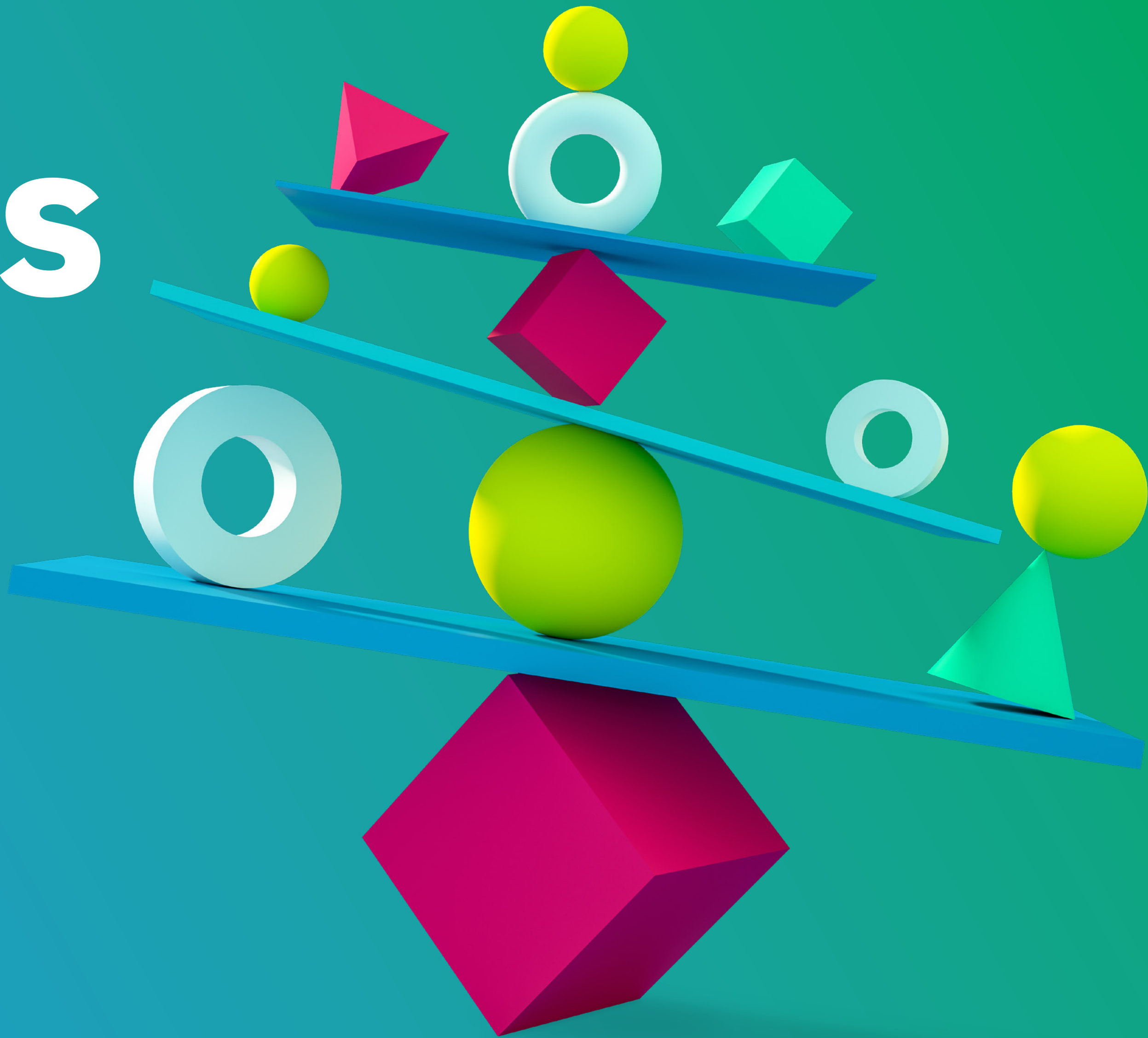
Mercer

asset allocation

insights

Pension allocation trends in Asia, the Middle East, Africa and Latin America

2022



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[1] Data was not available, but commentary is included based upon Mercer's experience with investors in these areas.

[2] It should be recognized that in this report, China refers to the pension system in mainland China. The pension systems in Hong Kong SAR and Taiwan are shown separately, as they have different pension systems.

01. Introduction and executive summary

Investors in Asia, the Middle East and Africa (AMEA) and Latin America are responding to complications in the global capital markets, such as the crisis in Ukraine, which is ongoing at the time of writing; challenges in their home economies; and systemic risks, such as climate change and environmental, social and governance (ESG) issues.

This report provides a comprehensive overview of investment allocation trends across AMEA and Latin America. We cover US$5.9 trillion in assets under management (AUM) across 15 jurisdictions and welcome a new data entrant — the Dubai International Financial Center (DIFC) Employee Workplace Savings (DEWS) Plan. This mandatory defined contribution (DC) savings scheme is the first of its kind, introduced for expatriates in 2020.

Each section provides a brief summary of the retirement savings environment in the respective market and the implications for underlying investment policy. More detailed information on the structures of many of these pension systems is set out in the *Mercer CFA Institute Global Pension Index Report*.[3]

Mercer's senior investment colleagues and our partners El Dorado Investments in Latin America and Alexforbes in South Africa contributed their experience with institutional investors through commentary and trends from 20 markets.

Overall allocation observations

	Current	Prior
Fixed income	49.0%	50.6%
Equities	38.5%	36.1%
Alternatives	3.9%	4.3%
Cash	4.1%	4.1%
Other	4.6%	4.9%

[3] Mercer. *Mercer CFA Institute Global Pension Index Report*, 2021, available at www.mercer.com.au/our-thinking/global-pension-index.html.

Asset allocation trends: Many investors are considering changes

Allocations remain steady

Overall asset allocation has remained steady. However, in some jurisdictions, we can see increasing allocations to alternative strategies and equities, including foreign equities as investors diversify outside their home markets.

Interest in investing sustainably is mounting

Sustainable investing is demanding the attention of many investors and regulators, with a wide range of initiatives across different markets toward greater integration of ESG factors in investment programs.

Investors are responding to inflation and other market pressures

Monetary policies are being reshaped as inflation balloons past central bank targets, and policymakers are grappling with the consequences of bloated balance sheets, the potential economic impact of higher interest rates and disrupted global supply chains.

Regulators and governments are implementing new policies, such as the unexpected announcement in late 2021 of a global minimum corporate tax rate of 15%. Separately, the Russia–Ukraine crisis, which is ongoing at the time of writing, provides a stark reminder of how geopolitical flashpoints can increase economic and market uncertainty.

> **Whether you are an asset owner, asset manager, financial intermediary or other institutional investment participant, the trends we see in Latin America and AMEA bring insights and actions to build upon. Find some of our "Taking Action" ideas in this report. We welcome the opportunity to discuss the implications for your specific circumstances.**
>
> **Fiona Dunsire**, Regional Wealth Leader, AMEA and LatAm

02. Taking action: Themes and opportunities

We have identified three overarching themes that will affect investment decisions in 2022 and beyond.[4]

Changing of the guard

How to understand the effects of the changing fortunes of economic players and ways of thinking that have long held sway, including the evolving objectives of monetary policies, the prospect of an "Asian century," and the dramatic reshaping of how finance is provided

Position for transition

How investors should plan for the changes required to put them on a more sustainable path, the role of impact investing, the management of resources to facilitate the green transition and the power that can be exercised through engagement

Modern diversification

How portfolios should be reinvented to hit target returns while maintaining protection, the use of dynamic asset allocation between strategies and themes and ways to gain access to emergent innovators

Five actions investors can take

Each investor has unique circumstances, risk tolerances, liquidity needs and objectives. The actions suggested here are expected to benefit a broad range of investment portfolios; however, you should consider your own needs before taking action. We welcome the opportunity speak to you about how to tailor these ideas to your own circumstances.

1. **Explore alternative strategies:** Alternative investments, such as private equity, private debt, real estate and infrastructure, could make a difference to outcomes. Over the many periods we have analyzed, we can see that a 60/40 equity/fixed income portfolio would have been improved with the addition of alternatives. Find out more in *Top Considerations for Private Markets in 2022*.[5]

2. **Reassess China exposure:** We believe many investors would benefit from having a larger allocation to China's onshore market through a dedicated China equity allocation. Find out more in *Positioning Your Portfolio for the Future of Emerging Markets*.[6]

3. **Protect against inflation:** Assess your portfolio's sensitivity to inflation, and consider any appropriate changes. Find Mercer's latest thinking on inflation on our *The Return of Inflation?* web page.[7]

4. **Invest sustainably:** Establish sustainable investing beliefs, and begin to implement these in your investment program; for instance, by developing total portfolio climate-transition plans. Find out more about Mercer's sustainable investment beliefs and actionable strategies for investors on our *Investing Towards a Sustainable Future* web page.[8]

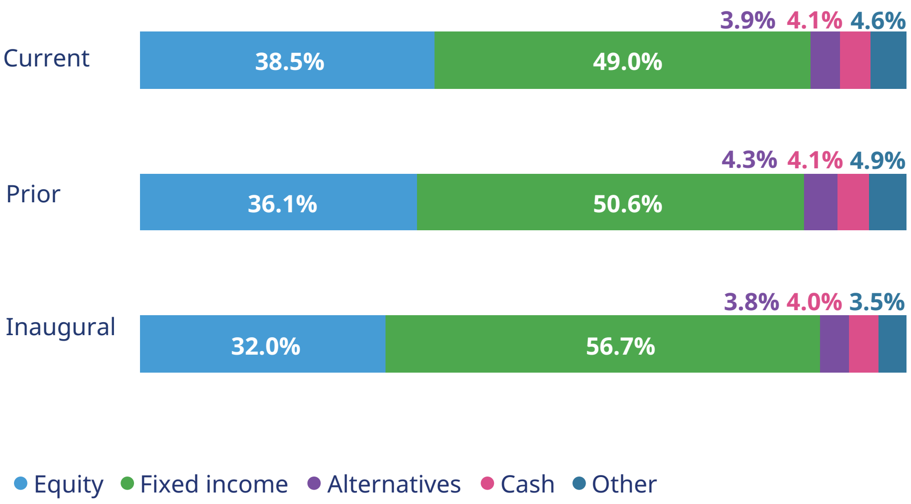
5. **Challenge your home bias:** Although many investors face investment restrictions and other factors that lead to a large domestic allocation, there are a number of reasons to consider additional diversification for your portfolio. Find the details in our *Stuck at Home? Home Bias in Portfolios* paper.[9]

[4] Mercer. *Themes and Opportunities 2022: Metamorphosis,* available at www.mercer.com/our-thinking/wealth/investor-themes-and-opportunities-2022.html.
[5] Mercer. *Top Considerations for Private Markets in 2022,* 2022, available at http://www.mercer.com/our-thinking/wealth/private-markets-top-considerations.html.
[6] Mercer. Positioning Your Portfolio for the Future of Emerging Markets, 2021, available at www.mercer.com/our-thinking/wealth/investing-in-china.html.
[7] Mercer. "The Return of Inflation?," available at www.mercer.com/our-thinking/wealth/inflation.html.
[8] Mercer. "Investing Towards a Sustainable Future," available at www.mercer.com/what-we-do/wealth-and-investments/investing-sustainably.html.
[9] Mercer. *Stuck at Home? Home Bias in Portfolios,* 2020, available at https://www.mercer.com/our-thinking/wealth/home-bias-in-portfolios.html.

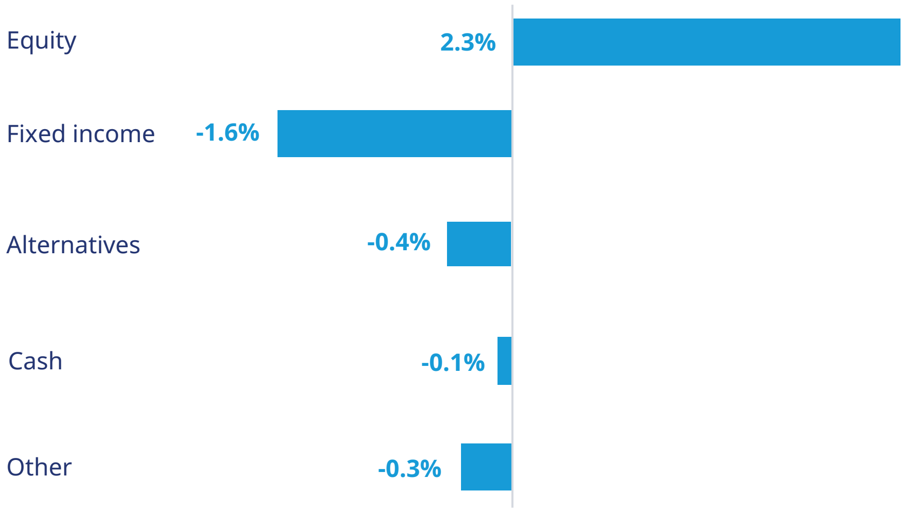
03. Key findings

Over the recent one-year period, asset allocation did not move significantly, although we noted a decline in fixed income to just under half of aggregated assets (49%) and a corresponding modest increase in equity, while alternatives and cash remained steady. The declining proportion of fixed income in the aggregate assets of plans in Brazil and Chile and the increasing proportion of equities within the plans in Japan were partial drivers of this shift.

Asset allocation



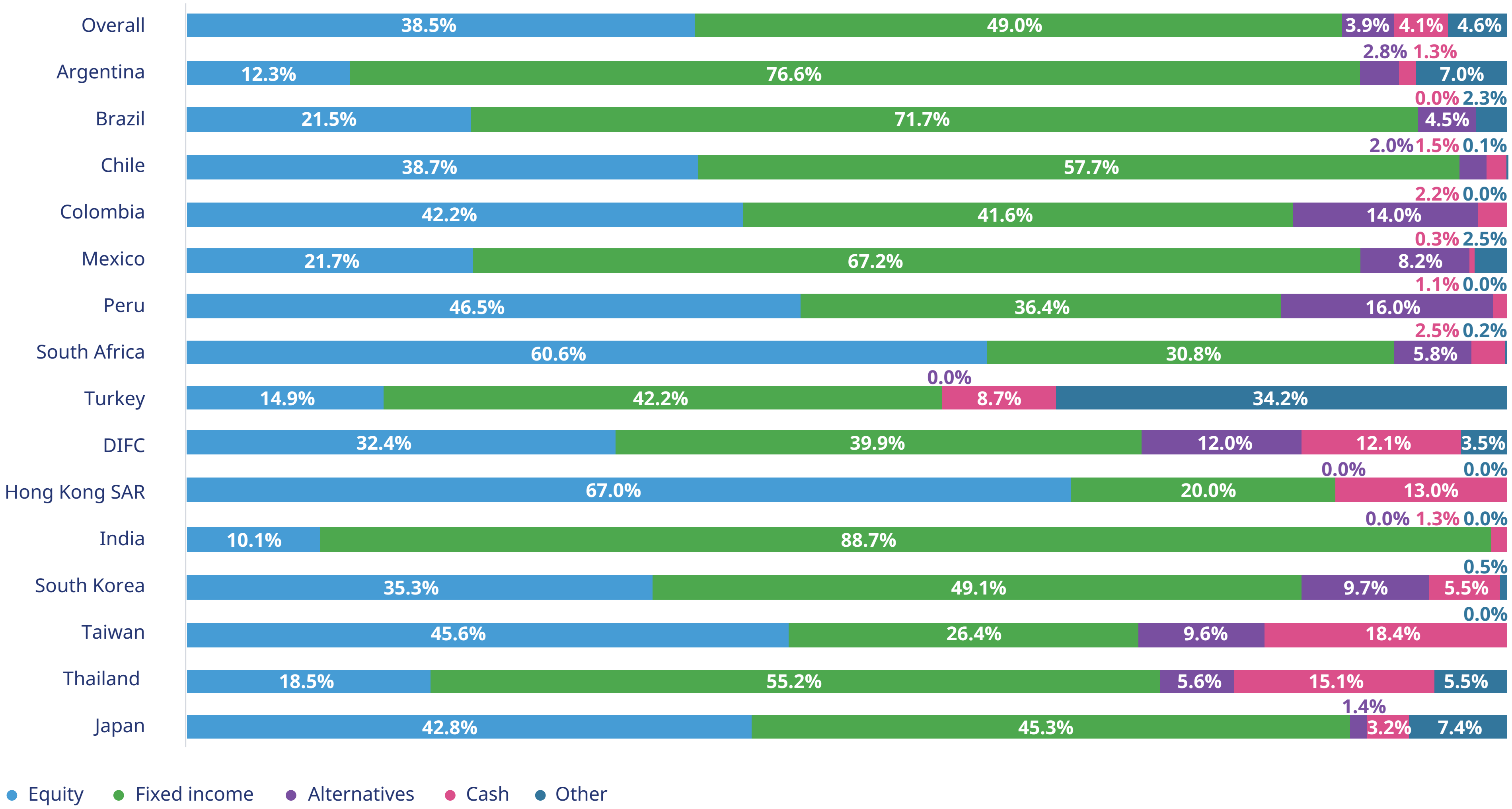
Change in allocation — current versus prior year



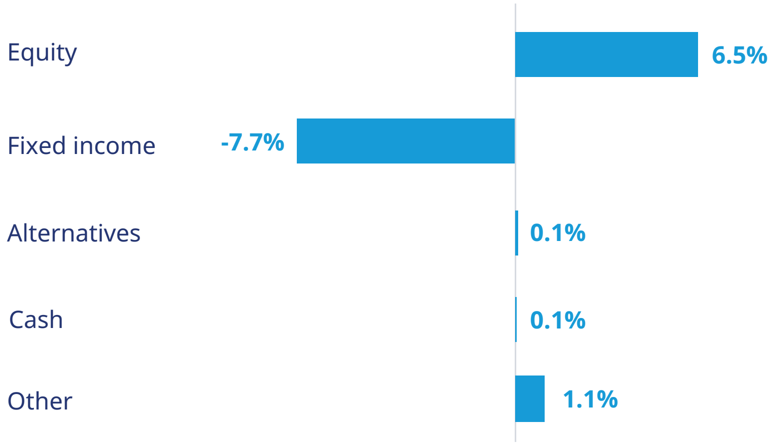
Note: "Other" varies by data source, and in many instances, detailed descriptions of "other" were not available. Where possible, "other" is defined within each jurisdiction's section.

Asset allocation varies widely across markets, partly driven by local regulatory requirements. For example, India (89%), Argentina (77%), and Brazil (72%) hold the highest percentages in fixed income, whereas Hong Kong (67%) and South Africa (61%) have the highest equity allocations. Peru (16%) and Colombia (14%) invest the greatest portion in alternatives.

Current weighted average asset allocation detail



Change in allocation — current versus inaugural

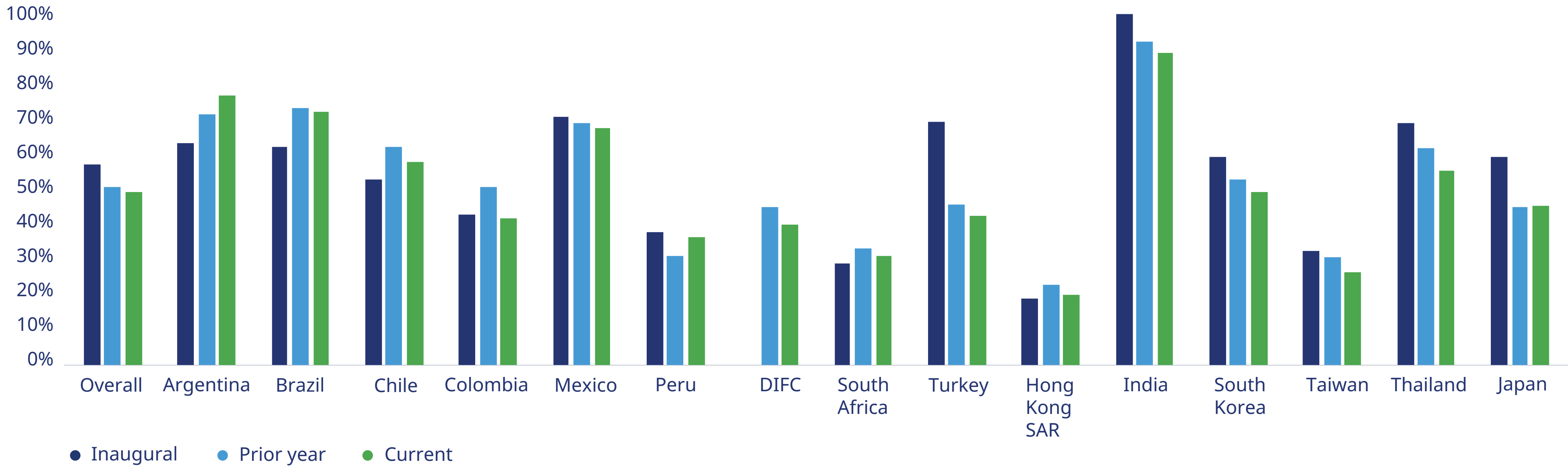


Note: “Other” varies by data source, and in many instances, detailed descriptions of “other” were not available. Where possible, “other” is defined within each jurisdiction’s section.

Over the full eight-year measurement period, the survey’s weighted average allocation shifted, with an increased allocation to equity and a reduction in fixed income, and with alternatives and cash remaining steady. This was largely driven by shifts in the two largest single investors profiled, Japan’s Government Pension Investment Fund (GPIF) and South Korea’s National Pension Service (NPS). Excluding these two asset owners from the analysis, we instead see a slight decline in equity allocations (-2.7 percentage points) over the full period.

The shift in fixed income can be seen in markedly different ways in different jurisdictions. As noted, the overall allocation to fixed income declined over the period, and this can be seen in a number of markets — in addition to Japan and South Korea, we also see declines in Turkey, India, Thailand, Taiwan and Mexico. On the other hand, Argentina’s, Brazil’s and Chile’s allocations to fixed income rose over the full period while a number of others remained steady. As investors in each jurisdiction face different regulatory regimes and local interest rates, in addition to having different risk appetites, the proportion of assets allocated to fixed income can vary significantly across markets.

Fixed income exposure



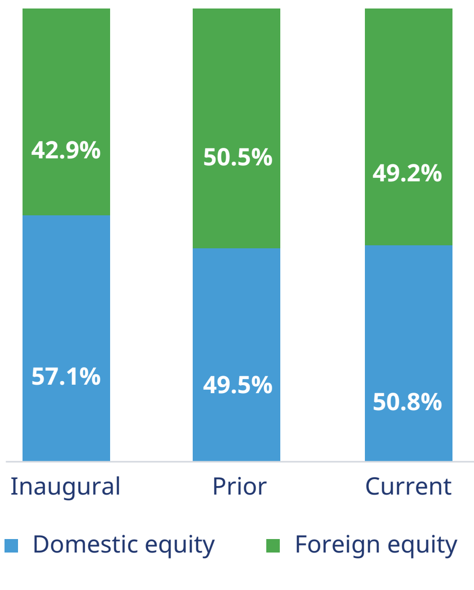
Foreign exposure

Another area in which investors are taking different approaches is the amount of foreign exposure. The contrast is particularly noticeable for foreign equity exposure as a percentage of total equity assets. In aggregate, the exposure to foreign equities has increased in equity portfolios. This trend can be seen over the full measurement period (43% to 49%), though the last year-over-year change offsets this slightly, moving back from 50% to 49%.

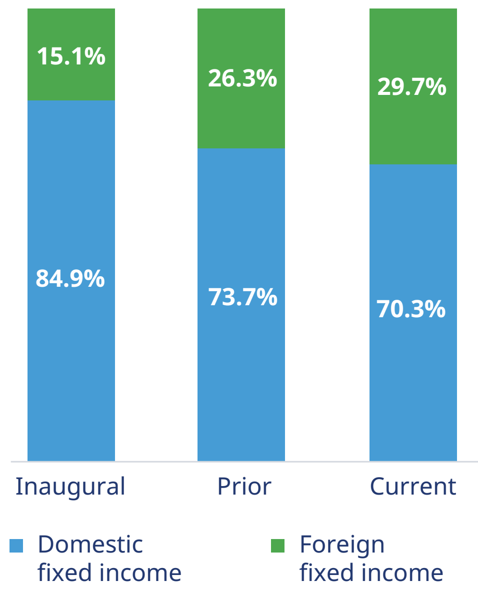
Fixed income portfolios remain much more domestically biased, although foreign exposure has risen from 15% to 30% since the inaugural period. A home bias within fixed income can often be justifiable given higher local interest rates, the defensive role of fixed income in portfolios, liability management, greater impact from currency volatility and potentially high costs of hedging foreign currency.

In Latin America, many markets have some of the highest allocations to foreign equity as a percentage of their equity portfolios, led by Chile and followed closely by Colombia, Mexico and Peru. Conversely, Argentina and Brazil invest almost entirely within their home markets due to restrictions on foreign exposure. The data source we use for Brazil (ABRAPP, the Brazilian pension association[10]) has now begun reporting the amount of foreign assets within pension portfolios. Although this is currently just 5% of total equity assets, we are seeing a number of trends in Brazil that support additional global diversification over time; however, given market volatility and rising interest rates in early 2022, these trends may stall in the short term as investors consider timing.

Domestic versus foreign equity



Domestic versus foreign fixed income

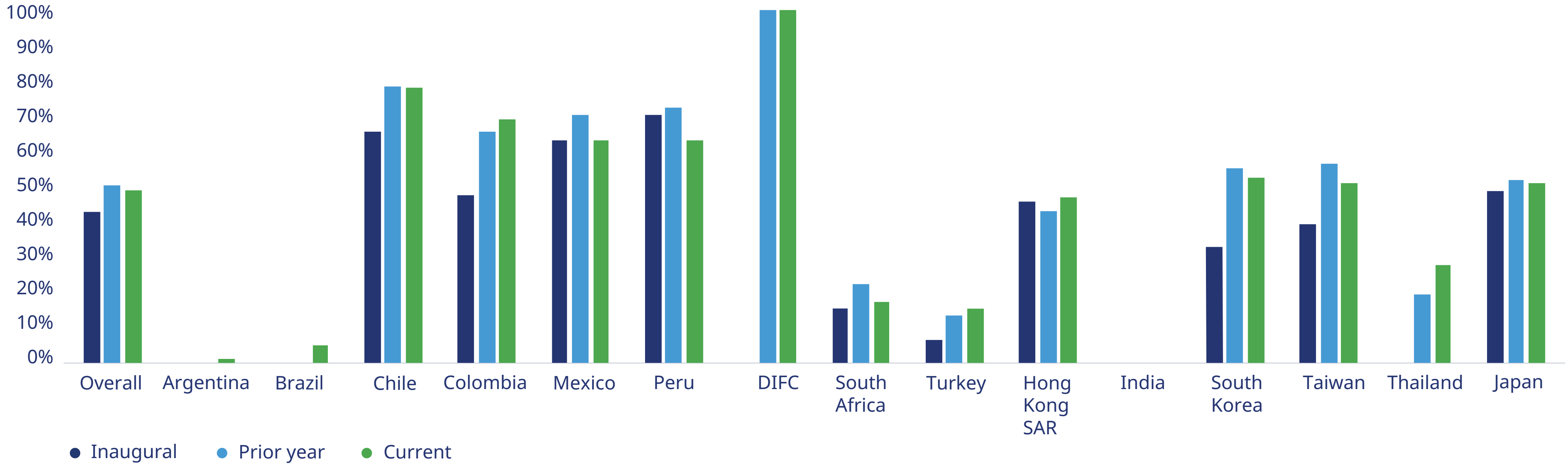


[10] Associação Brasileira das Entidades Fechadas de Previdência Complementar.

The DIFC Employee Workplace Savings (DEWS) Plan held the highest percentage of total equity assets in foreign equity, incorporating a fully globally diversified investment portfolio for its equity allocation. Within Asia, South Korea, Taiwan and Thailand have shown some of the largest increases in foreign equity exposure when compared to the inaugural period of this survey. Taiwan's largest public pension fund has also announced intentions to increase its allocation to foreign assets over the next few years.

Overall, the trend toward larger allocations to foreign equities can be expected to improve outcomes for investors, and we expect this trend to continue; however, it is important to note that many investors retain significant home biases. As mentioned in last year's survey, Mercer's 2020 paper *Stuck at Home? Home Bias in Portfolios*[11] dives into this topic in greater detail. Though a degree of home bias may be optimal from an investment perspective — due to tax considerations or other factors, and in some cases driven by constraints beyond investors' control — many investors could enhance their risk-adjusted returns by reducing home bias. Our paper looks at the different reasons behind this positioning and how justifiable they are from an investment perspective, along with some practical considerations for various asset classes.

Foreign equity exposure (% of total equity)



[11] Mercer. *Stuck at Home? Home Bias in Portfolios,* 2020, available at https://www.mercer.com/our-thinking/wealth/home-bias-in-portfolios.html.

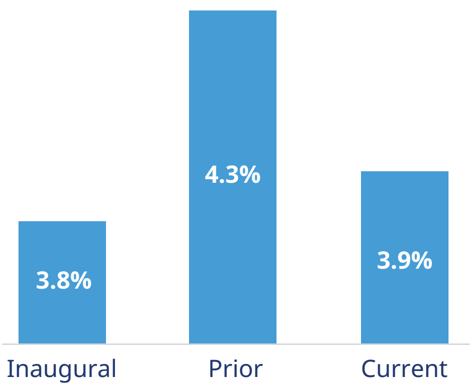
Alternatives

Alternatives allocations as a whole have stayed steady at near 4% since the inaugural period of the survey. The overall allocation has shown relatively little movement, in part due to a low allocation in some of the largest pension funds, disguising significantly increased exposures by a number of investors. Peru exhibited the largest increase, moving from a 4.1% alternatives allocation in the inaugural period to 16.0% in the current period. Over the same period, Colombia's allocation increased from 4.8% to 14.0% and Taiwan's from 1.9% to 9.6%. Taiwan's Bureau of Labor Funds (BLF) treats REITs, listed infrastructure and multi-asset strategies as alternatives, which would be included in this shift. In South Korea, the NPS has a meaningful allocation today (10.9%) and plans to increase this to 15% by 2025.

In the Middle East, we are generally seeing increased allocations to alternative investments, particularly to private equity, private debt, infrastructure and real estate. Some pension schemes in the region have high investment-return targets to help address funding deficits. They have looked to invest larger amounts in alternative asset classes to benefit from the higher risk-adjusted expected returns over the long term and to benefit from the increased diversification of including these asset classes in the investment strategy. Illiquidity is not a major concern for many of these pension schemes as they are generally open and expected to be cash-flow positive in the coming years.

As investors continue to seek additional return sources and reduced correlation with equities, we expect allocations to these alternative sources of return to grow over time.

Alternative investments (% of total assets)



Observations by scheme type

As we have highlighted in past reports, the use of DC plans is rising in a number of jurisdictions — Mexico and Japan are two of these. The DEWS Plan is a new DC savings scheme for expatriates in the DIFC, and this model is expected to expand across the Middle East in coming years. Defined benefit (DB) assets are larger than DC assets in this report[12] (US$4.2 trillion versus US$1.4 trillion), due largely to the two largest single investors profiled, Japan's GPIF and South Korea's NPS, which are both DB plans. Excluding these two plans, DB assets only total US$1.8 trillion.

DB plans have gone through the largest shift in asset allocation over the full measurement period, with close to an 11-percentage-point increase in equities, with a corresponding decrease in fixed income. This shift is almost entirely driven by Japan's GPIF and South Korea's NPS; excluding these two plans, the weighted average DB allocations to equity and fixed income remain steady over the full measurement period, at approximately 33% equity and 47% fixed income.

DC schemes have increased exposure to fixed income during the full measurement period; however, this was partly driven by additional schemes incorporated from India, which, due to their heavy investment in fixed income, affects the positioning of the weighted average allocation of DC assets. Stripping out India results in a relatively stable allocation to equities and increases in cash and alternatives over the full measurement period.

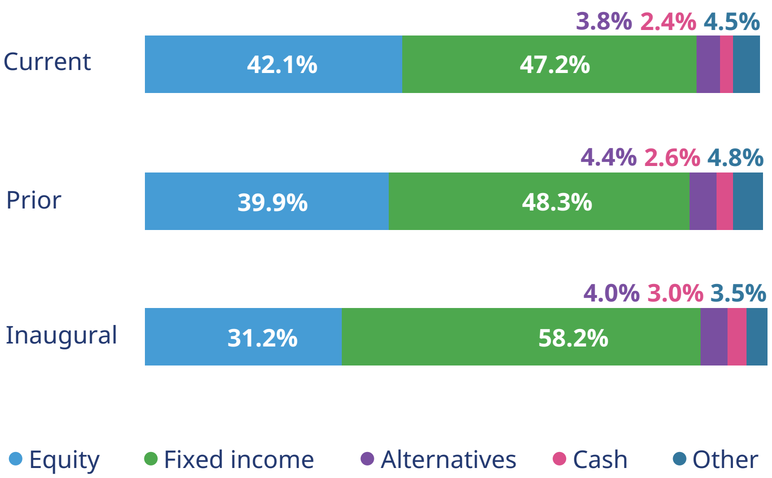
Mercer also surveys our European DB and DC clients, represented in our series of reports *European Asset Allocation Insights 2021*.[13] When compared to all Latin America and AMEA investors in the survey (both DB and DC schemes), European DB schemes are more heavily invested in fixed income, with 53% in bonds, 21% in equities, 23% in property and other alternatives, and 3% in cash. However, when compared solely to the DB plans in this survey, the difference in fixed income investment narrows — 47% of DB assets were allocated to fixed income. The larger differences occur with European schemes' significantly higher allocation to property and alternatives (23% versus 4%).

From a DC perspective, European schemes are more diversified into equities (47% for European DC plans versus 30% for DC plans in this survey) and significantly more so into alternatives and other multi-asset strategies, such as diversified growth funds (30% for European DC schemes versus 4% for this survey). However, we should note that the difference regarding multi-asset strategies is largely due to this survey's approach of "looking through" to the underlying asset allocation. Whenever possible, when multi-asset strategies are used in Latin America and AMEA, we show the underlying exposures to equity, fixed income, alternatives and cash, rather than categorizing multi-asset funds separately, though sometimes this "look through" is not available, such as in Taiwan.

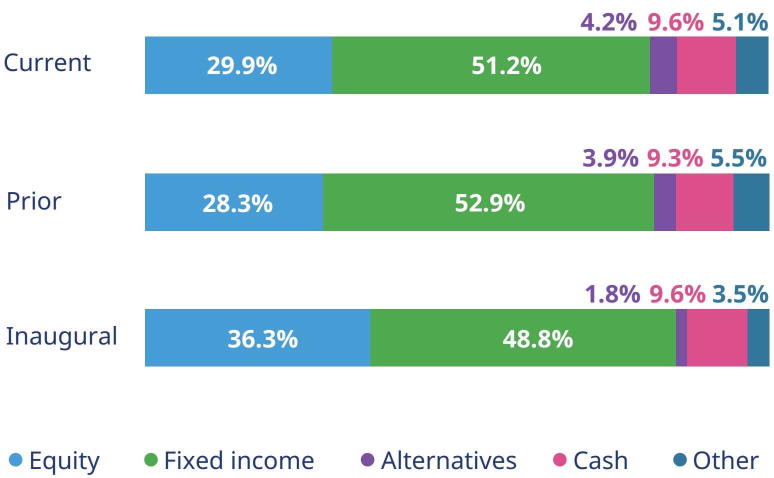
[12] This includes some adjustments for hybrid plans and source data that aggregate DC and DB information. The numbers quoted represent the assets we are able to segregate as DB or DC, and in some cases represent individual plans (such as Japan's GPIF) and in other cases represent aggregated data (such as a weighted average of corporate DB plans in a specific jurisdiction).

[13] Mercer. *European Asset Allocation Insights 2021,* available at www.mercer.com/our-thinking/wealth/european-asset-allocation-insights-2021.html.

DB asset allocation



DC asset allocation



Note: "Other" varies by data source, and in many instances, detailed descriptions of "other" were not available. Where possible, "other" is defined within each jurisdiction's section.

Other trends

Investors in AMEA and Latin America are facing many of the same issues as their peers around the world. These include navigating additional challenges associated with COVID-19, geopolitics and rising inflation, while still reviewing governance and fees and increasingly evaluating their investments through a sustainability lens. Most of these topics cannot be surveyed quantitatively, though we have included experience from our colleagues around the world.

Sustainability

Sustainable investing is one of the fastest-growing topics, with many investors showing interest and, in many cases, taking actions within the portfolio and governance processes.

In Latin America, Mexico is taking some of the strongest actions, passing new regulation in 2021 to spur the AFORES[14] to explicitly consider ESG issues and risks in their portfolios with a multi-year implementation horizon. This has resulted in requirements that 40% of these portfolios be explicitly connected to ESG themes; beyond just taking specific investment strategies, AFORES must demonstrate that they have methodologies to incorporate sustainability criteria. In Chile, Colombia and Peru, several of the AFPs[15] have joined the Responsible Investment Program to consider ESG issues in their investment policies and strategies. We expect to see more guidance from regulators on this topic; for example, Chile recently implemented a regulatory requirement that companies report information about social responsibility and sustainable development.

In the Middle East, investors in general have increased their consideration of ESG and sustainability factors over the last year — although, this is from a very low base, as most investors in the region have not been seriously considering this topic. The region still lags Europe in terms of ESG consideration and integration, but we see signs that ESG is gaining some traction. Given the Middle East's high dependence on fossil fuels, investors are navigating the environmental factors separately and in more detail, including consideration of the growing local hydrocarbon industry, which now contributes nearly a third of GDP. Incorporating these factors in general appears to be largely driven by the investors and key stakeholders themselves, including taking stock of the actions of their global peers, as there has been little change from a regulatory standpoint.

In Africa, ESG has been a rising topic of interest for Alexforbes (AF) and South African investors. In particular, AF has an investment framework for responsible investing that follows a beliefs, policy, process and portfolio approach. It aims to provide a transparent and practical pathway to understand and identify where responsible investment considerations sit within the investment approach and how they are incorporated and reflected in investment portfolios. Like many organizations in South Africa, AF places particular emphasis on social issues, including Black Economic Empowerment.

From the breadth and depth of interest we have seen in Asia, investors here have perhaps moved farthest along the journey to sustainable investing practices.

The overall focus on ESG in China has been strengthened by various market reforms and government-led initiatives in recent years as well as growing awareness of ESG considerations across a spectrum of different stakeholders, including individual consumers, company management, asset managers and asset owners. Investors believe issues related to climate change are becoming increasingly material and can influence portfolio risk and long-term return. This is strengthened by the fact that the China Securities Regulatory Commission has encouraged companies to voluntarily report their carbon emissions to meet state carbon-neutrality goals. As China puts more emphasis on climate change, investors are making efforts to proactively innovate and develop financial products to respond to the need for climate-risk mitigation and transition to a low-carbon economy.

[14] Administradoras de Fondos Para el Retiro.
[15] Administradora de Fondos de Pensiones y de Cesantias.

In Hong Kong SAR, following the Hong Kong Stock Exchange's introduction of ESG Reporting Guidelines and multiple subsequent revisions, the basis of ESG reporting was developed, which enabled investors' evaluation of their portfolios' ESG risks and impacts. In the second half of 2021, the SAR's financial services regulator, the Securities and Futures Commission, set out requirements for fund managers to disclose climate-related risks of their collective investment schemes and take steps to manage these.

The pensions regulator, the Mandatory Provident Fund Schemes Authority (MPFA), also requires trustees to adopt sustainable investing principles in their investment and risk-management processes. Making decisions with consideration of ESG factors has now become common for local investors.

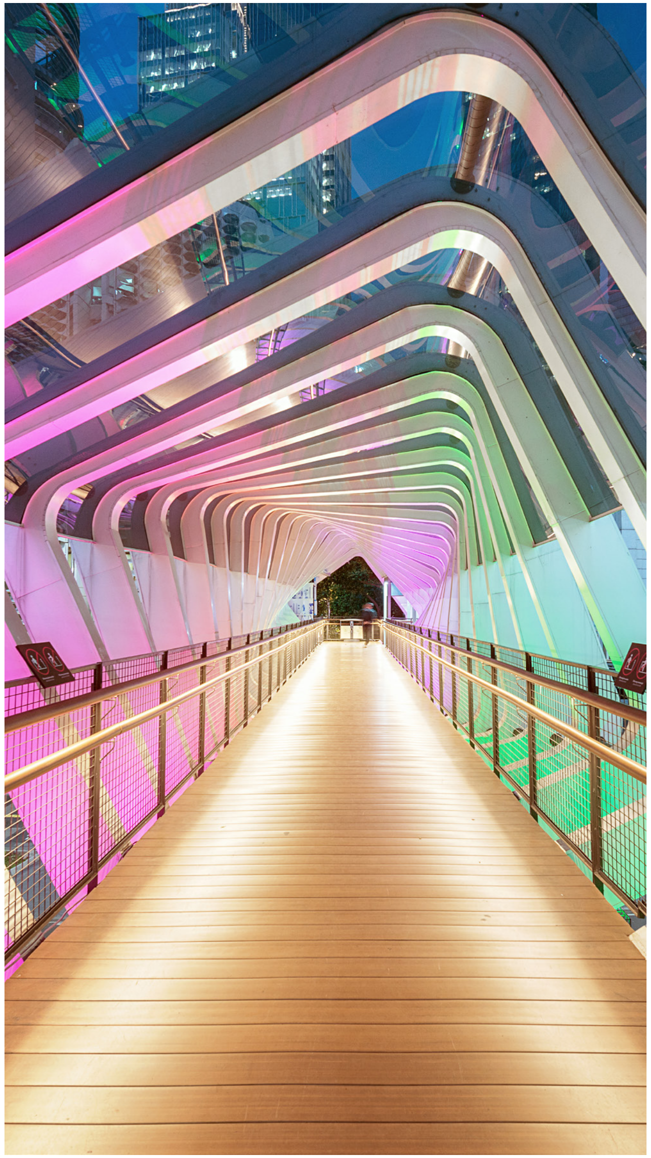
ESG investing continued its popularity in Taiwan, especially with institutional investors, such as the BLF and investment managers. The BLF and Public Service Pension Fund (PSPF) in Taiwan issued new global and domestic ESG equity mandates in 2021, respectively. In addition, both major government funds consider stewardship when they select investment managers.

In South Korea, demand from investors for ESG/sustainability information is increasing; for example, the government plans to introduce requirements for companies listed on the securities exchange to disclose information about their ESG positions. This will be implemented over a number of years, with voluntary reporting until 2025 before becoming mandatory for companies of a certain size. From 2030, it will be mandatory for all listed companies.

The Singapore Green Plan 2030 was launched in February 2020; before that, it introduced the Green Finance Action Plan in 2019 and the Climate Action Plan in 2016. More than 80% of the top asset managers in Singapore are signatories of the United Nations Principles for Responsible Investment (PRI).

In addition, the Singapore Government's recent budget announcement about the issue of US$26 billion in green bonds by 2030 will boost regional green financing.

In 2021, Malaysia's Employee Pension Fund announced plans for its portfolio to be ESG-compliant by 2030 and carbon neutral by 2050.



Governance

Investors everywhere go to great lengths to oversee their portfolios and implement changes efficiently, often while facing other tasks and priorities. This is taking shape in different ways.

In the AFP and AFORES systems in Latin America, governance is a key consideration when looking to gain an advantage over competitors. This includes internal costs, investment manager costs and getting access to the best investment managers and investment ideas and key themes.

In Turkey, individuals have been granted more flexibility in overseeing their own portfolios, enabling more open-architecture choice, and increasing the ability to make changes from six times a year to 12.

Many investors in the Middle East have made specific enhancements to their governance frameworks. We have seen some pension schemes and many other investors in the region review their long-term investment strategies and investment policy statements to ensure they remain appropriate to meet their investment objectives following the COVID-19 pandemic. Additionally, we have seen a notable increase in investors seeking to put in place procedures and processes to govern their key investment activities (manager selection, custody selection, investment monitoring, etc.).

In certain Gulf Cooperation Council (GCC) countries (Saudi Arabia and Oman), state pension scheme mergers are underway that will significantly alter the investment governance arrangements for the pension schemes in the respective countries.

Broadly in Asia, and particularly in Hong Kong and Singapore, we have seen a rising interest in outsourced chief investment officer services from institutional investors that are looking for the ability to delegate certain areas of responsibility for their plans.

Inflation

Overall, investors are more concerned about inflation now than they were a year ago.

In Latin America, high inflation and significant currency-exchange-rate moves in some markets have increased political and investment uncertainty, posing various challenges to domestic investors.

In the Middle East, we have seen several investors consider allocations to real assets or assets with inflation-protection qualities. Moreover, additional or first-time allocations to inflation-linked bonds have been included in some investment strategies this year in light of inflation concerns. Additionally, some investors have been interested in understanding the potential role of commodities in their portfolios to provide inflation protection and diversification.

With higher inflation in Asia, investors have been considering the resilience of their portfolios to various potential inflationary scenarios. Even in Japan, which has experienced decades of deflation, global commodity price increases have brought about domestic inflation. In Taiwan, for example, pension investors demonstrated more interest in absolute return strategies and real assets, partly to mitigate inflation risks. Although inflationary dynamics vary across the region, the additional inflationary impulse created by the Russia–Ukraine crisis promoted greater investor awareness of both the risks and opportunities posed by elevated inflation.

Fees

Regulators in a number of markets are pursuing actions that will promote greater transparency and competition to create room for fee reductions.

Turkey recently enabled participants to select funds in an open-architecture framework, removing the restrictions that previously kept individuals tied to the investment options offered by their administrator. All else being equal, this should result in greater competition and pressure on fees because individuals may more freely move to other options.

In Mexico, the AFORES regulator set a specific cap of 0.57% for fees that can be charged to individuals, which occurred following an exercise comparing DC fees in other plans around the world.

In Colombia and Taiwan, investors have looked at passive options to lower fees, though this is balanced by alpha-seeking strategies that look for higher returns from segments such as emerging markets or alternatives.

In Hong Kong, a key move for the Mandatory Provident Fund (MPF) industry is the establishment of a single digital platform, the eMPF, which is due to open in 2025 at the earliest. The eMPF platform will provide standardization, streamlining and automation of MPF scheme-administration processes. We expect this platform to lead to a 30% cut in the scheme-administration fee, saving an estimated HK$30 billion–HK$40 billion (US$4 billion–5 billion) over a 10 year period.

04. Survey methodology and participants

The survey incorporates information on US$5.9 trillion in AUM from corporate and government pension schemes in 15 markets across Latin America, Africa, Middle East and Asia. The full measurement period for AUM and allocation data is approximately eight years.

For this year's report, we have added the DIFC as a new jurisdiction, and data challenges necessitated the removal of Indonesia and Malaysia from the data set. To create an "apples to apples" comparison within the historical trends presented in this report, we removed these markets' data from past periods as well.

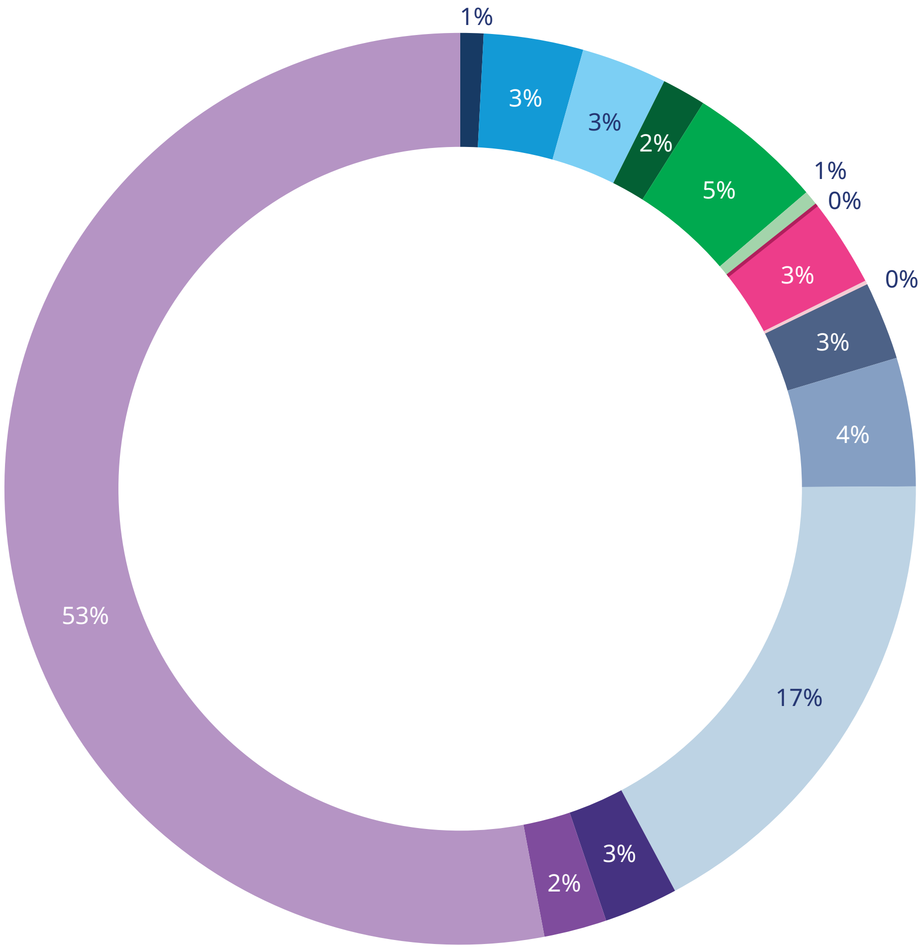
In addition to Indonesia and Malaysia, externally verifiable data was not available for some portions of the GCC region, China, the Philippines and Singapore; however, we have leveraged Mercer's experience with investors in these areas to provide qualitative insights.

This section provides an overview of key information and data-classification definitions.

- Data marked "current" are the most recent data available to us. In most cases, these represent information from a reporting date in 2021.
- Data marked "one year ago" or "prior year" represent, in most cases, data with reporting dates in 2020. In our 2021 report, these same data were shown as "current" and have now been carried forward.
- Data noted as "inaugural" represent, in most cases, data with reporting dates in 2013. As we build the data set each year, the time horizon between our inaugural reporting period and "current" data is now approximately eight years.
- We add new markets and data sets when available, or if necessary, we may remove them. As such, data comparisons for the one-year-ago and inaugural dates in this report may not match the information shown in prior editions.
- Data may not sum to 100% due to rounding.
- In some cases, our data sources do not classify allocations in detail; for example, data sources might only provide a total equity allocation rather than classifying both foreign equity and domestic equity. In such cases, these data sets are omitted from the relevant charts for accuracy.
- Data sets used in our report may represent a single pension scheme or may be an aggregation of multiple schemes, such as an industry survey covering, for example, all corporate pension plans in the market.
- Detailed source and reporting date information can be found in the Appendix of this report.

Split of total survey assets by market (US$ billion)

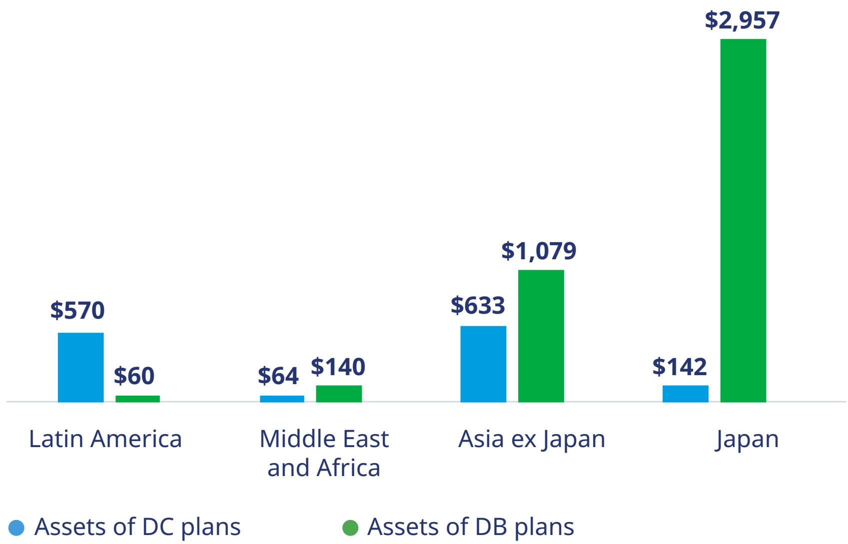
Argentina	48.1
Brazil	206.5
Chile	177.8
Colombia	91.3
Mexico	279.6
Peru	33.1
DIFC	0.2
South Africa	178.7
Turkey	25.2
Hong Kong SAR	150.8
India	266.4
South Korea	1,010.2
Taiwan	153.5
Thailand	130.3
Japan	3,098.3
Total	**5,850.2**



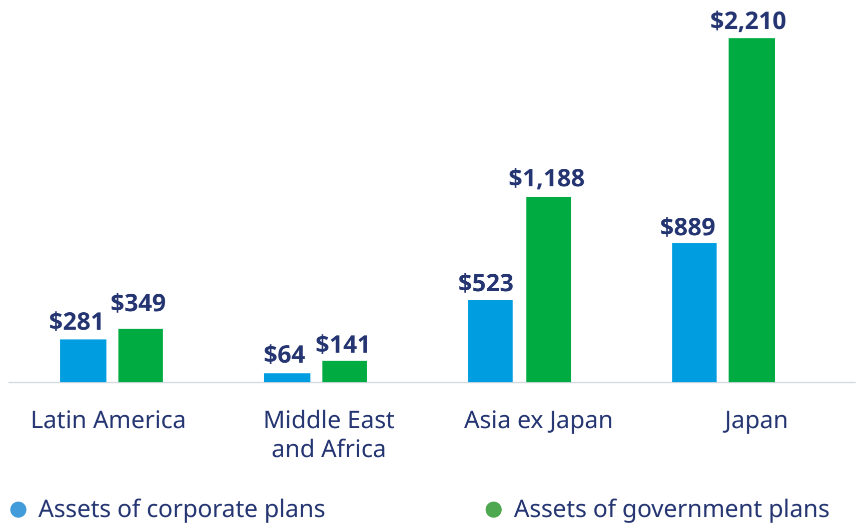
Plan types[16]

The survey includes information on pension plans within the markets or regions and covers both DC and DB plans as well as corporate and government-sponsored schemes. In many markets, government-mandated savings schemes are administered by a private financial institution, such as the AFPs and AFORES in Latin America. We have classified these types of mandatory plans as governmental in our analysis.

Assets of DC/DB plans (US$ billion)



Assets of corporate and mandatory/government plans (US$ billion)



[16] Brazil is excluded from the data for both of the charts above since our source aggregates DB, DC, corporate, and government data.

05. Latin America

The Latin America data cover plans with assets of US$836.5 billion, comprising primarily the AFPs and AFORES across the region (Chile, Colombia, Mexico and Peru) and "closed" private (and state-owned) company pension arrangements in Brazil, which are both DB and DC. AFPs and AFORES are government-mandated DC plans administered by financial institutions. Brazil also has large "open" DC insurance pension arrangements available to individuals, but we do not have accurate information about the asset allocation of this part of the pension market so we do not include data on this.

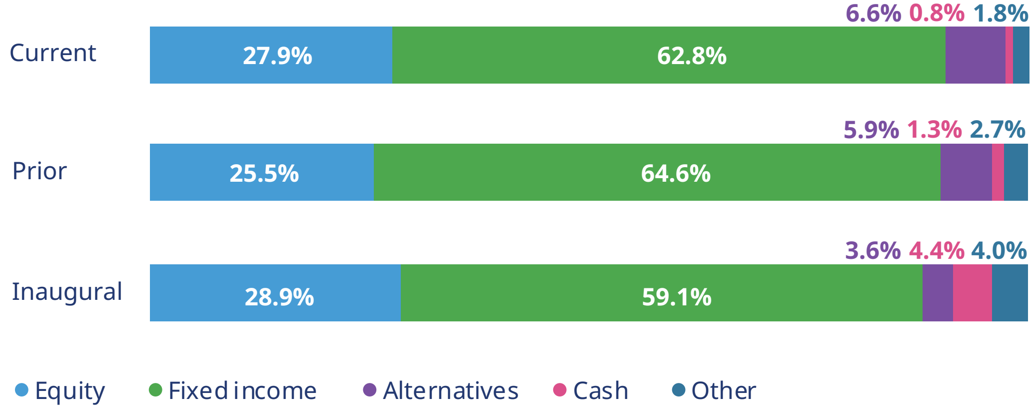
Contributors to the data and commentary in Latin America include both Mercer colleagues and El Dorado Investments, our partner for distribution of Mercer's investment solutions across the region.

Market	Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Argentina	Fondo de Garantía de Sustentabilidad (FGS)	Government DB	47,239
	Insurance retirement plans (under social security)	Corporate and government DC	281
	Supplemental DC plans	Corporate DC	595
Total			**48,115**
Brazil	Multiple plans within the pension association ABRAPP	Corporate DC and DB	206,534
Chile	Administradoras de fondos de pensiones	Mandatory DC	177,841
Colombia	Administradoras de fondos de pensiones	Mandatory DC	91,301
Mexico	Private pension plan	Corporate DB	13,060
	Private pension plan	Corporate DC	14,311
	AFORES	Mandatory DC	252,279
Total			**279,650**
Peru	Administradoras de fondos de pensiones	Mandatory DC	33,067
Total			**836,508**

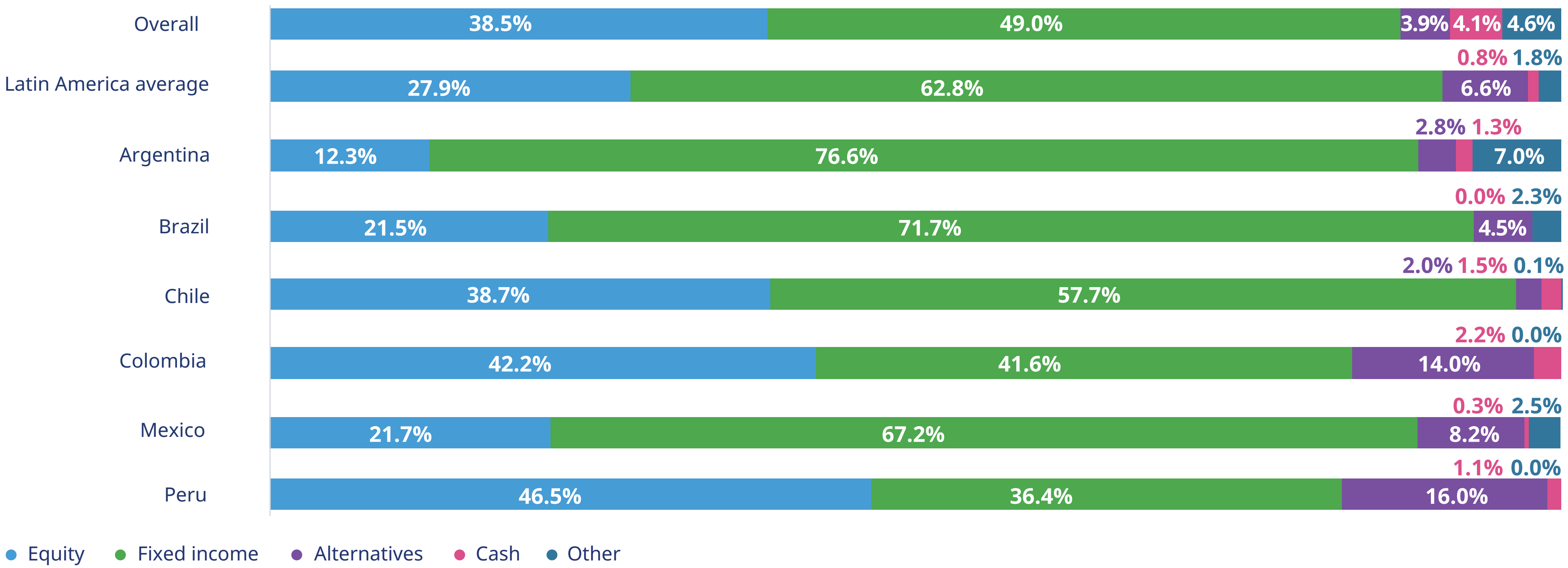
Latin America's asset allocation contains some interesting differences relative to the survey's overall average — although fixed income is higher (63% for Latin America versus 49% for the survey average), largely driven by Brazil and Mexico, the allocation to alternatives is also higher (6.6% versus 3.9%). Fixed income allocations have decreased since the prior period, especially in Colombia, where they declined by close to nine percentage points; this was in part due to market movements. As such, we may see a reversion toward more fixed income in future periods in order to maintain strategic allocation targets.

Alternative assets are especially prevalent in Peru and Colombia, followed by Mexico. In general, these comprise private equity and real estate and have been rising meaningfully over the survey period.

Asset allocation for Latin America

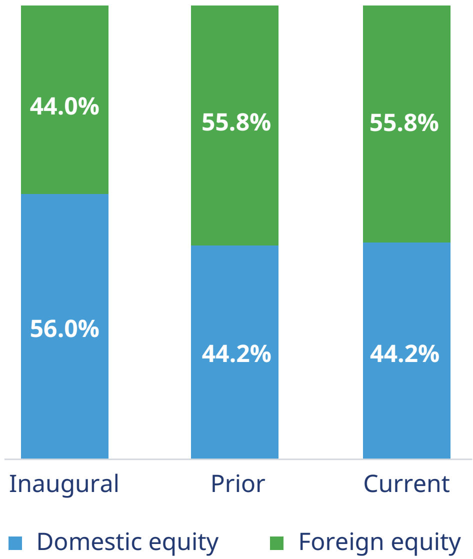


Current asset allocation (%) — Latin America

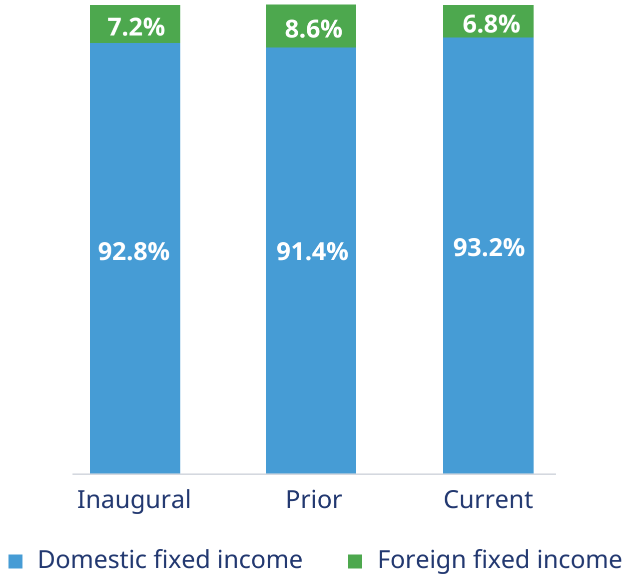


Note: "Other" varies by data source, and in many instances, detailed descriptions of "other" were not available. Where possible, "other" is defined within each jurisdiction's section.

Domestic versus foreign equity — Latin America



Domestic versus foreign fixed income — Latin America



Equities are more diversified into foreign assets, with nearly 56% of equity assets invested outside the domestic market, compared to a survey average of approximately 49%. However, we see significant divergences in the region. Argentina effectively only invests domestically, and Brazil is only beginning its journey toward greater global diversification. For the first time, our survey source (from the pension association ABRAPP[17]) provided the breakdown between foreign and domestic assets for Brazilian investors, with only 5% of equity assets invested outside the domestic market. On the other hand, Chile, Colombia, Peru and Mexico have some of the largest foreign equity exposures (as a percentage of the equity assets).

Investors are talking about sustainable investing, although this also varies from place to place. In Chile, Colombia and Peru, several of the AFPs have joined the Responsible Investment Program to consider ESG issues in their investment policies and strategies, and we expect to see more guidance from regulators on this topic. Chile also implemented a regulatory requirement that companies report information about social responsibility and sustainable development. Mexico has been the most active market in this regard, passing new regulation in 2021 to spur the AFORES to explicitly consider ESG issues and risks in their portfolios (with a multi-year implementation horizon) that requires 40% of the portfolio to be explicitly connected to ESG themes. AFORES must demonstrate they have a methodology to incorporate sustainable criteria and not just take a specific investment strategy.

[17] Associação Brasileira das Entidades Fechadas de Previdência Complementar.

Argentina

Argentina's retirement income system comprises a pay-as-you-go social security system and voluntary occupational corporate and individual pension plans. These plans may be offered through employer book reserves (DB), insurance companies or pension trusts (DC).

Both employees and employers contribute to the pay-as-you-go Fondo de Garantía de Sustentabilidad (FGS). Employees contribute 11% of base salary up to a salary ceiling; employers currently contribute 21% or 17% (according to the industry, headcount and company turnover) of payroll without limit. These percentages converged to an employer contribution of 19.5% in January 2022. Benefits from social security are also capped, and, at high salaries, the pension replacement rates are less than 20%.

Many companies are interested in providing a supplemental DC retirement plan, particularly for those employees affected by the benefit cap. To date, however, few such plans have been established, and we do not expect these plans to become more popular without additional incentives, such as tax benefits. When companies add new pension plans, they generally do so for retention purposes and HR branding. Today, only management is typically eligible. Payment is generally a lump sum at retirement, although annuities are available in the market.

The FGS comprises the vast majority of assets represented for Argentina. Because the FGS invests in projects and financial instruments that promote growth in the Argentine economy and support the development of local capital markets, it only invests in domestic securities. Although detailed allocation information is not available for insurance or pension trust assets for the supplemental DC plans, in Mercer's experience, these plans do invest in foreign securities to a limited extent.

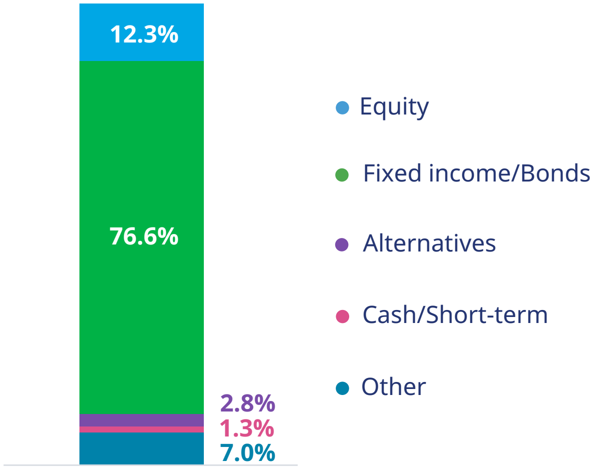
During 2019, the government introduced new tax adjustments, providing an income tax deduction for retirement and life insurance policies, with a cap of ARS 24,000 (US$200) per fiscal year per instrument. Mutual funds constituted for retirement purposes should also have this same tax deduction, which would support additional retirement saving. However, the National Securities Commission has yet to rule on which funds are subject to the deduction. The government has also limited the purchase of foreign currency to US$200 monthly and only for individuals, making investments in dollar assets difficult.

The COVID-19 pandemic lockdown caused an economic recession in Argentina, and restrictions on currency exchange produced split exchange rates. Saving for the long term has been more complicated than ever. Still, some companies are considering and implementing pension plans, although we did not see significant changes to plan availability or design.

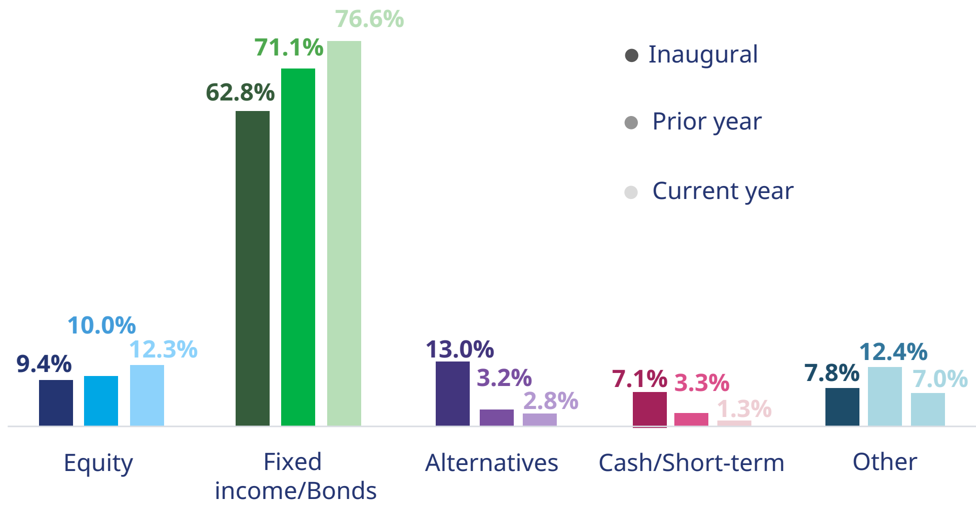
Data include:

Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Fondo de Garantía de Sustentabilidad (FGS)	Government DB	47,239
Insurance retirement plans (under social security)	Corporate and government DC	281
Supplemental DC plans	Corporate DC	595
Total		**48,115**

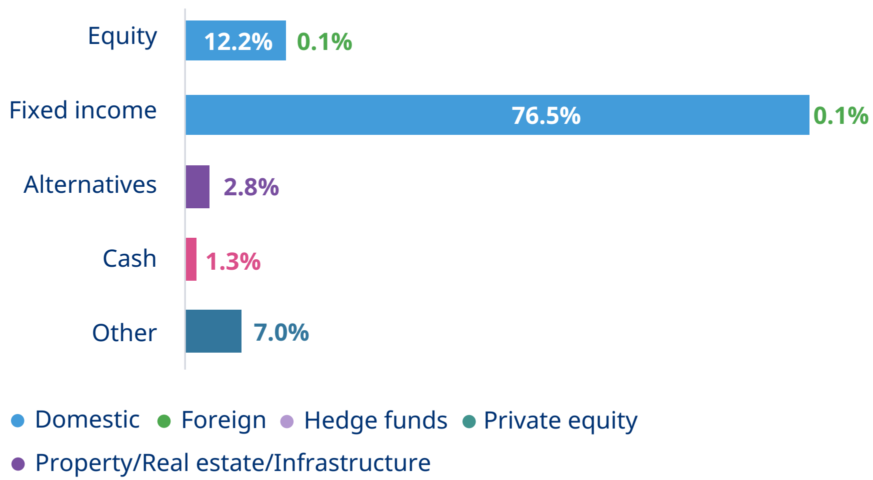
Current asset allocation



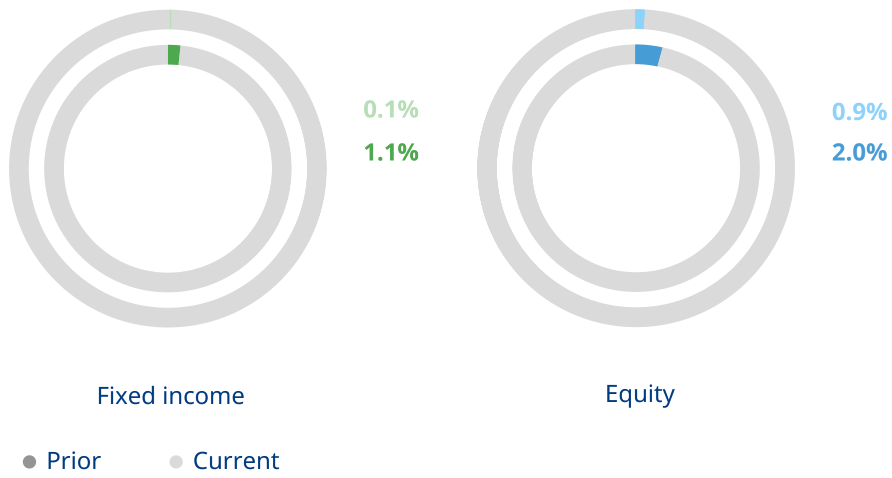
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

Brazil

Brazil's retirement income system comprises a pay-as-you-go social security system, with higher replacement rates for lower-income earners and voluntary occupational corporate and individual pension plans. These plans may be offered through insurance companies or pension trusts.

The economic environment and financial market dynamics have affected the local retirement system as a whole:

- Similar to others around the world, the Brazilian Government implemented a large package of aid to companies and families to face the economic impacts of COVID-19. Despite this, unemployment rose and the Central Bank of Brazil lowered the interest rate to 2% to expedite economic recovery.
- The aid package did increase the government's primary deficit (peaking at approximately 10% in 2020), but that had already returned to previous levels by the end of 2021 (estimated at around 1%). On the fiscal side, surpassing the spending ceiling in 2020 increased the debt-to-GDP ratio and created challenges, though this was again reduced in 2021.
- Fiscal challenges and the turbulent political environment led to a large devaluation of the real (R$), which, together with high and widespread global inflation, generated the highest consumer inflation since 2015 (10%). This caused the Central Bank to promote consecutive interest rate increases, which were expected to reach 13% in March 2022.

These events are significantly affecting pension funds' and members' attitudes toward savings, risk and diversification. As individual and institutional investors realize the need to save more and the need to invest more effectively, a noticeable but gradual shift to riskier strategies — such as equities, liquid alternatives, multi-asset funds, international exposure and REITs — has begun. This last attitude prevailed mainly in the first half of 2021; however, as volatility and interest rates have risen, a trend toward globalization may pause as investors consider the timing of their global investments.

We saw pension investors allocate R$60 billion (US$11.6 billion) to equity and hedge funds YTD 2021 through September 30, while close to R$50 billion (US$9.7 billion) in fixed income funds were withdrawn over the same period.

Supplementary DC plans offered by employers have been growing in popularity for some time and are prevalent in midsize and large companies.

The economic impacts of COVID-19 hampered the ability of families to save, as many faced reduced salaries or even lost their jobs. Even so, open and closed pension systems in Brazil continued to grow and surpassed R$2.2 trillion[18] (around US$400 billion) in 2021.

Despite the difficulties faced in 2021 and continuing into 2022 — including a presidential election — the economy is expected to recover in the medium term, and inflation and interest rates are forecast to decline. So, even amid this environment, almost all pension schemes maintained their previously adopted risk levels, focusing on the long term.

On the financial market side, 2021 was a year of intense volatility and low returns. The risk-free rate began the year at 2.0% and rose to 9.25% by year-end 2021 (average rate of 4.4%). Political turmoil, high inflation that led to higher interest rates and the difficult fiscal environment increased the country's risk, devalued the real and negatively affected the performance of risky assets. As a result, the local stock market, as measured by Ibovespa, dropped 11.9%. Local hedge funds posted another year of losses in relation to the risk-free rate, and even local fixed income strategies recorded negative returns (fixed rate -2% and TIPS -1.3%).

[18] Government of Brazil. "Patrimônio dos Regimes de Previdência Complementar chega a R$ 2,24 trilhões," Ministerio do Trabalho e Previdência website.

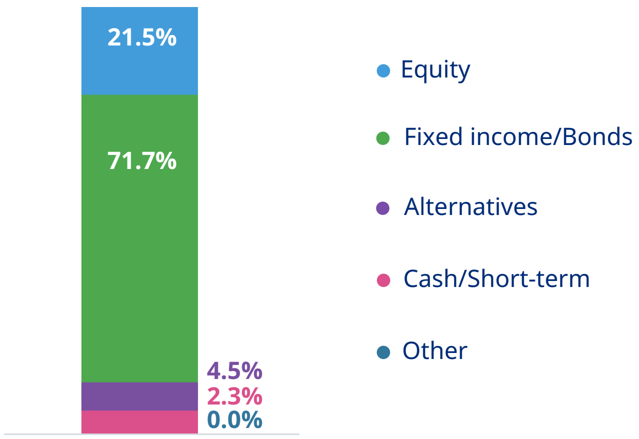
For the first time, ABRAPP disclosed the percentage of global assets invested by Brazilian pension schemes (closed and state-owned plans). The September report showed that 1.4% of plan assets were allocated abroad, totaling R$14.5 billion (US$2.8 billion). The foreign cap for pension funds remains at 10%, but investors remain well below the maximum.[19] Still, we are seeing a growing number of investment strategies and products focusing on foreign assets, particularly equities. Though shorter-term challenges may delay this, over the medium term, we expect the growth in foreign investment to continue, particularly within DC plans, due to their greater flexibility for a variety of return sources. Many DB plans, on the other hand, are focused more on their liability structures, which are closely linked to domestic interest rates and inflation.

Data include:

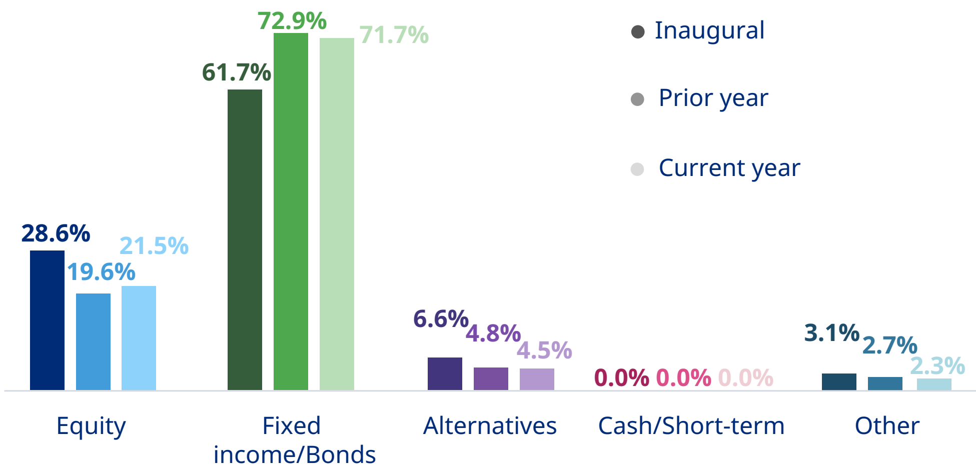
Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Multiple plans within the pension association ABRAPP	Corporate DC and DB	206,534

[19] Foreign assets shown on the subsequent page are not available for historical periods, as this was newly included in the data source.

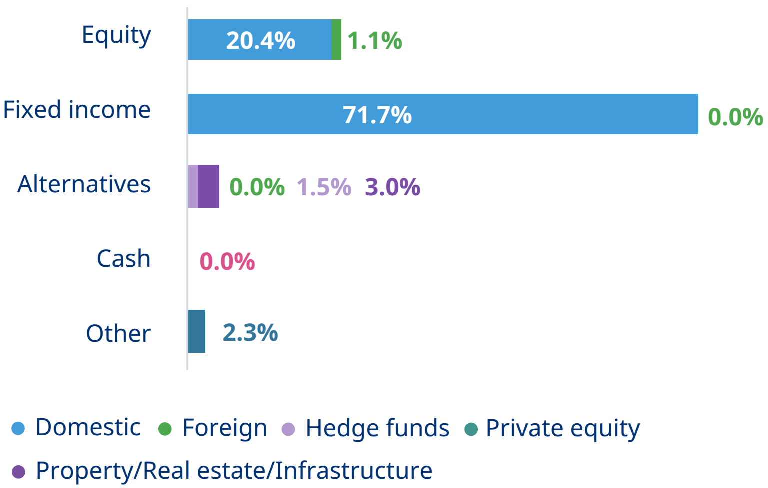
Current asset allocation



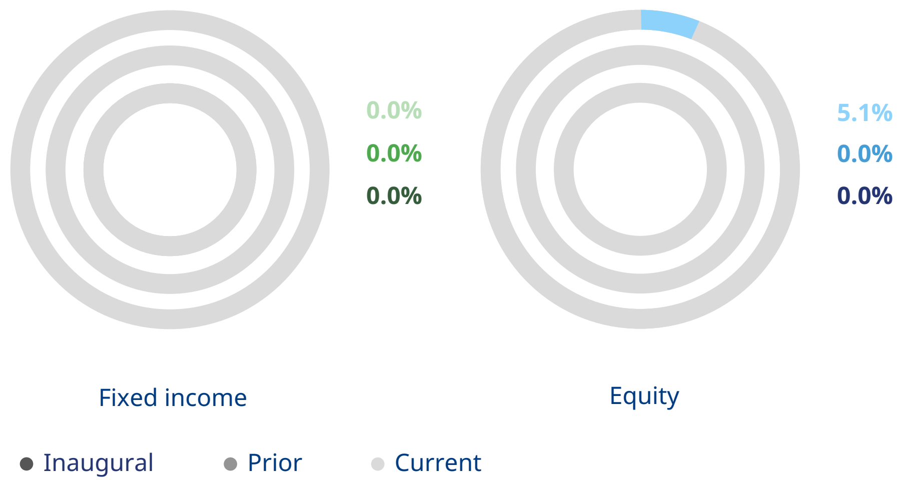
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

Chile

Chile's retirement income system comprises means-tested social assistance; a mandatory, privately managed DC scheme based on employee contributions, with individual accounts managed by a small number of AFPs; and a framework for supplementary plans sponsored by employers (the APVC schemes).

The Chilean pension security system was introduced in 1981 and is mandatory for every individual who has a formal job. Monthly contributions totaling 10% of salary are sent directly to one of the six private master trusts (AFPs) that oversee administration and investment management for the assets. Changes to the system structure and asset allocation limits have been discussed in the past few years. Recent protests in Chile are deeply rooted in the population's discontent with the low replacement rates the AFP system offers (around 30%) now that greater numbers are retiring. In response, the government announced a 20% increase in monthly pension payments that fall under the solidarity pillar (a "safety net" that incorporates government-provided income for individuals not sufficiently covered by the pension system).

Due to the COVID-19 pandemic, members could withdraw a portion of their savings from their individual accounts. Members appeared to take advantage of this opportunity, as the AUM of the overall AFP system declined about 8% over the year, even as market returns ended close to zero on average.

Chile's equity allocation increased from 28% to 38% over last year's measurement period (2020–2021). Although this may be due to a number of factors, it is likely due in part to members' withdrawals, as well as equity outperforming fixed income. As such, we may see a reversion toward more fixed income in future periods in order to maintain their strategic allocation targets.

The trend among AFPs has been to pursue return-seeking strategies by moving toward active managers for greater alpha potential and increasing allocations to higher-returning equity segments, such as emerging markets (Asian equities, in particular) and alternatives. Over the past few years, allocations to alternatives have been increasing. Limits for alternatives vary depending on the risk level of the fund but can be found in each portfolio up to a maximum of between 5% and 13%. These limits were raised from a maximum of 10% in 2020 and were part of a review of risks amid this year's heightened market volatility. We expect to see alternatives exposures continue to rise until the maximum limits are reached.

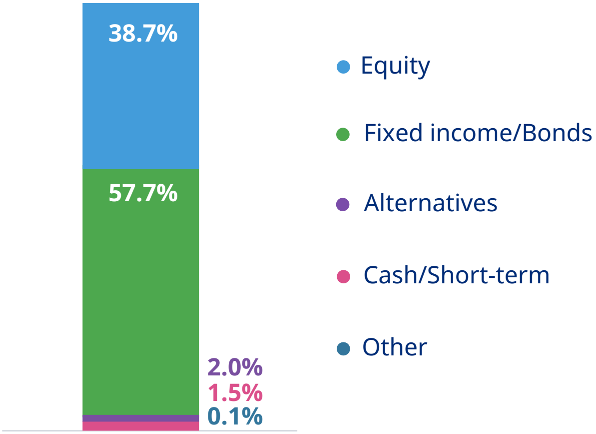
Investors in Chile have also begun showing interest in sustainable investing, with a regulatory requirement that companies report information about social responsibility and sustainable development. The corporate governance elements of diversity can also be seen in Chile. Recent regulations incentivize organizations to show progress toward achieving diversity and reducing the gender salary gap, with criteria in place for board composition, management and organizations with regard to gender, nationality, age and seniority. Other sustainability trends are evident, such as four of the seven AFPs signing on as members of the Responsible Investment Program, under which members consider ESG issues in their investment policies and strategies.

El Dorado Investments, our partner for delivering solutions across Latin America and particularly in Chile, Colombia, Mexico and Peru, contributed to this survey for Chile.

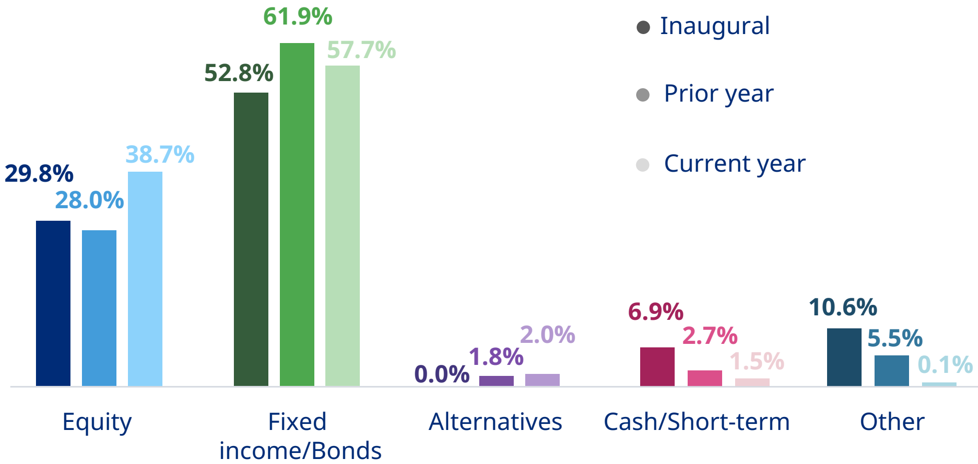
Data include:

Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Administradoras de fondos de pensiones	Mandatory DC	177,841

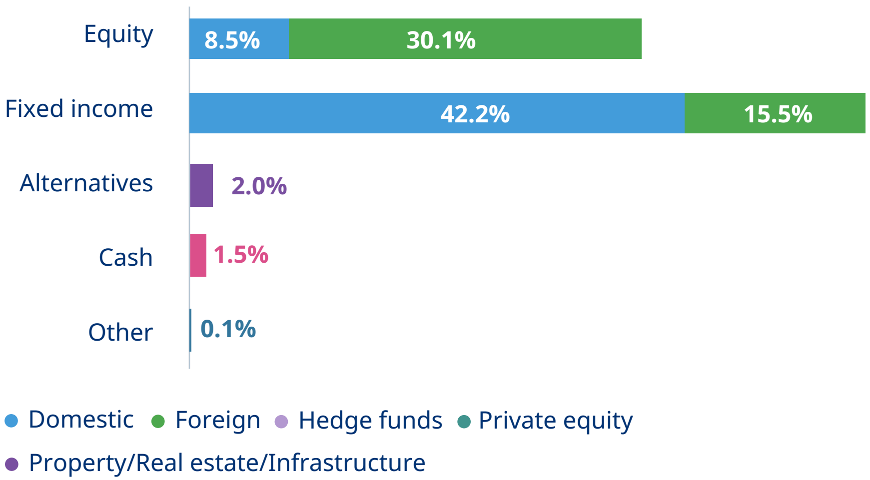
Current asset allocation



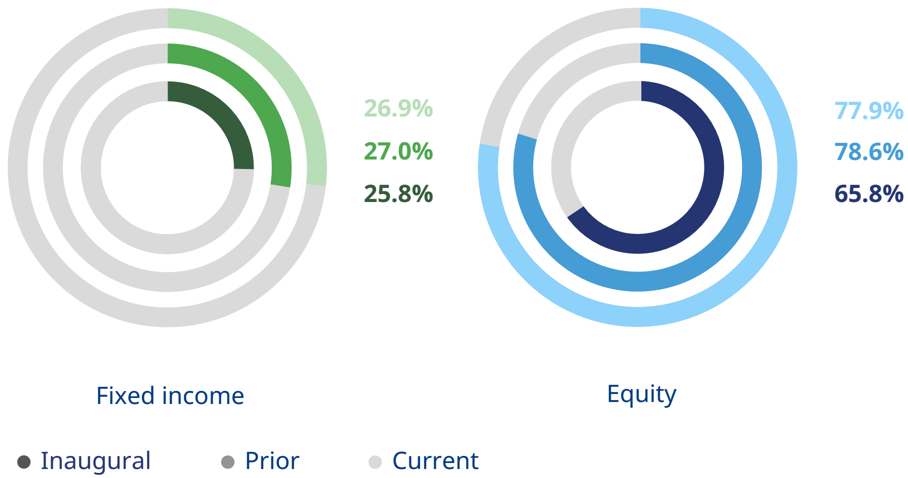
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: “Other” is not defined.

Colombia

Colombia's retirement income system comprises a means-tested pension and two parallel and mutually exclusive pension systems. The first of these two systems is a pay-as-you-go DB plan, and the second is a system of funded individual accounts offered through qualified financial institutions (AFPs). An employee elects to join one system and has the option to change later, with certain restrictions. The employer and employee contribution rates are the same for both systems. Some companies also offer a supplemental plan, typically DC, designed for higher earners whose benefits under the mandatory system are limited by a contribution ceiling, allowing them to benefit from favorable tax treatment.

As noted in the prior year's survey, the Colombian Government has recently implemented reforms to the DC investment regime that allow for greater exposure to alternatives and foreign investments. These reforms are intended to promote Colombia's infrastructure, reduce local investment risk and allow greater diversification.

Structural pension reform was supposed to take place during 2019 but was postponed. Although no formal language has been released, some pronouncements from government officials indicate that limited pension parameters will be changed (for example, retirement age), and the reform will aim to expand pension coverage and promote greater equality among participants. This would be driven by additional required contributions from wealthier participants to offset gaps in pension adequacy for those who do not qualify for the pension or have not amassed sufficient assets. Colombia is also planning new regulations to clarify and expand fee disclosures to help investors make informed choices.

New amendments to the investment regime in the past few years significantly raised the limit to invest in alternatives. Colombia's alternatives investments allocation rose from 11% to 14% over the past year's measurement period.

Due to the COVID-19 pandemic, for two months, members and the employer sponsors could choose to reduce their contributions to the fund from 16% to 3%. Nonetheless, AUM grew during the year from US$74 billion to US$91 billion in 2021.

Our survey indicates that Colombia's fixed income exposure declined by nine percentage points over the year, whereas equity and alternatives increased by 5% and 3%, respectively. Although this may be due to a number of factors, it is in part due to equity outperforming fixed income. As such, we may see a reversion toward more fixed income in future periods in order to maintain strategic allocation targets.

AFPs offer individuals the ability to select from a number of risk-based funds; each has set ranges of allowable investments, including overall equity/fixed income exposure and the permissible level of foreign assets. Several years ago, a more aggressively positioned fund was added to the suite of AFP investment options that incorporates higher equity and alternatives exposure, including foreign allocations. However, this more aggressive option constitutes less than 10% of total AUM.

AFPs have traditionally looked for more passively managed options to lower fees, although this trend is changing as alpha-seeking strategies become more prevalent. At the same time, AFPs have shown increasing interest in higher-returning equity segments, such as emerging markets, including Asian exposure.

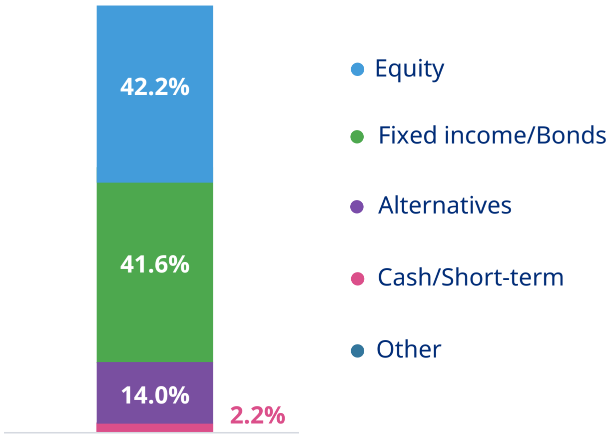
Sustainability is becoming a topic of some interest in Colombia. Two of the four AFPs have joined the Responsible Investment Program, whereby members consider ESG issues in their investment policies and strategies. The government is reportedly planning to release a guide to incorporating ESG principles within AFP investments; we expect this to focus primarily on corporate governance and managing conflicts of interest rather than on environmental topics.

El Dorado Investments, our partner for delivering solutions across Latin America and particularly in Chile, Colombia, Mexico and Peru, contributed to this survey for Colombia.

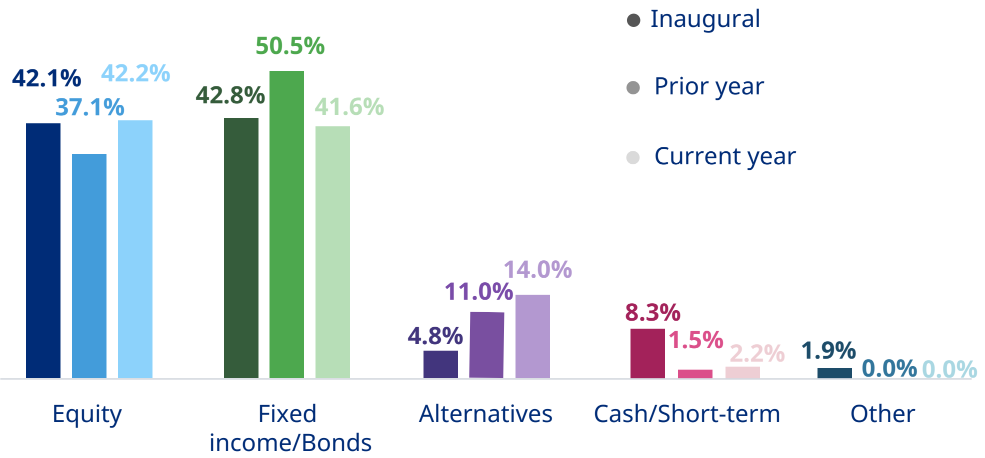
Data include:

Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Administradoras de fondos de pensiones	Mandatory DC	91,301

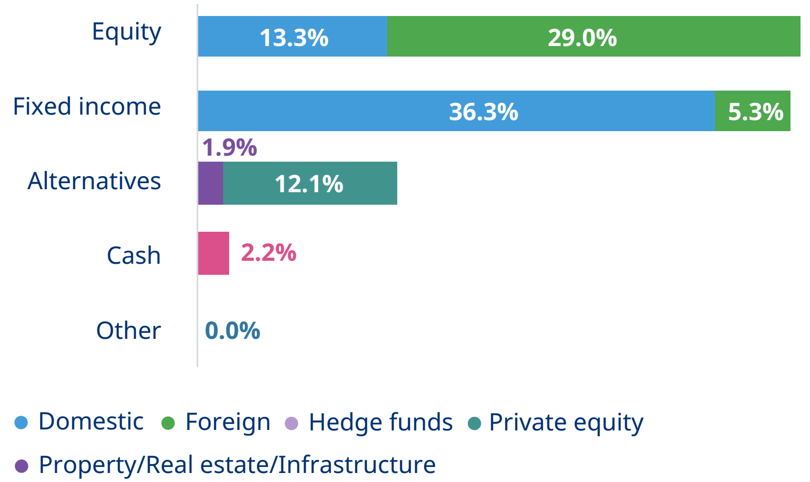
Current asset allocation



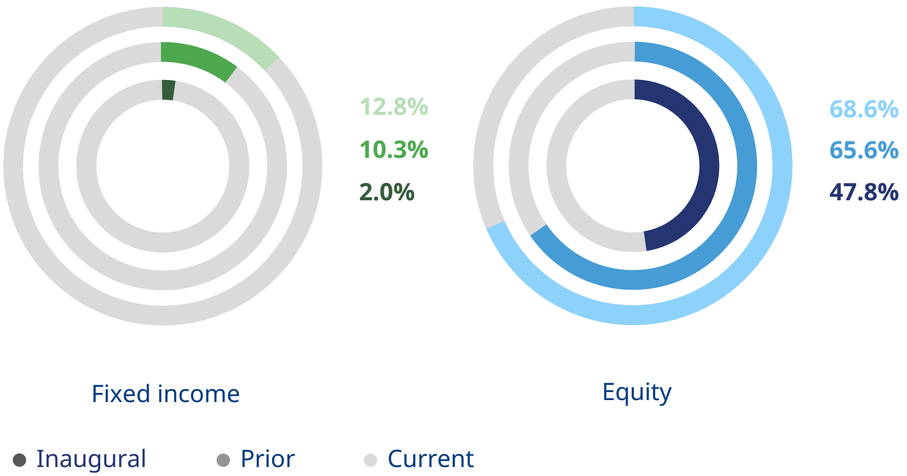
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

Mexico

Mexico's retirement income system comprises a mandatory and funded DC scheme for individuals with formal jobs in private companies and government employees. In 1997, the private company scheme transitioned from DB to DC, and the government employees' scheme made the same transition in 2007. The 10 AFORES are the retirement fund administrators for these schemes. Some companies also offer supplemental private pension plans to their employees (either DB or DC).

In 2021, the DC mandatory scheme for private companies was reformed to increase contributions, increase the minimum pension, cap AFORES' fees and lower the minimum conditions to retire. A summary of the main changes follows:

- **Increased contributions:** Increase from 6.5% of employee's salary (with a cap for higher earners) to 15% in eight years; contributions will start increasing in 2023 and reach 15% in 2030.
- **Minimum pension:** Increase the minimum pension paid by the social security retirement system, depending on age, salary and contribution weeks.
- **Minimum contribution weeks to retire:** Decrease the minimum requirement of contribution weeks needed to retire from 1,250 weeks to 750 weeks for 2021. These new minimums will add 25 additional weeks each year until 2030, when the new minimum will be 1,000 weeks.
- **Fee cap:** A maximum fee that can be charged to members has been established, effective at 0.57% in 2022. The regulator calculated a cap based upon averages of DC schemes in other jurisdictions, such as Colombia, Chile and the US.

Overall, AFORES investments dominate the results of our analysis, particularly in terms of exposure to foreign equity, as supplemental private pension plans have minimal foreign exposure. The AFORES' foreign equity allocation at the end of the recent period was 15% of total assets, within the cap and represented around 71% of the equity portfolio.

The investment strategy in 2021 has been dominated by target date funds. Nine AFORES target date funds strategies are recent additions to the AFORES' offerings and represent an evolution from the static risk-managed portfolios previously offered to members. As part of this shift, which started in 2020, we have seen increasing exposure to foreign equity and alternatives, as the target date funds have introduced greater diversification for members' investments.

The limit for foreign equity remains at 20%, although regulatory change to increase the foreign maximum to 30% is still under consideration and would further support the ability of investors to diversify offshore and increase exposure to equity and alternatives.

In addition to the mandatory AFORES schemes, some limited tax incentives encourage companies to provide their workers with supplemental private pension plans. These supplemental plans are subject to certain investment restrictions:

- Thirty percent must be invested in government instruments or fixed income mutual funds.
- The remaining 70% can be invested in any type of asset, as long as the instrument is registered with the Comisión Nacional Bancaria y de Valores.
- A maximum of 10% can be invested in the company's own securities.

As of the end of December 2021, close to 2,370 supplemental private plans represented US$27 billion registered with the Comisión Nacional del Sistema de Ahorro Para el Retiro — or 2.5% of Mexico's GDP. Thirty-seven percent of these plans are DB — a figure that has been decreasing over the past four years, mainly due to tax regulation changes and plan administration costs. At the same time, we observed an increase in the creation of hybrid plans, which include DC components with a guaranteed minimum benefit and have become particularly prevalent.

During the pandemic, the withdrawal of some savings from the AFORES became popular, especially in 2021, because the regulation allowed withdrawals due to unemployment. The approximate withdrawal totaled 18 billion Mexican pesos (US$872 million) — the highest amount in history and 11% higher than 2020.

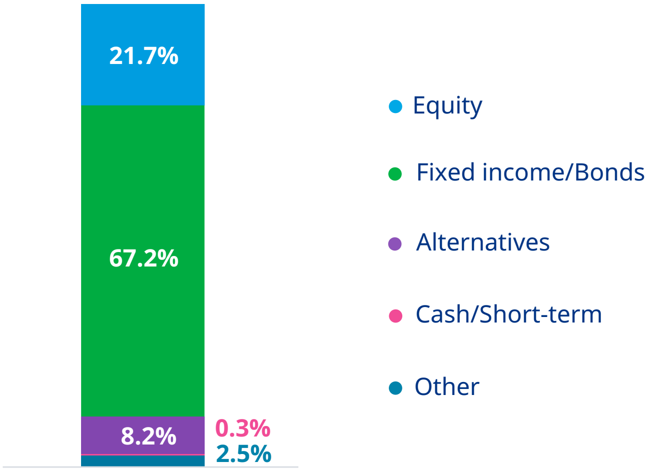
New regulations governing ESG within the AFORES were recently announced, to go into effect in 2022. These require AFORES to publicly disclose how they integrate ESG factors into their investment processes and define both an investment policy and a risk-management policy that considers ESG factors, gradually increasing these factors until reaching approximately 40% of the portfolio. Passive strategies cannot be included in the ESG scope, so we may see a shift toward actively managed strategies.

For DB supplemental plans, the investment strategy is bouncing back to a more aggressive allocation by increasing exposure to equity. However, many DC supplemental plans have migrated from a single-investment option to a life-cycle or lifestyle option. Within supplemental private pension funds, asset allocations did not move significantly over the period. Most of the increase was in equity assets due to the economic recovery. Most private pension plans seek actively managed strategies through mutual funds, although plans that are more sophisticated make direct investments.

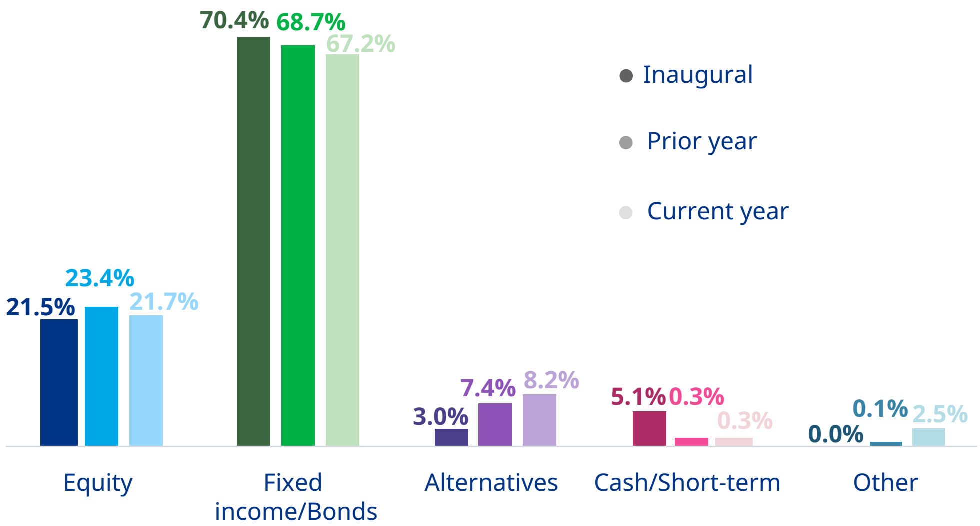
Data include:

Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Private pension plan	Corporate DB	13,060
Private pension plan	Corporate DC	14,311
AFORES	Mandatory DC	252,279
Total		**279,650**

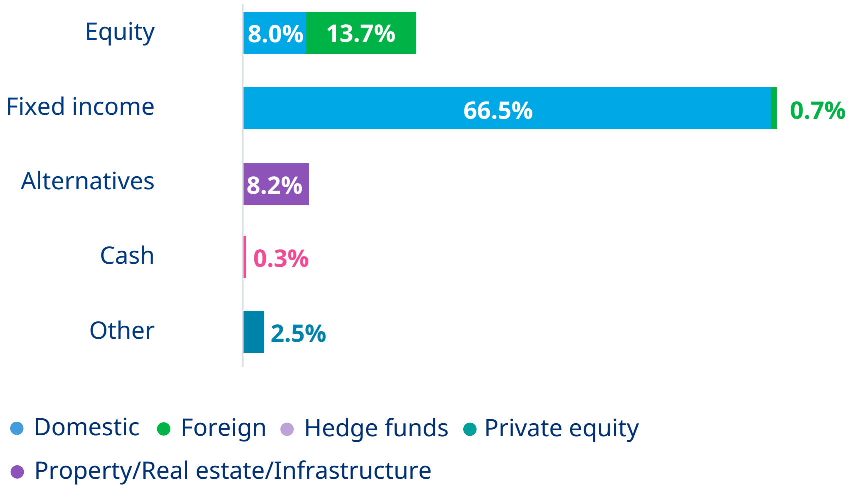
Current asset allocation



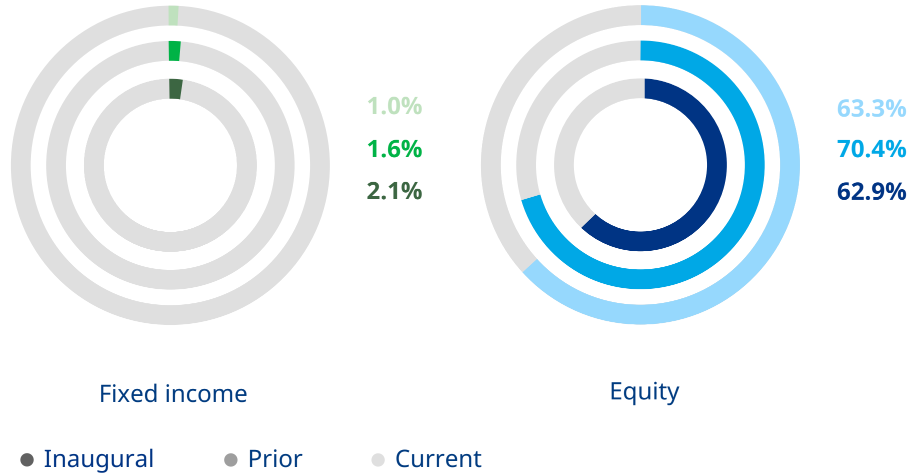
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

Peru

Peru's retirement income system comprises a means-tested pension and two parallel and mutually exclusive pension systems. People can choose between a pay-as-you-go DB public system and a fully funded DC system managed by four private-sector AFPs. Once an individual chooses either the DB or DC scheme, strict rules limit switching between them; for example, only participants who began contributing to the DC scheme prior to 1995 may switch into the DB scheme. Supplemental corporate private pension plans are not common.

AFPs offer individuals the ability to select from a number of risk-based funds; each has set ranges of allowable investments, including overall equity/fixed income exposure and the level of foreign assets.

At the time of writing, pension reform was being debated in Peru. The reform draft aims to unify the pension systems currently coexisting in the country. The focus of the reform is to increase coverage, although it still needs to establish funding sources in order to be sustainable. In addition, the lack of competition and the need to reduce the fees AFPs charge are always hot topics. Like other pension systems in the region, the Peruvian AFP system produces low replacement rates and reaches only a small portion of the population.

Over the recent period, alternative investments have increased, and this trend will continue increasing until reaching the cap allowed for the pension funds, which varies between 15% and 20%, depending on the risk level of the fund.

Due to the COVID-19 pandemic, members could elect to temporarily stop their 13% contributions to the pension fund. In addition, the Peruvian Congress agreed that active workers may withdraw up to 25% of their savings. Accommodations were also made for members who had not contributed for the past 12 months and for workers who had been affected by mandatory social-isolation requirements.

Peru devotes a significant portion of its allocation to equities (almost half of AUM), of which more than 60% is invested internationally. Additionally, the international fixed income exposure is 4%, which is down from 6% last year (the fixed income portfolio remains domestically focused, with 32% invested internationally).

Peru's AFPs have been moving strongly toward passively managed strategies in order to reduce fees. At the same time, they have shown an increasing interest in higher-returning equity segments, such as emerging markets, including Asian exposure.

From a sustainable investing perspective, three of the four AFPs in Peru have joined the Responsible Investment Program, and are considering ESG issues in their investment policies and strategies.

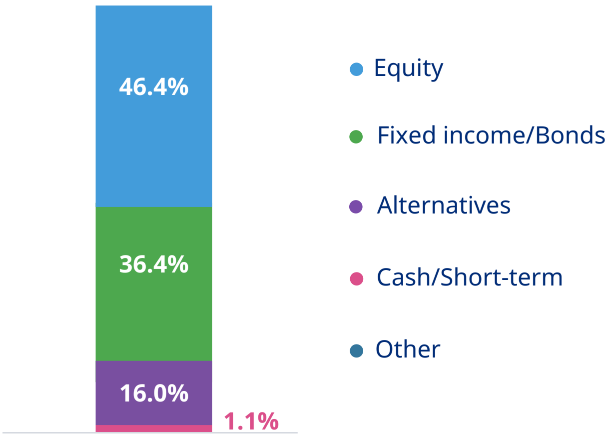
The government is expected to release guidance for ESG principles within the AFPs' investment portfolios. Similar to Colombia's ESG guidance, this is likely to focus on corporate governance and conflict issues and less on environmental issues.

El Dorado Investments, our partner for delivering solutions across Latin America and particularly in Chile, Colombia, Mexico and Peru, contributed to this survey in Peru.

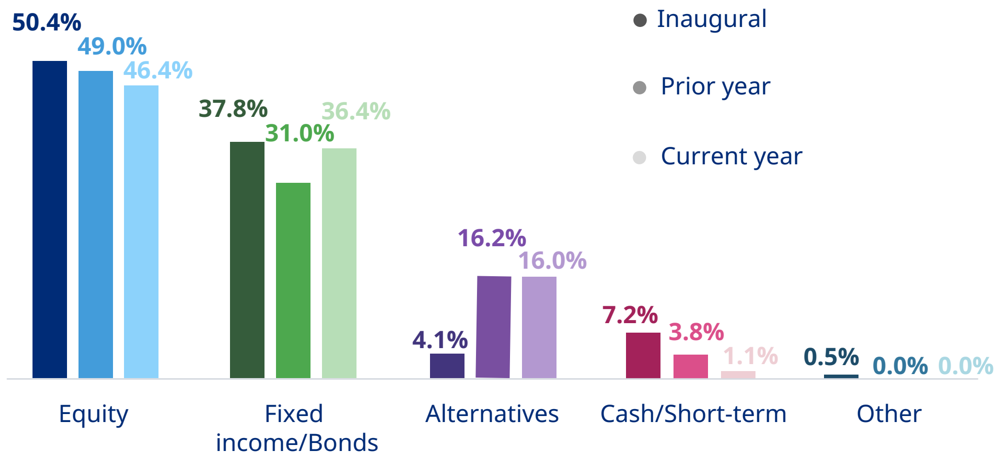
Data include:

Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Administradoras de fondos de pensiones	Mandatory DC	33,067

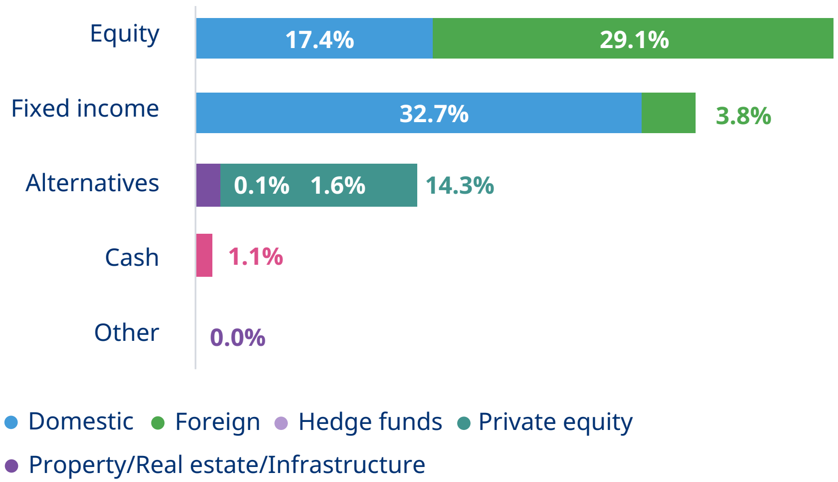
Current asset allocation



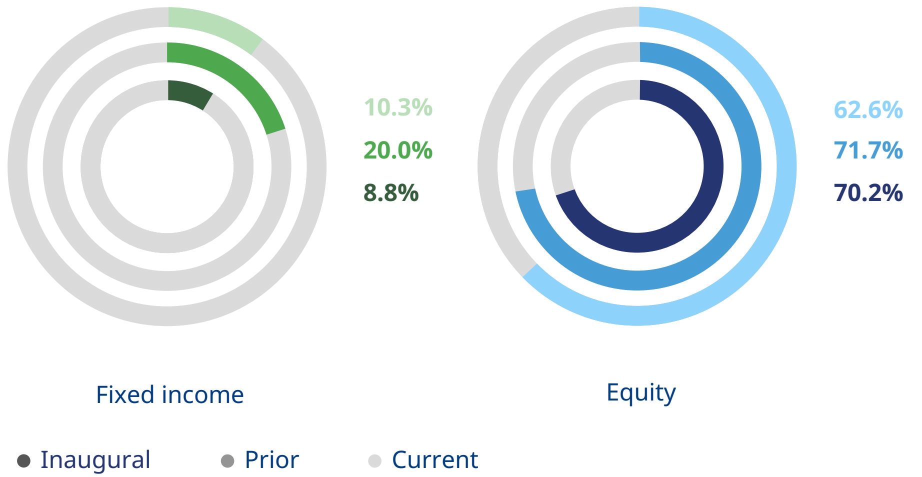
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

06. Middle East and Africa

Middle East and Africa

The region comprising the Middle East, Turkey and Africa includes a number of large, sophisticated investors. Based on Mercer's estimates, the GCC region is home to more than US$5 trillion in institutional AUM; however, data regarding investors in the region are not publicly available. A key initiative launched in the United Arab Emirates in early 2020 was the launch of the first government-sponsored DC savings scheme for expatriates in the market, the Dubai International Financial Center Employee Workplace Savings (DEWS) Plan, which is intended to provide a better mechanism for employees to save for their retirement and other financial goals. This plan has been included in our data set for the first time this year.

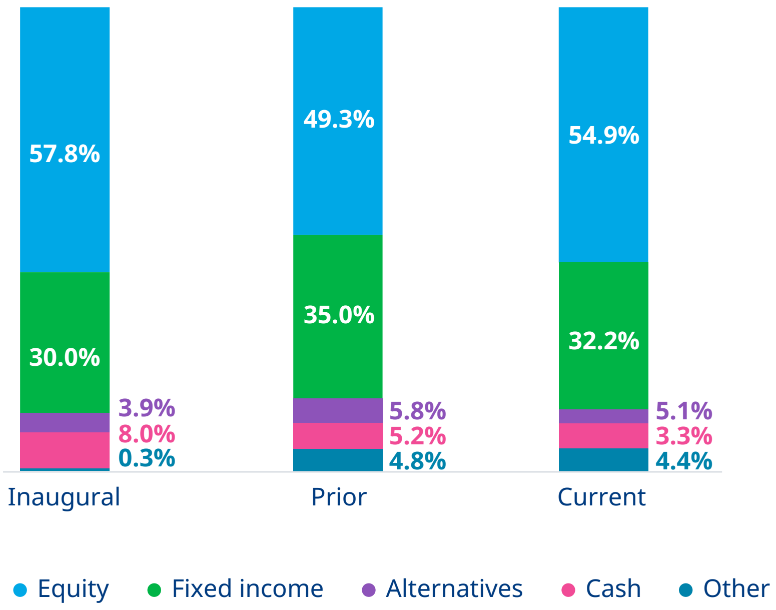
Information for this survey comes from Mercer colleagues and, in South Africa, from Alexforbes' *Manager Watch*™ survey.

Data include:

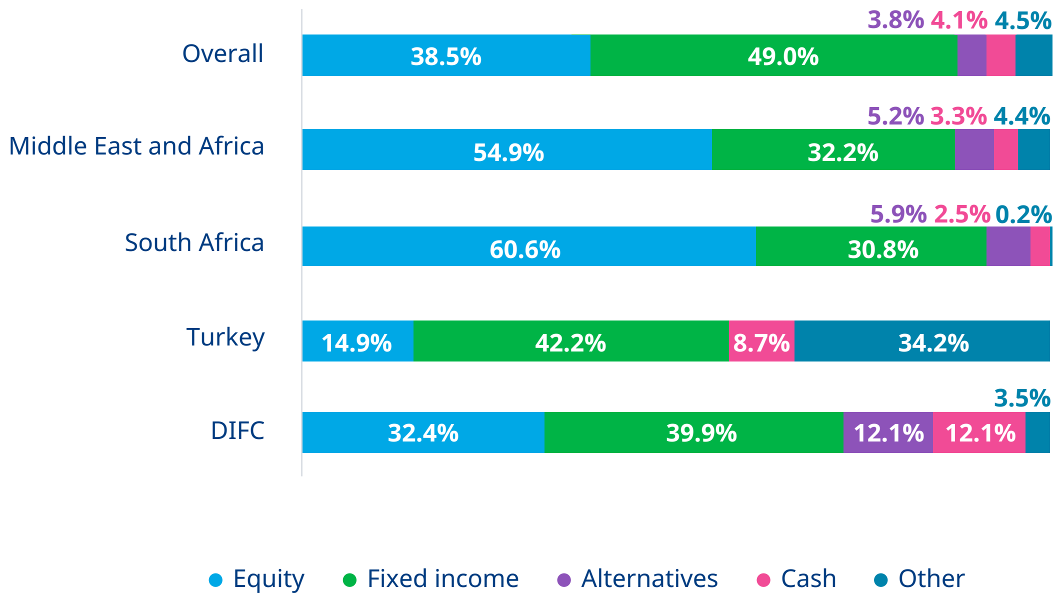
Market	Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
DIFC	DIFC Employee Workplace Savings Plan	Mandatory DC	211
South Africa	Government Employees Pension Fund	Government DB	139,914
	Plans represented in the Alexforbes Investable Global *Manager Watch* survey	Corporate DC	38,749
Total			**178,663**
Turkey	State contribution	Mandatory DC	25,250
Total			**204,124**

This region was more heavily positioned to equities compared to the overall survey positioning, with 55% of total assets in equities relative to 39% for the survey average. South Africa had a particularly high exposure to equities of 61%, with 31% of total assets in fixed income. The DEWS Plan represents members' investment selections across its menu of diversified fund offerings and ended the period with 32% of total assets in equities and 12% in alternatives (real estate). In Turkey, concerns about economic and market volatility have led to an allocation of over 51% in fixed income and cash combined, as well as a large allocation to "other" (mainly representing precious metal funds and public-leasing certificates, which are securities issued by asset-leasing companies with returns tied to revenue received from the underlying asset).

Middle East and Africa asset allocation

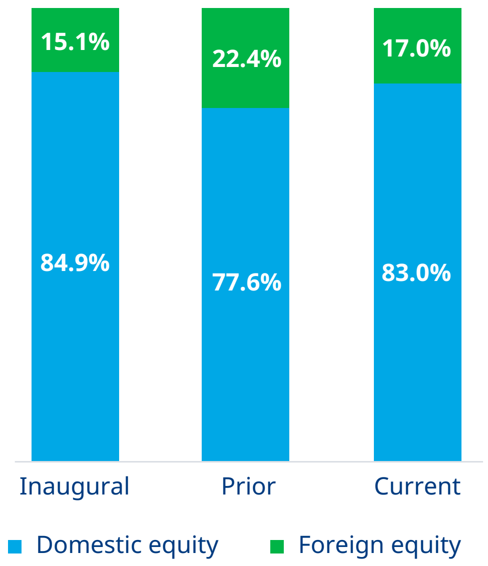


Current asset allocation (%) — Middle East and Africa

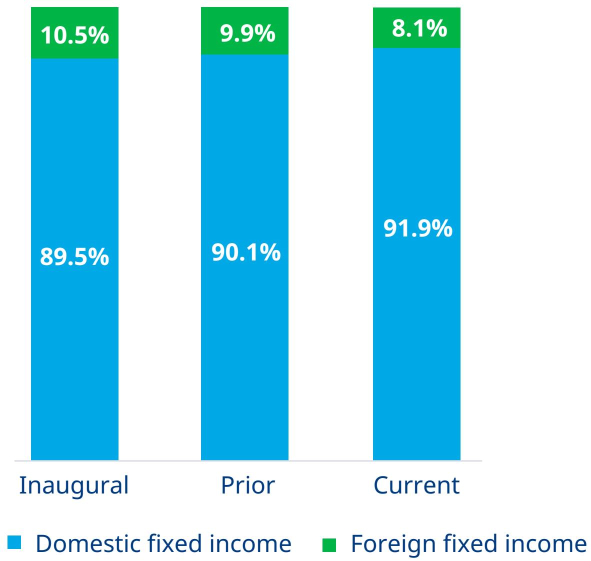


Note: "Other" is not defined.

Domestic versus foreign equity



Domestic versus foreign fixed income



South Africa has decreased exposure to foreign markets during the recent period, within both equities and fixed income, although foreign equity investments are up slightly as a proportion of total equity assets over the full measurement period. Conversely, although Turkey has been increasing exposure to foreign markets within both equities and fixed income, it remains heavily home biased within equities. The DIFC's investment options are fully global portfolios and do not contain a domestic allocation.

Investors in the region are assessing the governance and oversight of their plans. In the GCC region, some pension schemes and many other investors have been reviewing their long-term investment strategies and investment policy statements to ensure they remain appropriate to meet their investment objectives following the global pandemic. In Turkey, industry changes are moving to support greater choice and transparency for members in a new system that enables participants to buy and sell all private pension system mutual funds regardless of the pension company that administers their plan.

Dubai International Financial Center and broader Gulf Cooperation Council (GCC)

In the GCC region, pension funds are the second-largest category of institutional investors after sovereign wealth funds (SWFs), with AUM estimated to be around US$600 billion. Pension systems across the GCC vary, but, in general, pension systems that cover nationals fall within two main categories:

- Government- or state-sponsored plans, which comprise the majority of assets and have embarked on an institutionalization journey outlined later in this section.
- Corporate or nongovernment-sponsored plans, which are relatively rare and, in general, are conservatively positioned and lack the sophistication and risk management of their government-sponsored peers.

Expatriates or others who do not fulfill retirement conditions are typically paid an earnings-related lump-sum retirement benefit by their employers.

In 2020, the DIFC Authority introduced an employee workplace savings plan (DEWS) to replace the end-of-service benefits arrangements and align with global retirement savings standards.

The initiative means DIFC employees switched from an unfunded end-of-service benefits regime to a funded, professionally managed DC scheme, to enable members to save for retirement as well as other financial goals. Since its launch in February 2020, the DEWS Plan has drawn more than US$210 million in AUM, with more than 1,300 employers and 20,000 employees enrolled as of September 30, 2021. These assets are now included in this report. Other authorities in the region are exploring the potential to implement similar arrangements based on the success of DEWS.

As markets continued to rise over 2021, investors in the region continued their manager-selection activity. GCC pension funds sought to add further diversification to their portfolios, with an increased level of interest in Chinese investments, particularly onshore Chinese equities (China A-shares).

Investors in the region are more concerned about inflation compared to one year ago and are seeking to include some specific allocations to real assets or assets with inflation-protection qualities in their portfolios. GCC pension schemes continued to invest further in alternative investments, particularly in private equity, private debt, infrastructure and real estate, given perceived high valuation levels in public equities and bond markets and concerns about the sustainability of returns over the coming years.

We saw no changes in investors' foreign investment restrictions — some GCC pension schemes require a minimum proportion of assets to be invested in local or regional investments; though this varies by jurisdiction, many pension schemes allocate 10%–30% to domestic/GCC assets. Cash allocations remain high among some of the GCC pension funds, particularly in jurisdictions where deposit rates are viewed as attractive relative to the yields available in developed market government bonds.

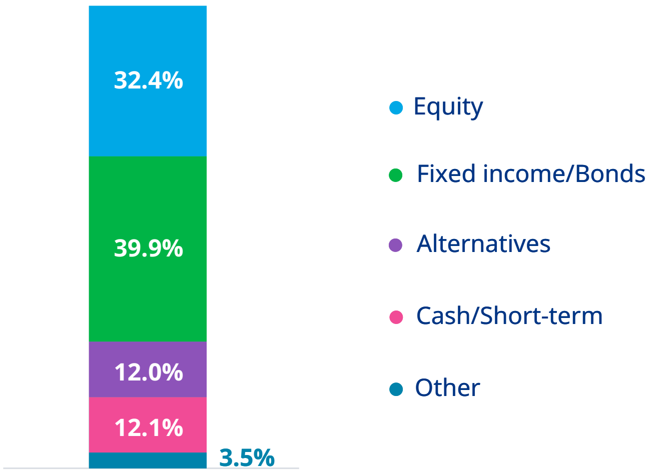
Many investors in the region continued to make enhancements to their governance frameworks throughout 2021. Some GCC pension schemes and many other investors, including large family offices, are reviewing their long-term investment strategies and investment policy statements to ensure they remain appropriate to meet their investment objectives following the global pandemic and improve their level of institutionalization. Additionally, in Saudi Arabia and Oman, state pension scheme mergers are underway, which will significantly alter the investment governance arrangements for the pension schemes in each country.

ESG factors are a growing topic of consideration for pension fund investors in the GCC, driven by the influence of some regional SWFs that have announced plans to increase their focus on sustainable investing. We also expect to see increased stakeholder pressure to consider ESG factors, such as from investment committee members and governments, as the focus on responsible investment initiatives grows globally. Areas such as stewardship and sustainable investment are expected to feature more prominently on pension fund agendas. Given the region's high dependence on fossil fuels, investors are navigating the environmental factors separately and in more detail, including consideration of the growing local hydrocarbon industry, which now contributes to nearly a third of GDP.

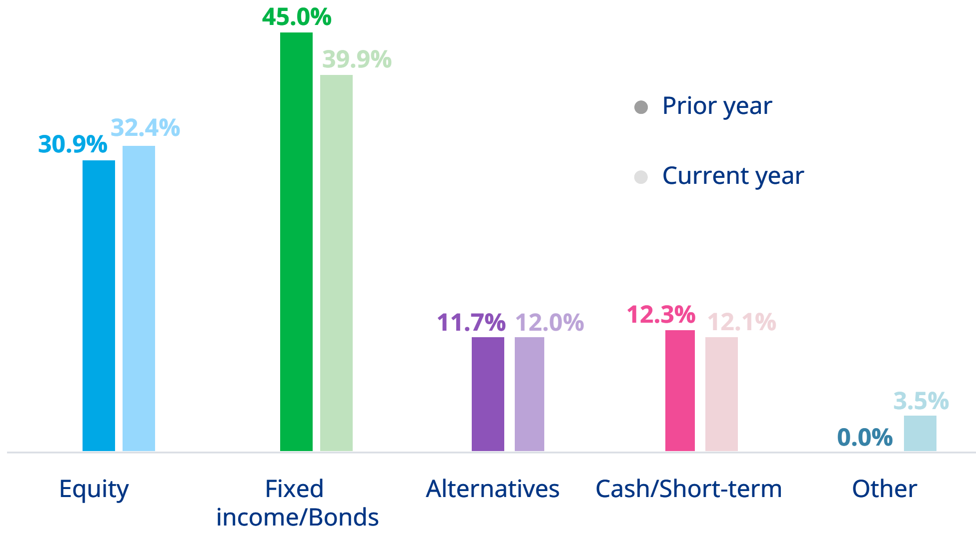
Data include:

Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
DIFC Employee Workplace Savings Plan	Mandatory DC	211

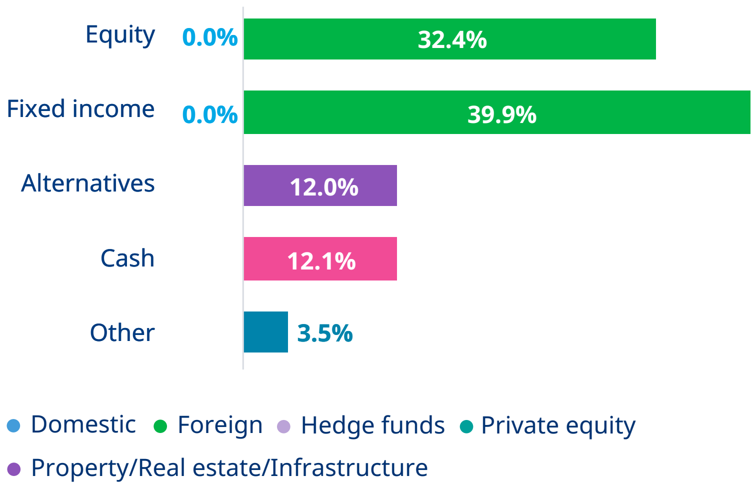
Current allocation



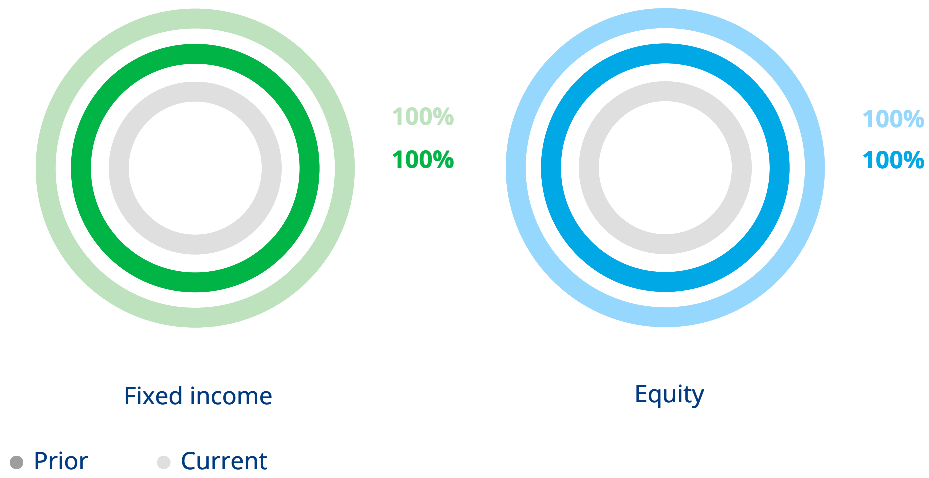
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

South Africa

South Africa's retirement income system comprises a means-tested public pension and tax-supported voluntary occupational schemes. The analysis includes data from South Africa's Government Employees Pension Fund (GEPF) as well as information provided by Mercer's strategic partner in Africa, Alexforbes (AF). Allocations provided by AF are based on its *Manager Watch*™ survey.

Within the *Manager Watch* survey, allocations to growth assets increased year-on-year compared to the previous survey (+6%). Managers adopted a more pro-risk stance as investors looked toward a rebound in business activity and more normal conditions despite the emergence of new COVID-19 variants. Increased equity allocations were primarily funded by a reduction in cash allocations, with domestic equities being favored over international equities owing to more attractive valuations within the South African market.

Although international assets saw a reduction (-2.5%) in the *Manager Watch* survey compared to the prior year, investors continue to make use of their permitted allocations to non-African investments, with international assets representing around 28.5% of total allocations at the reporting date. (Prior to February 2022, retirement funds were allowed to invest 30% of their portfolios outside of Africa plus an additional 10% in Africa ex-South Africa investments.)

The allocations to offshore assets by retirement funds are expected to increase following the decision by South Africa's National Treasury in February 2022 to allow retirement funds to invest up to 45% of their portfolios anywhere globally. Previously, pension funds typically invested up to the 30% non-African limit but, owing to limited opportunities, did not make significant use of the 10% allocation to Africa ex-South Africa investments.

In line with the *Manager Watch* survey, growth assets within the GEPF increased from the last survey (+6%), with the fund's local equity allocation increasing (+8%) over the past year. Alternative investments represent around 6.5% of the GEPF's asset allocation, with a strong emphasis on developmental or impact investing with an infrastructure focus. The GEPF's impact investments aim to generate a return while also providing positive outcomes by creating jobs and addressing pressing issues like inequality and transformation imperatives. Beyond the GEPF, there is growing appreciation that retirement funds can play a role in generating economic growth in South Africa through infrastructure investments, with larger funds indicating a desire to increase allocations.

Integrated within the GEPF's process for selecting not only impact investments is the consideration of ESG factors, which has been a rising topic of interest with AF and South African investors.

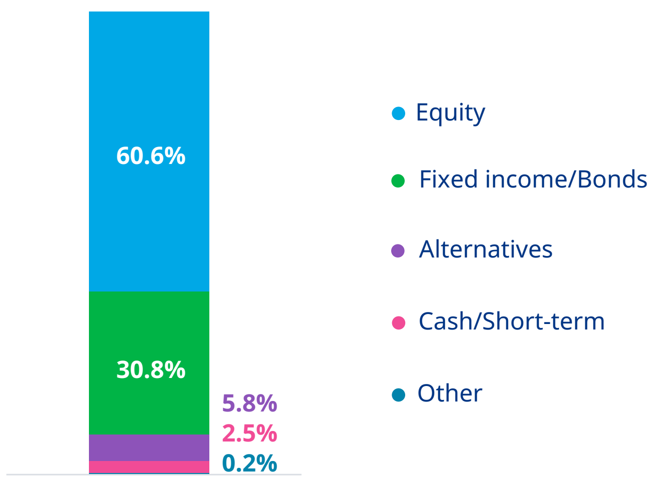
In particular, AF has an "Investment Framework for Responsible Investing" that follows a beliefs, policy, process and portfolio approach to provide a transparent and practical pathway to understand and identify where responsible investment considerations sit within the investment approach and how they are incorporated and reflected in investment portfolios. Like many organizations in South Africa, AF places particular emphasis on social issues, including Black Economic Empowerment.

The use of alternative asset classes is limited, as liquidity will remain a constraint in a largely DC pension fund market; however, the consolidation of pension funds should be a tailwind for increasing illiquid allocations and larger allocations to alternative investments. Consolidation of stand-alone pension funds into umbrella fund arrangements has been a long-standing trend in the South African market and is expected to continue. The South African regulator has announced the current figure of around 1,500 active pension funds should be reduced to fewer than 200, with the aim of lowering costs and improving governance and member outcomes.

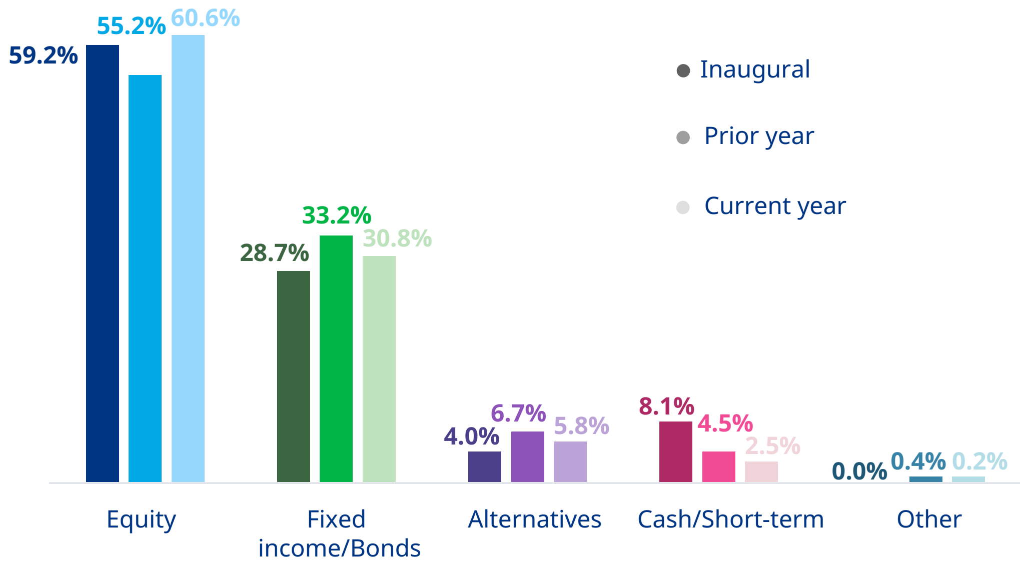
Data include:

Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Government Employees Pension Fund	Government DB	139,914
Plans represented in the Alexforbes Investable Global *Manager Watch*™ survey	Corporate DC	38,749
Total		**178,663**

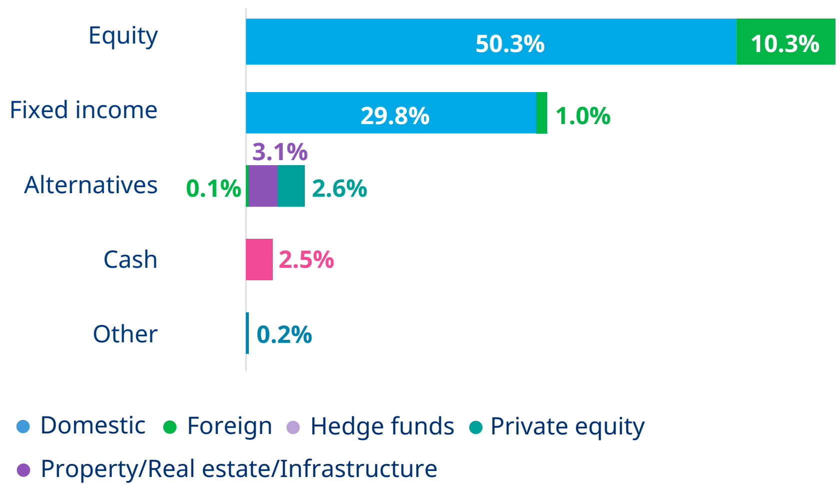
Current asset allocation



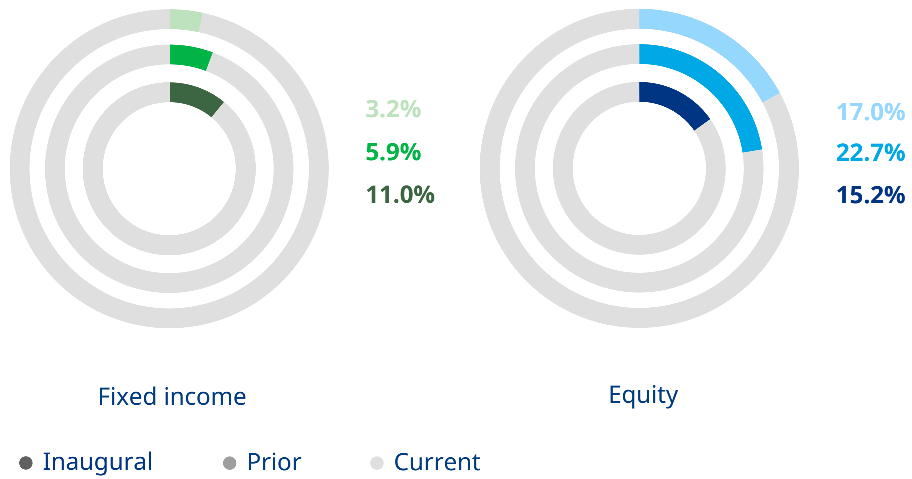
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

Turkey

The pension system in Turkey consists of three pillars. The first pillar is a mandatory, pay-as-you-go public pension in the form of an earnings-related scheme supported by a means-tested safety net and a flat-rate pension. The second pillar comprises occupational schemes, which are mostly DB plans. The third pillar is a voluntary, fully funded private pension system, established in 2003.

Over the past decade, two major reforms to the third pillar have been introduced to encourage savings. In 2013, the government started matching employee contributions by 25% up to the monthly minimum gross wage. In January 2017, it introduced auto-enrollment with mandatory employee contributions. Employers with more than five employees are now required to implement a plan, but not to contribute financially to pension pots.

We would have expected to see these changes result in an increase in the participation rate and pension savings, but the scheme has seen a higher opt-out rate than predicted, meaning only around 40% of employees are staying in the auto-enrollment plans.

Today, Turkey has total AUM of nearly US$25 billion invested in 367 pension funds, with 7.1 million contributors in voluntary plans and 6.1 million contributors in auto-enrollment plans.

The new trend of robo-advisory fund systems aims to increase the level of financial literacy in Turkey, and awareness of fund preference is coming to the fore. All pension companies in the sector offer education on general market trends and information, and participants who want to be included in the robo-advisory systems answer a risk questionnaire to receive specific fund-allocation guidance based upon their responses.

Another trend for pension funds in Turkey is the "BEFAS" system, in which participants are allowed to buy and sell all private pension system mutual funds regardless of the pension company that administers their plan. In this context, it is possible for members to compare funds in an open-architecture way rather than being limited by the proprietary funds offered by their administrators. This gives members the opportunity to assess performance, fees and other factors when making their selections amid a wider array of choices.

In addition to all these reforms, in order to increase the investment preferences of private pension funds, the right to change fund allocation ratios has increased from six times a year to 12. In this way, participants who want to make more changes according to market developments are allowed to transact.

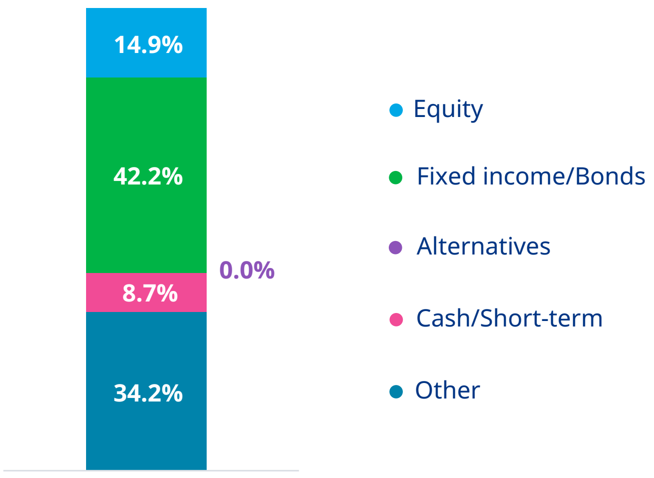
Another effort to drive increased savings and additional participants in the system is the new ability for parents to open a pension account on behalf of their children who are still under the age of 18. The expectation is that this will create additional savings awareness and habits.

The government is currently discussing new reforms, which include reenrollment to the auto-enrollment system, mandatory employer contributions to DC plans and integration of termination indemnity to the private pension system. These actions, if implemented, will encourage long-term savings and increase private pension assets under management.

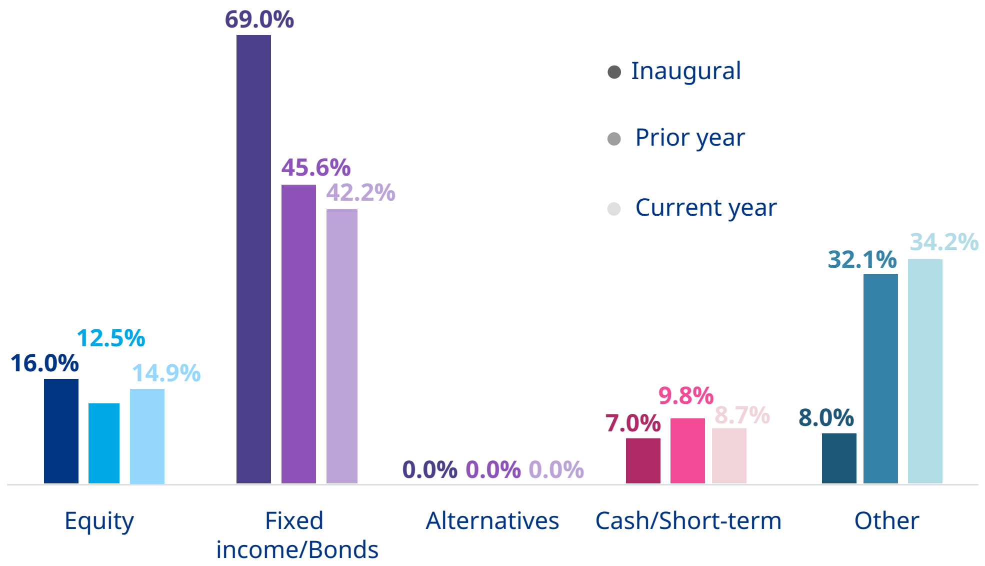
Data include:

Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Voluntary	Voluntary DC	20,441
Voluntary state contribution	Voluntary DC	2,937
Auto-enrollment (employee)	Mandatory DC	1,790
Auto-enrollment state contribution	Mandatory DC	82
Total		**25,250**

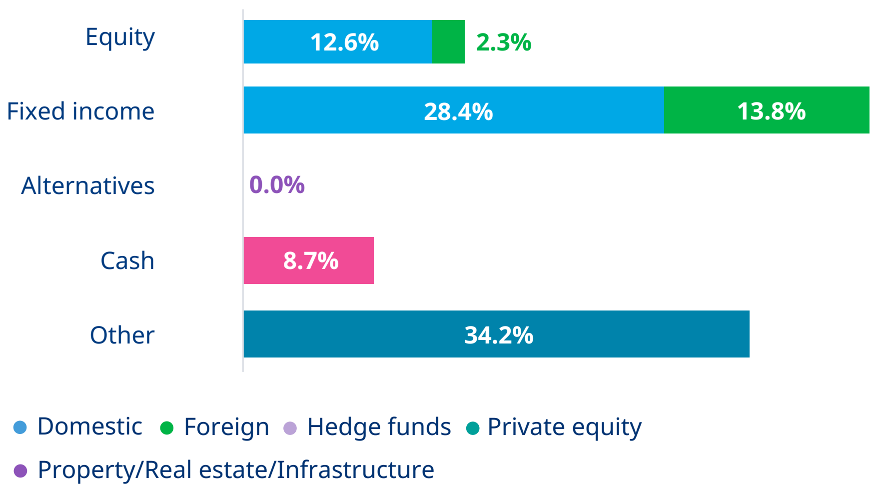
Current asset allocation



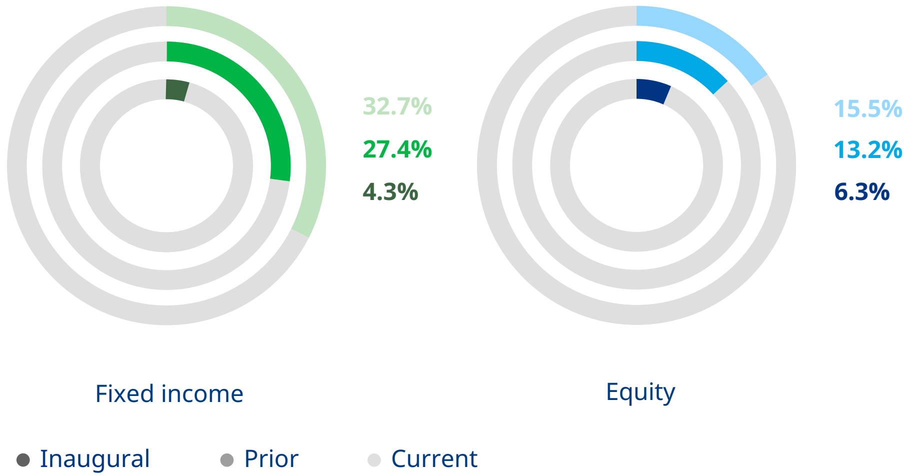
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

07. Asia

Asia/Asia ex Japan

Asia represents a diverse region. The data in our survey are drawn from mandatory DC schemes, such as those found in Hong Kong and Malaysia, and large government DB schemes, like those found in South Korea and Japan, and many others in markets across the region. Given the size of the Japanese pension system, notably including GPIF, we will review trends for Japan and the rest of Asia separately.

Data include:

Market	Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Hong Kong SAR	MPF schemes	Mandatory DC	150,798
India	National Pension System	Government DC[20]	78,718
	Seamen's Provident Fund Organization	Government DC	275
	Employee Provident Fund — EPFO	Government DC (with guarantee)	187,427
Total			**266,420**
South Korea	National Pension Fund	Partially government-funded DB	766,562
	Government Employee Pension Fund	Partially government-funded DB	7,551
	Teachers' Pension Fund	Partially government-funded DB	21,994
	Military Mutual Aid Association Co Ltd.	Government DC	11,681
	Corporate Pensions	Corporate DB	141,602
	Corporate Pensions	Corporate DC	60,818
Total			**1,010,208**

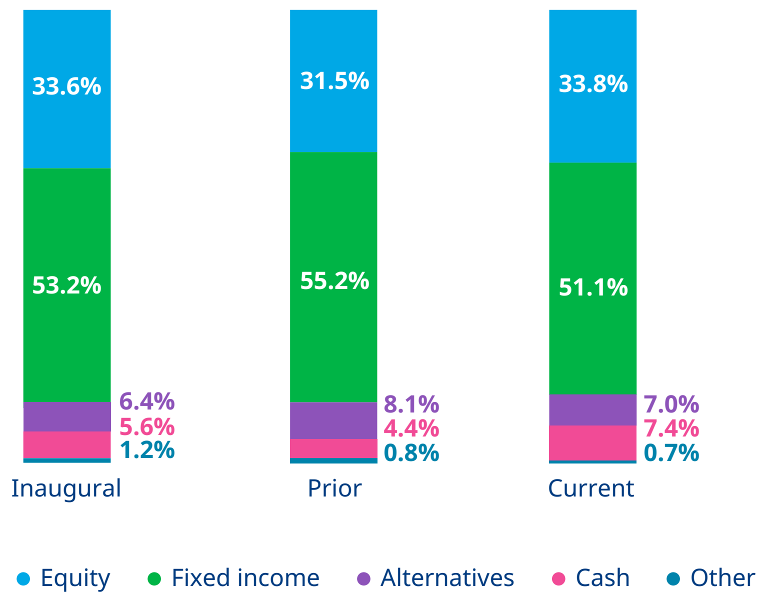
[20] Established by government but now overseen independently by NPS Trust.

Market	Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Taiwan	Statutory corporate DB plans (LSA)	Mandatory DB	31,880
	Statutory corporate DC plans (LPA)	Mandatory DC	96,699
	Private school pension fund	Government DB	56
	Private school pension DC	Government DC	2,167
	Public Service Pension Fund	Government DB	22,742
Total			**153,544**
Thailand	Government Pension Fund	Government DC	14,230
	Voluntary provident fund	Corporate DC	41,515
	SSF benefit fund (old age and child allowance)	Government DB	74,581
Total			**130,326**
Total			**1,711,296**

Asset allocation for the Asia ex Japan region is broadly aligned with the overall survey averages; however, it has a higher allocation to alternatives of around 7%, compared to around 4% for the overall survey.

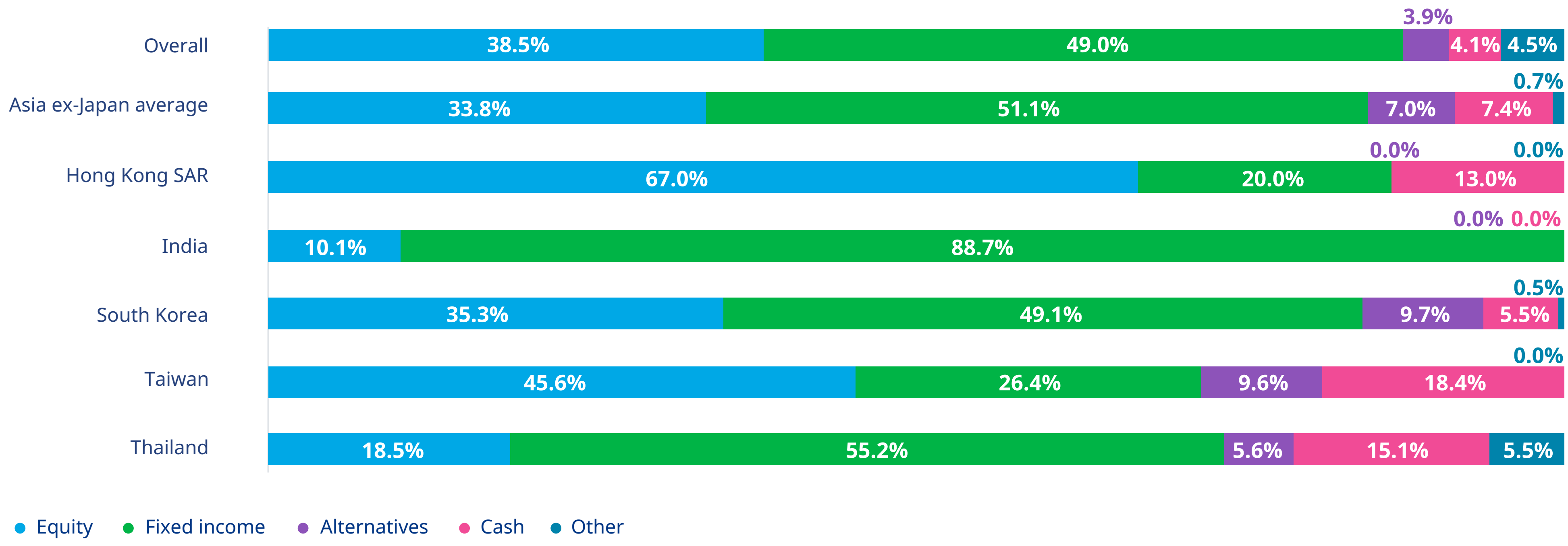
Over the past few years, Asia ex Japan investors have held allocations steady, with modest increases to alternatives over the full measurement period. Hong Kong's allocation represents investment choices from participants and has the highest equity allocation in the region at 67%. South Korea has the highest allocation to alternatives among all markets in the region at 9.7%, though it decreased in this measurement period from 11.4% in the prior year. Conversely, India's fixed income allocation is significant at close to 89%.

Asia ex Japan asset allocation



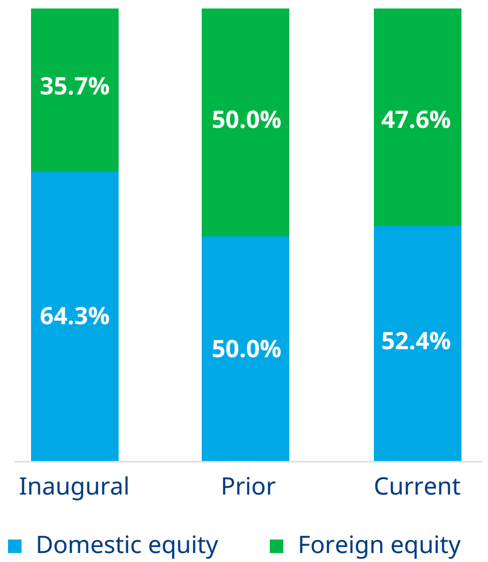
Note: "Other" is not defined.

Current asset allocation (%) — Asia ex Japan

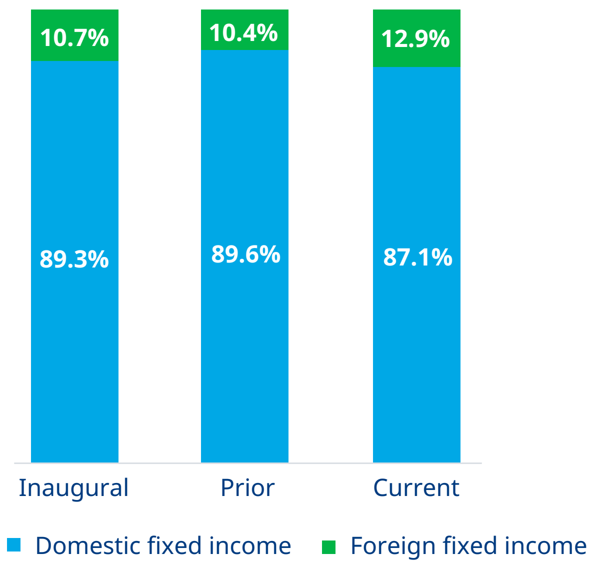


Note: "Other" is not defined.

Domestic versus foreign equity



Domestic versus foreign fixed income



The proportion of total equity assets invested in foreign equities has increased over the full measurement period, from 36% in the inaugural period to 48% in the current period; shifts in South Korea, Taiwan and Thailand have contributed to this. Foreign fixed income has remained a relatively low portion of fixed income assets, although it has increased modestly to 13% in the current period.

Investors are shifting to adapt to ESG risks when considering their investments, with significant growth seen in ESG-oriented products offered as well as adoption of guidelines and principles by investors across the region. For example, South Korea's NPS announced in 2021 that it plans to allocate as much as half of total assets to ESG investments by the end of 2022, while China has seen the range of ESG-related products roughly double over the last year or so.

Asian investors are also showing continued interest in alternatives to diversify portfolios amid a low-interest-rate environment and are seeking diversification from traditional asset classes.

China

China's retirement income system comprises an urban system and a rural social system as well as systems for rural migrants and public-sector workers. The urban and rural systems have a pay-as-you-go basic pension consisting of a pooled account (from employer contributions or fiscal expenditure) and funded individual accounts (from employee contributions). Supplementary plans are also provided by some employers, more so in urban areas.

Some domestic investors can invest in foreign stocks and bonds through a specific program, Qualified Domestic Institutional Investor (QDII), which is open to institutional investors who meet certain qualifications (such as insurance companies, banks, funds and investment companies, but not pension schemes). Quotas in this program increased in 2021, totaling US$157.5 billion in Q4 2021, up US$116.7 billion from the prior year, and the regulator has signaled its intentions to normalize the schedule of granting quotas to facilitate these outbound investments for domestic investors' exposure to foreign markets.

In addition to the QDII program, the Shanghai–Hong Kong Stock Connect launched in November 2014, is a cross-boundary investment channel that connects the Shanghai Stock Exchange and the Stock Exchange of Hong Kong. Under the program, investors are allowed to trade shares on the other market using local brokers and clearing houses, and the program is open to pension schemes.

With regard to ESG in general, China has undertaken a number of initiatives for carbon reduction, including as part of its most recent five-year plan and its national carbon market launched in July 2021. These priorities are just some of the reasons driving Chinese investors' awareness of the importance of ESG. More and more investors are considering ESG and sustainability risks in their portfolios, and we are seeing a number of trends that point to rising interest in this topic.

- According to the United Nations Principles for Responsible Investment (PRI), the number of PRI China signatories has increased by more than 50% in 2021, with 26 new signatories.
- China's National Council for Social Security Fund issued its first-ever request for proposal for a global responsible investing equities mandate in September 2020.
- At the end of 2021, 175 ESG-related funds were issued in mainland China, totaling 363.6 billion yuan (US$57 billion). Of these, nearly half were issued in 2021. We've seen significant growth since 2015, when there were 25 registered ESG-related funds with 28.2 billion yuan (US$4.4 billion).

Investors are allocating more to alternative investments for the illiquidity premium and higher yield amid a low-interest-rate environment. Hedge funds and related quantitative investments have been growing rapidly, though we expect increased regulation in this area.

Hong Kong SAR

In Hong Kong, the Occupational Retirement Schemes Ordinance (ORSO) and MPF are retirement savings schemes set up for employees. The ORSO came into effect in 1993 as a voluntary occupational retirement scheme, and the MPF system was launched in December 2000 as a mandatory, privately managed, fully funded DC scheme.

The two types of schemes operate quite differently. ORSO schemes are established voluntarily by employers to provide retirement benefits for their employees, and, as such, the governing rules are drawn up by individual employers. Some ORSO schemes are sizable, have a long history and are actively maintained by employers. However, we consistently observe slowing asset growth within ORSO schemes compared to MPF schemes, largely due to their voluntary nature. As of June 30, 2021, ORSO scheme asset growth was 9% over the past five years[21] compared with 101% growth in MPF assets over the same period.[22]

In terms of the types of retirement plans, the DC approach adopted under both ORSO and MPF schemes dominates and accounted for more than 93% of total pension assets as of June 30, 2021. The average fund expense ratio (FER) for MPF funds has shown a declining trend. As of March 31, 2021, the average FER had dropped from 1.57% to 1.45% over the full measurement period.

The Mandatory Provident Schemes Authority (MPFA) is continuing to drive market competition and transparency to create room for fee reductions through collective market power.

Voluntary contributions have grown at a faster pace in the past few years. From April 2020 to March 2021, the voluntary contribution accounted for 18% of the total contribution received in the period, a 64% increase over the same period in 2015/16. In April 2019, the MPFA introduced a tax-deductible voluntary contribution with a cap of HK$60,000 per year to encourage employees to contribute to their MPF schemes. Tax-deductible voluntary contribution represented 2.7% of the total contribution received from April 2020 to March 2021 and grew by 30% year over year.

Our analysis includes only MPF schemes, given their considerable market share. The majority of assets are invested in equities (including equity allocations in lifestyle funds as well as standalone equity funds), with the remainder in fixed income and cash. Alternative investment options have not yet been introduced to MPF schemes because of the restrictions on permissible investments. Asset allocation remained largely the same compared with that of five years ago, and the overall MPF market has a home bias in both the equities and fixed income allocations.

With regard to ESG integration, on November 26, 2021, the MPFA issued a set of guiding principles entitled "Principles for Adopting Sustainable Investing in the Investment and Risk Management Processes of MPF Funds" (the principles). The principles set a high-level framework to help MPF trustees integrate ESG factors into the investment and risk-management processes of MPF funds from a financial risk-management perspective and make the relevant disclosure to MPF scheme members. The four key elements of the principles are governance, strategy, risk management and disclosure.

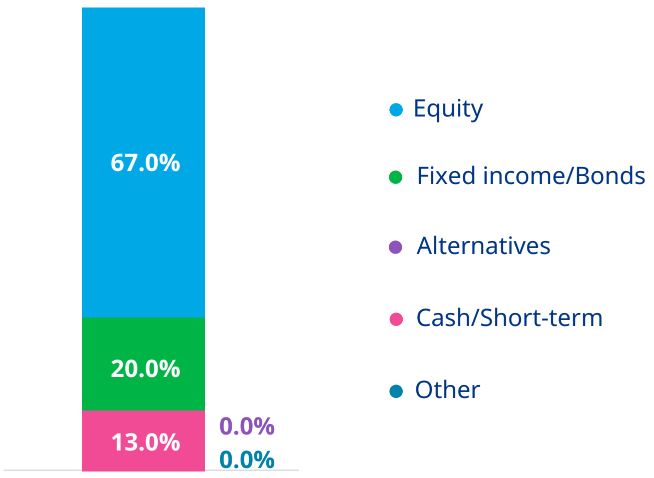
MPF trustees were required to develop an action plan and submit it to the MPFA by February 25, 2022. Further, they are to report their progress on ESG integration according to the recommendations set out in the principles in MPF schemes' annual consolidated reports for all financial years ending on or after November 30, 2022.

Data include:

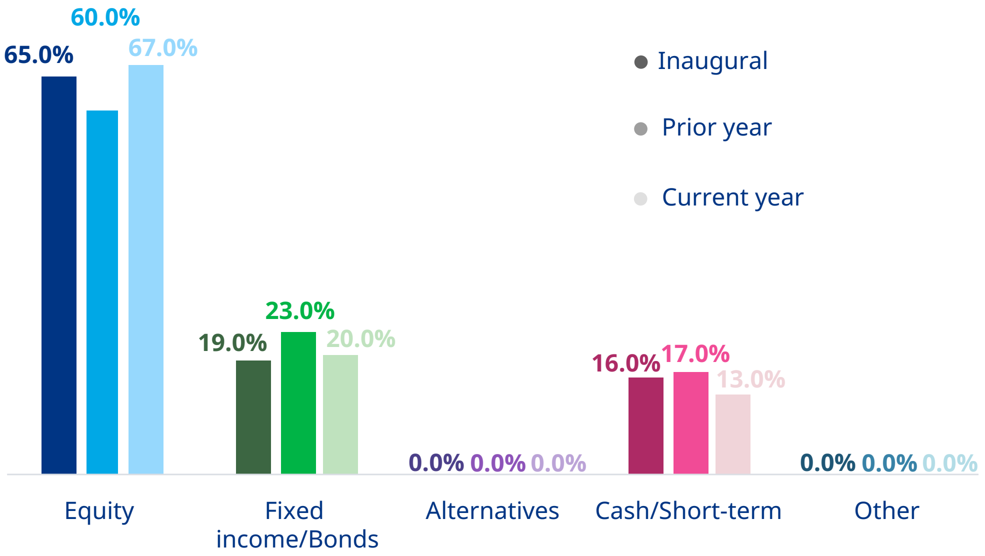
Scheme name(s)	Sponsor and plan type	Current asset size (US$ million)
MPF schemes	Mandatory DC	150,798

[21] As of June 30, 2021, the asset size of ORSO DB and DC schemes stood at US$14.855 million and US$27.124 billion, respectively. On June 30, 2016, these figures were US$14.033 billion and US$24.495 billion, respectively.
[22] As of June 30, 2016, the asset size of MPF schemes was US$77.862 billion.

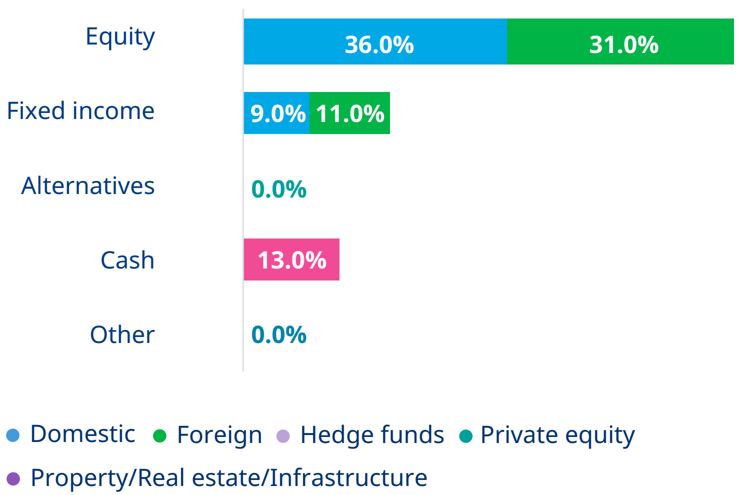
Current asset allocation



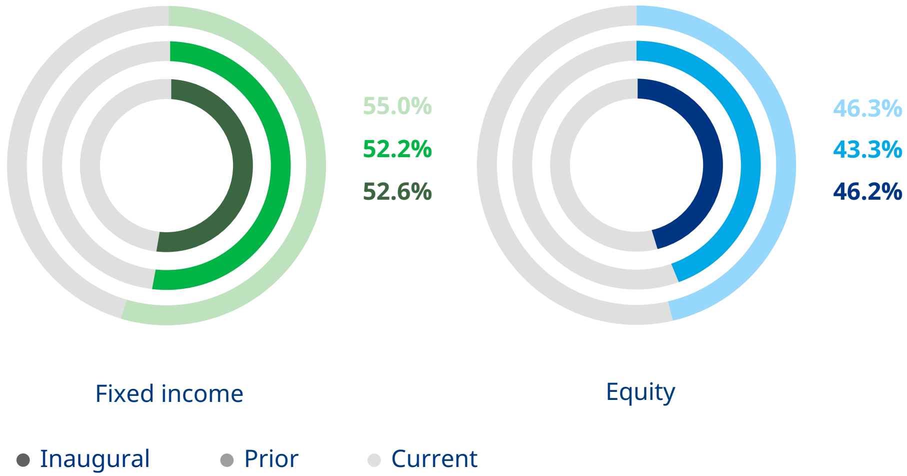
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

India

India's retirement benefit system comprises a DC statutory employee provident fund (hybrid, with a guaranteed interest rate), an earnings-related employee pension scheme (DB) and a supplementary employer-driven/voluntary DC pension scheme, the National Pension System (NPS). Some employers also provide legacy supplementary superannuation schemes, which are largely DC in nature. Due to changes in regulation in 2016 and 2017, these schemes are gradually transitioning to the NPS. Government schemes have been launched as part of the universal social security program, aimed at benefiting the unorganized sector. The NPS is gradually gaining popularity.

The Employees' Provident Fund Organisation (EPFO) was set up in 1952 with a dual role as a regulator and an administrator of the Provident Fund scheme in India. EPFO is a mandatory scheme for corporate employers, and both employees and employers make 12% contributions. Investments by the EPFO are made largely in fixed income instruments and held to maturity. This is a non-unitized plan with an interest credit annually to all members and is largely exempt from income tax. The EPFO does not allow employee choice in investments; fund managers appointed by the EPFO make investment decisions.

The NPS and EPFO both saw an increase in allocation to equity and a reduction in allocation to fixed income compared to the prior year.

This change in asset allocation is reflected in the overall increase of 2% in equity with a corresponding decrease in debt compared to the prior year. This was likely due to buoyancy in the Indian equity markets in 2021. However, allocations to fixed income remain high (owing largely to investment regulation) when compared to some of the other markets covered in this report. Investments in foreign assets are not yet allowed. Media in India widely reported that the EPFO was evaluating investment in alternative investment funds with a view to enhancing diversification; this may follow additional unitization of assets and liabilities.

Another notable trend within employer-managed provident fund trust funds (known as Exempt PF trusts in India) is consolidation. These Exempt PF trusts are considered to be DB plans (due to the interest rate guarantee, which has to be provided by the employer). In 2021, many employers chose to de-risk by migrating to the DC format by opting to transfer their fund assets to the EPFO. The primary trigger for this migration was the increase in investment risk following the credit crisis of 2018, along with defaults by highly rated borrowers. Many other employers are reviewing the viability of their Exempt PFs.

The superannuation/pension space has also seen changes this year. The NPS changed its eligibility age from 18–65 years to 18–70 years. The largest insurer in India, Life Insurance Corporation of India, which also manages sizeable assets of retail and corporate pension and gratuity funds, has announced an IPO for 2022.

This IPO is expected to affect pension and gratuity funds in India, although the implications remain ambiguous.

Social security regulation and the regulatory framework are undergoing a major change in India. Although the long-term impact is unclear, it is a topic of significant discussion and deliberation among sponsors, trustees and other stakeholders.

Other areas of focus continue to be investment policy, fiduciary risk, strengthening of risk-management frameworks, capacity building of trustees and overall governance.

The buoyancy in equity markets from April–December 2021 was visible in the retail investor segment as well, and we saw an increase in their participation.

The Indian markets also continued to see the launch of ESG-focused funds by many large mutual fund companies. ESG funds now make up around 0.35% of the total AUM of mutual funds. However, pension funds in India do not have dedicated allocation to ESG products/funds. The regulator for financial markets in India (the Securities and Exchange Board of India) introduced revised disclosure norms in 2021. These are the Business Responsibility and Sustainability Reporting standards, and they cover ESG perspectives, which will apply for the top 1,000 companies by market capitalization. These new norms are expected to increase transparency and enable market participants to identify and assess sustainability-related risks and opportunities.

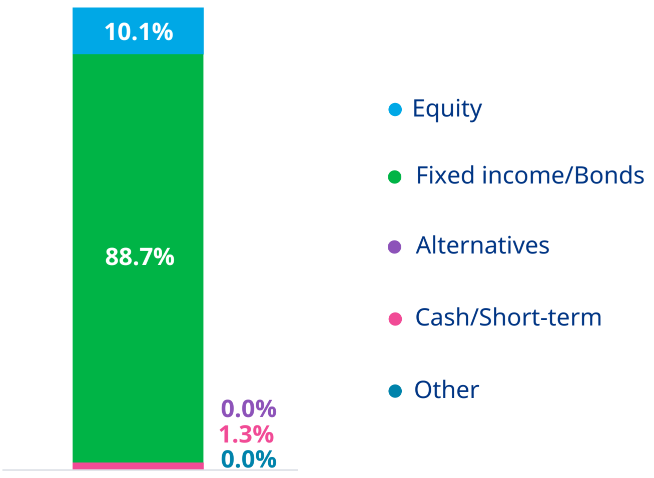
Another trend is passive investing. We have seen passive mutual fund product launches, and, according to the Association of Mutual Funds in India, net inflows into passive mutual funds increased by 112% between June and November 2021.

Data include:

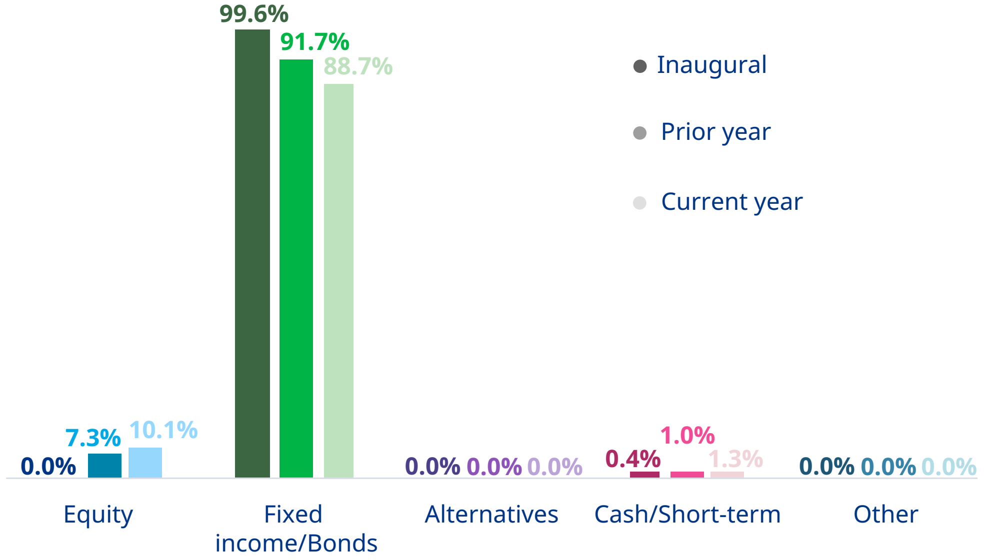
Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
NPS	Government DC[23]	78,718
Seamen's Provident Fund Organization	Government DC[24]	275
EPFO	Government DC (with guarantee)	187,427
Total		**266,420**

[23] Established by government but now overseen independently by NPS Trust.
[24] Inaugural period data include only the Seamen's Provident Fund Organization plan since data were not available for the others. The other plan data are included beginning in the prior-year figures.

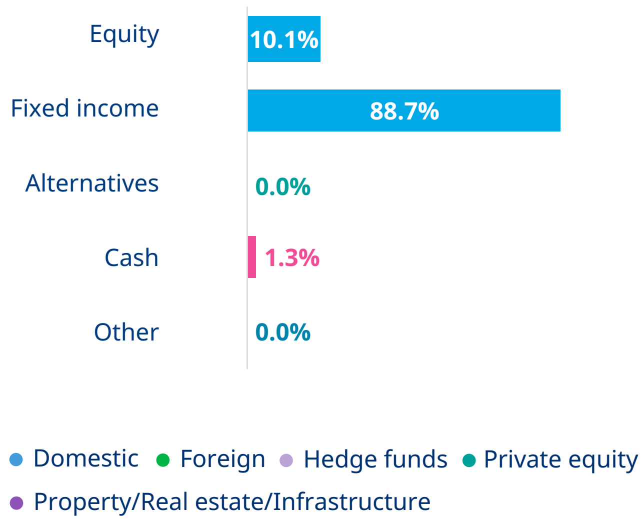
Current asset allocation



Allocation over time



Asset allocation detail



Note: "Other" is not defined.

Indonesia

Indonesia's retirement income system comprises three pillars:

- **Social security:** a mandatory, state-run scheme providing basic coverage in the form of DC and, from 2015 onward, DB pensions; funded by fixed contributions from employers and employees linked to salaries
- **Job Creation Law No. 11/2020 and Government Regulation No. 35/2021 (a new statutory regulation replacing the existing Labor Law No. 13/2003):** a minimum level of benefit paid by employers to employees when they reach the normal retirement age; no requirement for employers to set aside assets to fund this benefit, but it can be offset with the employer portion of private pension fund benefits
- **Private pensions**: voluntary DC or DB plans funded by contributions from employers and employees; can be administered in house by the employer or outsourced to a financial institution

In general, the adequacy of Indonesia's pension system is poor. Household savings rates are relatively high by international standards and even increased compared to last year, but bank deposits dominate this, and there is low engagement in long-term savings. Growth in corporate private pensions and savings vehicles will be critical for improving benefits going forward.

Development of the pension fund industry in Indonesia is difficult due to the low level of literacy and participation. Pension fund participants represent less than 20% of the total number of workers in Indonesia. The low participation in pension funds is due to the lack of public understanding of the need for pension funds. The latest issue includes significant unrest related to the required age for disbursement of pension benefits. Social security can only be disbursed at the normal retirement age of 56; however, many people expected they could access their money immediately when they stopped working, without waiting for retirement age.

Within the corporate pension system, Indonesia continues to see a shift from DB to DC plans, with further growth in the number of employers contributing to voluntary DC plans administered by a financial institution (Dana Pensiun Lembaga Keuangan). However, employees seldom have visibility or input into asset allocation choices. We see employers investing conservatively in fixed income and cash/short-term assets to ensure they can meet minimum statutory benefits requirements. This is particularly true within DC plans, where the average allocation to cash/short-term assets is 82.1%. The investment strategies of social security plans are also risk-averse in nature.

Pension funds are primarily invested in government bonds, time deposits, bonds, stocks and mutual funds.

In the near future, we believe overall allocations to growth assets will remain low due to the following attributes:

- Low financial literacy across a growing middle class, leading to risk-averse behaviors
- Relatively high interest rates available on bank and time deposits
- Lack of access to information to help investors assess the quality of investment strategies available
- No consistent approach to pension scheme and investment governance, with limited use of independent investment advice on strategy and asset allocation

Investment regulations also limit the possibility for investing in growth assets, including a low maximum allocation on equity investments for social security plans and restrictions on foreign investments, either directly or via mutual funds, for private pension plans.

Reduced monetary limits on mutual fund investments and emerging fintech solutions are supporting a new trend of micro-investors. Although this trend is still in its early stages, signs are starting to show that the growing middle class is becoming more engaged with investments and more interested in putting its savings to work. That said, more can be done by employers to provide the tools, training and technology to engage employees in their long-term financial well-being.

South Korea

The South Korean pension system comprises three pillars.

The first pillar consists of two parts:

- The National Pension Fund (NPF, managed by the NPS), which applies to the public, excluding government employees, private school teachers and military service personnel
- The special occupational pension schemes, which apply to government employees (GEPS), private school teachers, and military service personnel and associated civilian employees

The second pillar consists of the Severance Pay Scheme (SPS) and retirement plans governed by the Employee Retirement Benefit Security Act (ERBSA plans).[25]

The third pillar consists of private pension plans — voluntary pension schemes funded by individual contributions.

Over the recent period, South Korean plans surpassed the US$1 trillion mark, becoming only the second market in the survey to achieve more than US$1 trillion in assets (Japan being the first). During the recent period, we saw a slightly increased exposure to equities, which we believe was the result of plan sponsors seeking higher returns. At the same time, although portfolios remain heavily invested in fixed income (close to 50%), they have reduced their exposure to domestic fixed income securities ahead of an expected interest rate increase.

The NPS has been increasing its allocation to foreign equities over the full measurement period, which has been echoed by other government pensions, including GEPS, as well as corporate pension schemes. The NPS has also been increasing its exposure to alternatives over the period.

The above-referenced decrease in domestic fixed income assets is a distinctive trend in South Korea. We believe this is in response to monetary policy announced by the Bank of Korea in late 2020 and early 2021, resulting in an interest rate hike in mid-2021. In particular, corporates/insurance providers started to lower fixed-income exposure and hold cash instead, starting from sometime last year, which may be one of the reasons driving a modest uptick in cash, along with increasing volatility during the COVID-19 pandemic.

One of the most noticeable investment themes of the year for investors in South Korea has been enhancing ESG stewardship of investments. Along with other pensions, the NPS in particular has been actively working with global asset managers and global pension funds to establish in-house ESG investment frameworks to meet the South Korean Government's ESG drives and its requirements, which is having a significant impact across industries in South Korea.

Since the South Korean Government announced in October 2020 its net-zero-by-2050 commitment and its plans to activate the voluntary disclosure of ESG sustainability reports by 2025, all government-related pensions, along with other large financial institutions, have been learning about ways to accommodate the ESG standards in their investments.

In September, the two largest South Korea institutions — the NPS and the sovereign wealth fund, Korea Investment Corporation (KIC) — teamed up and stated they would actively participate in voting and shareholder engagement, including in their overseas investments. KIC has established a new, dedicated responsible investment team this year, while the NPS has been developing its ESG investment framework, establishing ESG-evaluation factors and seeking to expand its application from equities to additional asset classes.

[25] The ERBSA was introduced in 2005, replacing the SPS, established in 1961 as the first mandatory DB benefit plan.

The NPS announced in earlier 2021 that it plans to allocate as much as half of its assets to ESG investments by the end of 2022.

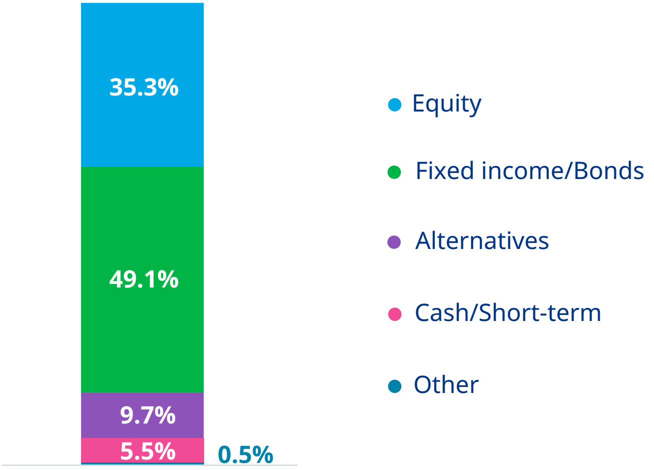
Meanwhile, other large financial institutions, like major securities firms and their in-house research teams, were actively building up their ESG guidelines and ESG-evaluation factors to meet asset owners' requirements and to align with the changes around ESG-themed investment globally as well as domestically.

Data include:

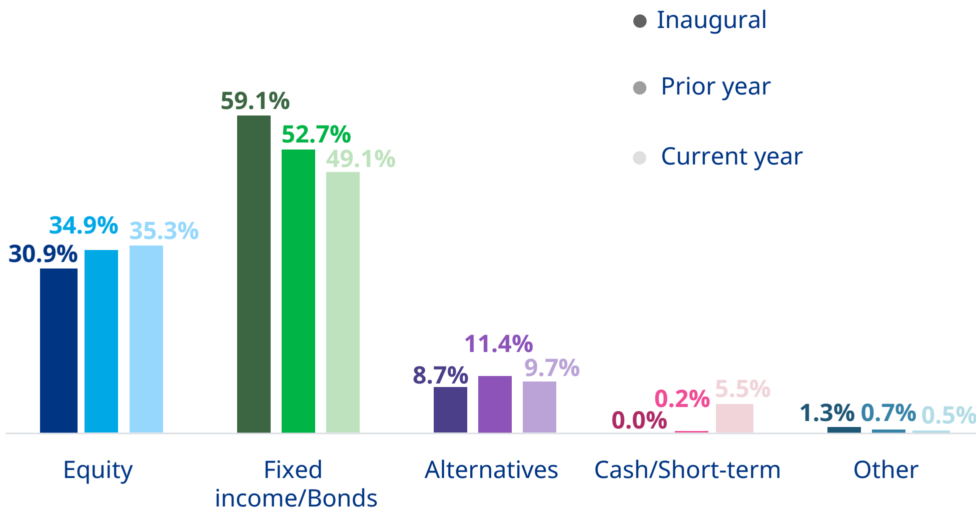
Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
NPF	Partially government-funded DB	766,562
Government Employee Pension Fund	Partially government-funded DB	7,551
Teachers' Pension Fund	Partially government-funded DB	21,994
Military Mutual Aid Association Co Ltd.	Government DC	11,681
Corporate Pensions[26]	Corporate DB	141,602
Corporate Pensions	Corporate DC	60,818
Total		**1,010,208**

[26] The data for South Korea's corporate DB and DC plans have been updated for this period and prior; they now incorporate both performance-based assets and principal-guaranteed assets — which were not covered in prior surveys.

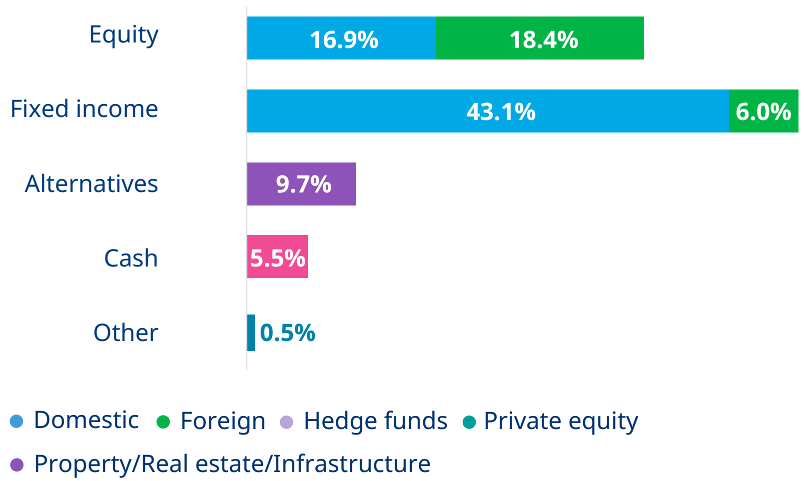
Current asset allocation



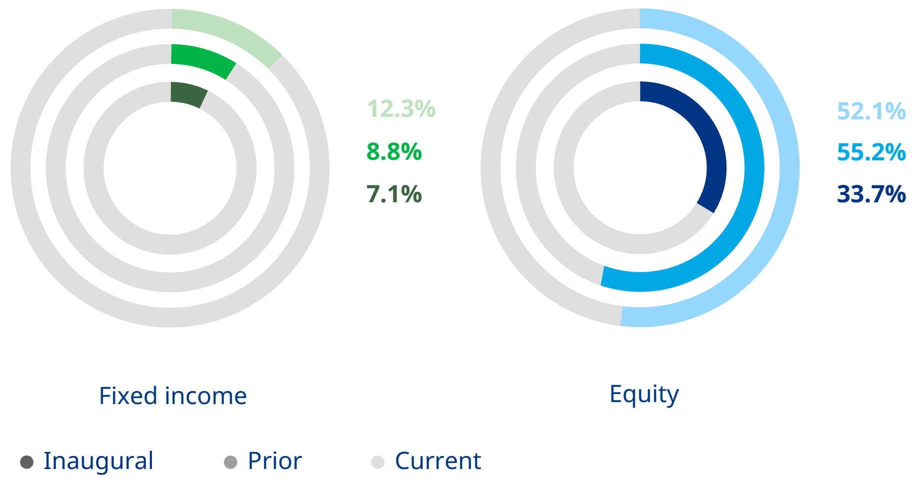
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

Malaysia

Malaysia has two main state-run pension plans:

- The Employee Provident Fund (EPF, also known by its Malay acronym KWSP) is a mandatory DC plan that covers private-sector employees, nonpensionable public-sector employees and voluntary contributors with funds for around 14.6 million members as of December 2019. The plan includes a guaranteed minimum dividend rate of 2.5% p.a., and provisions allow some benefits to be withdrawn at any time (under predefined uses, such as to fund education, home loans or specific healthcare needs), with other benefits preserved for retirement.
- The government pension fund (KWAP) is a partially funded DB plan that covers employees of pensionable status who are in service with statutory bodies, local authorities and agencies. As of December 30, 2020, the fund had nearly 180,000 contributing employees and 472 contributing employers.

Most investors in Malaysia, including the above two plans, have typically held a significantly large domestic bias in their portfolios, partially due to the restrictions imposed by the central bank, Bank Negara Malaysia (BNM). However, investors have put much effort into convincing BNM to relax some of these measures on a case-by-case basis. Investors have also increased efforts to diversify portfolios, including allocations to alternatives such as real assets and private equity. In 2021, with the rise of private equity investment trends and seeking to diversify portfolio returns, the EPF launched the first and largest shariah private equity direct/co-investment separate managed account fund in the world, with an allocation of US$600 million.

Many are also considering integrating sustainable investments/ESG risks into their portfolios, much of it led by the EPF. In 2019, the EPF became a signatory to the United Nations PRI, a declaration of its commitment to responsible investing.

In 2013, the Securities Commission Malaysia (SC) launched supplementary private retirement schemes (PRS), with the fund size exceeding US$1.2 billion as of April 2021. These DC funds are set up on a voluntary basis by individuals or employers through private-sector providers. The aim of PRS is to provide additional sources of retirement savings, increase the role of the private sector and aid development of Malaysia's capital markets.

A significant portion of PRS assets are invested domestically. However, the SC has made recent endeavors to bolster the industry's competitiveness. In 2020, the SC liberalized investment guidelines on foreign investments, which includes allowing conservative funds to invest in foreign markets. Prior to this, conservative fund providers could only invest in the domestic market.

In 2016, the EPF launched a shariah-compliant option for members, with an initial allocation of around US$20 billion. KWAP has also stated a longer-term aspiration of being 100% shariah-compliant. We therefore expect that shariah-compliant investments within the plans may increase over time. As of December 31, 2019, close to 37% of investment assets were shariah-compliant.

Philippines

Pensions in the Philippines comprise two government-sponsored DB plans: the Social Security System (SSS) for the private sector and the Government Service Insurance System (GSIS) for public servants. The regulatory requirement of DB termination indemnity provides at least half a month's salary, five days of incentive leave and a payout of approximately one month for every year served. The individual must have a minimum of 10 years of service, although retirees who have at least five years of service will receive a lump sum upon retirement equal to member and employer contributions plus interest. Retirees also have a right to a 13th-month pension every December. Employers can offset these statutory termination indemnities by offering supplemental retirement scheme benefits.

Supplementary corporate/private-sponsored plans are not uncommon, with 31% of respondents in Mercer's January 2021 *Benefits Monitor* providing a DB plan, 19% a DC plan and 50% a hybrid plan. Private-sector employees are entitled to retirement benefits at the compulsory retirement age of 60, with early retirement beginning at age 50. Companies commonly have final salary DB plans linked to age and length of service, although these are not integrated with social security. Any DC plans are essentially hybrids, as they must at least provide termination indemnity, and these are typically structured to equal the greater of employee contributions or the minimum statutory retirement benefit.

New plan setups are predominantly DC, but some multinational firms migrating from DB to DC have settled for a hybrid plan to cater to the generous old DB plan and onboard new employees on a DC plan. We are seeing a shift in interest toward DC for the purposes of risk management, global alignment of benefits or other employee-retention efforts.

Philippine Government-sponsored plans have specific limitations on the asset classes, sectors and even financial products in which they can invest. Allowable asset classes are restricted to locally registered organizations (including asset managers and trustees) that are focused on peso- or US-dollar-based investments (including government securities, private equities and securities) and member loans, such as housing loans.

Private plans have more investment management options; however, market preference is for private pension plans to be invested through local bank trustees, which often provide proprietary products or mutual funds through local partners. Demand for offshore investments is relatively low, due in part to low financial literacy, although we are starting to see signs of growth in offshore investments, such as funds of funds run by established offshore investment managers.

Although systems are in place to provide mandatory retirement benefits, the Philippine pension system is still greatly underdeveloped, and the system's deficiencies stem from the existing retirement pay law that limits the size of retirement packages. However, current reform development will soon change the legislation and pension landscape in the Philippines.

As of early 2021, the House of Representatives approved the Capital Market Development Act with the initial goal of providing the Philippines with a long-term, sustainable supply of domestic capital that can fund local investment opportunities. This led to establishing the Employee Pension and Retirement Income (EPRI) account, which will be a more robust private pension plan system that will be fully funded, portable and more actuarially fair and stable. Account holders will have the option to invest in accredited investment products. In the event no investment choice is indicated, regulators will designate a default investment product or products. An investment manager may be appointed by the EPRI account owner to provide the appropriate investment decisions, which we think will help to steer the reform of the pension system and promote investor confidence and financial literacy.

As of early 2022, the bill is under Senate review and debate; however, because national elections were held in May 2022, at the time of this writing, the bill is delayed. Even if it does pass the Senate and is signed off by the new president as law, the infrastructure and development of market players will still be a few years away.

Singapore

The main pension fund in Singapore is the Central Provident Fund (CPF), which is a mandatory DC plan. As of the end of 2020, the fund had 4.1 million members and S$462.1 billion (US$350 billion) in total account balances within the CPF system — which, despite the pandemic, grew year-over-year 1.8% from 3.9 million members and 8.7% from S$425.1 billion (US$313.5 billion) in December 2019.

The CPF's financial statements indicate that the assets supporting members' accounts are Singapore government bonds. However, these are special, nontradable bonds that underlie a risk-transfer mechanism to move the CPF's obligations for guaranteed minimum returns to the government. Therefore, an asset allocation snapshot of a portfolio fully invested in domestic fixed income securities does not accurately portray the risk exposures within the fund.

Furthermore, as of December 2020, approximately S$12.2 billion (US$9 billion) was invested in accounts in the Supplementary Retirement Scheme (SRS), representing more than 221,000 individual accounts. The SRS is a voluntary savings arrangement with certain tax incentives available to any resident of Singapore, and some multinational companies have used the SRS as a savings vehicle for foreign workers not eligible for CPF coverage.

The statistics on this scheme indicate that 29% of the assets are invested in equities, 37% in unit trusts/insurance products, and the balance in cash or other assets.[27]

Many investors are also considering integrating sustainable investments/ESG risks into their portfolios, but many are in the initial stages when this will be likely implemented via a screening process. Having said that, the three sovereign wealth funds and the central bank, the Monetary Authority of Singapore, are setting an example and beginning on a journey of full integration of sustainable/ESG risks.

In addition, we expect investments in alternatives to increase in the coming years, as they are commonly suited for long-term investors who can tolerate the associated illiquidity as well as the long horizons needed to realize returns.

[27] Singapore Ministry of Finance. "Supplementary Retirement Scheme," available at www.mof.gov.sg/schemes/individuals/supplementary-retirement-scheme.

Taiwan

In Taiwan, the Labor Standards Act (LSA) and the Labor Pension Act (LPA) are retirement protection schemes for private-sector employees. The LSA came into effect in 1984 in the form of a DB plan. The LPA was launched in 2005, with the aim of shifting the retirement income system to a DC scheme. Effective July 1, 2005, the LPA is mandatory for employees hired after that date and is optional for preexisting LSA participants. The LSA has been closed to new participants since July 1, 2005.

The operations of the two schemes are similar. Both the LSA and LPA are funded on a mandatory basis by private employers to provide retirement benefits for their employees, but plan funds are held by the government. The government also conducts and manages the investment of assets. Since the pension system is transitioning to a DC scheme, the LPA's fund size has grown at an annualized rate of 12.3% over the five-year period ended December 31, 2020, compared to an annualized rate of 6.4% for the LSA fund.

In addition to the LSA and LPA, there are two main state-run retirement schemes for public-sector employees in Taiwan:

- The PSPF is a mandatory DB plan that covers public servants.
- The private school pension system covers private school teachers. It consists of one DB plan and one DC plan. Similar to the LSA and LPA, the DB plan is closed to new participants.

The private school DC plan is the first state-run plan to offer investment options to its participants. The focus now is to lower the participation rate in low-risk default investment options to encourage participants to invest according to the risk and return category funds for their ages.

Sustainable investing remains a focus area in Taiwan, especially with institutional investors, including the BLF and PSPF.

Conversely, other pension investors are more concerned about inflation. We saw pension investors show more interest in absolute return strategies and alternative investments.

In terms of asset allocation, over the full measurement period, we saw a trend toward increasing foreign investments. Allocation to equities has slightly increased over the recent period, which is due to increasing exposure in the LSA and LPA schemes. Over the same period, average cash balances decreased incrementally, although they remain high.

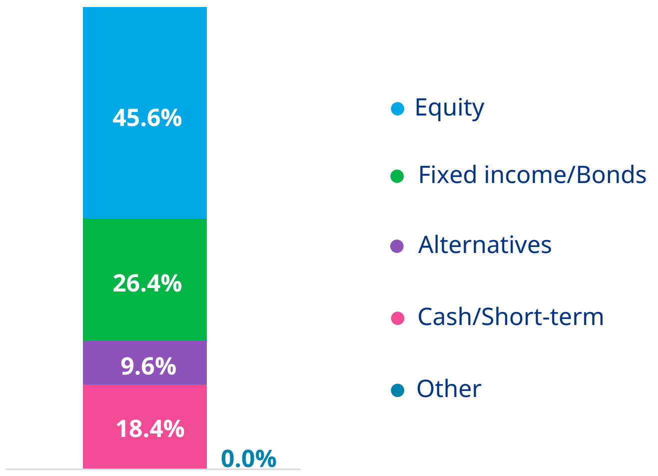
Taiwan's alternatives allocation increased during the period; the BLF treats REITs, listed infrastructure and multi-asset strategies as alternatives, which would be included in this shift.

We did not observe plan sponsors making significant strategic asset allocation or governance changes. However, many did increase their focus on risk-management and stewardship activities related to climate change.

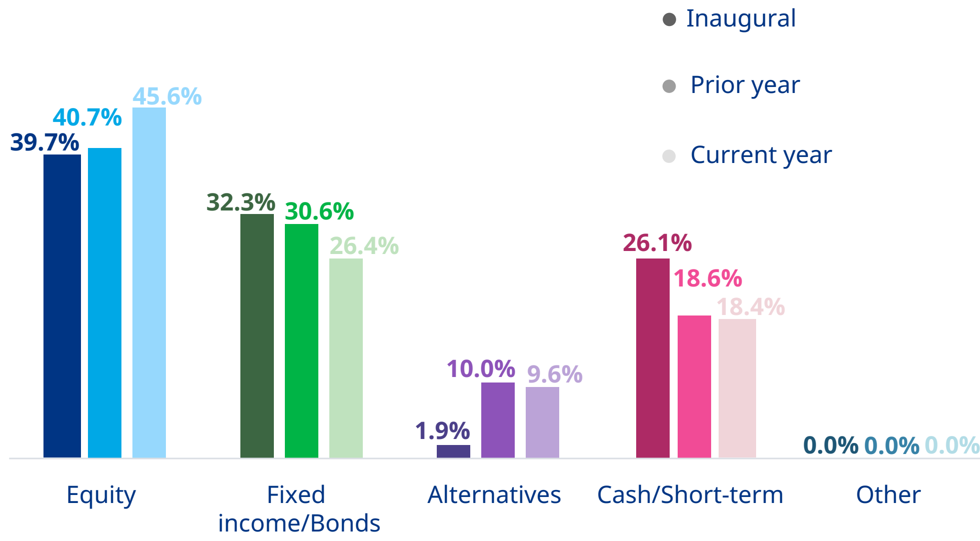
Data include:

Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
Statutory corporate DB plans (LSA)	Mandatory DB	31,880
Statutory corporate DC plans (LPA)	Mandatory DC	96,699
Private school pension fund	Government DB	56
Private school pension DC	Government DC	2,167
PSPF	Government DB	22,742
Total		**153,544**

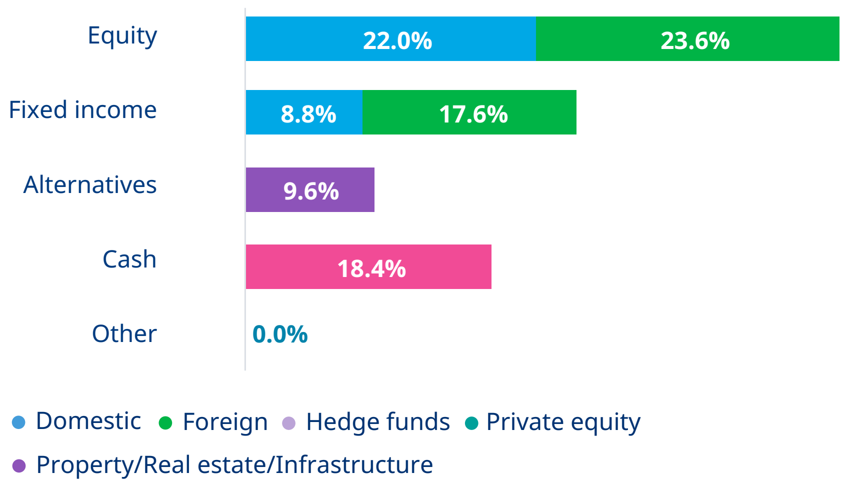
Current asset allocation



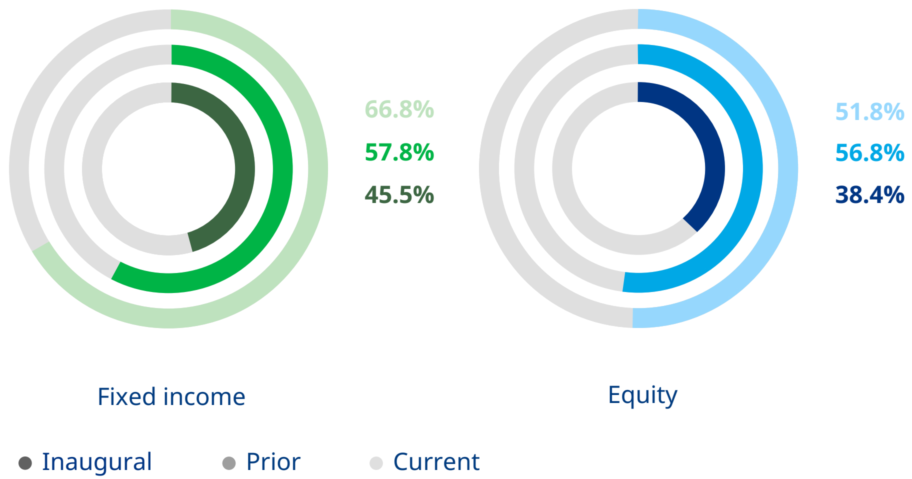
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

Thailand

The Thai pension system is in its growth-and-development phase. The system structure and asset allocation are geared toward conventional practice, but the system is evolving to be more sophisticated, especially in the global investment arena.

The first Thai pension system was initiated in 1902 as a pay-as-you-go DB scheme for government officials. The system continued for almost a century, but apparent unsustainability led to a complete restructure in the late 1990s. At a high level, the Thai system currently comprises three pillars. The first pillar consists of two parts:

- Old Civil Service Scheme (DB)
- Social Security Fund (SSF)

The second pillar consists only of the Government Pension Fund (GPF), a DC pension system for civil servants.

The third pillar is the provident fund, voluntarily established between employer and employees based on respective contributions. Provident funds can be set up either as a single fund, whereby the fund committee has full control of the investment policy and objectives, or as part of a pooled fund.

Despite the difference in size across these schemes, the asset allocation is similar. Most allocations are geared toward domestic fixed income, with GPF being the most sophisticated.

Of the three schemes covered, only SSF is a DB scheme and thus has an explicit liability component to consider. Nevertheless, since the SSF is still in its growth phase, we expect allocations to be comparable to its DC counterpart.

Provident funds currently have the highest allocation to (domestic) fixed income and limited allocations to alternatives (especially hedge funds and private equity). This is due to a lack of employee choice, access, availability, regulations and a thorough understanding of this asset class. However, this area has seen the most progress in terms of accepting more sophisticated products, especially in foreign investment areas.

Recent trends have seen more employers adopting the “life path” option — whereby risk is based on the employee’s age — as the default for their employees. We expect to see more allocations to domestic equity over the longer term, where domestic equity is still prevalent in life-path allocations. In the short term, however, foreign equities have risen (as a percentage of the equity portfolio), particularly since the inaugural period when the equity portfolio was fully invested in domestic stocks. Compared to the prior year, GPF and SSF have increased their allocations in foreign equities at the expense of domestic equities. Overall, this may be due to investors seeking additional return amid low bond yields and a higher demand for equities generally.

For SSF and provident funds, access to foreign equities is mostly achieved through ETFs and feeder foreign investment funds.

Sustainable investment is gaining traction in the investment community, especially for institutional investors, including the GPF, SSF and large asset managers. Nine out of 27 Thai asset management companies offer corporate governance domestic equity mutual funds.[28]

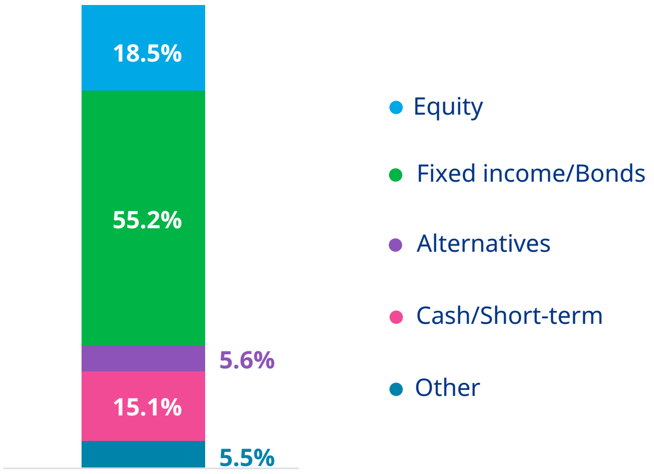
Inflation concerns have been relatively limited compared to that of developed markets. However, given the low-rate environment, institutional and high-net-worth clients have shown some interest in private equity.

Data include:

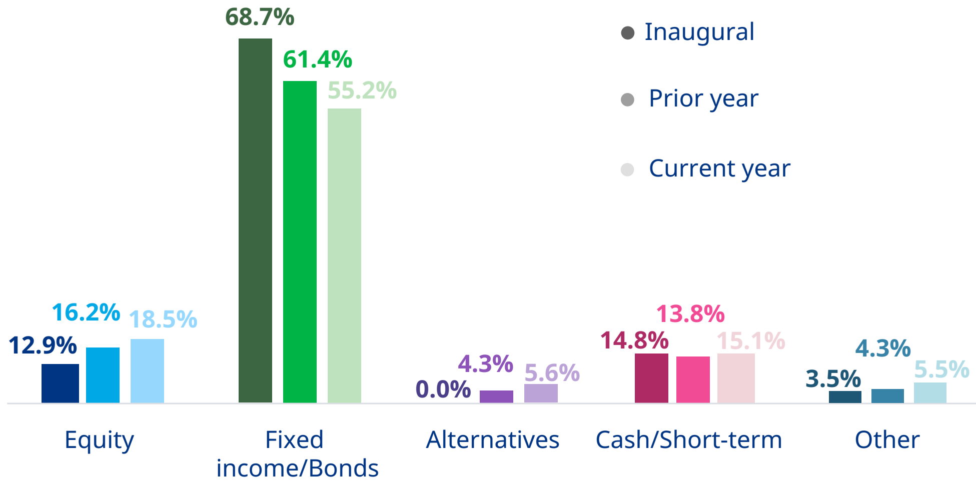
Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
GPF	Government DC	14,230
Voluntary provident fund	Corporate DC	41,515
SSF benefit fund (old age and child allowance)	Government DB	74,581
Total		**130,326**

[28] As of end April 2022. For more details on Thai Corporate Governance funds, visit https://classic.set.or.th/en/products/fund/cg_fund.html.

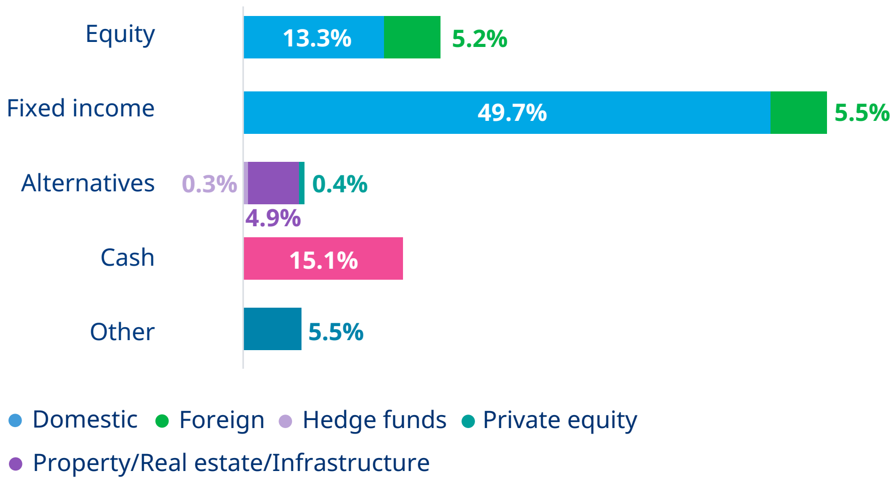
Current asset allocation



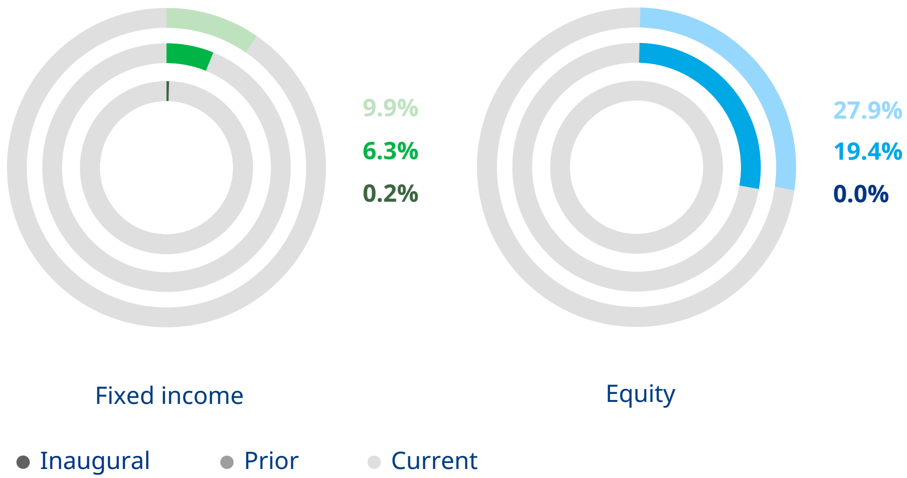
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: "Other" is not defined.

Japan

The pension system in Japan is robust and comprises both corporate and public DB schemes — including the US$1.7 trillion Government Pension Investment Fund (GPIF) — and a growing DC system that includes both corporate and individual plans.

In recent years, the GPIF has seen its assets grow, primarily due to the shift away from employee pension funds, which were all but eliminated following 2013 legislation and returns from favorable market conditions. The GPIF has increased its allocation to equity and decreased cash/short-term allocations from one year ago. Within its fixed income allocation, the fund has moved to more foreign assets at the expense of domestic assets. It has also demonstrated interest in ESG-related strategies and private markets. Over the full measurement period, Japan has transitioned from having one of the most conservatively positioned asset allocations to one of the most aggressive. The fixed income allocation decreased from 59% to 45%, largely due to changes within the GPIF.

According to a recent Mercer survey, 62% of corporate DB plans have already invested in private markets, and 16% of corporate DB plans that have not yet invested in private markets are considering investing. Also, 41% of corporate DB plans that have already invested in private markets intend to increase their allocation in the next five years. As such, we expect to see an increase in pension funds investing in private markets going forward, although we note that the primary reasons cited for not investing include concerns about liquidity, as well as the ability of some investors to achieve return targets without this asset class.

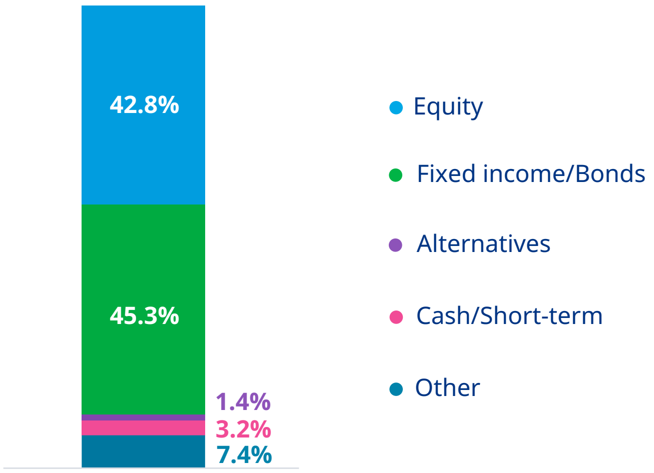
Both the GPIF and corporate DB plans have been decreasing their home-country biases in fixed income over the year. ESG is a topic of increased focus for corporate pensions. More and more funds are considering ESG risks, but the level of interest in ESG varies greatly between fund sponsors. The key drivers for considering ESG risks are the financial materiality of those risks and alignment with the sponsor's ESG strategy. On the other hand, some investors cite a concern about whether ESG factors affect performance.

Data include:

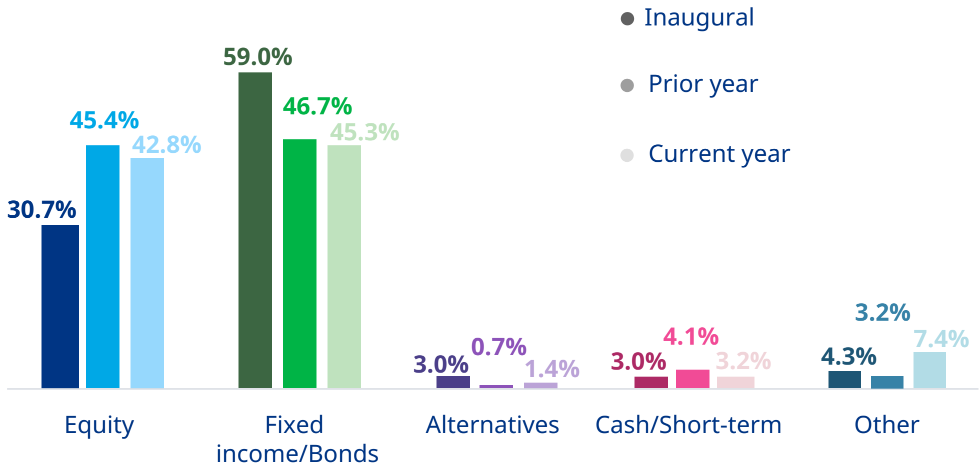
Plan name(s)	Sponsor and plan type	Current asset size (US$ million)
GPIF	Government DB	1,684,790
Other public DB[29]	Government DB	524,718
Pension Fund Association	Corporate DB	113,407
Corporate DB	Corporate DB	633,865
Corporate DC	Corporate DC	141,511
Total		**3,098,291**

[29] Includes Pension Fund Association for local government officials; National Federation of Mutual Aid Associations for municipal personnel; Federation of National Public Service Personnel Mutual Aid Associations; Promotion and Mutual Aid Corporate for Private Schools of Japan and National Pension Fund Association.

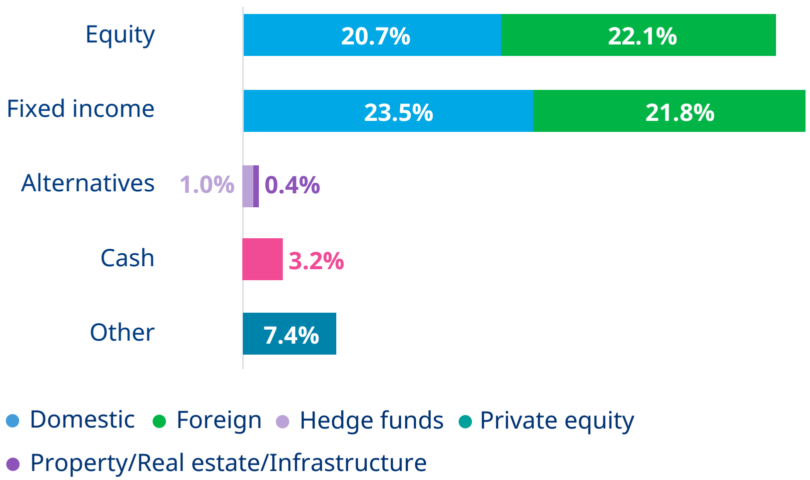
Current asset allocation



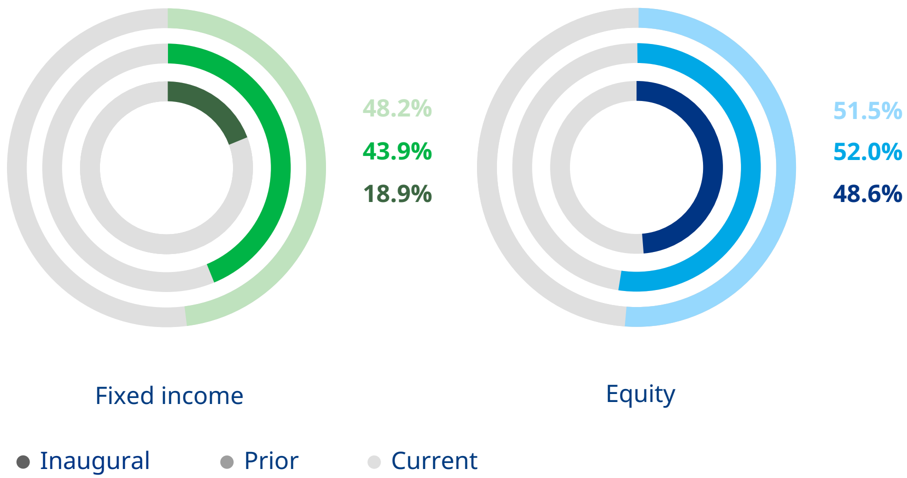
Allocation over time



Asset allocation detail



Foreign as % of asset class



Note: “Other” is not defined.

08. Source notes

Market	Current AUM included in survey (US$ million)	Date	Prior survey AUM (US$ million)	Date	Source	Plan info and other notes	FX rate used for current (US$1 = X local)	Key contributors
Argentina	48,115	Data as of 30 Sep 2021 and 31 Mar 2021	34,249	Data as of 30 Sep 2020, 30 Jun 2019, 30 Apr 2020	BNP Paribas; Santander Rio, TMF Group; Superintendencia de Seguros de la Nación (SSN); Fondo de Garantía de Sustentabilidad (FGS)	Government DB, government and corporate DC, corporate DC	0.0100	Gustavo Aguilar, Florencia Vaquer, Clara Estevarena
Brazil	206,534	Data as of 30 Jun 2021	233,691	Data as of 31 Dec 2019	Abrapp (pension plans association)	Corporate DC and DB	0.1932	Mauricio Martinelli, Vanessa Santos
Chile	177,841	Data as of 30 Sep 2021	194,968	Data as of 30 Sep 2020	Superintendencia de Valores de Chile	Mandatory DC	0.0012	Mercer: Martyn James; El Dorado: Jose Luis Cabrera Fuster, Melvin Escudero
China								Jize Hu, Benjamin Zhang, Fred Wen
Colombia	91,301	Data as of 31 Oct 2021	74,874	Data as of 30 Sep 2020	Superintendencia Financiera de Colombia	Mandatory DC	0.0003	Mercer: Martyn James; El Dorado: Jose Luis Cabrera Fuster, Melvin Escudero
DIFC/GCC	211	Data as of 30 Sep 2021	N/A	N/A	iFast, MGIE	Mandatory DC	N/A	Claudia Maldonado, David Lynch, Paul Rooney
Hong Kong SAR	150,798	Data as of 31 Mar 2021	111,254	Data as of 31 Mar 2020	*MPF Schemes Statistical Digest*	Mandatory DC	0.1290	Virginia Tang, Adeline Tan
India	266,420	Data as of 31 Mar 2021 for NPS; 31 Mar 2020 for EPFO and Seaman's	227,578	Data as of 31 Mar 2020 for NPS; 31 Mar 2019 for EPFO	Plan annual reports	Government DC and DB	0.0136	Akhil Dev Sharma, Amit Gopal, Richa Rastogi
Indonesia			47,926	Data as of 31 Dec 2018 and 31 Dec 2017	OKJ, BP JS, Ketenagakerjaan	Corporate DB, corporate DC, financial institution DC, mandatory DB	0.00007	Jovita Sadrach

Market	Current AUM included in survey (US$ million)	Date	Prior AUM included in survey (US$ million)	Date	Source	Plan info and other notes	FX rate used (US$1 = X local)	Key contributors
Malaysia			233,879	EPF data as of 31 Dec 2018, KWAP data as of 31 Dec 2017	EPF Annual Report 2018; KWAP Annual Report 2017	Mandatory DC and government DB	0.2396	Chin Yee Koh, Merissa Ang
Mexico	279,649	Data as of 31 Dec 2021	208,115	Data as of 30 Jun 2020	CONSAR, Mercer Mexico	Corporate DB and DC; mandatory DC	0.0489	Ivette Maya, Jose Luis Quiroz, Oscar Castanon
Philippines								Harold Tan
Peru	33,067	Data as of 31 Oct 2021	42,840	Data as of 30 Sep 2020	Superintendencia de Valores de Peru	Mandatory DC	0.2507	Mercer: Martyn James; El Dorado: Jose Luis Cabrera Fuster, Melvin Escudero
Singapore								Chin Yee Koh, Eugene Lian
South Africa	178,664	Data as of 30 Sep 2021 for AF survey; 31 Mar 2021 for GEPF	158,097	Data as of 30 Sep 2020 for AF survey; 31 Mar 2019 for GEPF	Alexforbes *Investable Global Manager Watch*™ survey; South Africa Government Employees Pension Fund (GEPF)	Corporate DC, government DB	0.0679	Alexforbes: Makhonsonke Madi Mercer: Mark Smathers
South Korea	1,010,208	Data as of 31 Dec 2020	889,133	KNPS data as of 31 Jul 2020; Others as of 31 Dec 2019	Korea NPS website; GEPS website; Teachers Pension Korea website; MMMA site; Financial Supervisory Services (FSS) website	Partially government-funded DC	0.0009	Michelle Cha, Jeannie Yoon, Elizabeth Oh
Turkey	25,250	Data as of 31 Jul 2020	25,489	Data as of 31 Jul 2020	Capital Markets Board of Turkey website	Corporate DC	0.1355	Gokhan Karali, Serap Ozalp, Evsen Olmez

Market	Current AUM included in survey (US$ million)	Date	Prior AUM included in survey (US$ million)	Date	Source	Plan info and other notes	FX rate used (US$1 = X local)	Key contributors
Taiwan	153,543	Data as of 31 Dec 2020	130,965	Data as of 31 Dec 2019	Annual Reports, Ministry of Labour; Private School Pension Fund Committee; Annual Report, Public Service Pension Fund	Government DC, government DB, mandatory DB, mandatory DC	0.0355	Sue Cheng, Laura Liao
Thailand	130,326	Data as of 30 Sept 2021 and 31 Dec 2020	122,187	SSF as of 30 Jul 2020, GPF as of 30 Sep 2020 Prov Fund as of 30 Nov 2019	Websites of Social Security Office; Government Pension Fund; and Thai PVD	Government DC, government DB, corporate DC	0.0328	Pete Arunpullop, Kasin Sutuntivorakoon
Japan	3,098,291	31 Mar 2021	2,609,664	GPIF data as of 30 Mar 2020; Other public data as of 30 Jun 2020 and 31 Mar 2020; PFA as of 31 Mar 2020; DC 31 Mar 2020	GPIF, PFA and other public websites	Government DB, corporate DB, corporate DC	0.0090	Toshio Imai, Nobuhiro Shingyoji
Overall	**5,850,218**		**5,191,113**		**OECD *Pension Markets in Focus*, Mercer CFA Global Pension Index**		**Simon Coxeter, Fiona Dunsire, Tracy Teel, Ana Baptista, Vishal Kalra, Atul Pahuja, Hem Kishore, Pushpendra Gautam, Daniela Simic**	

Contacts

Should you have any questions about the survey, please contact:

Fiona Dunsire, Regional Wealth Leader, AMEA and LatAm
fiona.dunsire@mercer.com

Tracy Teel, Regional Strategy Leader, AMEA and LatAm
tracy.teel@mercer.com

Simon Coxeter, Wealth Strategic Research Director, AMEA and LatAm
simon.coxeter@mercer.com

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