

The Asset Owner 100

The most influential capital on the planet | Thinking Ahead Institute | November 2024



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Institute

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The Thinking Ahead Institute

The Thinking Ahead Institute (TAI) is a not-for-profit research and innovation network motivated to influence the investment industry for the good of savers worldwide and to mobilise capital for a sustainable future. Since its establishment in 2015, almost 90 investment organisations have collaborated to bring this vision to light through designing fit-for-purpose investment strategies, working towards better organisational effectiveness and strengthening stakeholder legitimacy. This report was produced in collaboration with the WTW Montevideo Research Services team.

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Foreword

This report, *The Asset Owner 100*, produced by the Thinking Ahead Institute, captures the scale, reach, and influence of the world's 100 largest asset owners. By examining the total assets of these leading institutions, along with data on the top 10 insurers and the top 10 foundations and endowments, this study offers a panoramic view of the global asset management landscape.

These organisations are enormously important to the futures of people and planet. From great power flows great opportunity. They have 'the keys to the kingdom' as Ted Seides puts it in his podcast 'Capital Allocators'.

The insights within *The Asset Owner 100* underscore several key themes that are reshaping the investment world today.

First, rising complexity has emerged as a leading concern for asset owners, challenging them to go beyond traditional approaches and embrace a mindset geared toward innovation and resilience. Global interconnectedness, regulatory changes, climate risk, and technological advances are creating a web of interdependencies that demand more than business-as-usual responses. To navigate this intricate landscape, asset owners need robust organisational practices that enable agility and a commitment to innovative strategies that account for both current and emerging risks.

Traditional risk management, which relies on historical data and linear models, falls short in addressing today's complex and interconnected risks. Risk 2.0 represents a new paradigm for understanding and managing risks that arise from systemic, often unprecedented sources. Risk 2.0 is intrinsically *wider, softer and longer* than its predecessor models; it is considering more factors, goes into unmeasured factors and uncertainty in more depth and considers the longer-term factors more.

We believe that adopting systems thinking alongside a stronger risk model empowers asset owners to navigate the interconnected risks of today's landscape, offering a comprehensive view of how these elements interact within portfolios.

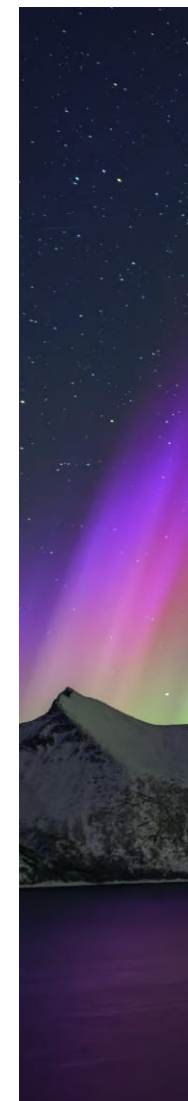
This perspective embodies one of our guiding principles: the importance of being "joined-up."

Roger Urwin

Co-founder of the Thinking Ahead Institute and Global Head of Investment Content, WTW

Marisa Hall

Head of the Thinking Ahead Institute



The Asset Owner 100

A Thinking Ahead Institute study which provides key insights and trends on the top 100 asset owners in the world

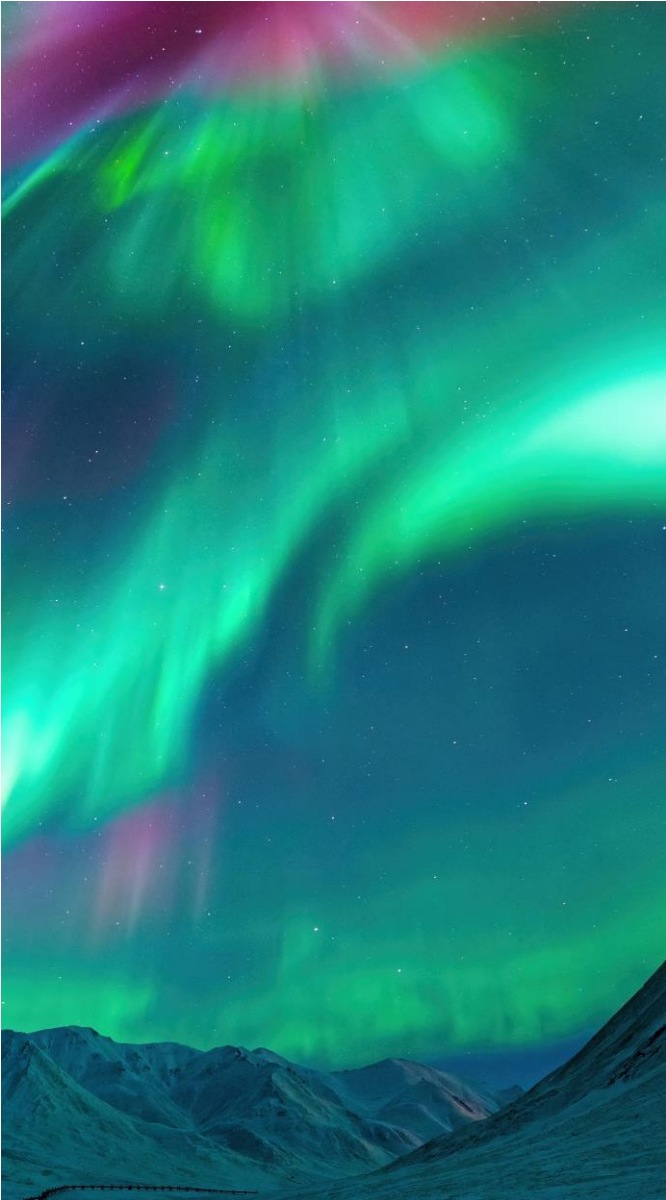
An asset owner has five qualifying characteristics:

- Works directly for a defined group of beneficiaries/savers/investors as the manager of their assets in a fiduciary capacity under delegated responsibility
- Works with a sponsoring entity (government, government affiliate, company or not-for-profit)
- Works within explicit law and possesses an implicit societal license to operate because of its societal trust and legitimacy
- Delivers mission-specific outcomes to beneficiaries and stakeholders in the form of various payments or benefits into the future
- Employs a business model that combines a governance budget (resources and processes) and a risk budget (reflecting the mix of financial assets that delivers on the mission)

Executive summary



Overview and key findings



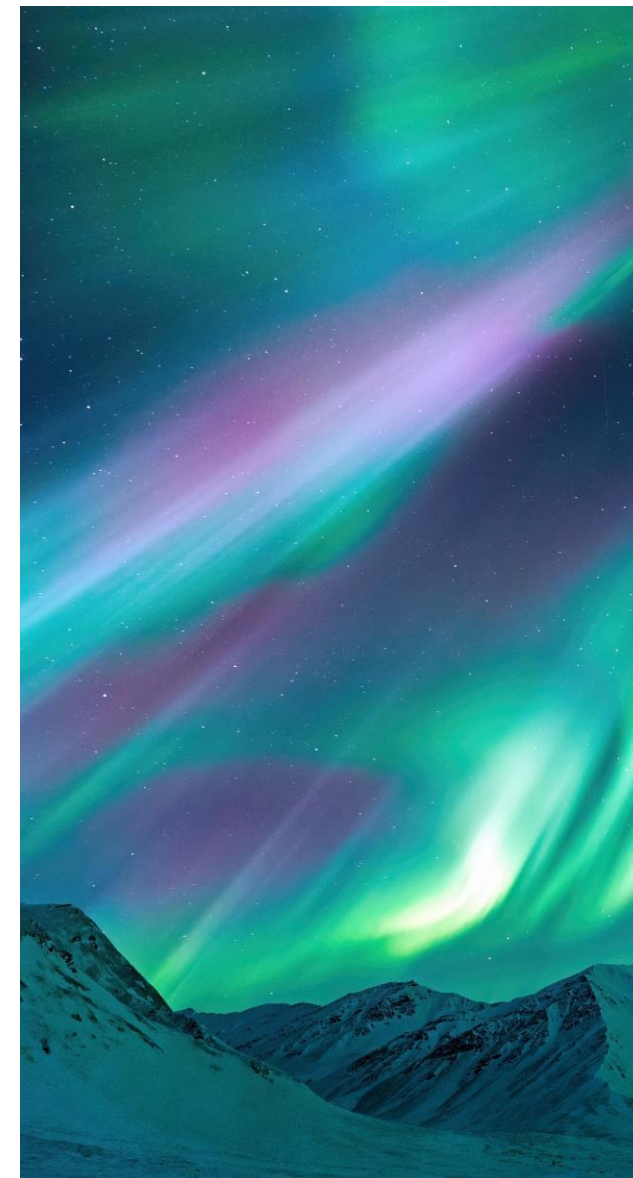
Key figures

- At the end of 2023, the top 100 asset owners managed a total of **US\$ 26.3** trillion in assets (AUM); marking a **12.3%** increase from the previous year.
- The top 20 assets owners made up 55.6% of total AUM, with US\$14.6 trillion
- The top 5 asset owners accounted for 24.4% of total AUM, with US\$6.4 trillion
- The top 3 asset owners remained unchanged: Japan's Government Pension Investment Fund (GPIF) retained its position as the world's largest asset owner (AUM of US\$1.6 trillion), followed by Norway's Norges Bank Investment Management (AUM of US\$1.5 trillion) and China Investment Corporation in third place (AUM of US\$1.2 trillion)

Figures to end 2023, unless otherwise stated.
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Key figures

- EMEA, Asia-Pacific and North America are each close to one third of assets in the study.
- **EMEA** is the largest region in this study, holding **34.3%** of total AUM. Asia-Pacific closely followed, accounting for 33.0% of total AUM.
- The North America region represents 32.7% of total AUM in the AO100 ranking.
- **Pension funds** manage **51.2%** of the total AUM, Sovereign wealth funds handle 38.9%, and outsourced CIOs and master trusts are responsible for 9.3% of total AUM. Additionally, a new category, foundations and endowments, has entered the ranking, accounting for 0.6% of total AUM.
- Pension funds continue to dominate in North America and Asia-Pacific, while SWF dominate in EMEA.



Asset Owner 100

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Embracing forward-thinking approach

AUM of the top 100 asset owners totaled **US\$26.3 trillion** at end-2023

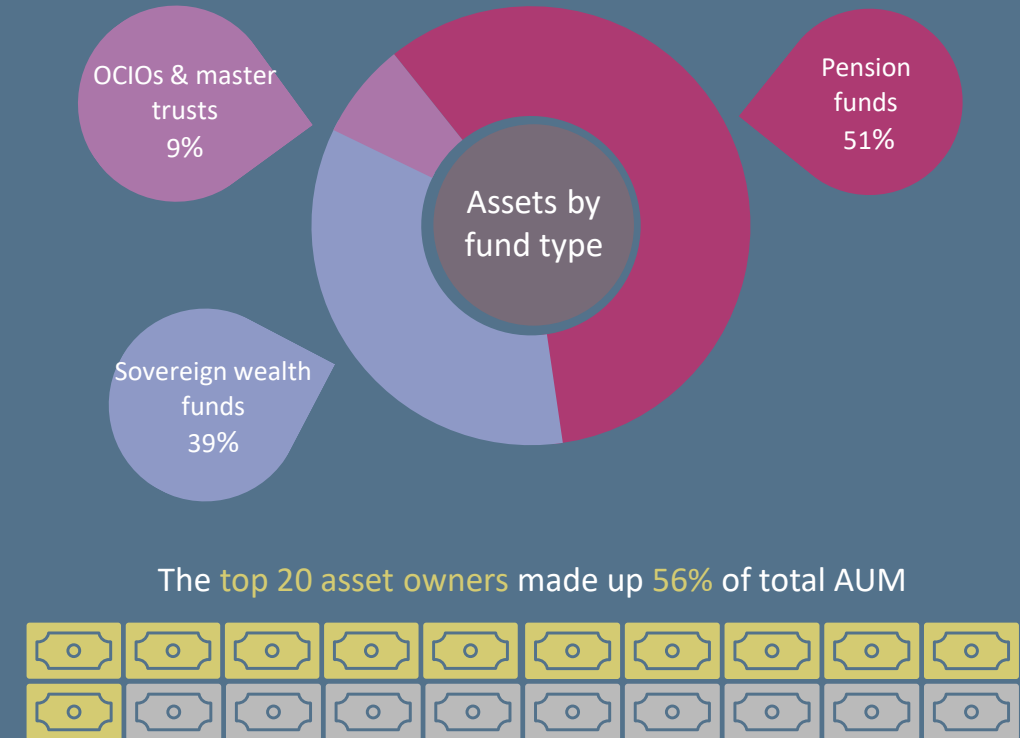
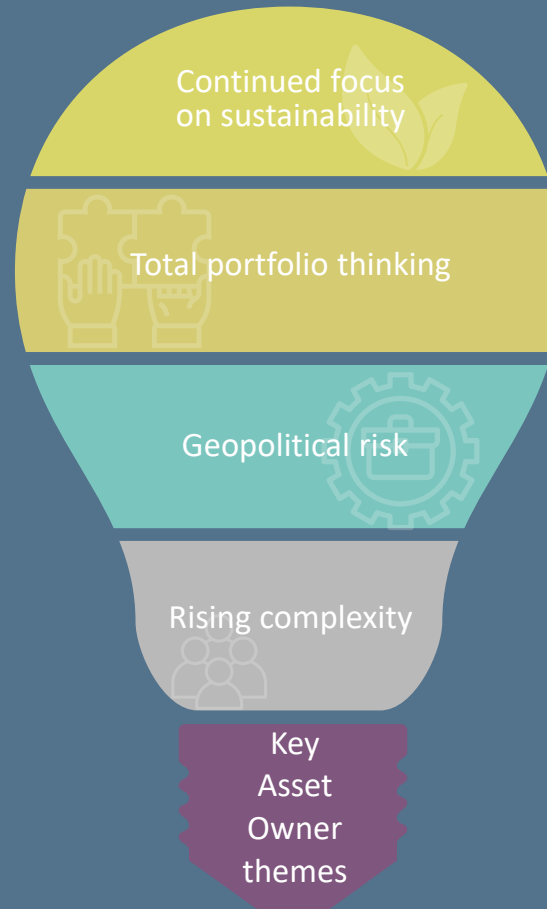
Leading asset owners strive to balance political influence, achieve positive sustainability impacts, while operating in macro environment of high uncertainty

52 out of Top 100 AOs have made net zero pledges. All asset owners are reflecting on the right size of their sustainability commitments

Data to end 2023 and figures may not sum due to rounding

Source: The Thinking Ahead Institute

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This small group of investors are right on the front line of the investment community's fight to become net zero

Key industry-wide observations (1)

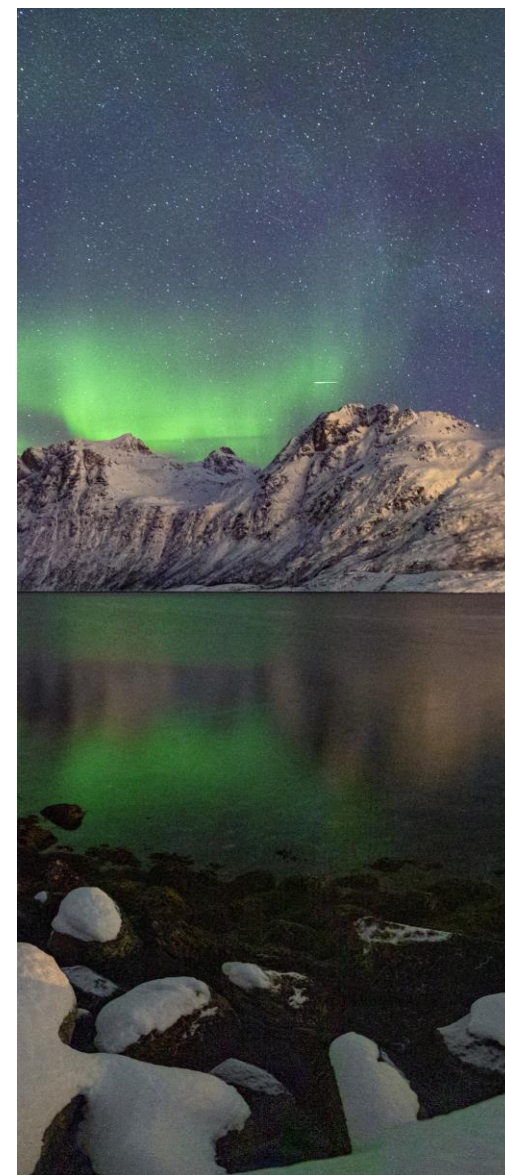
Investment macro

Over the last 12 months, the global investment macro environment has been marked by volatility and mixed performance across asset classes. Interest rates reached significant highs in 2023. The first half of 2024 brought some stabilisation in global markets, as base rates remained relatively flat. After a sustained period of elevated rates aimed at controlling inflation, central banks began to implement gradual rate cuts in the latter half of 2024, marking the first reductions in years. However, market volatility remains high with uncertainty due to geopolitical events and several major elections.

Sustainability

ESG (Environmental, Social, and Governance) factors are now generally accepted by most investors as financially material and are essential tools for generating long-term value, however it is challenged by politicisation. The next evolutionary step is the shift toward sustainability, a broader term that prioritises both financial and wider considerations with a long-term, intergenerational focus.

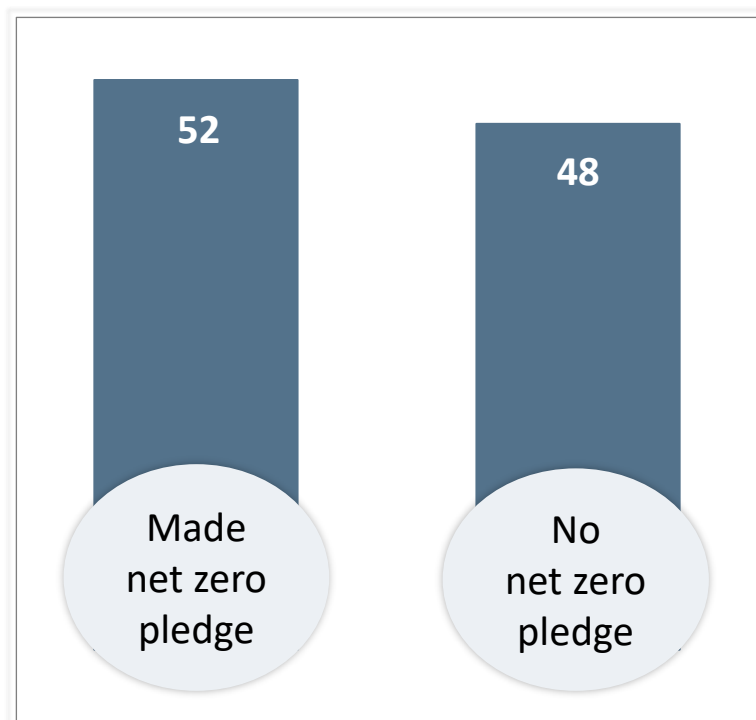
The net zero investing landscape remains complex, requiring a portfolio-wide approach and strong collaboration between asset owners and managers.



Key industry-wide observations (2)

Pathway to Net Zero

52% of the top 100 asset owners made net zero commitments.



Sourced from publicly available data.

After an initial wave of enthusiasm in the early 2020s, net-zero commitments among asset owners have stalled, reflecting a shift in momentum.

While many asset owners initially pledged to align their portfolios with net-zero goals, the complexity of balancing these targets with financial performance and fiduciary responsibilities has created significant challenges.

The number of asset owners committing to net zero has remained the same over the past year. This hesitation highlights the difficulties inherent in meeting ambitious environmental targets without compromising financial obligations or investment performance.

Key industry-wide observations (3)

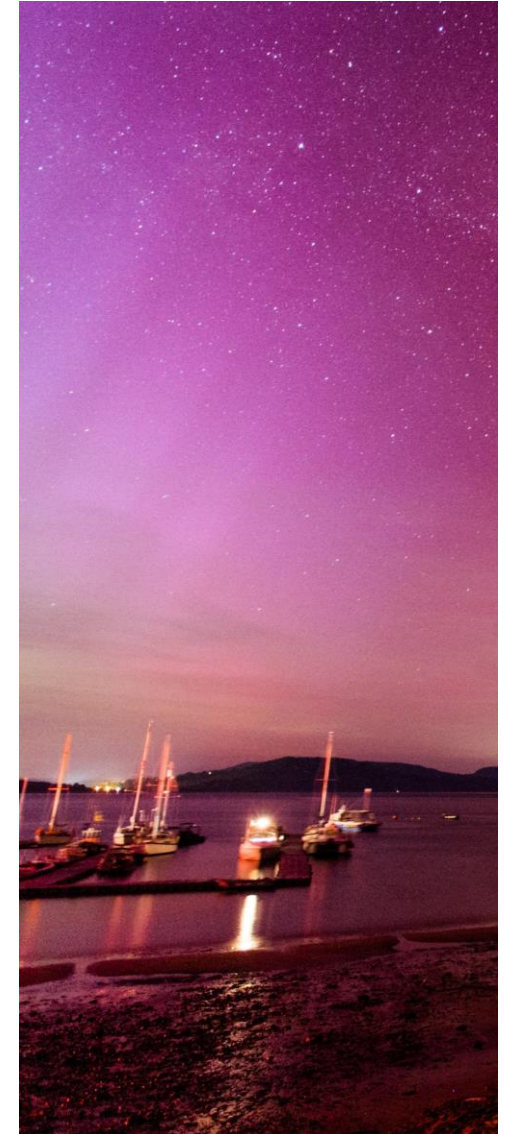
Political influence

The investment industry is increasingly subject to political influence as governments leverage policy and regulation to shape financial strategies that align with national priorities. Political agendas are now more intertwined with asset allocation decisions, particularly in sectors like infrastructure. Mansion House reforms in the UK exemplify this trend, encouraging investment in domestic infrastructure.

As a result, the investment landscape is evolving into a domain where asset owners are not only influenced by market dynamics but also by policy and political shifts, requiring a sophisticated approach to manage the intersections of financial return and regulatory compliance and stakeholder influences.

Technology

Asset owners are increasingly recognising the importance of artificial intelligence (AI) and data-driven strategies to enhance their investment processes and organisational effectiveness. Reflecting this trend, many leading asset owners have significantly increased their spend on technology over the past five years, aiming to harness these advancements for a competitive edge. While AI offers substantial opportunities to access and apply valuable, decision-focused data, it also brings challenges in managing a complex and fast-evolving technological landscape. However, there are promising AI applications that are beginning to simplify data management and mitigate data overload.



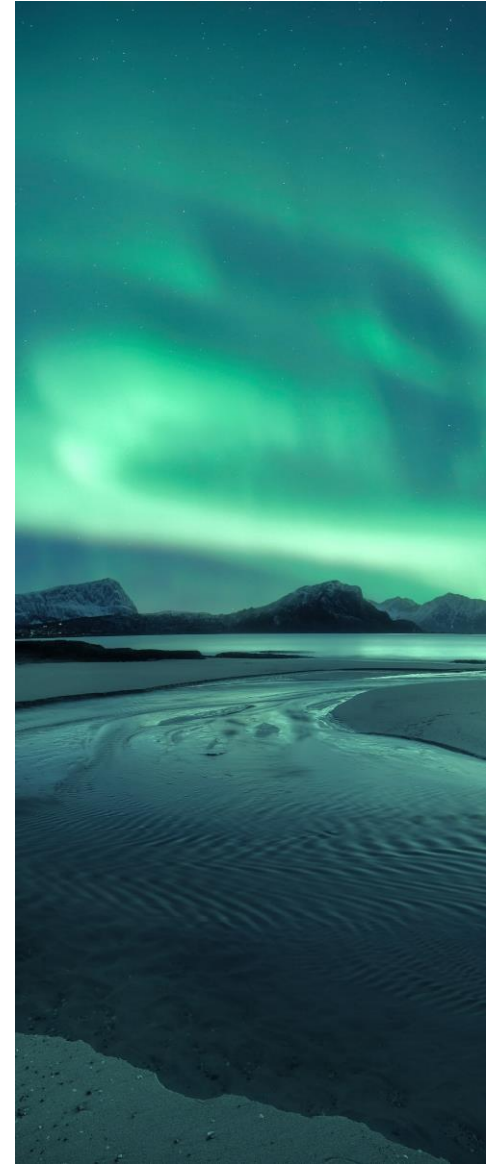
Key asset owner challenges

Rising complexity

The investment landscape is becoming increasingly complex due to rising uncertainty, expanding regulations, and the involvement of a growing number of stakeholders, each with unique interests and expectations. 73% of the [Asset Owner Peer Study 2024](#) participants said that managing complexity is their top concern. With that, Business beyond Usual (BbU) initiatives aiming at adapting to new conditions and leveraging technological advances are becoming essential, yet they have struggled to get adequate focus. Navigating this heightened complexity demands a culture of innovation, robust organisational practices and governance, and a forward-thinking mindset.

Geopolitical risk

Geopolitics has become a leading driver of market risk, but in common with other risks that are systemic its integration into the investment process has been a challenge. Shifts in geopolitical stability and a trend toward deglobalization are creating new layers of risk and uncertainty, prompting concern among major asset owners like those in the AO100. As the global economy pivots in certain areas toward regionalisation, investors must adapt by developing strategies that capture emerging, diverse opportunities across various markets, balancing growth potential with a heightened awareness of global and local risks.



New asset owner thinking

Risk 2.0

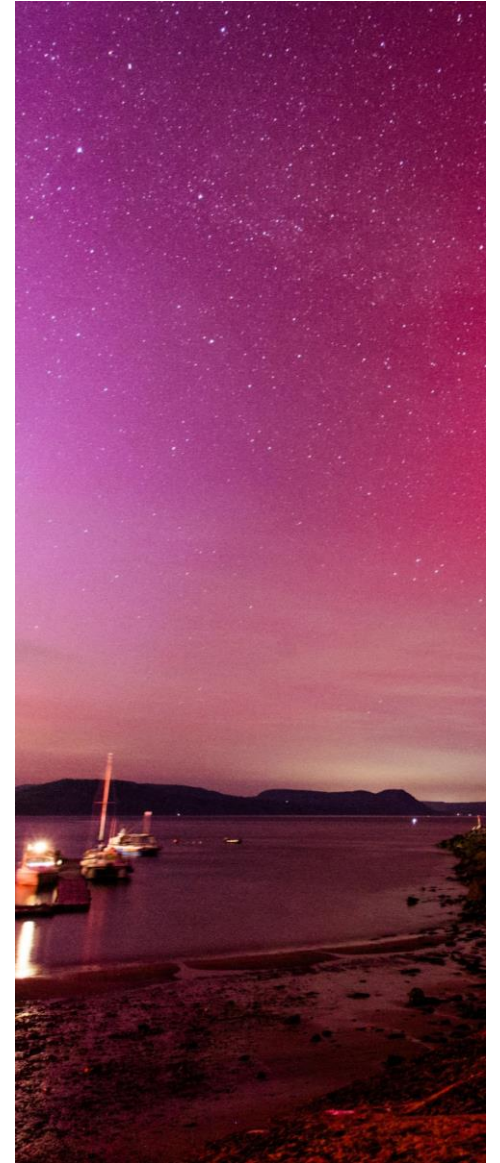
Traditional risk management relying heavily on historical data and linear models struggles to keep up with today's complex, interconnected risks. Risk 2.0 is a conceptual framework to better identify, understand and manage all risks particularly those that arise from complex, systemic sources with limited historical precedent. These include geopolitical tensions, climate change, environmental degradation, inequality and cybersecurity - each posing challenges that extend beyond traditional risk metrics.

Risk 2.0, therefore, goes beyond conventional measures like volatility alone but also considers interconnected nature of risks and aims to provide safeguard long-term mission integrity. This forward-thinking approach aligns well with Total Portfolio Approach (TPA) principles, focusing on meeting investment goals in sustainable ways.

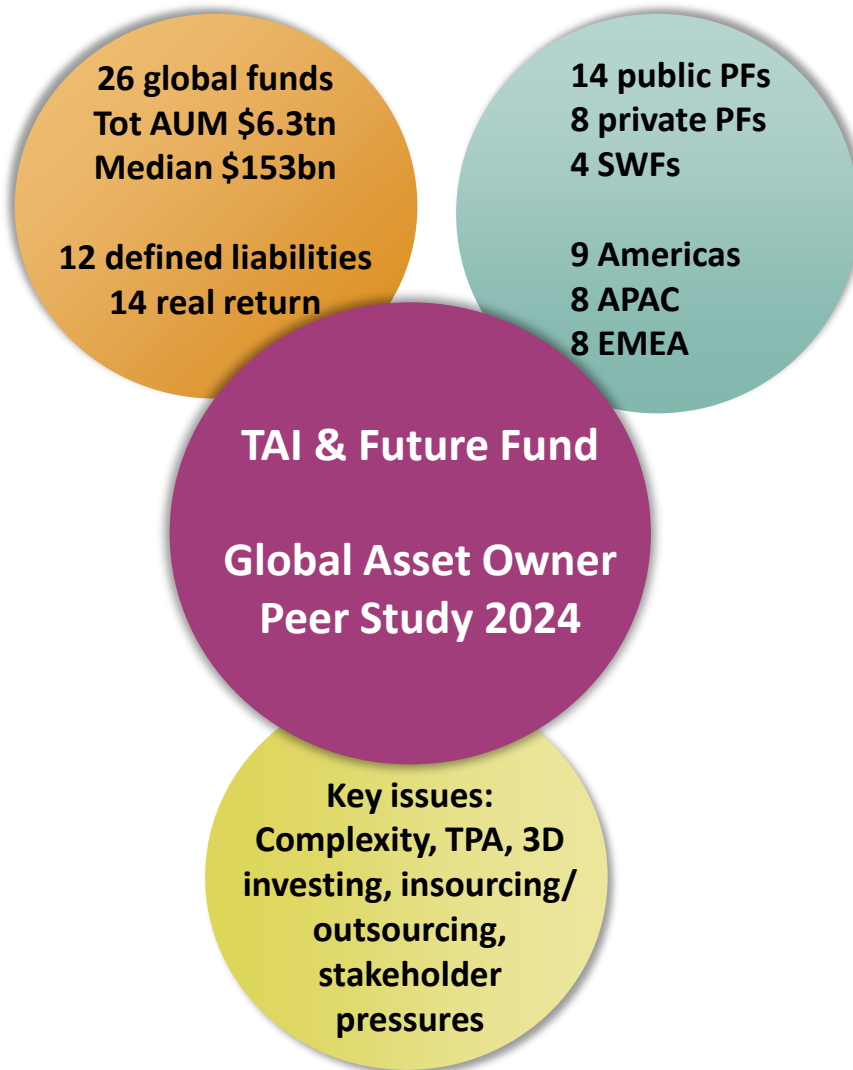
Systems thinking

Systems thinking is an approach to understanding complex, interconnected systems by recognising the relationships and interactions among their parts rather than focusing on individual components in isolation. It emphasizes a holistic perspective, acknowledging that changes in one area can have ripple effects throughout the entire system. Systems thinking allows to understand complex systems, such as organisations, at a nuanced level and recognise patterns, comparing different perspectives, and prepare for what might happen in the future.

The rise in systemic risk puts emphasis on the need for forward thinking and re-positioning strategy with investment processes that are able to model, measure and adapt to systemic risk.



About the TAI – Future Fund Peer Study 2024



1	Managing complexity	<ul style="list-style-type: none"> Managing complexity and associated workload growth is the #1 issue cited by 73% of group
2	The soft stuff is the hard stuff	<ul style="list-style-type: none"> Attracting and retain staff is the #2 issue cited by 65% 42% have insourced more in last 5yrs 52% plan to do more in the next 5yrs
3	Design and execution of the investment model	<ul style="list-style-type: none"> 36% are working to a Total Portfolio Approach And another 46% are moving in that direction
4	Design and execution of the sustainability model	<ul style="list-style-type: none"> 67% are net zero investors; 65% are universal owners 100% are committed to sustainable investing

For more information see [TAI Peer Study of 26 large AOs](#)

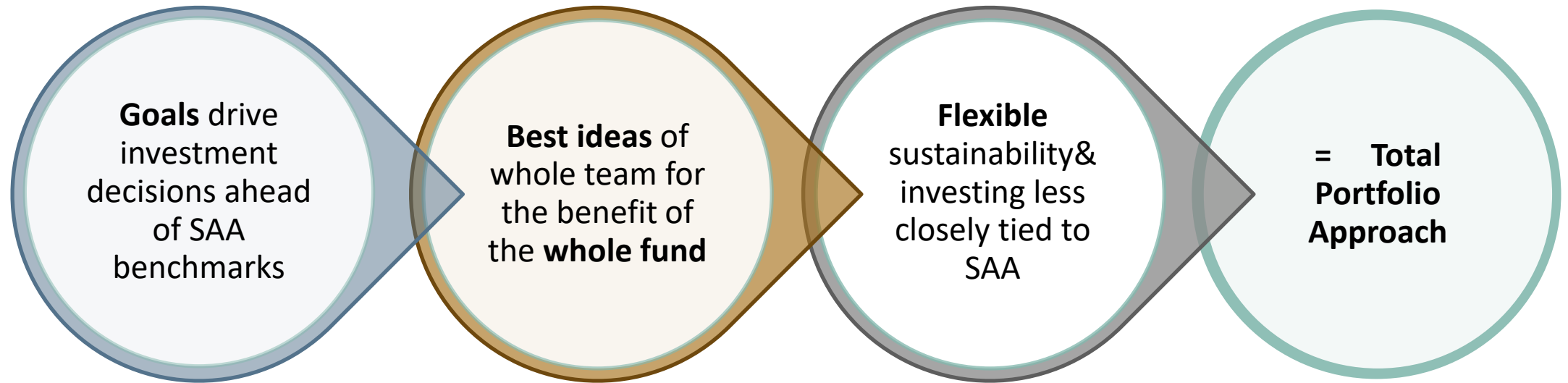
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Focus Section: Total Portfolio Approach



Leadership calls and opportunity beckons

What is Total Portfolio Approach (TPA)?



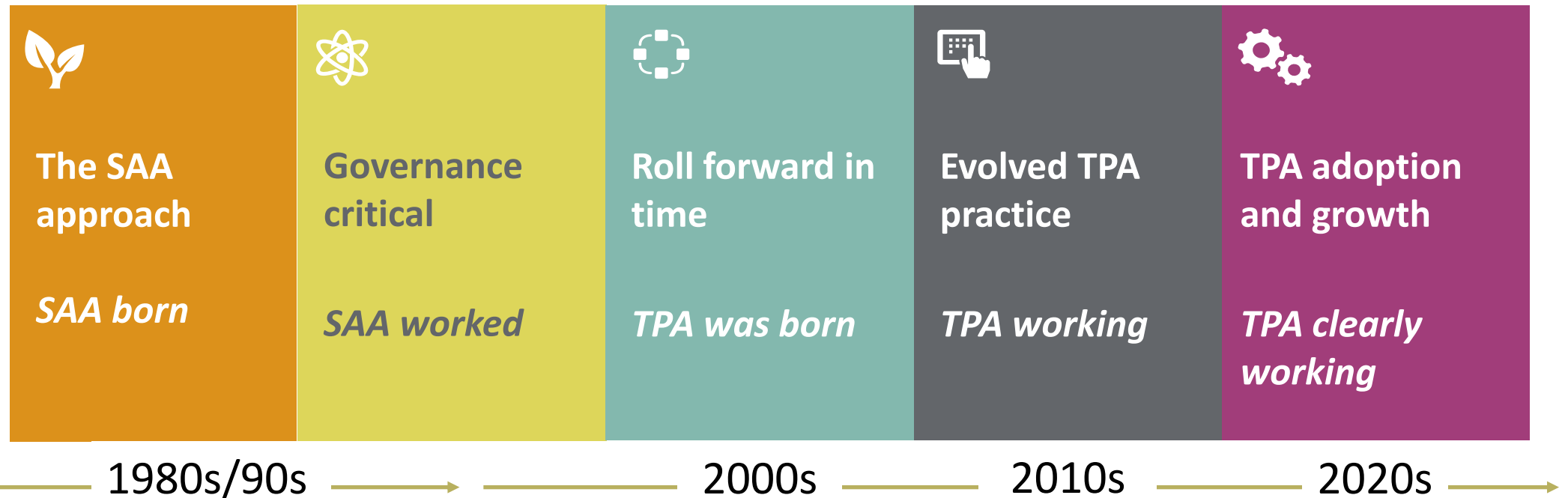
SAA generally ties the fund to its benchmarks

Total portfolio thinking exploits joined-up thinking and collaboration

TPA employs the greatest flexibility to exploit opportunities, in both sustainability and risk and return

The story so far for asset owners on SAA and TPA

- SAA was a perfect construct for a time when boards were dominant, issues were less complex and managing the managers was the focus
- Boards were comfortable with their policy role (beta), managers were comfortable with an implementation role (alpha). *SAA worked*
- Three organisations were the early adopters of TPA – CPP, Future Fund and NZSF – all funds benefiting from a fresh start
- The edge in theory in total portfolio approaches has been substantially accepted. In most situations the fulfilment of that potential will depend more on meeting governance, behavioural and cultural challenges than the technical issues.



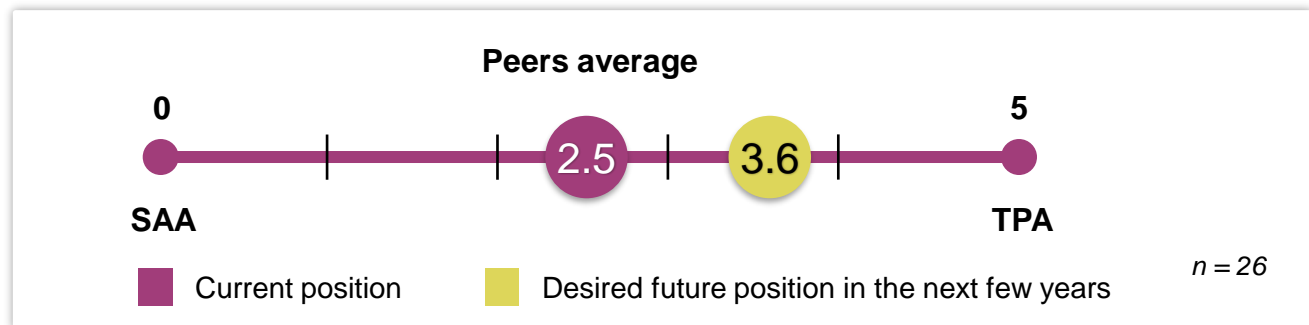
Total portfolio approach position among the largest asset owners

Asset owner peer funds are evenly spread on this attribute

- TPA is developing the best quality portfolio for the particular fund goals adopting best ideas, dynamic management and a holistic approach
- SAA is creating a policy benchmark suited to the longer-term fund goals and allocating to asset class portfolios that are sized to align with the benchmark
- Present practices are not a case of polar points (either SAA or TPA), they are more like a spectrum represented in the 0 → 5 scale across
- The 2.5 / 5 current average shows the split of practices, the 3.6 / 5 ambition shows the tide of the argument, but most organisations speak of the multi-strand change program needed to transition

The SAA → TPA spectrum

	SAA 0	1	2	3	4	TPA 5	
Performance assessed vs.	Benchmarks			Fund goals			Better decision framing
Success measured by:	Relative value added			Total fund return			
Opportunities for investment defined by:	Asset classes			Contribution to total portfolio outcome			Better decision making
Diversification principally via:	Asset classes			Risk factors			
Asset allocation determined by a:	Board-centric process			CIO-centric process			Greater dynamism
Frequency of change:	Infrequent, calendar meeting based			Continuously monitored, changes made in real time			
Portfolio implemented by:	Multiple teams competing for capital			One team collaborating together			Sustainability joined-up
Integrated ESG + stewardship/divestment:	Bottom-up only			Top-down and bottom-up integrated			
3D investing, net zero investing:	Separate bottom-up/ top-down process			Top-down and bottom-up integrated on risk, return and impact			

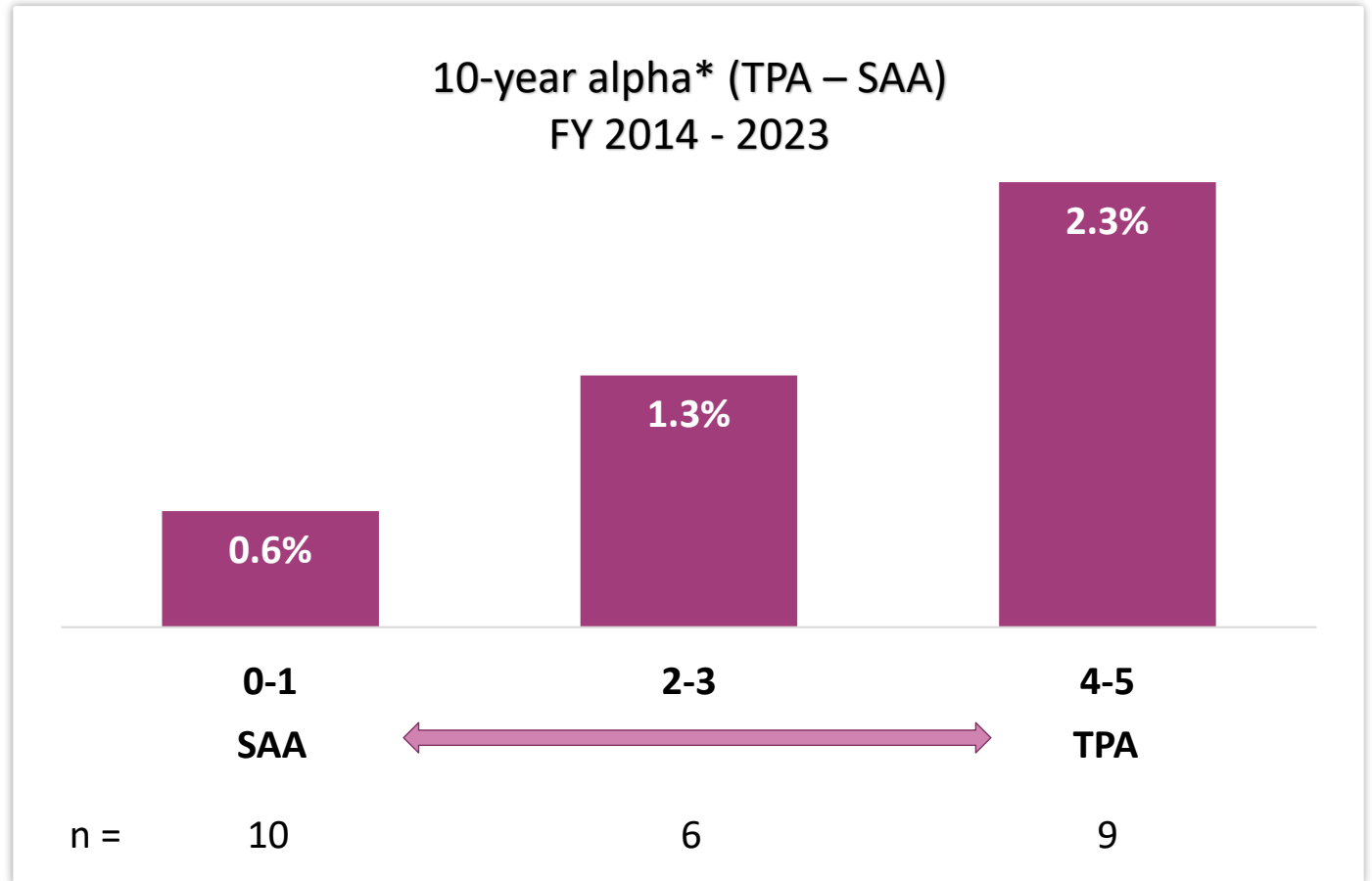


Source: [Asset Owner Peer Study 2024](#), Thinking Ahead Institute

Top TPA-adopters have produced 1.7%pa higher alpha* over 10 years

The TPA edge overlaps with a governance edge

- Performance data sourced from participating funds' public disclosures and Global SWF – there are qualifications as to how comparable the figures are (including differences of exact period tracked)
- The performance differences for TPA over SAA are considerable: +1.7% pa for 10 years
- Some of this difference can be explained by governance differences



Source: Thinking Ahead Institute

* Value added relative to benchmark

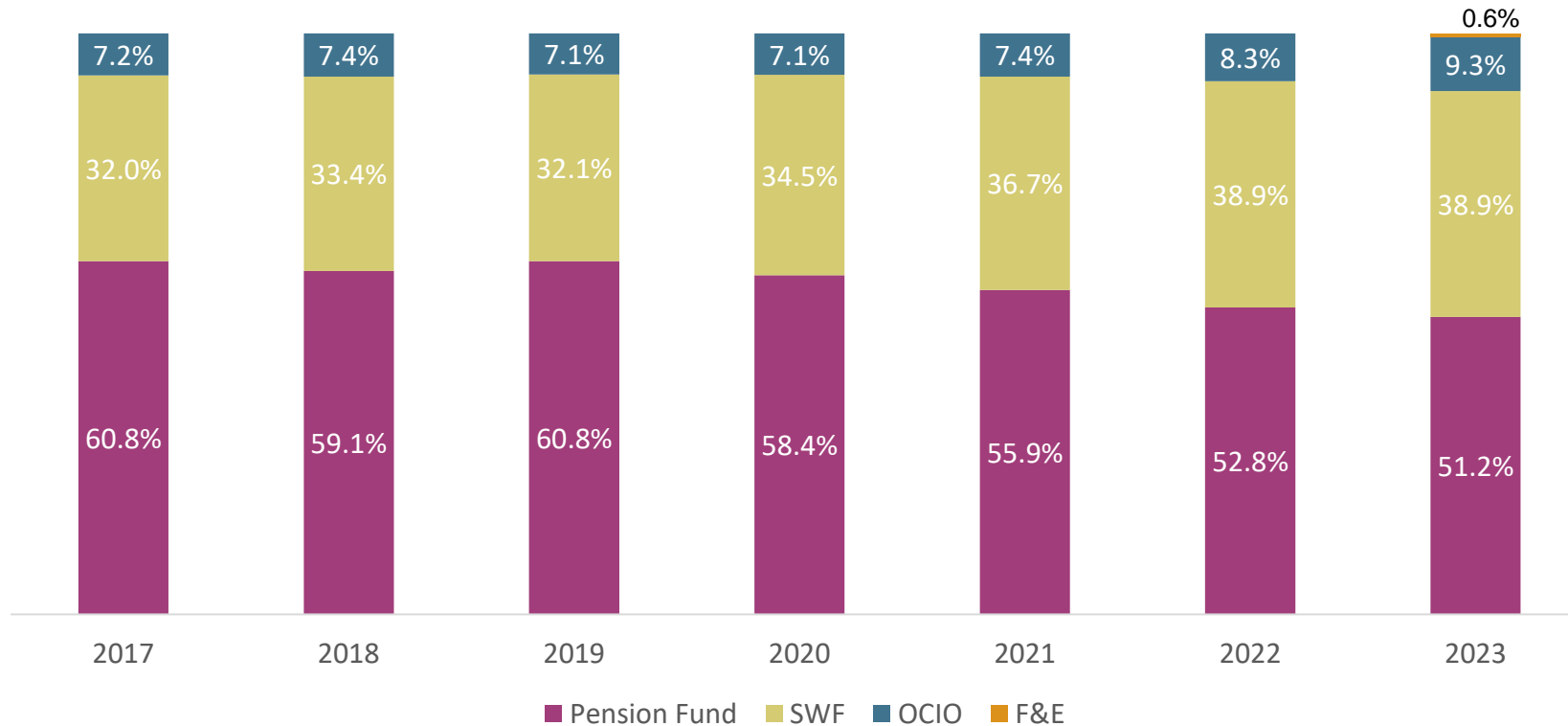
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Section 1 | Total value of assets



Evolution by fund type

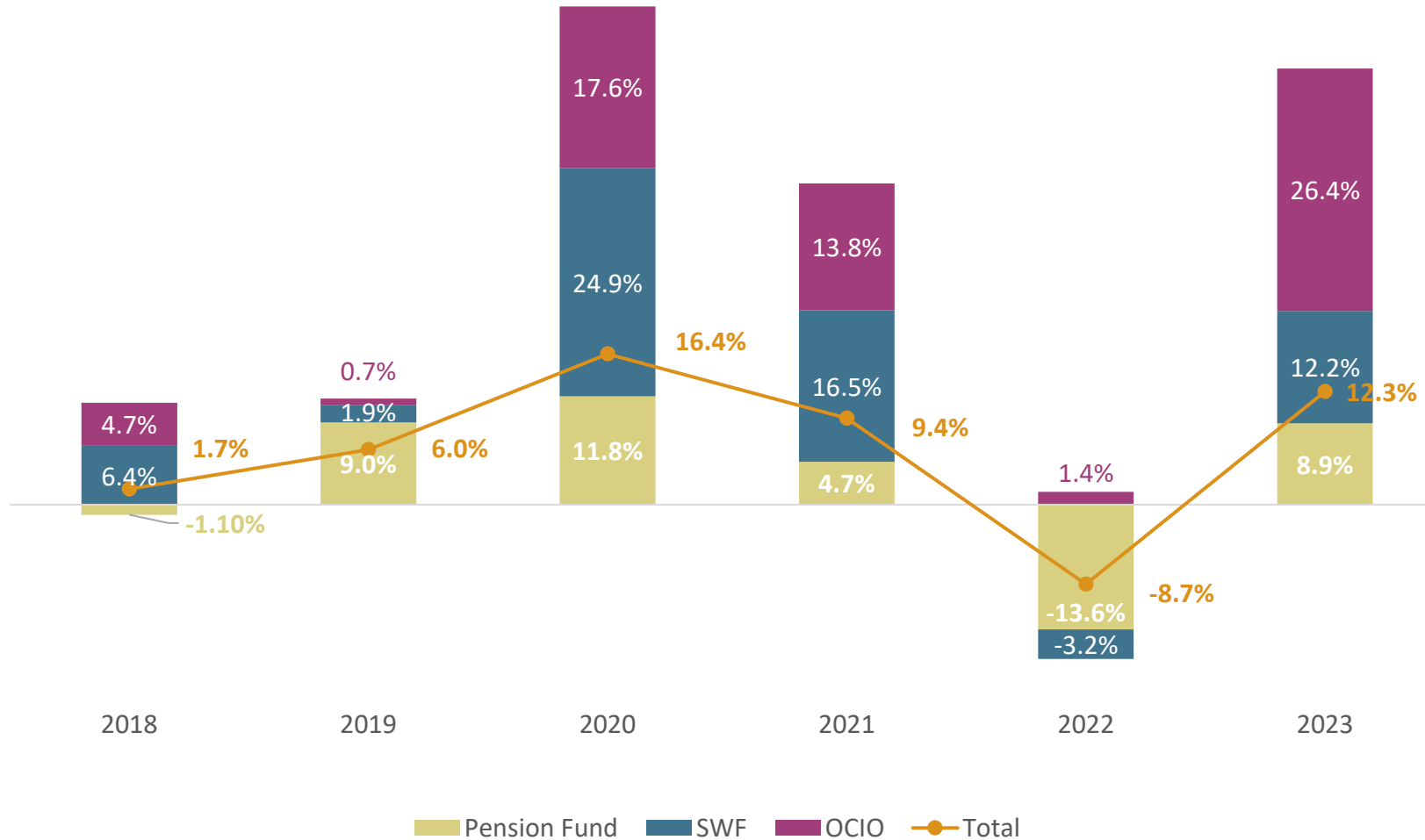
Distribution of total AUM



Pension funds dominate the AO100 and manage 51.2% of total AUM (US\$ 13.5 trillion).

Sovereign Wealth Funds follow with 38.9% of total AUM (US\$ 10.2 trillion).

Annual growth by fund type



Note: In 2023, the first Foundation & Endowment made it to the ranking, it is not included in analysis as there were none in previous years.

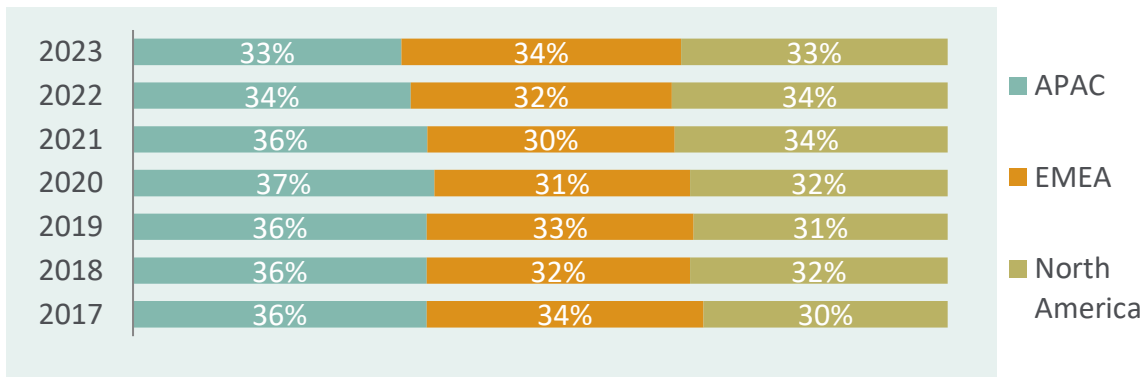
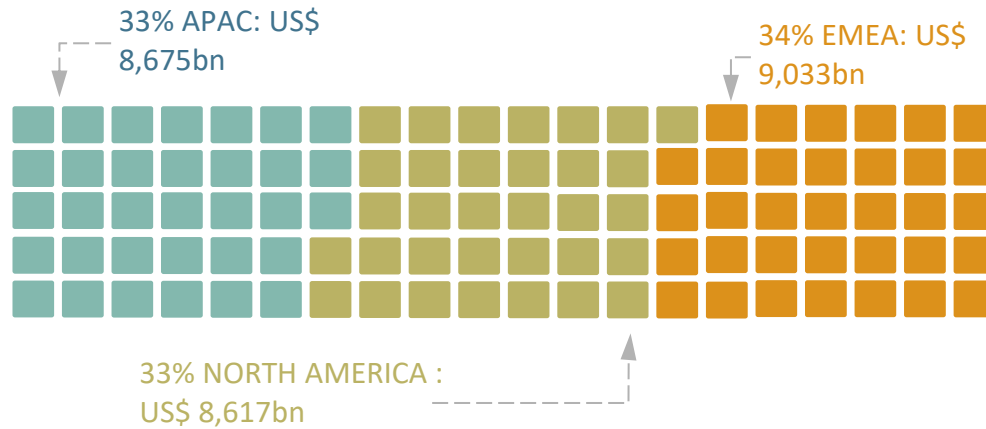
AUM returned to its previous growth path (12.3% YoY) in 2023 after a decrease in the prior year.

OCIO saw the most significant growth with a 26.4% year-on-year rise.

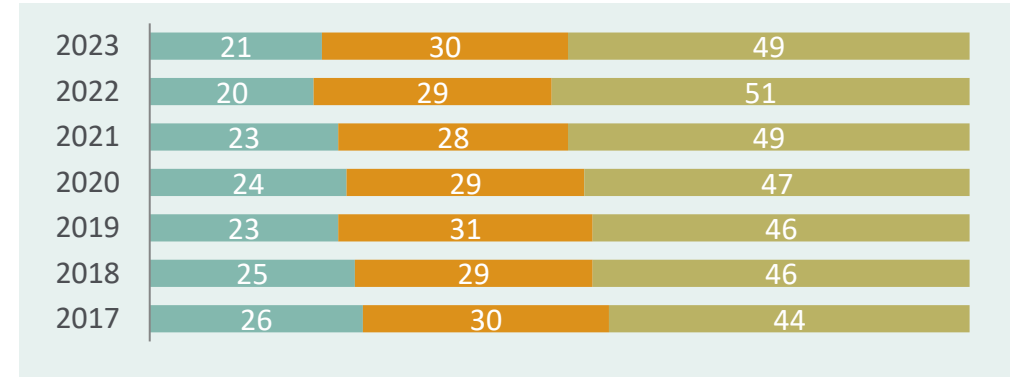
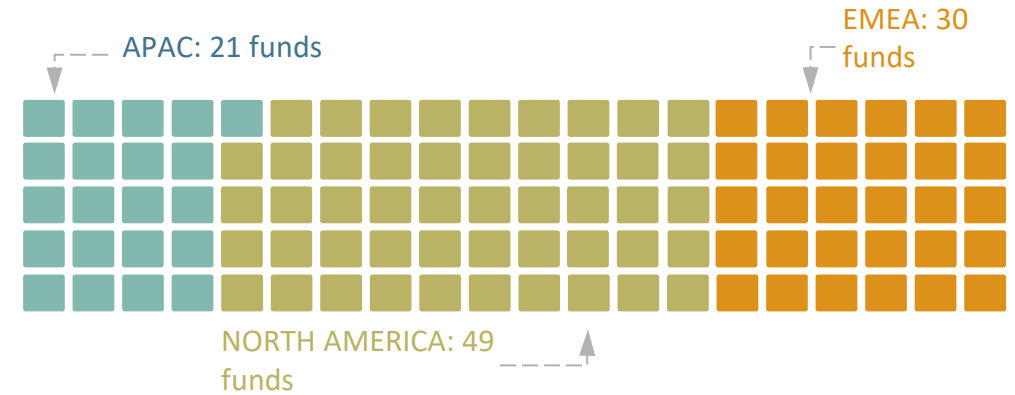
Changes in AUM are caused by a combination of organic growth and sample composition.

Evolution by region

Distribution by assets



Distribution by number of funds



Split by fund type and region

NORTH AMERICA

Pension funds	69%
SWF	2%
OCIO	28%
F&E	0%

EMEA

Pension funds	29%
SWF	70%
OCIO	0%
F&E	2%

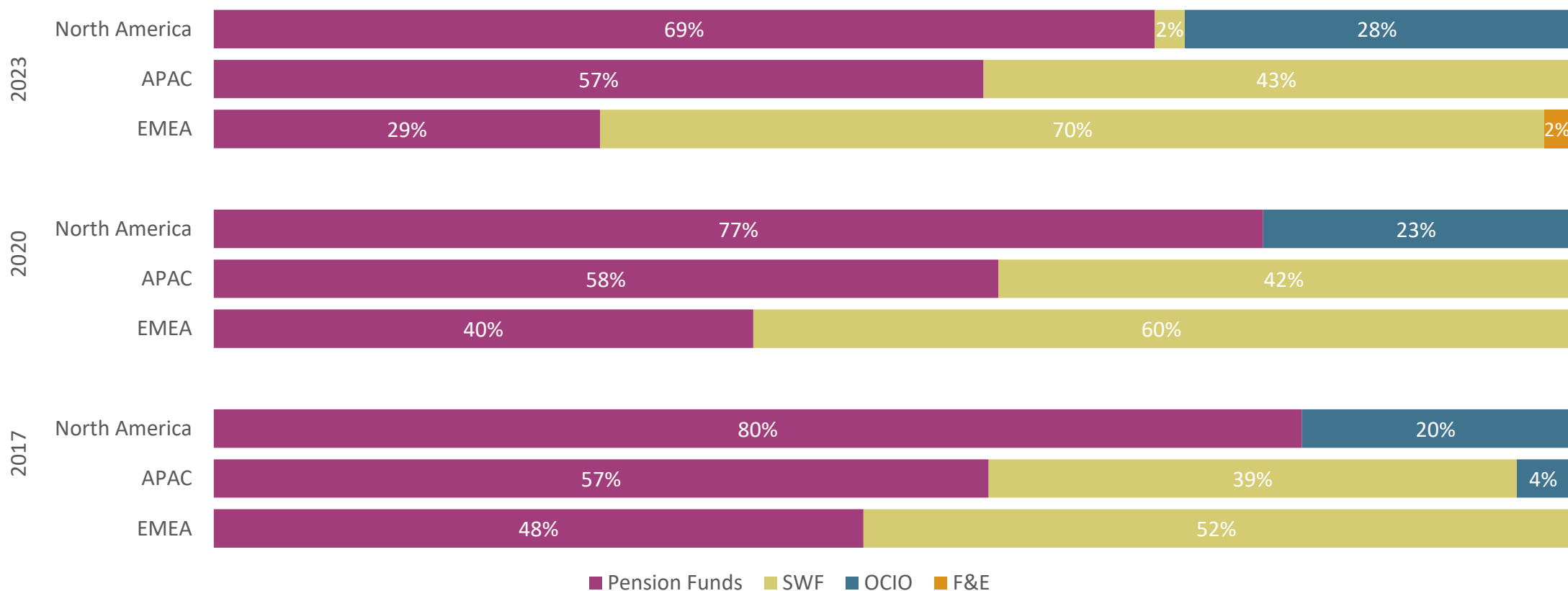
APAC

Pension funds	57%
SWF	43%
OCIO	0%
F&E	0%

- Pension funds dominated in North America where they represent 69% of assets. Pension funds also dominated in APAC although to a smaller extent with 57%.
- Sovereign Wealth funds accounted for 70% of assets in the EMEA region, in particular due to the Middle East sovereign funds.

Note: OCIO and Master trust assets are shown in the region of their corporate headquarters. We note that all OCIOs and Master Trusts have clients globally.

Evolution of split by fund type and region

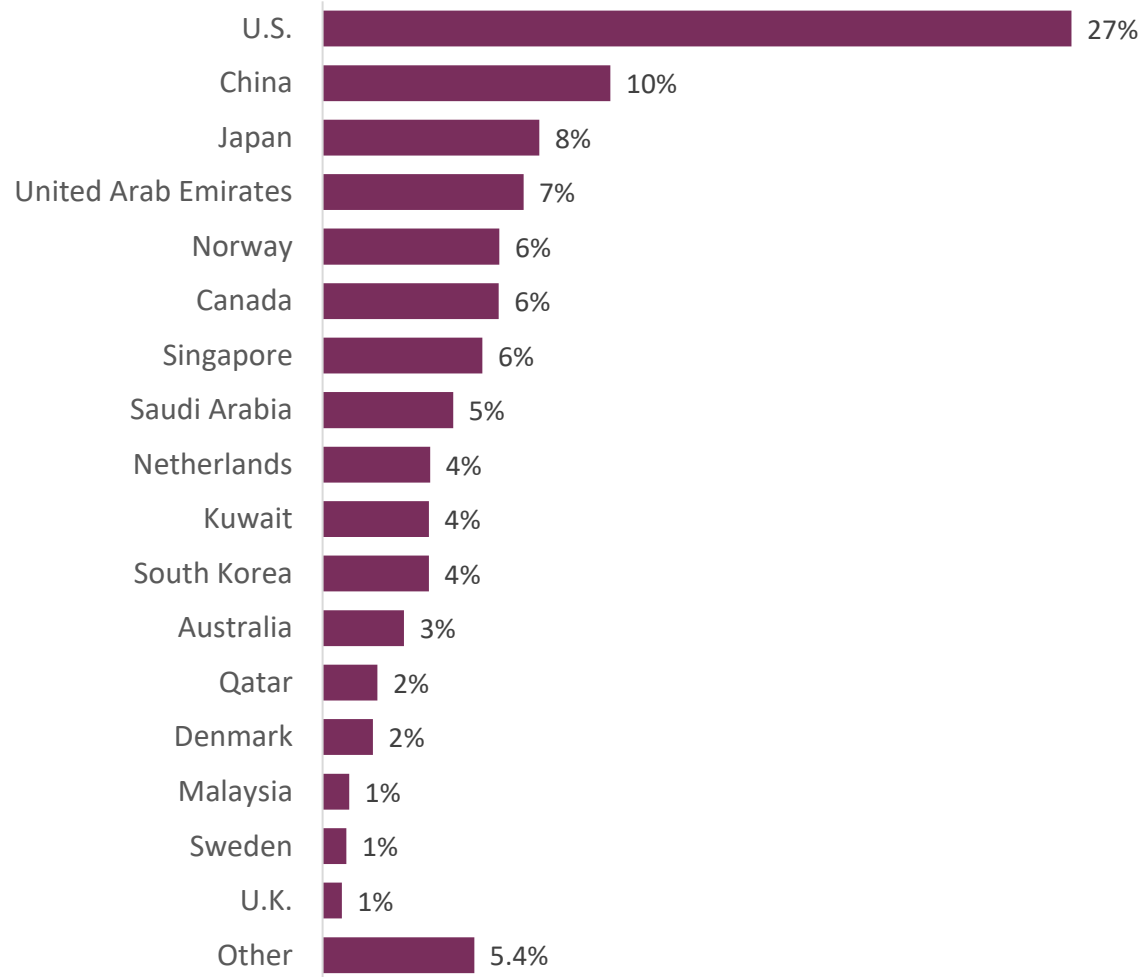


- For the period, Pension Funds dominated in North America with 69% on average, followed by APAC with 57% on average.
- OCIO and Master trust have more presence in North America with 28% on average for the period.

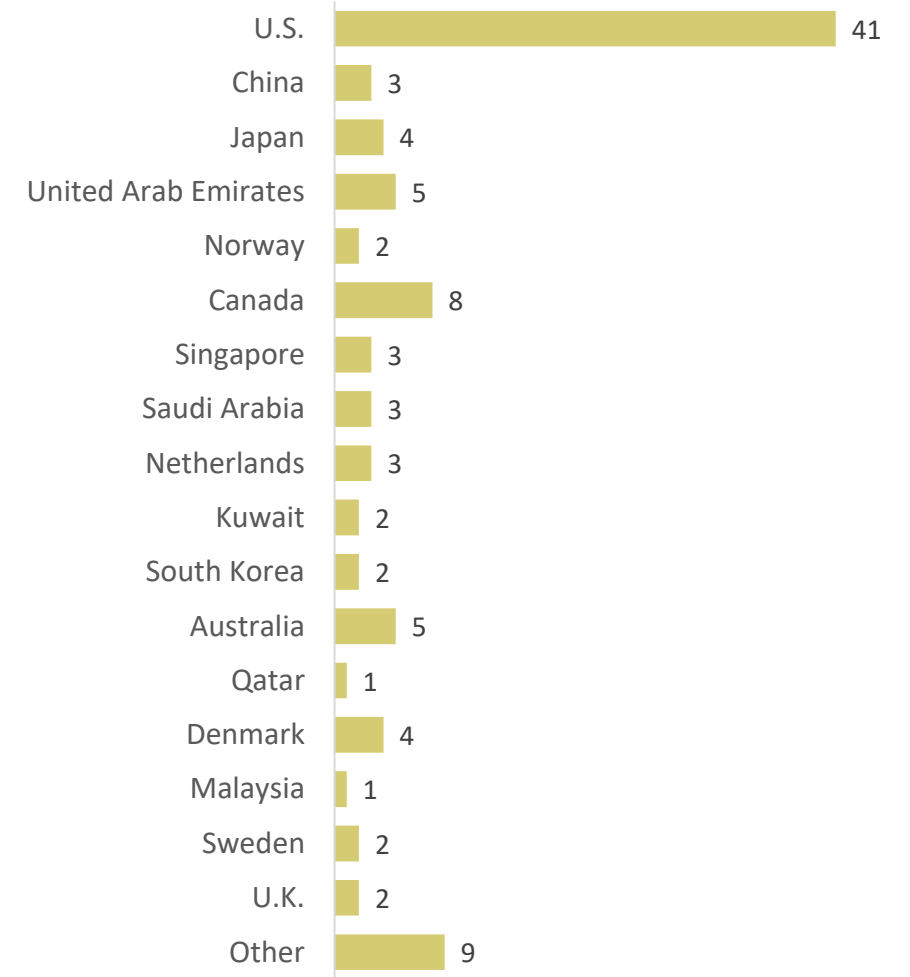
Note: OCIO and Master trust assets are shown in the region of their corporate headquarters. We note that all OCIOs and Master Trusts have clients globally.

Split by asset owner domicile

Share of top 100 discretionary assets

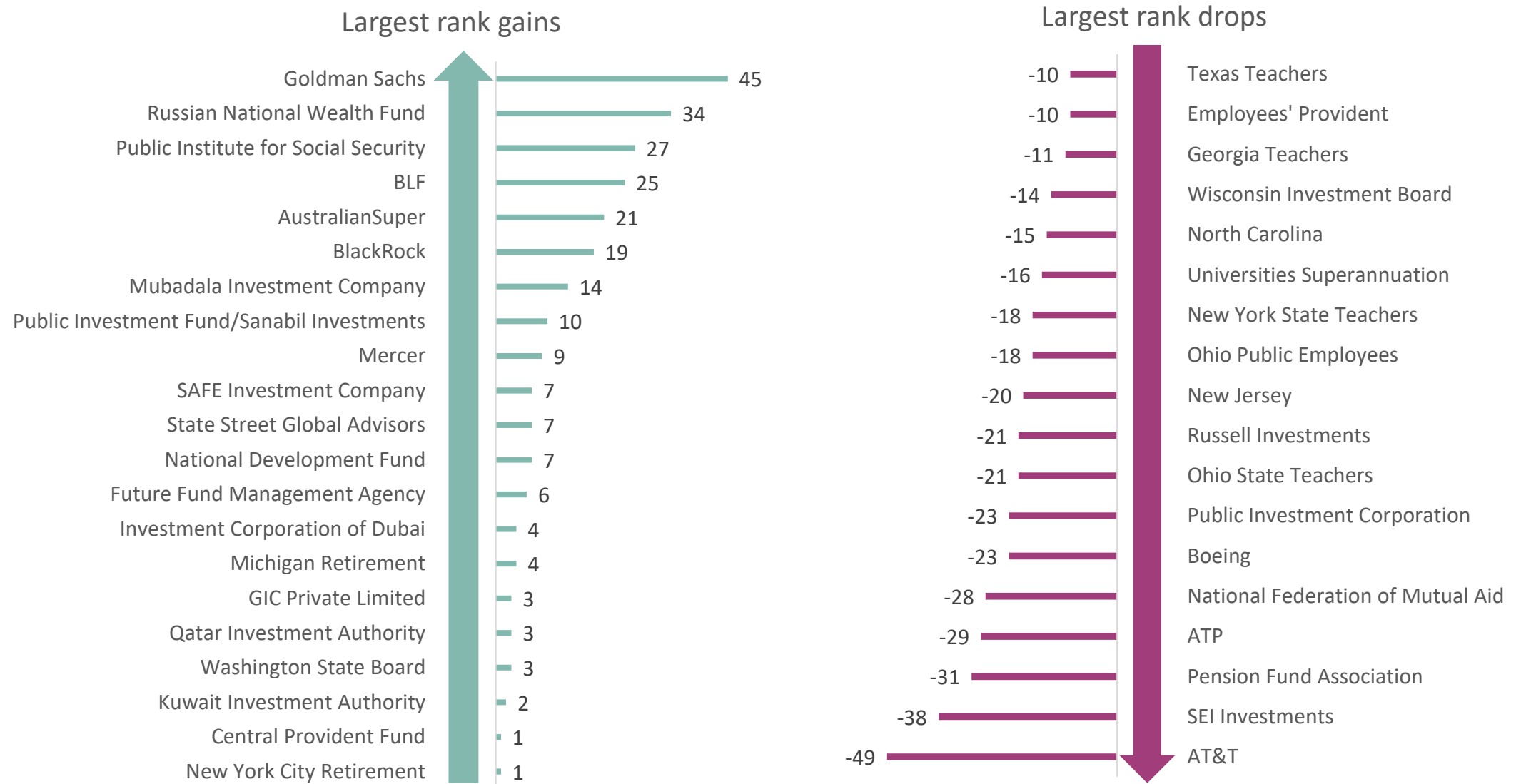


Number of funds per country



Note: 'Other' includes France, Germany, India, Iran, Israel, Russia, South Africa, Taiwan, and Turkey.

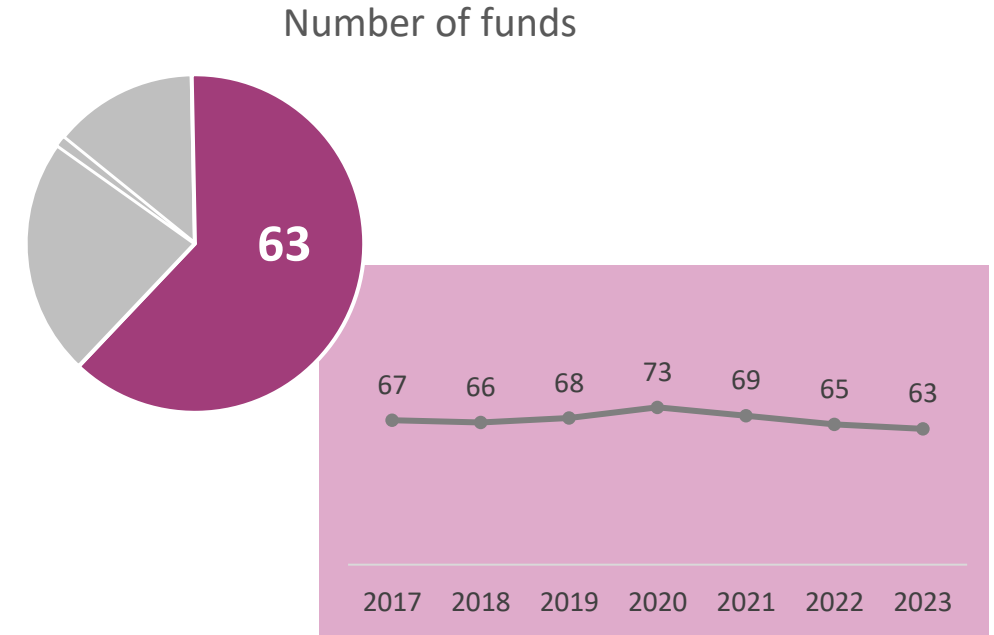
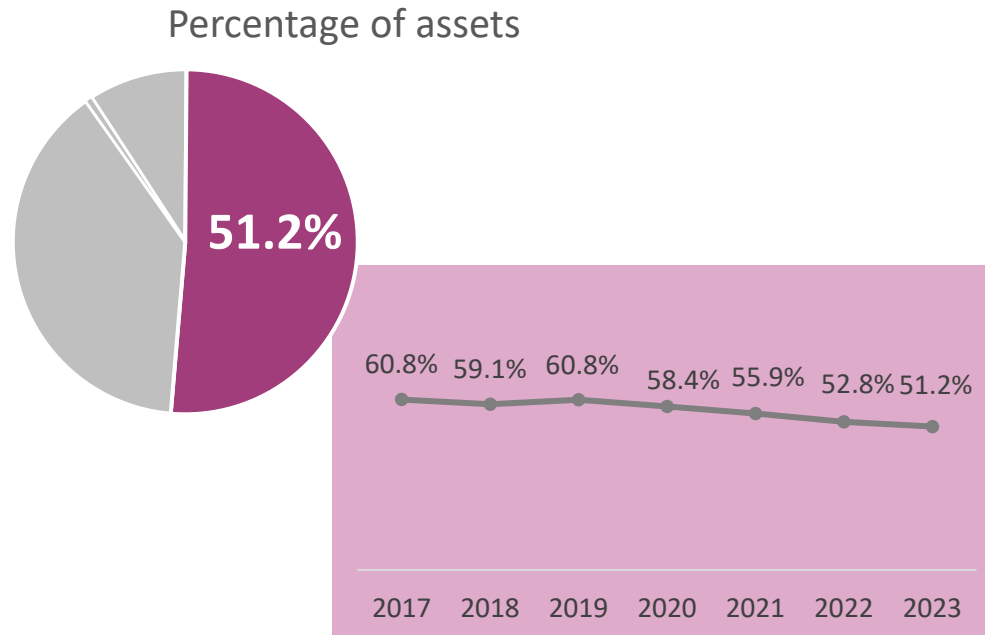
Change in ranking positions 2017 – 2023



Section 2 | Pension funds



Pension funds



- Pension Funds represent 51.2% of the ranking's assets and 63% of funds.
- Pension funds assets decreased since 2017, where they represented 60.8%, and the number of funds also decreased by 4 funds in the AO 100 ranking.
- The average assets of Pension Funds account for US\$214 billion, below the average of US\$263 billion for all funds.

Top 10 pension funds

Total assets managed in US\$ billions

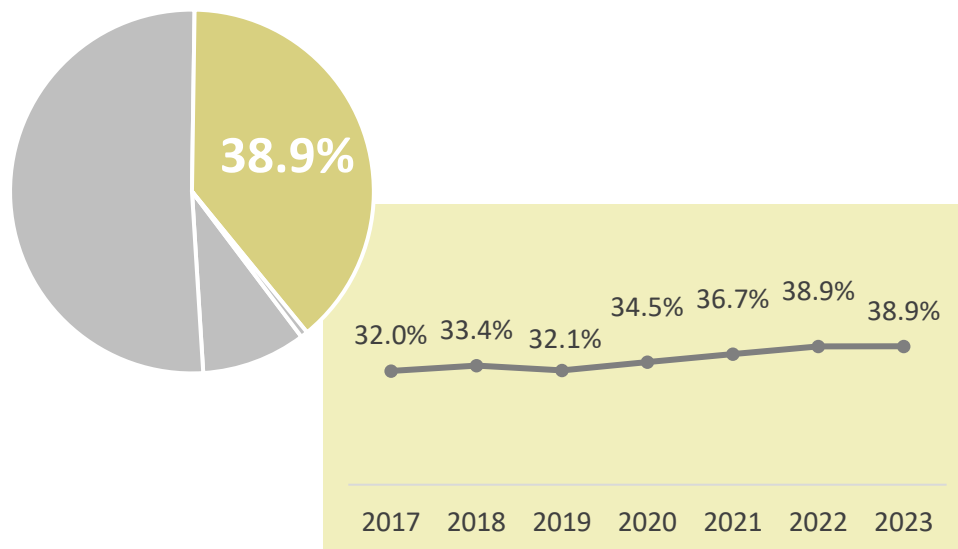
	Asset owner	Market	Est.	Total Assets (\$bn)
1	Government Pension Investment	Japan	2006	1,593
2	National Pension	South Korea	1988	802
3	Federal Retirement Thrift	U.S.	1986	783
4	APG	Netherlands	1922	552
5	Canada Pension Plan	Canada	1997	478
6	California Public Employees	U.S.	1932	452
7	Central Provident Fund	Singapore	1955	433
8	National Social Security	China	2000	364
9	CDPQ	Canada	1965	328
10	General Organization of Social Insurance	Saudi Arabia	1958	320

Section 3 | Sovereign wealth funds

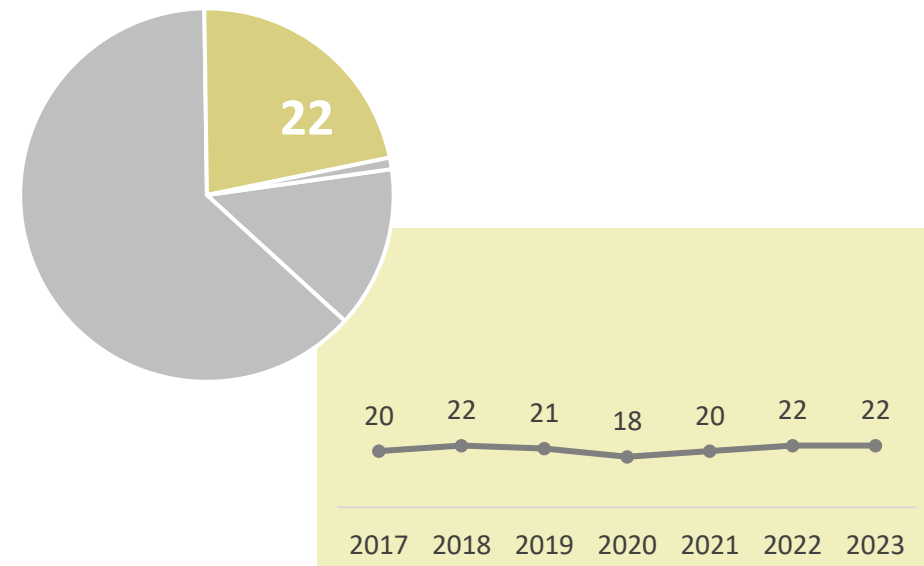


Sovereign wealth funds

Percentage of assets



Number of funds



- Sovereign Wealth Funds (SWFs) represent 38.9% of the ranking's assets and 22% of the number of funds.
- SWF's assets have increased their participation in total assets since 2017 and the number of funds ranked has remained relatively stable throughout time.
- The average assets of SWFs account for US\$465 billion, above the average of US\$263 billion for all funds.

Top 10 sovereign wealth funds

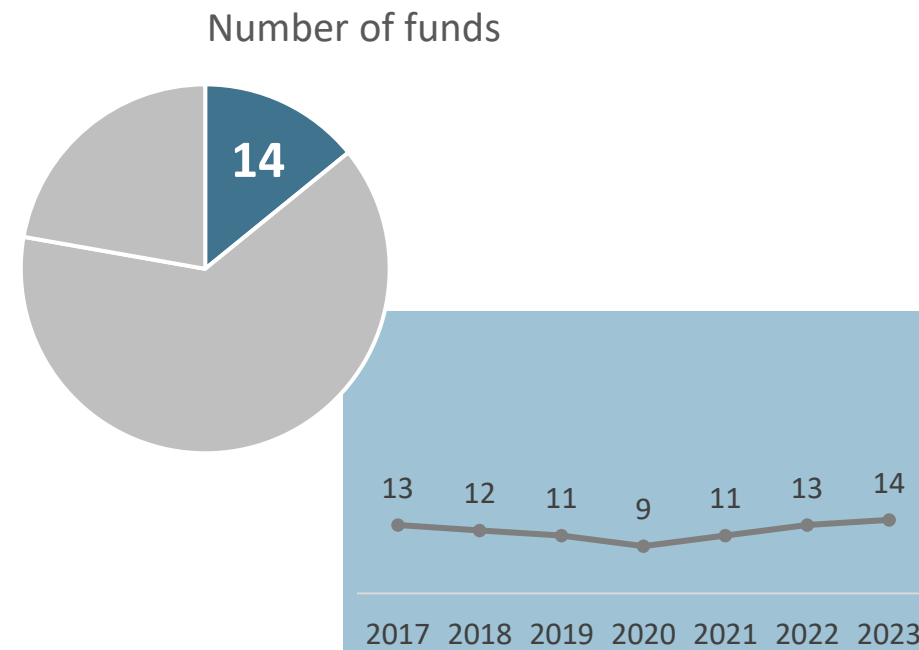
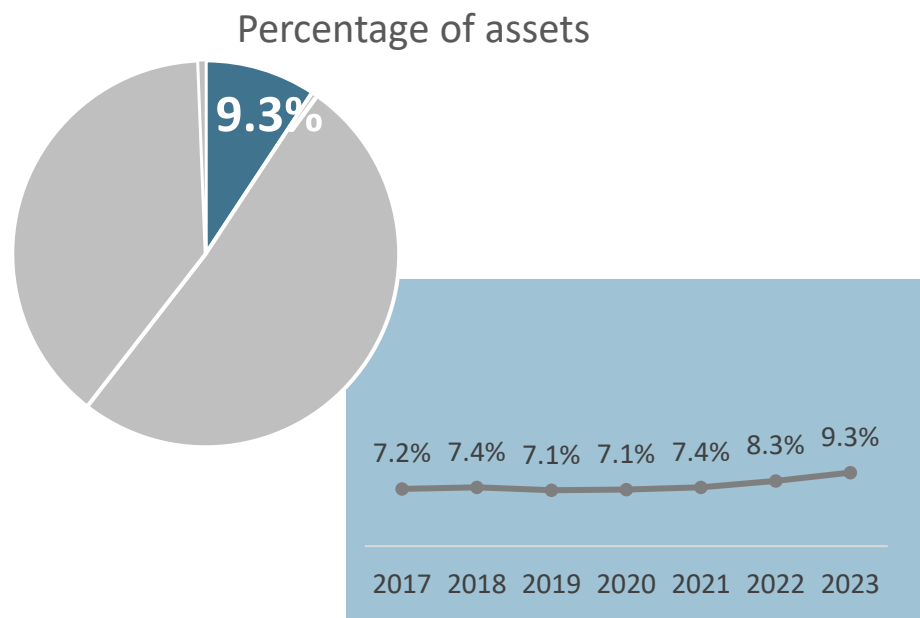
Total assets managed in US\$ billions

	Asset owner	Market	Est.	Total Assets (\$bn)
1	Norges Bank Investment Management	Norway	1997	1,548
2	China Investment Corporation	China	2007	1,240
3	SAFE Investment Company	China	1997	1,076
4	Abu Dhabi Investment Authority	United Arab Emirates	1967	968
5	Kuwait Investment Authority	Kuwait	1953	846
6	GIC Private Limited	Singapore	1981	769
7	Public Investment Fund/Sanabil Investments	Saudi Arabia	1971	764
8	Qatar Investment Authority	Qatar	2005	510
9	Investment Corporation of Dubai	United Arab Emirates	2006	341
10	Temasek Holdings	Singapore	1974	288

Section 4 | OCIO



OCIOs and master trusts



- OCIOs and Master Trusts represented 9.3% of the ranking's assets and 14% of the number of funds.
- OCIOs and Master Trusts have a slightly higher participation in total assets compared to previous years.
- The average assets of OCIOs and Master Trusts accounted for US\$175 billion which is below the average of US\$263 billion for all funds.

Note: OCIO and Master trust assets are shown in the region of their corporate headquarters. We note that all OCIOs and Master Trusts have clients globally.

Top 10 OCIOs and master trusts

Total assets managed in US\$ millions

	Asset owner	Market	Total Assets (\$bn)
1	Mercer	U.S	469
2	Goldman Sachs	U.S	329
3	BlackRock	U.S	240
4	AON	U.S	184
5	WTW	U.S	163
6	Russell Investments	U.S	162
7	State Street Global Advisors	U.S	158
8	CAPTRUST Financial Advisors	U.S	138
9	J.P. Morgan Asset & Wealth Mgmt.	U.S	113
10	Morgan Stanley	U.S	111

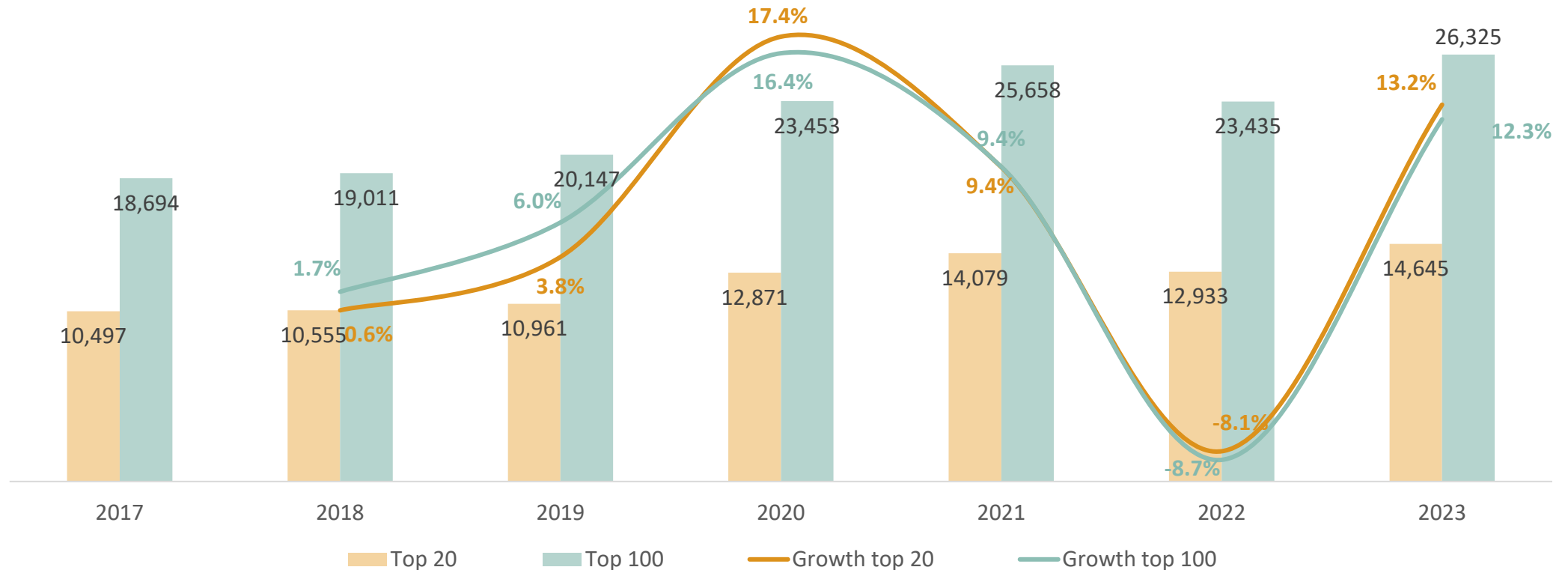
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Section 5 | Top 20 Asset Owners



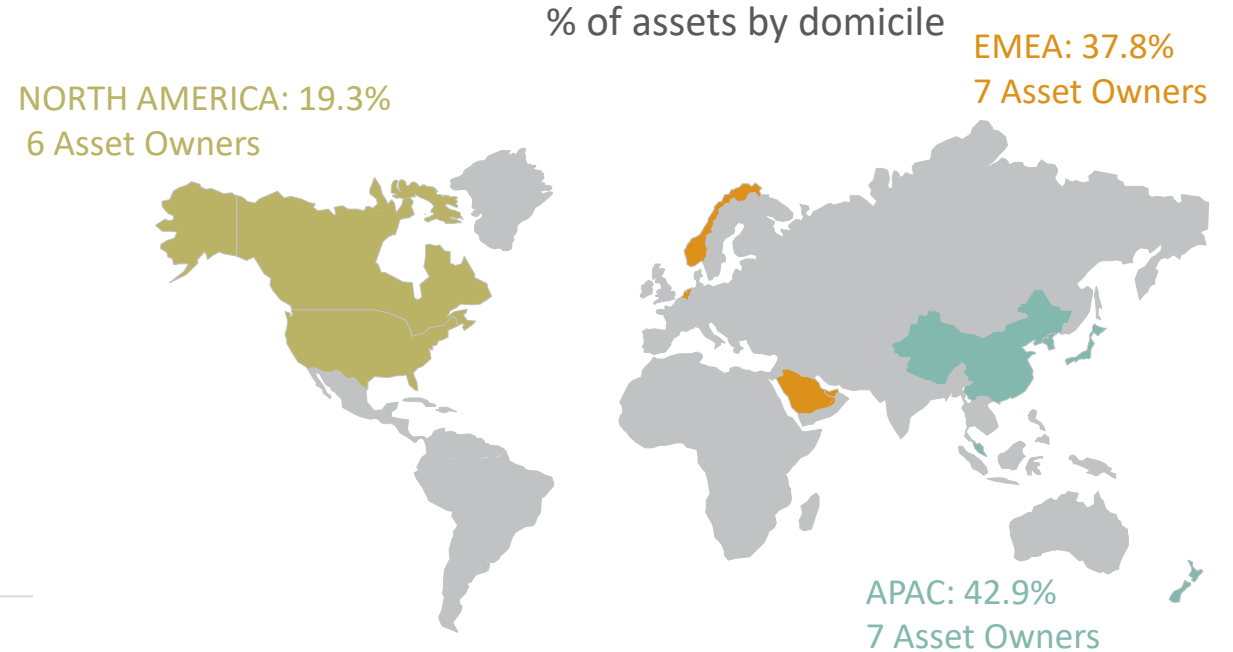
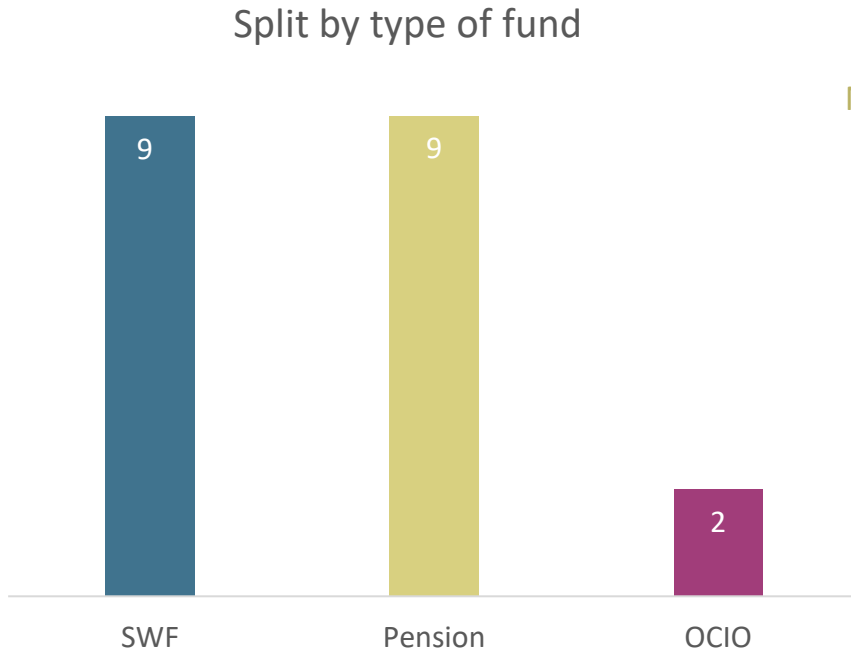
Top 20 fund assets

Value of assets and asset growth (US\$ bn) Top 20 vs Top 100



- The top 20 funds AUM totals US\$14.6 trillion and represent 55.6% of the total AUM in the AO100.
- In fact, the top 5 funds have an AUM of US\$6.4 trillion, which makes up 24.4% of the total AUM in the ranking.
- The 6-year CAGR of the top 20 was 5.7% versus 5.9% of the top 100.

Top 20 split by type of fund and domicile

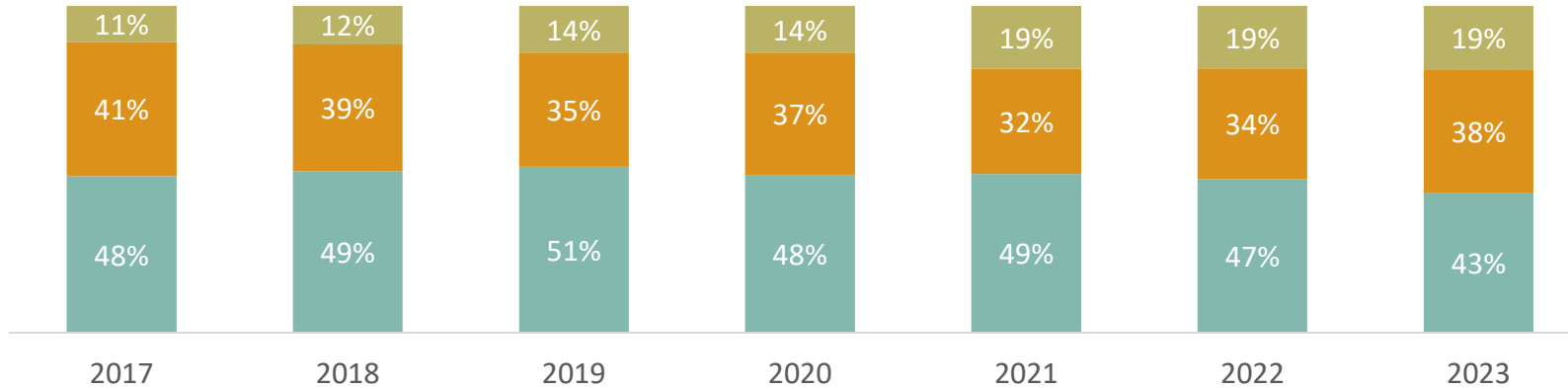


- Of the top 20 funds, 9 are sovereign wealth funds (55.0% of AUM in top 20), 9 are pension funds (39.5% of top 20 AUM) and 2 are OCIOs (5.5% of top 20 AUM).
- There are 6 asset owners from North America, 7 from EMEA and 7 asset owners from APAC in the top 20.

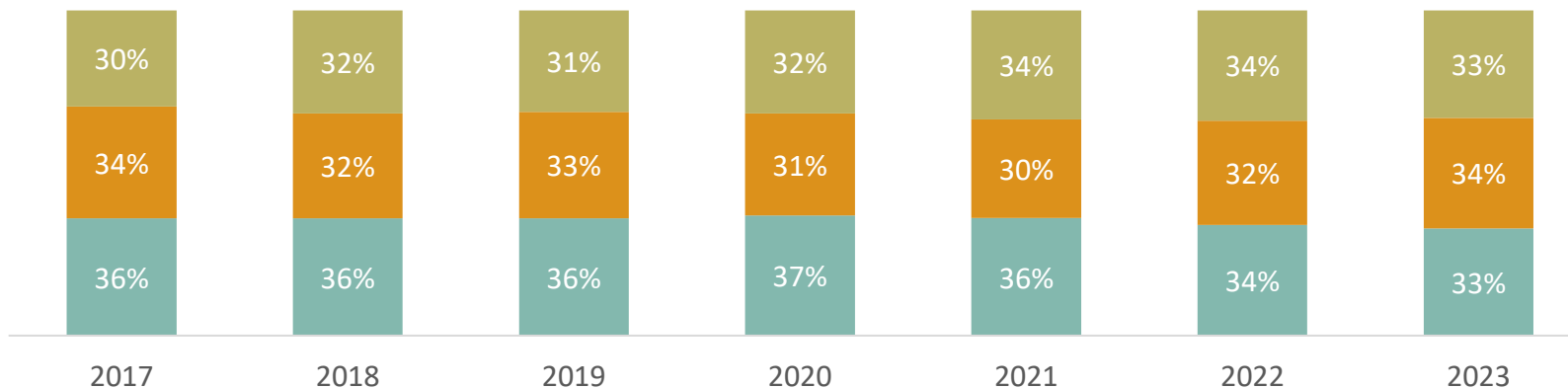
Top 20 fund assets

Value of assets (%) by region Top 20 vs Top 100

Top 20



Top 100



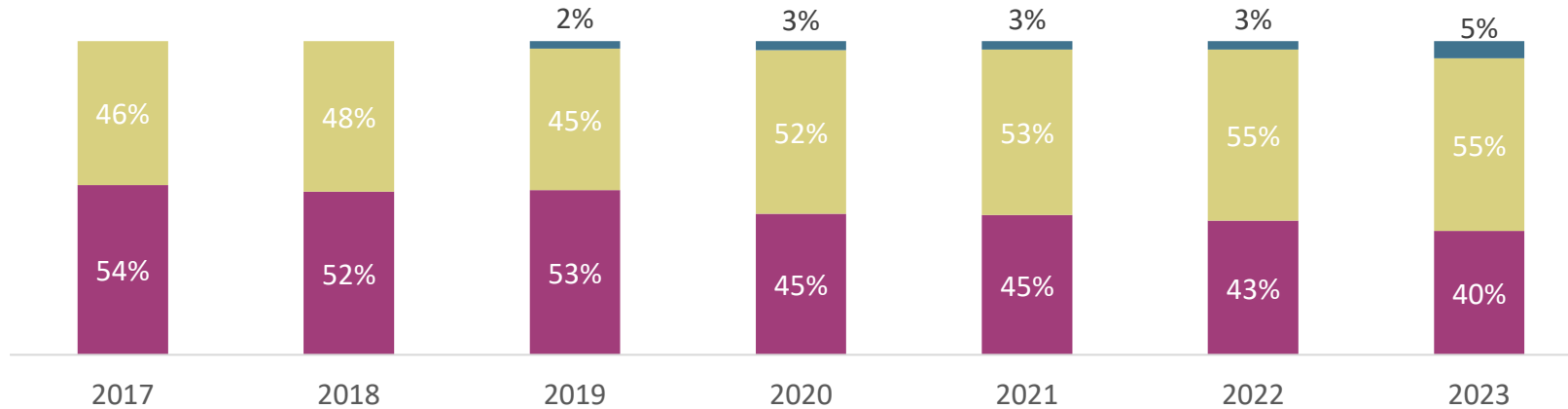
APAC EMEA North America

- APAC accounts for most assets in the top 20.
- North America shows the highest growth since 2017, in both top 20 (800bps) and top 100 funds (300bps).

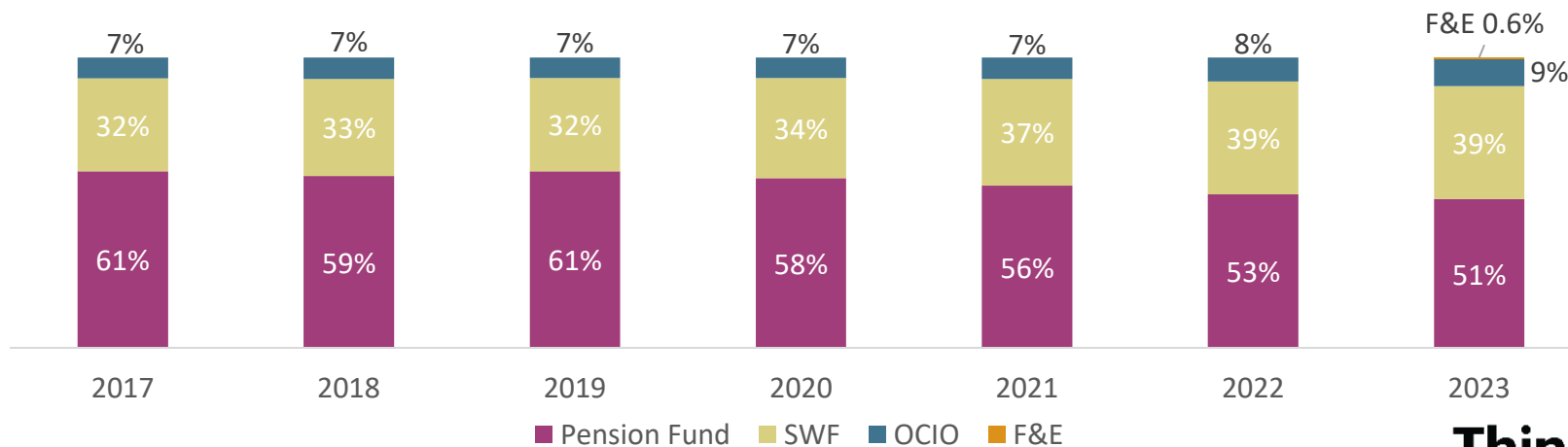
Top 20 fund assets

Value of assets (%) by type of fund Top 20 vs Top 100

Top 20



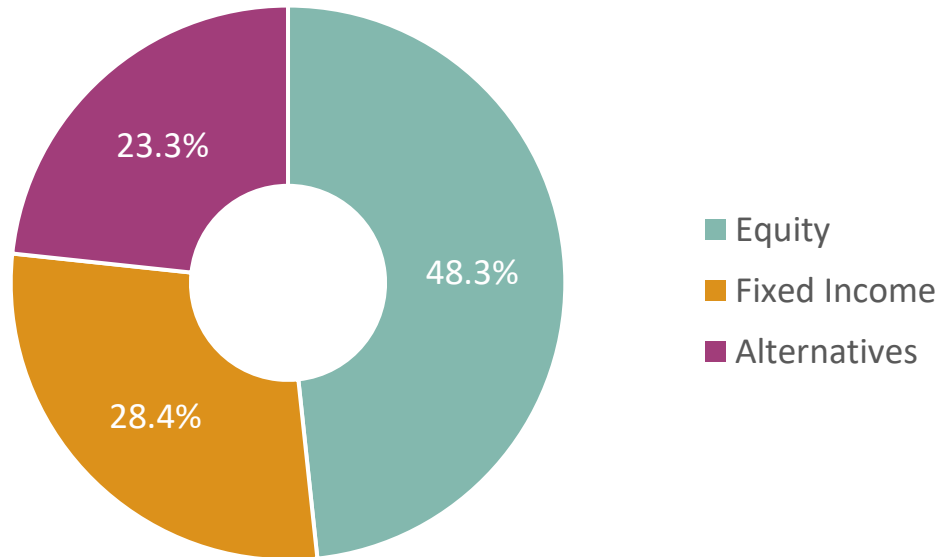
Top 100



- OCIO's have a minor weight in both the top 20 and top 100.
- SWF have increased their participation in the total value of assets in detriment of Pension Funds, more so in the top 20, where it is the predominant type of fund.
- Foundations & Endowments have made it to the ranking for the first time this year.

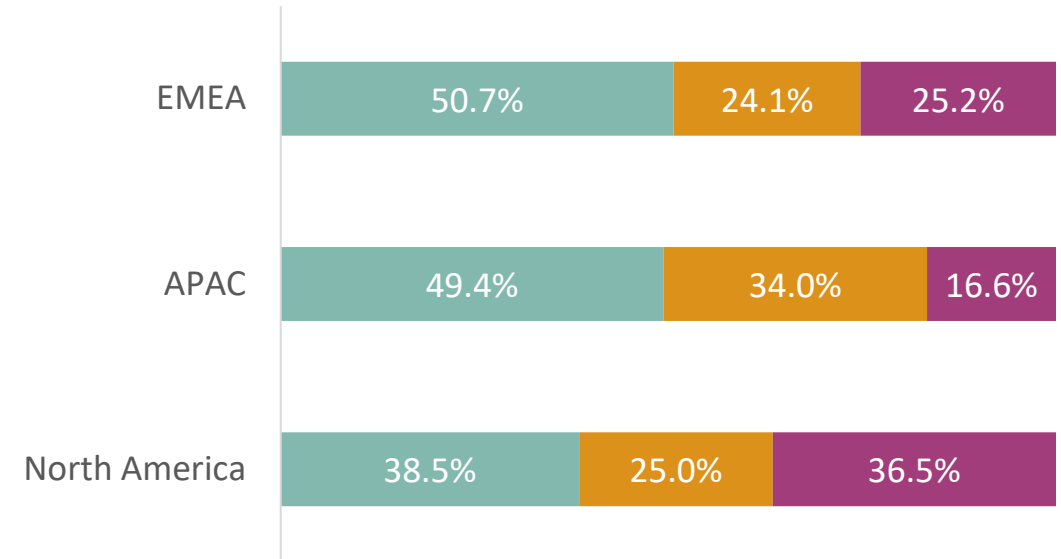
Top 20 split by asset allocation and fund domicile

Split by asset allocation*



*Weighted average

Asset allocation between regions*

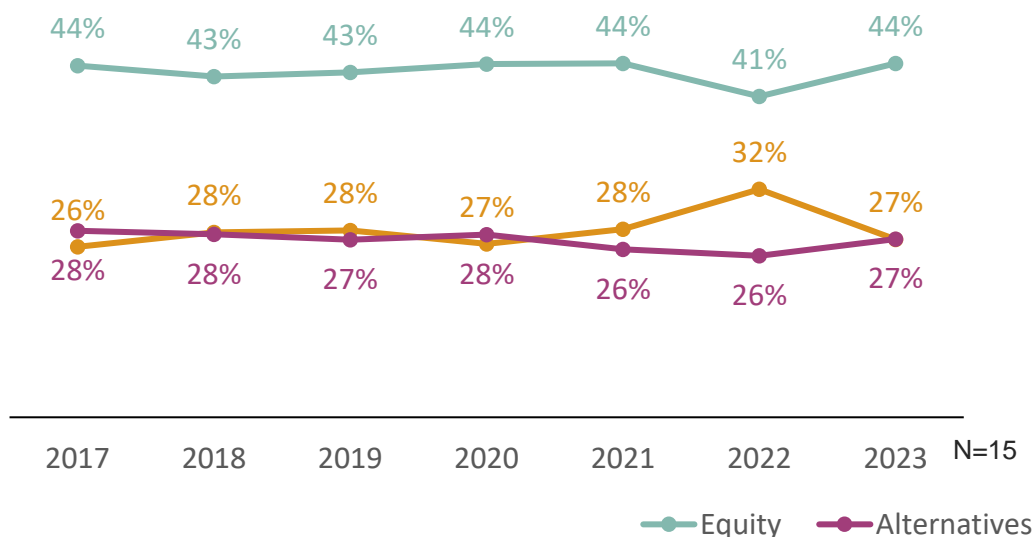


- The average portfolio for the top 20 funds shows the highest proportion of assets were invested in **equities**, followed by fixed income securities and lastly, alternative assets.
- **EMEA funds:** Majority share in equities (50.7%), followed by allocation to alternatives (25.2%).
- **Asia-Pacific funds:** 49.4% of assets allocated in equities, followed by fixed income at 34.0%.
- **North American funds:** Predominantly invested in equities (38.5%) closely followed by alternatives (36.5%).

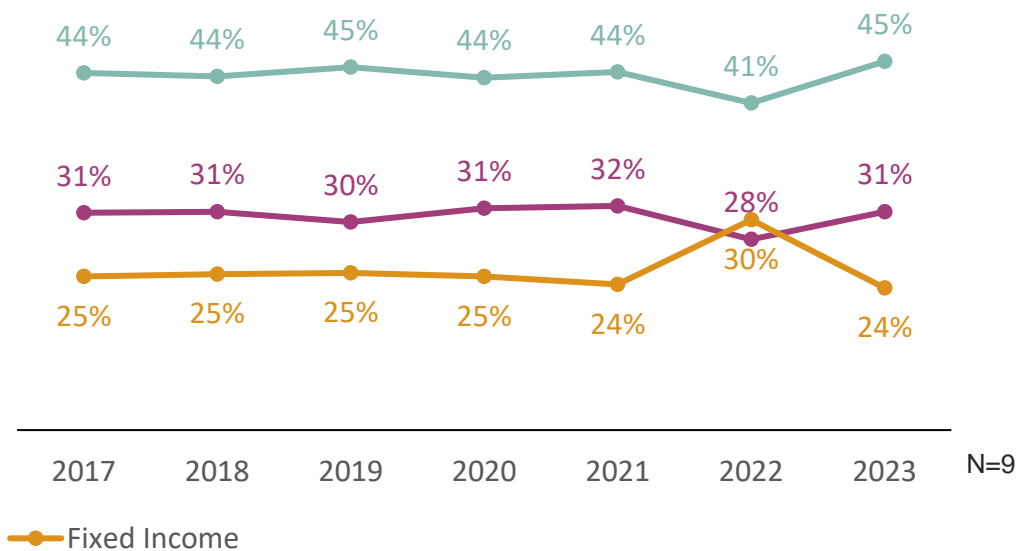
Note: Fixed income includes debt and cash; Alternatives include: private equity, real estate, hedge funds and other.
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Top 20 vs SWF asset allocation historical evolution

Top 20 Historic Asset allocation



Top 20 SWF only Asset allocation



- For the top 20 ranked in 2023, their historical asset allocation remained mostly unchanged during the period. However, there was a decrease in fixed income investments in the last year, offset by an increase in alternative assets.
- For SWF investments, there is a higher allocation to alternatives and lower proportion of fixed income compared to the Top 20.

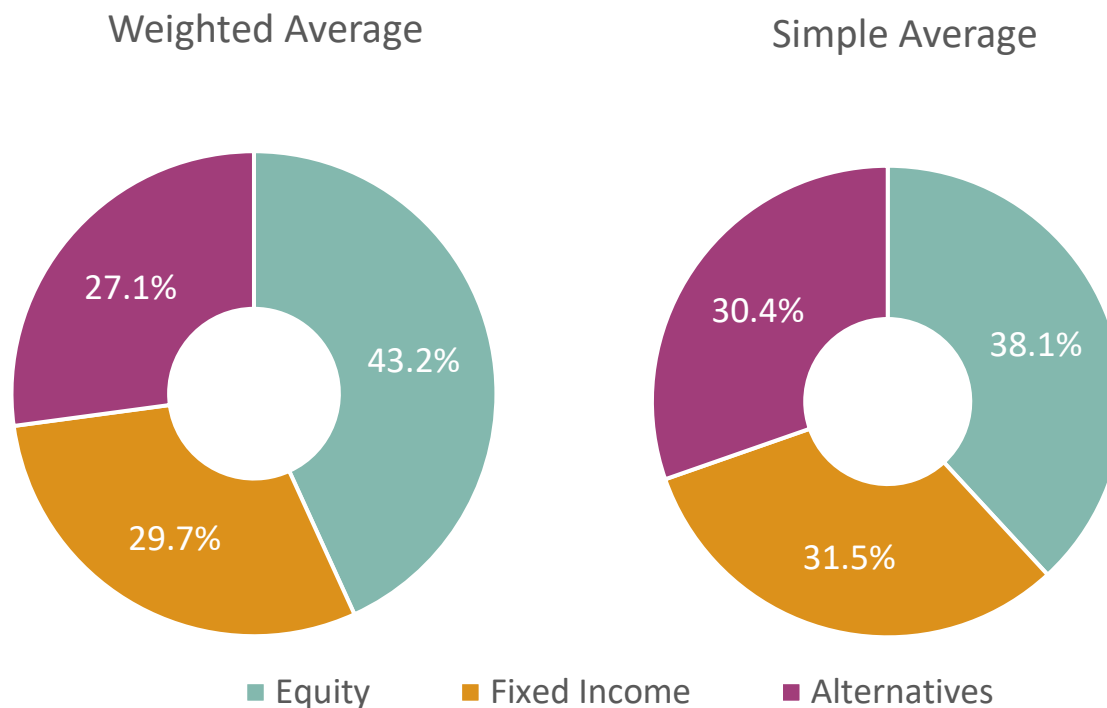
Note: Fixed income includes debt and cash; Alternatives include: private equity, real estate, hedge funds and other. For 2020 and previous years, cash is included in Alternatives for: GPI (Japan), National Pensión (South Korea), APG (Netherlands), Federal Retirement Thrift (U.S.), California Public Employees (U.S.), Canada Pensión Plan (Canada) and California State Teachers (U.S.). 5 funds from the top 20 were excluded due to lack of data availability.

Section 6 | Asset Allocation

AO 100



Split by Asset Allocation



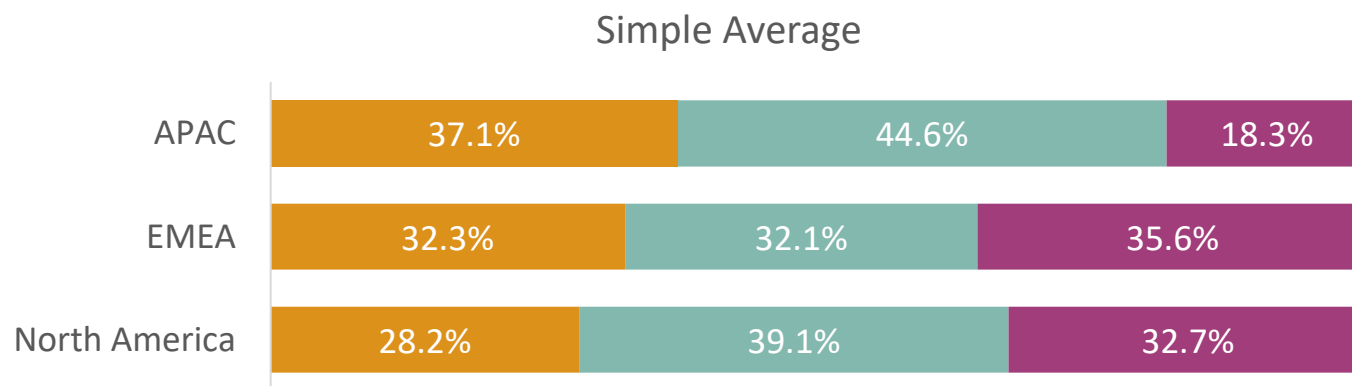
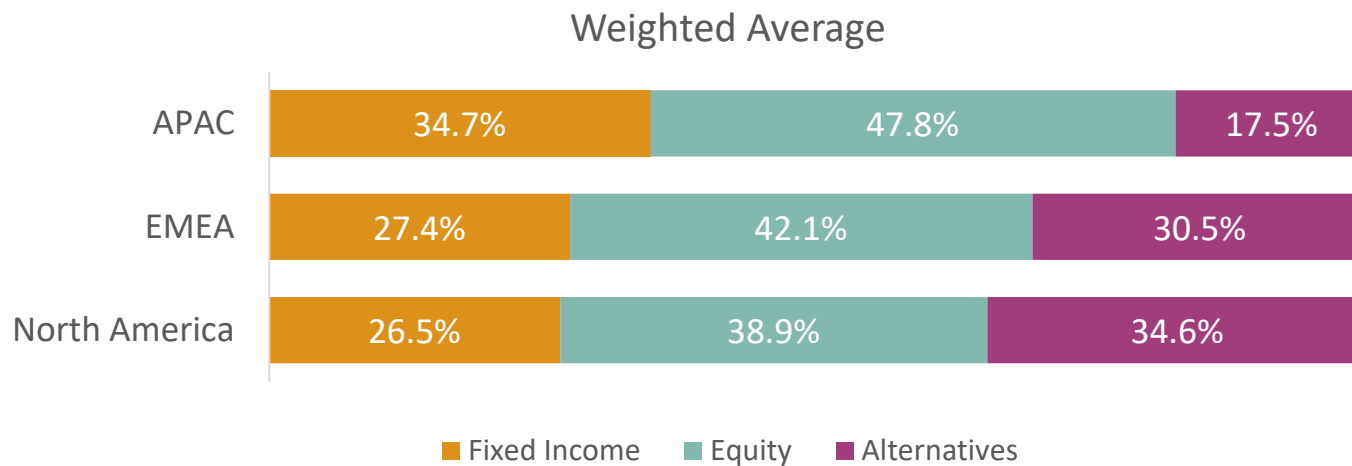
In 2023, the average portfolio for the top 100 owners was primarily invested in equities, followed by fixed income including cash securities. The smallest allocation was to alternatives.

Note: Asset allocation was available for 79 of the Asset Owners ranked in the AO100

Note: Fixed income includes debt and cash; Alternatives include: private equity, real estate, hedge funds and other.

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Split by Asset Allocation and region



Asia-Pacific funds have the highest share in equities (47.8%), followed by allocation to fixed income (34.7%)

EMEA funds have invested a majority share in equities (42.1%), followed by allocation to alternatives (30.5%)

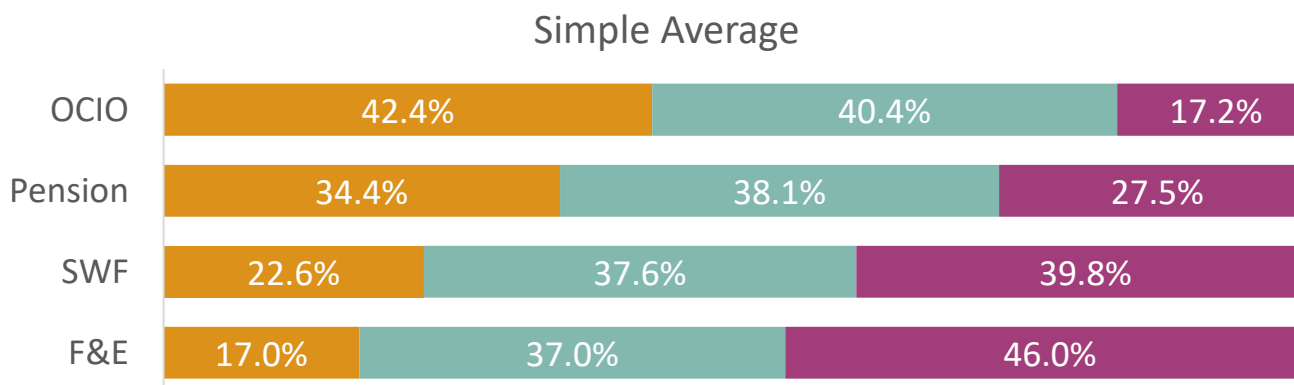
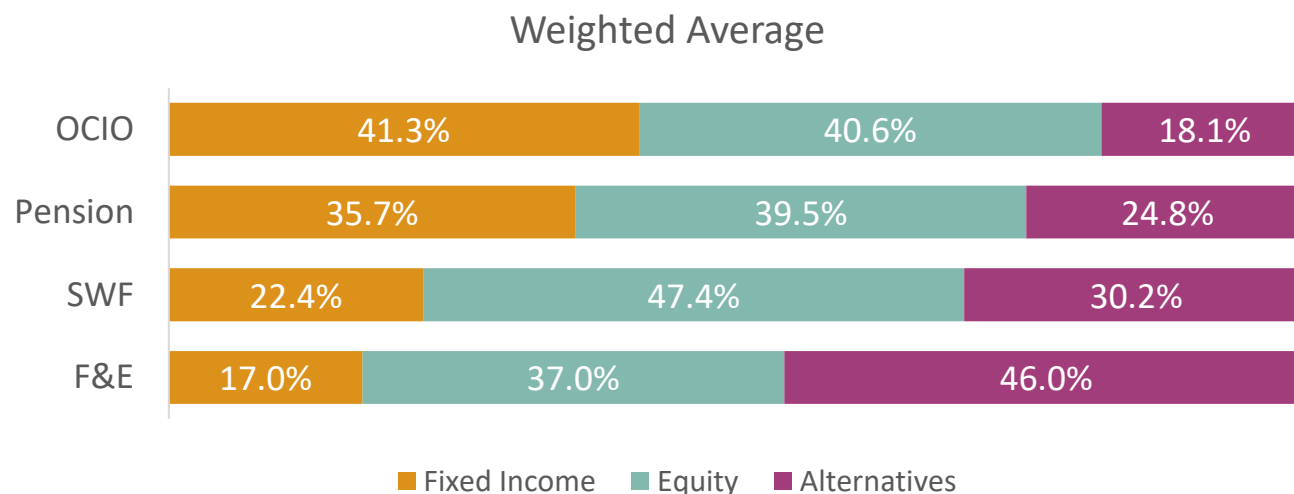
North American funds have predominantly invested in equities (38.9%), followed by alternatives (34.6%)

Note: Asset allocation was available for 79 of the Asset Owners ranked in the AO100

Note: Fixed income includes debt and cash; Alternatives include: private equity, real estate, hedge funds and other.

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Split by Asset Allocation and fund type



OCIO's funds have the highest investment in fixed income (41.3%), followed by allocation to equity (40.6%)

SWF have the highest share in equities (47.4%), followed by allocation to alternatives (30.2%)

Pension funds have invested most assets in equities (39.5%), followed by allocation to fixed income (35.7%)

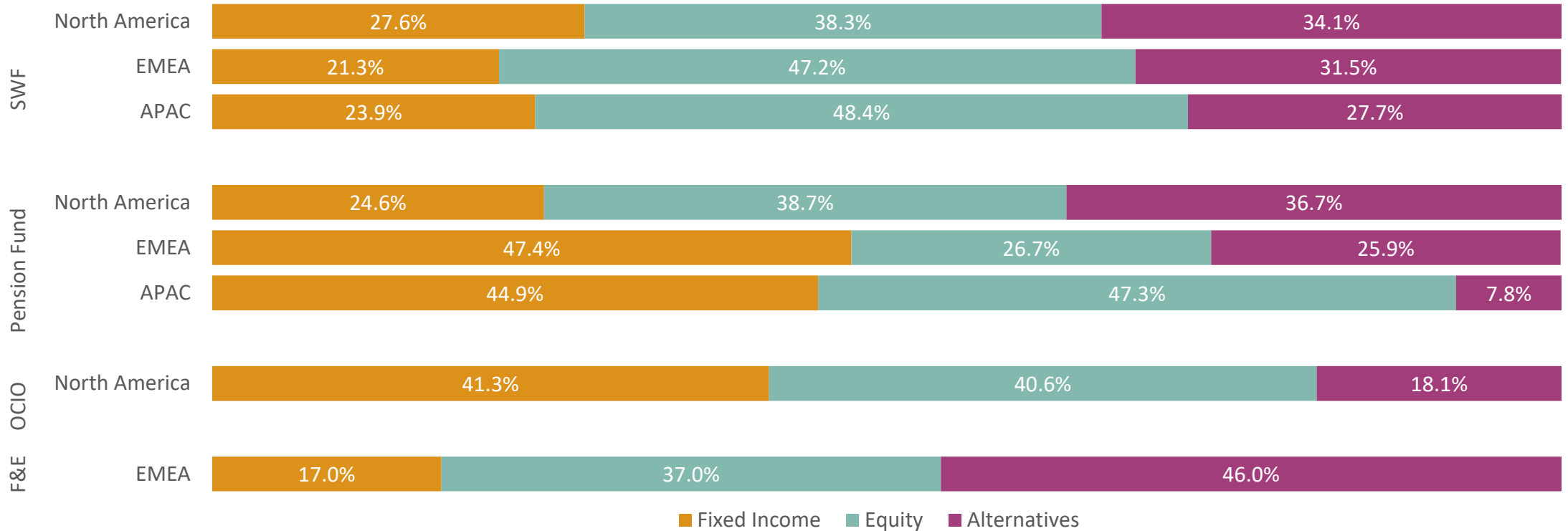
Note: Asset allocation was available for 79 of the Asset Owners ranked in the AO100

Note: Fixed income includes debt and cash; Alternatives include: private equity, real estate, hedge funds and other.

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Split by Asset Allocation, region and type of fund

Weighted Average



- The largest allocation to equity is held by APAC SWF's with 48.4%, followed by APAC Pension Funds with 47.3%.
- The largest allocation to fixed income is held by EMEA pension funds with 47.4%, followed by APAC pension funds with 44.9%.
- The highest share of alternative assets belongs to EMEA Foundations & Endowments with 46.0%, followed by North America pension funds with 36.7%.

Note: Asset allocation was available for 79 of the Asset Owners ranked in the AO100

Note: Fixed income includes debt and cash; Alternatives include: private equity, real estate, hedge funds and other.

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Section 7 | SIP



What are State Investment Platforms (SIP)?

- State Investment Platforms are institutional investors which are entrusted with managing and investing a pool of capital from various depositors or funds; and are usually based in one country.
- These depositors/funds can range from pension funds, insurance plans, sovereign wealth funds, endowment funds and other organisations. SIP governance structures are impacted by each depositor's investment policies
- State Investment Platforms should not be considered as a mutually exclusive category like the ones examined in above sections of this report, but as an additional layer to understand the nature of some funds
- The considerable size of AUMs of these platforms is why they warrant special consideration in our report

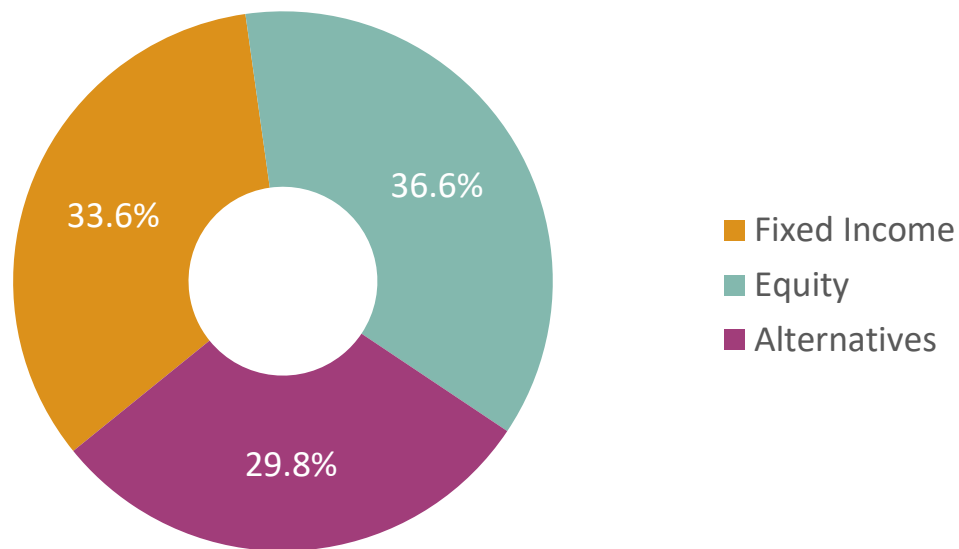
Top 10 State Investment Platforms

Ranking	Manager	Country	Total AUM billion, US\$	Type of fund	Region
6	Kuwait Investment Authority	Kuwait	846	SWF	EMEA
11	APG	Netherlands	552	Pension	EMEA
20	CDPQ	Canada	328	Pension	North America
25	PGGM	Netherlands	262	Pension	EMEA
28	New York State Common	U.S.	246	Pension	North America
31	BLF	Taiwan	214	Pension	APAC
37	MN Services N.V.	Netherlands	187	Pension	EMEA
39	Future Fund Management Agency	Australia	186	SWF	APAC
41	Public Service Pension Investment Board	Canada	184	Pension	North America
46	British Columbia Investment	Canada	172	Pension	North America

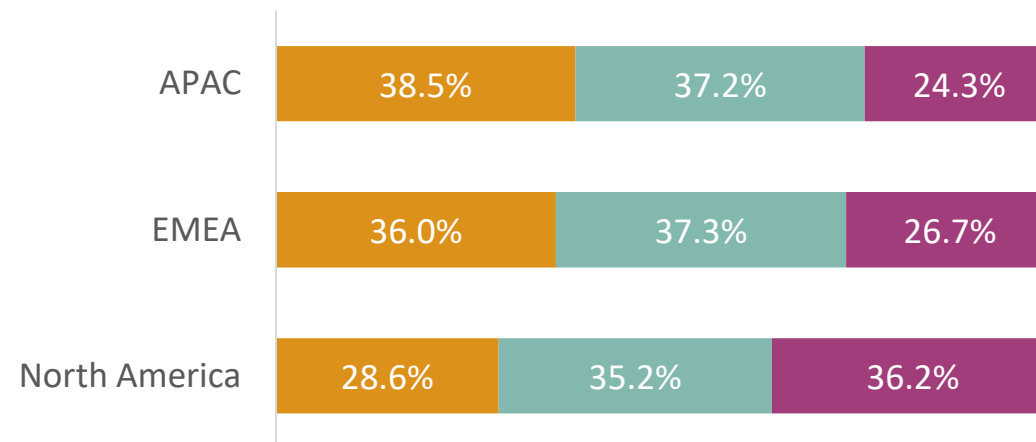
- We have identified 16 State Investment Platforms in the AO100, representing total AUM of US\$ 3.9 trillion.
- There is usually one fund which forms the majority of AUM in any SIP. This majority fund is used to categorize a SIP, for example, PGGM from Netherlands is an SIP and the majority of AUM are from PFZW, which is a pension fund. So PGGM is also categorized as a pension fund and a SIP.

Split by asset allocation and fund domicile

Split by asset allocation*



Asset allocation between regions*



*Weighted average

- The average portfolio for SIP shows the highest proportion of assets were invested in equities, followed by fixed income and alternative assets.
- North American SIP assets allocate 36.2% of their assets to alternative investments.
- EMEA SIP primarily invest in equity, with 37.3%, followed by fixed income (36.0%) and alternative assets (26.7%).
- Asia-Pacific funds have allocated 38.5% of assets to fixed income, followed by equities 37.2%

Note: Fixed income includes debt and cash; Alternatives include: private equity, real estate, hedge funds and other.

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Section 8 | Universal Owners



What is a universal owner?

Universal owners are large long-term holders of index-like portfolios that are exposed to the entire market and economy

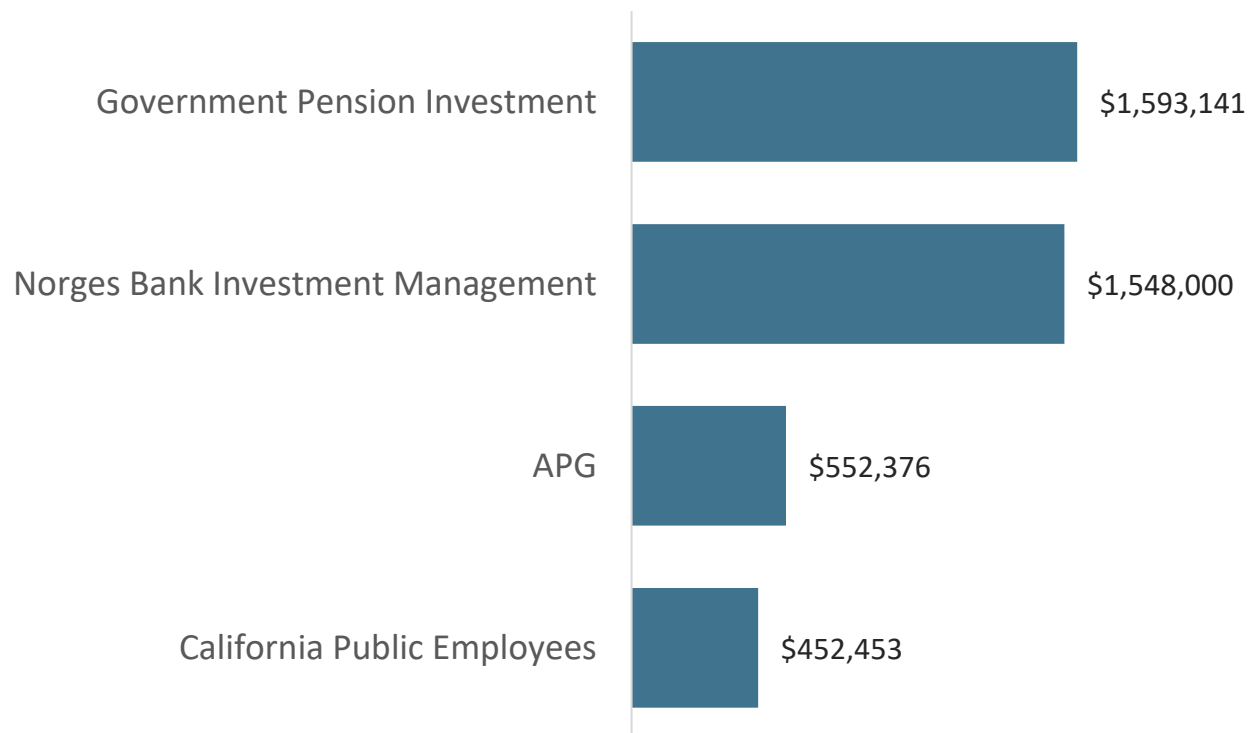
Universal owners also own a significant slice of corporate externalities which risk being internalized to their funds' net cost, now or in the future

Universal owners are leadership-minded to grow the value and utility of their sponsor/member wealth by managing their long-term risk exposures inter-dependencies across the portfolio, across the stakeholders and over time

Universal owners and sustainability strategies:

- Universal owners have distinctive investment strategies regarding sustainability that aim to achieve real-world impacts on the environmental/societal system and drive better outcomes for beneficiaries (or not suffering worse outcomes)
- The activities adopted by universal investors in these strategies are both allocating to specific assets (security selection and asset allocation) and active ownership practices – voting and engagement
- The engagement here is often concerned with system-level factors to contribute to safeguarding the financial system and contributing positively to wider stakeholders
- Universal owner strategies play a key part in Paris alignment and COP26 strategies, consistent with net zero emissions by 2050
- Relatively few asset owners in this study have held claim to being universal owners (eg GPIF from Japan, NBIM from Norway, CalPERS from U.S.), while others appear to have a universal mindset

Universal owners



“The core idea of a universal owner is a large institution investing long-term in widely diversified holdings across multiple industries and asset classes, and adapting its investment strategy to these circumstances. For universal owners, overall economic performance will influence the future value of their portfolios more than the performance of individual companies or sectors. This suggests that universal owners will support the goals of sustainable growth and well-functioning financial markets. A universal owner will also view these goals holistically and seek ways to reduce the company level externalities that produce economy-wide efficiency losses.”

Definition of universal owners comes from : Urwin, Pension Funds as Universal Owners; Opportunity Beckons and Leadership Calls | Rotman International Pensions Management Journal | Spring 2011.

The challenge for universal owners is hyper-integrated risk management which can be carried out in two main areas:

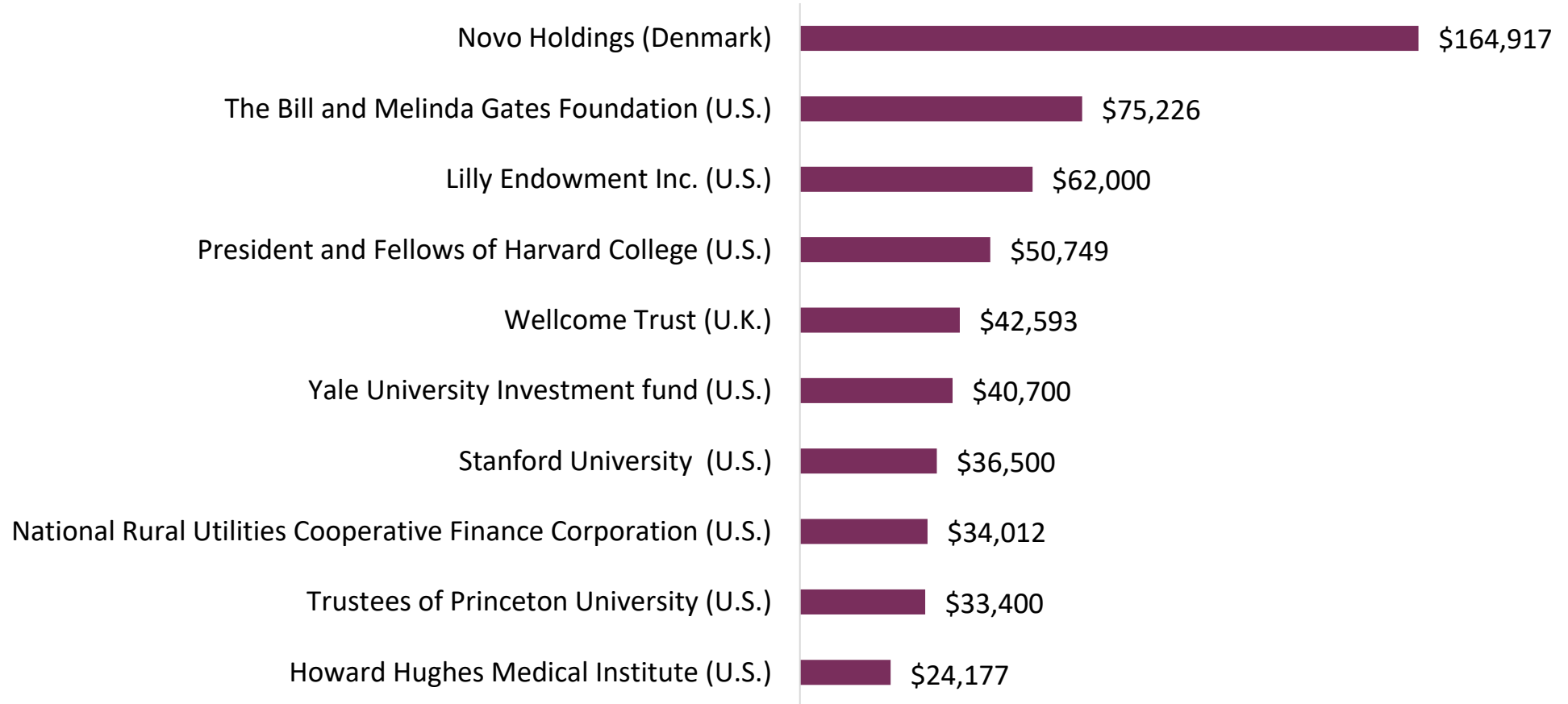
- allocation of assets whereas large investors they will generally work within-the-system
- stewardship of assets whereas universal owners there are change-the-system opportunities

Section 9 | Foundations & Endowments



Foundations and endowments

Total assets managed in US\$ millions



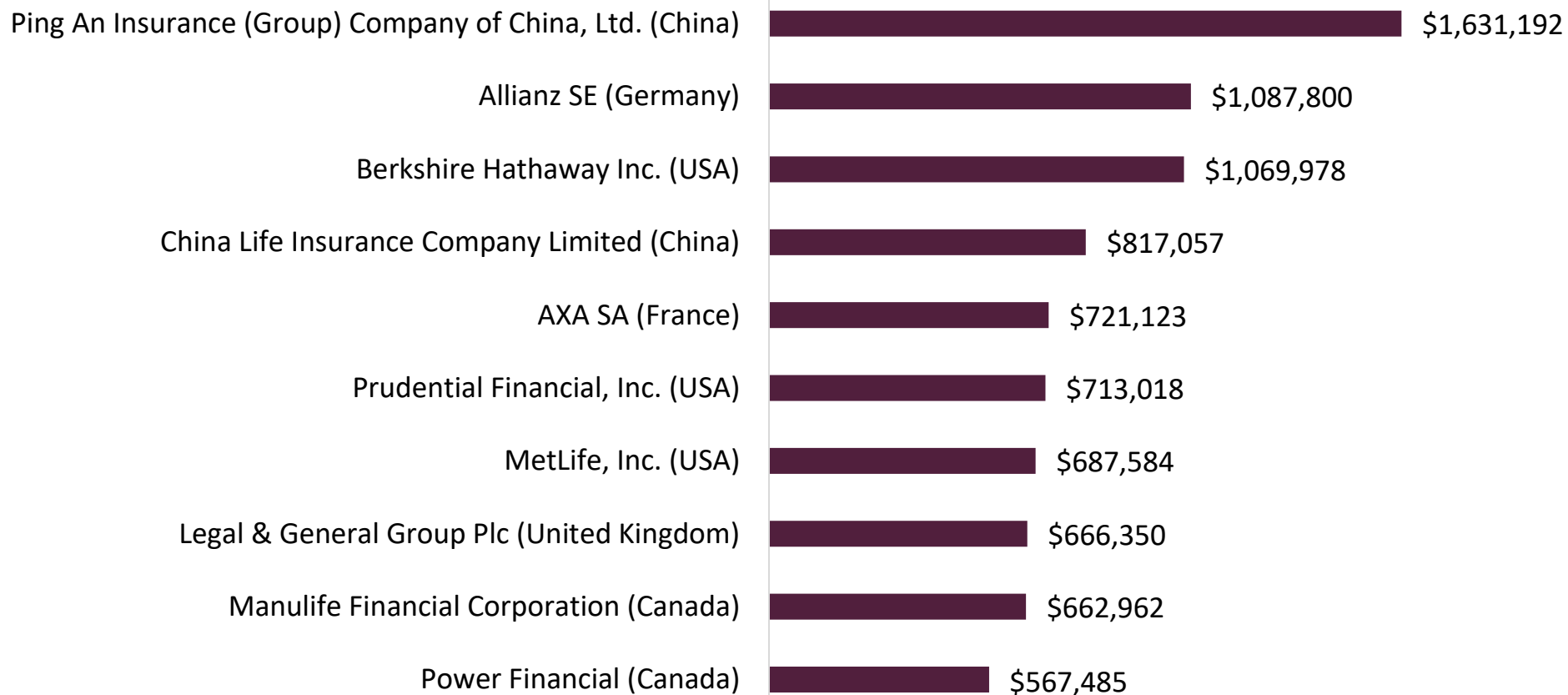
Novo Holdings is the only entity from this category included in the AO100 ranking.

Section 10 | Insurance Companies



Top 10 insurance companies

Total assets managed in US\$ millions



Note: Total assets presented for insurance companies include assets managed by third parties, so are not included in the top 100 ranking

Section 11 | Ranking



AO 100 ranking (in US\$ million)

Rank	Fund	Market	Total Assets	Type of Fund
1	Government Pension Investment	Japan	\$1,593,141	Pension Fund
2	Norges Bank Investment Management	Norway	\$1,548,000	SWF
3	China Investment Corporation	China	\$1,240,000	SWF
4	SAFE Investment Company	China	\$1,076,000	SWF
5	Abu Dhabi Investment Authority	United Arab Emirates	\$968,000	SWF
6	Kuwait Investment Authority	Kuwait	\$846,000	SWF
7	National Pension	South Korea	\$801,864	Pension Fund
8	Federal Retirement Thrift ¹	U.S.	\$782,835	Pension Fund
9	GIC Private Limited	Singapore	\$769,000	SWF
10	Public Investment Fund/Sanabil Investments	Saudi Arabia	\$764,000	SWF
11	APG	Netherlands	\$552,376	Pension Fund
12	Qatar Investment Authority	Qatar	\$510,000	SWF
13	Canada Pension Plan ²	Canada	\$477,676	Pension Fund
14	Mercer ²	U.S.	\$469,212	OCIO
15	California Public Employees ¹	U.S.	\$452,453	Pension Fund
16	Central Provident Fund	Singapore	\$432,509	Pension Fund
17	National Social Security ^{1, 3}	China	\$364,351	Pension Fund
18	Investment Corporation of Dubai	United Arab Emirates	\$341,000	SWF
19	Goldman Sachs ²	U.S.	\$328,913	OCIO
20	CDPQ	Canada	\$328,000	Pension Fund

AO 100 ranking (in US\$ million)

Rank	Fund	Market	Total Assets	Type of Fund
21	General Organization of Social Insurance	Saudi Arabia	\$320,000	Pension Fund
22	California State Teachers ¹	U.S.	\$309,931	Pension Fund
23	Temasek Holdings	Singapore	\$288,000	SWF
24	Mubadala Investment Company	United Arab Emirates	\$276,000	SWF
25	PGGM	Netherlands	\$262,261	Pension Fund
26	New York City Retirement ¹	U.S.	\$247,999	Pension Fund
27	Employees Provident Fund	Malaysia	\$247,268	Pension Fund
28	New York State Common ¹	U.S.	\$246,307	Pension Fund
29	BlackRock ²	U.S.	\$240,000	OCIO
30	Local Government Officials	Japan	\$226,803	Pension Fund
31	BLF	Taiwan	\$214,000	Pension Fund
32	AustralianSuper ⁴	Australia	\$204,631	Pension Fund
33	ADQ	United Arab Emirates	\$196,000	SWF
34	Florida State Board ¹	U.S.	\$194,659	Pension Fund
35	Turkey Wealth Fund	Turkey	\$190,000	SWF
36	Korea Investment Corporation	South Korea	\$189,000	SWF
37	MN Services N.V.	Netherlands	\$187,000	Pension Fund
38	Ontario Teachers	Canada	\$186,897	Pension Fund
39	Future Fund Management Agency	Australia	\$186,000	SWF
40	AON ²	U.S.	\$184,044	OCIO

AO 100 ranking (in US\$ million)

Rank	Fund	Market	Total Assets	Type of Fund
41	Public Service Pension Investment Board	Canada	\$184,000	Pension Fund
42	CDC	France	\$182,000	Pension Fund
43	Texas Teachers ¹	U.S.	\$181,656	Pension Fund
44	Employees' Provident ^{1, 3}	India	\$176,246	Pension Fund
45	Australian Retirement Trust ⁴	Australia	\$173,844	Pension Fund
46	British Columbia Investment	Canada	\$172,000	Pension Fund
47	Washington State Board ¹	U.S.	\$167,033	Pension Fund
48	Novo Holdings	Denmark	\$164,917	F&E
49	WTW ²	U.S.	\$163,000	OCIO
50	Russell Investments ²	U.S.	\$161,575	OCIO
51	State Street Global Advisors ²	U.S.	\$157,952	OCIO
52	National Development Fund	Iran	\$150,000	SWF
53	Public Investment Corporation	South Africa	\$147,000	SWF
54	Public Institute for Social Security ^{1, 3}	Kuwait	\$144,911	Pension Fund
55	CAPTRUST Financial Advisors ²	U.S.	\$138,134	OCIO
56	Russian National Wealth Fund	Russia	\$133,000	SWF
57	National Development Fund (NDF)	Saudi Arabia	\$132,000	SWF
58	Wisconsin Investment Board ¹	U.S.	\$130,932	Pension Fund
59	New York State Teachers ¹	U.S.	\$130,783	Pension Fund
60	Alecta	Sweden	\$126,614	Pension Fund

AO 100 ranking (in US\$ million)

Rank	Fund	Market	Total Assets	Type of Fund
61	North Carolina ¹	U.S.	\$126,472	Pension Fund
62	Bayerische Versorgungskammer ⁵	Germany	\$123,526	Pension Fund
63	Boeing ^{1, 3}	U.S.	\$119,225	Pension Fund
64	California University ¹	U.S.	\$118,284	Pension Fund
65	J.P. Morgan Asset & Wealth Mgmt. ²	U.S.	\$112,729	OCIO
66	ATP	Denmark	\$112,611	Pension Fund
67	Morgan Stanley ²	U.S.	\$111,173	OCIO
68	Virginia Retirement ¹	U.S.	\$110,665	Pension Fund
69	Alberta Investment Management Corporation	Canada	\$110,000	SWF
70	Aware Super ⁴	Australia	\$109,927	Pension Fund
71	Michigan Retirement ¹	U.S.	\$109,513	Pension Fund
72	PFA Pension	Denmark	\$109,138	Pension Fund
73	Ohio Public Employees ¹	U.S.	\$107,468	Pension Fund
74	NEPC ²	U.S.	\$106,602	OCIO
75	AP Fonden ⁷	Sweden	\$106,015	Pension Fund
76	National Federation of Mutual Aid	Japan	\$102,962	Pension Fund
77	KLP	Norway	\$100,000	Pension Fund
78	Oregon Public Employees ¹	U.S.	\$98,280	Pension Fund
79	Amitim	Israel	\$98,000	Pension Fund
80	Ontario Municipal Employees	Canada	\$97,267	Pension Fund

AO 100 ranking (in US\$ million)

Rank	Fund	Market	Total Assets	Type of Fund
81	Pension Fund Association ²	Japan	\$96,244	Pension Fund
82	Universities Superannuation ⁶	U.K.	\$95,998	Pension Fund
83	Massachusetts PRIM ¹	U.S.	\$95,241	Pension Fund
84	Minnesota State Board ¹	U.S.	\$95,177	Pension Fund
85	Northern Trust ²	U.S.	\$95,138	OCIO
86	New Jersey ¹	U.S.	\$94,039	Pension Fund
87	Kaiser ¹	U.S.	\$91,551	Pension Fund
88	Georgia Teachers ¹	U.S.	\$91,088	Pension Fund
89	Emirates Investment Authority	United Arab Emirates	\$91,000	SWF
90	SEI Investments ²	U.S.	\$90,560	OCIO
91	AT&T ^{1, 3}	U.S.	\$90,497	Pension Fund
92	RTX ¹	U.S.	\$89,511	Pension Fund
93	Ohio State Teachers ¹	U.S.	\$87,456	Pension Fund
94	Bank of America ²	U.S.	\$85,969	OCIO
95	Healthcare of Ontario	Canada	\$85,051	Pension Fund
96	UniSuper ⁴	Australia	\$84,915	Pension Fund
97	Rothsay Life	U.K.	\$82,555	Pension Fund
98	Danica Pension	Denmark	\$82,480	Pension Fund
99	United Nations Joint Staff ¹	U.S.	\$81,546	Pension Fund
100	Alaska Permanent Fund	U.S.	\$81,000	SWF

Notes:

¹ As of September 30, 2023

² As of March 31, 2024

³ Estimate

⁴ As of June 30, 2023

⁵ As of January 31, 2024

⁶ As of March 31, 2023

Sources:

- Global Top 300 Pension Funds, WTW
- Pensions & Investments research center
- Global SWF: a leading financial boutique providing the most up-to-date and reliable data around State-Owned Investors
- Australian Prudential Regulation Authority (APRA)
- Annual reports, websites, and direct communication with organizations

Limitations of reliance





Limitations of reliance

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