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# How Do Sovereign Wealth Funds Invest? With Strategic Diversification

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# Introduction

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Since our last bi-annual report on investment trends among Sovereign Wealth Funds (SWFs), we highlight the following key trends in 2018–2020:

- Overall asset allocation remained largely stable with equities continuing to be the largest exposure.<sup>1</sup>
- The number of SWFs has shrunk due to mergers, underscoring our previous analysis that fund size is a more important predictor of asset allocation than fund origin or other characteristics.
- Size enables greater diversification and higher allocations to alternatives, and therefore supports better performance over the long run.
- Over half of SWF alternatives allocation is concentrated in real estate and private equity, with SWFs owning roughly 16% of global assets under management (AUM) in the latter industry.
- Surprisingly, SWF returns are similar to those of public pension funds over the past decade, with SWFs benefiting slightly more during risk-on periods.

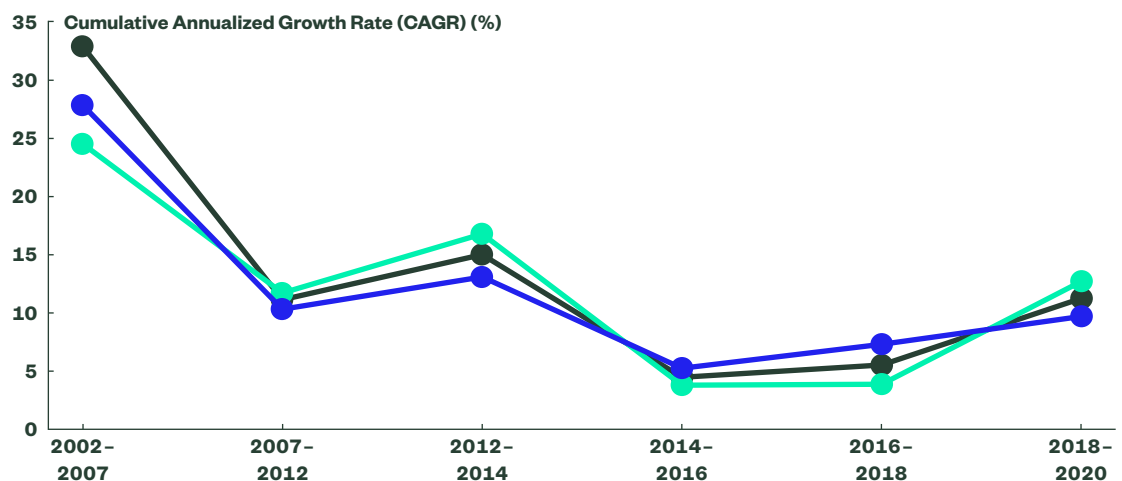
Our research draws on data provided by Global SWF. Global SWF studies 438 State-Owned Investors (SOIs), including Sovereign Wealth Funds (SWFs) and Public Pension Funds (PPFs), which jointly manage well over \$27 trillion in assets. Since our last report released in early 2020, we mark a change to our sample, now counting the 34 largest SWFs.

## SWFs: Growing in Size and Importance

Sovereign Wealth Funds (SWFs) remain a prominent and diverse group of global asset owners. They represent unencumbered fiscal resources of the host governments, invested under a range of different mandates. In this study, we considered 34 of the largest SWFs, located in 26 different jurisdictions, which as of year-end 2020, have total assets of almost \$8.5 trillion, representing 5% of total global markets.<sup>2</sup> Between 2018 and 2020, total SWF assets under management (AUM) grew by an annualized 11.3%, as compared to 5.5% over the previous time period (Figure 1). We find that the acceleration in AUM growth is largely a function of market gains due to the post-2018 drawdown in equities. However, we estimate that organic inflows into global SWF holdings are roughly in line with the mid-single digits during the 2014–2018 time period. Figure 2 displays the breadth and depth of the 2018 market drawdown by illustrating the return of asset classes across the years between 2018 and 2020. The table also shows the stark reversal across the board in markets, which in turn flatters SWF AUM growth. Looking ahead, we speculate that the beginning of a commodity supercycle in 2020 is likely to restore higher organic AUM growth over the coming decade, increasing SWFs' systemic role in the asset owner community.

Figure 1  
Sovereign Wealth Fund Growth

■ All SWFs  
■ Oil SWFs  
■ Non-oil SWFs



Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.

Figure 2  
Return of Asset Classes in 2018, 2019, and 2020

Asset Class Returns	Index	2018 (%)	2019 (%)	2020 (%)
Fixed Income	S&P 500 Global Bond Index	-2.00	13.60	10.20
Public Equities	S&P Global 1200 Index	-10.50	25.00	13.10
Real Estate	S&P 500 Real Estate Index	-5.60	24.90	-5.20
Infrastructure	S&P Global Infrastructure Index	-13.20	21.80	-8.70
Private Equity	S&P Listed Private Equity Index	-17.20	39.40	0.60
Hedge Funds	HFM Global Index	-0.80	7.30	4.90

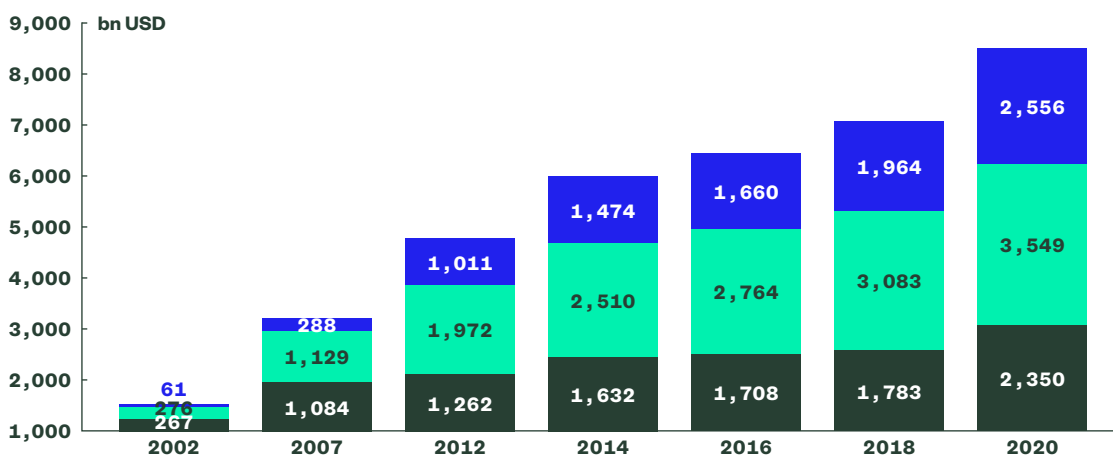
Source: Global SWF.<sup>3</sup>

## Asset Allocation: Caution Amid the Pandemic

SWFs entered the COVID-19 pandemic with a cautious positioning. Though long-term overall asset allocation trends remain constant, SWFs had marginally de-risked with an increased allocation to cash and fixed income. The average SWF recorded 2.5% more of its assets in cash and fixed income, essentially mirroring a -2.3% reduction in public equities and a -0.2% reduction in private markets exposure (Figures 2 and 3). Most of this shift is explained by four SWFs: the Fundo Soberano de Angola (Angola), the National Wealth Fund (Russia), the Future Fund (Australia) and the Permanent Wyoming Mineral Trust Fund (USA), respectively, which added 15% on average to their cash and fixed income layer. Some of those choices were driven by institutional re-design more than portfolio choices; for example, Russia's fund dramatically increased its cash and fixed income allocation. While we are not speculating whether this increase was related to the country's geopolitical intentions, we note Russia added \$100 billion to cash and fixed income, bringing the total share to 70% of the mandate. However, given the continued growth in global leverage, the static appetite for bonds among SWFs means that SWFs currently hold a 2.8% share of global fixed income markets.<sup>4</sup>

Figure 3  
**Aggregate Allocation  
of SWFs**

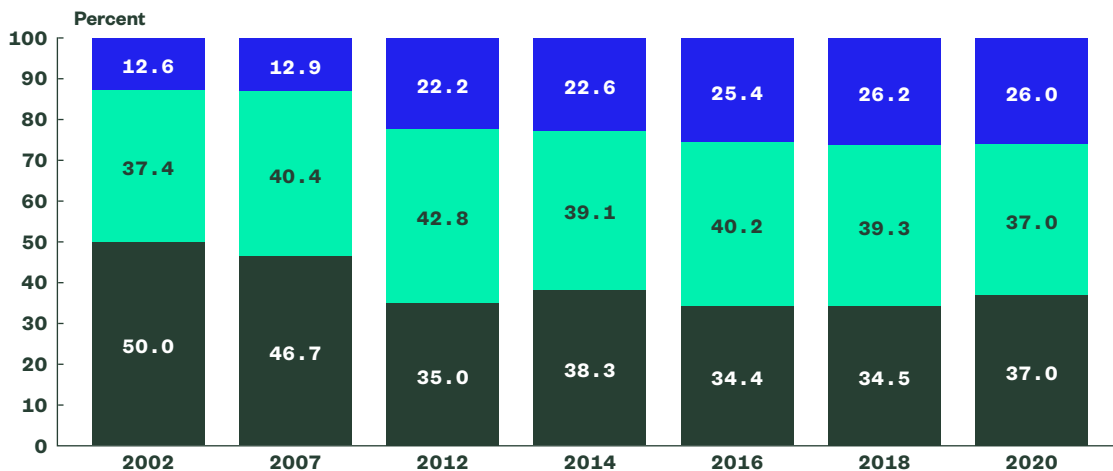
■ Cash and Fixed Income  
■ Equities  
■ Private Markets



Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.

Figure 4  
**Unweighted  
Average Asset  
Allocation of SWFs**

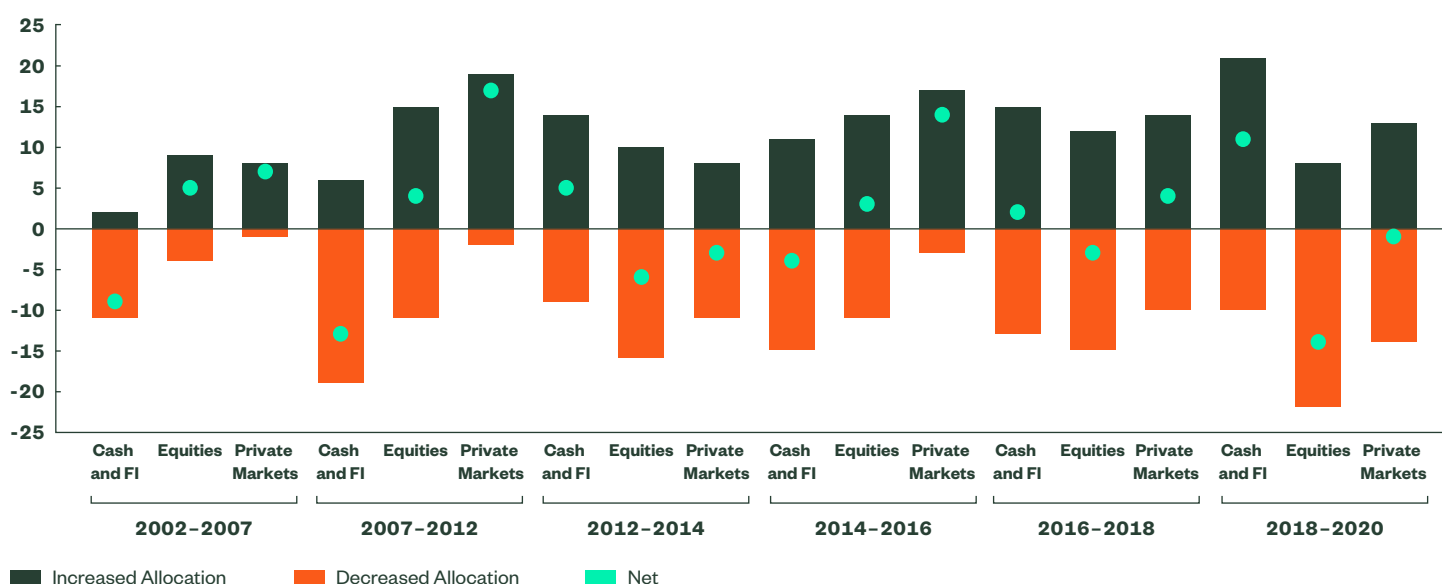
■ Cash and Fixed Income  
■ Equities  
■ Private Markets



Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.

In contrast, SWFs are doubly as relevant as equity investors, currently holding a 5.4% share of global public equities.<sup>5</sup> This continues to be the largest exposure, both on average (37% of SWFs) and in aggregate (42% of the global SWF asset pool). While the larger SWFs appear to have lowered their equity allocation more (3.2% for funds with AUM >\$50 billion versus 0.9% for funds with AUM <\$50 billion), one could be sceptical given reporting timelines and the significant market gyrations. Instead, another way is to count the number of SWFs with increased or decreased allocations, as shown below in Figure 5. Indeed, this shows a clear consensus net decrease in equity allocation between 2018 and 2020. Notably, this is not explained by a re-allocation within the risk budget as shifts in private market allocation are roughly balanced, with an equal number of SWFs increasing or lowering their allocations.

Figure 5  
**Increases and Decreases in Allocations to Asset Classes, and Net Number of SWFs**



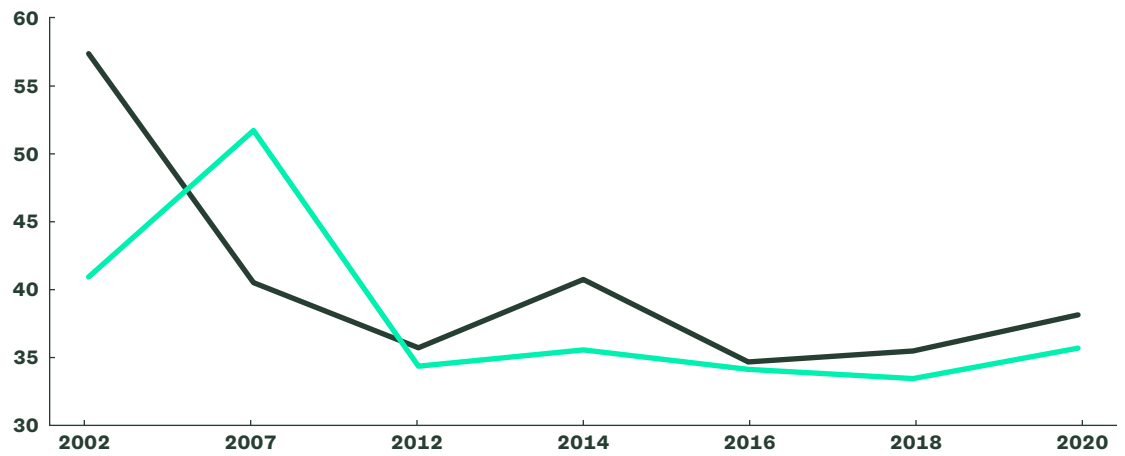
Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.

SWF private markets investment continues to grow in nominal terms and has now reached \$2,556 billion (2020) in our sample, an increase of \$590 billion from 2018. This total results in a 14% increase on an annualized basis over the two-year period. However, overall private market allocation to the portfolio has only increased by 1%. Compared to 2019 volumes, global investments by SWFs dropped by 33%, in 280 transactions (Global SWF).<sup>6</sup> Figure 5 indicates the appetite for increasing private investments has been mixed as there is not a real consensus in allocation direction. Dissecting by size, we also only find minimal differences, with larger SWFs showing marginally higher (0.3%) and smaller SWFs showing marginally lower average allocations (-0.7%).

Again, fund size remains a more important predictor of asset allocation than fund origin. Since the post-2014 oil price shock, oil SWFs have either dwindled or re-adjusted to the new reality, and their investment behavior has somewhat converged with the non-oil ones.<sup>7</sup> Figure 7 shows the allocation to fixed income between smaller funds (<\$50 billion) and larger funds (>\$50 billion) continues to diverge (43% vs 33%). Moreover, the gap between small oil funds and large oil funds and between small and large non-oil funds is also similar. This is likely to change given the structural shift higher in oil prices.

Figure 6  
**Allocation to Fixed Income by Fund Source**

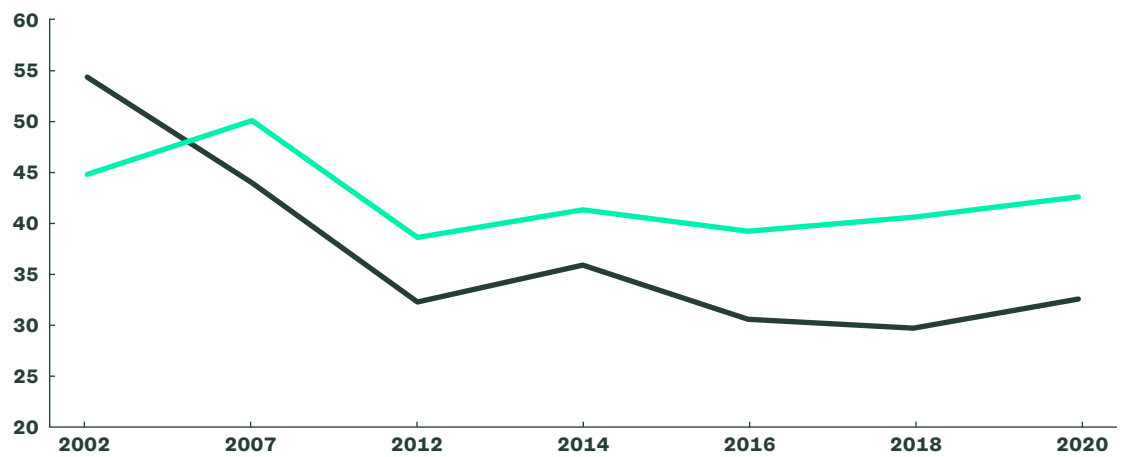
Oil SWFs  
Non-oil SWFs



Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.

Figure 7  
**Allocation to Fixed Income by Fund Size**

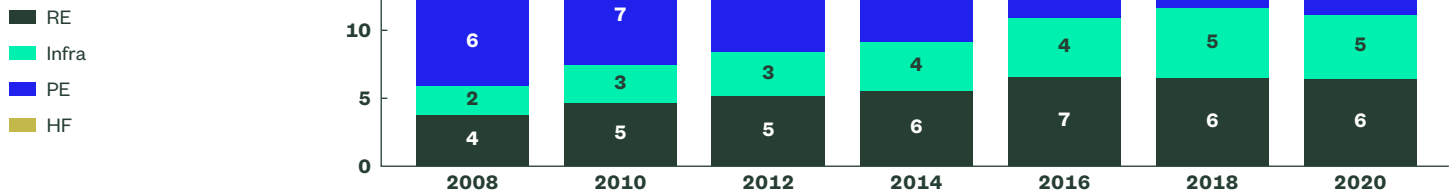
SWFs > \$50bn  
SWFs < \$50bn



Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.

Comparing sub-asset class choices, oil SWFs maintain a higher exposure to private equity, where non-oil SWFs have a more balanced alternatives profile. Private equity and real estate account for 53% of the alternatives profile and 17% of total assets, which implies a major share for SWFs in these industries (Figure 8). Globally, we estimate that our 34 SWFs account for 16% of private equity markets and 7% of real estate markets in 2020.<sup>8</sup> Additionally, we find that both private equity and infrastructure have picked up the most over the decade, increasing by 4% and 2% of total asset allocation, respectively.

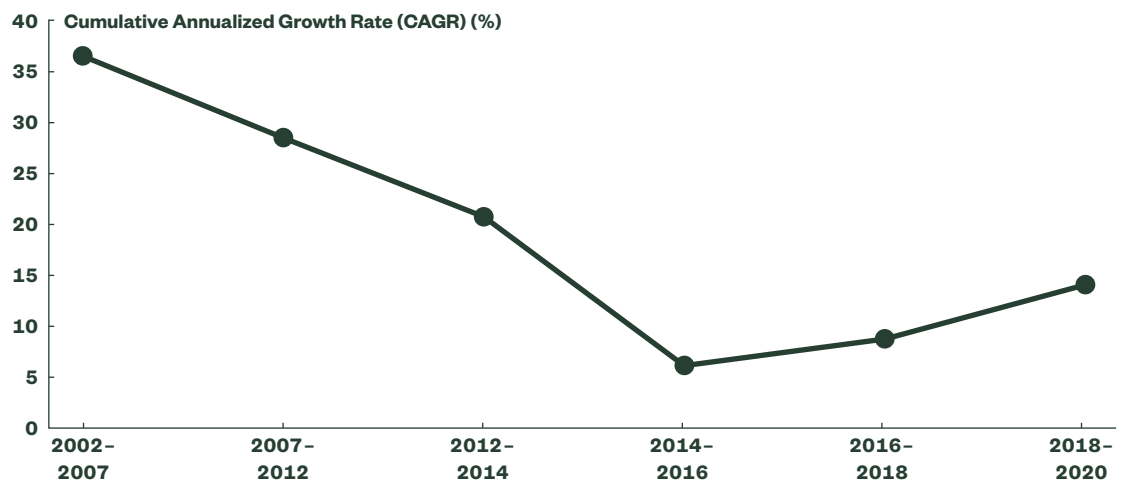
Figure 8  
**Unweighted Average Private Markets Asset Allocation of SWFs, Breakdown by Sub-Asset Class**



Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.

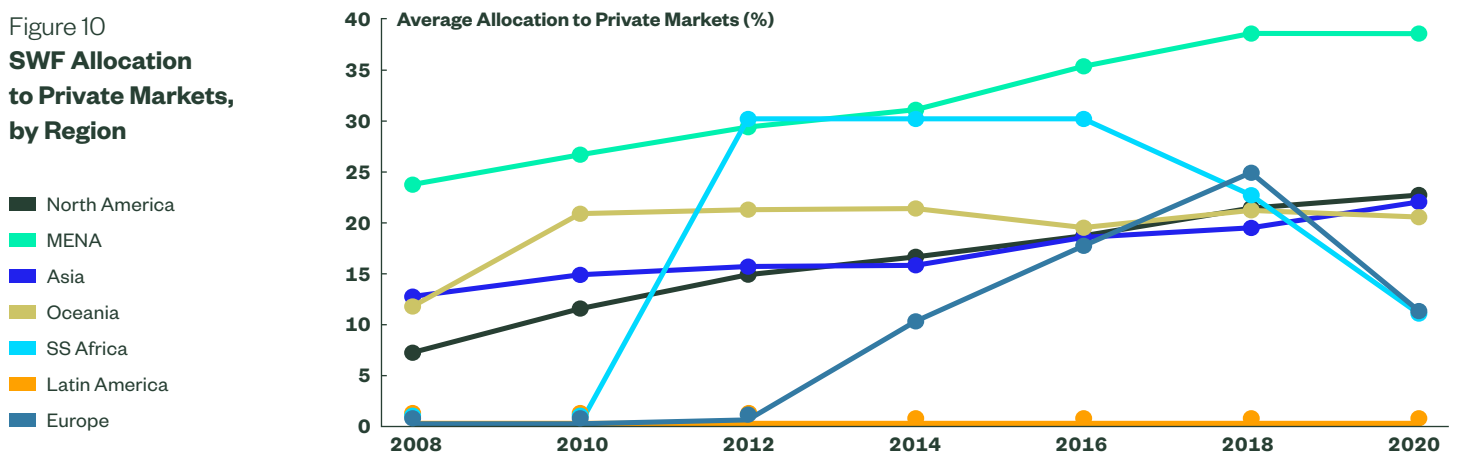
Over the long term, illiquid assets have delivered higher returns and thus early diversification into private markets has affected overall fund performance. SWFs diversifying earlier in their time horizon have generated higher returns. Figure 10 shows the average allocation to private markets on a regional basis. The Middle East and North Africa (MENA), Oceania and North America diversified earlier and continued to ramp up their alternatives profile.

Figure 9  
**Private Markets Fund Growth**



Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.

Figure 10  
**SWF Allocation to Private Markets, by Region**

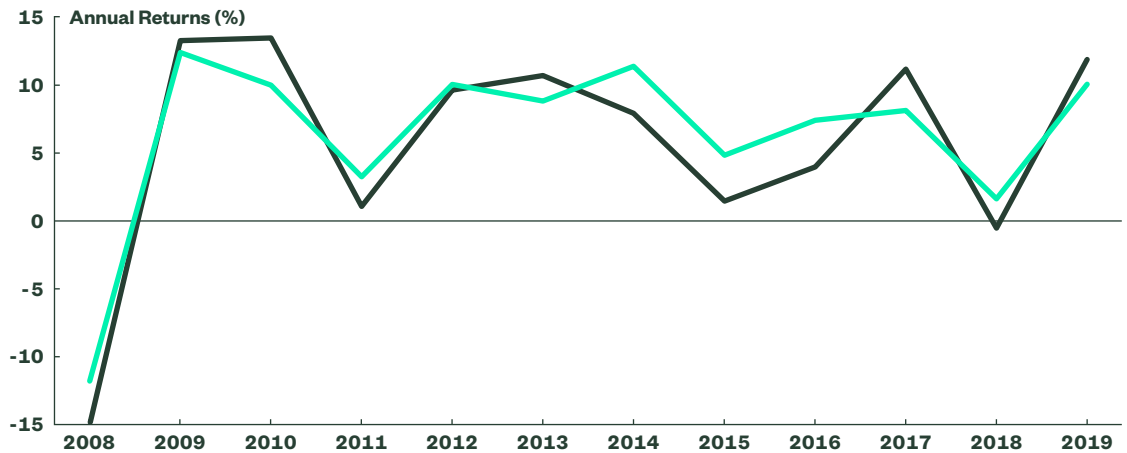


Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.

Public Pension Funds (PPFs) and SWFs generally follow similar return trends. Figure 11 shows the average returns for our SWF sample compared to our PPF sample. PPFs on average outperformed SWFs, where PPFs were protected better in risk-on years. Post the Global Financial Crisis (GFC), PPFs have outperformed SWFs by 3% at most. Similar to PPFs, we find that SWFs with earlier diversification to private markets have higher returns. Figure 12 illustrates the five-year average return for different SWF groups in our sample. Oceania and MENA lead regionally, both having the highest allocation to private markets. Conversely, Latin American SWFs have no alternatives allocation and exhibit the lowest returns. Large SWFs tend to outperform small SWFs for the same reason.

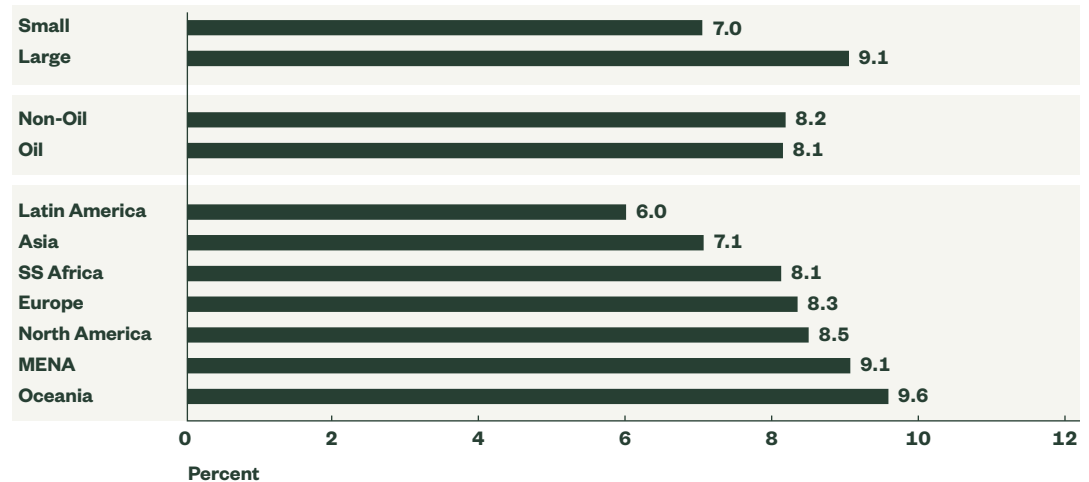
Figure 11  
**SWF vs. PPF Average Annual Returns**

■ SWFs  
■ PPFs



Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.

Figure 12  
**SWF 5-year Average Returns by Group**



Source: Global SWF, State Street Global Macro Policy Research, based on 34 largest SWFs.



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## Conclusion

In our analysis of sovereign wealth funds, we consciously focus on the largest SWFs as they exhibit long-term trends and benefit from the classic characteristics of no explicit liabilities and a diversified international asset pool (in contrast to newer funds whose original portfolio may be state-owned enterprises). This long-term trend shows that SWFs are approaching an equilibrium strategic asset allocation, with any increased alternatives exposure constrained by liquidity needs as well as market supply. Furthermore, any major shifts in the global economy such as a commodity cycle or geopolitical shifts in the balance of payments surpluses are likely to be mirrored in SWF asset allocation strategies going forward.

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## Endnotes

- 1 In this study, we use the terms 'alternatives' and 'private markets' interchangeably to denote all asset classes which cannot be categorized as cash, fixed income or equity, such as real estate, private equity, private debt and commodities.
- 2 The Global Market Portfolio (GMP) encompasses the universe of all investable assets and their market value at a given point in time. This includes public equities, government bonds, investment grade credit, real estate, private equity, emerging market debt, gold, inflation-linked bonds, and high yield bonds. Dodard, F. and A. Le (2022) 'Global Market Portfolio: Value of Investable Assets Touch All-Time High,' SSGA.
- 3 '2021 Annual Report: State-Owned Investors in a post-pandemic age,' Global SWF.
- 4 The GMP excludes cash and commodities therein skewing our calculation SWF cash and fixed income share of total fixed income markets. Dodard, F. and A. Le (2022) 'Global Market Portfolio: Value of Investable Assets Touch All-Time High,' SSGA.
- 5 SSGA calculations. Dodard, F. and A. Le (2022) 'Global Market Portfolio: Value of Investable Assets Touch All-Time High,' SSGA.
- 6 '2021 Annual Report: State-Owned Investors in a post-pandemic age,' Global SWF.
- 7 Hentov, E. and A. Petrov (2019) 'How Do Sovereign Wealth Funds Invest: Shift into Private Markets Continues,' SSGA.
- 8 SSGA calculations. Dodard, F. and A. Le (2022) 'Global Market Portfolio: Value of Investable Assets Touch All-Time High,' SSGA.

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