

The Thinking Ahead Institute's Asset Owner 100

The most influential capital on the planet



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Executive summary

INTRODUCTION

- The Asset Owner 100 is a new Thinking Ahead Institute study which gathers data on the total assets of the top 100 asset owners around the world. The study includes data on pension funds, outsourced CIOs (OCIOs), sovereign wealth funds, endowments and foundations.
- This inaugural survey builds on our research of leading asset owners in the following related papers:
 - [Smart leadership. Sound followership](#): a peer group study of 15 leading asset owners around the world
 - [The asset owner of tomorrow](#): a study of the challenges faced by asset owners and shifts required over the next 5-10 years.
- Asset owners are too important to fail in their mission. Under a tight definition¹, their assets are worth around **US\$55 trillion**, a significant chunk of the **US\$420 trillion** total global capital that exists today. They have little choice but to take their financial and social responsibilities seriously, to lead from the front and not to shrink away from the big issues.
- The key practical challenges for asset owners include developing stronger leadership, responding to regulation, clarifying their true mission, curtailing agency issues and improving the control of outcomes. There is also an overarching need for them to understand the world in which they operate through an ecosystem model that connects all the dots. To address these challenges, asset owners need to make four big shifts over the next 5-10 years:
 - Repurpose the **business model** by institutionalising professionalism
 - Streamline the **operating model** to make more effective decisions possible
 - Adapt the **people model** to leverage culture and diversity more
 - Evolve the **investment model** into increasingly smart and sustainable arrangements.

¹ The asset owner of tomorrow: Business model changes for the Great Acceleration, Thinking Ahead Institute, 2017

THE MOST INFLUENTIAL CAPITAL ON THE PLANET

- The Asset Owner 100 – the largest 100 asset owners in the world – represent approximately **US\$19 trillion** out of an estimated **US\$55 trillion** in total.
- These institutional investors warrant particular attention because they have the discretion to place their capital into any country and any asset class that suits them. It follows that their policies and their decisions regarding asset allocation and stewardship shape capital markets and are a key element in the smooth functioning of the global economy.
- These asset pools are **the most influential capital on the planet**.
- These asset owners are spread around the world, and represent a range of types of organisation:
 - the older generation: pension funds, endowments and foundations
 - the younger generation: sovereign wealth funds
 - the newcomers: OCIOs (outsourced CIO organisations) and master trusts.
- The emergence of OCIOs and master trusts as a new category of asset owner reflects the significant increase in the delegation by asset owners of key decisions to external organisations – it is the extent of discretion that is delegated that differentiates these platforms from traditional asset management.
- The most influential members of this group of 100 asset owners are those who qualify as **universal owners**. These are organisations that are very large and long-term in horizon that also have a leadership mind-set. **Universal ownership** acknowledges the influence that investment decisions have beyond the portfolio itself onto wider stakeholders and systemic considerations, and the responsibility and opportunity that comes with that.

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 funds only partly qualify and so have been excluded from this study.

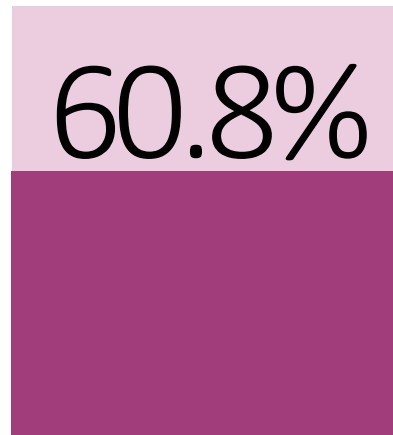
SUMMARY

- Discretionary assets under management of the world's 100 largest asset owners totalled **US\$18.69 trillion**
- The **top 20 funds total US\$10.5 trillion** and represent 56% of the assets in the ranking
- **APAC** is the largest region in terms of AUM, accounting for 36% of all assets in the ranking
- EMEA and North America's assets represented 34% and 30% respectively
- All data is to end 2017 unless otherwise stated. For more detail see the footnotes on page 32

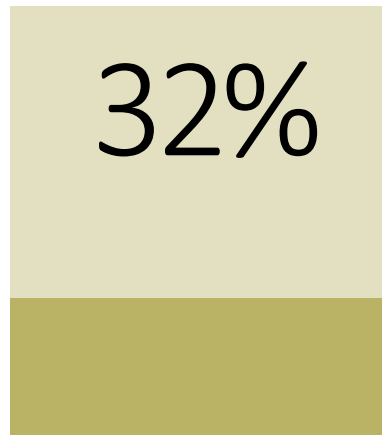
Section 1

Total value of assets

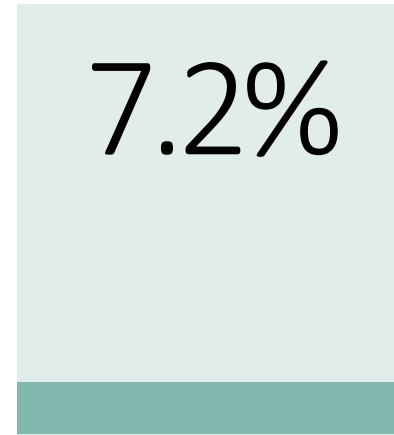
TOTAL VALUE OF FUND ASSETS SPLIT BY FUND TYPE



Pension Funds



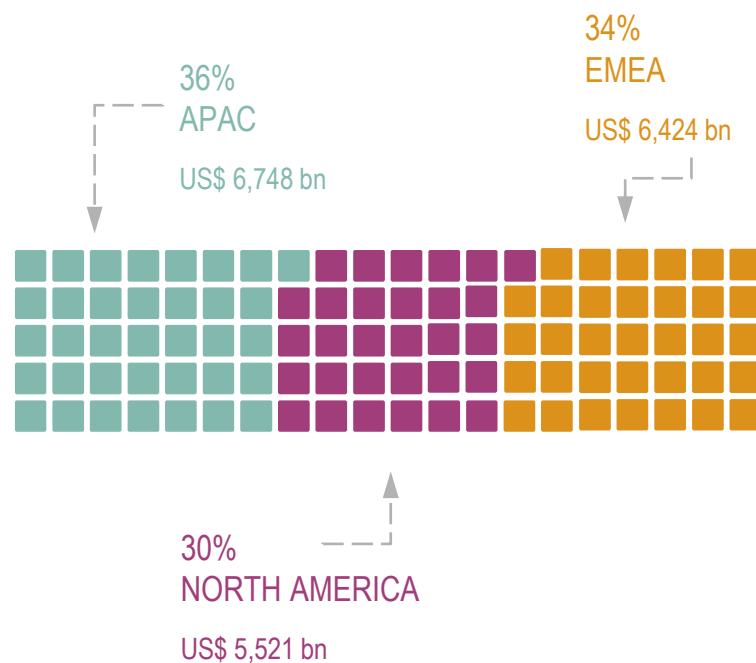
Sovereign Wealth
Funds



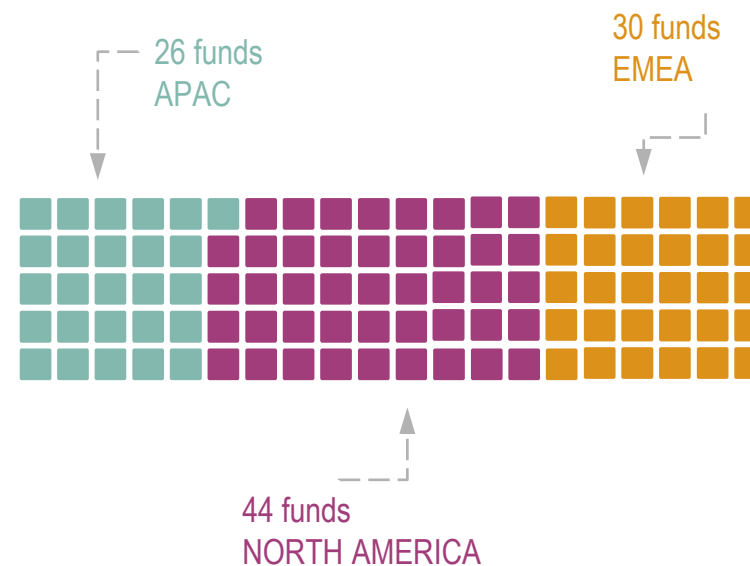
OCIOs and Master
Trusts

ASSETS BY TYPE OF REGION

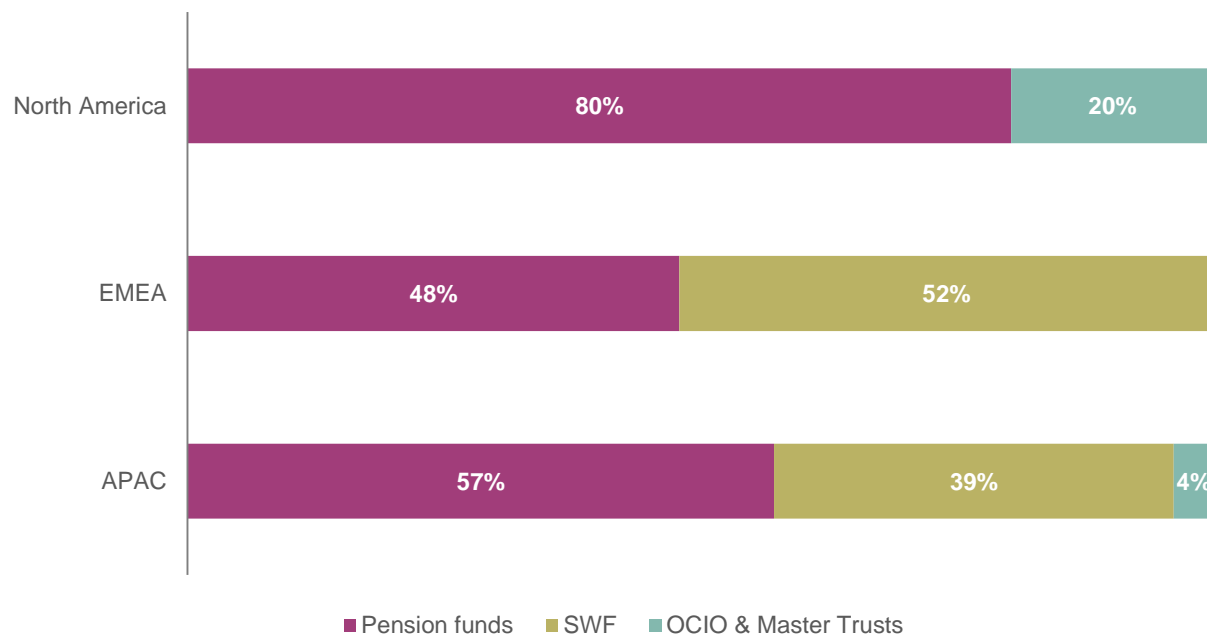
Distribution by assets



Distribution by number of funds



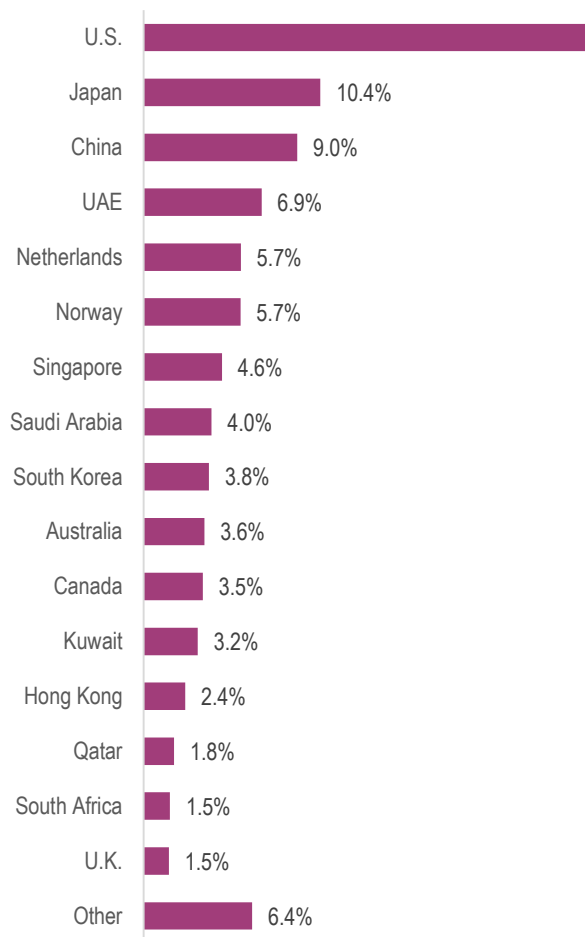
TOTAL VALUE OF FUND ASSETS SPLIT BY FUND TYPE AND REGION



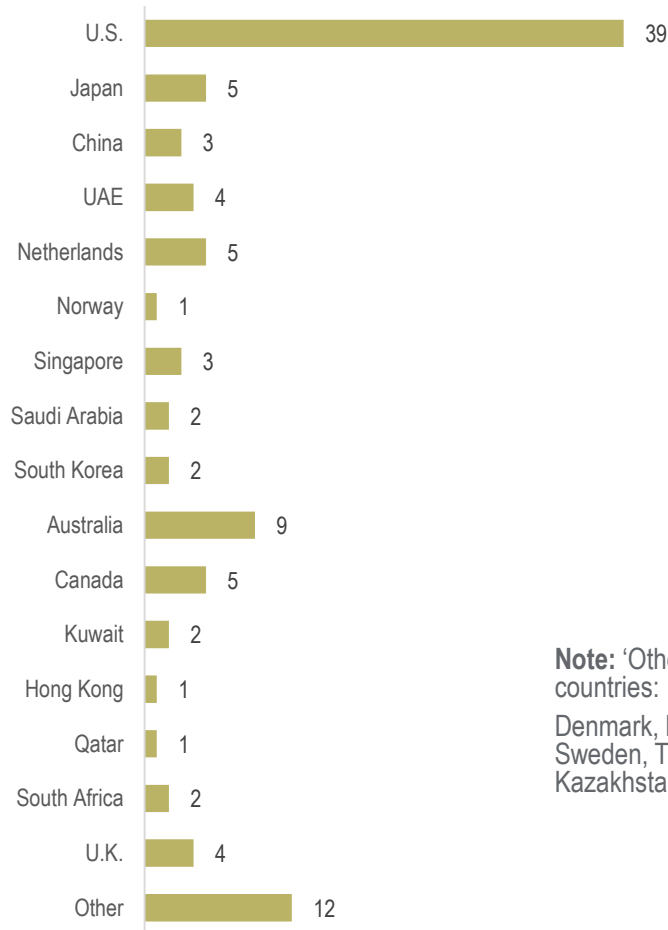
- Pension funds dominated in North America where they represented 80% by assets. Pension funds also dominated in APAC although to a smaller extent with 57%.
- Sovereign Wealth funds accounted for a significant share of the assets in the EMEA region (52%), in particular due to the Middle East sovereign 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 the following countries:

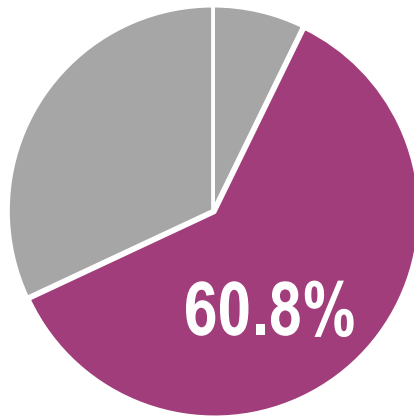
Denmark, Malaysia, India, Russia, Sweden, Taiwan, Iran, Germany, Kazakhstan and Libya

Section 2

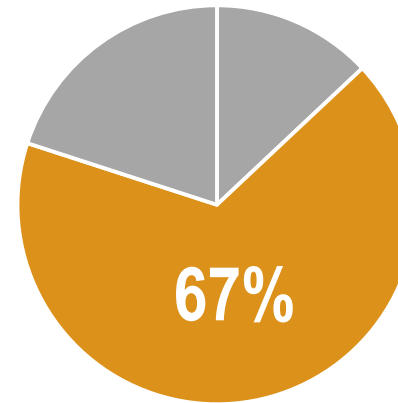
Pensions

PENSION FUNDS

Percentage of assets



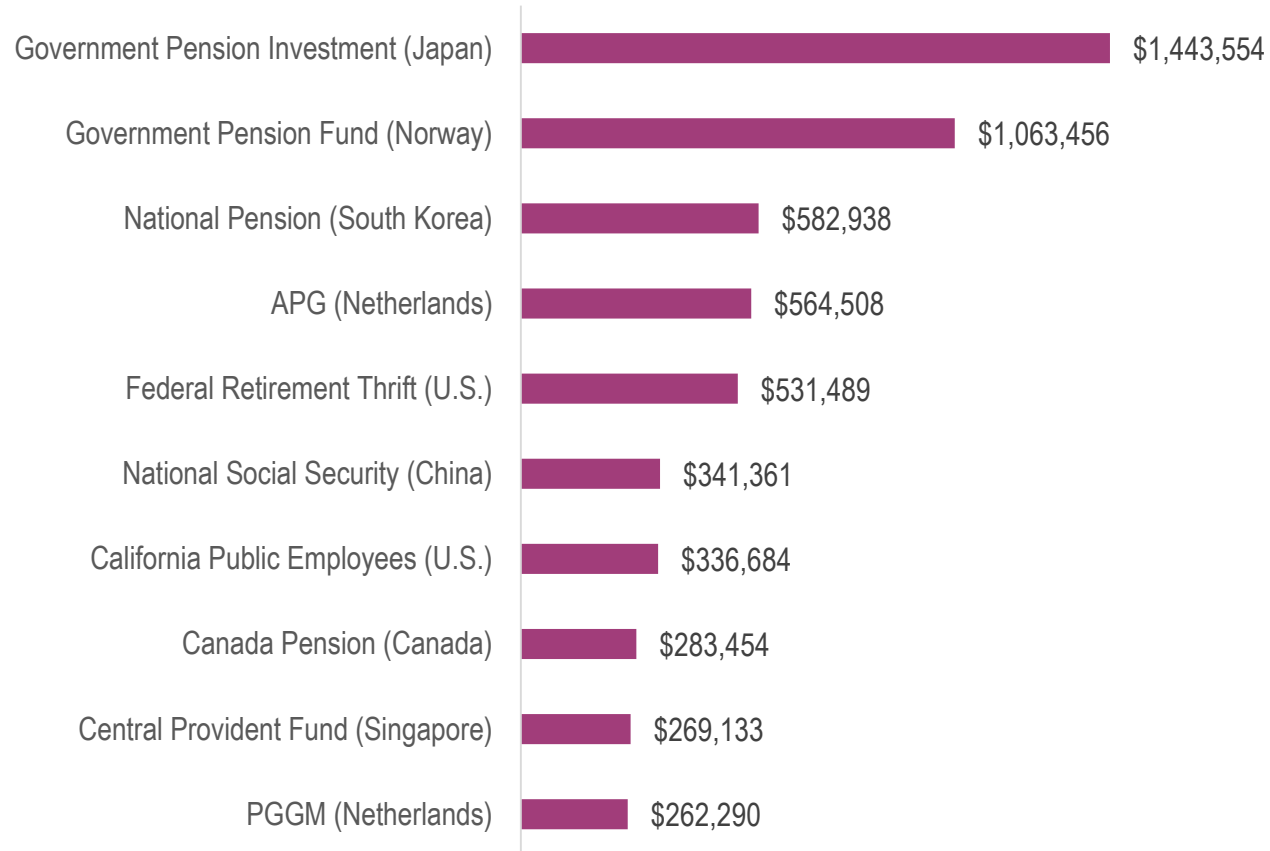
Number of funds



- Pension funds represented 60.8% of the ranking's assets and 67% of the number of funds
- Of the top 20 funds, 50% are pension funds
- The average assets of Pension Funds accounted for US\$170 billion, just below the average of US\$187 billion for all funds

PENSION FUNDS

Top 10 Pension Funds (in US\$ million)

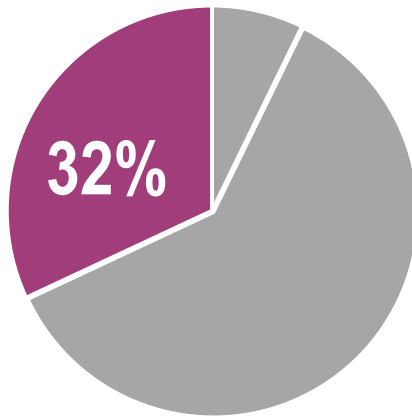


Section 3

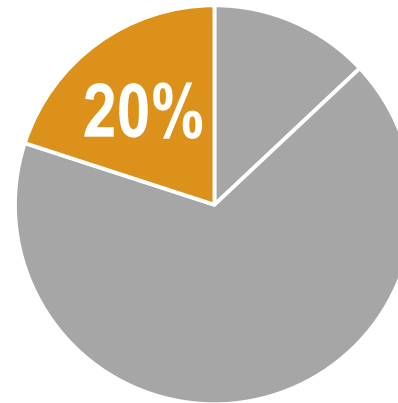
Sovereign Wealth Funds

SOVEREIGN WEALTH FUNDS

Percentage of assets



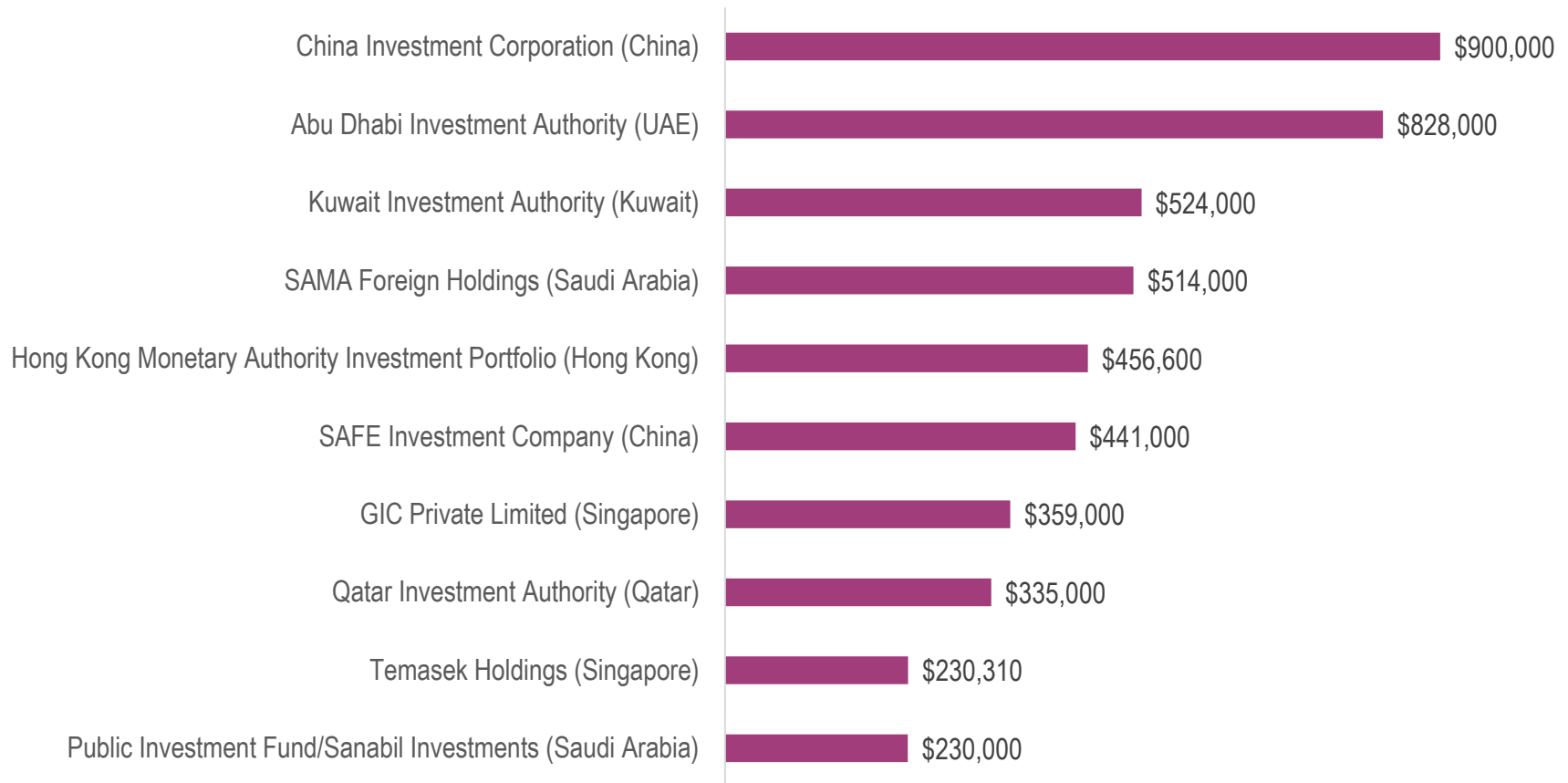
Number of funds



- Sovereign wealth funds (SWFs) represented 32% of the ranking's assets and 20% of the number of funds
- Of the top 20 funds, 50% are SWFs
- The average assets of SWFs accounted for US\$299 billion, well above the average of US\$187 billion for all funds

SOVEREIGN WEALTH FUNDS

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

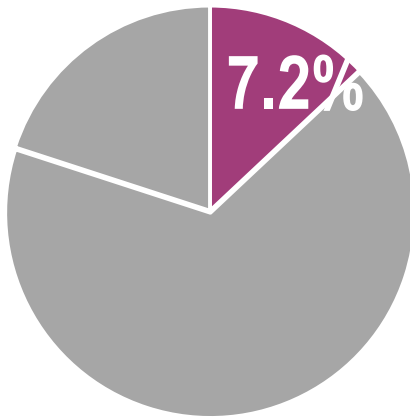


Section 4

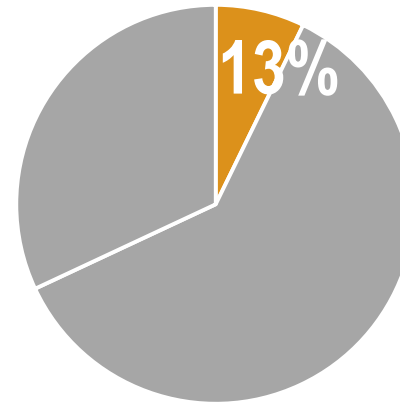
OCIOs and Master Trusts

OCIO AND MASTER TRUSTS

Percentage of assets



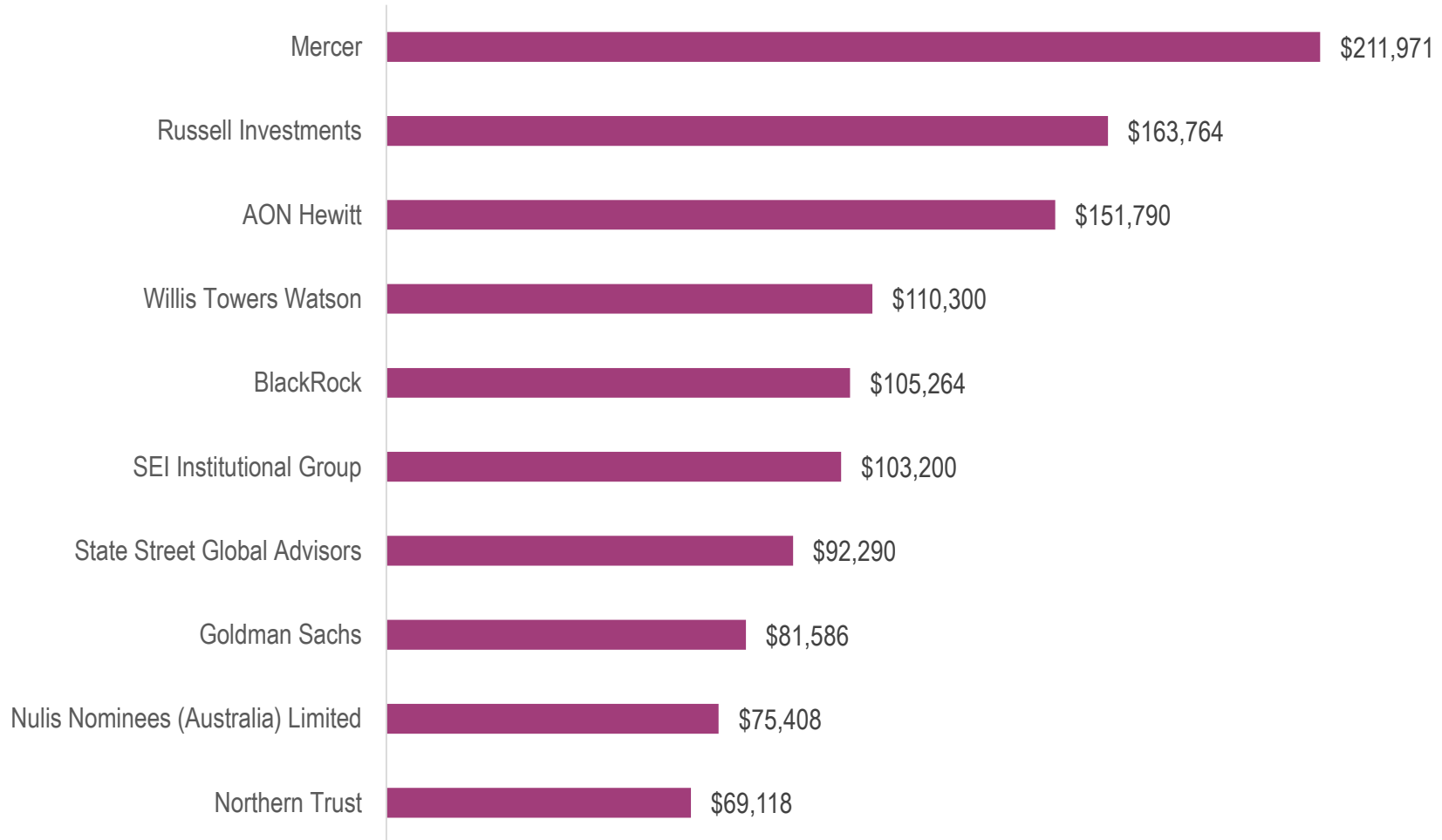
Number of funds



- OCIOs and Master Trusts represented 7.2% of the ranking's assets and 13% of the number of funds
- There are no OCIOs and Master Trusts in the top 20 of the ranking
- The average assets of OCIOs and Master Trusts accounted for US\$104 billion which is below the average of US\$187 billion for all funds

OCIO AND MASTER TRUSTS

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

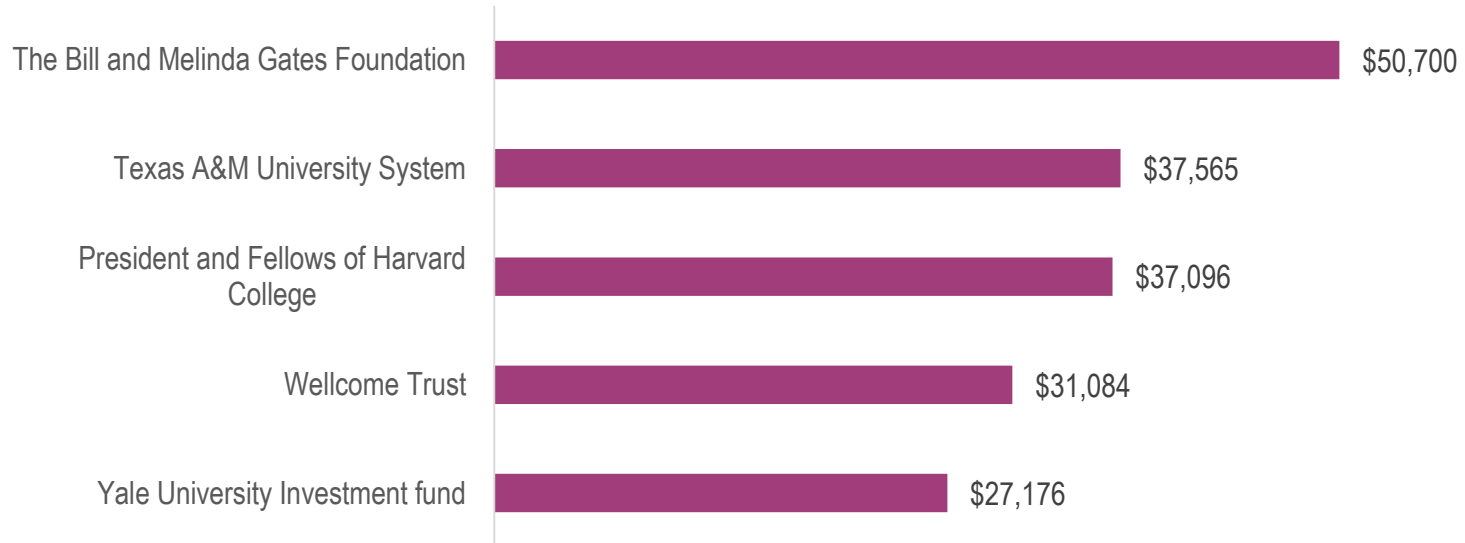


Section 5

Foundations and Endowments

FOUNDATIONS AND ENDOWMENTS

Top 5 Foundations & Endowments (in US\$ million)



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

Section 6

Universal Owners

WHAT IS A UNIVERSAL OWNER?



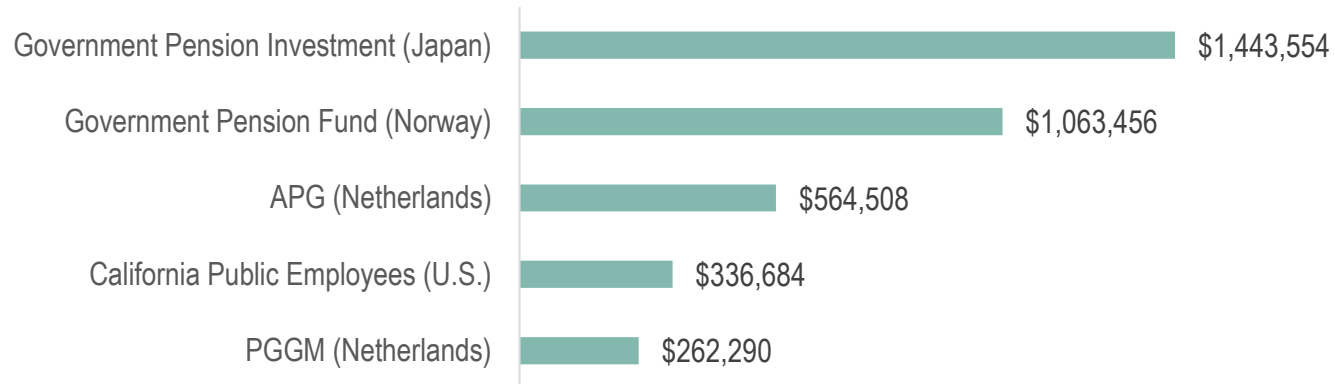
- For a definition of universal owners we use: R Urwin, *Pension Funds as Universal Owners; Opportunity Beckons and Leadership Calls* | Rotman International Pensions Management Journal | Spring 2011.

“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, Norges), 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)



- Categorisation 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 7

Full AO 100 ranking

AO 100 ranking (in US\$ million)

Rank	Organisation	Country	Total Assets	Primary Category
1.	Government Pension Investment	Japan	\$1,443,554	Pension fund
2.	Government Pension Fund	Norway	\$1,063,456	Pension fund
3.	China Investment Corporation	China	\$900,000	SWF ⁵
4.	Abu Dhabi Investment Authority	UAE	\$828,000	SWF ⁵
5.	National Pension	South Korea	\$582,938	Pension fund
6.	APG	Netherlands	\$564,508	Pension fund
7.	Federal Retirement Thrift	U.S.	\$531,489	Pension fund
8.	Kuwait Investment Authority	Kuwait	\$524,000	SWF
9.	SAMA Foreign Holdings	Saudi Arabia	\$514,000	SWF ³
10.	Hong Kong Monetary Authority Investment Portfolio	Hong Kong	\$456,600	SWF ⁵
11.	SAFE Investment Company	China	\$441,000	SWF ⁵
12.	GIC Private Limited	Singapore	\$359,000	SWF ⁵
13.	National Social Security	China	\$341,361	Pension fund
14.	California Public Employees	U.S.	\$336,684	Pension fund
15.	Qatar Investment Authority	Qatar	\$335,000	SWF
16.	Canada Pension	Canada	\$283,454	Pension fund ¹
17.	Central Provident Fund	Singapore	\$269,133	Pension fund
18.	PGGM	Netherlands	\$262,290	Pension fund
19.	Temasek Holdings	Singapore	\$230,310	SWF ¹
20.	Public Investment Fund/Sanabil Investments	Saudi Arabia	\$230,000	SWF ³
21.	California State Teachers	U.S.	\$216,193	Pension fund
22.	Investment Corporation of Dubai	UAE	\$214,200	SWF ³
23.	Mercer	U.S.	\$211,971	OCIO & Master Trust ¹
24.	Local Government Officials	Japan	\$209,880	Pension fund
25.	New York State Common	U.S.	\$201,263	Pension fund

Note: Data is at 31 December 2017, or latest available dates. See Footnotes.

AO 100 ranking (in US\$ million)

Rank	Organisation	Country	Total Assets	Primary Category
26.	Employees Provident Fund	Malaysia	\$200,265	Pension fund
27.	New York City Retirement	U.S.	\$189,794	Pension fund
28.	Florida State Board	U.S.	\$167,900	Pension fund
29.	Russell Investments	U.S.	\$163,764	OCIO & Master Trust ¹
30.	Public Investment Corporation	South Africa	\$155,565	SWF ²
31.	AON Hewitt	U.S.	\$151,790	OCIO & Master Trust ¹
32.	Ontario Teachers	Canada	\$150,730	Pension fund ²
33.	Texas Teachers	U.S.	\$146,326	Pension fund
34.	Employees' Provident	India	\$134,272	Pension fund
35.	Korea Investment Corporation	South Korea	\$134,100	SWF
36.	GEPF	South Africa	\$133,944	Pension fund ²
37.	ATP	Denmark	\$129,741	Pension fund
38.	Mubadala Development Company	UAE	\$127,800	SWF
39.	Abu Dhabi Investment Council	UAE	\$123,000	SWF
40.	Boeing	U.S.	\$121,717	Pension fund
41.	New York State Teachers	U.S.	\$115,637	Pension fund
42.	AT&T	U.S.	\$113,582	Pension fund
43.	Willis Towers Watson	U.S.	\$110,300	OCIO & Master Trust
44.	Wisconsin Investment Board	U.S.	\$109,960	Pension fund
45.	Future Fund	Australia	\$108,216	SWF
46.	North Carolina	U.S.	\$106,946	Pension fund
47.	National Federation of Mutual Aid	Japan	\$106,629	Pension fund
48.	BlackRock	U.S.	\$105,264	OCIO & Master Trust ¹
49.	Pension Fund Association	Japan	\$105,204	Pension fund ¹
50.	Washington State Board	U.S.	\$104,260	Pension fund

Note: Data is at 31 December 2017, or latest available dates. See Footnotes.

AO 100 ranking (in US\$ million)

Rank	Organisation	Country	Total Assets	Primary Category
51.	IBM	U.S.	\$103,676	Pension fund
52.	SEI Institutional Group	U.S.	\$103,200	OCIO & Master Trust ¹
53.	AustralianSuper	Australia	\$103,180	Pension fund
54.	Alecta	Sweden	\$101,415	Pension fund
55.	Ohio Public Employees	U.S.	\$97,713	Pension fund
56.	Labor Pension Fund	Taiwan	\$96,539	Pension fund
57.	General Motors	U.S.	\$96,284	Pension fund
58.	State Street Global Advisors	U.S.	\$92,290	OCIO & Master Trust ¹
59.	National Development Fund	Iran	\$91,000	SWF
60.	California University	U.S.	\$87,452	Pension fund
61.	Bayerische Versorgungskammer	Germany	\$86,556	Pension fund ⁶
62.	Metaal/tech. Bedrijven	Netherlands	\$86,185	Pension fund
63.	PFA Pension	Denmark	\$83,158	Pension fund
64.	Goldman Sachs	U.S.	\$81,586	OCIO & Master Trust ¹
65.	Universities Superannuation	U.K.	\$81,078	Pension fund ²
66.	New Jersey	U.S.	\$80,486	Pension fund
67.	Virginia Retirement	U.S.	\$79,238	Pension fund
68.	General Electric	U.S.	\$78,839	Pension fund
69.	Public Service Pension Plan	Canada	\$78,330	Pension fund ²
70.	Royal Dutch Shell	Netherlands	\$78,105	Pension fund
71.	Oregon Public Employees	U.S.	\$77,495	Pension fund
72.	Ohio State Teachers	U.S.	\$76,458	Pension fund
73.	Bouwnijverheid	Netherlands	\$76,091	Pension fund
74.	Ontario Municipal Employees	Canada	\$75,730	Pension fund
75.	Michigan Retirement	U.S.	\$75,550	Pension fund

Note: Data is at 31 December 2017, or latest available dates. See Footnotes.

AO 100 ranking (in US\$ million)

Rank	Organisation	Country	Total Assets	Primary Category
76.	Nulis Nominees (Australia) Limited	Australia	\$75,408	OCIO & Master Trust ³
77.	Georgia Teachers	U.S.	\$73,089	Pension fund
78.	Minnesota State Board	U.S.	\$72,672	Pension fund
79.	National Public Service	Japan	\$71,662	Pension fund
80.	Lockheed Martin	U.S.	\$71,001	Pension fund
81.	Public Institute for Social Security	Kuwait	\$70,710	Pension fund
82.	Massachusetts PRIM	U.S.	\$69,496	Pension fund
83.	Samruk-Kazyna JSC	Kazakhstan	\$69,260	SWF
84.	Northern Trust	U.S.	\$69,118	OCIO & Master Trust ¹
85.	BT Group	U.K.	\$68,857	Pension fund ¹
86.	First State Super	Australia	\$67,610	Pension fund
87.	BT Funds Management Limited	Australia	\$67,348	OCIO & Master Trust ³
88.	Royal Bank of Scotland Group	U.K.	\$67,222	Pension fund
89.	Libyan Investment Authority	Libya	\$67,000	SWF
90.	Russian National Wealth Fund	Russia	\$66,400	SWF
91.	National Wealth Fund	Russia	\$65,076	Pension fund ⁴
92.	TCorp	Australia	\$64,367	Pension fund ³
93.	Healthcare of Ontario	Canada	\$61,854	Pension fund
94.	United Nations Joint Staff	U.S.	\$61,457	Pension fund
95.	Lloyds Banking Group	U.K.	\$60,664	Pension fund
96.	Colonial First State Investments Limited	Australia	\$60,635	OCIO & Master Trust ³
97.	QSuper	Australia	\$60,629	Pension fund
98.	Ford Motor	U.S.	\$59,813	Pension fund
99.	United Parcel Service	U.S.	\$59,560	Pension fund
100.	AMP Superannuation Limited	Australia	\$58,078	OCIO & Master Trust ³

Note: Data is at 31 December 2017, or latest available dates. See Footnotes.

Asset Owner 100

Footnotes

1. As of March 31, 2018
2. As of March 31, 2017
3. As of June 30, 2017
4. As of January 1, 2018
5. As of August 31, 2018
6. As of January 31, 2018

Notes:

- Compilation of the Asset Owner 100 data has been drawn from several published studies. Notably these include P&I, 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.

Section 8

TAG team and limitations of reliance

The Thinking Ahead Group research team



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The Thinking Ahead Institute

The Thinking Ahead Institute (TAI) is a global not-for-profit group whose aim is to influence change in the investment world for the benefit of the end saver. The Institute's members comprise asset owners, investment managers and other groups that are motivated to influence the industry for the good of savers worldwide. It is an outgrowth of Willis Towers Watson Investments' Thinking Ahead Group and more research is available on its [website](#).

Limitations of reliance

Limitations of reliance – Thinking Ahead Group 2.0

This document has been written by members of the Thinking Ahead Group 2.0. Their role is to identify and develop new investment thinking and opportunities not naturally covered under mainstream research. They seek to encourage new ways of seeing the investment environment in ways that add value to our clients.

The contents of individual documents are therefore more likely to be the opinions of the respective authors rather than representing the formal view of the firm.

Limitations of reliance – Willis Towers Watson

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