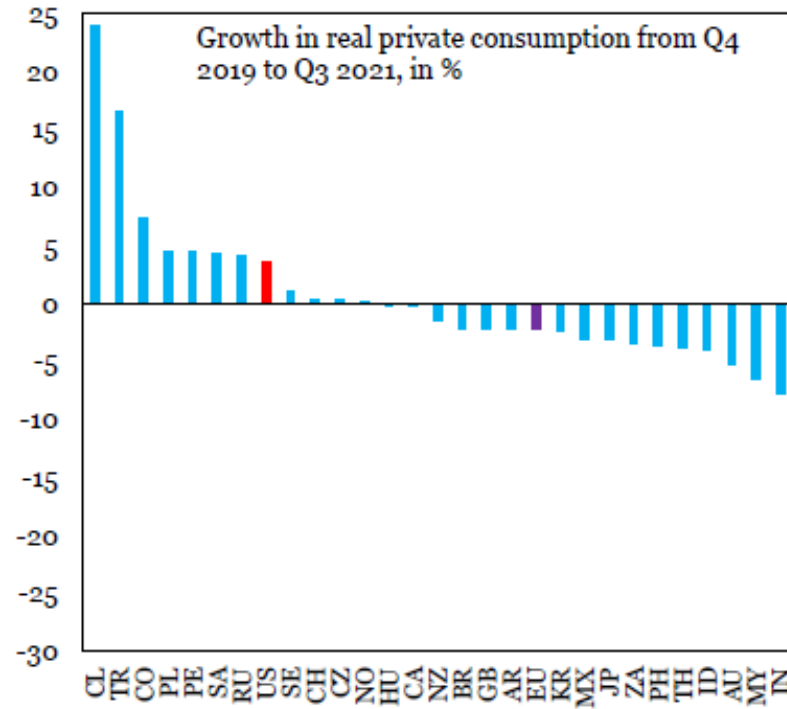
Interest rate (%)



Source: Bloomberg, as of 31 December 2021.

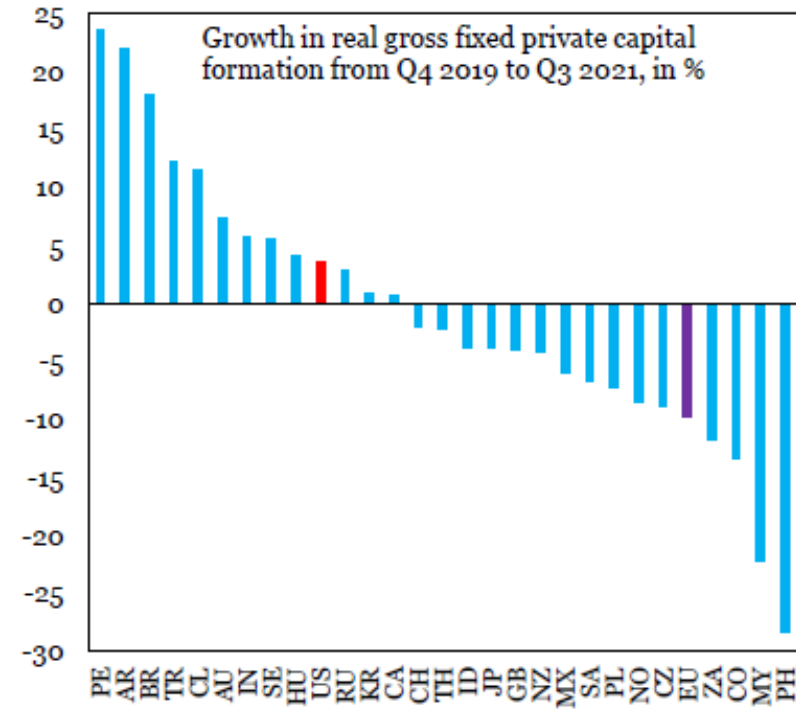
# ....but the Eurozone is lagging

Exhibit 3. The US has outperformed the rest of the G10, ...



Source: Haver, IIF

Exhibit 4. ... both on consumption and on investment.

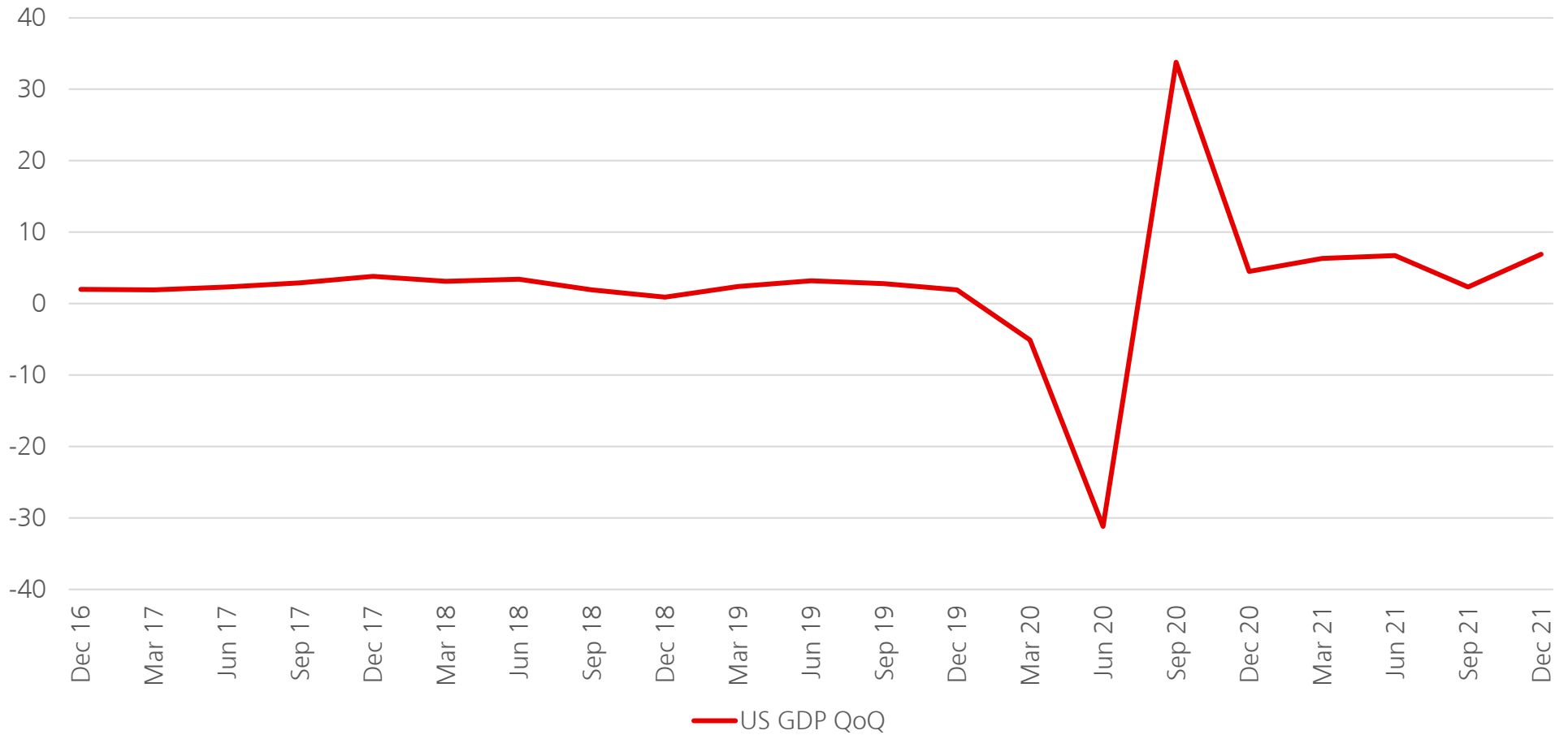


Source: Haver, IIF

# US GDP Growth – or perhaps history *will* repeat.....

As of 31 December 2021

## GDP Growth QoQ (%)



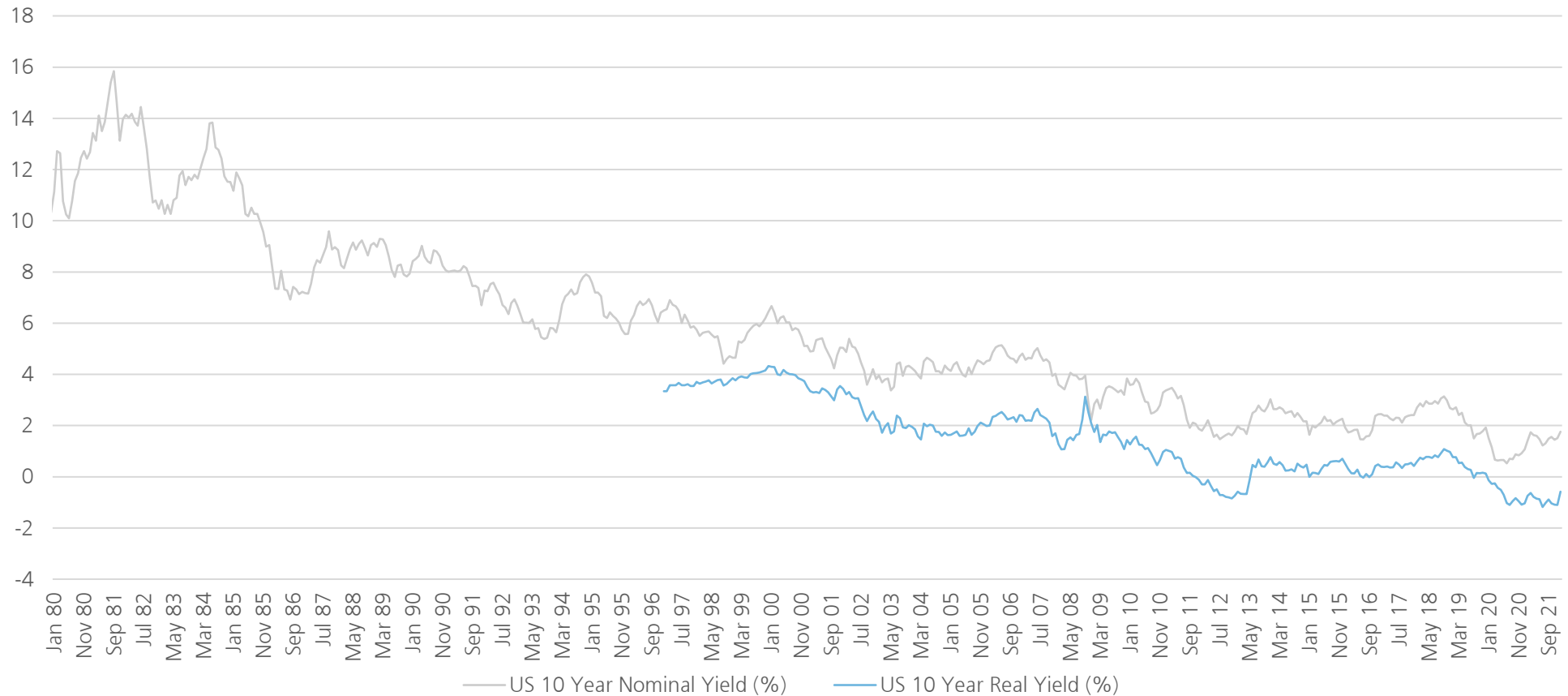
Source: Bloomberg, as of 14 February 2022.



# .....or will the structural story change? US nominal and real yields

As of 21 January 2022

Yield (%)



Source: Bloomberg, as of 21 January 2022.

# It is the structural drivers of inflation that will matter

---



- Demographics



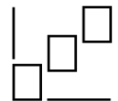
- Technology



- **Fiscal policy**; from austerity to the joy of deficits.



- **Monetary policy**; from pre-emptive and forecast based, to delays and outcome based



- **The labour share of income**; from the gig economy to new rights for workers



- **Globalisation**; from free movement of goods and capital to matters of sovereignty and control



- **The green economy**; from cheapest to deliver to greenest to deliver.

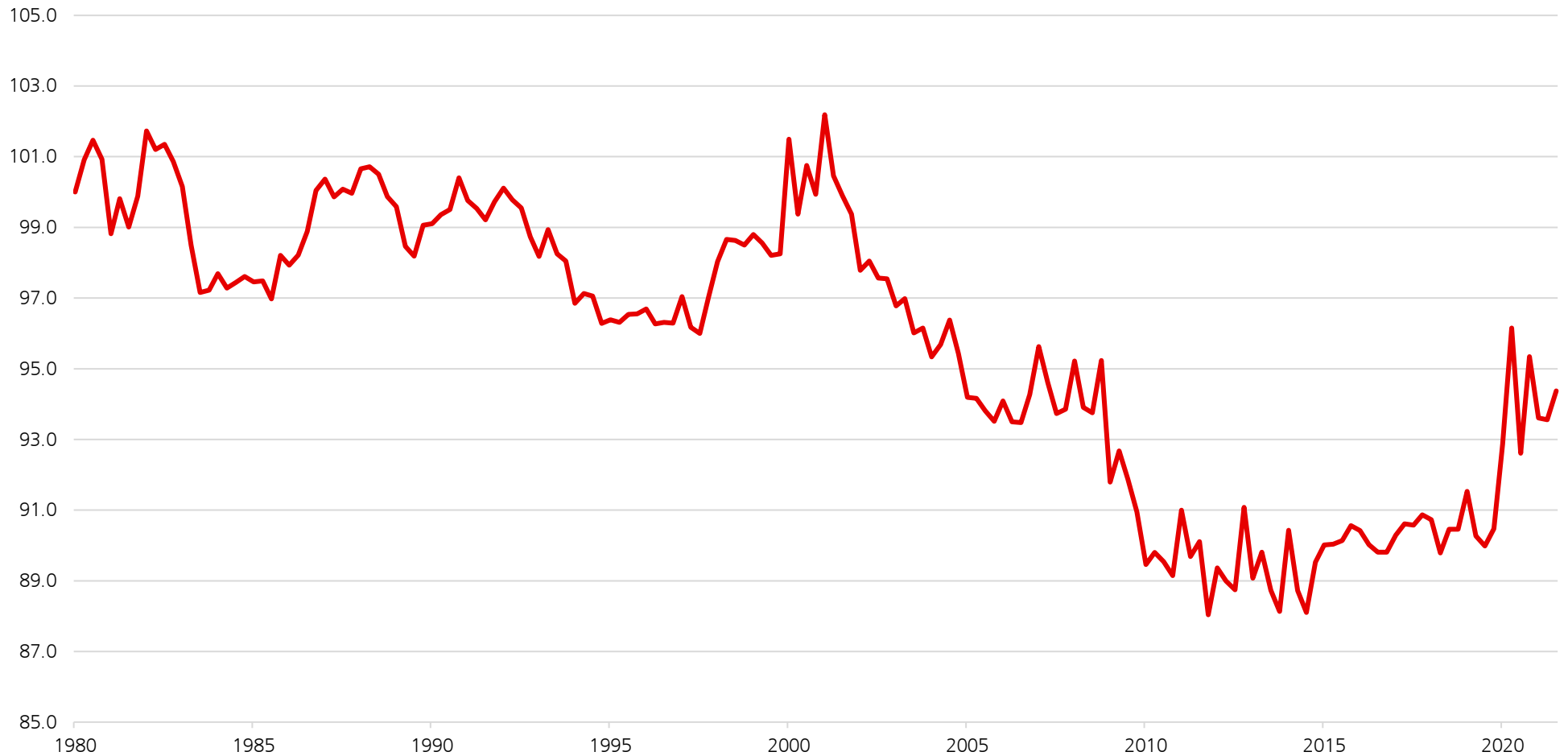


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Source: Bloomberg, as of 30th June 2020.

# US Non-Farm Labour share of Output

Non-Farm Labour share of Output (Index: Q1 1980 = 100)

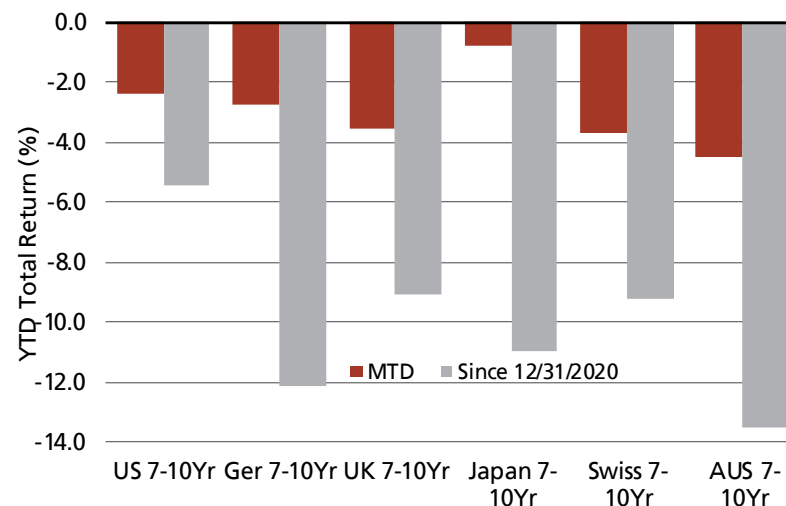
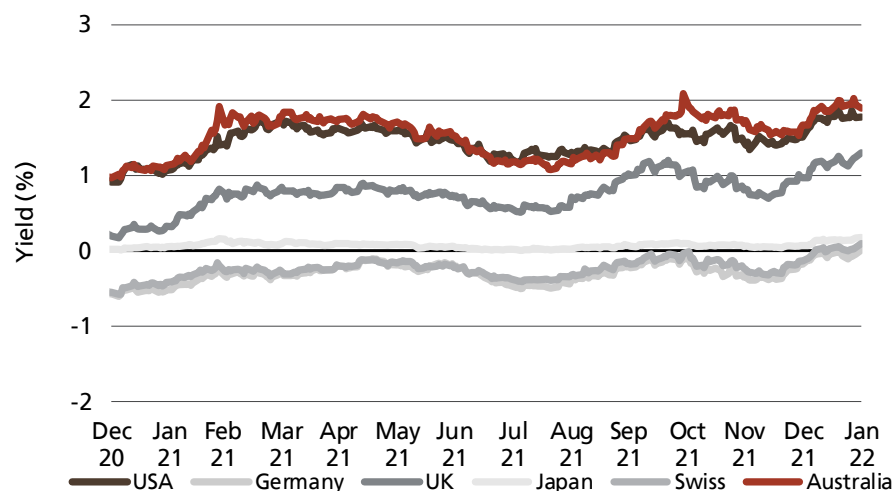


Source: St Louis Fed, as of 31 July 2021.

Section 3

# Broadening the Fixed Income Universe – Uta Fehm

# Government Bond Market Review



	Yield	MTD Change	3-Month Change	Change Since 12/31/2020
AUS 7-10Yr	1.90%	+23 bps	-19 bps	+93 bps
Ger 7-10Yr	0.01%	+19 bps	+12 bps	+58 bps
Japan 7-10Yr	0.18%	+11 bps	+8 bps	+16 bps
Swiss 7-10Yr	0.10%	+23 bps	+13 bps	+65 bps
UK 7-10Yr	1.30%	+33 bps	+27 bps	+111 bps
US 7-10Yr	1.78%	+27 bps	+22 bps	+86 bps

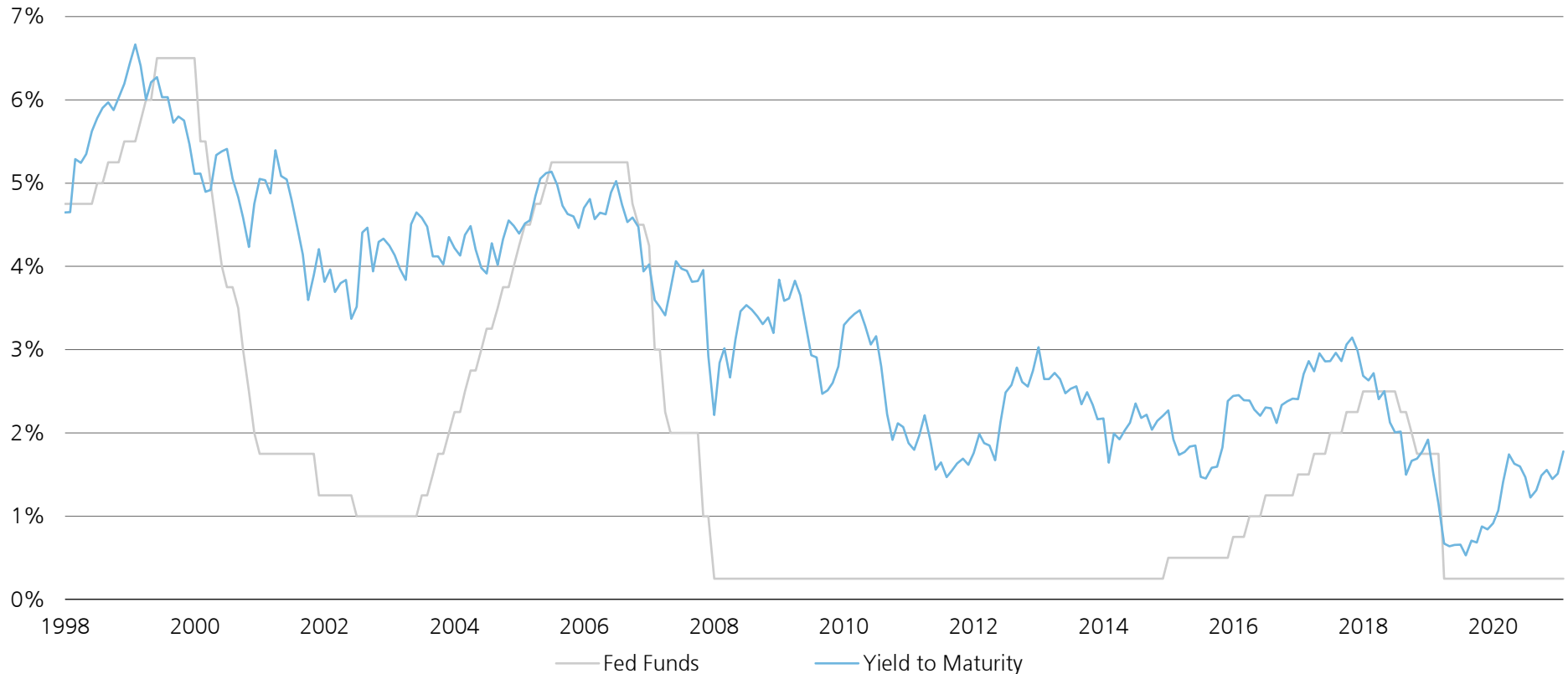
	MTD Tot. Ret.	3-Month Tot. Ret.	Since 12/31/2020 Tot. Ret.
AUS 7-10Yr	-4.53%	-4.81%	-13.53%
Ger 7-10Yr	-2.74%	-3.73%	-12.13%
Japan 7-10Yr	-0.78%	-1.50%	-10.98%
Swiss 7-10Yr	-3.73%	-2.60%	-9.24%
UK 7-10Yr	-3.55%	-3.98%	-9.07%
US 7-10Yr	-2.36%	-1.59%	-5.42%

Source: Bloomberg Finance LP, Barclays, as of January 31, 2022

# Fixed Income – still dancing?

Despite the recent increase in yields – the levels are still low

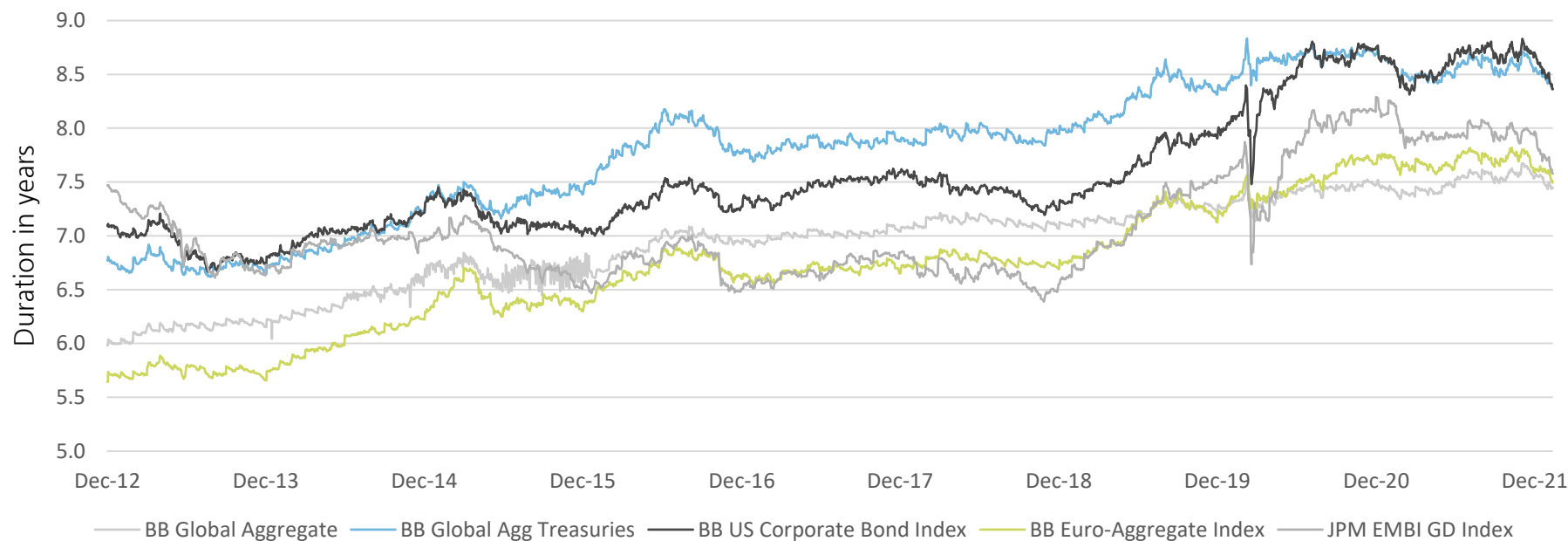
Yields to Maturity & Fed Funds rate



Source: Bloomberg Barclays Global Aggregate Index yield to maturity. Data as at 31 January 2022.

# Overall risk exposure has been increasing

... so portfolios should adjust for it



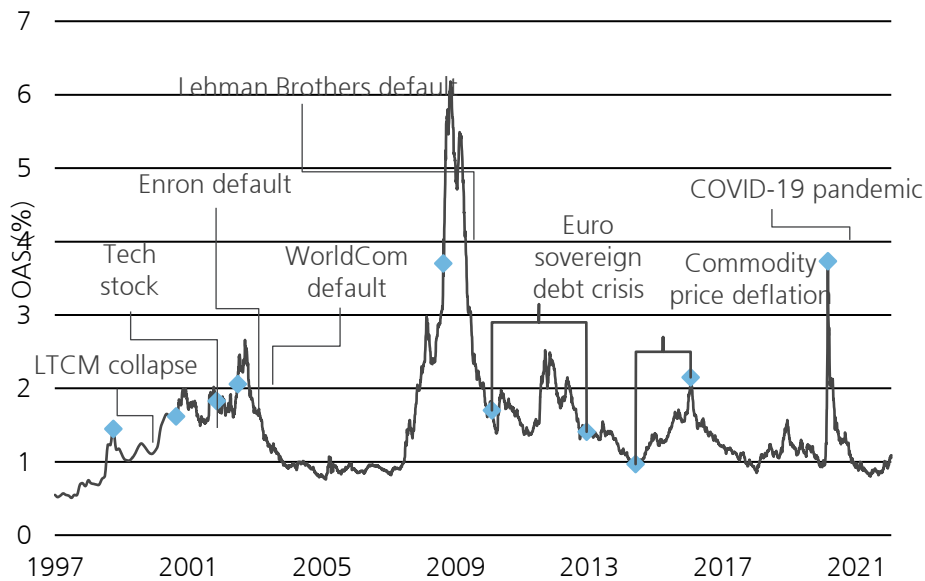
	<b>Total Return (Annualised)</b>	<b>% from Income</b>	<b>YTW (1998)</b>	<b>Rating (1998)</b>	<b>Current YTW</b>	<b>Current Rating</b>
Global Broad Market <sup>2</sup>	4.0%	92%	5.00%	AAA	1.80%	Aa3
Global Corporate <sup>2</sup>	4.9%	93%	5.40%	A1	2.56%	A3

1 Source: Bloomberg. Data as at 15 February 2022

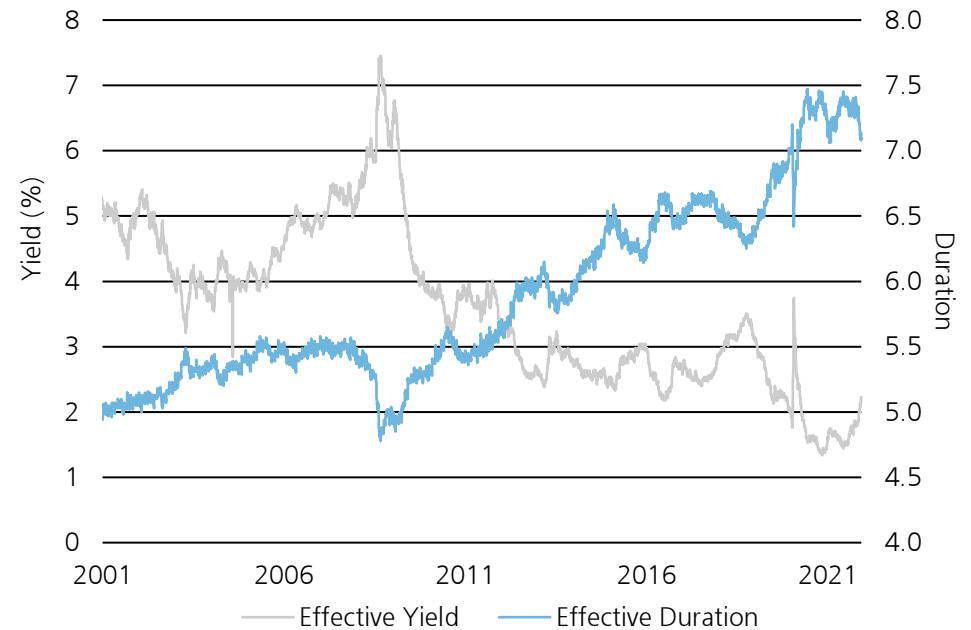
2 Source: Bloomberg, ICE BofA. Data as at 15 February 2022.

# Simply following the same index isn't enough anymore

US Corporate Spreads<sup>1</sup>



Global Corporate Spreads<sup>2</sup>



US Corporates	1998	2022
Duration <sup>2</sup>	5.9	8.1
BBB Weight <sup>2</sup>	33%	50%

1 Source: Bloomberg. Data as at 31 January 2022.

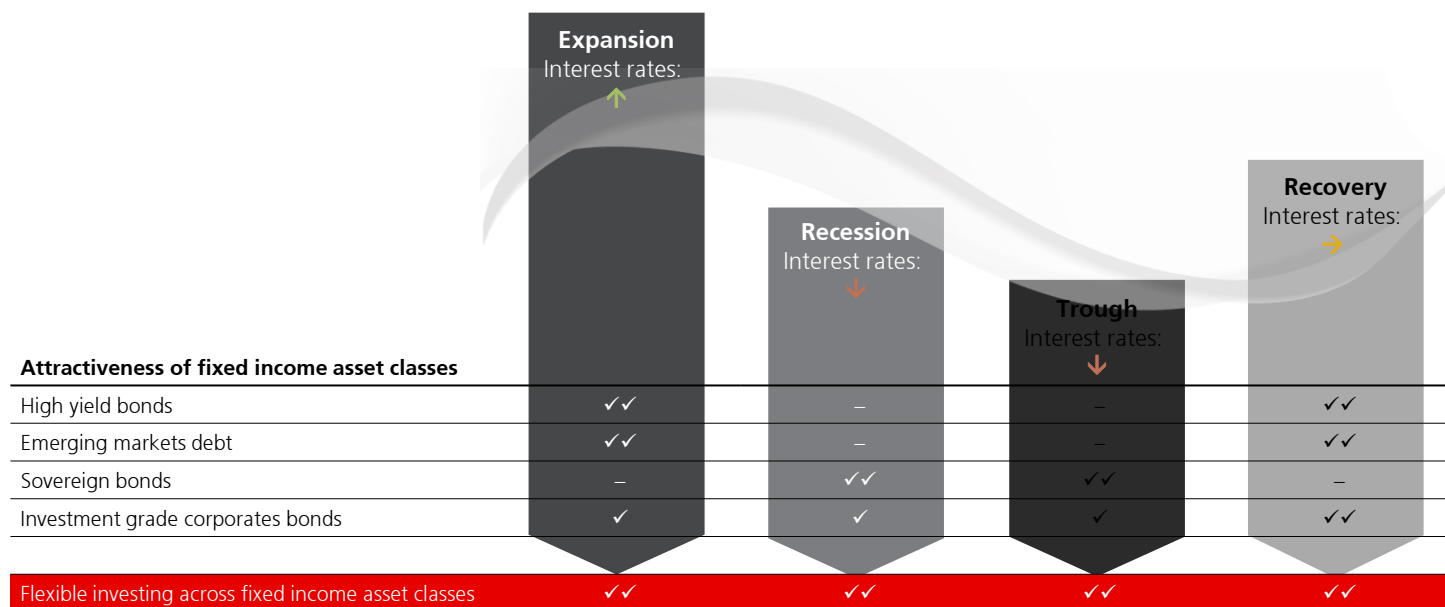
2 Source: ICE BofA. Data as at 31 January 2022.



# Flexible investing will bridge the current uncertainty

Allocation into Global Unconstrained/Multisector strategies has been increasing

## Market environment



For illustrative purposes only

# This time the future path is much less clear

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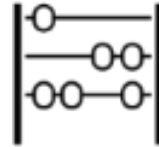
## Current challenges for the outlook



After the COVID related recovery – growth is slowing down to more normal levels



High demand after the pandemic lockdowns met lower stock-keeping and a lower capacity



Energy prices and commodity prices have been soaring, not only due to higher demand



While fiscal support should be reduced over time, it might be still around 50% from 2020/2021 elevated levels

Flexibility and diversification in the fixed income approach **will be key from here.**

# Key features of a flexible investment approach

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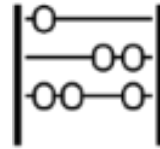
Over the last couple of years, benchmarks have changed – so you should adopt as well



Investment flexibility  
(drop the benchmark or  
retain a lot of freedom)



Relative value across  
markets more important  
than directional views



Inflation protection must  
play some part in the  
opportunity set



Active issuer selection in  
credit will be important



Don't ignore new  
opportunities, e.g. China

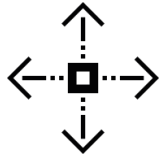
Section 4

# Flexibility in the Management of Fixed Income Portfolios – Tony Appiah

# What does flexibility mean to us

Flexibility to perform in a variety of market conditions

## Flexible fixed income investing



- Balanced approach
- Truly global
- No sector bias
- No benchmark

## Investment grade credit quality



- Emphasis on quality and liquidity
- Can be a core fixed income holding

## Active duration management

0-10  
years

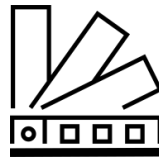
- Combination of cash bonds and derivatives
- Ability to perform in both rising and falling rate environment

## Diversification



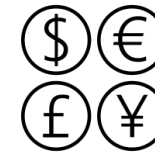
### Diversified across the globe

- Developed markets
- Emerging markets



### Diversified across asset classes

- High yield corporate bonds
- Sovereign bonds
- Securitized debt
- Emerging markets debt
- Investment grade corporate bonds

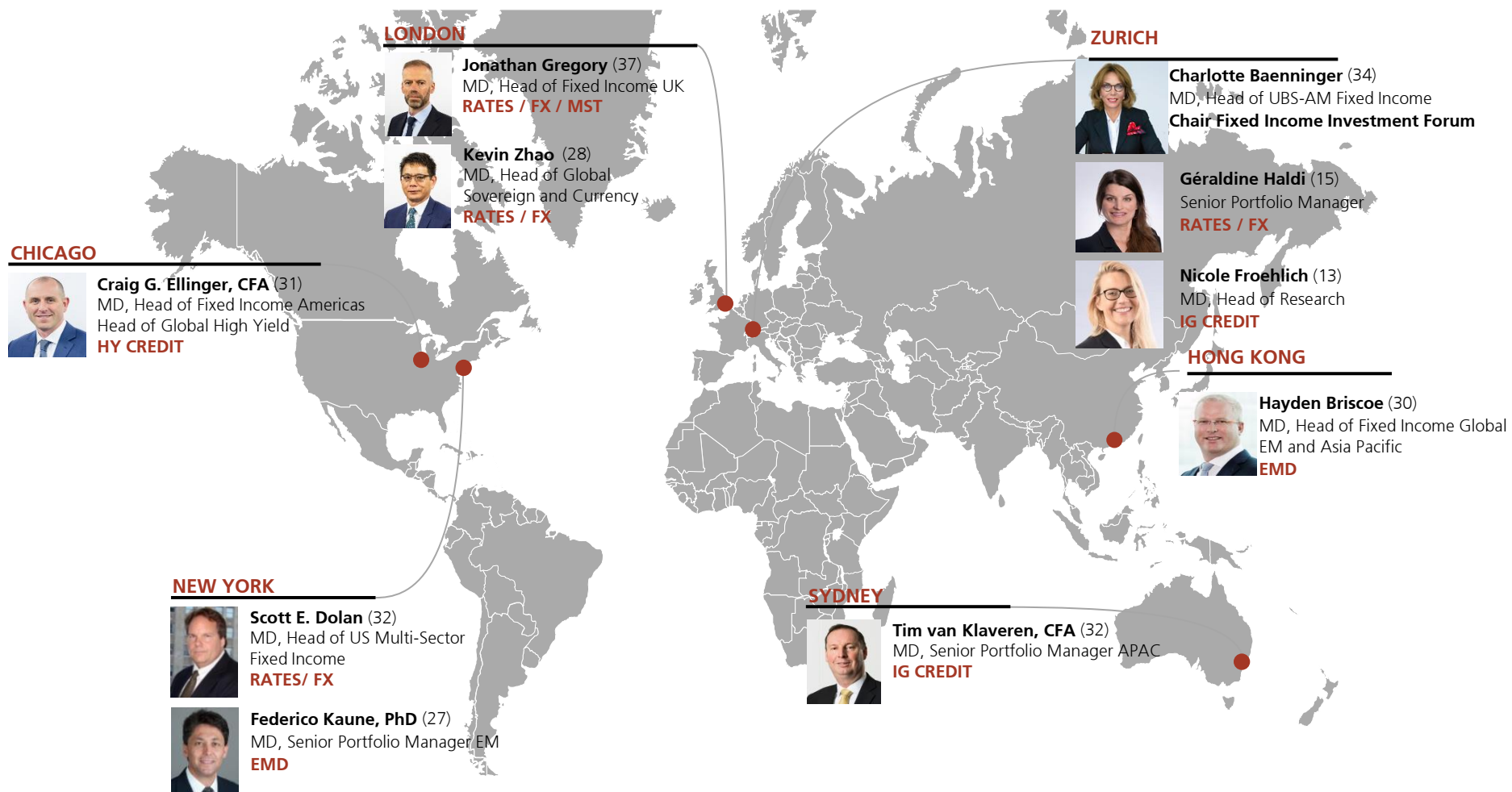


### Diversified by strategy

- Duration/curve
- Relative value
- Security selection
- Active currency

# Bringing it all together is key to success

Senior investors across the globe – FIIF team



As of January 2022  
Numbers in brackets indicate years of experience.

# It is important to have a disciplined yet dynamic process

Combining top-down views and bottom-up security selection with ongoing risk management



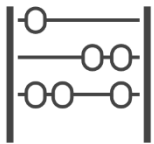
## 1. Identification of themes / long-term fundamentals

- Identify key macroeconomic drivers
- Establish global investment context (stage of economic cycle, economic data trends, inflationary pressures, policy response and market valuation)



## 2. Idea generation and filtering

- Identify opportunities in context themes / long-term fundamentals
- Thorough analysis and filtering of ideas based on risk / return profile
- Best risk-reward trades selected for closer monitoring



## 3. Trade analysis and implementation

- Use quantitative and qualitative techniques to determine entry levels, stop loss limits and trade sizing





## 4. Portfolio construction and risk management

- Construct diversified portfolios while closely monitoring all portfolio risks – identify and manage tail risk
- Conduct stress testing against extreme outcomes – strictly adhere to stop loss discipline



UBS Global Portfolios

# A robust risk budgeting process is a good starting point

	Global duration and curve	Cross country relative value	Index linked and breakeven inflation	Currency
Active risk	100 bps	100 bps	50 bps	150 bps
				
Expected average active risk <sup>1</sup> 4 – 6%				
				
Active risk	180 bps	50 bps	100 bps	100 bps
	Investment grade corporates	Securitised (ABS, MBS, Covered)	High yield	Emerging market debt

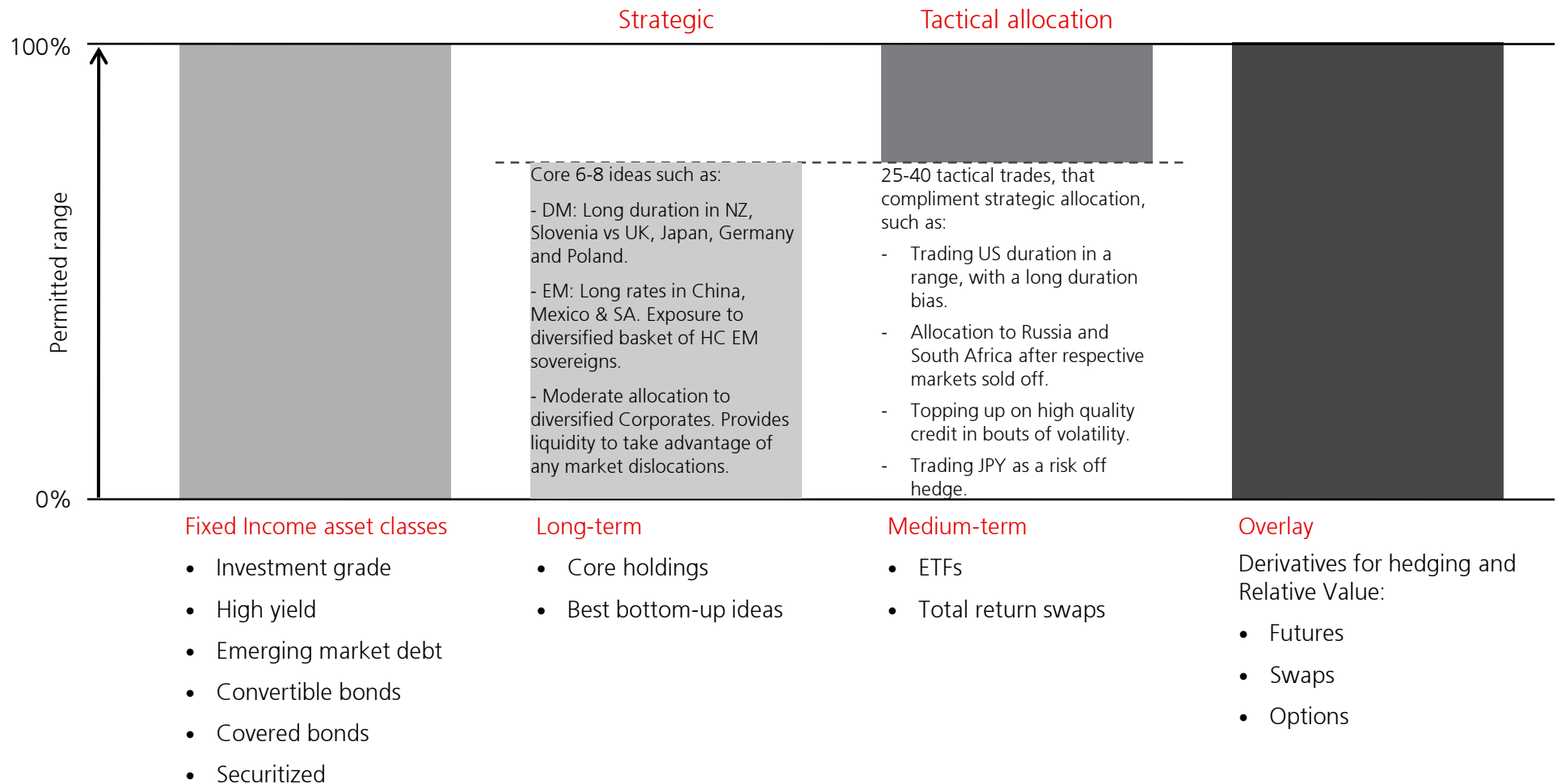
For illustrative purposes only . All metrics are expectations in the medium term and are not historical figures relating to a live portfolio within the composite

<sup>1</sup> Please note that the historical active risk is not a guide to the future. Active risk levels will vary according to market conditions and our views



# We aim to build core high quality bond portfolios with dynamic management of downside risk...

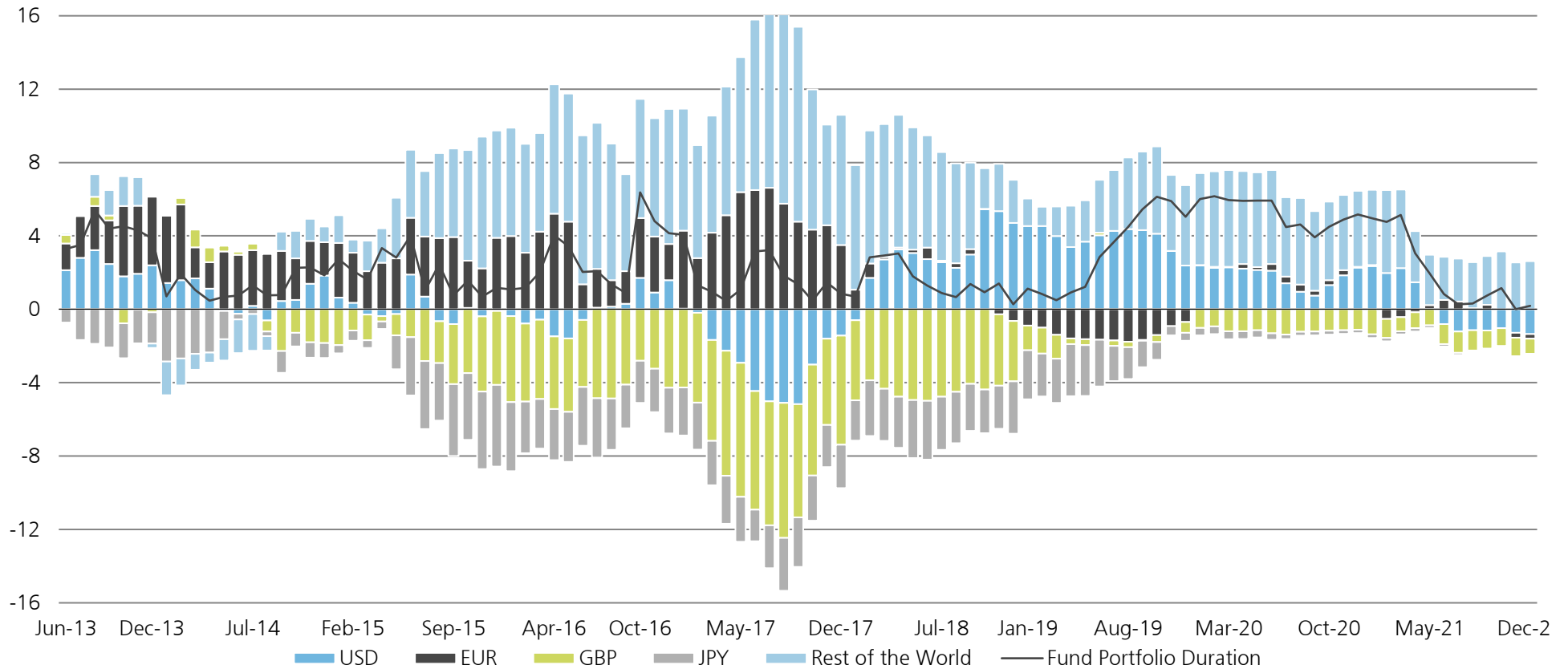
...by diversifying the portfolio using multiple independent alpha sources, blending styles and time horizons and careful risk budgeting



# Flexibility in action: Active duration management

No geographical bias – key to pursuing positive returns throughout the cycle

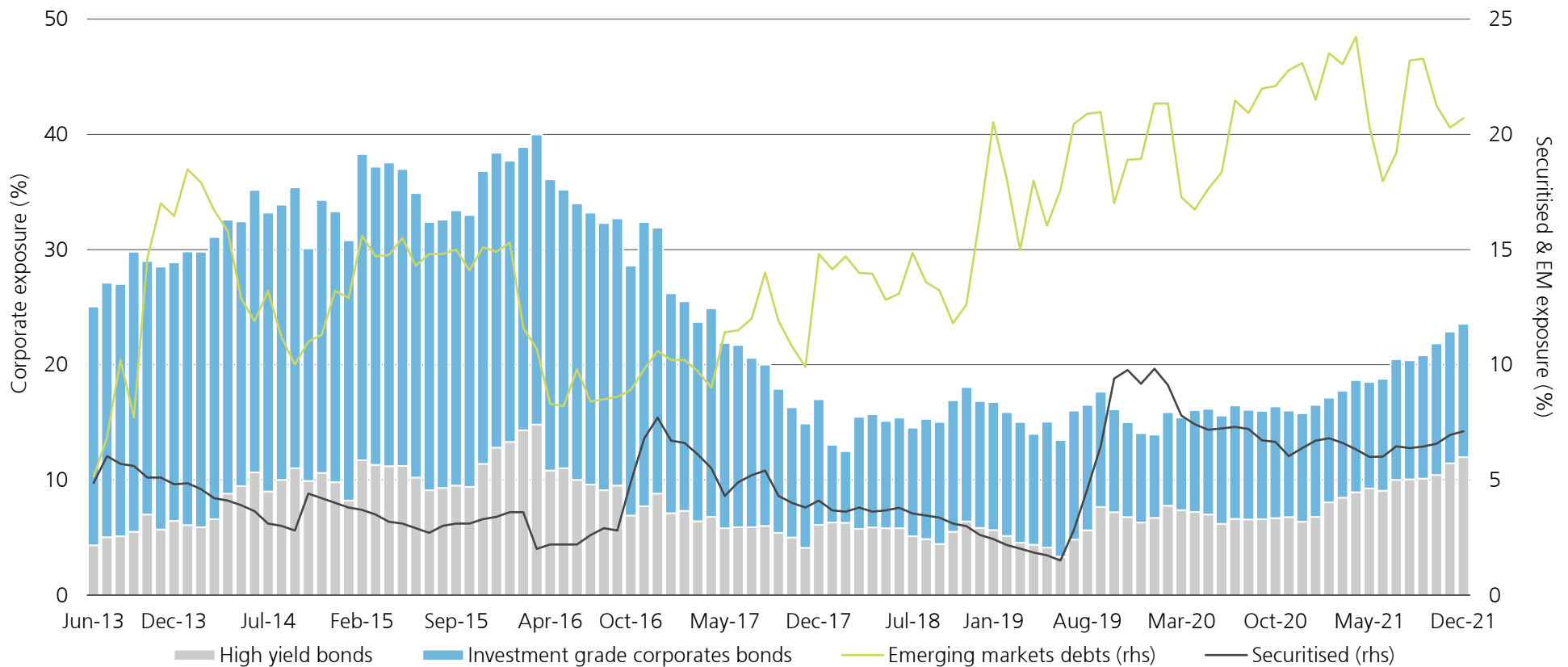
## Duration contribution by currency



Source: UBS Asset Management, as of 31 December 2021.

# Flexibility in action: Active allocation to credit sectors

Credit exposure gradually reduced as spreads tightened, with a recent increase in emerging markets (EM) exposure and securitised



Source: UBS, as of 31 December 2021.

# A consistent, repeatable approach leads to consistent results

Outperformance across range of strategies

	<b>Global Dynamic</b>	<b>Global Flexible</b>	<b>EUR Flexible</b>	<b>Global Inflation Linked</b>	<b>Global Short Term Flexible</b>
Universe/Style	Total Return	High Alpha Global Bonds	High Alpha Global Bonds	Global Inflation Linked	High Alpha Global Bonds
Typical benchmark	No benchmark	Bloomberg Barclays Global Aggregate	EUR Aggregate	Bloomberg Barclays Global Inflation Linked 1-10yrs	Bloomberg Barclays Global Aggregate 1-3
Duration range (yrs.)	0 - 10	BM +/- 3	BM +/- 3	BM +/- 3	0 - 4
Liquidity	High	High	High	High	High
Credit quality (avg. rating)	Investment grade	Investment grade	Investment grade	Investment grade	Investment grade
<b>Excess Return</b>					
1 year	-0.06% <sup>1</sup>	+0.99%	+1.03%	-1.46%	+0.73%
3 years (ann.)	+5.73% <sup>1</sup>	+2.93%	+3.99%	+1.76%	+1.48%
5 years (ann.)	+6.58% <sup>1</sup>	+2.44%	+3.18%	+1.40%	-
S.I. (ann.) <sup>2</sup>	+4.48% <sup>1</sup>	+2.27%	+1.41%	+0.66%	+1.46%

**Past performance is not a reliable indicator of future results.**

Note: The returns shown above are based on currently available information and are subject to revision.

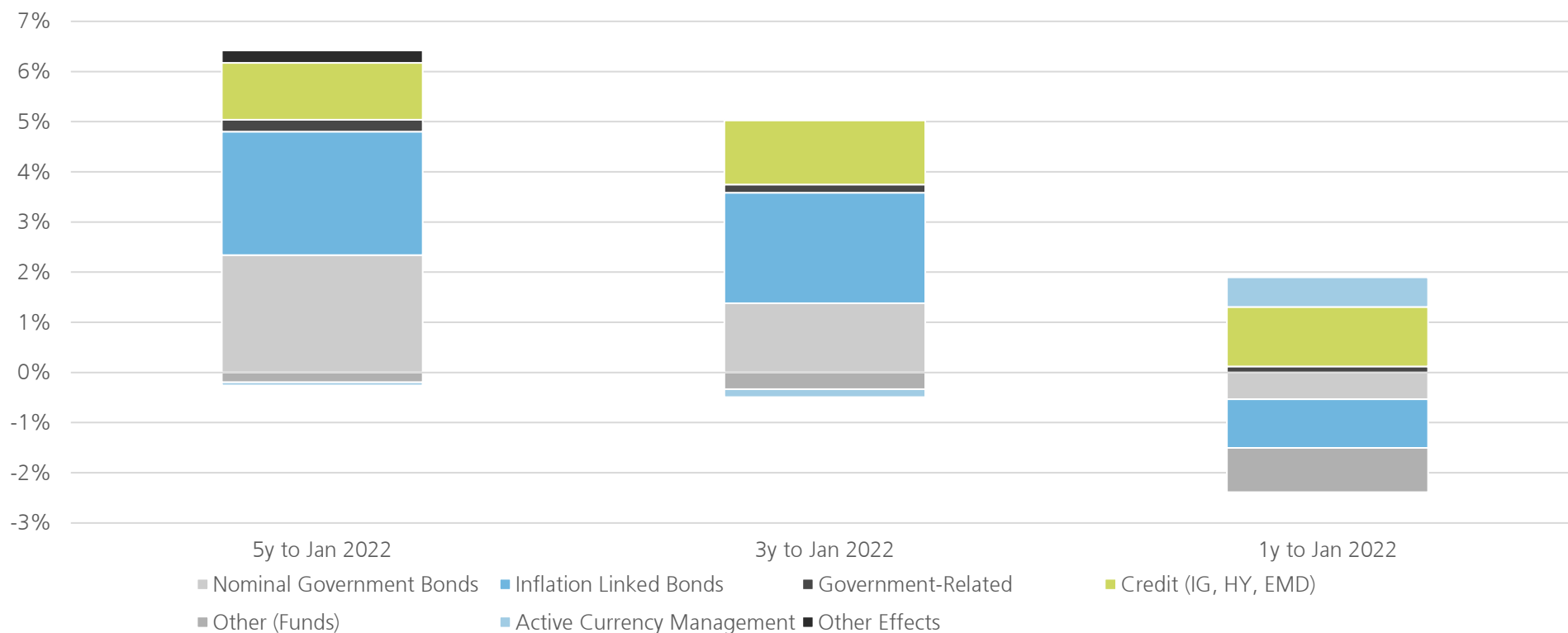
Performance figures are gross of fees as at 31 December 2021.

<sup>1</sup> Global Dynamic has no benchmark, performance is absolute returns rather than excess returns

<sup>2</sup> Inception dates: Global Dynamic 31.05.2013; Global Flexible 31.12.2015; EUR Flexible 31.12.2015; Global Inflation Linked 31.10.2009; Global Short Term Flexible 30.11.2018.

# Diversification and flexible asset allocation enables consistent performance in changing markets

## Contribution to annualised gross performance – Global Dynamic Strategy<sup>1</sup>



**Past performance is not a reliable indicator for future results.**

Source: UBS Asset Management as of 31 January 2022.

<sup>1</sup> UBS (Lux) Bond SICAV – Global Dynamic (USD) gross of fees.

<sup>2</sup> Others includes Intraday valuation discrepancies, swing pricing and unallocated.

# Thank you

Any questions?

# Massimiliano Castelli, PhD, MSC

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Head Global Strategy, Global Sovereign Markets  
Managing Director



Years of financial industry  
experience: 20

Education: University of  
Rome (Italy), PhD; University  
of London (UK), MSc

As Head of Global Strategy he analyzes the market trends affecting the investment behavior of central banks, sovereign wealth funds and other state-controlled investment institutions and work closely with the investment teams in providing investment advice and developing tailored investment solutions for this client segment

Max established himself as a global thought leader on the macroeconomic, financial and political trends in sovereign wealth management. He has often been called in by leading institutions as an expert on global economic and financial matters. Max has recently published *The New Economics of Sovereign Wealth Funds* in the Wiley Finance Series, a book providing a thorough guide to sovereign wealth funds, covering the drivers of the industry, how it operates and grows, the interest from and in Western markets and the pivotal role that sovereign wealth funds play in the world economy

In his sixteen year long international professional career, Max has been Head of governmental affairs for UBS in Europe, Middle East and Africa, EMEA Senior Economist and consultant advising governments and corporates in emerging markets on behalf of international institutions

Max holds a PhD in Economics from the University of Rome where he lectured and a Msc in Economics from the University of London. He is a member of the Executive Committee of the Asset Management Investment Council (ICMA) and a Fellow at the Centre for International Markets, Money and Regulations at Bocconi University.

Note: As at March 2021

# Jonathan Gregory

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Head of Fixed Income UK, Senior Portfolio Manager  
Managing Director



Years of investment  
industry experience: 37

Jonathan Gregory is Head of Fixed Income in the UK and a senior portfolio manager in the Fixed Income team. He is the lead portfolio manager on all Global Aggregate, Global Credit and UK Fixed Income strategies. He is responsible for all investment decisions taken for and implemented in these strategies.

Jonathan is a member of the Fixed Income Investment Forum.

Jonathan joined UBS Asset Management in 2010, having previously been Head of Credit and Portfolio Manager at Western Asset Management between 1998 and 2009. In that role he was responsible for managing Global, Euro and Sterling corporate bond portfolios and had significant involvement in the credit allocation for Global, Euro and UK aggregate portfolios.

Prior to his 11 years at Western, Jonathan worked for NatWest Markets as a credit rating analyst and in corporate banking. He began his career in the mortgage industry as a loan officer and underwriter.

Note: As at March 2021



# Uta Fehm, DVFA/CEFA

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Senior FI Strategist  
Managing Director



Years of investment  
industry experience: 29

Education: Technical  
University of Dresden  
(Germany), Dipl.-Ing.-Oek.

Uta Fehm is responsible for analysis and management of investments in Fixed Income portfolios. Based on a long-term experience as a Portfolio Manager in Fixed Income, Uta is delivering investment views and strategies to institutional, wealth management and wholesale clients globally, with a special focus on EM and Asian debt as well as on Global Debt strategies. In that role, she also advises clients in Fixed Income strategies, while representing the FI Portfolio Management team.

Prior to joining the firm, Uta worked at Deutsche Asset Management first for 3 years in the Client Relation department. Later on, she moved to the Fixed Income Portfolio Management team, co-building EM debt business and managing portfolios for institutional clients. She has investment industry experience since 1991 and had a special focus on managing emerging markets debt portfolios for more than 20 years. Uta holds a Master's degree in Economics from the Technical University of Dresden (Germany).

Note: As at March 2021

# Tony Appiah, CFA

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Fixed Income Specialist  
Executive Director



Years of investment  
industry experience: 16

Education: Colgate  
University (US), BA

Tony is a Fixed Income Specialist and has been with UBS since August 2015. In his role, Tony liaises between the firm's fixed income investment teams and our various distribution channels. His responsibilities include developing, managing and servicing client relationships. He also works directly with portfolio management teams across a number of UBS Asset Management fixed income strategies.

Prior to joining UBS AM in March 2020, Tony was a Senior Research Analyst within the Investment Management Research team at UBS Wealth Management Americas. In this role, Tony was responsible for manager due diligence across taxable fixed income strategies including global and emerging markets debt. Prior to UBS, Tony led fixed income manager research at Brown Brothers Harriman Private Bank. Tony began his career with Cleabrook Global Advisors as a research analyst.

Note: As at March 2022

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