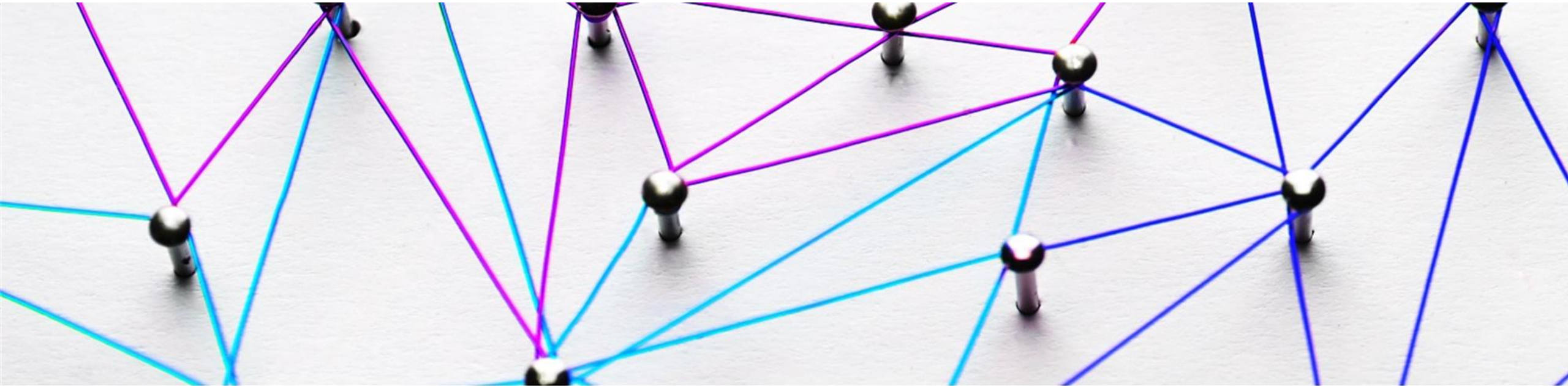


18th Funds Forum - Poland



The role of institutional investors in building a mature capital market

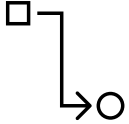


17 June 2024

Pat Lardner
Chief Executive

Who we are....

Background



- Founded in 1991
- Member funded trade association

Mission



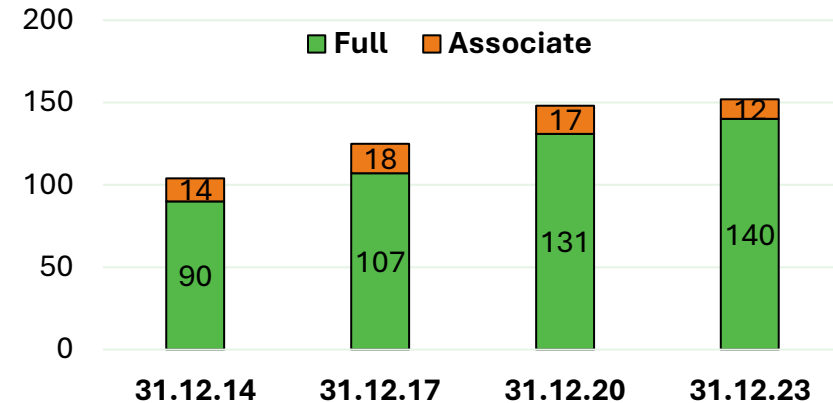
We are the voice of the Funds and Asset Management industry in Ireland.

Vision

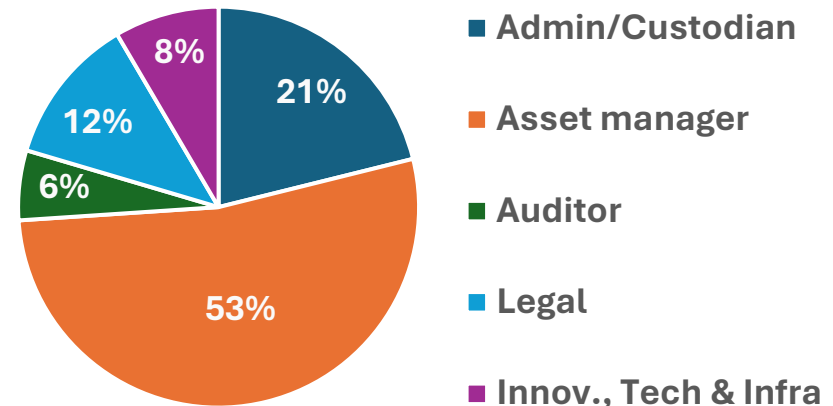


Ireland will be the premier location to enable and support global investing through its reputation for trust, capability and innovation.

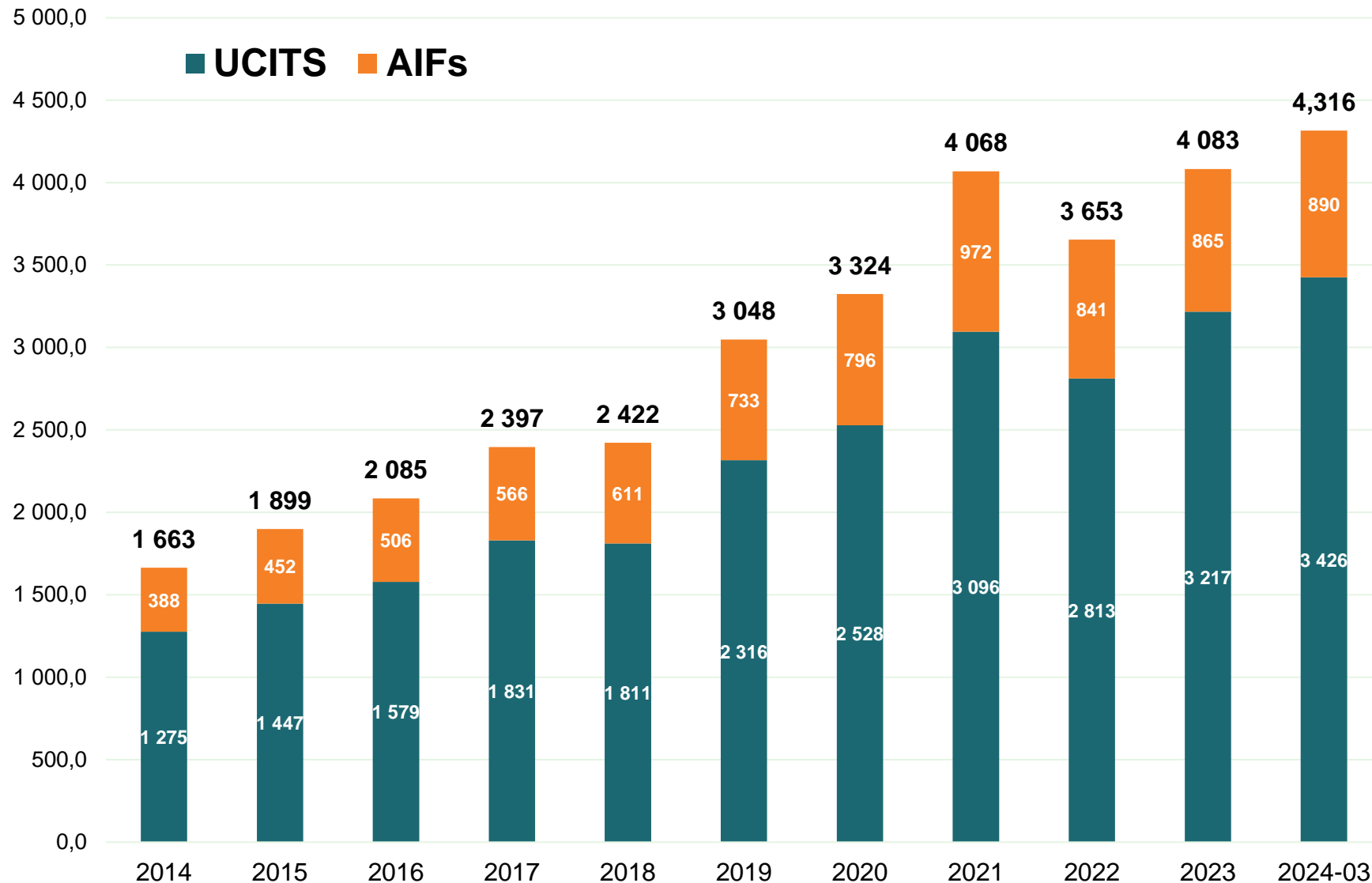
Number of Members: 152



Profile of Full Members

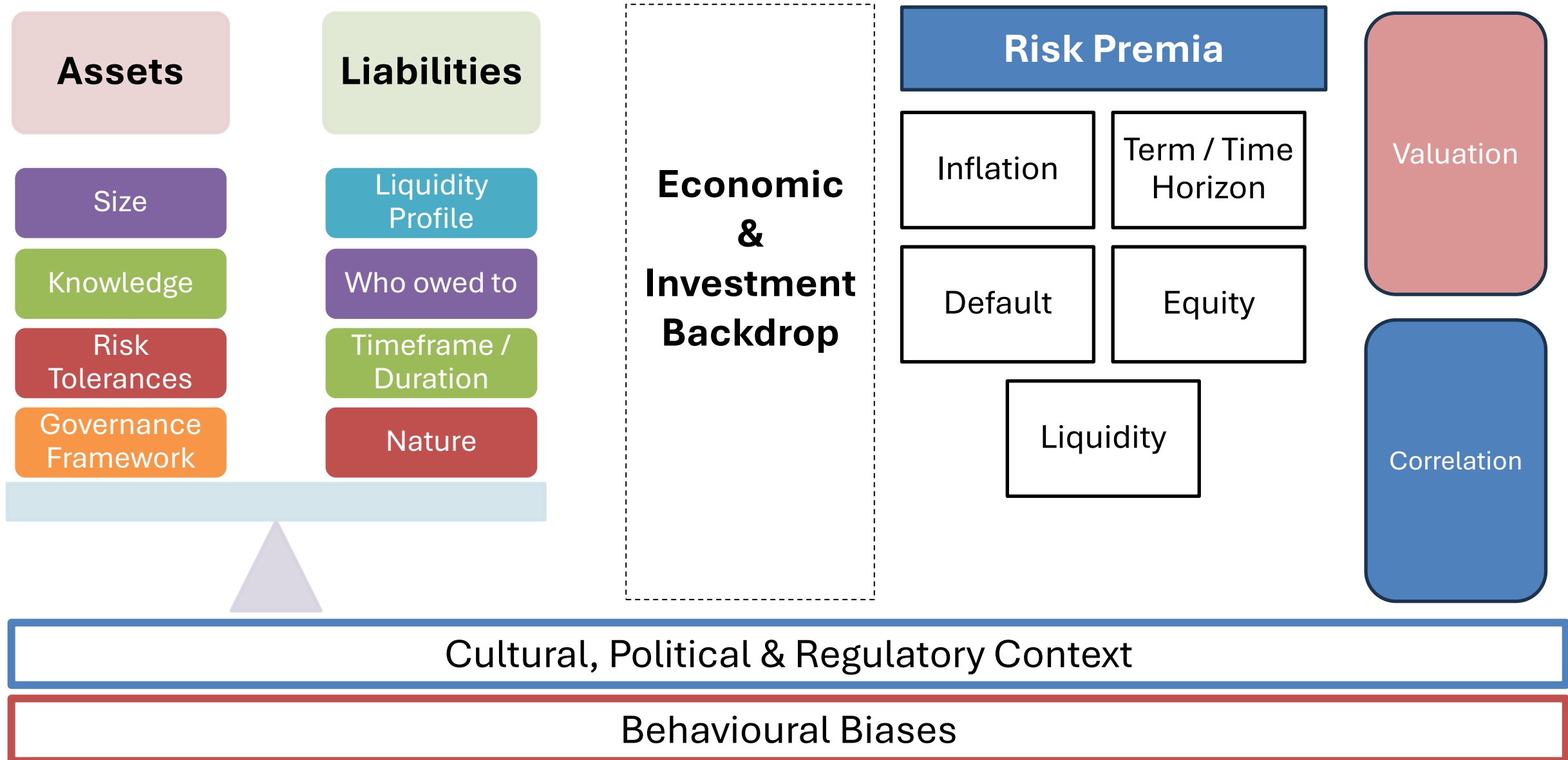


Irish domiciled investment fund assets (€ billion)



Source: Central Bank of Ireland, Net Assets

Unpicking the question is not straightforward



Changing Environment : Inflation

Figure 1.1. Global Inflation Falling as Output Grows

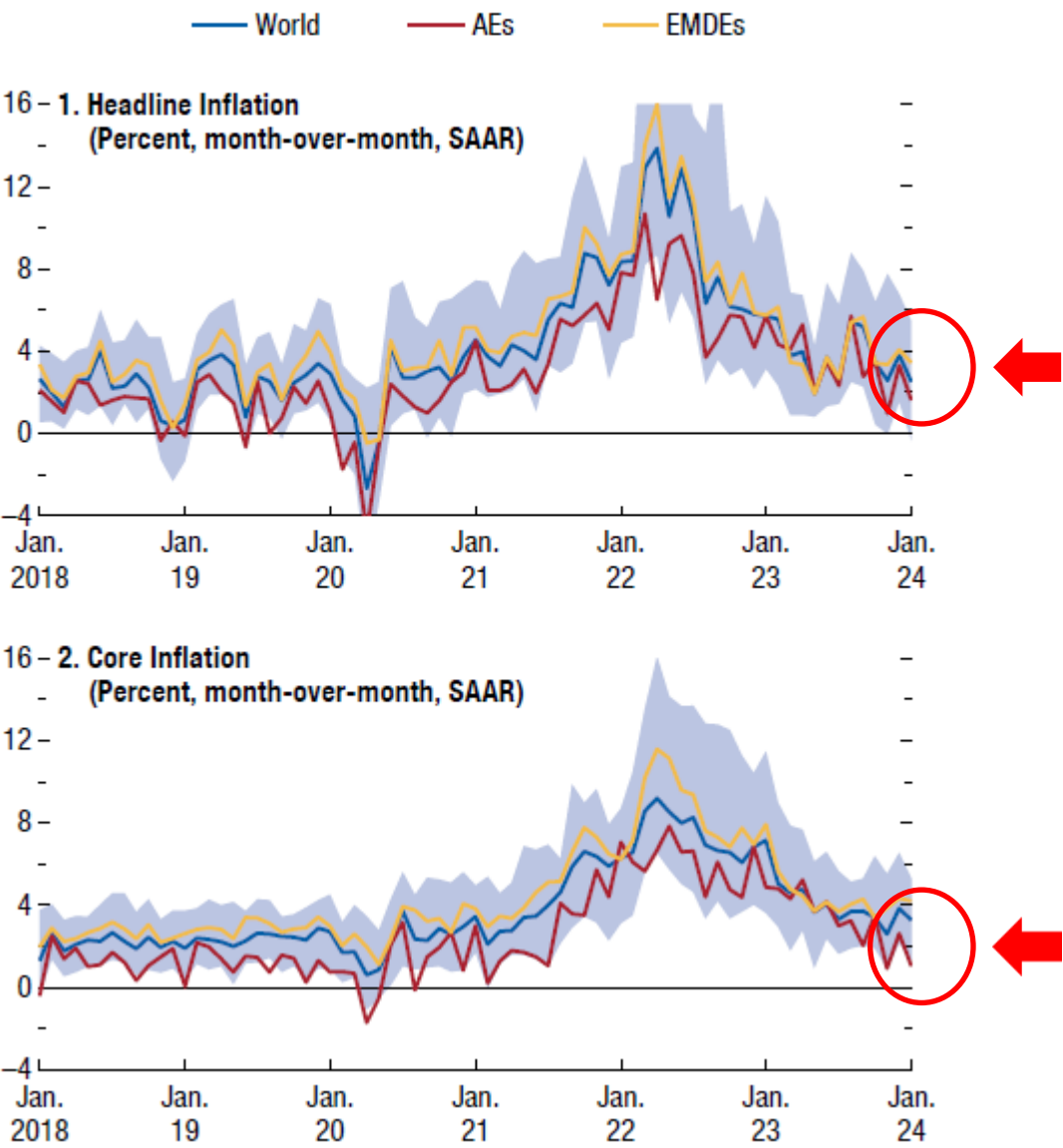
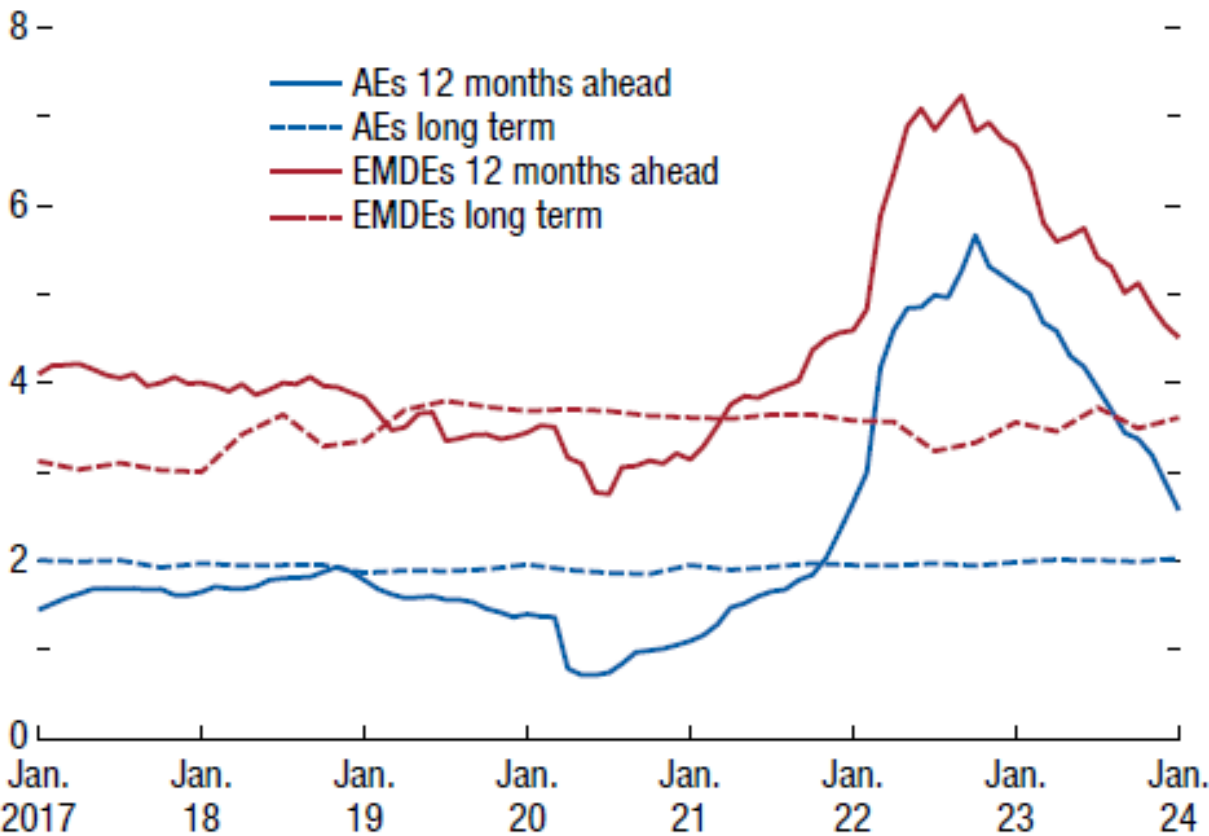


Figure 1.6. Near-Term Inflation Expectations Falling (Percent)



Source: IMF, World Economic Outlook

Changing Environment : Interest Rates

Figure 1.9. Monetary Tightening: Nominal and Real

(Percent)

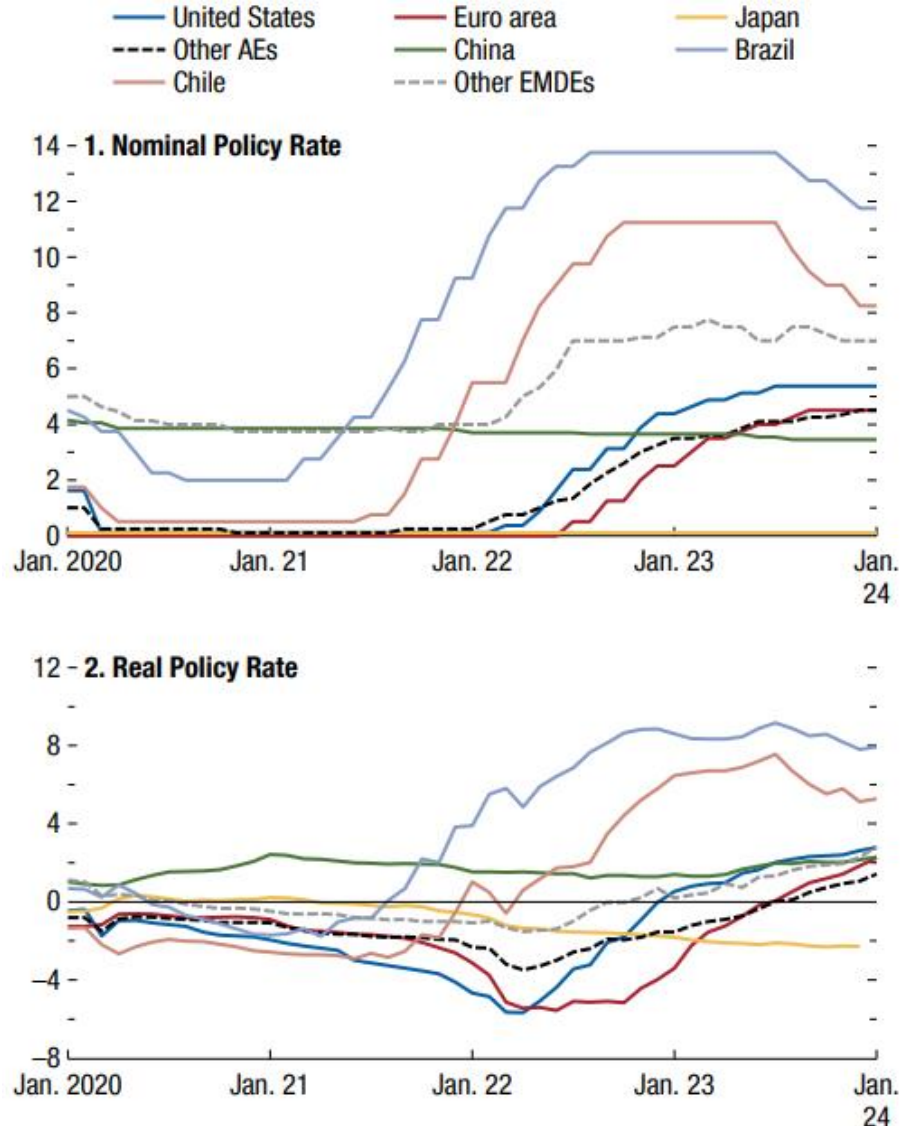
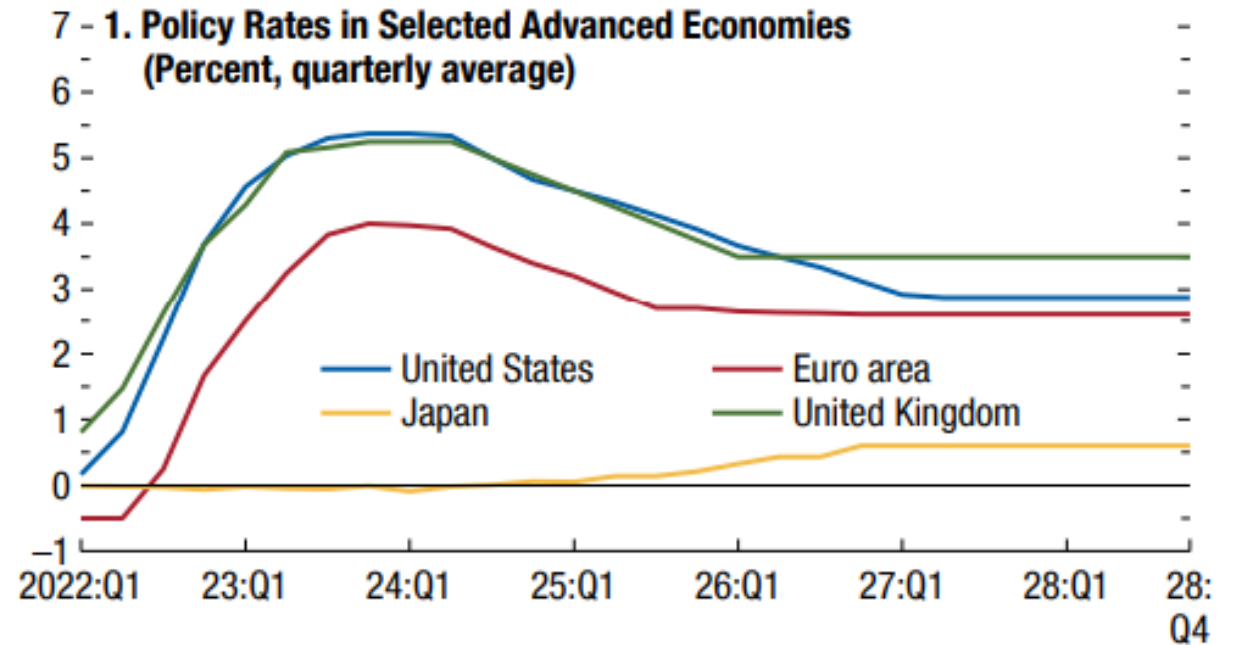
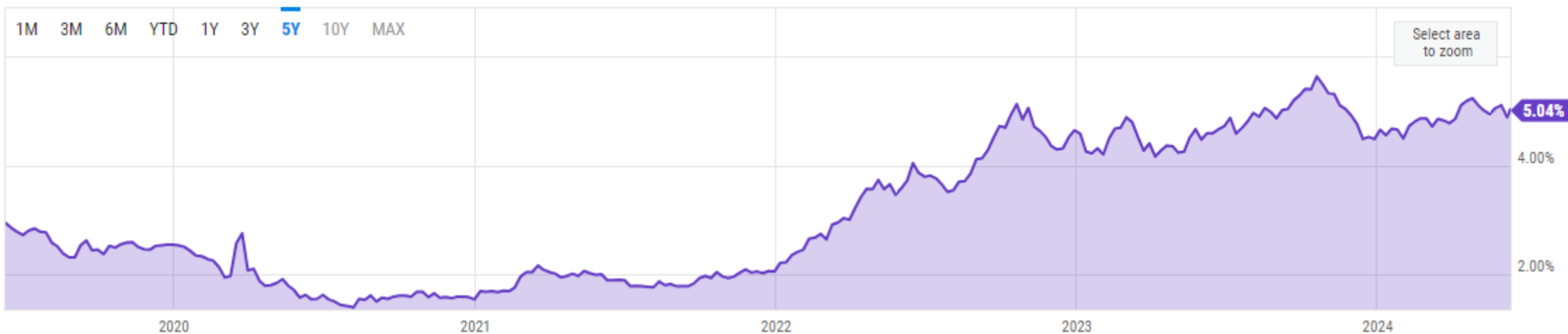


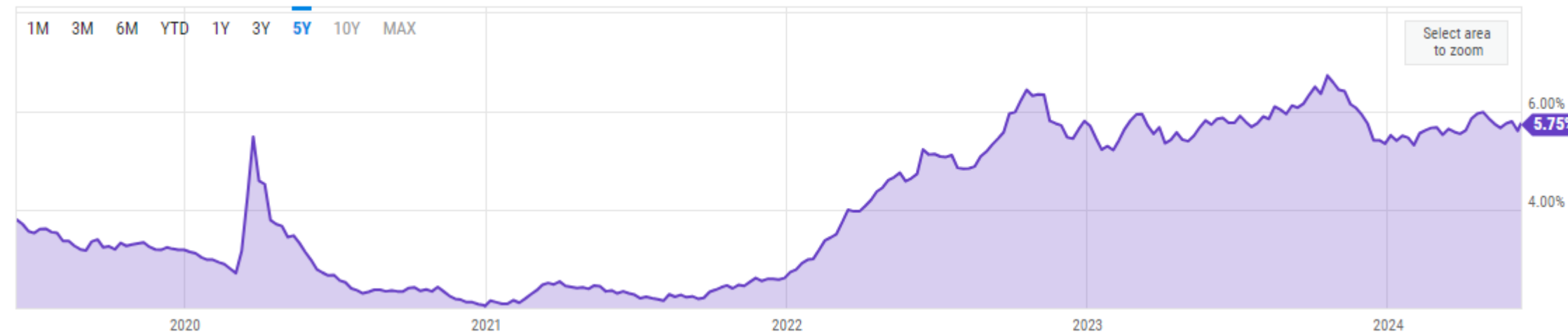
Figure 1.13. Monetary and Fiscal Policy Projections



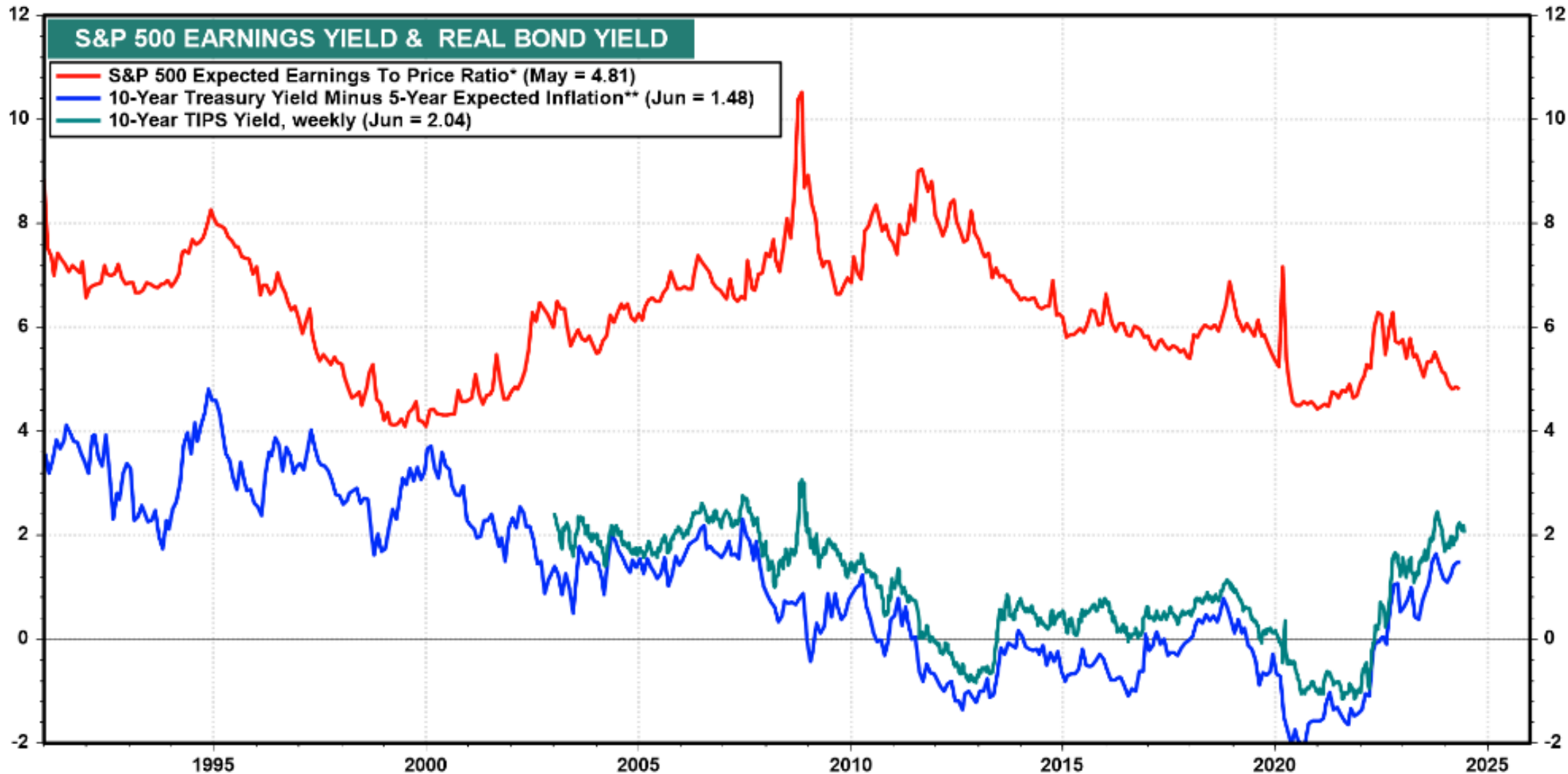
US Corporate AAA Effective Yield



US Corporate BBB Effective Yield



Risk Premia: What is this picture telling investors?

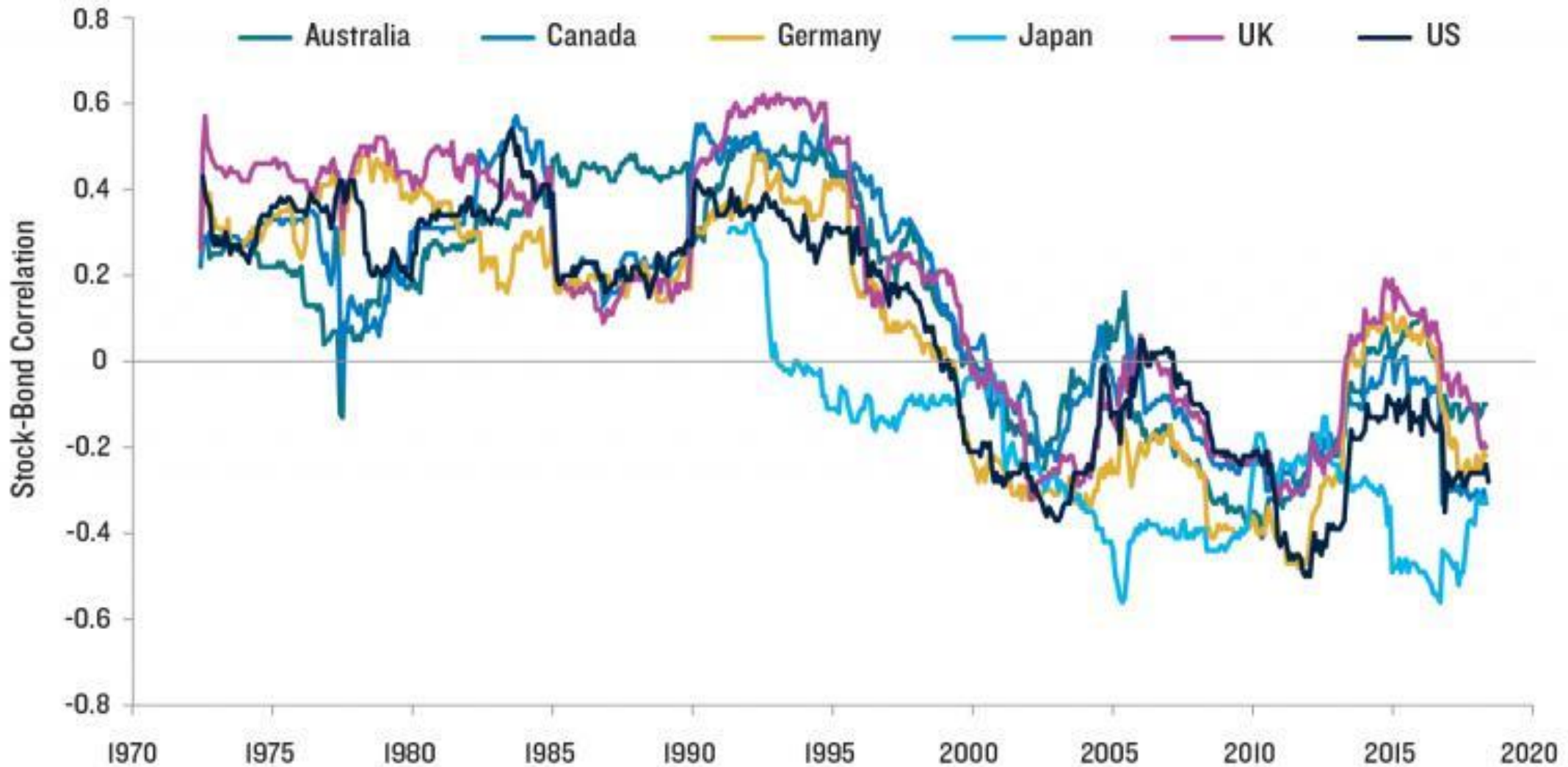


Source: LSEG Datastream and © Yardeni Research.

* Earnings-price ratio is based on the I/B/E/S consensus estimates of earnings over the coming 12 months.

** Consumer sentiment survey.

Stock vs Bond Correlations – a changing picture?



Note: MSCI Country Equity Local Currency Total Return Indices; Country Benchmark Long-Term Sovereign Bond Local Currency Total Return Indices; 1m returns; 5y, centered, rolling correlation; Australia, Canada, Germany, Japan, UK, US; 1970-2021 (varies by country). Source: DataStream, Federal Reserve Bank of St. Louis, FRED, MSCI and PGIM IAS. For illustrative purposes only.

Correlations : which is the anomaly?

5-year rolling equity-bond correlation



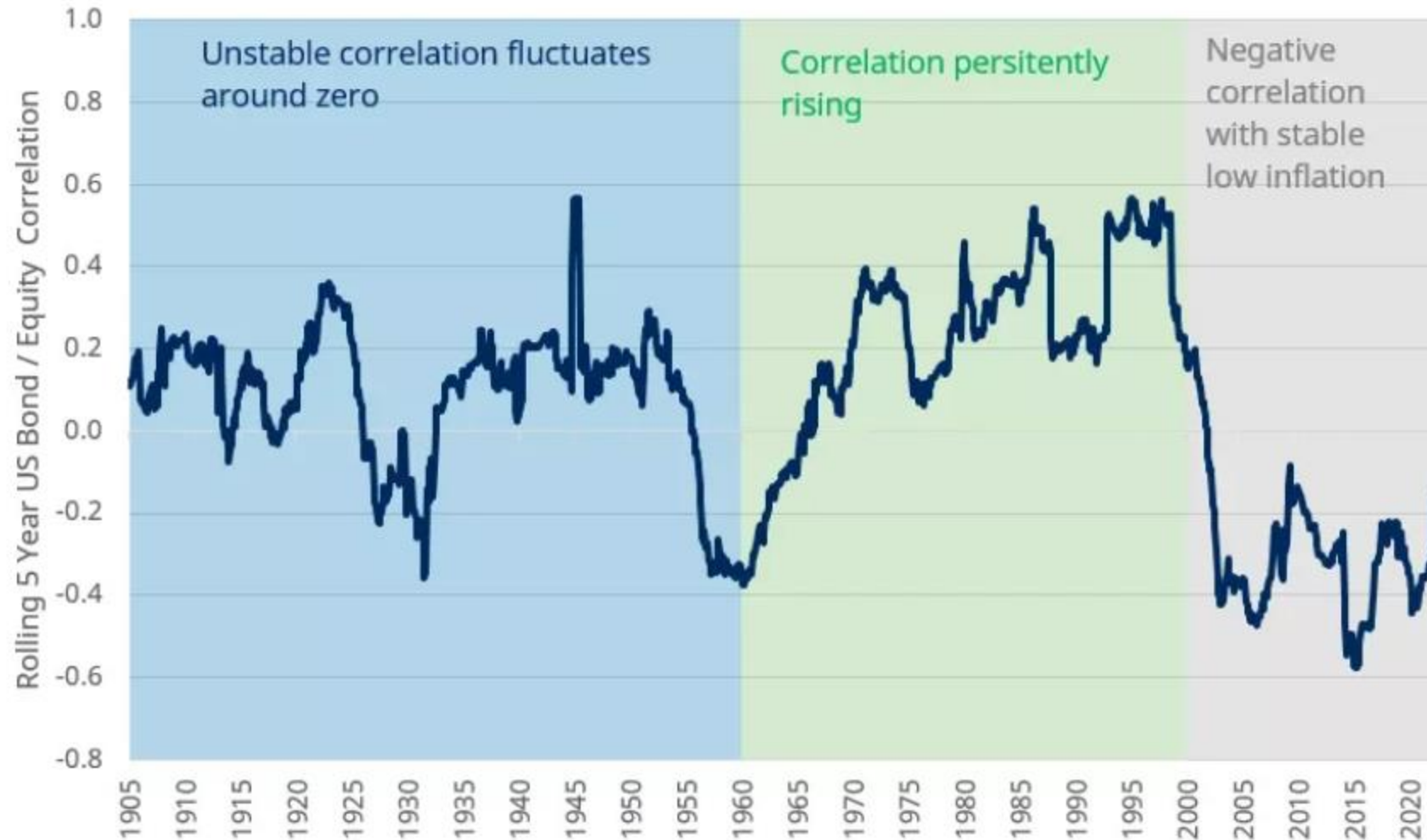
Past performance is not a guide to future performance and may not be repeated.

Source: CFA Institute, Datastream Refinitiv and Schroders. Notes: equity and bond returns are based on US large-cap equities and 10-year US Treasuries. Data to 31 December 2021. 603943

Correlations : which is the anomaly?

Chart 1: Equity/Bond correlation has mostly been positive over 100 years

Correlation regimes vary over time



Source: Schroders, Refinitiv, Morningstar and Robert Shiller dataset to 30 March 2023; rolling 5 year correlation between US Bonds and US Equities

Other comparisons to the past

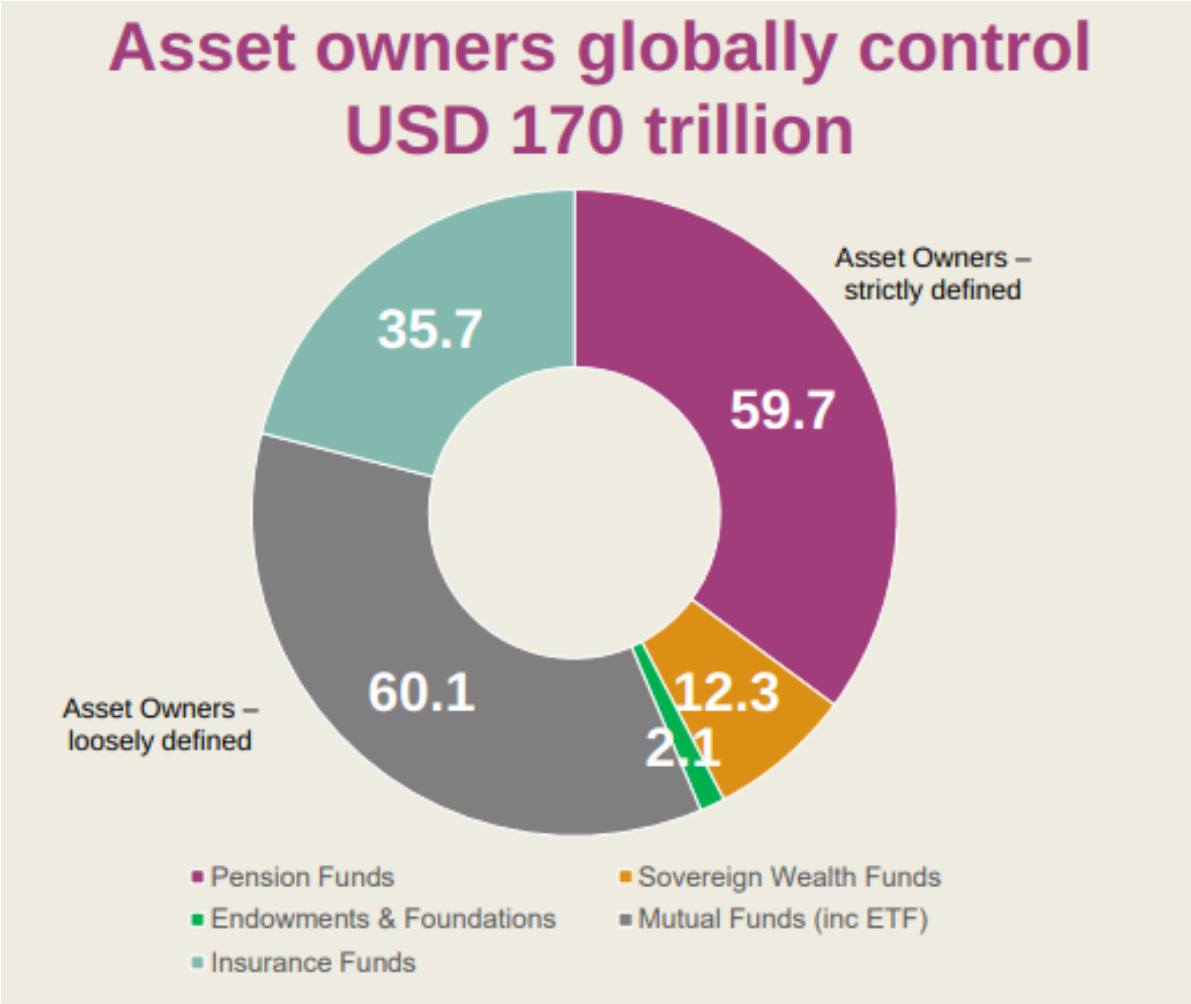
Challenges

- War / Armed Conflict and potential impact on energy and other supply chains
- Fiscal positions of most governments
- De-coupling
- Sustainability Crisis
 - Climate
 - Biodiversity

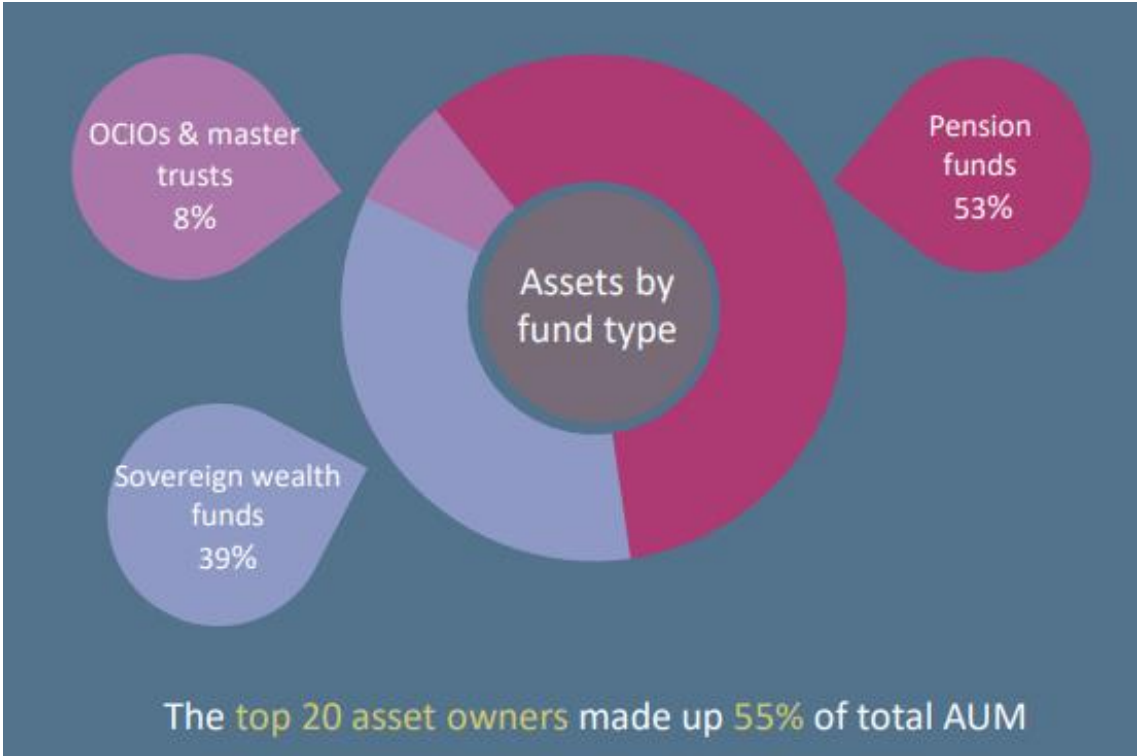
Opportunities

- Stronger Investment Governance
- Availability and speed of data transmission
- Wider and deeper range of accessible investment opportunities
- Tools around portfolio construction and analysis more developed
- Better renewable technologies

Who are the institutional investors?



2024



November 2023

Source: Thinking Ahead Institute

Some traditional models and approaches being used

Norway Model

- invests almost exclusively in publicly traded securities
- follows a diversified global fund strategy to perform well in different economic and market conditions with a low tracking error.
- rigorous asset allocation that allows little deviation from the policy portfolio, which is determined by the government based on long-term objectives and risk tolerance.
- a responsible and sustainable investor that considers the ESG factors of the companies, sectors, and economies it invests in. It also engages with its investees.

Endowment Model

- invests in a wide range of asset classes, including alternative or illiquid assets
- aims to achieve high returns with low volatility and low correlation with the market by exploiting the long-term horizon and the diversification benefits of these assets
- disciplined asset allocation that is determined by the strategic objectives and risk tolerance of the institution, and allows little deviation from the policy portfolio.
- a responsible and sustainable investor
- requires a large amount of capital, access to high-quality managers, and a long-term perspective.

Canada Model

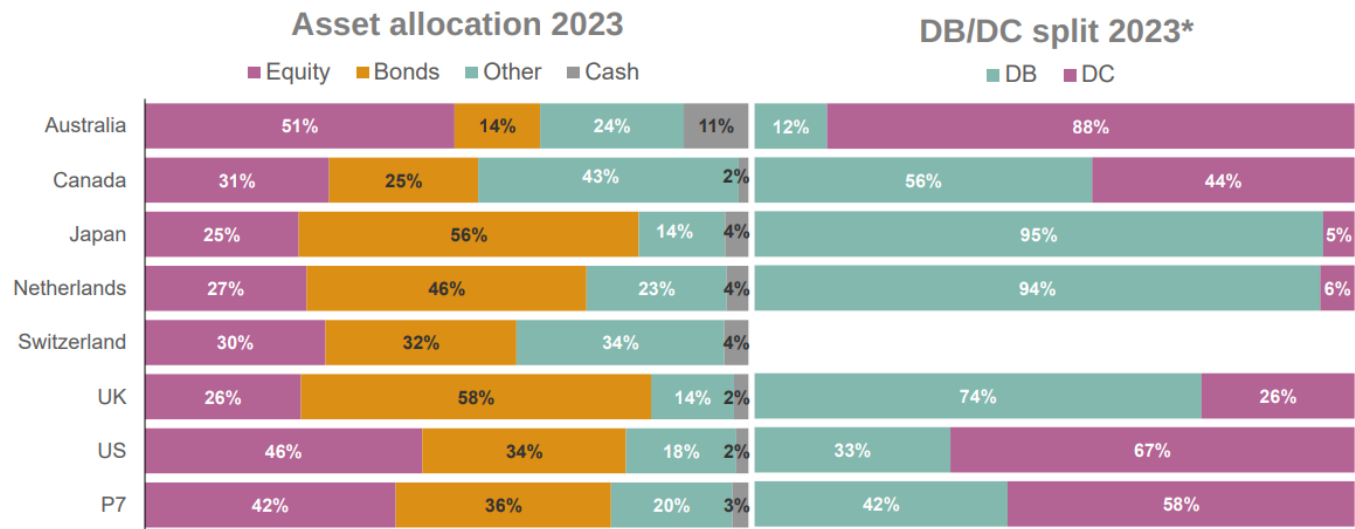
- invests in a wide range of asset classes, including alternative or illiquid assets, such as infrastructure, real estate, private equity, and natural resources.
- similar to endowment model - aims to achieve high returns / low volatility / low correlation / exploiting the long-term horizon
- has a large and skilled internal team that manages most of the assets in-house, reducing costs and increasing control.
- responsible and sustainable investor that considers the environmental, social, and governance (ESG) factors of the companies, sectors, and economies it invests in.
- may not be easy to replicate, as it requires a large amount of capital, access to high-quality deals, and a strong governance structure.

LDI Model

- focuses on matching the assets of a portfolio with the current and future liabilities of an investor. Goal is to generate enough cash flow to pay for the obligations.
- used by pension funds / insurance companies to reduce risk of not being able to meet liabilities due to market, interest rates or inflation.
- typically involves investing in fixed-income securities, that have similar duration and cash flow characteristics as the liabilities but may also use derivatives, such as swaps or options, to further adjust the risk and return profile of the portfolio.

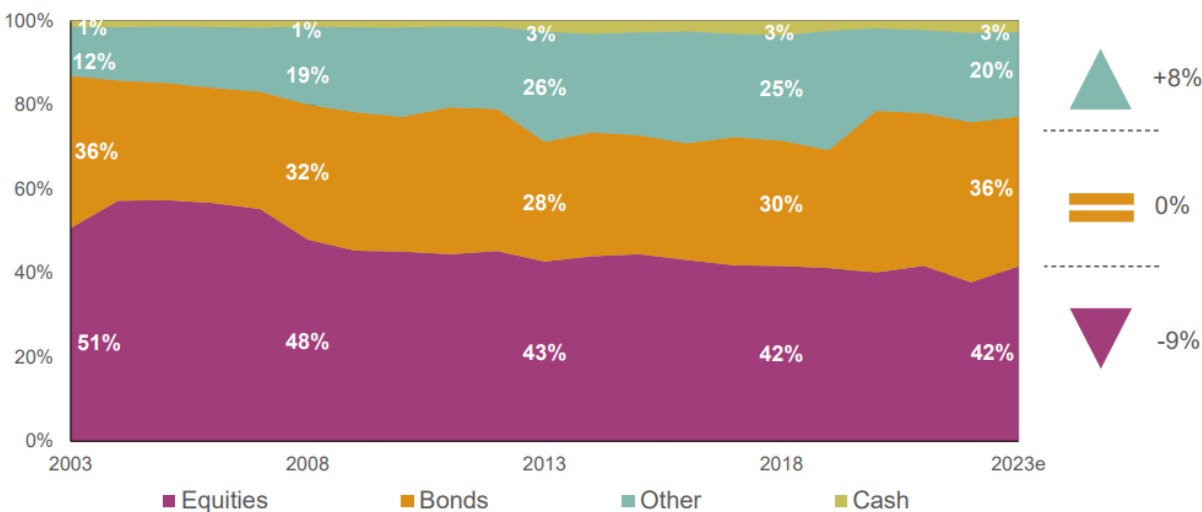
Pension Funds – some high level data

Asset allocation and DB/DC split



Numbers may not add up to 100% due to rounding

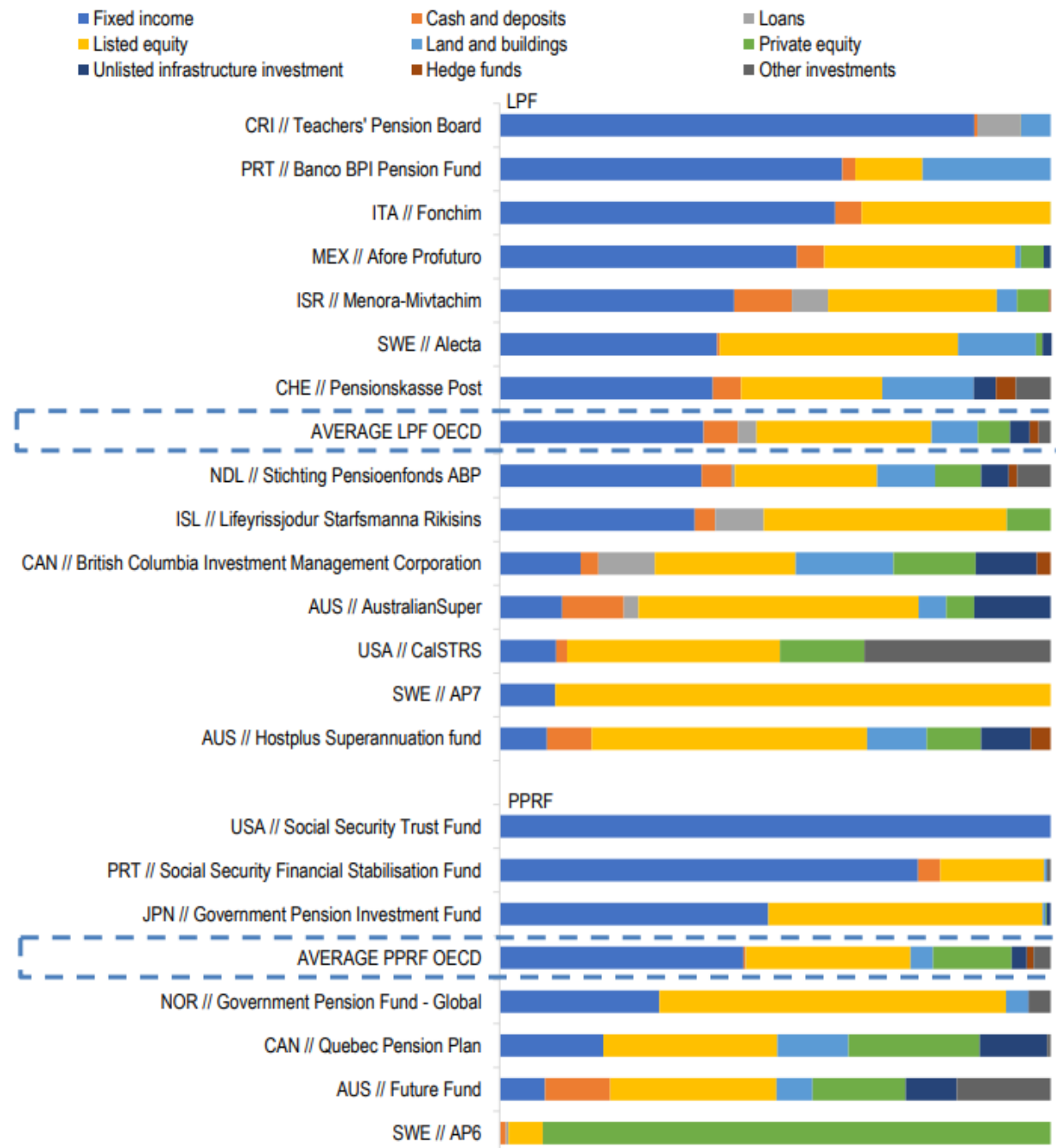
Aggregate P7 asset allocation from 2003 to 2023



Source: Thinking Ahead Institute

Pension Funds

- Data availability on Asset Allocation poor across wide range of countries
- Highest exposures to interest rates and equity market beta
- Significant cultural differences in how funds are invested linked to:
 - Market structure
 - Benefit Type
 - Sponsor

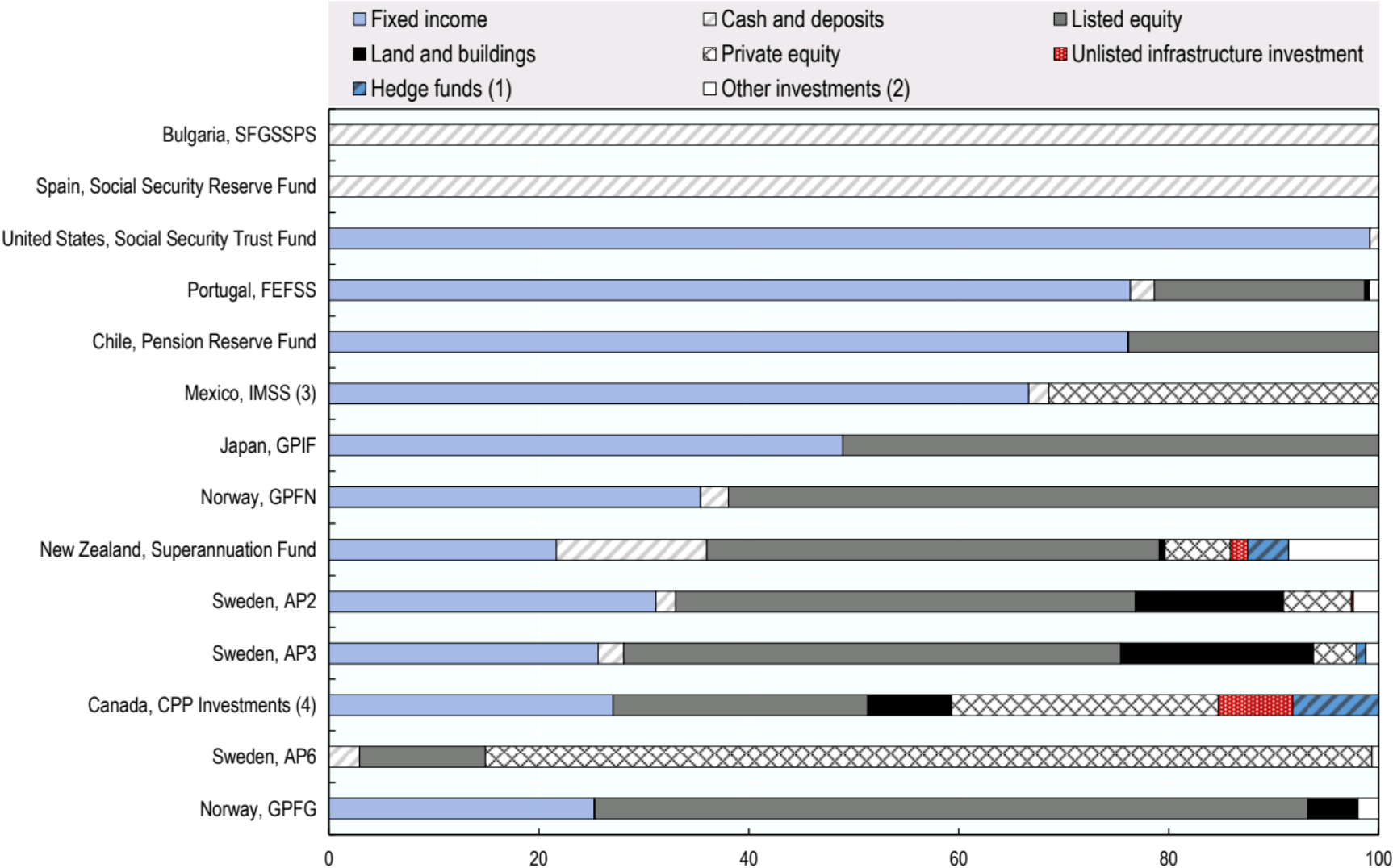


Source: Asset allocation of selected LPFs and PPRFs based in OECD countries, 2022

Public Pension Reserve Funds

Figure 6. Asset allocation of selected PPRFs – actual 2020

As a percentage of total investment



- *Not every DB plan will move to buyout – what does a “run-off” fund look like?*

Defined Benefit

- Improved Funding Position
- De-risking / Buy-outs
- UK Gilts & Liquidity Focus

Defined Contribution

- Main focus is on cost
- Want wider asset access
- Seek Equity β diversifiers
- Less focus on decumulation

- *90% of UK DC in growth phase strategies*

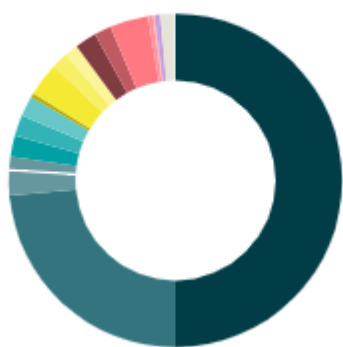
Nest (UK) and the role of funds

Background / Approach

- National Employment Savings Trust is a defined contribution workplace pensions scheme set up to facilitate auto-enrolment. It offers age-based options, static options or asset class options
- The options use a range of underlying funds

Nest 2040 Retirement Fund (default strategy – growth phase)

Asset allocation



Climate aware global developed equities - GBP ...	47.1%
Climate aware global emerging market equities	4.9%
Private equity	2.6%
Emerging market debt	4.1%
Global high yield bonds	4.1%
Private credit	4.0%
Property income	0.8%
Hybrid property (UK direct & REITs)	6.5%
Infrastructure equity	3.1%
Infrastructure equity - renewables	2.7%
Sterling corporate bonds	4.2%
Short duration UK investment grade bonds	3.3%
Global investment grade bonds	7.4%
Short duration investment grade bonds	1.0%
Short duration gilts	0.4%
Commodities	1.1%
Low risk sterling liquidity	2.8%
Derivatives - Collateral Account	0.2%

Note: all figures are rounded and therefore may not total 100%.

Overall exposure to underlying funds

Asset class*	Investment Approach
Climate aware global developed equities - GBP Hedged	Systematic
Climate aware global emerging market equities	Systematic
Commodities	Active
Derivatives	Active
Direct Property Income	Active
Emerging market debt	Active
Ethical global equities	Active
Ethical sterling corporate bonds	Active
Fixed interest gilts	Active
Fixed interest gilts	Passive
Fixed interest gilts	Passive
Global high yield bonds	Active
Global investment grade bonds	Active
Global listed property	Passive
Global short duration investment grade bonds	Active

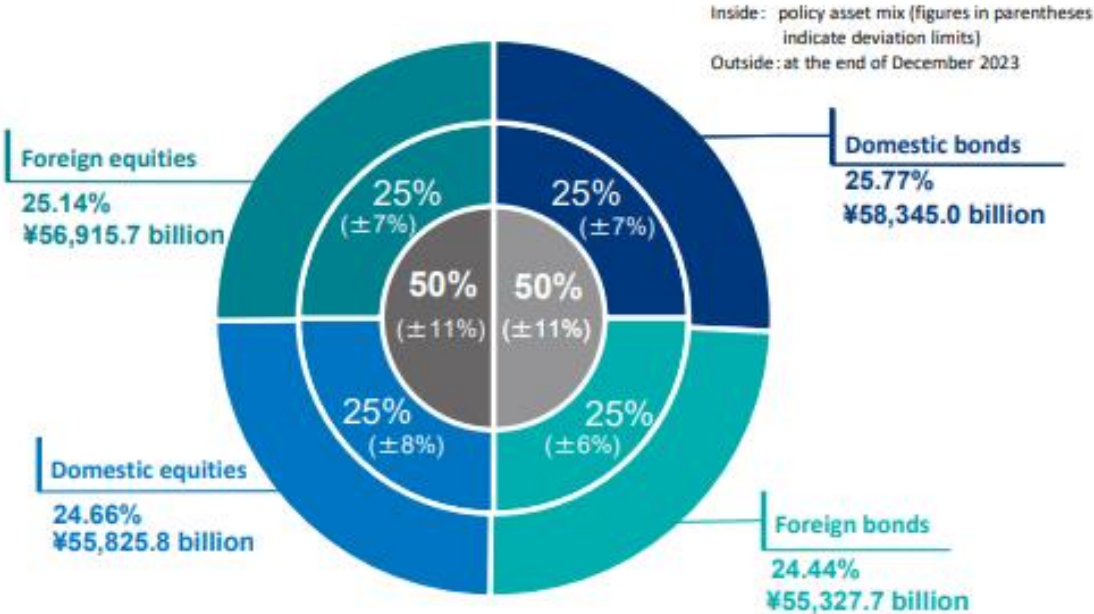
Asset class*	Investment Approach
Hybrid property (UK direct & REITs)	Active
Infrastructure equity	Active
Infrastructure equity	Active
Infrastructure equity - renewables	Active
Infrastructure equity - renewables	Active
Low-risk sterling liquidity	Active
Low-risk sterling liquidity (ethical)	Active
Private credit	Active
Private credit	Active
Private credit	Active
Private equity	Active
Private equity	Active
Sharia compliant equities	Passive
Sterling corporate bonds	Active
Sterling short duration investment grade bonds	Active
Sterling short duration investment grade bonds	Active
UK direct property	Active

* A proportion of the foreign currency exposure is hedged in our developed market credit funds, global developed equity fund and our private market funds

Pension Reserves Managed by GPIF and the Pension Special Account - End of December 2023

Background / Approach

- Manages Japan’s pension reserve fund.
- Goal is to contribute to the stability of the national pension scheme by securing investment returns with minimal risk and a long-term focus.
- Largest public fund investor in Japan and amongst largest globally.
- Modest allocations to alternatives
- Includes collaboration with Development Bank of Japan and Intl. Finance Corporation for emerging market PE.
- Proposing concept of “Public Market Equivalent” to measure PE fund’s performance relative to the listed market.



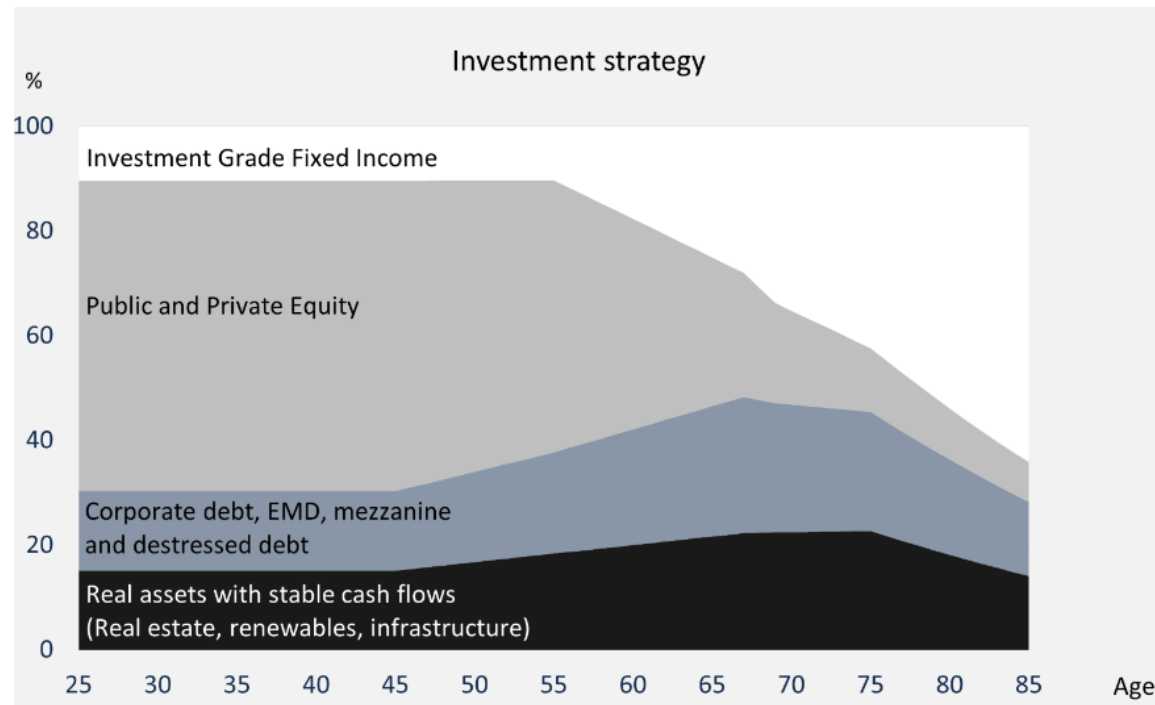
	Market value (¥ billion)	Allocation of Pension Reserve (1)	Allocation of Pension Reserve (2)
Domestic bonds	58,345.0	25.77%	50.21%
Foreign bonds	55,327.7	24.44%	
Domestic equities	55,825.8	24.66%	49.79%
Foreign equities	56,915.7	25.14%	
Total	226,414.2	100.00%	100.00%

The percentage of the alternative investments: 1.53%
(within maximum 5% of total portfolio)

Pension Danmark

Background / Approach

- Multi-employer scheme
- Supplements public benefits
- Lifecycle products for various age cohorts
- No guaranteed minimum yields



Assets (in percent)	Members under the age of 46	Members at the age of 67
Global Equities	47,8	18,6
High Yield Bonds	4,50	9,8
Senior Bank Debt	3,5	8,3
Emerging Market Debt	4,4	5,0
Equities and Credit in Total	60,2	41,7
Private Equity	11,6	5,2
Mezzanine and Distressed Debt	2,8	2,8
Real Estate	8,3	11,4
Infrastructure and renewable Assets	6,8	10,9
Alternatives in Total	29,9	30,3
European Government and Mortgage Bonds	7,5	20,5
Index Linked Bonds	1,8	1,8
Investment Grade Corporate Bonds	1,0	5,7
Investment Grade in Total	10,3	28
Total	100	100

Australian Super – categorising growth and defensive assets

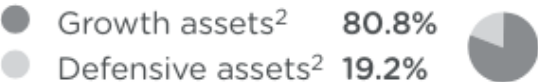


High Growth



- Australian shares 29.0%
- International shares 37.8%
- Private equity 5.5%
- Unlisted infrastructure 10.1%
- Listed infrastructure 1.0%
- Unlisted property 3.1%
- Listed property 0.3%
- Credit 0.8%
- Fixed interest 8.2%
- Cash 4.1%
- Other assets 0.2%

Foreign currency exposure 26.2%

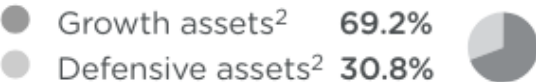


Balanced



- Australian shares 22.6%
- International shares 29.6%
- Private equity 4.9%
- Unlisted infrastructure 14.1%
- Listed infrastructure 0.8%
- Unlisted property 4.3%
- Listed property 0.3%
- Credit 2.8%
- Fixed interest 17.9%
- Cash 2.3%
- Other assets 0.3%

Foreign currency exposure 18.9%

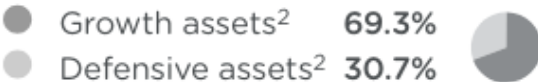


Socially Aware



- Australian shares 22.7%
- International shares 29.6%
- Private equity 5.0%
- Unlisted infrastructure 14.3%
- Listed infrastructure 0.5%
- Unlisted property 4.5%
- Listed property 0.3%
- Credit 2.9%
- Fixed interest 17.9%
- Cash 2.0%
- Other assets 0.4%

Foreign currency exposure 18.8%



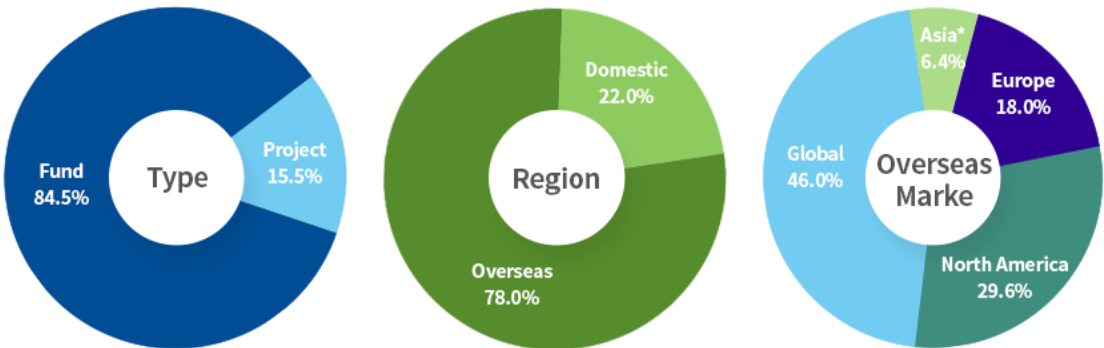
* **Growth asset allocation includes** 100% of Australian shares, International shares, Private equity, Listed property, Listed infrastructure and Other assets. **Unlisted property, Unlisted infrastructure and Credit are classified as 50% growth and 50% defensive.** **Defensive allocation includes** 100% of Fixed interest and Cash.

National Pension Service - Korea

Private Equity Investments (6.6%)

Type/Geography Composition

(As of the end of 2022)

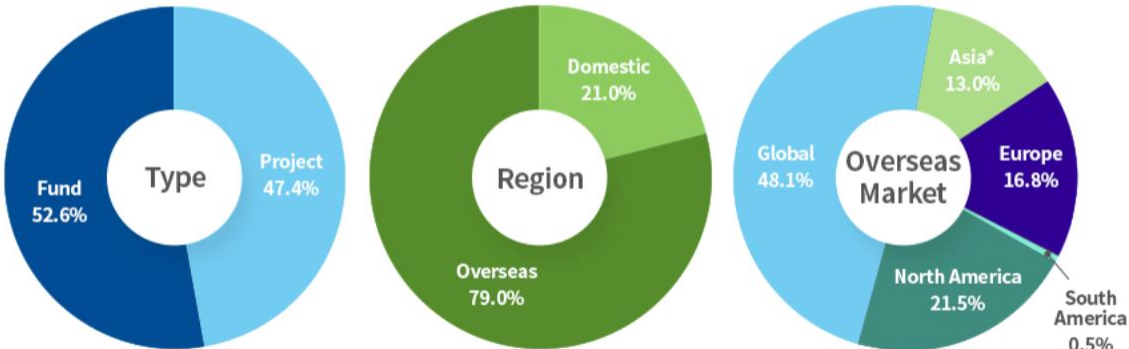


*including emerging countries in South America

Infrastructure Investments (4.0%)

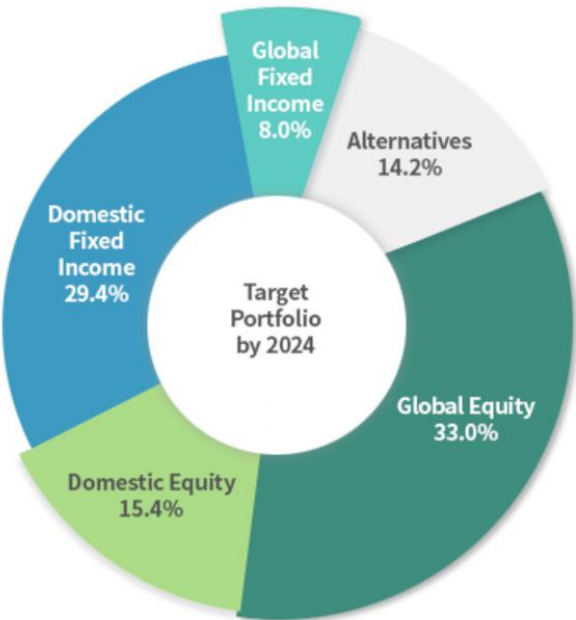
Type/Geography Composition

(As of the end of 2022)

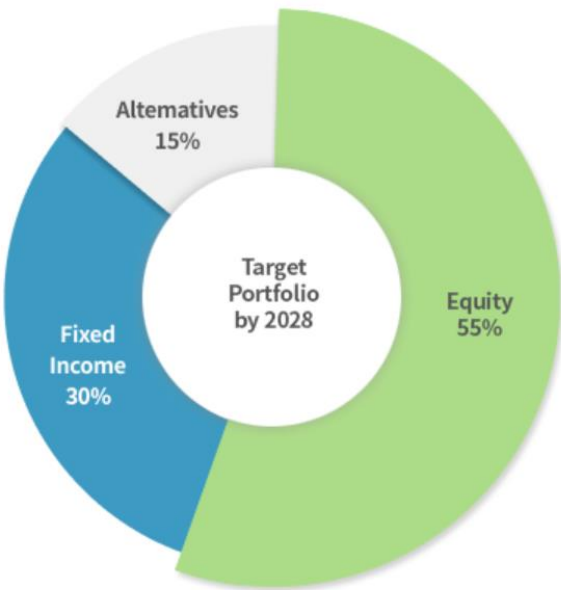


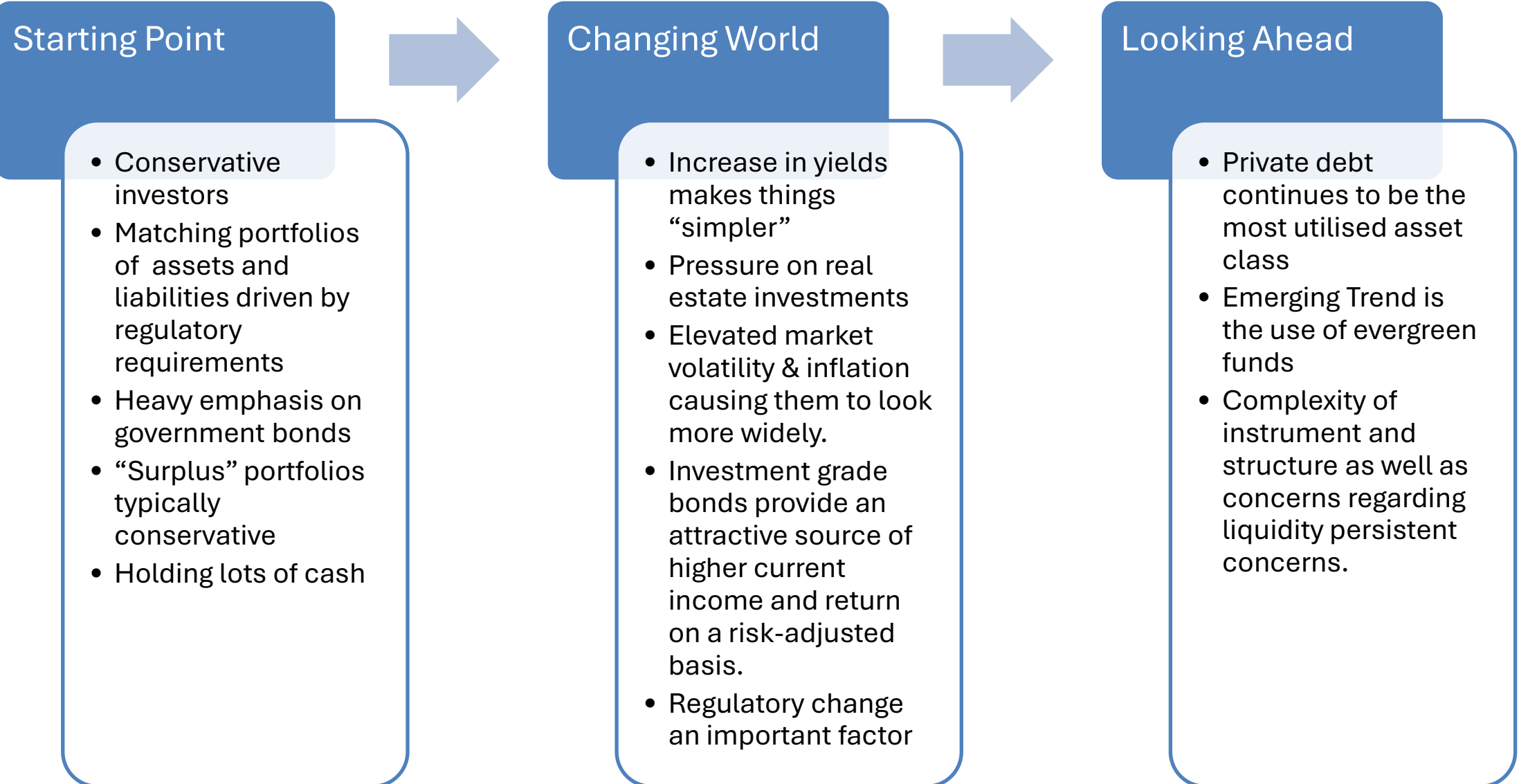
*including Australia

Annual Fund Management Plan



Mid-term Asset Allocation Plan





How do you expect the asset allocation of your portfolio to change over the next 12 months?

	Increase	Decrease
Domestic equities	13%	15%
International equities	17%	10%
Emerging market equity	6%	6%
Core fixed income (government/corporate bonds)	37%	21%
High-yield/bank loans	12%	12%
Multi-asset credit	7%	1%
Investment-grade private debt	32%	1%
Sub-investment-grade private debt	21%	1%
Structured credit	12%	5%
Private equity	20%	6%
Real estate equity	18%	15%
Real estate debt	12%	6%
Infrastructure equity	20%	2%
Infrastructure debt	12%	2%
Hedge funds	4%	2%
Non-core fixed income	5%	1%
Cash	7%	27%

Endowments

Background / Approach

- Typically structured so that the principal invested is preserved in real terms while a portion of the returns is available for funding the organisation's ongoing cashflow requirements.
- Most hold the principal over the very long-term and many intend to do so in perpetuity.
- Can tolerate illiquidity and may not need immediate access to their capital invested.

Summary Asset Allocations for U.S. College and University Endowments and Affiliated Foundations, Fiscal Year 2022*

Size of Endowment	U.S. Equities %	U.S. and Non-U.S. Fixed Income %	Non-U.S. Equities^ %	Global Equities %	Alternative Strategies* %	Other %
Over \$1 Billion	8.80	9.54	9.26	6.80	62.61	2.99
\$501 Million to \$1 Billion	21.43	14.94	13.96	5.73	42.87	1.07
\$251 Million to \$500 Million	21.04	15.83	11.26	9.00	40.55	2.32
\$101 Million to \$250 Million	28.19	19.16	13.27	8.66	30.11	0.61
\$51 Million to \$100 Million	34.34	23.70	12.65	7.76	20.39	1.16
\$25 Million to \$50 Million	39.12	26.44	14.04	3.62	16.05	0.73
Under \$25 Million	44.71	32.68	13.10	1.34	7.77	0.40

Type of Institution						
All Public Colleges/Universities	15.70	12.47	11.91	6.63	52.85	0.44
<i>Public College, University, or System</i>	<i>12.87</i>	<i>11.68</i>	<i>11.62</i>	<i>6.38</i>	<i>57.01</i>	<i>0.44</i>
<i>Institutionally Related Foundations</i>	<i>21.88</i>	<i>16.28</i>	<i>10.78</i>	<i>9.89</i>	<i>40.66</i>	<i>0.51</i>
<i>Combined Endowment/Foundation</i>	<i>22.61</i>	<i>11.11</i>	<i>15.40</i>	<i>2.93</i>	<i>47.61</i>	<i>0.34</i>
All Private Colleges/Universities	9.07	9.88	8.85	7.02	61.38	3.80
Other Non-Profit Organizations	20.68	12.84	17.98	2.10	46.40	-0.02

<i>All Institutions</i>						
Dollar-weighted Average	11.20	10.70	9.85	6.88	58.64	2.73
Equal-weighted Average	26.29	19.10	12.40	7.53	33.42	1.27

*Average asset allocations as of June 30, 2022. ^Includes emerging market equities.

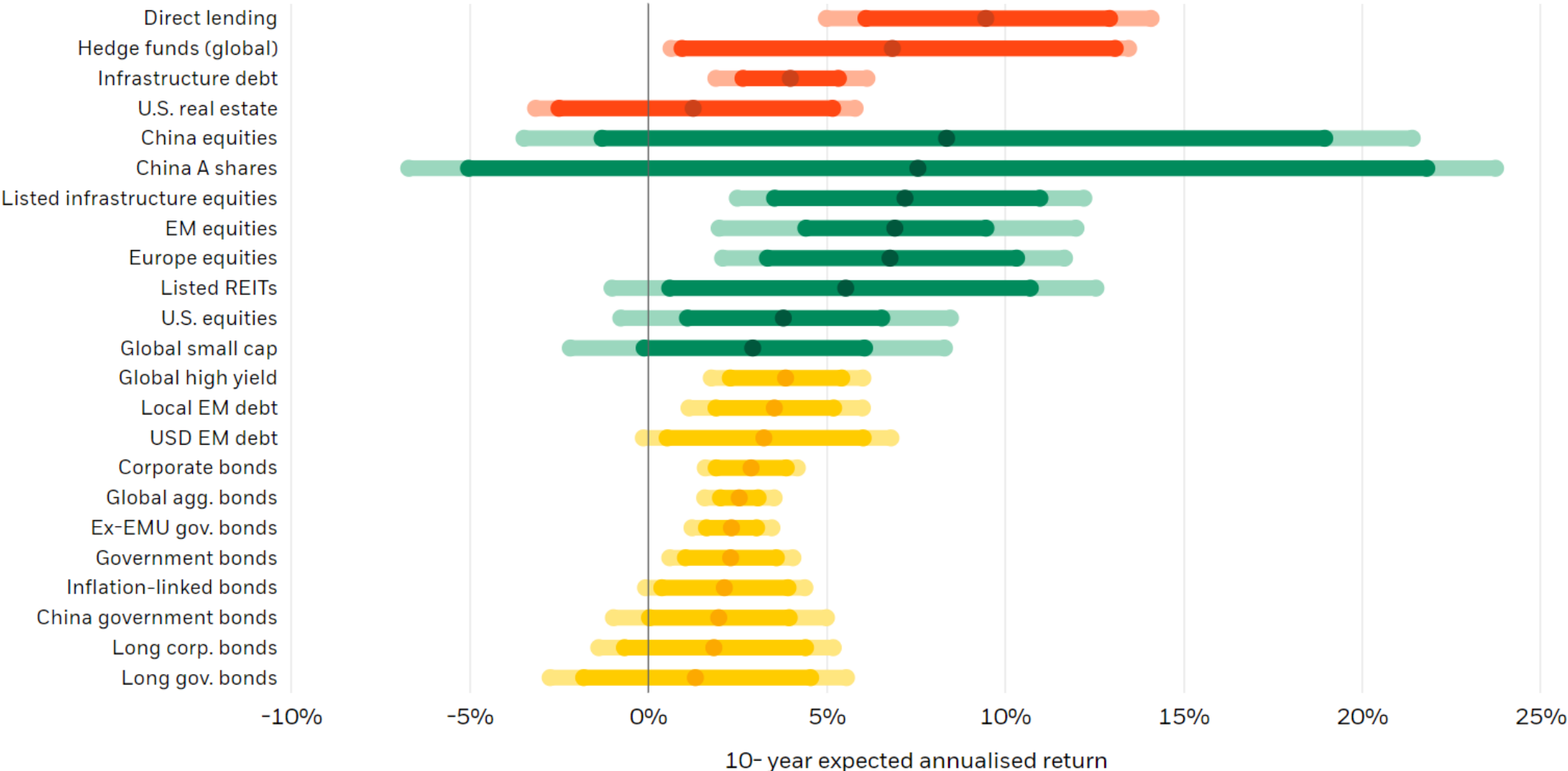
All data are dollar-weighted unless otherwise specified. Due to rounding, details may not sum to 100%.

Alternative strategies include: marketable alternatives (hedge funds), private equity, private venture capital and real assets.

Private debt and short-term cash/securities are included in the Fixed Income category.

Source: NABUCO – TIAA Study of Endowments 2023

Forward Capital Market Assumptions

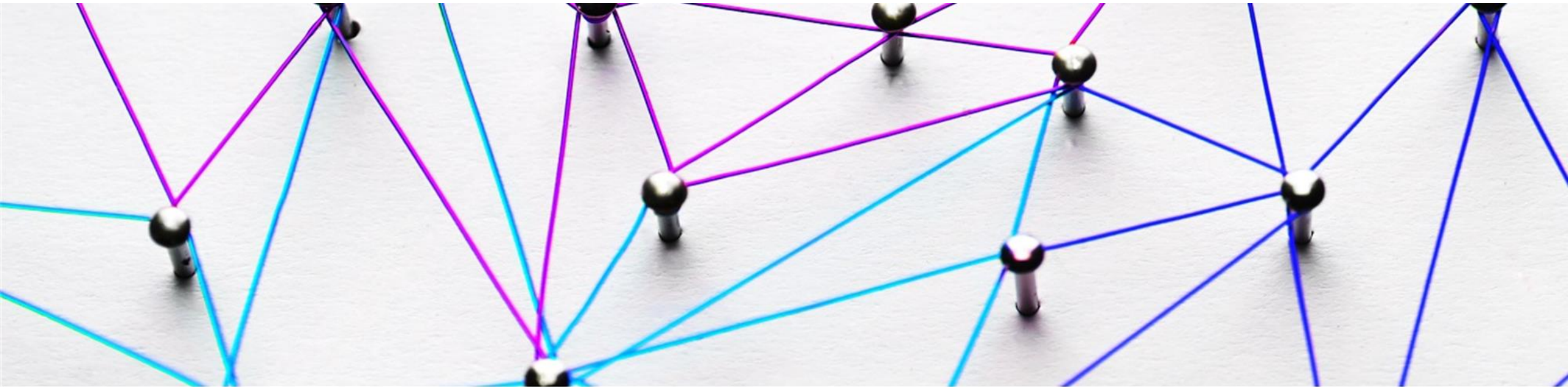


● Central expected return ■ Central return uncertainty ▨ Interquartile range

Source: BlackRock Investment Institute, May 2024. Data as of 28 March 2024.

- **Will embedded practices, behaviours and beliefs give way to revised approaches?**
 - Next chapter of financial investing is being written in new conditions
 - Some tailwinds from the EU Competitiveness agenda
- **Changing needs of investors having a direct impact on**
 - Exposures or risk premiums they want to access (direct/via funds)
 - Nature and terms of assets/vehicles they use
- **Understanding the way different types of institutions put their portfolios together**
 - critical in developing your strategy
 - communicating the investment opportunity

18th Funds Forum - Poland



17 June 2024

Pat Lardner
Chief Executive