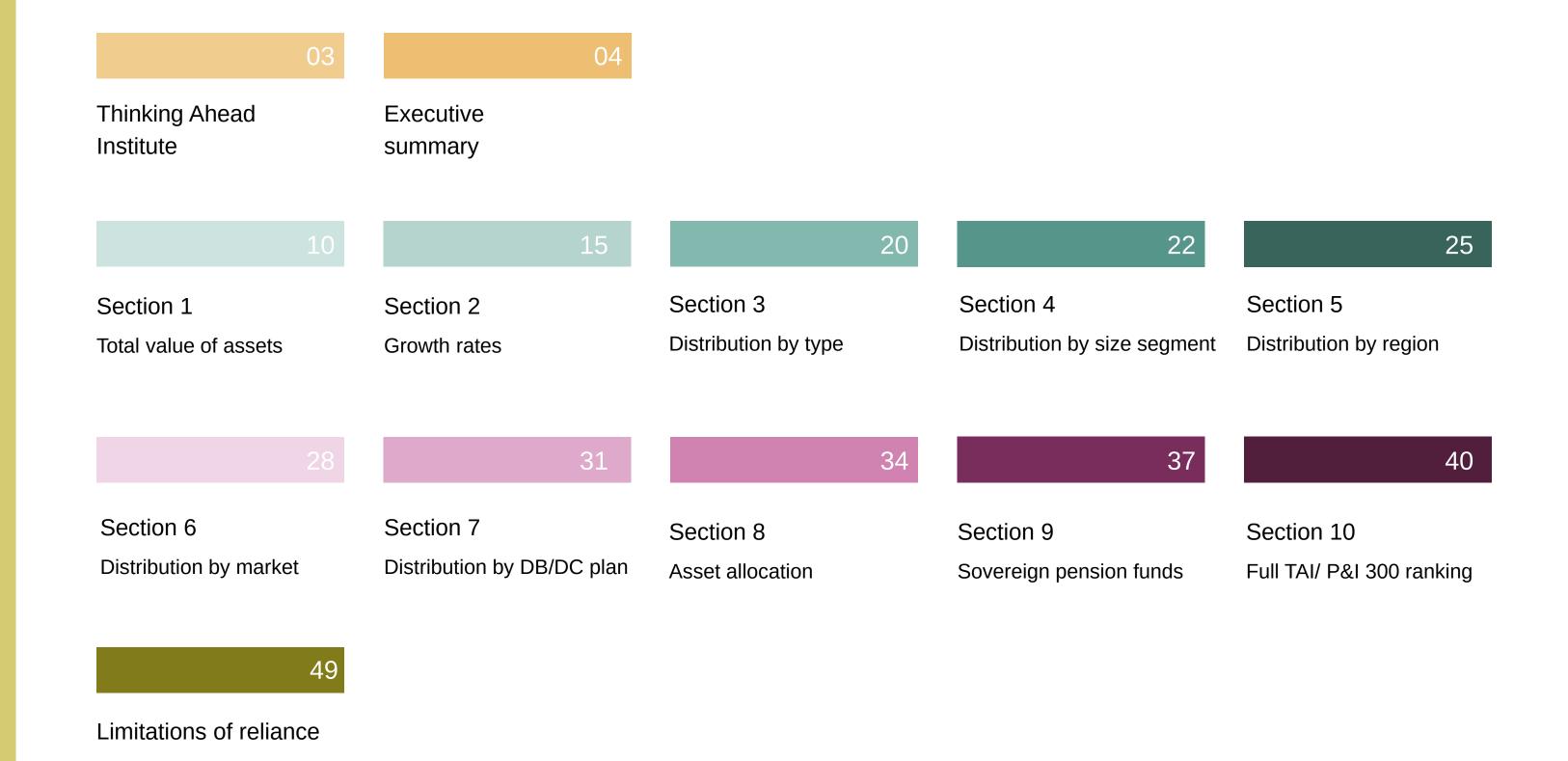
Thinking Ahead Institute

Global top 300 pension funds | Joint study with Pensions & Investments | September 2020





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 <u>website</u>.

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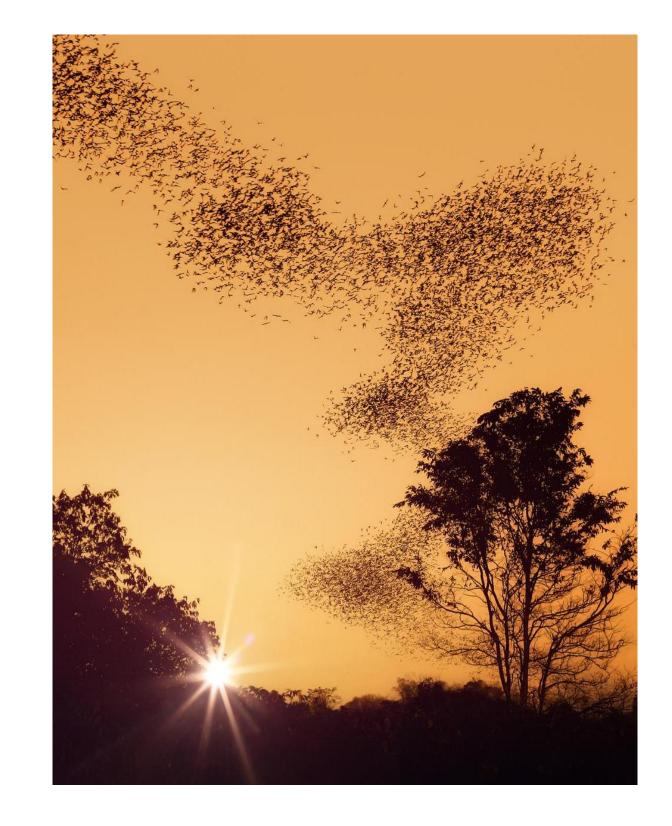
Executive summary

Overview and key findings

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Key findings

- The world's leading pension funds covered in this survey have sustained respectable growth in recent years, amounting to 4.9% per annum in the past five years.
- However, this has not made them resilient to pressures from multiple sources. Solvency concerns, stakeholder expectations, the COVID-19 ramifications, sustainability pressures and other challenges have compounded to make pension fund boards' agendas more complex and stressed than at any previous times.
- Defined benefit (DB) fund boards' solvency concerns sit alongside the management of defined contribution (DC) participant expectations. Both fund types have faced up to the gathering headwinds by increasingly stretching their risk budgets to meet return targets and future goals. This has resulted in increased allocations to private assets in recent years.



Key findings

- While pension funds have become increasingly aware of the financial dimensions of ESG and have been developing their sustainability policies and practices accordingly, expectations on them continue to grow. Within ESG, their focus is being directed towards climate and social considerations.
- US\$140 billion (AuM) is the entry level for the top 20 grouping. These larger funds continue to develop stronger governance capabilities supported by larger spends on people and technology. They have significantly increased their internal resources in recent years.
- Pension funds generally have lagged other industries in the digital revolution. Technology offers a coordinating mechanism to improve the people, process, and information factors that are central to successful pension fund outcomes and will increasingly determine which funds prosper in the years ahead.



Key Figures

AUM of the world's largest pension funds totalled US **\$19.5** trn

The top 20 funds' AUM surged by **8.1%**

68.3% of assets are public sector or sovereign pension funds

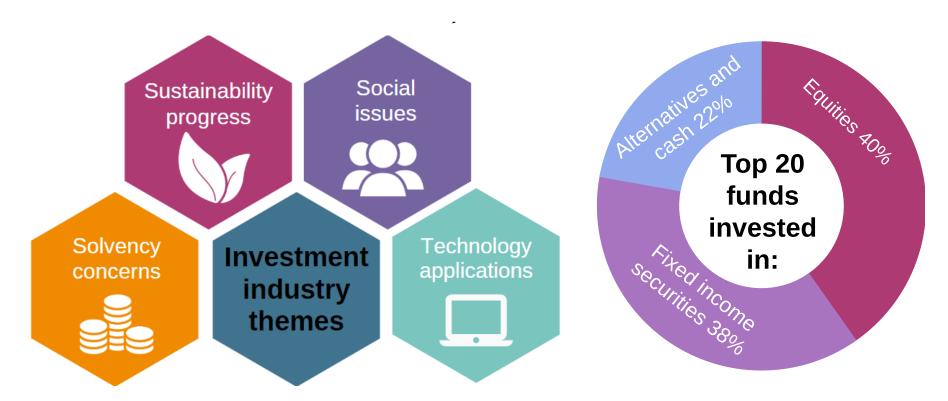
DB funds account for **64.2%** of AUM

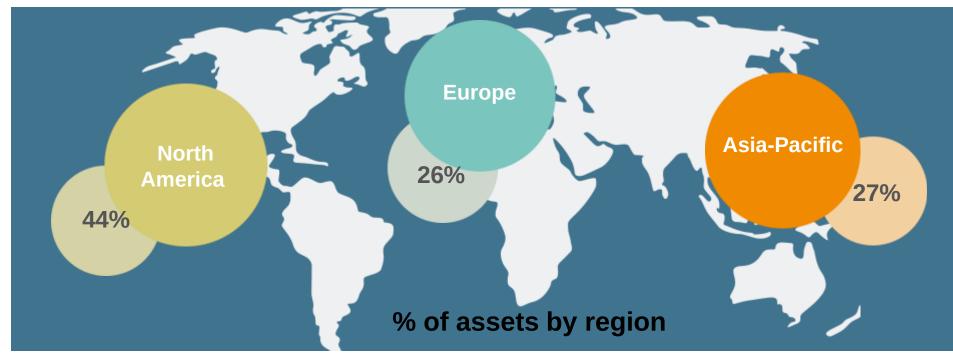
Global trends

North America (NA)
remains **largest** region
in terms of AUM and
share of funds

The US accounts for **142** funds out of **300**

NA and European funds
mainly invested in
equities and AsiaPacific funds in
fixed income





Executive summary

Figures to end 2019, unless otherwise stated

- AUM of the world's largest pension funds totalled US \$19.5 trillion in 2019.
- In 2019 total AUM surged by 8.0%, compared to a decrease of 0.4% the previous year.
- In 2019 the value of the top 20 funds increased by 8.1% equating to 40.7% of total AUM, unchanged from 2018.
- North America remains the largest region in terms of AUM, accounting for 43.8% of all assets in the research and decreasing from a share of 45.2% in 2018.
- Europe and Asia-Pacific AUM represent 25.8% and 26.6% respectively.
- Asia-Pacific had the largest annualized growth during the period 2014 to 2019 (7.0%).
- North America and Europe had annualised growth rates of 5.1% and 2.8% respectively, in the same period.

AUM in the Top 300 soared 8.0% in 2019, a sharp rebound from the previous year's drop of 0.4%

The top 20 funds' AUM surged by 8.1% in 2019

North America
remains the largest
region in terms of
AUM and share of
funds

Executive summary

Figures to end 2019, unless otherwise stated

- The US accounts for 142 funds in the ranking. Since 2014, it has seen ten funds leave the top 300, and 24 new funds join.
- Sovereign and public sector pension funds currently account for 68.3% of the total assets, with 144 funds in the top 300.
- DB funds account for 64.2% of the total assets in the ranking. DB, Reserve funds and Hybrid* funds' assets increased by 7.1%, 9.9% and 11.7% respectively, compared to a 9.2% surge for DC plans' assets.
- On average, the top 20 funds invested approximately 40.2% of their assets in equities, 37.6% in fixed income securities and 22.2% in alternatives and cash.
- North American and European funds have mainly invested in equities while there was a stronger preference for fixed income among Asia-Pacific funds.

*Note: Hybrid funds are plans that incorporate both DB and DC components. Reserve funds are set aside by a national government to guarantee pension payments in the future. By definition, these funds are characterized by no explicit liabilities and are neither DB or DC.

68.3% of assets represent public sector or sovereign pension funds

DB funds dominate, accounting for 64.2% of AUM

40.2% of the top 20 funds' assets were invested in equities and 37.6% in fixed income

Section 1 | Total value of assets

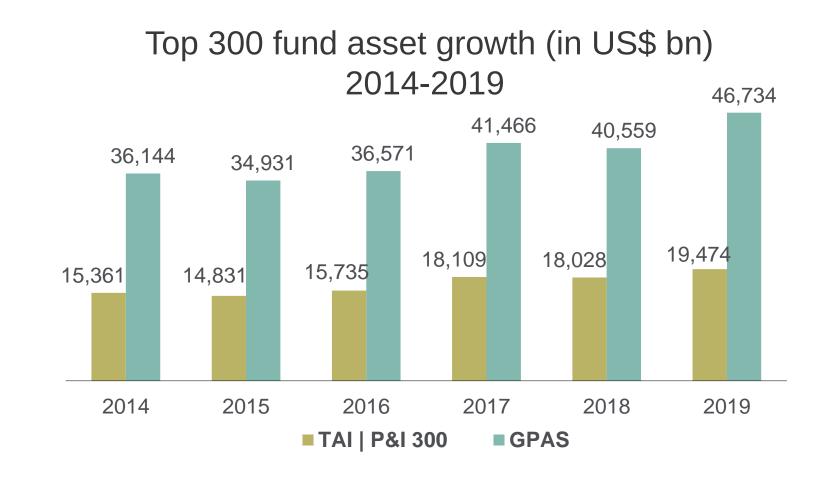
Total value of assets of top 300 and top 20 funds

Movements in top 20 funds

Top 300 fund assets

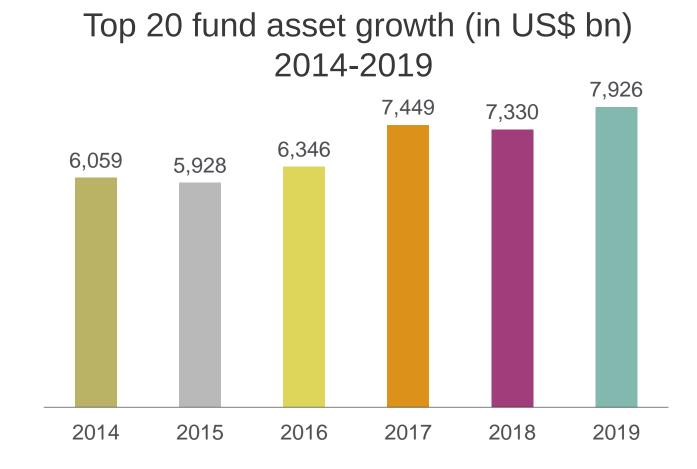
- During 2019, the world's top 300 pension funds grew by 8.0% in terms of assets under management, significantly up from the 0.4% decrease in 2018.
- The cumulative growth in the period 2014-2019 was 26.8%.
- The world's top 300 pension funds represented 41.7% (44.4% in 2018) of the global pension assets, as estimated by GPAS.

The Global Pension Asset Study (GPAS) is a Thinking Ahead Institute study which gathers yearly data on total assets, asset allocation, and plan structure for occupational pension plans in Australia, Brazil, Canada, Chile, China, Finland, France, Germany, Hong Kong, India, Ireland, Italy, Japan, Malaysia, Mexico, Netherlands, South Africa, South Korea, Spain, Switzerland, UK and US.



Top 20 fund assets

- The AUM for the top 20 pension funds increased by 8.1% during the last year, nearly the same as the overall ranking.
- The top 20 funds accounted for 40.7% of the AUM in the ranking, the same share as in 2018.



Major movements in top 20 funds

- There were no new entrants in the top 20 funds during 2019.
- The Government Pension Investment Fund of Japan remained at the top of the ranking, where it has been since 2002, with AUM totaling over US\$ 1.6 trillion in 2019.
- This fund is 46% larger than the second fund in the ranking, the Government Pension Fund of Norway (US\$ 1.1 trillion).
- Within the top 20, the share of Asia-Pacific pension funds went up from 43.0% in 2018 to 44.0% in 2019, as APAC funds' assets on the top 20 increased by 10.6% during the year.
- Although the share of US pension funds decreased, moving from 26.3% to 25.0% over the last year, US funds' assets in the top 20 grew 2.9% in 2019.
- Europe's share slightly increased from 24.9% to 25.0% in the same period, while European funds' assets in the top 20 increased 8.6% in 2019.

The Government Pension
Investment Fund of Japan
remains at the top of the
ranking



APAC funds account for 44.0% of the assets in the top 20

Quotes from the top 20 funds

- 13 out of the top 20 funds published annual reports in English on their websites for FY2019.
- Diversification was pointed as a strategy of paramount importance for investment performance by eleven funds.
- Nine funds mentioned the importance of sustainable and responsible investment by implementing best practices in corporate governance, to ensure the long-term value of the funds' investments.
- Nine funds expressed concern about global uncertainty and slowdown in global economic activity before the disruption of the COVID-19.
- Nine funds emphasized the importance of recruiting a high-performing and diverse workforce as a key component of the long-term strategy for success.
- Seven funds referred to geopolitical tensions and trade barriers, such as the US-China trade war, as a crucial element affecting returns.
- Six funds stated that returns were also affected by the continued low interest rate environment.

'The start of 2019 was characterized by worries of rising interest rates globally, this theme quickly shifted throughout the remainder of the fiscal year as increasing concerns of slowing global growth—made worse by trade tensions between the U.S. and China—prompted major central banks to consider more accommodative policies.'

California State Teachers, U.S.

'Responsible investment is an integral part of our management task. We are an active owner and prioritise work on well-functioning boards and good corporate governance. Our investment decisions take account of how we view companies' long-term financial, environmental and social performance.'

Government Pension Fund, Norway

'In the first few months of 2020 the coronavirus SARS-CoV-2 spread worldwide, with an unprecedented impact. World financial markets were also hit hard, putting pension funds' financial position under still further pressure.'

ABP, Netherlands

Section 2 | Growth rates

Annual growth of assets

Comparison of assets in local currency vs. USD

Annual growth of fund assets

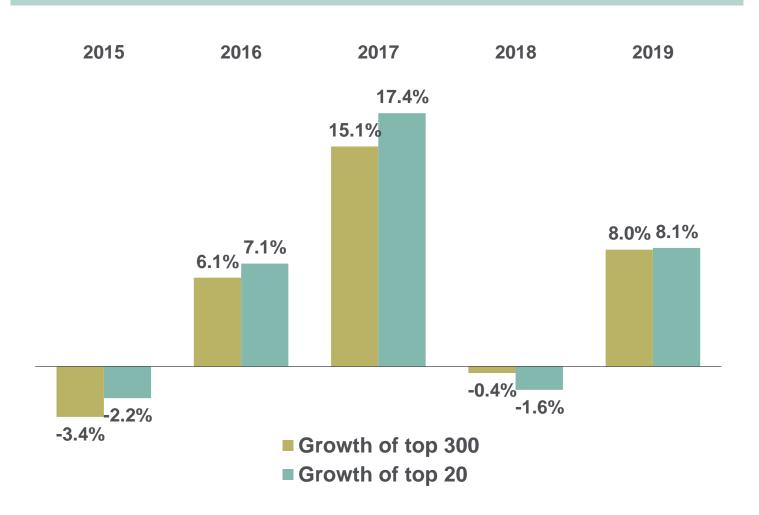
300 funds vs. top 20

- The AUM of the top 20 funds increased by 8.1% in 2019, compared to an increase of 8.0% for the overall ranking.
- Looking at the Compound Annual Growth Rate (CAGR) for the last five years, the top 20 have shown higher growth rates than the top 300 funds (5.5% and 4.9%, respectively).

Annualised growth of top 300 over five years: **4.9%**

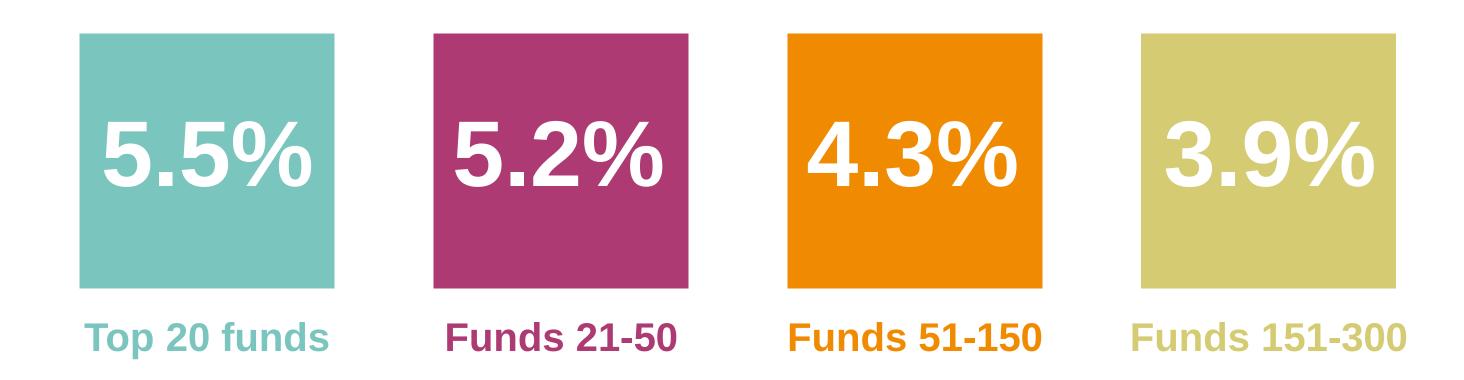
Annualised growth of

top 20 over five years: 5.5%



2014-2019 annualised growth of assets

Split by segment

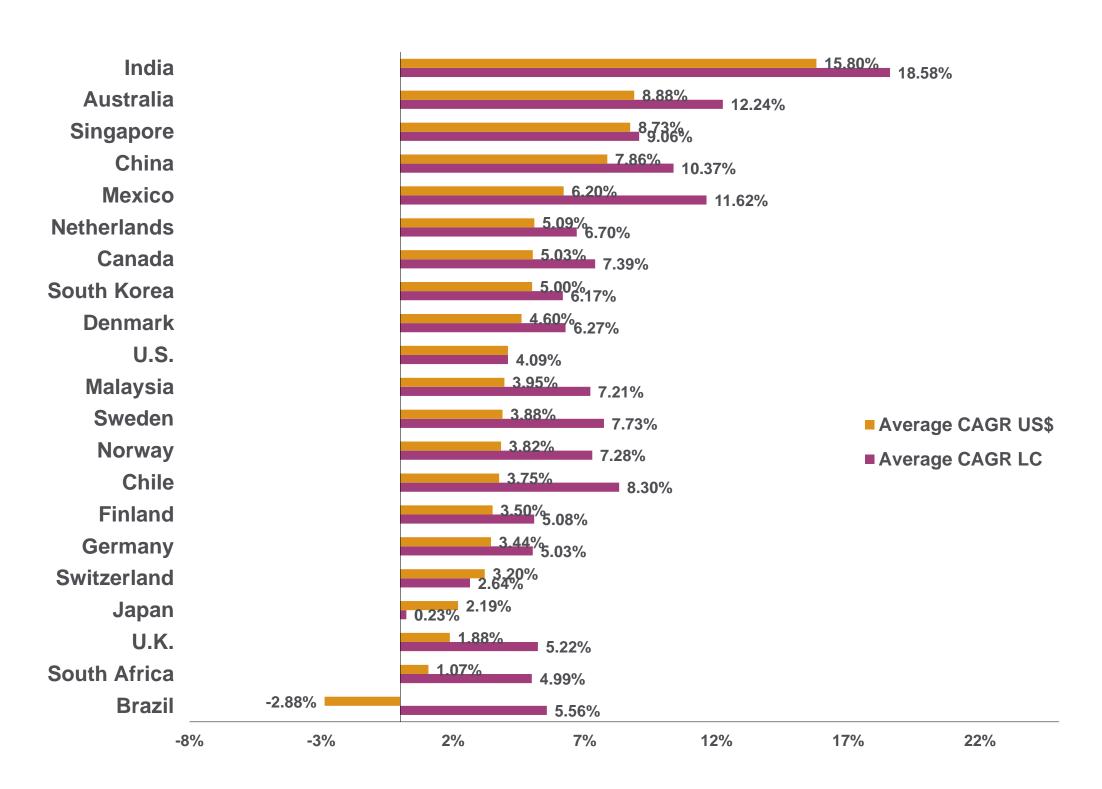


■ The top 20 segment experienced the largest CAGR during the five-year period 2014-2019, followed by the segment 21-50. Meanwhile, the segment 151-300 recorded the lowest annualized rate of growth over the same period.

17

2014-2019 average annualised growth by markets

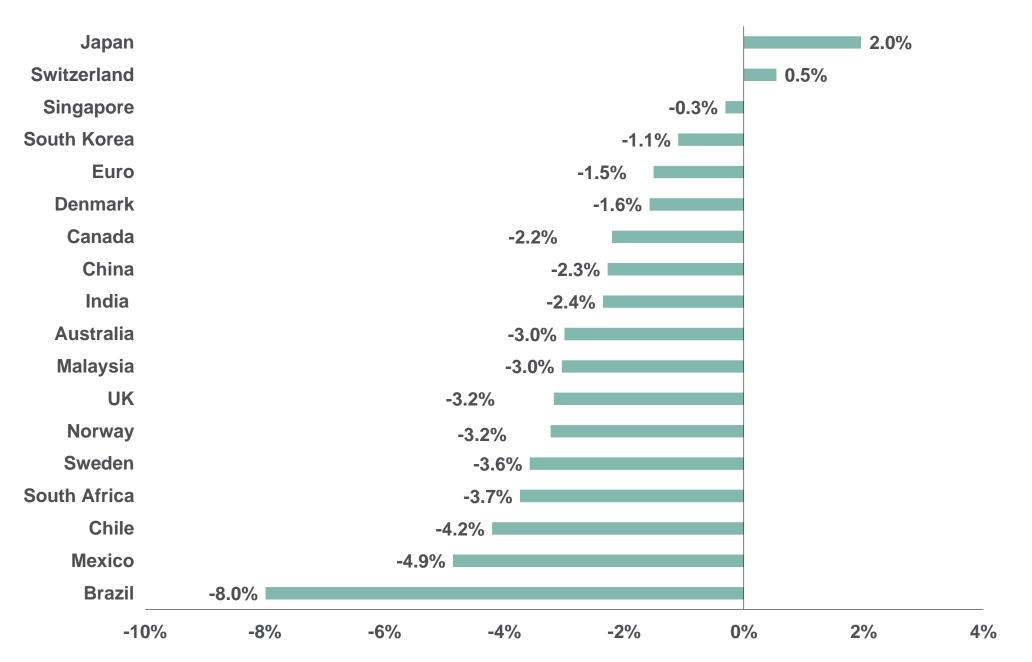
US\$ terms vs. local currency terms



In general, growth rates were higher in local currency terms due to the strong appreciation of the US dollar against almost all major currencies over the 5-year period. The only Indian fund in the ranking showed the highest growth in US\$ terms, while Brazilian funds experienced negative growth rates in US\$ terms.

*Note: Straight average used to calculate market average.

Annualised change in exchange rates 2014 vs. 2019



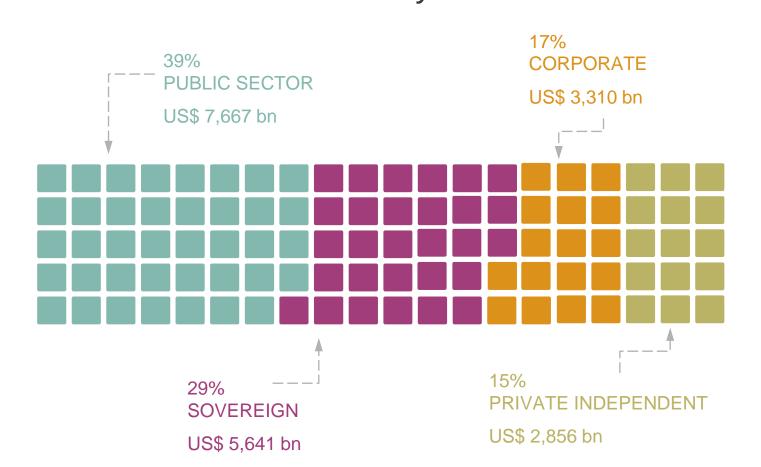
- Considering currency variations in main pension markets, only the Japanese Yen and the Swiss Franc appreciated against the US dollar, while all other major currencies depreciated over the period 2014-2019.
- Same as last year, the Brazilian Real and Mexican Peso experienced the highest depreciation against its US counterpart over the five-year period.

Local currency against US\$ - 31 December 2014 to 31 December 2019

Section 3 | Distribution by type

Assets by type of fund

Distribution by assets



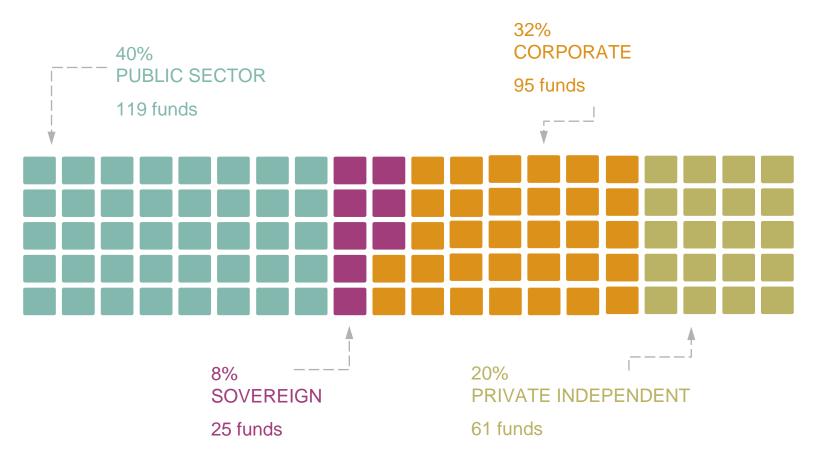
Sovereign funds: those directly controlled by the state.

Public sector funds: covering public sector workers in provincial or state sponsored plans.

Private independent funds: private sector organizations authorized to manage pension plans from different employers.

Corporate funds: covering workers in company sponsored pension plans.

Distribution by number of funds

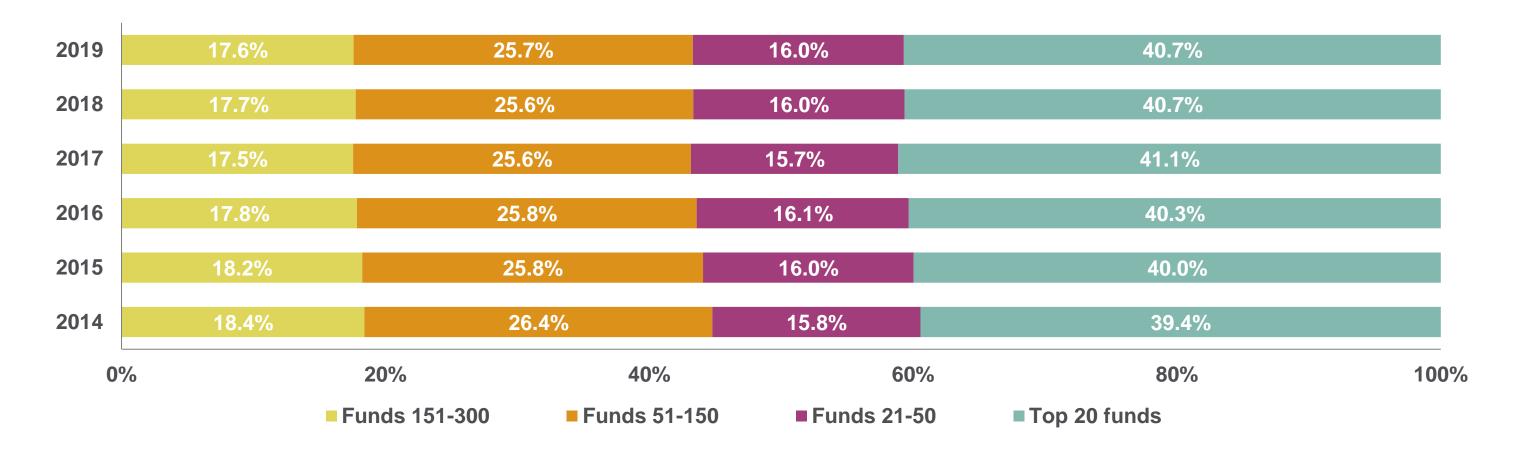


Sovereign and public sector funds accounted for 68.3% of the total AUM in the ranking (68.5% in 2018).

Section 4 | Distribution by size segment

Concentration of fund assets

Split by segment

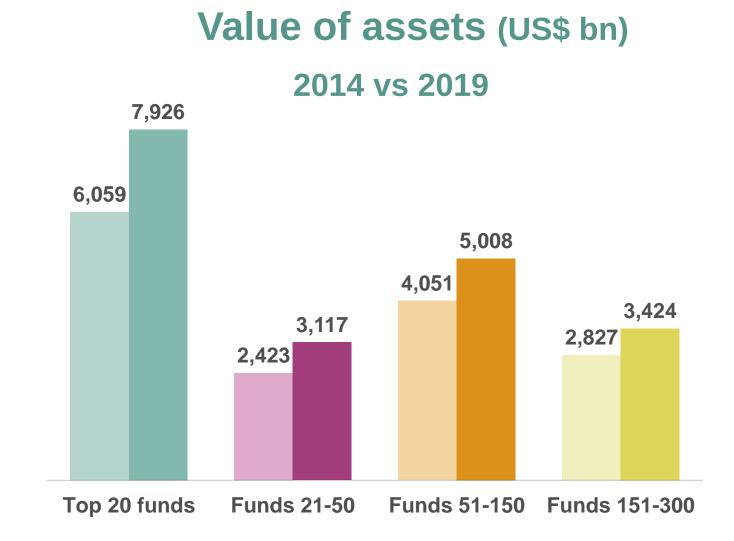


• The distribution of AUM by fund size changed little during the last five years. The top 50 funds account for more than 55% of the total AUM in the ranking.

Concentration of fund assets

Split by segment

- The AUM of the top 20 funds increased by 8.1% in 2019, compared to an increase of 8.0%.
- All segments grew during the five-year period 2014-2019, with the fastest growth occurring amongst the largest funds (the top 20 funds grew by 5.5% a year over this period) for the overall ranking.
- Looking at the Compound Annual Growth Rate (CAGR) for the last five years, the top 20 have shown higher growth rates than the top 300 funds (5.5% and 4.9%, respectively).



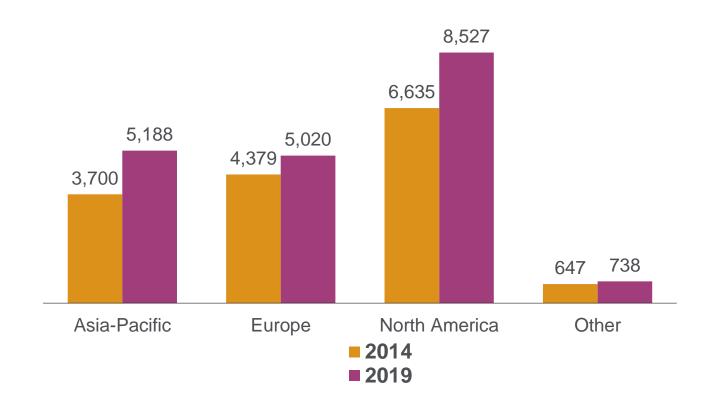
Section 5 | Distribution by region

Total value of fund assets

Split by fund domicile

- Asia-Pacific funds (7.0%) showed the largest growth during the period 2015-2019.
- North America and Europe regions showed growth rates of 5.1% and 2.8% respectively, while Latin American and African funds' AuM increased 2.6% during the five-year period.

Value of assets (in US\$ bn)



Annualised growth by region over the past five years:

Asia-Pacific: 7.0%

North America: 5.1%

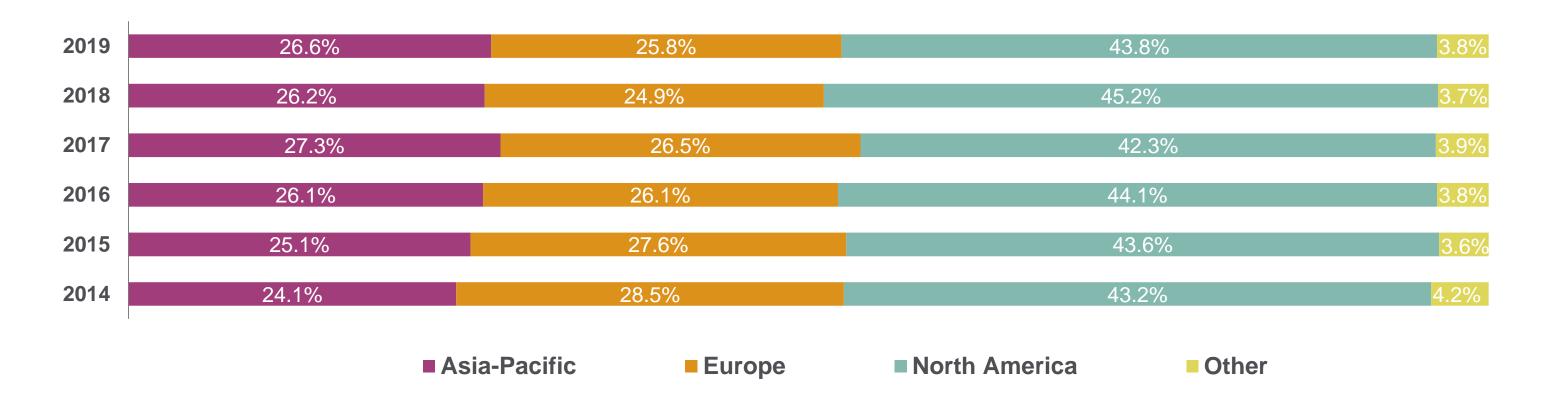
• Europe: 2.8%

• Other: 2.6%

Total Ranking: 4.9%

Total value of fund assets

Split by fund domicile

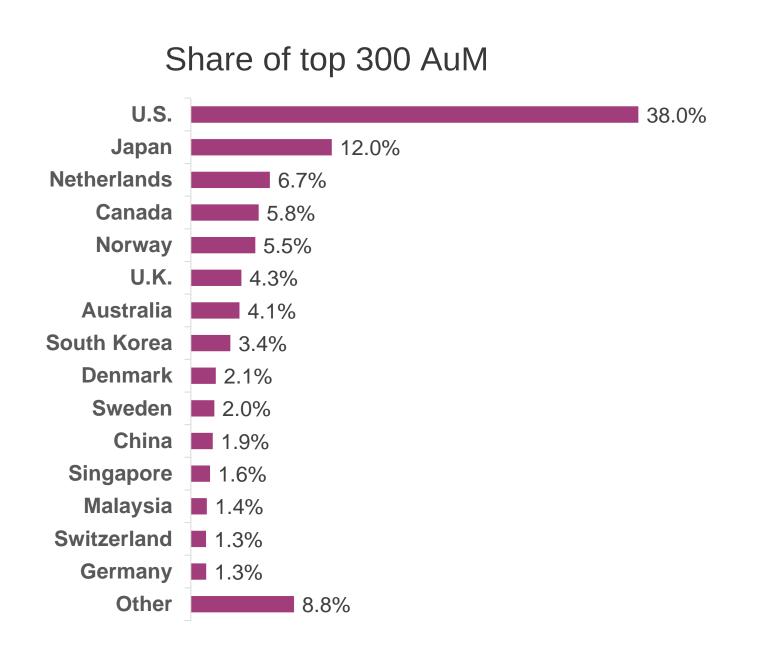


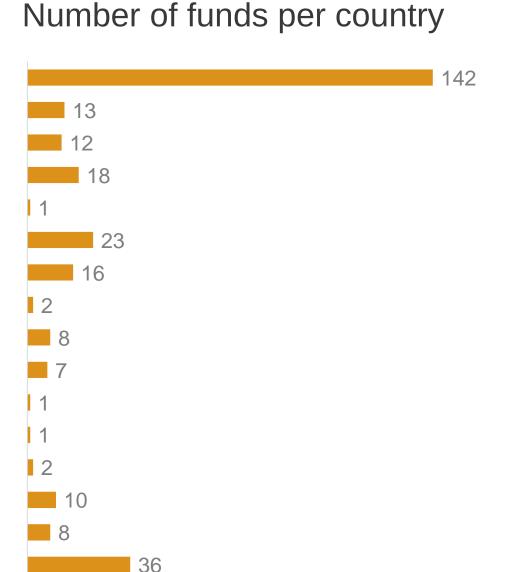
- Despite a fall in North America's share in 2019, it still remains the largest region in terms of AUM and number of funds.
- Asia-Pacific, Latin America, Africa and Europe's share have also surged in 2019, with the latter having the fastest increase in five years.

Section 6 | Distribution by market

Total value of fund assets

Split by fund domicile





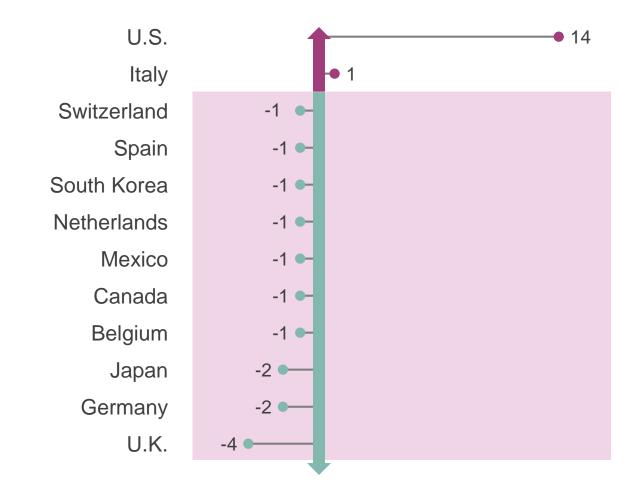
Note: 'Other' here includes the following markets: Brazil, Chile, Colombia, Finland, France, India, Ireland, Italy, Kuwait, Luxembourg, Mexico, New Zealand, Peru, Philippines, Portugal, Russia, South Africa, Taiwan, Thailand and Vietnam.

Change in number of funds in ranking

2014 vs. 2019

- A total of 30 new funds have entered the ranking over the last five years.
- The US accounts for 142 funds in the top 300. It has experienced significant movements in the period 2014-2019 with ten funds leaving the ranking and 24 newcomers.
- On a net basis, the US has had more funds entering the ranking during the period (14 funds), while UK experienced the highest net loss (4 funds).

Net change in number of funds



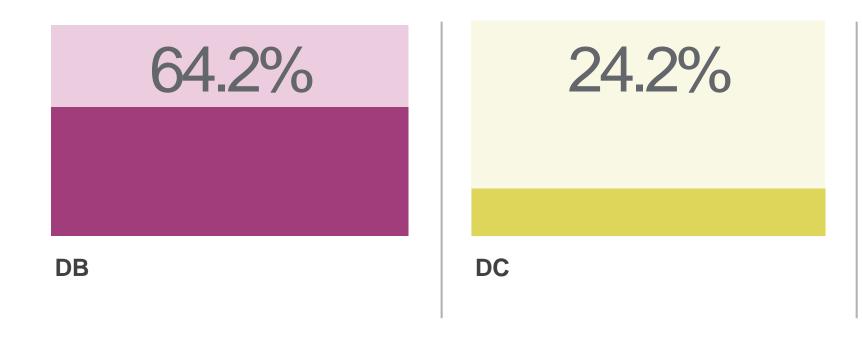
Note: There were no changes in number of funds in Australia, Brazil, Chile, China, Colombia, Denmark, Finland, France, India, Ireland, Kuwait, Luxembourg, Malaysia, New Zealand, Norway, Peru, Philippines, Poland, Portugal, Russia, Singapore, South Africa, Sweden, Taiwan, Thailand and Vietnam.

Section 7 | Distribution by DB/DC funds

Change in number of funds in ranking

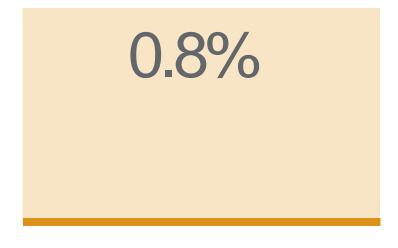
2014 vs. 2019

Note: Disclosure by type of fund was available for 281 funds, accounting for 94% of the AUM in the TAI/P&I 300 study.





Reserve funds are set aside by a national government to guarantee pension payments in the future. By definition, these funds are characterised by no explicit liabilities and are neither DB or DC.



Hybrid

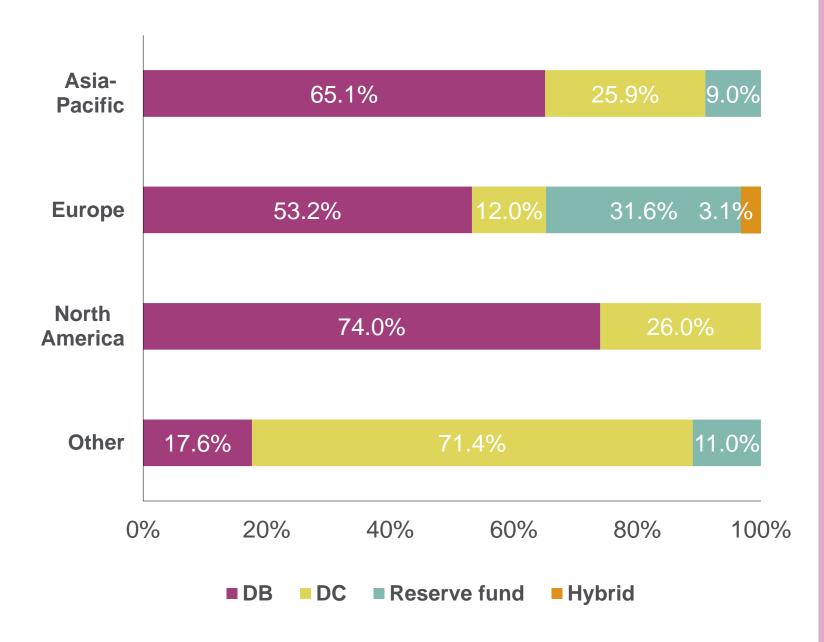
Hybrid funds are plans that incorporate both DB and DC components.

- DB funds accounted for 64.2% of the disclosed total AUM. This share decreased modestly from 64.7% in 2018.
- DB assets increased by 7.1% in 2019, while DC plan assets surged by 9.2%. Hybrid plan assets and reserve funds soared by 11.7% and 9.9%, respectively.

Total value of fund assets

Split by DB/DC plan and fund domicile

- DB plans dominated in North America and Asia-Pacific where they represented 74% and 65%, by assets, respectively. To a smaller degree, DB schemes also dominated in Europe (53%).
- DC plans accounted for a significant share of the assets in the 'Other' regions (71%), in particular in Latin American countries.
- When compared to last year, the share of DB funds slightly decreased in all regions, except in Asia-Pacific where it maintained the same level, while the share of reserve funds grew only in Europe. Conversely, the share of DC funds increased in all regions, except in Europe, where it remained unchanged.



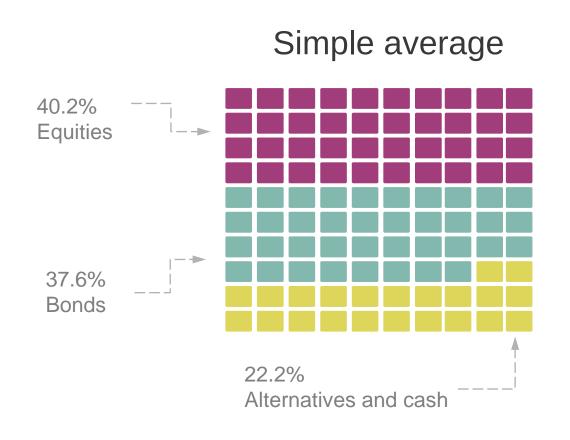
Note: Disclosure by type of fund was available for 281 funds, accounting for 94% of AUM.

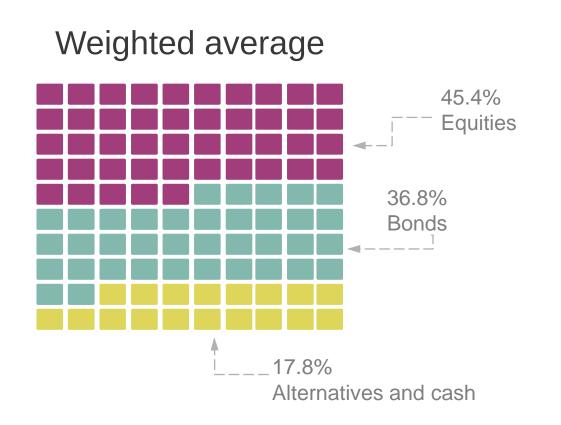
Section 8 | Asset allocation

Total value of fund assets

Split by asset allocation of the top 20 funds







Note: Asset allocation for the National Social Security fund of China and for the Employees Provident Fund of India was not available.

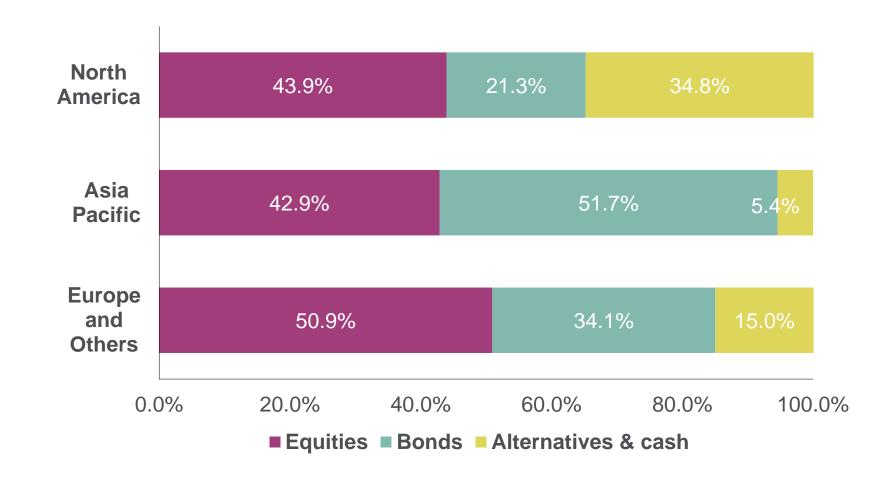
- The simple average portfolio for the top 20 funds shows that 40.2% of the assets were invested in equities, 37.6% in fixed income securities and 22.2% in alternatives and cash.
- The weighted average of the allocations shows a higher percentage of investment in equity (45.4%) and a lower allocation towards fixed income (36.8%) and alternatives & cash (17.8%).

Total value of fund assets

Split by asset allocation and fund domicile of the top 20 funds



- Looking at the weighted average allocations by region, North American and European funds have predominantly invested in equities (43.9% and 50.9%, respectively).
- Conversely, Asia-Pacific funds have largely allocated assets to fixed income investments (51.7%).



Section 9 | Sovereign pension funds

Sovereign pension funds in the ranking

(In US\$ million)

These funds represent 29% of total assets in the ranking, up from last years' share of 28.1%.

			_ , .
Rank	Fund	Market	Total assets
1.	Government Pension Investment Fund	Japan	\$1,555,550
2.	Government Pension Fund ¹	Norway	\$1,066,380
3.	National Pension Fund	South Korea	\$637,279
7.	National Social Security Fund ¹	China	\$361,087
8.	Central Provident Fund	Singapore	\$315,857
9.	Canada Pension ²	Canada	\$315,344
12.	Employees Provident Fund	Malaysia	\$226,101
17.	Employees' Provident ¹	India	\$168,095
21.	GEPF ³	South Africa	\$129,914
25.	National Wealth Fund ⁴	Russia	\$125,302
26.	Labor Pension Fund	Taiwan	\$123,655
29.	Future Fund	Australia	\$117,988
50.	Public Institute for Social Security ¹	Kuwait	\$81,247
66.	AP Fonden 7	Sweden	\$64,057
103.	AP Fonden 4	Sweden	\$44,059
107.	AP Fonden 3	Sweden	\$42,009
114.	AP Fonden 2	Sweden	\$40,320
127.	Social Insurance Funds ¹	Vietnam	\$38,464

Rank	Fund	Market	Total assets
129.	AP Fonden 1	Sweden	\$37,966
132.	FRR	France	\$37,676
185.	New Zealand Superannuation ⁵	New Zealand	\$27,123
214.	State Pension	Finland	\$23,085
217.	FEFSS	Portugal	\$22,829
222.	Fonds de Comp./Securite Sociale	Luxembourg	\$22,272
281.	Ireland Strategic Investment	Ireland	\$16,895

Definition: Sovereign pension funds are established by national authorities for the meeting of pension liabilities. We acknowledge that there are many other state-sponsored funds established – we have attempted to restrict this list to funds specifically sponsored by national authorities.

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Sovereign pension funds vs. sovereign wealth funds

- As of December 2019, sovereign wealth funds (SWF) accounted for US\$ 8.2 trillion in assets, while sovereign pension funds totaled US\$ 5.6 trillion.
- Based on the information published by the SWF Institute, sovereign wealth funds' assets increased by 3.6% during 2019, compared to a surge of 11.4% for the sovereign pension funds in the TAI/ P&I 300 study.

Source: SWF Institute: http://www.swfinstitute.org/fund-rankings/

US\$ 5,641 bn

Sovereign pension funds

US\$ 8,190 bn

Sovereign wealth **funds**

Section 10 | Thinking Ahead Institute (TAI) / Pensions and Investments (P&I) 300 ranking

Rank	Fund	Market	Total Assets	Rank	Fund	Market 1	otal Assets
1.	Government Pension Investment Fund	Japan	\$1,555,550	21.	GEPF	South Africa	\$129,914 ³
2.	Government Pension Fund	Norway	\$1,066,380 ¹	22.	Boeing	U.S.	\$129,545
3.	National Pension Fund	South Korea	\$637,279	23.	AustralianSuper	Australia	\$129,095
4.	Federal Retirement Thrift	U.S.	\$601,030	24.	AT&T	U.S.	\$125,611
5.	ABP	Netherlands	\$523,310	25.	National Wealth Fund	Russia	\$125,302 ⁴
6.	California Public Employees	U.S.	\$384,435	26.	Labor Pension Fund	Taiwan	\$123,655
7.	National Social Security Fund	China	\$361,087 ¹	27.	Washington State Board	U.S.	\$119,992
8.	Central Provident Fund	Singapore	\$315,857	28.	New York State Teachers	U.S.	\$119,663
9.	Canada Pension	Canada	\$315,344 ²	29.	Future Fund	Australia	\$117,988
10.	PFZW	Netherlands	\$243,839 ²	30.	Wisconsin Investment Board	U.S.	\$116,877
11.	California State Teachers	U.S.	\$243,311	31.	North Carolina	U.S.	\$114,631
12.	Employees Provident Fund	Malaysia	\$226,101	32.	National Federation of Mutual Aid	Japan	\$109,053
13.	Local Government Officials	Japan	\$224,006	33.	IBM	U.S.	\$105,712
14.	New York State Common	U.S.	\$215,424	34.	Alecta	Sweden	\$102,985
15.	New York City Retirement	U.S.	\$208,458	35.	Bouwnijverheid	Netherlands	\$102,692
16.	Florida State Board	U.S.	\$173,769	36.	Ohio Public Employees	U.S.	\$101,852
17.	Employees' Provident	India	\$168,095 ¹	37.	Pension Fund Association	Japan	\$98,090 2
18.	Ontario Teachers	Canada	\$159,666	38.	Metaal/tech. Bedrijven	Netherlands	\$97,576
19.	Texas Teachers	U.S.	\$157,632	39.	California University	U.S.	\$95,493
20.	ATP	Denmark	\$144,983	40.	Public Service Pension Plan	Canada	\$93,966 ³

Rank	Fund	Market	Total Assets	Rank	Fund	Market 1	Γotal	Assets
41.	Bayerische Versorgungskammer	Germany	\$91,610	61.	First State Super	Australia	\$	71,972
42.	Universities Superannuation	U.K.	\$89,352 ³	62.	BT Group	U.K.	\$	\$70,887 ²
43.	PFA Pension	Denmark	\$87,533	63.	Royal Bank of Scotland Group	U.K.	\$	68,837 6
44.	General Motors	U.S.	\$86,894	64.	Kaiser	U.S.	\$	68,574
45.	Virginia Retirement	U.S.	\$86,718	65.	United Nations Joint Staff	U.S.	\$	67,770
46.	Ontario Municipal Employees	Canada	\$84,201	66.	AP Fonden 7	Sweden	\$	64,057
47.	Michigan Retirement	U.S.	\$83,908	67.	QSuper	Australia	\$	63,091
48.	New Jersey	U.S.	\$82,983	68.	Ford Motor	U.S.	\$	62,997
49.	Oregon Public Employees	U.S.	\$82,404	69.	Quebec Pension	Canada	\$	62,773
50.	Public Institute for Social Security	Kuwait	\$81,247 1	70.	Bank of America	U.S.	\$	62,181
51.	Minnesota State Board	U.S.	\$80,805	71.	PME	Netherlands	\$	61,630
52.	Royal Dutch Shell	Netherlands	\$79,807 5	72.	Tennessee Consolidated	U.S.	\$	60,757
53.	General Electric	U.S.	\$79,599	73.	Lloyds Banking Group	U.K.	\$	\$60,705 ⁶
54.	Lockheed Martin	U.S.	\$79,470	74.	UniSuper	Australia	\$	60,619
55.	Ohio State Teachers	U.S.	\$78,988	75.	Northrop Grumman	U.S.	\$	\$59,763
56.	Georgia Teachers	U.S.	\$78,782	76.	Keva	Finland	\$	\$59,734
57.	Massachusetts PRIM	U.S.	\$76,001	77.	Quebec Government & Public	Canada	\$	\$59,365
58.	National Public Service	Japan	\$74,258	78.	AFP Habitat	Chile	\$	\$59,132
59.	Healthcare of Ontario	Canada	\$72,440	79.	United Technologies	U.S.	\$	\$59,051
60.	United Parcel Service	U.S.	\$72,253	80.	Los Angeles County Empl.	U.S.	\$	\$58,811

Rank	Fund	Market To	otal Assets	Rank	Fund	Market To	otal Assets	
81.	Pennsylvania School Empl.	U.S.	\$58,008	101.	Missouri Schools & Educ.	U.S.	\$45,235	
82.	Ilmarinen	Finland	\$56,657	102.	Nevada Public Employees	U.S.	\$44,629	
83.	Organization for Workers	Japan	\$56,002 ²	103.	AP Fonden 4	Sweden	\$44,059	
84.	AMF Pension	Sweden	\$55,488	104.	Teamsters, Western Conf.	U.S.	\$44,029	
85.	Varma	Finland	\$54,617	105.	Illinois Municipal	U.S.	\$42,668	
86.	Maryland State Retirement	U.S.	\$54,134	106.	Bundes Pensionskasse	Switzerland	\$42,359	
87.	Colorado Employees	U.S.	\$53,837	107.	AP Fonden 3	Sweden	\$42,009	
88.	Wells Fargo	U.S.	\$53,700	108.	REST	Australia	\$41,908	
89.	Verizon	U.S.	\$53,189	109.	Barclays Bank U.K.	U.K.	\$41,577	
90.	Previ	Brazil	\$52,965	110.	Arizona State Retirement	U.S.	\$41,401	
91.	AFP Provida	Chile	\$52,346	111.	State Farm	U.S.	\$41,151	
92.	Illinois Teachers	U.S.	\$52,252	112.	AFP Capital	Chile	\$40,848	
93.	Electricity Supply Pension	U.K.	\$52,242 ¹	113.	Raytheon	U.S.	\$40,322	
94.	Sunsuper	Australia	\$52,096	114.	AP Fonden 2	Sweden	\$40,320	
95.	Afore XXI Banorte	Mexico	\$48,742 ⁷	115.	Alabama Retirement	U.S.	\$40,303	
96.	FedEx	U.S.	\$46,483	116.	Utah State Retirement	U.S.	\$39,800	
97.	Public School Employees	Japan	\$46,066	117.	Cbus	Australia	\$39,767	
98.	B.C. Municipal	Canada	\$45,758	118.	HESTA	Australia	\$39,739	
99.	J.P. Morgan Chase	U.S.	\$45,673	119.	PensionDanmark	Denmark	\$39,722	
100.	Sampension	Denmark	\$45,413	120.	Afore Citibanamex	Mexico	\$39,347	7

Rank	Fund	Market	Total Assets	Rank	Fund	Market 1	Γotal	Assets
121.	Delta Air Lines	U.S.	\$39,259	141.	Connecticut Retirement	U.S.	\$	\$35,937
122.	Johnson & Johnson	U.S.	\$39,201	142.	Honeywell	U.S.	\$	\$35,722
123.	South Carolina Public Empl.	U.S.	\$39,055	143.	CSC	Australia	\$	35,561
124.	Alberta Local Authorities	Canada	\$38,924	144.	British Airways	U.K.	\$	\$35,553
125.	National Pension Association	Japan	\$38,702 1	145.	ERAFP	France	\$	\$35,092 ¹
126.	Vervoer	Netherlands	\$38,676	146.	Private Schools Employees	Japan	\$	\$34,798
127.	Social Insurance Funds	Vietnam	\$38,464 1	147.	Rabobank	Netherlands	\$	\$34,791
128.	AFP Cuprum	Chile	\$38,352	148.	Afore Profuturo GNP	Mexico	\$	\$34,021 ⁷
129.	AP Fonden 1	Sweden	\$37,966	149.	Iowa Public Employees	U.S.	\$	\$34,011
130.	Railways Pensions	U.K.	\$37,887 1	150.	BVV	Germany	\$	\$33,970
131.	HSBC Bank	U.K.	\$37,874	151.	Alaska Retirement	U.S.	\$	\$33,870
132.	FRR	France	\$37,676	152.	Grafische Bedrijven	Netherlands	\$	\$33,836
133.	Porvenir	Colombia	\$37,276	153.	ING Pensioenfonds	Netherlands	\$	\$33,526
134.	Nokia USA	U.S.	\$37,166	154.	Pennsylvania Employees	U.S.	\$	\$33,156
135.	Retirement Fund-KWAP	Malaysia	\$37,019 ¹	155.	Greater Manchester	U.K.	\$	\$33,143
136.	ABN AMRO Pensioenfonds	Netherlands	\$36,960	156.	Walmart	U.S.	\$	\$33,066
137.	BVK des Kantons Zurich	Switzerland	\$36,841	157.	Afore Sura	Mexico	\$	\$32,534 ⁷
138.	Indiana Public Retirement	U.S.	\$36,658	158.	Exxon Mobil	U.S.	\$	\$32,403
139.	BP	U.K.	\$36,129	159.	American Airlines	U.S.	\$	\$32,269
140.	HOSTPLUS	Australia	\$36,018	160.	Texas County & District	U.S.	\$	\$32,112

Rank	Fund	Market	Total Assets	Rank	Fund	Market 1	Γotal	Assets
161.	Texas Employees	U.S.	\$31,939	181.	Caterpillar	U.S.	Ç	\$27,808
162.	Strathclyde Pension Fund	U.K.	\$31,424	182.	Citigroup	U.S.	9	\$27,547
163.	State Super	Australia	\$31,194	183.	Daimler	Germany	٥	\$27,420
164.	Government Pension	Thailand	\$31,024 ¹	184.	CVS Health	U.S.	9	\$27,328
165.	Pfizer	U.S.	\$30,862	185.	New Zealand Superannuation	New Zealand	9	\$27,123 ⁹
166.	Mississippi Employees	U.S.	\$30,531	186.	Federal Reserve Employees	U.S.	9	\$27,088
167.	Proteccion	Colombia	\$30,418	187.	Migros-Genossenschafts-Bund	Switzerland	9	\$26,864
168.	VBL	Germany	\$30,311 ¹	188.	Dow	U.S.	9	\$26,815
169.	BAE Systems	U.K.	\$30,180	189.	Shell Oil	U.S.	9	\$26,266
170.	San Francisco City & County	U.S.	\$30,129	190.	3M	U.S.	9	\$26,237
171.	Texas Municipal Retirement	U.S.	\$29,984	191.	Government Service Insurance	Philippines	9	\$25,950
172.	Japan Police Personnel Mutual Aid	Japan	\$29,136	192.	FCA US	U.S.	9	\$25,878
173.	Chevron	U.S.	\$28,909	193.	United Airlines Holdings	U.S.	9	\$25,870
174.	Industriens Pension	Denmark	\$28,766	194.	New York State Def. Comp.	U.S.	9	\$25,707
175.	General Dynamics	U.S.	\$28,673	195.	ENPAM	Italy	9	\$25,518
176.	Elo Mutual Pension Insurance	Finland	\$28,369	196.	B.C. Public Service	Canada	9	\$25,459 ³
177.	UBS	Switzerland	\$28,219	197.	National Railroad	U.S.	9	\$25,407
178.	Mitsubishi UFJ Financial	Japan	\$28,012 ²	198.	Nestle	Switzerland	9	\$25,314 ⁶
179.	British Coal Pension Schemes	U.K.	\$27,885 ⁸	199.	Microsoft	U.S.	Q	\$25,200
180.	Exelon	U.S.	\$27,828	200.	Walt Disney	U.S.	Ç	\$24,908

Rank	Fund	Market	Total Assets	Rank	Fund	Market T	otal Assets
201.	PepsiCo	U.S.	\$24,871	221.	ESSSuper	Australia	\$22,397
202.	Labor Insurance Fund	Taiwan	\$24,741	222.	Fonds de Comp./Securite Sociale	Luxembourg	\$22,272
203.	BBC	U.K.	\$24,336 ¹	223.	Illinois State Universities	U.S.	\$22,163
204.	B.C. Teachers	Canada	\$24,250	224.	New York City Def. Comp.	U.S.	\$22,162
205.	National Electric	U.S.	\$24,015	225.	Prudential Financial	U.S.	\$22,087
206.	PKA	Denmark	\$23,972	226.	Super SA	Australia	\$21,877
207.	Corteva	U.S.	\$23,962	227.	GESB	Australia	\$21,730
208.	Illinois State Board	U.S.	\$23,958	228.	Intel	U.S.	\$21,505
209.	Los Angeles Fire & Police	U.S.	\$23,920	229.	Kansas Public Employees	U.S.	\$21,495
210.	PG&E	U.S.	\$23,630	230.	Laegernes Pensionskasse	Denmark	\$21,454
211.	World Bank	U.S.	\$23,461	231.	Public Service Pension Fund	Taiwan	\$21,400 ¹
212.	Aviva	U.K.	\$23,426	232.	HP	U.S.	\$21,349
213.	Tesco	U.K.	\$23,100 ^{6, 10}	233.	Canada Post	Canada	\$21,308
214.	State Pension	Finland	\$23,085	234.	Spoorwegpensioenfonds	Netherlands	\$21,158
215.	Procter & Gamble	U.S.	\$23,005	235.	Hydro-Quebec	Canada	\$20,902
216.	Louisiana Teachers	U.S.	\$22,925	236.	West Midlands Metropolitan	U.K.	\$20,832 3
217.	FEFSS	Portugal	\$22,829	237.	CommonSpirit Health	U.S.	\$20,780
218.	Merck	U.S.	\$22,782	238.	Deloitte	U.S.	\$20,759
219.	Ontario Pension Board	Canada	\$22,584	239.	Magistrenes Pensionskasse	Denmark	\$20,683
220.	Petros	Brazil	\$22,495	240.	Mizuho Financial Group	Japan	\$20,481 ²

Rank	Fund	Market	Total Assets	Rank	Fund	Market	Total	Assets
241.	Kentucky Teachers	U.S.	\$20,135	261.	Siemens	Germany	\$	\$18,600 8
242.	Deere	U.S.	\$20,100	262.	FMR	U.S.	\$	\$18,501
243.	Costco Wholesale	U.S.	\$20,000	263.	Credit Suisse	Switzerland	\$	\$18,444
244.	Wespath (UMC)	U.S.	\$19,970	264.	FUNCEF	Brazil	\$	\$18,310
245.	National Rural Electric	U.S.	\$19,942	265.	Georgia Employees	U.S.	\$	\$18,260
246.	Southern Co.	U.S.	\$19,928	266.	Los Angeles City Employees	U.S.	\$	\$18,139
247.	Quebec Construction Industry	Canada	\$19,887	267.	Air Canada	Canada	\$	\$18,032
248.	Abbott Laboratories	U.S.	\$19,800	268.	CenturyLink	U.S.	\$	\$18,002
249.	Bell Canada	Canada	\$19,653	269.	Hoffman La Roche	Switzerland	\$	\$17,759 ⁶
250.	Integra	Peru	\$19,647 ¹⁰	270.	VicSuper	Australia	\$	\$17,742
251.	Consolidated Edison	U.S.	\$19,644	271.	PK Post	Switzerland	\$	\$17,664
252.	L3Harris Technologies	U.S.	\$19,632	272.	Arkansas Teachers	U.S.	\$	\$17,584
253.	Ernst & Young	U.S.	\$19,629	273.	HCA Holdings	U.S.	\$	\$17,500
254.	City of Zurich	Switzerland	\$19,091	274.	Hawaii Employees	U.S.	\$	\$17,422
255.	National Grid	U.K.	\$19,042 ²	275.	Nippon Telegraph & Telephone	Japan	\$	\$17,364 ²
256.	West Yorkshire	U.K.	\$19,041 ³	276.	E.ON	Germany	\$	\$17,348
257.	SBB Pensionskasse	Switzerland	\$19,016	277.	Nebraska Investment Council	U.S.	\$	\$17,261
258.	Operating Eng. International	U.S.	\$18,920	278.	Oklahoma Teachers	U.S.	\$	\$17,237
259.	Idaho Public Employees	U.S.	\$18,806	279.	GlaxoSmithKline	U.K.	\$	\$17,209
260.	Duke Energy	U.S.	\$18,678	280.	AkzoNobel	U.K.	\$	\$17,141 ⁶

Rank	Fund	Market	Total Assets
281.	Ireland Strategic Investment	Ireland	\$16,895
282.	MetLife	U.S.	\$16,882
283.	BWVA	Germany	\$16,866
284.	Orange County	U.S.	\$16,755
285.	Koch Industries	U.S.	\$16,709
286.	OPSEU	Canada	\$16,697
287.	Nordrheinische Arzteversorgung	Germany	\$16,612 ¹
288.	Banco Santander (U.K.)	U.K.	\$16,545
289.	Eli Lilly	U.S.	\$16,468
290.	Oracle	U.S.	\$16,460
291.	Sammons Enterprises	U.S.	\$16,447
292.	New Mexico Public Empl.	U.S.	\$16,356
293.	Government Employees Pension	South Korea	\$16,330
294.	Mayo Clinic	U.S.	\$16,253
295.	Liberty Mutual	U.S.	\$16,104
296.	Partners HealthCare	U.S.	\$16,083
297.	West Virginia Investment	U.S.	\$16,042
298.	New York City Teachers	U.S.	\$16,023
299.	New York City MTA	U.S.	\$16,005
300.	International Paper	U.S.	\$15,979

- US fund data was sourced from the P&I 1000, while figures for other regions were sourced from annual reports, websites, and direct communication with pension fund organisations.
- US funds' data is as of September 30, 2019.
- Non-US funds' data is as of December 31, 2019 except where shown.
- Unless otherwise noted, domestic pension fund figures were considered.

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1 Estimate
2 As of March 31, 2020
3 As of March 31, 2019
4 As of Jan. 1, 2020
5 Global figure (ex-U.S.)
6 Global figure
7 As of May 31, 2020
8 As of Sept. 30, 2019
9 As of June 30, 2019
10 As of Feb. 29, 2020
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Limitations of reliance

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Limitations of reliance

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