White Paper
Asset Allocation

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How Do Public Pension Funds Invest?

Global Asset Allocation Before the Pandemic

Elliot Hentov, Ph.D.
Head of Policy Research

Jennifer Alé
Research Analyst
Global Macro Policy Research

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Summary

- Long-term asset allocation trends remained in place through 2019 — i.e., shifting to riskier assets as well as lessening the home bias or domestic exposure within asset classes
- On average, long-term return targets are in the desirable 6%–8% range, but there is a wide spectrum among PPFs
- Although early and determined strategic diversifications offer a template for meeting these return targets, they are constrained by domestic supervisory or regulatory frameworks

Diversification Continues, Sustaining Decent Returns[1]

Public pension funds (PPFs) have continued their gradual reallocation of assets over the past decade. Holding around US$7.9 trillion in total assets as of 2019[2] and over 5% of all publicly traded assets, PPFs have gained weight as a global investor group within certain asset classes. The updated data supports a continuation of major industry trends, particularly the increased exposure to risk assets and foreign assets of all kinds.

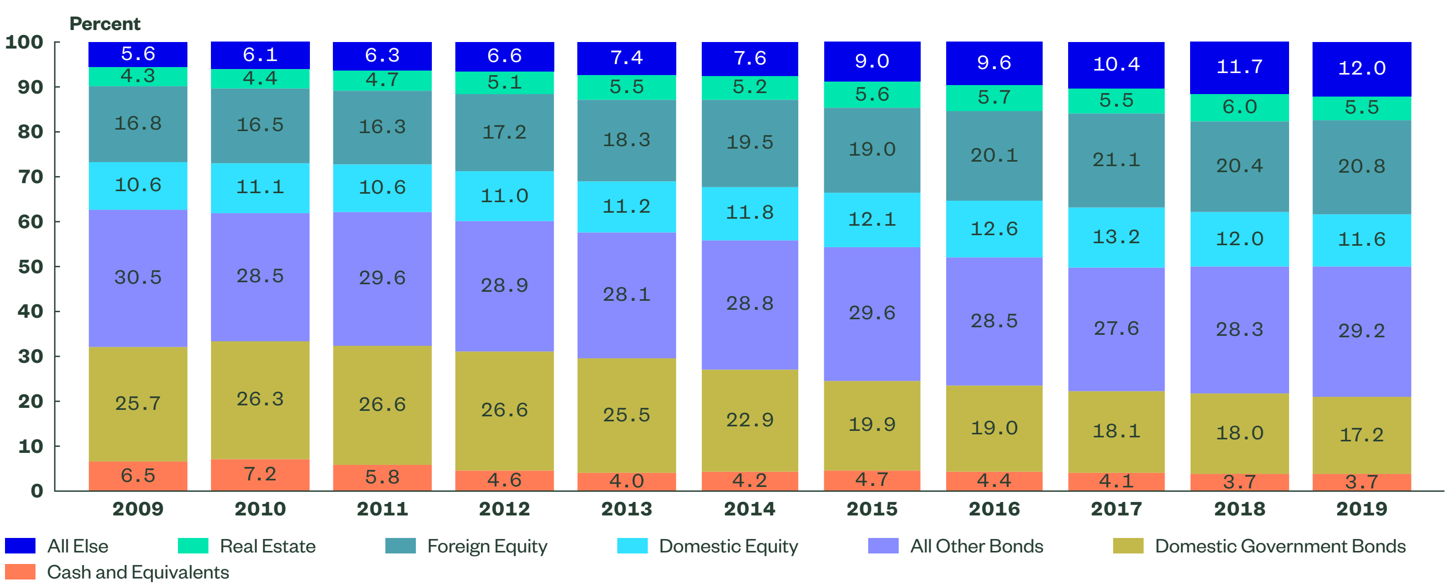
Since 2008, PPFs have allocated more toward higher risk assets while reducing their share of fixed income exposure. The average cash share nearly halved over the decade in line with late-cycle investing and the opportunity cost of low-yielding money markets. The reduction in fixed income allocations remains a story of fewer domestic bonds, mainly government bonds.

In contrast, vacillations in foreign bond allocations are more a reflection of currency movements and less of tactical or strategic investment choices. Similarly, the increased allocations in equity are dominated by increased foreign equity purchases. This was due to a relaxation in regulatory standards as well as the equity bull market, which flattered the share of assets under management (AUM).

Figure 1 shows the average asset allocation of global PPFs over the 2009–2019 period. In our 2018 report,[3] 51.9% of assets were still tied up in fixed income or cash instruments, and these have been falling. By 2018, fixed income allocation had dropped to 50% and by 2019 even further to 49.2%, though the pace of decline is slowing.

Figure 1

Average Asset Allocation Among PPFs (Unweighted)

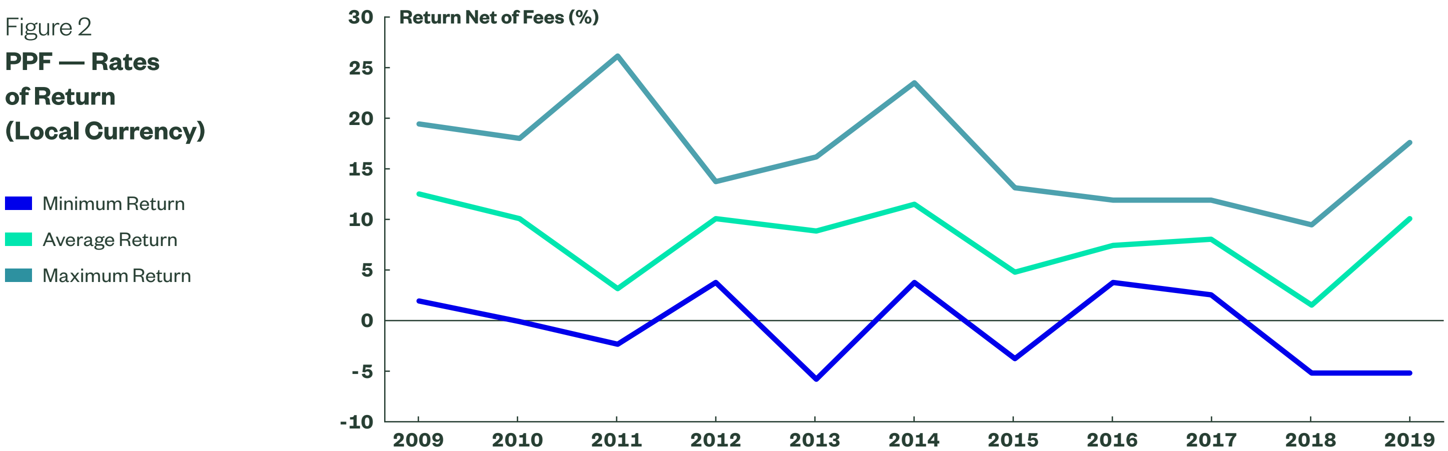


Source: State Street Global Advisors, as at 2019.

An equally definitive trend as the bond-equity mix is the steady rise in alternative investing. Alternatives overall remain the fastest growing asset class. In 2008, on average, only 11% of assets were allocated to alternatives, but by 2018 this had increased to 17.6%. We can conclude that PPFs are determined to generate higher returns, but liquidity concerns as well as institutional constraints are limiting an even faster rise. In the section below, we explore in greater detail the relative shifts within alternatives away from real estate.

The addition of returns from several years underpins a key conclusion from our earlier study: PPFs can achieve their long-term return targets. Figure 2 shows both the average rate of return as well as the dispersion of those returns across the group. Overall, PPFs generated an average of 7.9% in annual return in local currency terms over 2009–2019 including two separate years of weak returns, which would be normal over the longer term.

Figure 2
PPF — Rates of Return (Local Currency)



Source: State Street Global Advisors, as at 2019. Past performance is not a reliable indicator of future performance.

The PPFs that generated average returns in excess of the 7%–8% range tended to have the most diversified portfolios. It so happens that these PPFs in general are Canadian or Nordic, but geography is not a key characteristic and is just an indication of how early they started their diversification process. In fact, we observed that these funds evolved less in terms of their strategic asset allocations than other funds over the past decade, suggesting they have attained an equilibrium point of diversification.

Strong absolute returns notwithstanding, average returns appear to be moderating slightly. This could reflect broader market conditions during the later stages of an economic recovery or institutional limitations to yield generation. We suspect that the strong market performance in 2020 will offset that and the post-pandemic cyclical recovery will again deliver above-average returns in the near term.

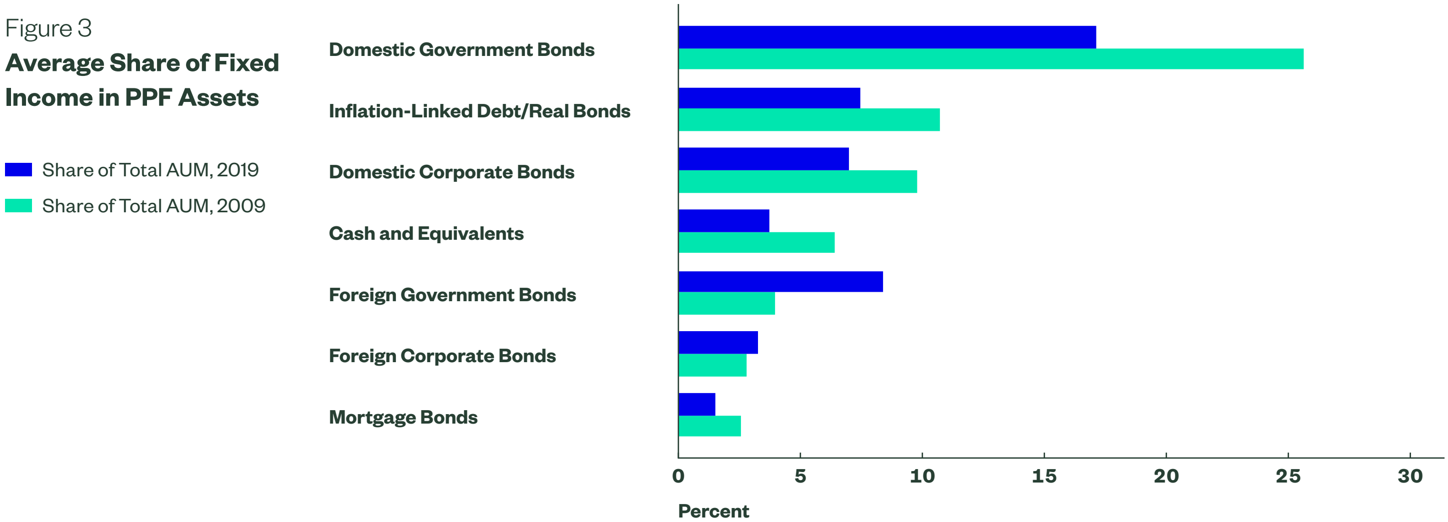
Fixed Income

Due to industry trends, fixed income assets continue to vary considerably over time across our PPF universe. Historically, the most significant underlying trend is a redistribution in the share of government bonds. We observe that this continues to be driven by Asian PPFs. Governments have sought to diversify their bondholder base as well as liberate their PPFs from being forced buyers of their debt.

Figure 3 shows that all types of domestic bond allocations have declined and only the share of foreign government bonds has risen. As mentioned, domestic government bonds have fallen the fastest over the period, making up roughly one-sixth of average assets compared with more than one-fourth a decade earlier.

One slight exception has been the trend among some PPFs, mainly European, to add risk via their bond portfolio by allocating more to emerging market or high-yield bonds. While the number of such PPFs are few, they have done so with conviction, thereby more than tripling the average allocation in our dataset over the period — from 1.2% of overall AUM in 2008 to 3.8% in 2018.

Figure 3
Average Share of Fixed Income in PPF Assets

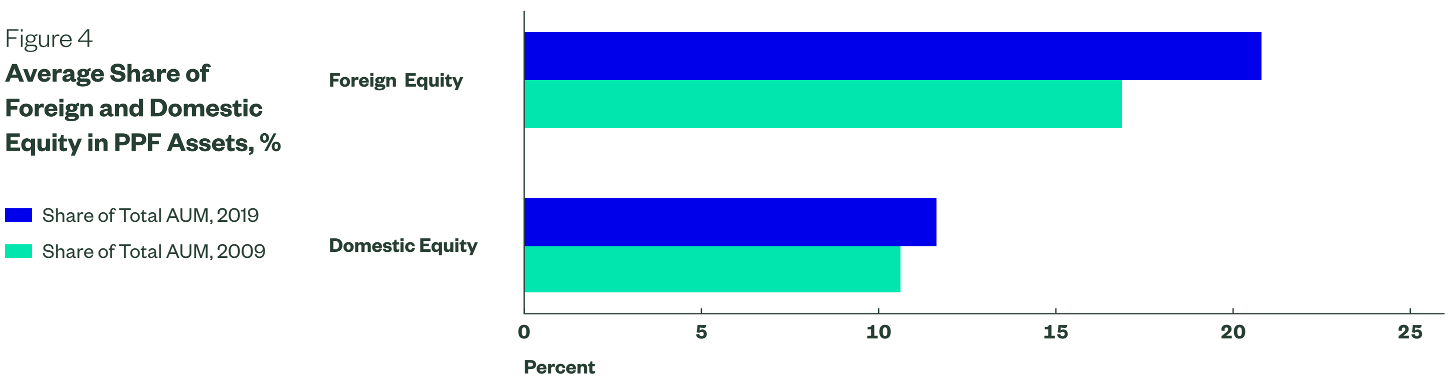


Source: State Street Global Advisors, as at 2019.

Equities

Internationalization has also been a defining trend within equities. Here, too, it has been Asian public pension funds leading the charge, substituting domestic bonds with foreign equities. Figure 4 shows overall changes in listed equity allocations over the 2009 to 2019 period — equities rose from 27.5% to 32.4% of the total AUM during this period.

Figure 4
Average Share of Foreign and Domestic Equity in PPF Assets, %



Source: State Street Global Advisors, as at 2019.

Whilst domestic equities constituted roughly one-fifth of the change, foreign equities contributed most to the shift, rising from 16.8% to 20.8%. We believe we are nearing the end of this portfolio shift as the recent bull market should raise average allocation to roughly a third of the portfolio.

Alternatives

The hunt for yield continues to be a strong underlying driver for global PPFs. Consequently, the share of alternatives has been on the rise among the group. As mentioned, in 2008, on average, only 11% of assets were allocated to alternatives. By 2018 this had increased to 17.6% and by 2019 to 20% of the sample PPF portfolio. It is worth noting that the divergence within the PPF community toward alternatives remains high. In our sample, only four PPFs out of a total of 18 do not invest in alternatives (i.e., less than 0.5% of their overall AUM).

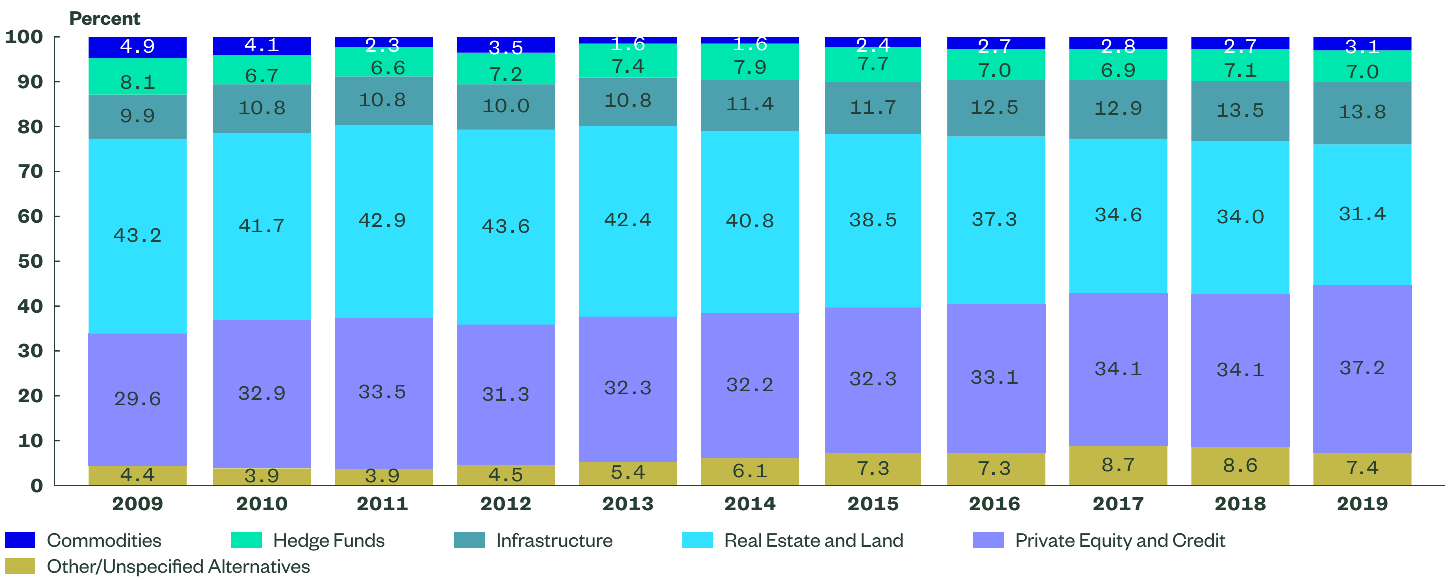
Notably, we identify a very different pattern to how Sovereign Wealth Funds (SWFs) entered and expanded their alternatives allocation. In the case of SWF, there was a clear correlation between size and allocation, which means the larger funds invested sooner and more in alternatives compared with mid-size or smaller SWFs.[4] In contrast, the size of an asset pool had no bearing on a PPF's investment trend.

Within alternatives, we observe that real estate no longer holds the primary spot for revenue generation as PPFs have taken on considerably more private equity (as well as private credit) over the period. PPFs have a long history of real estate exposure as a primary income stream as it offers investors an opportunity to generate higher returns and hedge their portfolio against market volatility. As of 2018, real estate comprised 6% of the total AUM and 34% of all alternatives.

Yet we observe Canadian PPFs are drivers in terms of moving away from real estate toward private equity and private credit exposure. Private equity investments tend to generate a higher return by extracting premiums not available to listed shares.[5] They are attractive to medium- and large-sized PPFs that have the ability to take a long-term investment view and can tolerate cyclical downturns. Figure 5 shows average asset allocation among PPFs to alternative investments.

Figure 5

Average Asset Allocation to Alternatives Among PPFs (Unweighted)

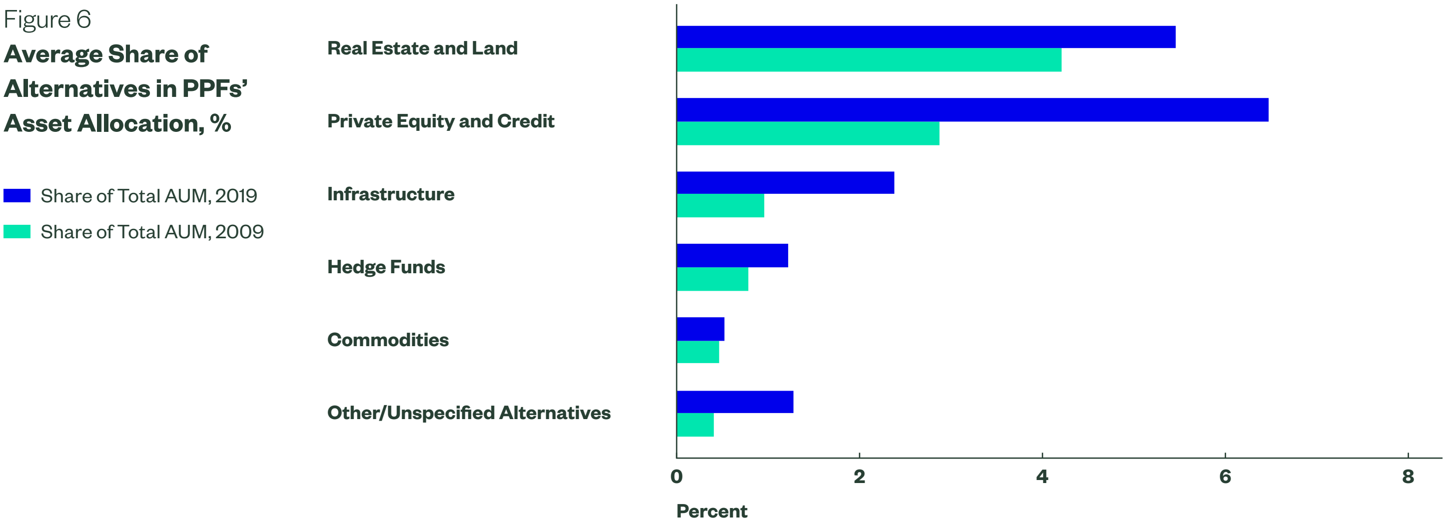


Source: State Street Global Advisors, as at 2019.

Figure 6 shows the average share of alternatives in PPFs' asset allocation compared with the previous decade. We can see growth in infrastructure, which is theoretically a highly attractive asset class with low correlations and good income streams. Typically, this has not been entirely available to global PPFs due to structural constraints, yet our impression is that allocations would be even higher if more supply were to become available.

Figure 6

Average Share of Alternatives in PPFs' Asset Allocation, %



Source: State Street Global Advisors, as at 2019.

Hedge funds, meanwhile, appear to have restored their appeal as a worthy diversifier. In particular, European PPFs seem to have embraced hedge funds as another marginal return driver. By our estimates, hedge fund exposure as a percentage of total portfolio has more than doubled for European PPFs over 2008–2018 (0.9% to 2.2%) while mildly increasing from 1% to 1.3% in the overall sample.

Conclusion

When conducting sector asset allocation analyses, it is important to ensure comparability. For this reason, we have a narrow definition of PPFs, with a big emphasis on 'public' and the government's ability to influence the asset/liability mix (in contrast to public 'defined contribution'-like funds). This approach results in more defined patterns and explains how portfolios have become riskier over time and how funds have engineered geographical diversification. Above all, these shifts in strategic asset allocation appear to have succeeded as PPFs continue to generate target returns during the current era of ultra-low bond yields. In conclusion, there is little evidence to suggest that the pandemic would reverse any of the above trends.

Contributors/ Contacts

Elliot Hentov, Ph.D.
Head of Policy Research

Jennifer Alé
Research Analyst
Global Macro Policy Research

Endnotes

1 This paper is an update on our 2018 study of PPFs, which we define more narrowly than the industry standard. Specifically, we only include PPFs that remain on the sovereign or sub-sovereign balance sheets and whose assets and liabilities are subject to legislation. In practice, this excludes US, UK and Australian PPFs. Of the remaining global group, we cover 18 PPFs representing nearly 75% of global assets under management in our study. Data limitations are mainly the delayed publication of PPF reports, so a full data set is only available for 2018. Our research covers the time period from 2009 to 2019, though 2019 data is only partially available. Our asset allocation data covers three major asset classes (cash and fixed income, equities and alternatives) and within those, 16 sub-asset classes or categories.

2 Global Public Investor 2019. The Official Monetary and Financial Institutions Forum.

3 Hentov, E., Petrov, A., & Odedra, S. (2018, April). How do Public Pension Funds Invest? From Local to Global Assets. State Street Global Advisors.

4 Hentov, E., & Petrov, A. (2020, January). How Do Sovereign Wealth Funds Invest? Less and Less Contrarian. State Street Global Advisors.

5 Lacaille, R., Roy, A., Hentov, E., Petrov, A., & Le, A. (2019, October). Boom in Private Markets is No Private Matter Role of PE in a Changing World. State Street Global Advisors.

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* This figure is presented as of December 31, 2020 and includes approximately $75.17 billion of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated.

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