

Sovereign Wealth Funds Overview

Analyzing fund types, key players and investment approaches

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Key takeaways

- Sovereign wealth funds (SWF) are either intended to stabilize government finances through short-term swings in natural resource price cycles, known as stability funds, or they are intended to deliver multigenerational economic stimulus as a government transitions past nonrenewable resource income or invests excess capital, in the form of development funds or savings funds.
- Investment sophistication varies along with AUM, though most funds tend to grow in sophistication with their asset base. Many of the largest funds, however, are hamstrung by their importance to the government and must refrain from more sophisticated, risky or direct investments.
- SWFs continue to grow in size and sophistication, now representing major allocators to private capital funds. Additionally, these funds are acting more as GPs by directly sourcing deals and teaming up with other GPs on investments.

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Introduction

SWFs have become major participants in today's capital markets with over \$8 trillion in AUM. Many of these high-profile funds are managing hundreds of billions of dollars and allocating capital through in-house investment teams, with some even pursuing direct deals in the private capital markets. However, the overarching moniker of SWF does not reflect the nuances that differentiate them. Many SWFs are not even funded by sovereign entities and instead belong to states and cities. These entities have different AUM, goals, public disclosure requirements and levels of investment sophistication. In this note, we will delineate high-level definitions to better define the SWF space and analyze the key players involved.

Goals

SWFs typically have one of three goals: stability, savings or local development. Stabilization funds are designed to reduce the effects of volatile revenues to the government and economy.¹ These funds are set up in countries that are highly dependent on one (sometimes more) specific nonrenewable resource; capital flows into the funds when prices are high, and the government enjoys a surplus. Alternatively, when prices are lower and government finances swing to a deficit, capital flows from the SWF back to the government and economy. Stabilization funds are intended for use between shorter-term cycles, such as the typical rise and fall in oil prices. Two notable examples include Chile's Economic and Social Stabilization Fund and the Ghana Stabilization Fund, which were financed by copper and oil revenues, respectively. Since stabilization funds are more reactionary than savings or development funds, their investment portfolio needs to hold a higher portion of liquid investments.

Savings funds, which make up the bulk of funds and AUM, are designed to provide an economic boost to the local economy. Natural resource-financed funds are intended to bridge the gap from reliance on a nonrenewable resource to the time when the country or region depletes its natural resource base. Though most of these funds are financed by revenue from fossil fuels, minerals revenue is also a source of capital for several funds. Another subset of funds is financed by excess government assets. Whereas stabilization funds are more focused on the short-term, savings funds are intended to

1: "Stabilization and Savings Funds for Nonrenewable Resources: Experience and Fiscal Policy Implications" International Monetary Fund, Jeffrey Davis, et. al., April 13, 2001

have a multigenerational time horizon and will be the SWFs of most interest to private market practitioners. Though their investment scope is generally much longer, savings funds can have different timeframes depending on resource depletion levels. Many savings funds, such as the Alaska Permanent Fund, deploy some of their yearly gains, though the bulk of savings funds are not expected to begin fully paying out for several decades. Many of the largest funds, including Norway Government Pension Fund Global and Abu Dhabi Investment Authority (ADIA), are more fixated on growing assets today than on distributions.²

Another classification of SWF, known as development funds, has a strategy beyond just investing for multigenerational gains. Development funds are also tasked with promoting the economic growth within the home country. Many of these funds invest in the domestic economy with the goal of catalyzing homegrown markets through infrastructure investing and direct investments in local companies. These investors hope to be a force that proves the viability of local capital markets while reaping the long-term benefits of being a first mover. Often, countries with SWFs will have development funds as well as savings funds, such as Abu Dhabi with ADIA and Mubadala or Singapore with GIC and Temasek.

The funds with longer-term horizons are more focused on growth and are better suited for illiquid investments, allowing them to pursue higher allocations to equity as opposed to cash or fixed income. Despite the necessity to meet current obligations, savings funds already in the payout process are still well suited for higher levels of illiquid assets and investments with equity ownership, similar to pension plans. Therefore, we believe funds like Canada Pension Plan Investment Board (CPPIB) could serve as models for SWFs striving to strike the right balance between growing capital and paying beneficiaries. To supplement our understanding of these investors, we have categorized five of the main institutional investor types—SWFs, endowments, family offices, pensions and insurance companies—by their timeframes and risk appetites.

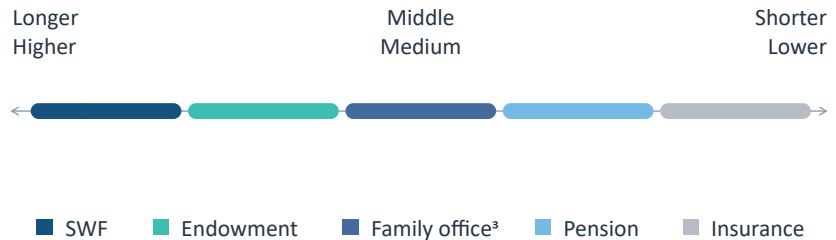
2: For political reasons, many of these funds distribute some capital today, though the distributions are likely to rise in future years as oil revenues decline. For example, Norway's fund distributes 3% of its capital per year to supplement the government's social services budget but will likely distribute a larger portion once oil revenues cease. "Factbox: Norway's \$960 billion Sovereign Wealth Fund," Reuters, Gwaldys Fouche, ed. Dale Hudson, June 2, 2017

This chart is meant to help visualize the differences in time horizon and investment risk tolerance between major institutional investor types. SWFs on the left typically have the longest time horizons and thus can take on the highest levels of investment risk. On the right, insurance companies must be ready for substantial payouts at any time and keep a significant portion of assets liquid, forcing them to have shorter time horizons and take less risk. However, risk tolerance and investment horizon can vary greatly within each of these categories.

Institutional investor categorization

Timeframe

Risk appetite



Funding sources

Within savings and development funds, there are two main funding sources: excess natural resource revenues and foreign exchange (FX) reserves.⁴ SWFs financed from these dissimilar sources also have slightly different goals. SWFs investing surpluses from nonrenewable resources are typically meant to replace the economic benefits as the country or local government depletes said resource(s), whereas FX-funded SWFs are usually more focused on bringing immediate value to citizens. While the timing of the economic impact may vary, both funds are meant to last generations and qualify as savings funds.

Natural resource funds make up the bulk of savings funds, and many stem from the Middle East. The largest players in the region include ADIA, Mubadala, Kuwait Investment Authority (KIA) and Saudi Arabia's Public Investment Fund (PIF). While the Middle East is synonymous with oil and natural gas, the largest natural resource SWF is Norway's Government Pension Fund Global with over \$1 trillion in assets. These funds are still in the accumulation phase and are concentrated on replacing oil's economic impact once reserves run dry.

FX-funded SWFs, on the other hand, aim to reap the economic benefits for citizens in the near term. While many natural resource-based SWFs emanate from the Middle East, most of the large FX reserve funds are in East Asia—with China, Hong Kong and Singapore each managing over half a trillion dollars. Of these funds, Singapore does the best job with fund management and has seen superior risk-adjusted results. The city-state operates two separate funds that manage a

³: This investor type has the most variety and is difficult to summarize. Many family offices have multigenerational outlooks and resemble SWFs, though many others are hyper focused on short-term investing and hold huge portions of wealth in cash.

⁴: Not all the capital is financed by FX reserves. Some capital in these funds is from issuing bonds as well as excess tax revenue.

combined \$800 billion of Singaporean reserves, but each fund has a different risk tolerance. GIC Private Limited (GIC) is the more conservatively managed fund and is required to hold a higher portion of capital in liquid, non-SGD-denominated assets. Temasek Holdings, though, has a higher risk tolerance and seeks to maximize long-term returns for the government while stimulating the local economy. Singapore currently seeks to supplement the government's budget with half of the expected long-term gains from each of these funds.⁵ These SWFs have been so successful that Temasek Holdings served as the model for the China Investment Corporation (CIC), tasked with investing nearly \$1 trillion of China's colossal foreign exchange reserves.

Investment sophistication

A SWF's investment sophistication can run the gamut. The simplest asset allocators tend to allot only to publicly traded equities, real estate and bonds. Additionally, they lack in-house allocation teams and often exclusively rely on outside consultants and fund managers. On the other end of the spectrum, sophisticated allocators typically assign a higher portion of AUM to in-house strategies and private markets and often take a further step by co-investing in funds and even directly sourcing deals. Many go so far as to have entire in-house public equity, PE and/or real estate teams running internal funds. Though the medium-sized SWFs may not be able to pursue this strategy as effectively as larger SWFs, some, such as Alaska Permanent and GIC, display a sophisticated investment approach that we believe outclasses their peers. Alaska Permanent and GIC's novel approaches to private and public markets exhibit a level of execution that many similarly sized funds lack. The sophistication goes beyond simply allocating to private markets, as this can be done poorly even at scale, as evidenced by CalPERS' many woes in private markets.

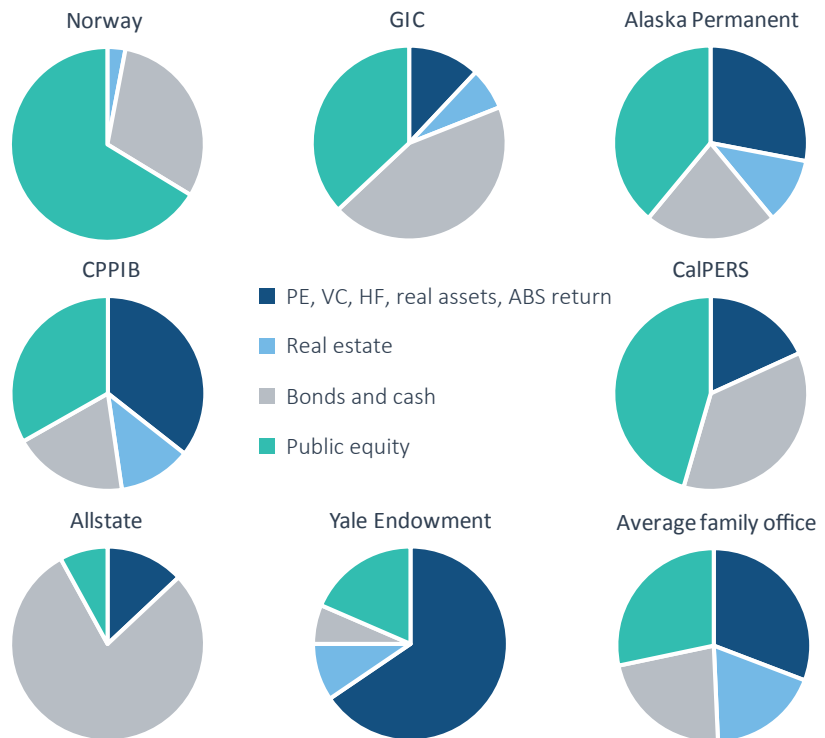
We believe most SWFs want to be sophisticated investment managers, eventually handling investments in-house, forging relationships and conducting investments outside the traditional fund structure and expanding private market allocations over time. ADIA has doubled its direct PE investments over the past three years according to the fund's annual filing, clearly illustrating its investment prowess and asserting itself near the head of the pack in terms of sophistication.⁶ Not only should raising allocations to private markets lift long-term returns, but maximizing co-investments and direct deals may

5: "Tamasek to Contribute More to Govt Coffers," The Business Times, Siow Li Sen, February 24, 2015

6: "2018 Review: Prudent Global Growth," Abu Dhabi Investment Authority, 2018

further enhance returns by reducing fee drag. In-house teams also allow SWFs an opportunity to markedly deviate from a globally cap-weighted index in public equities and fixed-income, potentially delivering alpha. However, doing so comes with added risk. While there are relatively few SWFs on the cutting-edge end of the investment spectrum, we believe most SWFs will increase their allocations to private markets and focus on direct investments and in-house management teams over the medium-to-long term. As a supplement to understanding investment sophistication and risk tolerance, we have included the allocations for some major LPs across each of the major asset classes, including for three SWFs.

Asset allocation by LP⁷



Source: Norway as of 2018; GIC as of March 2019; Alaska Permanent as of 2018; CPPIB as of June 6, 2019; CalPERS as of June 30, 2018; Allstate as of 2018; Yale Endowment as of 2019; family office as of 2017

7: Due to reporting inconsistencies, real estate's weighting may not accurately reflect underlying portfolio assets as some managers categorize the asset class within real assets or other alternatives.

Size

Not all SWFs are created equally. These funds can be as small as North Dakota's \$6 billion Legacy Fund or as large as Norway's gargantuan \$1.1 trillion fund.⁸ Although the phrase "size is the enemy of performance" may ring true in some areas of investing, size grants SWFs freedom when structuring an investment portfolio that smaller funds cannot afford. Smaller SWFs, such as the \$25 billion State General Reserve Fund of Oman, have built out in-house investment teams, but high allocations to in-house strategies, direct deals and co-investments in a smaller fund may lead to excess concentration risk.⁹ Funds in the \$10 billion-\$50 billion size range often utilize externally managed private market funds and traditional liquid investment strategies. At the \$10 billion mark and below, a SWF tends to be nascent and less sophisticated, often solely using outside investment consultants and managers with little in-house expertise.

Larger funds are often more sophisticated than smaller funds, but that doesn't necessarily lead to higher risk tolerances or private market allocations. For example, Norway's Government Pension Fund Global is currently the world's largest SWF. Smaller funds such as GIC are more advanced, but the sheer size of the Norway fund and its importance to the future of the country and economy forces the fund to take a more cautious approach, typically implementing changes after many of its peers. While the fund sacrifices some amount of future return, it subsequently lowers its risk profile.

Select SWF analysis: Norway, Abu Dhabi, Alaska, Singapore

Norway Government Pension Fund Global

While many SWFs—and institutional investors including pension funds, insurance companies and endowments—have decided to continually raise allocations to private markets, Norway's finance ministry has openly shunned the strategy and instead opted for more publicly traded investments. PE conflicted with the fund's goals of transparency as well as public disclosure and low fees. Additionally, many inside the SWF believed its sheer size would prevent it from prudently entering the private market. However, the fund does allocate

8: "North Dakota's Legacy Fund Looking 'Healthy' at Almost \$6 Billion," The Bismark Tribune, Jack Dura, March 21, 2019

9: "State General Reserve Fund of the Sultanate of Oman," Sovereign Investor Institute's Sovereign Wealth Center, n.d.

up to 7% of its assets to pursue private real estate and private companies that intend on publicly listing.

The fund is viewed as a bellwether for many other SWFs—similar to how other public pensions view CalPERS in the US. An inclusion of PE and VC, even a small allocation to just managed funds, could cause other SWFs sitting on the sideline to change course as well.

In 2017, the fund hired a group of experts to investigate adding PE to the fund's allocation. Despite the efforts from outside experts and those running the fund to initiate allocation to PE, political reasons swayed the elected officials overseeing the fund from making any changes. After the decision, Per Stromberg, who led the group looking into PE for Norway, said, "I am sympathetic to the complexity of changing policy, but it is likely to come at a considerable cost in lower returns in the future." However, other investors cheered. One LP investing in PE reportedly said, "Great news about Norway, better for the rest of us."¹⁰

Overall, we see the tide shifting. While Norway's fund moves reasonably slow due to AUM size and its importance to the future of the Norwegian economy, many large investors that had previously stayed away from private markets are now allocating to them, seeing them as necessary for diversified exposure to global growth.¹¹ Furthermore, private markets are becoming less illiquid with the proliferation of the secondaries market. This portfolio rebalancing tool allows institutional investors to alter private market allocations in a way that was unavailable even a few years ago. Additionally, with the scale the secondaries market has achieved, we believe the SWF could prudently enter the space while maintaining enough liquidity and utilizing rebalancing options available to other asset classes in the portfolio. We expect Norway's fund will eventually allocate to PE as the asset class becomes more entrenched in institutional portfolios and the long-term costs of foregoing it become clearer.

Abu Dhabi's Mubadala and ADIA

The near \$1 trillion capital pool of these two SWFs, funded by excess oil & gas income, is the third largest globally; their purpose is to stimulate the economy in place of oil revenues

¹⁰: "Norway's Wealth Fund Blocked from Investing in Private Equity," The Financial Times, Richard Milne and Javier Espinoza, April 10, 2018

¹¹: "Private Markets Come of Age: McKinsey Global Private Markets Review 2019," McKinsey & Company, February 2019

once the wells run dry.¹² As mentioned earlier, ADIA is a sophisticated allocator with in-house operations spanning multiple asset classes and plans to continue building out its in-house capabilities.¹³ ADIA, though, takes on a higher level of calculated investment risk than similarly sized SWFs. For example, investment managers have more freedom to take risks and make decisions compared to their Norwegian counterparts, allowing AIDA to double its direct deals in the past three years while increasing private markets investing and managing decisions in-house. The culture of the fund seems to promote healthy levels of risk taking, parting out bets across several deals. Due to this strategy, ADIA jumps further out on the risk spectrum, potentially boosting longer-term returns.

Mubadala, which manages less than a third of ADIA, is also a sophisticated actor. The fund not only participates in direct deals and allocates to private markets, but it is tasked with the added responsibility of growing the local economy. Through the fund's sovereign investment partnerships, Mubadala co-invests with other SWFs in deals that are bilaterally beneficial.¹⁴

Alaska Permanent Fund Corporation

We view Alaska Permanent Fund as one of the savviest SWFs in the world. The \$65.3 billion fund was financed by oil & gas revenue for the benefit of future generations of Alaskans.¹⁵ Despite being less than one tenth the size of ADIA, the fund is just as sophisticated. The long-term orientation of Alaska Permanent and others enables the pursuit of novel and innovative investment strategies that may have longer durations than typical private market strategies. Alaska Permanent's indefinite time horizon affords the fund opportunities to take highly calculated bets farther out on the risk/reward spectrum, often producing returns that outperform its peers. As an example, the fund is one of three founding members of Capital Constellation, a joint venture with The Public Institution for Social Security of Kuwait and RPMI Railpen, which intends on doing GP stakes deals.¹⁶ The fund also avoids the largest private managers, preferring to be significant investors in smaller to middle market managers, allowing them to negotiate hefty co-investment rights.

12: "Top 81 Largest Sovereign Wealth Fund Rankings by Total Assets," Sovereign Wealth Fund Institute, n.d.

13: "ADIA Boosts Internal Active Fixed Income," Top 1000 Funds, Sarah Rundell, July 29, 2019

14: "Sovereign Investment Partnerships," Mubadala

15: "Permanent Fund Gains 6.48 Percent in Q3," Alaska Journal of Commerce, Elwood Brehmer, May 29, 2019

16: "3 Asset Owners Team Up for Alternatives Joint Venture," Pensions & Investments, Arleen Jacobius, February 22, 2018

Singapore's GIC Private Limited and Temasek Holdings

Singapore's FX reserves, which sit at around \$1.1 trillion, are split into three pots; the Monetary Authority of Singapore oversees about \$275 billion in assets, while GIC and Temasek split over \$800 billion.¹⁷ Due to slightly different funding sources and investment goals, the monetary authority is extremely conservative with its cash, while Temasek is the more aggressive allocator and GIC sits in the middle.¹⁸ GIC's goal as a savings fund is to preserve and enhance the purchasing power of government reserves and invests outside of Singapore while Temasek is slated to maximize shareholder value and holds significant SGD-denominated assets. Temasek is also the country's development fund and invests some of its assets in homegrown companies to boost the local economy. Another difference is that GIC manages funds on behalf of Singapore's Ministry of Finance (MoF), while Temasek owns the assets on its balance sheet, though the MoF is the sole shareholder in Temasek.¹⁹

Although each fund has many differences, the two funds invest for the future but are also expected to pay out in the near term, with approximately half of each year's returns supplementing the Singaporean government's annual budget. GIC has become a prolific PE investor, constantly teaming up with PE firms to close on multibillion-dollar deals—such as with Brookfield for the \$8.4 billion buyout of Genesee & Wyoming. Whereas GIC is a frequent PE investor, Temasek has shown a penchant for direct VC deals, operating an office in San Francisco and participating in rounds for DoorDash, Ant Financial and Magic Leap.²⁰ As these SWFs realize the gains from directly sourcing deals and bypass typical GP fees, we believe it is likely other SWFs of a similar statute will follow.

Going forward

With a better understanding of the many types of SWF and the differences in fund goals, size and investment sophistication, we will continue to analyze the role these funds play in global private capital markets. We plan on diving into the direct dealmaking and co-investments done by the most sophisticated players and tracking how this group has grown and matured over time. Furthermore, we'll perform additional analysis and evaluate how these funds' actions will impact current LPs and GPs investing in private markets.

17: "Top 81 Largest Sovereign Wealth Fund Rankings by Total Assets," Sovereign Wealth Fund Institute, n.d.

18: "Frequently Asked Questions," GIP Private Limited, n.d.

19: "Section I: What Comprises the Reserves and Who Manages Them?" Ministry of Finance Singapore, updated December 4, 2017

20: "Temasek Holdings Expands US Presence with Launch of San Francisco Office," E27, Yon Heong Tung, February 27, 2017