

Thinking Ahead Institute

Top 100 Asset Owners | The most influential capital on the planet
November 2020



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The Thinking Ahead Institute

Formed in 2015, the Thinking Ahead Institute is a global not-for-profit research and innovation group whose aim is to mobilise capital for a sustainable future. The Institute's members comprise asset owners, investment managers and other groups that are similarly motivated. It is an outgrowth of Willis Towers Watson Investments' Thinking Ahead Group and more research is available on its [website](#).

The Thinking Ahead Group research team



Marisa Hall



Tim Hodgson



Roger Urwin



Liang Yin

Executive summary



Overview and key findings

Infographic

Executive summary

Figures to end 2019, unless otherwise stated

- The **Asset Owner 100** is a Thinking Ahead Institute study which gathers data on the total assets of the top 100 asset owners around the world. Though not included in the ranking, the study also presents total assets for the top 10 insurers.
- Total assets under management (AUM) of the 100 asset owners included in the ranking amounted to **US\$ 20.1 trillion** at the end of 2019¹, **up 6.0%** from the end of 2018. Median AUM was **US\$ 111.8 billion** in 2019, up from US\$ 102.9 billion the previous year.
- The **top 20 funds total US\$11.0 trillion** and represent 54.4% of the assets in the ranking.
- The top three largest asset owners have remained the same since 2017, with **The Government Pension Investment Fund (GPIF)** of Japan continuing to dominate with US\$1.6 trillion of AUM.

Top 100 assets under management increased by 6.0% over the year

GPIF remained the largest asset owner in the world. Followed again by Government Pension Fund of Norway and China Investment Corporation.

¹New sources of information were used for some countries in 2019.

Executive summary

Figures to end 2019, unless otherwise stated

- **APAC** remains the largest region in terms of AUM, accounting for 36.1% of all assets in the ranking.
- EMEA and North America's assets represent 32.7% and 31.2% of the total respectively.
- **Pension funds** continue to dominate the ranking and increased this by 1.7% during the year, primarily at the expense of Sovereign Wealth Funds.

Pension funds continue to dominate in North America and APAC. This is in contrast to EMEA, and in particular the Middle East, where sovereign wealth funds are dominant.

Key industry-wide observations

- **Sustainability.** The world's top 100 asset owners have become more prominent in integrating ESG and being active owners, in many cases aiming for real-world impacts through their investment strategies. These increasingly include new elements, such as: factoring in member views; using new investment benchmarks and reporting on impacts (increasingly by reference to the TCFD framework and to the SDGs); reducing emissions from portfolios and investing in assets that will support the transition towards a low-carbon economy; and devising and implementing climate transition strategies that are Paris aligned.
- **Evolutionary changes in the asset owner business model.** Asset owners use **people, networks, information and processes** to create value for beneficiaries over extended periods. Leading asset owners are developing stronger leadership, emphasising culture and diversity with and through their own **people**, diminishing reliance on external provider **networks** over time. **Processes** to deal effectively with **information** at large asset owners remains a work-in-progress as they seek to turn a super-abundance of data into value-adding intellectual capital that can boost investment outcomes. At present, there remain considerable constraints around the effectiveness of the management and governance of data.



Key industry-wide observations

Universal investors (also known as universal owners) are large-scale, long-term, leadership-minded funds that invest in a hyper-integrated way to produce a mix of risk, return and real-world impacts.

- **Governance and culture** remain areas where asset owners appear to trail other financial services organisations and limit the positive influences they can generate. However, we suggest there are between 10 and 20 very large asset owners globally that are well-governed, with effective cultures, providing leadership for others and constitute a considerable force for change.
- **Universal investor strategies** are pursued by an increasing number of the AO100 to contribute to safeguarding the financial system and addressing societal issues, including climate change without sacrificing risk-adjusted returns. These funds' strategies often involve working through industry groups (e.g. PRI & Net-Zero Asset Owner Alliance) and using system-level engagement to improve long-term financial outcomes, through *beta* (market return) rather than *alpha* (securities relative return).
- Despite significant **Covid-19** impacts on asset owners' operations, they achieved a relatively smooth transition to a working-from-home model and maintained business continuity. While investment returns held up surprisingly well, the balance sheets of many DB pension funds and insurance companies were negatively affected by interest rate declines.

Key asset owner challenges

- **Purpose.** Many funds have to build a more coherent understanding of, and alignment with, their core stakeholders' needs. This implies a re-setting of purpose, mission and vision and the consequent changes to strategy and culture.
- **Strengthened governance and leadership.** The relative influence of asset owners compared with asset managers on the system is set to rise, in part through building bigger teams with stronger leadership, but also through the streamlining of governance particularly in delegations, partners and processes.
- **Impact from evolved regulations.** Asset owners can expect further saver and investor protection regulations, so what they invest in will also be over-regulated. This results in a very confusing picture, with some good aspects, but lots of bad.
- **Factors. Private markets. ESG.** Funds have to explore these new opportunities in a market environment where returns do not meet current targets. Factors are developing a bigger profile. Private markets are increasingly significant in the opportunity set. ESG is everywhere.
- **China.** The development of a strong access route and far-sighted strategy to investing in mainland Chinese assets will be critical, in a world that needs to build its understanding of the special factors governing those markets.

Stakeholder management has become a much bigger task for asset owners to address

Regulation is set to rise as a factor influencing asset owner practice, in particular in ESG and stewardship

Asset owners face lower expected returns in future. The success with which they meet their targeted returns will depend on how well they adapt their investment model

What is an asset owner?

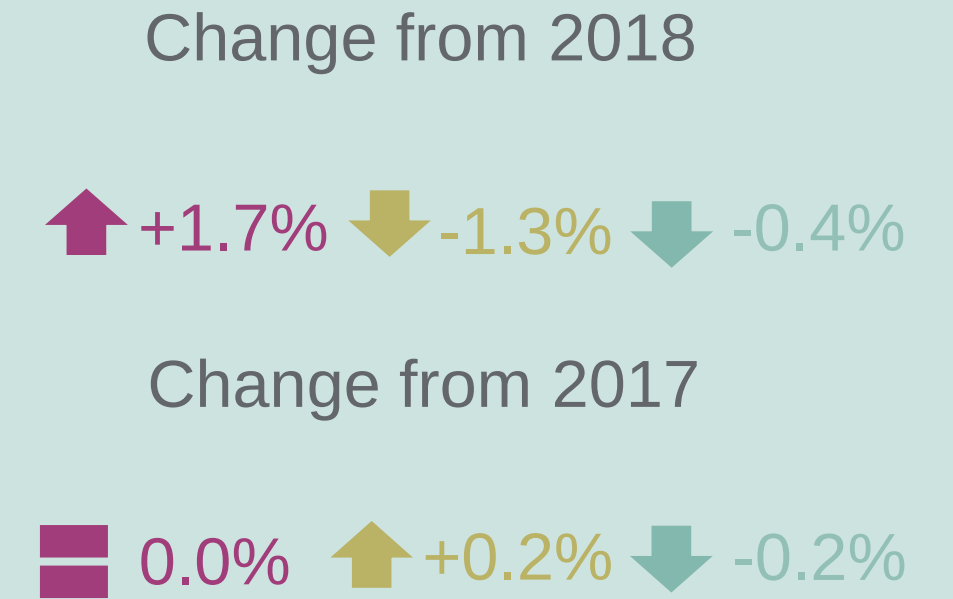
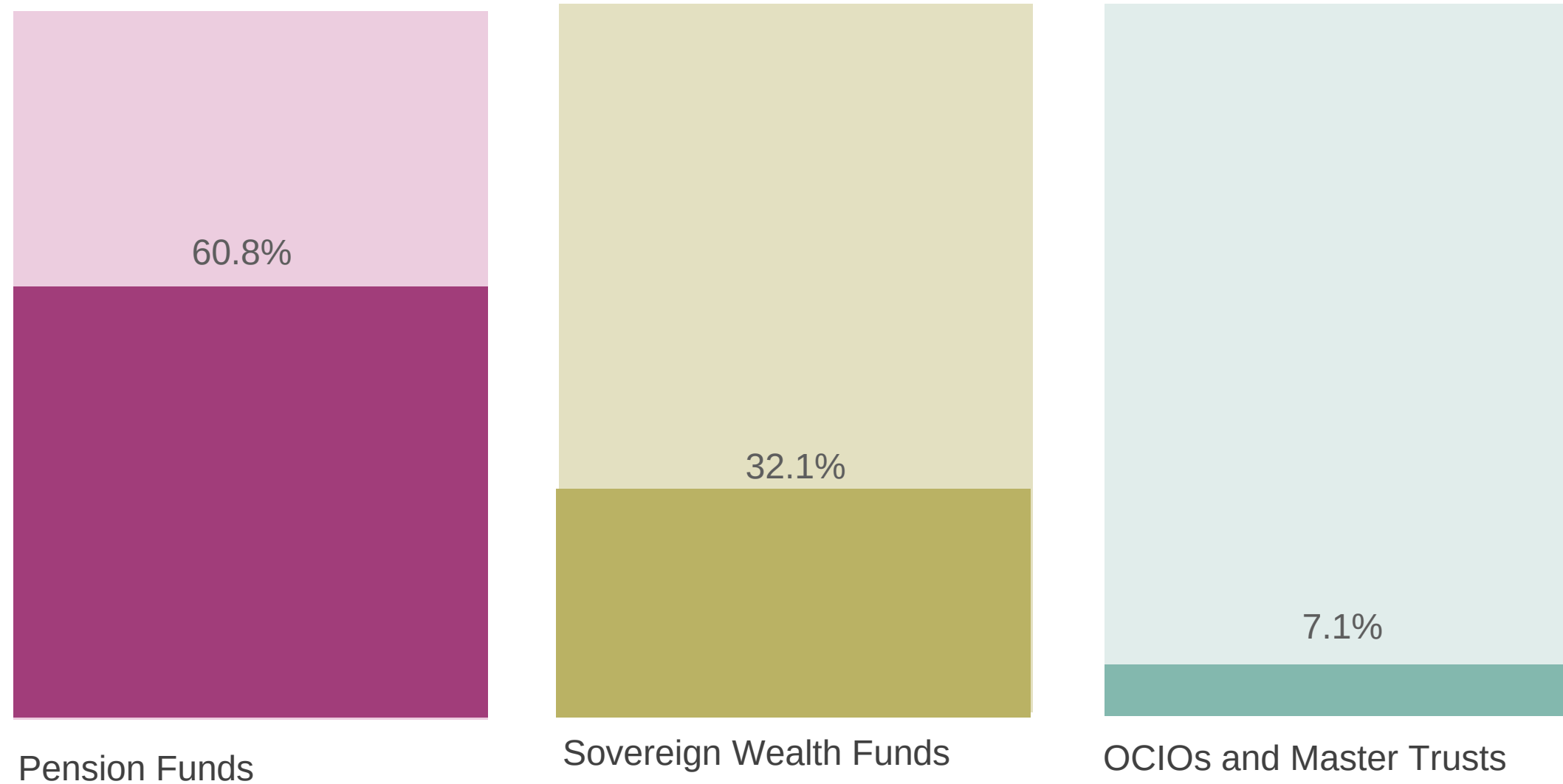
- In our view, an **asset owner** has five qualifying characteristics:
 1. Works directly for a defined group of beneficiaries/savers/investors as the manager of their assets in a fiduciary capacity (upholding loyalty and prudence) under delegated responsibility
 2. Works with a sponsoring entity, usually a government, part of government, a company or a not-for-profit
 3. Works within explicit law and possesses an implicit societal license to operate because of its societal trust and legitimacy
 4. Delivers mission-specific outcomes to beneficiaries and stakeholders in the form of various payments or benefits into the future
 5. Employs a business model that combines a governance budget (essentially resources and processes) and a risk budget (reflecting the mix of financial assets that delivers on the mission).
- Pension funds are the single biggest group of asset owners meeting all the qualifying criteria above. Sovereign funds, OCIOs, endowments and foundations also fully qualify. Other institutions, such as insurance companies and mutual fund partly qualify.

Section 1 | Total value of assets



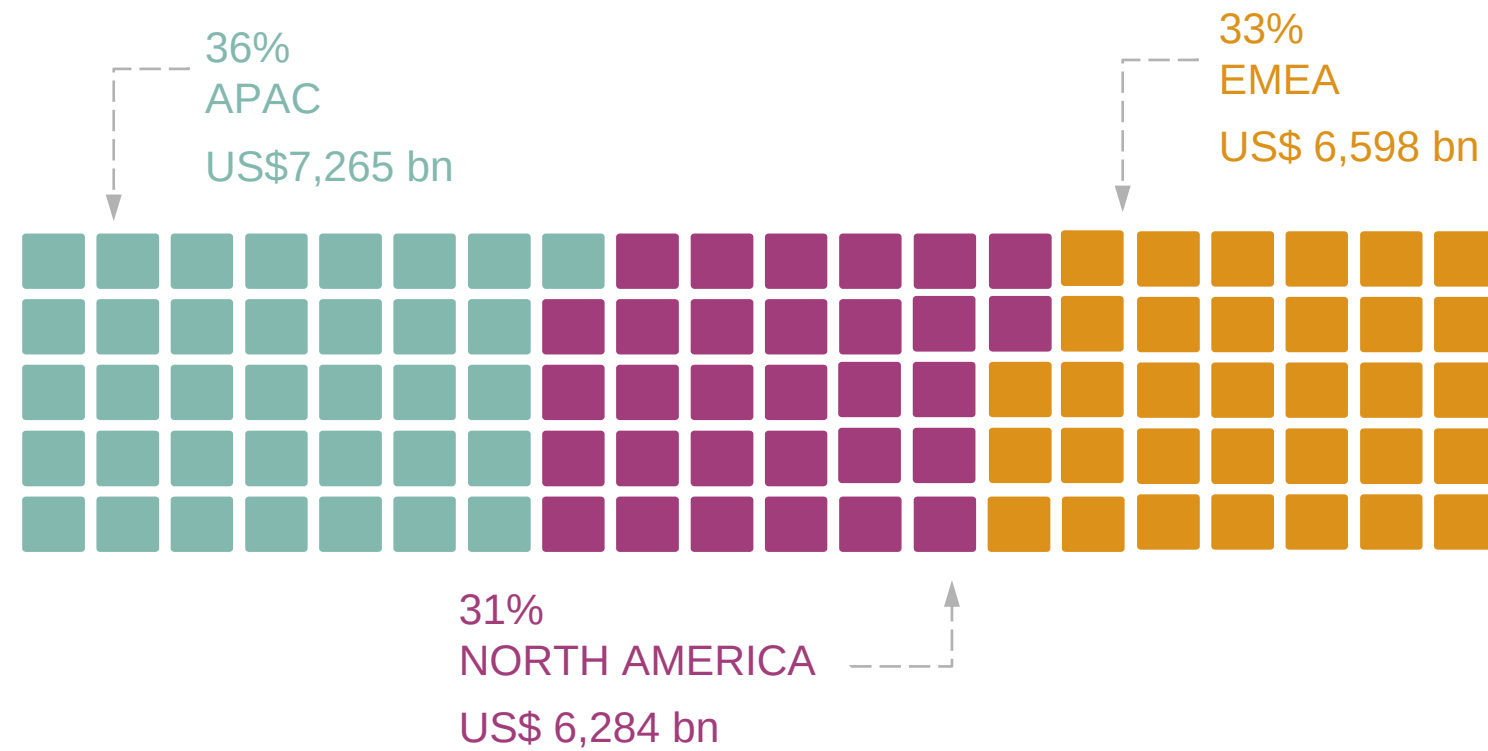
Total value of fund assets

Split by fund type



Assets by region

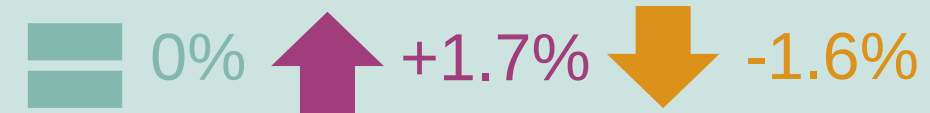
Distribution by assets



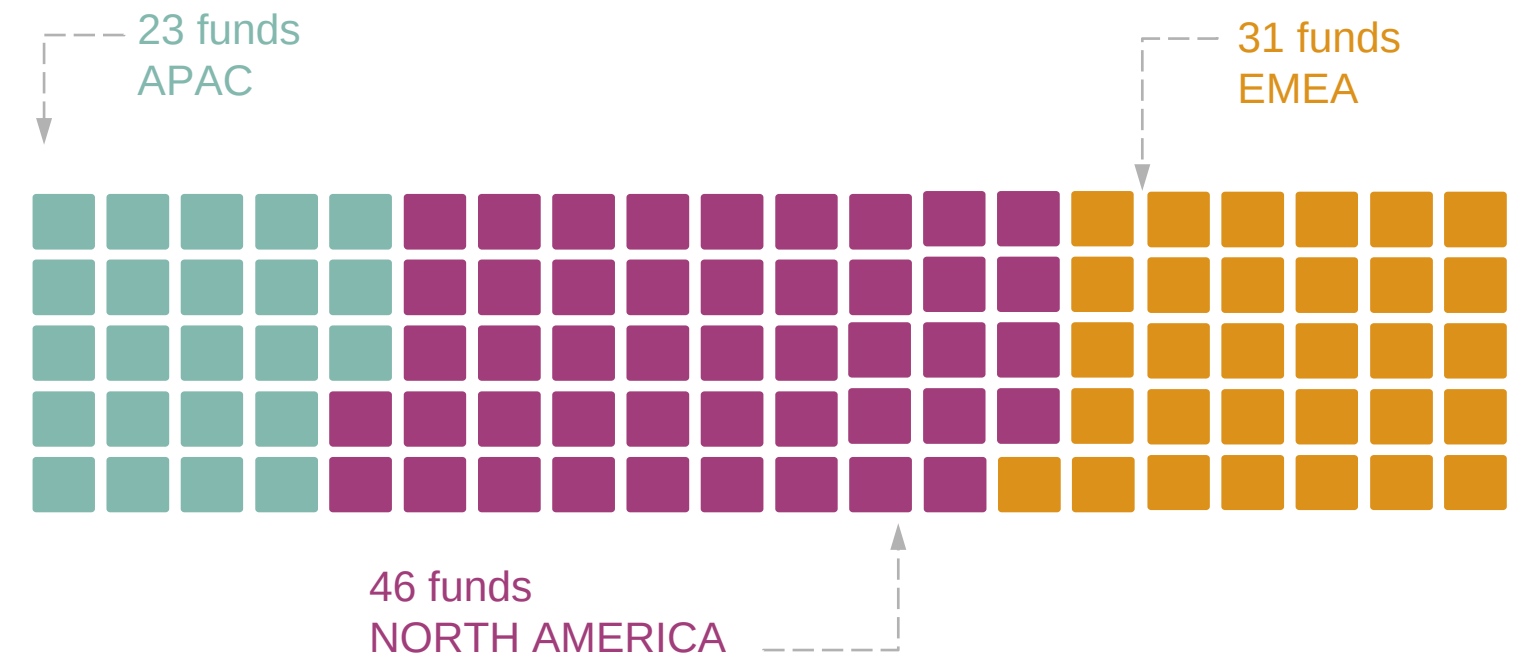
Change from 2018



Change from 2017



Distribution by number of funds



Change from 2018

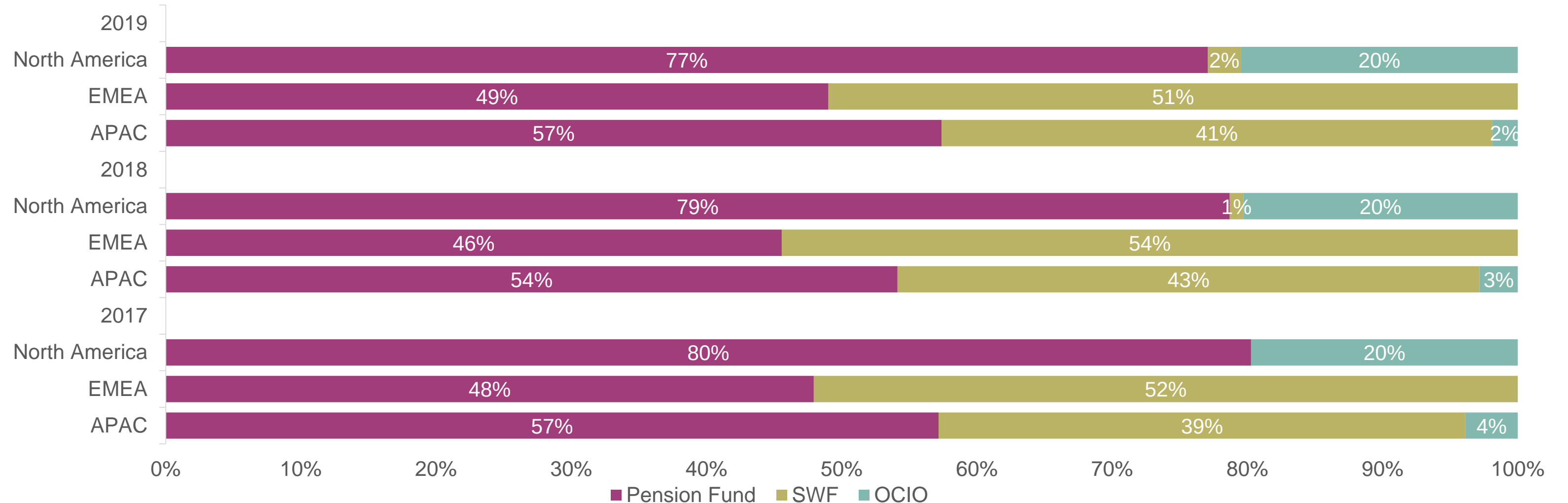


Change from 2017



Total value of fund assets

Split by fund type and region

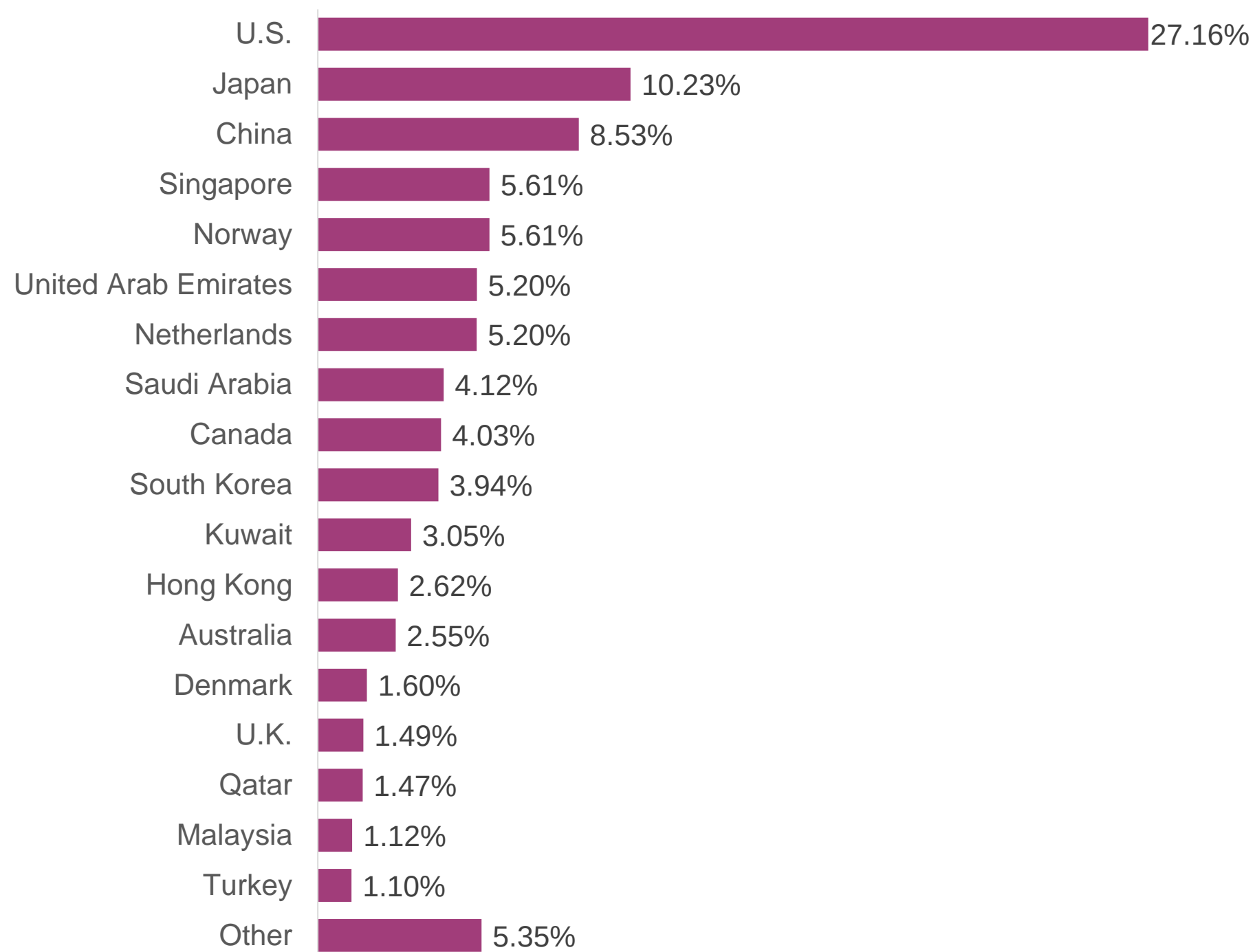


- Pension funds dominated in North America where they represent 77% of assets. Pension funds also dominated in APAC although to a smaller extent with 57%.
- Sovereign Wealth funds accounted for a significant share of the assets in the EMEA region (51%), in particular due to the Middle East sovereign funds.
- OCIO and Master trust assets are shown in the region of their corporate headquarters. We note that all of the OCIOs and Master Trusts have clients globally.

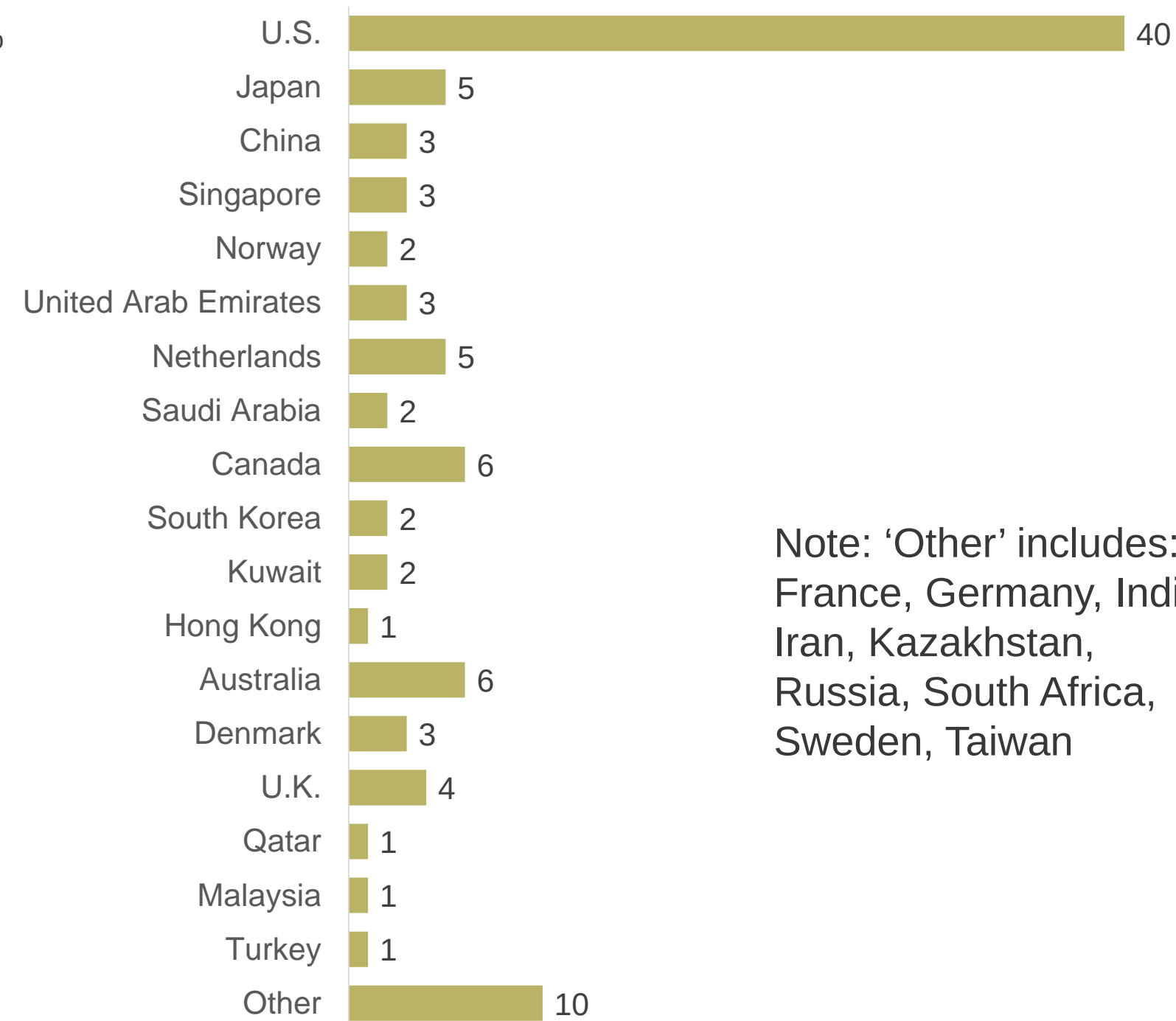
Total value of fund assets

Split by fund domicile

Share of top 100 discretionary assets



Number of funds per country



Note: 'Other' includes: France, Germany, India, Iran, Kazakhstan, Russia, South Africa, Sweden, Taiwan

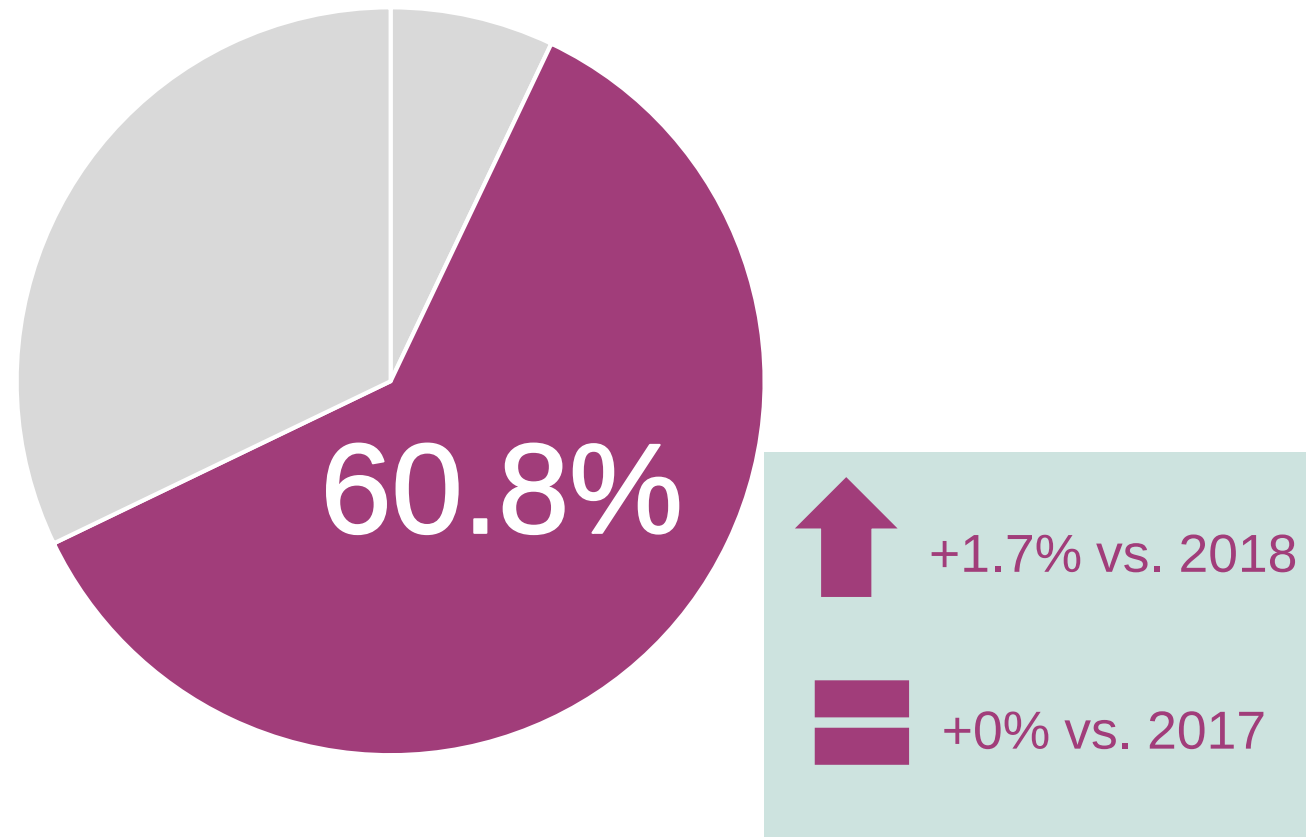
Section 2 | Pension Funds



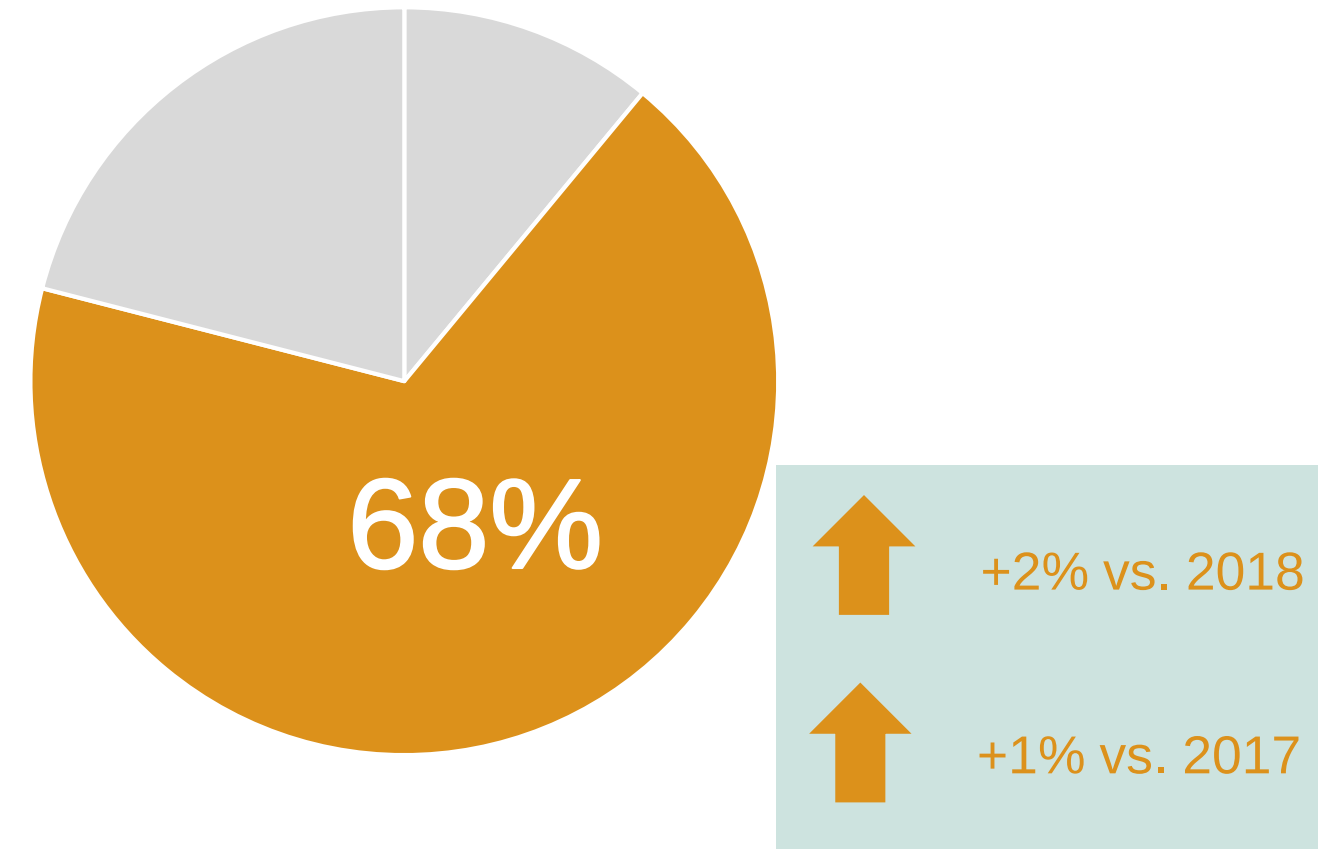
Percentage of assets – Number of funds
Top 10 Pension Funds

Pension Funds

Percentage of assets



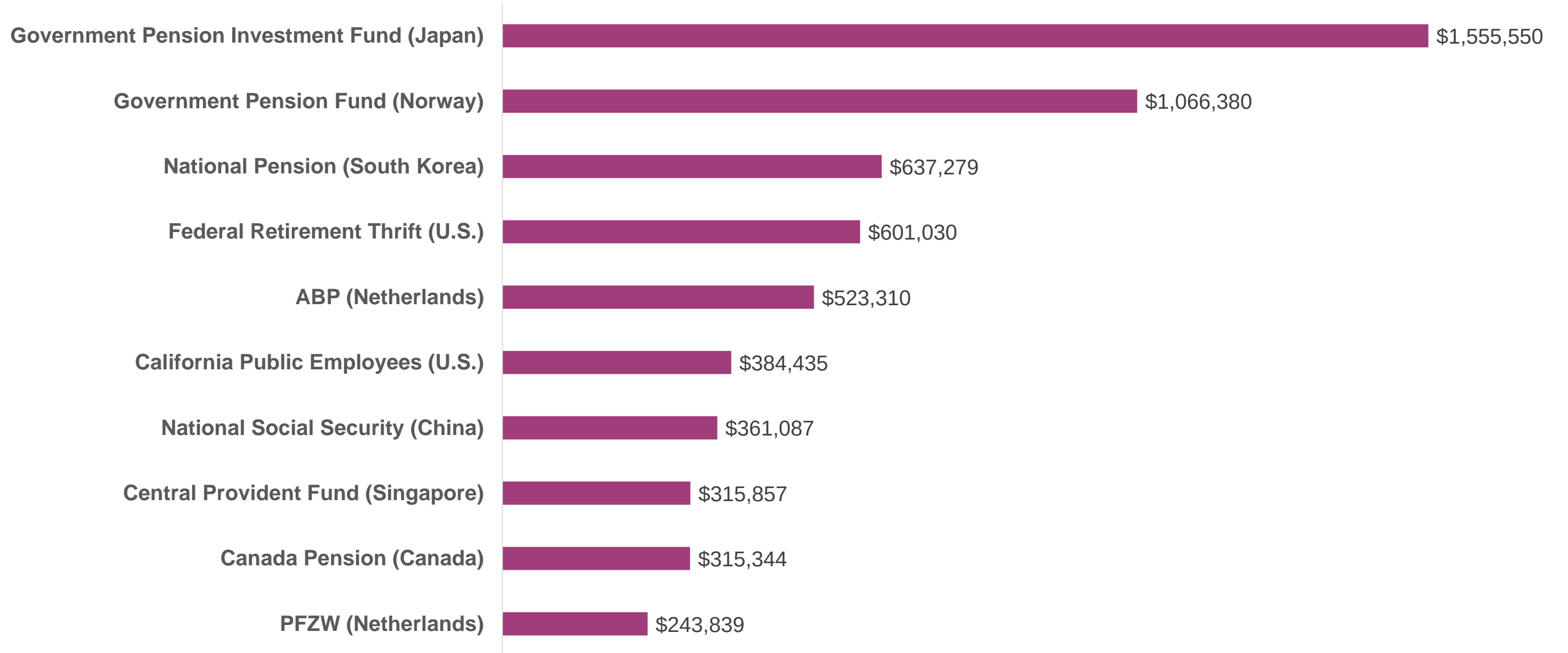
Number of funds



- Pension Funds represent 60.8% of the ranking's assets and 68% of the number of funds.
- Of the top 20 funds, 45% are Pension Funds.
- The average assets of Pension Funds accounted for US\$180 billion, below the average of US\$201 billion for all funds.

Pension Funds

Top 10 Pension Funds (in US\$ million)



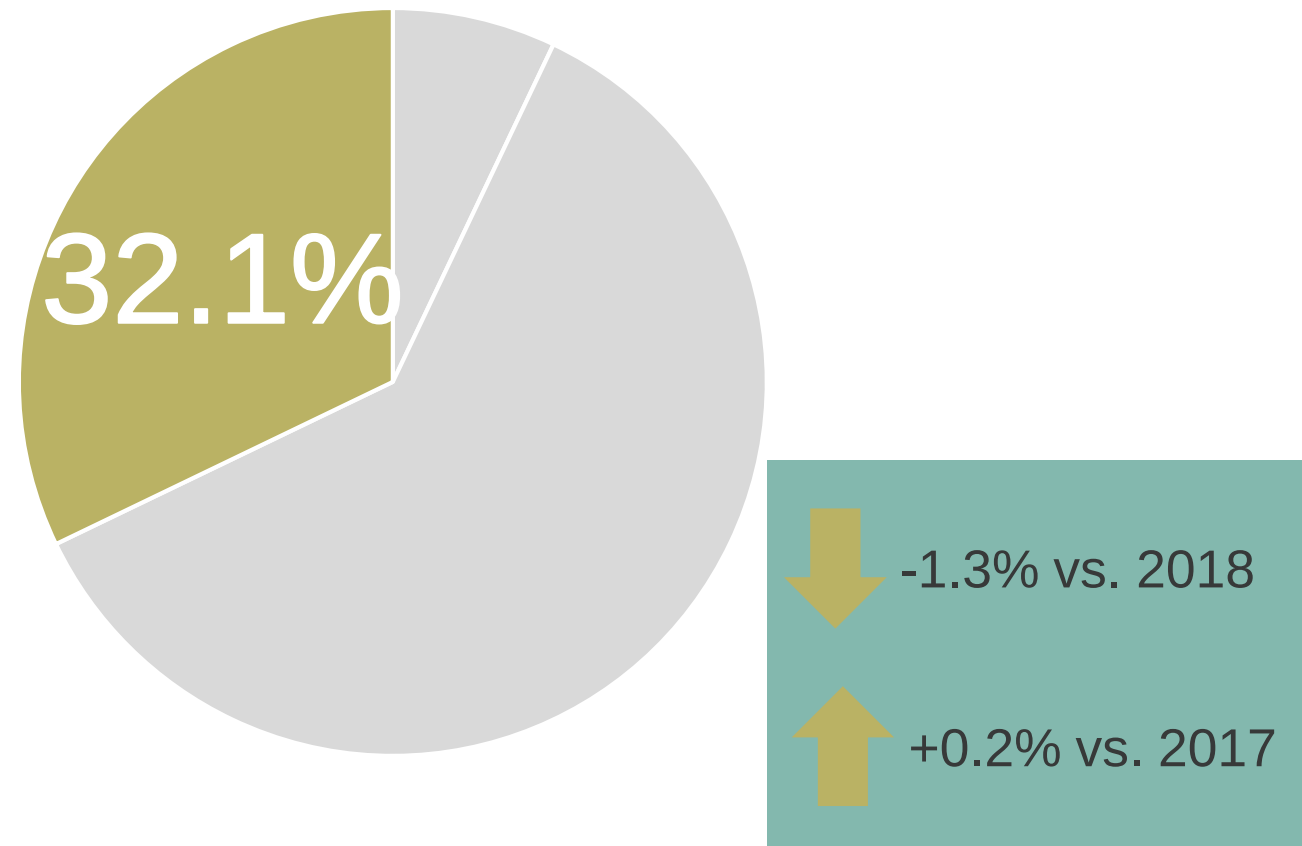
Section 3 | Sovereign Wealth Funds



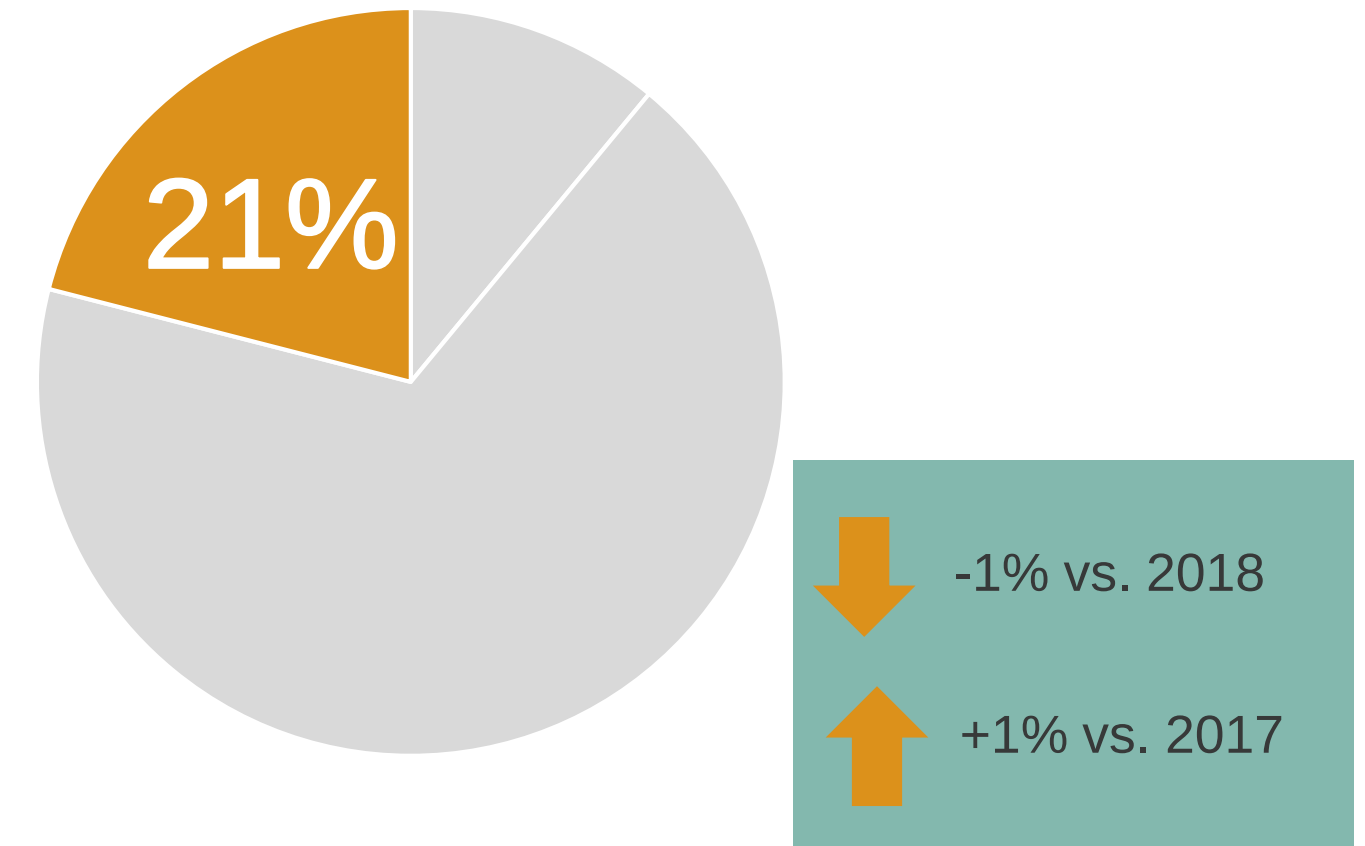
Percentage of assets – Number of funds
Top 10 Sovereign Wealth Funds

Sovereign Wealth Funds

Percentage of assets



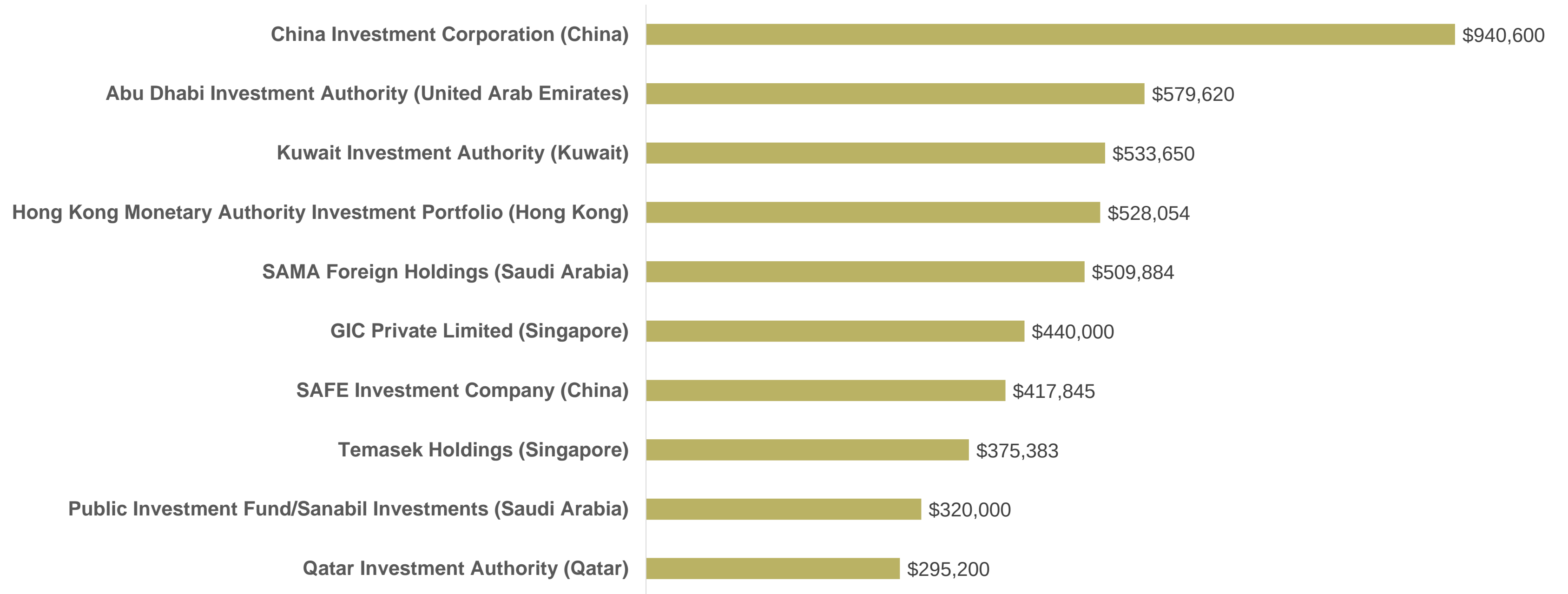
Number of funds



- Sovereign Wealth Funds (SWFs) represent 32.1% of the ranking's assets and 21% of the number of funds.
- Of the top 20 funds, 50% are SWFs.
- The average assets of SWFs accounted for US\$308 billion, above the average of US\$201 billion for all funds.

Sovereign Wealth Funds

Top 10 Sovereign Wealth Funds (in US\$ million)



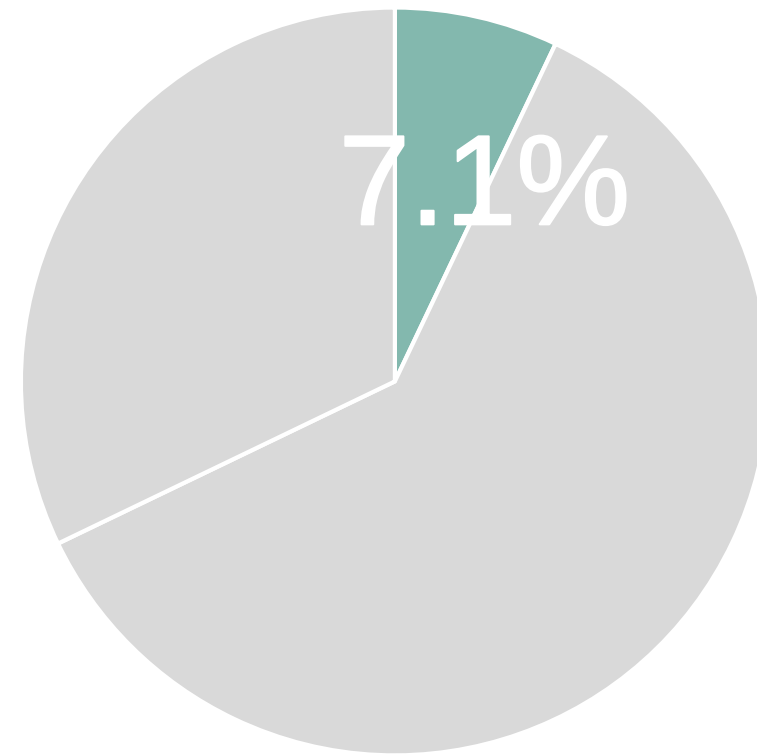
Section 4 | OCIOs and Master Trusts



Percentage of assets – Number of funds
Top 10 OCIOs and Master Trusts

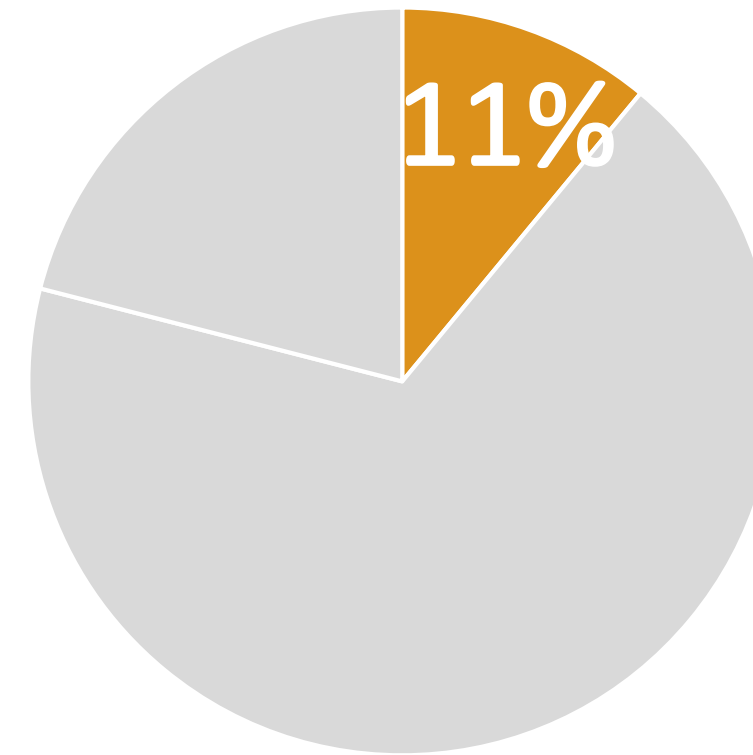
OCIOs and Master Trusts

Percentage of assets



↓ -0.4% vs. 2018
↓ -0.2% vs. 2017

Number of funds

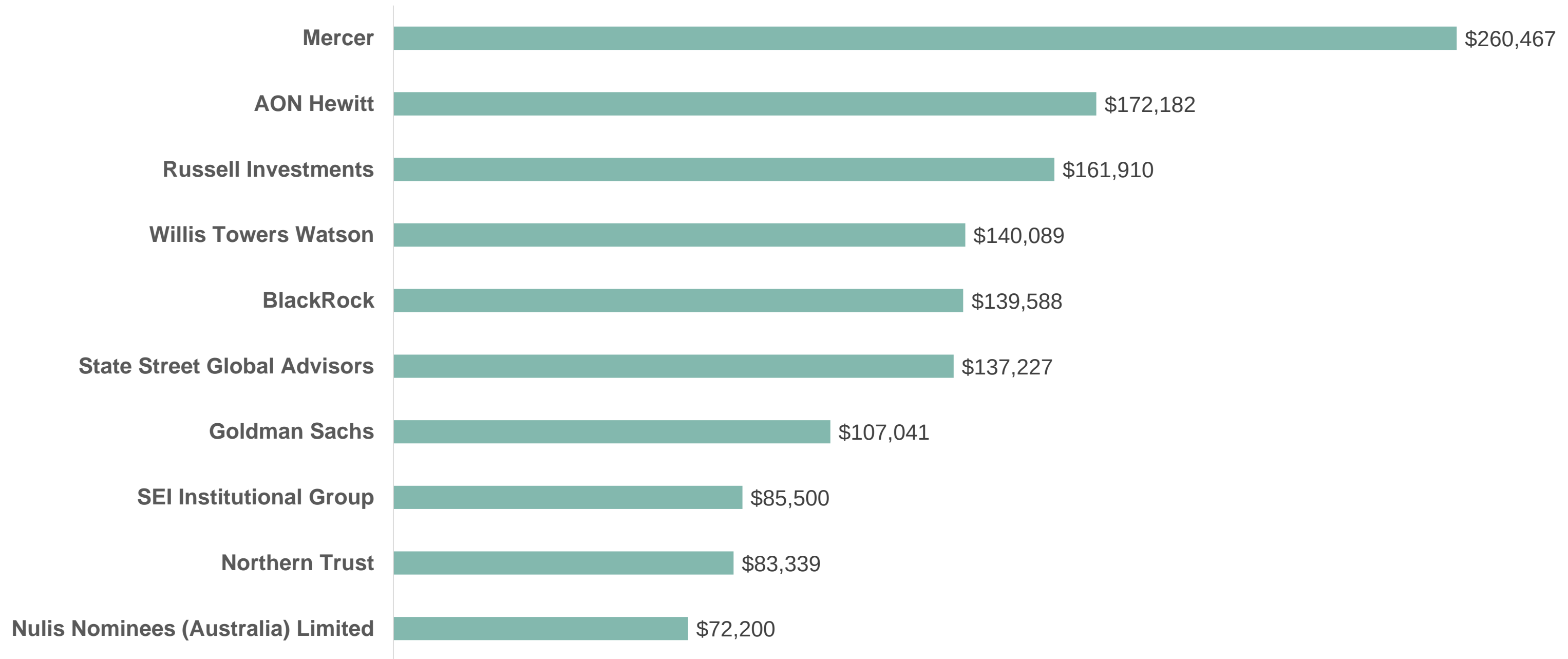


↓ -1% vs. 2018
↓ -2% vs. 2017

- OCIOs and Master Trusts represent 7.1% of the ranking's assets and 11% of the number of funds.
- The average assets of OCIOs and Master Trusts account for US\$130 billion which is below the average of US\$201 billion for all funds.

OCIOs and Master Trusts

Top 10 OCIOs and Master Trusts (in US\$ million)



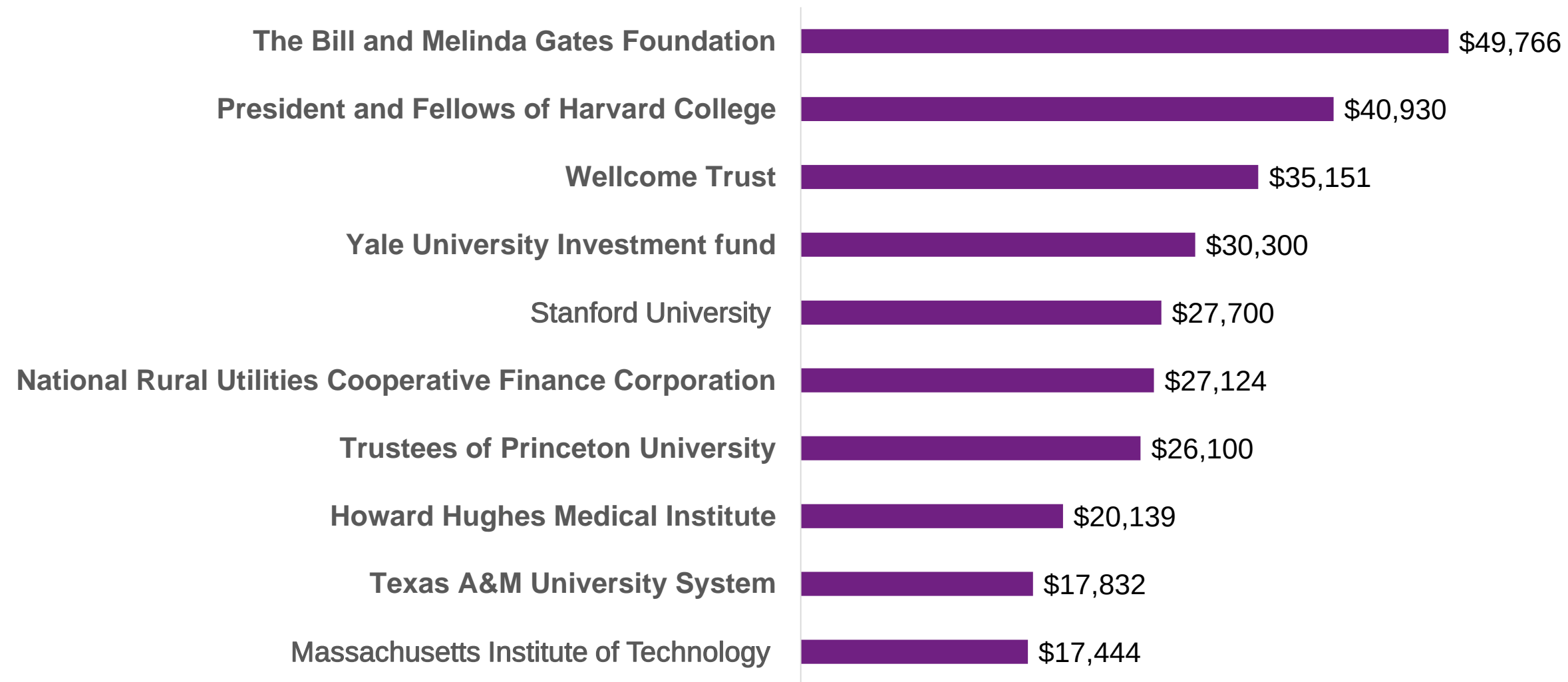
Section 5 | Foundations and Endowments



Top 10 Foundations and Endowments

Foundations & Endowments

Top 10 Foundations & Endowments (in US\$ million)



- None of the Foundations and Endowments listed above are large enough to enter the top 100 asset owners.

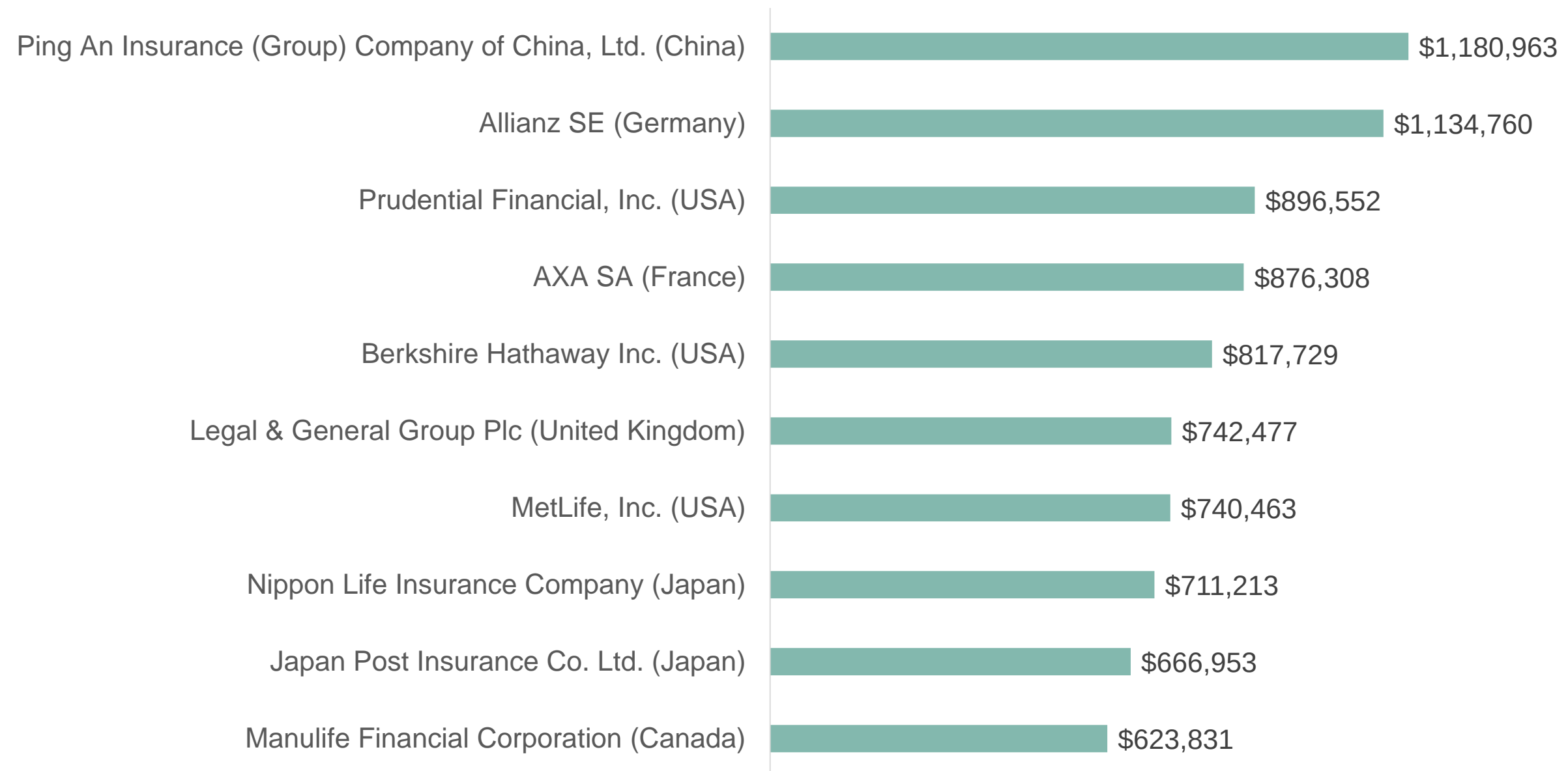
Section 6 | Insurance companies



Top 10 Insurance companies

Top 10 insurance companies

Total assets managed by top 10 insurers¹ (in US\$ million)



¹Total assets presented for insurance companies include assets managed by third parties, so are not included in the top 100 ranking

Section 7 | Universal owners



Top 5 Universal owners

What is an 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 internalised 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

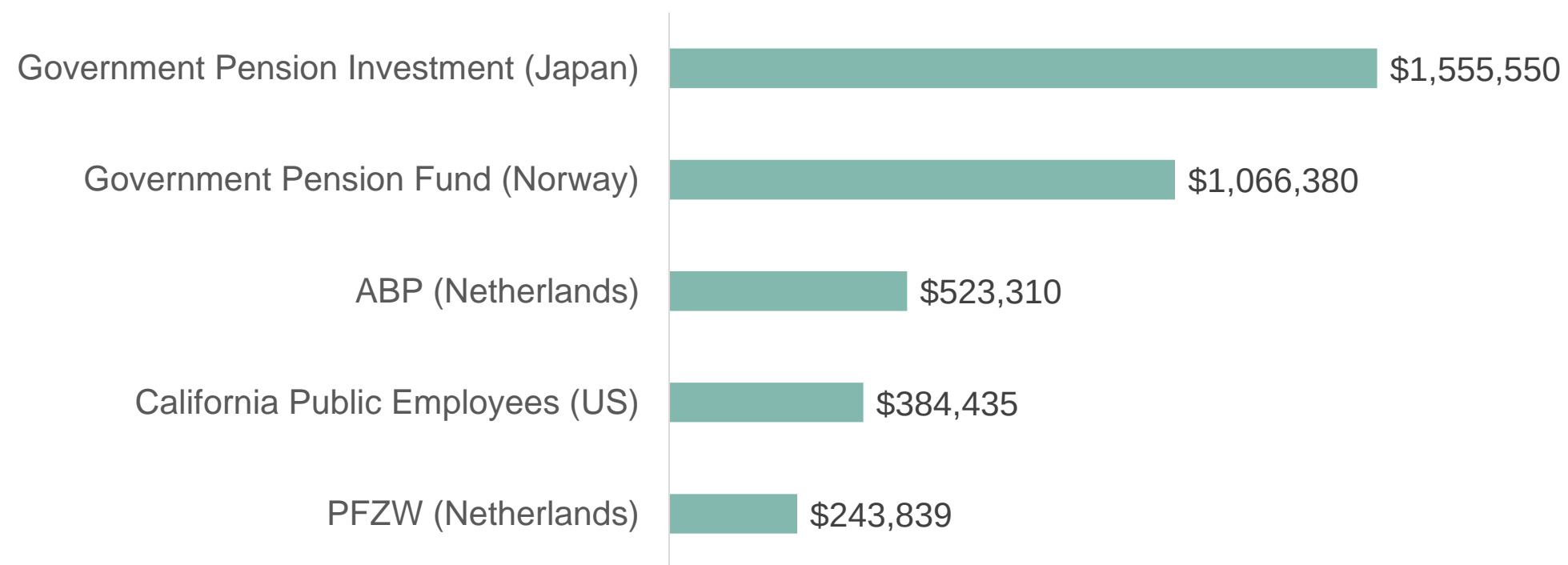
- For a definition of universal owners we use: R Urwin, Pension Funds as Universal Owners; Opportunity Beckons and Leadership Calls | Rotman International Pensions Management Journal | Spring 2011.

“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.”

- Relatively few asset owners in this study have held claim to being universal owners (eg GPIF from Japan, GPF from Norway, CalPERS from U.S.), while others appear to have a universal mindset. We identify around 5 of the top 20 asset owners in the universal owner category.

Universal owners

Top 5 Universal Owners (in US\$ million)



- Categorization of universal owners follows from a combination of their characteristics, actions and mind-set and so is hard to draw up a definitive listing.
- The principle is that universal owners have a large and growing portfolio of externalities that risk being internalised to their funds' net cost, now or in the future. Their responses can be to manage the value and utility of their sponsor/member wealth by integrating financial and extra-financial exposures by both within-the-system and change-the-system actions recognising inter-dependence across the portfolio, across stakeholders and across time.

- The challenge for UO's is hyper-integrated risk management which can be carried out in two main areas:
 - allocation of assets where as large investors they will generally work within-the-system
 - stewardship of assets where as universal owners there are change-the-system opportunities.
- These challenges introduce considerable practical difficulties. In practice, most large asset owners currently find factors not to manage their funds in line with universal ownership principles by either not seeing themselves as large enough; not having the long-term orientation; or not having the leadership buy-in to operate this way.

Section 8 | Thinking Ahead Institute (TAI) / AO 100 ranking



TAI | AO 100 ranking

(in US\$ million)

Rank	Fund	Market	Total Assets	Type of Fund
1.	Government Pension Investment Fund	Japan	\$1,555,550	Pension Fund
2.	Government Pension Fund ⁸	Norway	\$1,066,380	Pension Fund
3.	China Investment Corporation	China	\$940,600	SWF
4.	National Pension	South Korea	\$637,279	Pension Fund
5.	Federal Retirement Thrift ⁵	U.S.	\$601,030	Pension Fund
6.	Abu Dhabi Investment Authority ¹	United Arab Emirates	\$579,620	SWF
7.	Kuwait Investment Authority ¹	Kuwait	\$533,650	SWF
8.	Hong Kong Monetary Authority Investment Portfolio ¹	Hong Kong	\$528,054	SWF
9.	ABP	Netherlands	\$523,310	Pension Fund
10.	SAMA Foreign Holdings ¹	Saudi Arabia	\$509,884	SWF
11.	GIC Private Limited ¹	Singapore	\$440,000	SWF
12.	SAFE Investment Company ¹	China	\$417,845	SWF
13.	California Public Employees ⁵	U.S.	\$384,435	Pension Fund
14.	Temasek Holdings ¹	Singapore	\$375,383	SWF
15.	National Social Security ⁸	China	\$361,087	Pension Fund
16.	Public Investment Fund/Sanabil Investments ³	Saudi Arabia	\$320,000	SWF
17.	Central Provident Fund	Singapore	\$315,857	Pension Fund
18.	Canada Pension ²	Canada	\$315,344	Pension Fund
19.	Qatar Investment Authority ¹	Qatar	\$295,200	SWF
20.	Mercer ²	U.S.	\$260,467	OCIO

TAI | AO 100 ranking

(in US\$ million)

Rank	Fund	Market	Total Assets	Type of Fund
21.	PFZW ²	Netherlands	\$243,839	Pension Fund
22.	California State Teachers ⁵	U.S.	\$243,311	Pension Fund
23.	Investment Corporation of Dubai ¹	United Arab Emirates	\$239,379	SWF
24.	Mubadala Development Company	United Arab Emirates	\$229,000	SWF
25.	Employees Provident Fund	Malaysia	\$226,101	Pension Fund
26.	Local Government Officials	Japan	\$224,006	Pension Fund
27.	Turkey Wealth Fund ¹	Turkey	\$222,276	SWF
28.	New York State Common ⁵	U.S.	\$215,424	Pension Fund
29.	New York City Retirement ⁵	U.S.	\$208,458	Pension Fund
30.	Florida State Board ⁵	U.S.	\$173,769	Pension Fund
31.	AON Hewitt ²	U.S.	\$172,182	OCIO
32.	Employees' Provident ⁸	India	\$168,095	Pension Fund
33.	Russell Investments ²	U.S.	\$161,910	OCIO
34.	Ontario Teachers	Canada	\$159,666	Pension Fund
35.	Texas Teachers ⁵	U.S.	\$157,632	Pension Fund
36.	Korea Investment Corporation	South Korea	\$157,300	SWF
37.	Public Investment Corporation ⁷	South Africa	\$151,557	SWF
38.	ATP	Denmark	\$144,983	Pension Fund
39.	Willis Towers Watson ²	U.S.	\$140,089	OCIO
40.	BlackRock ²	U.S.	\$139,588	OCIO

TAI | AO 100 ranking

(in US\$ million)

Rank	Fund	Market	Total Assets	Type of Fund
41.	State Street Global Advisors ²	U.S.	\$137,227	OCIO
42.	Boeing ⁵	U.S.	\$129,545	Pension Fund
43.	AustralianSuper	Australia	\$129,095	Pension Fund
44.	AT&T ⁵	U.S.	\$125,611	Pension Fund
45.	National Wealth Fund ⁴	Russia	\$124,000	SWF
46.	Labor Pension Fund	Taiwan	\$123,655	Pension Fund
47.	Washington State Board ⁵	U.S.	\$119,992	Pension Fund
48.	New York State Teachers ⁵	U.S.	\$119,663	Pension Fund
49.	Wisconsin Investment Board ⁵	U.S.	\$116,877	Pension Fund
50.	North Carolina ⁵	U.S.	\$114,631	Pension Fund
51.	National Federation of Mutual Aid	Japan	\$109,053	Pension Fund
52.	Goldman Sachs ²	U.S.	\$107,041	OCIO
53.	IBM ⁵	U.S.	\$105,712	Pension Fund
54.	Alecta	Sweden	\$102,985	Pension Fund
55.	Bouwnijverheid	Netherlands	\$102,692	Pension Fund
56.	Ohio Public Employees ⁵	U.S.	\$101,852	Pension Fund
57.	Future Fund ¹	Australia	\$99,800	SWF
58.	Pension Fund Association ²	Japan	\$98,090	Pension Fund
59.	Metaal/tech. Bedrijven	Netherlands	\$97,576	Pension Fund
60.	California University ⁵	U.S.	\$95,493	Pension Fund

TAI | AO 100 ranking

(in US\$ million)

Rank	Fund	Market	Total Assets	Type of Fund
61.	Public Service Pension Plan ⁷	Canada	\$93,966	Pension Fund
62.	Agirc-Arrco	France	\$93,654	Pension Fund
63.	Bayerische Versorgungskammer	Germany	\$91,610	Pension Fund
64.	National Development Fund ¹	Iran	\$91,000	SWF
65.	Danica Pension	Denmark	\$90,813	Pension Fund
66.	Universities Superannuation ⁷	U.K.	\$89,352	Pension Fund
67.	PFA Pension	Denmark	\$87,533	Pension Fund
68.	General Motors ⁵	U.S.	\$86,894	Pension Fund
69.	Virginia Retirement ⁵	U.S.	\$86,718	Pension Fund
70.	Alberta Investment Management Corporation ¹	Canada	\$86,289	SWF
71.	SEI Institutional Group ²	U.S.	\$85,500	OCIO
72.	Ontario Municipal Employees	Canada	\$84,201	Pension Fund
73.	Michigan Retirement ⁵	U.S.	\$83,908	Pension Fund
74.	Northern Trust ²	U.S.	\$83,339	OCIO
75.	New Jersey ⁵	U.S.	\$82,983	Pension Fund
76.	Oregon Public Employees ⁵	U.S.	\$82,404	Pension Fund
77.	Public Institute for Social Security ⁸	Kuwait	\$81,247	Pension Fund
78.	Minnesota State Board ⁵	U.S.	\$80,805	Pension Fund
79.	Royal Dutch Shell ⁹	Netherlands	\$79,807	Pension Fund
80.	General Electric ⁵	U.S.	\$79,599	Pension Fund

TAI | AO 100 ranking

(in US\$ million)

Rank	Fund	Market	Total Assets	Type of Fund
81.	Lockheed Martin ⁵	U.S.	\$79,470	Pension Fund
82.	Ohio State Teachers ⁵	U.S.	\$78,988	Pension Fund
83.	Georgia Teachers ⁵	U.S.	\$78,782	Pension Fund
84.	Massachusetts PRIM ⁵	U.S.	\$76,001	Pension Fund
85.	Tcorp	Australia	\$74,728	Pension Fund
86.	National Public Service	Japan	\$74,258	Pension Fund
87.	Healthcare of Ontario	Canada	\$72,440	Pension Fund
88.	United Parcel Service ⁵	U.S.	\$72,253	Pension Fund
89.	Nulis Nominees (Australia) Limited ⁶	Australia	\$72,200	OCIO
90.	First State Super	Australia	\$71,972	Pension Fund
91.	BT Group ²	U.K.	\$70,887	Pension Fund
92.	Rothesay Life	U.K.	\$70,433	Pension Fund
93.	Royal Bank of Scotland Group ¹⁰	U.K.	\$68,837	Pension Fund
94.	Kaiser ⁵	U.S.	\$68,574	Pension Fund
95.	Samruk-Kazyna JSC ¹	Kazakhstan	\$68,243	SWF
96.	United Nations Joint Staff ⁵	U.S.	\$67,770	Pension Fund
97.	Alaska Permanent Fund ²	U.S.	\$66,300	SWF
98.	BT Funds Management Limited ²	Australia	\$65,193	OCIO
99.	AP Fonden 7	Sweden	\$64,057	Pension Fund
100.	Kommunal Landespensjonskasse KLP	Norway	\$63,993	Pension Fund

TAI | AO 100 ranking

End notes for ranking

¹ As of June 30, 2020

² As of March 31, 2020

³ As of January 31, 2020

⁴ As of December 01, 2019

⁵ As of September 30, 2019

⁶ As of June 30, 2019

⁷ As of March 31, 2019

⁸ Estimate

⁹ Global figure (ex-U.S.)

¹⁰ Global figure

Notes

- Compilation of the Asset Owner 100 data has been drawn from several published studies. Notably these include Sovereign Wealth Fund Institute, Pension & Investments, Bloomberg, Reuters, Statista and Verdict. In certain cases the data is taken from the primary source – the organisation itself.
- The country listing is associated with the principal location of the organisation, but in some cases management is in multiple locations. Note reference to Hong Kong is as a special administrative region of China and not a country.
- The heading of ‘Primary Category’ has drawn on the self-labelling of some organisations. For example, Government Pension Fund (Norway) is listed here as a pension fund although it also is included in some surveys as a SWF.
- The OCIO figures are compiled by reference to full or partial discretionary accounts managed for underlying asset owners that have delegated the asset management responsibility. The OCIO organisations in some cases manage Master Trust funds for underlying asset owners which are consolidated in the overall figures. We note that all of the OCIOs and Master Trusts have clients globally.
- Consolidated asset figures have been calculated in a number of cases, where an asset owner organisation has one large account and manages other smaller portfolios. The categorisation of organisation type is given for the principal funds managed.

Limitations of reliance





Limitations of reliance

Limitations of reliance – Thinking Ahead Group 2.0

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Contact Details

Paul Deane-Williams, +44 1737 274397

Paul.Deane-Williams@willistowerswatson.com

Website: www.thinkingaheadinstitute.org/en

LinkedIn: Thinking Ahead Institute

Twitter: @InstituteTAG