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Keywords

Retirement System, Sustainability, ESG, Sustainable Finance, Financial Regulation

Disciplines

Economics

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Private Retirement Systems and Sustainability: Insights from Australia, the UK, and the US

Nathan Fabian, Mikael Homanen, Nikolaj Pedersen, and Morgan Slebos

Abstract

Retirement system sustainability is defined as the ability of plan boards and managers to be responsible investors, active stewards, and allocators of capital to economic activities with desirable social and environmental outcomes. In this paper, we examine the policy frameworks and important structural variables pertinent to private retirement systems in Australia, the UK, and the US. By analyzing various reports, interviewing experts, and using data from the Principles of Responsible Investment as well as national pension and retirement authorities, we identify key structural challenges within national retirement systems. These include market fragmentation, principal-agent conflicts in personal pensions, and the role of service providers. Our results provide insight into how, or whether, retirement systems can facilitate desirable economic, social, and environmental outcomes.

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JEL Codes: G18, G23, Q01

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Aligning the financial system with the real economy is necessary for society to address urgent sustainability challenges, including the climate crisis and economic inequality. Connecting the financial system and the real economy requires the alignment of financial policy and regulation with sustainability objectives and frameworks, along with the consideration of market structure. The aim of this study is to understand the policy frameworks and important structural variables—fund concentration, number and types of actors, and relative market power—specifically for private retirement systems in Australia, the UK and the US.¹ Private retirement systems are among the largest pools of long-term capital globally, and the three selected countries are those with most total assets. By reviewing policy and structure, we sought to better understand the behaviour of various actors, their key challenges, retirement systems functioning, and the ability of the system to align with sustainability objectives (for example human rights or net-zero policy commitments). We therefore define retirement system sustainability as the ability of plan boards and managers to be responsible investors, active stewards, and allocators of capital to economic activities with desirable social and environmental outcomes. Systemic sustainability issues such as the climate crisis and economic inequality hold the potential for environmental and economic destruction, devastation of livelihoods, and political upheaval and conflict with clear negative implications for global financial markets. Pension fund members face risk both of a financial nature and in relation to quality of life in retirement. In order to tackle these issues, we need to redirect capital flows and ensure that assets are stewarded to align economic activities with science-based thresholds and commitments. Pension systems should be designed to fulfil a central part of this sustainability realignment in the interest of their members.

In recent years, there has been an upsurge in Environmental, Social, and Governance (ESG), climate, and sustainable policies (PRI 2021) and related regulations (Eskander et al. 2021).

These policies have not only grown in numbers, but they are also becoming increasingly detailed. For example, the European Union (EU) Sustainable Finance Disclosure Regulation (SFDR) has recently introduced requirements for financial service firms (at both entity and product-level) to document, on a ‘comply or explain’ basis, how they consider sustainability risks in their investment decision-making and how their decisions influence sustainability factors. The SFDR (2019) includes a reference to the EU Taxonomy Regulation, requiring financial institutions to document the extent to which they use the taxonomy to determine the sustainability of their products and the degree to which they are aligned. The taxonomy sets performance thresholds for specific economic activities to determine the extent to which they make a substantial contribution to environmental objectives within the EU while avoiding significant harm to other environmental objectives (PRI 2020a). Other major capital markets such as Canada, China, and the UK have already developed, or are in the process of developing, similar taxonomies. Such policy frameworks designed to deliver both sustainability objectives—such as net-zero emissions—and market stability by aiming to redirect capital to sustainable economic activities and promote active stewardship of asset owners (e.g., pension funds), although it is not clear whether and when retirement system designs serve as obstacles or accelerators of these policies.

Policy frameworks vary across the three jurisdictions examined. The design of conventional retirement and pension policy has implications for the sustainability of private retirement systems. Whether it is policymakers encouraging fund consolidation, tightening of solvency requirements, automatic enrolment legislation, or measures to protect consumers and savers from excessive costs, policy instruments influence asset pools, as well as governance and investment activities regarding sustainability. Currently, the US retirement system is generally subject to a more market-led approach, whereas Australian and UK policymakers have played a

more active role. UK policymakers have been particularly proactive, recently introducing new requirements for consideration of ESG factors by retirement plans, including stewardship. Australian policymakers have been the most forceful in driving fund consolidation in the private retirement system. However, they have not put sustainability at the core of policymaking.

Our research gathers quantitative and qualitative data from various national pension and retirement authorities, consultants, think tanks, and investment industry organisations; reviews related literature, policy, and regulatory documents; and includes interviews with experts and practitioners across the three countries. We identify three key issues: 1) market fragmentation, which tends to undermine the responsible investment support and activities among retirement plans; 2) the increasing importance of fund managers and investment consultants, along with their limited responsible investment incentives; and 3) the growth in personal pensions systems which have tended to lack emphasis on sustainability.

Our research shows, first, that public sector retirement plans generally benefit more from economies of scale. Larger plans with greater assets under management generally tend to have more market power (i.e., ability to influence services and products in the market), stronger governance, and, in some cases, internal investment expertise. As the degree of cross-sectional ownership of the economy—through diversified, global and long-term portfolios—is higher, large asset owners have an increased interest in reducing market risk and externalities presented by sustainability challenges to improve financial performance overall. In its most developed form, this is commonly referred to as universal ownership. From a system perspective, if we use PRI membership² as a proxy, our findings suggest that when the number of asset owners with scale in the system is low, the system-wide consideration of sustainability challenges is also low. At the same time, we find that other segments of the retirement system with very high fragmentation in

terms of assets, often showcase potential shortcomings such as weak governance, insufficient investment expertise and resources, investment chain complexity, and principal-agent issues. Overall, fragmented systems face the greatest challenges in developing sustainable investment practices.

Second, we show that the weight of capital and influence of actors in private retirement systems has shifted away from institutional asset owners undertaking investment strategy, asset allocation, and manager selection on behalf of beneficiaries, towards financial service providers, who have assigned responsibility to individuals to determine their own investment strategies. As a consequence, we find that most retirement plans rely heavily on the fund management and investment consulting industries in the formulation and execution of their investment strategies. Both industries are dominated by a relatively small number of firms with significant asset concentration. Accordingly, while their market power and resources could, in theory, imply that they would be best situated to drive responsible investment and stewardship, in practice their lack of incentives results in limited execution.

Last, we examine personal pension savings which currently total \$12 trillion, the fastest growing segments of the three countries examined. Here we find that individual savers are faced with complex choices that they are generally ill-equipped to make, and therefore they must often rely on independent financial advisers where cost, a more comprehensible metric than value or quality, is often the focus. For this reason, sustainability is often not considered, despite increasing interest. We also find the data in personal pension markets to be insufficient to draw a complete picture in terms of market share and product uptake. While the general lack of transparency limits the insights we generate on firms and products, we conclude that the structural challenges and lack of market focus hinder sustainability in this large and growing market.

The remainder of the paper is structured as follows. We first discuss our methodology and data collection process. Next, we report main findings focusing on market fragmentation, the role of service providers, and principal-agent conflicts in personal pensions. A final section concludes.

Prior Related Literature

Our research is broadly related to the emerging literature on sustainable finance. To date, prior work has documented a range of institutional investor specific responsible investment (RI) developments, including ESG investment allocation (Gibson & Krueger 2018; Gibson et al. 2021), proxy voting (Bolton et al. 2020; He et al. 2020), and engagement (Dimson et al. 2015; Dimson et al. 2020; Hoepner et al. 2021). In addition, there is a growing understanding that client interest in these issues is on the upswing as well (Hartzmark & Sussman 2019; Bauer & Smeets forthcoming; Riedl & Smeets 2017). Nevertheless, we have identified very few studies that concentrate on pension system structures specifically and the institutional investors therein. While there are useful broader analyses (OECD 2017, 2020), we have not found related literature examining how jurisdictional characteristics influence the ESG integration practices of these institutional actors, or whether client interests are served differentially across these jurisdictions. This is most likely due to data limitations, as few datasets exist that enable analysis of client demand and jurisdictional characteristics by design. We therefore complement the literature by adopting a mixed-methods approach to examining these gaps and opportunities for research.

Methodology and Data

The first phase of this research focused on obtaining and analysing data on retirement plans, assets and members from various national pension and retirement authorities, pension and

investment consultants, think tanks, pension trade press as well as investment industry organisations. Sources reviewed included the Australian Prudential Regulation Authority, the Productivity Commission, the Royal Commission, the Responsible Investment Association Australasia, QMV and the Financial Services Council in Australia; The Pension Regulator, the Financial Conduct Authority, the Department of Workers and Pensions, ShareAction and the Pension Protection Fund in the UK; Influence Map, the Employee Benefit Research Institute, the Employee Benefits Security Administration, the Investment Company Institute, the Milliman Corporate Pension Funding Study and Callan in the US; and global sources such as Willis Tower Watson's Global Pension Assets study and the 500 Largest Asset Managers study, the Melbourne Mercer Global Pension Index, and the PRI signatory database (see Appendix Table A1 for additional details on these sources).

We furthermore reviewed academic literature and policy and regulatory documents and conducted interviews with a range of experts and practitioners. To validate the research, we also sought input from selected pension experts and academics on each of the markets examined. These included leading thinkers with decades of experience in pension policy and practice from governments, academia, think tanks, and industry, across the three countries examined. Our findings reflect the feedback received and verify many of our generated insights.

Main Findings

It is important to recognise the idiosyncratic characteristics of the retirement systems examined. Each system is a construction of different policies and various features—defined contributions (DC) and/or defined benefit (DB), single-employer and/or multi-employer or industry, public and/or private sector, for-profit and/or not-for-profit—and while many of the

building blocks are the same, the unique combination of these policies and features makes quantitative comparison challenging. We are aware of these analytical constraints and therefore complement the quantitative methods with qualitative assessment and comparative commentary.

Market Fragmentation. In this sub-section, we examine the role of market fragmentation for private retirement system sustainability. We collected and analyzed 2019 data from national retirement and pension agencies, regulators, and industry associations, and we find that there is significant variation in asset fragmentation levels both across countries as well as within pension systems. In Table 1, we show, that the scale in terms of assets (indicated through average plan size) of public and industry retirement plans such as not-for-profit superannuation funds in Australia (average size of \$12bn), local government pension schemes (LGPS) in the UK (\$22.5bn), and public defined benefit (DB) plans in the US (\$35bn) exhibit significantly more scale in terms of assets than other segments such as US 401(k) plans (\$0.01bn), private sector DB plans in the US (\$.07bn) and in the UK (\$0.39bn), and workplace DC trust schemes in the UK (\$0.05bn). Unsurprisingly, the private sector segments (both DB and DC), which are often single-employer plans, are quite fragmented parts of the systems in asset terms, meaning that these segments include a very high number of plans (e.g., there are 560,000 401(k) plans in the US), many of which are small. By using PRI membership as a proxy for support of responsible investment, we find that the most fragmented segments of each national retirement system have the lowest PRI coverage in asset terms: 401(k) plans (<1%) and private sector DB plans (0%) in the US, and private sector DB and DC plans in the UK (18%).³ This suggests that fragmented segments have very low levels of support for responsible investment.

Table 1 here

Over time, the weight of capital and influence of actors in private retirement systems has shifted away from institutional asset owners that undertake investment strategy, asset allocation, and manager selection, on behalf of beneficiaries. Increasingly, influence has shifted towards financial service providers, who have assigned responsibility to individuals to determine their own investment strategies. In the US, this is indicated by total asset size and 5-year compound annual growth rate (CAGR) figures for Independent Retirement Accounts (IRAs) (total assets equal \$11trn and 5-year CAGR is 8.6%), and 401(k) plans (\$6.2trn and 7.1%). The story in Australia is somewhat different, with not-for-profit superannuation funds being the dominating type of pension provision with \$895bn in total assets and 5-year CAGR at 11.7 percent. Nonetheless, self-managed superannuation funds, the personal pension vehicle in Australia, amount to more than 25 percent of total retirement system assets. In the UK, the picture is less clear, with LGPS only accounting for \$450bn in total assets but a high 5-year CAGR of 9.8 percent, private sector workplace DB plans are the largest segment accounting for more than \$2trn and 5-year CAGR of 7.7 percent. Data are not available to calculate 5-year CAGR for either workplace DC contract schemes or personal pensions.

In essence, we find significant asset fragmentation within the three retirement systems. This is most noticeable in private sector segments, as indicated by average plan sizes above. Generally speaking, small plans tend to be less engaged with sustainable investment as indicated by PRI membership figures. In Table 2, we see the results at the national retirement system level. The UK and US systems, both of which include large, fragmented private sector, single-employer segments, have considerably lower PRI membership ratios than Australia. Additionally, if we include the personal pension assets in the equation, where IRAs in the US make up the largest share (36.7% of total US retirement assets), the contrast is even more stark. This complements a

previous finding that larger plans are generally more engaged with sustainable investment (PRI, 2019).

Table 2 here

As Table 2 shows, DB remains a large share of private retirement pools, accounting for \$17.4 trillion in assets across the three nations examined here. In the UK and US, many private sector DB plans are already closed to new members (88% and 25% in the UK and US, respectively), and more plans are now closed to new accruals (41% and 12% respectively) (PRI 2020b). With the notable exception of a small number of UK private sector workplace DB plans, there has been limited leadership on sustainability in the DB segment as indicated by the PRI membership ratios. We also find that with sponsors and trustees focused on liabilities and de-risking, sustainability has become even less of a priority. Therefore, in the absence of regulatory intervention or determined action by trustees and sponsors, private workplace DB plans are unlikely to be major providers of new sustainable capital going forward.

The governance set-up of private sector workplace DB plans also reveals some challenges. Sponsors in the UK and US routinely establish governing bodies that take on responsibility for managing and administering the plans. In the UK, the governing body is comprised of independent trustees required to act impartially and in members' best interests. In the US, the equivalent is a plan fiduciary, who is typically a corporate officer. The trustee/fiduciary is the ultimate steward of the assets and of beneficiaries' interests. The sponsor remains ultimately responsible for making up any shortfall in the plan's funding, so it has a continuing interest in the investment strategy. In the UK, trustees have the final say on investments, but in the US, given the dual role of fiduciaries and potential absence of impartiality, the lines are less clear. Figures 1 and 2 below illustrate the differences between the two models and reveal a complex structure of advisors (actuaries and

consultants), administrators, and asset managers in both countries. Overall, the structure and governance setup leave private sector DB plans with limited influence on the complex intermediation chain, i.e. as Figures 1 and 2 illustrate, the investment chain has multiple entities involved in both investment strategy and execution.

Figures 1 and 2 here

The picture is similar for US 401(k) plans where there is also a relatively long chain of intermediaries—as shown in Figure 3—between the ultimate owner of the invested assets of a 401(k) plan—the employee—and the actual investment decision. Plan sponsors are ultimately responsible for the design and operation of the plan. They usually use third-party trustees and recordkeepers for day-to-day operations, relying on external advisers in choosing the provider and determining the investment line-up. As plan participants are increasingly enrolled into a default option, termed in the US a Qualified Default Investment Alternative (QDIA), the selection of the default asset manager—and, where the QDIA is a Target Date Fund or a balanced fund, that manager’s selection of underlying instruments—will be the primary determinant of how DC assets are invested.⁴ As our interviews indicated, this complex intermediation chain increases the risk of beneficiary or plan preferences on sustainability not being expressed in investment decisions or proxy voting behavior. It is also important to note that the current language of the US Labor Department’s Employee Benefits Security Administration’s (EBSA) 2018 Field Assistance Bulletin leaves fiduciaries reluctant to deviate from peers to avoid litigation risk. Overall, regulatory signals, structural barriers, and governance challenges leave 401(k) plans with limited scope to address sustainability issues.

Figure 3 here

The Role of Service Providers. To examine the role of service providers in private retirement system sustainability, we review data from P&I The Largest Money Managers (US, May 2019), IPE (UK, August 2019), Australian Managed Funds Industry, FSC/Morningstar (July 2016), PRI signatory database (April 2020), and Willis Towers Watson The World's Largest 500 Asset Managers (2019); see Appendix Table A1. We find that there is considerable asset concentration among the largest asset managers in all three countries. Thus, Table 3 shows that the top 10 asset managers in Australia hold 50 percent of externally managed retirement assets. In the US, the top 10 asset managers for DB funds account for more than 20 percent of externally managed assets and more than 50 percent for DC assets. Lastly, in the UK, the top three asset managers hold more than 70 percent of externally managed retirement assets. This is important since fragmented retirement systems leave more authority in the hands of service providers, including investment managers and consultants.

Table 3 here

In situations where retirement plans use external managers to run segregated mandates on their behalf, plan sponsors can retain a high degree of control over both the shape of the portfolio and the opportunities for engagement associated with these investments. However, retirement plans that invest through pooled funds are usually unable to exercise their ownership rights, and many of the bigger asset managers have poor track records on proxy voting and other aspects of stewardship. Recent research has found that the three biggest passive asset managers globally have stewardship budgets that are only 0.2 percent of the estimated fees they earn from managing equity assets, and that there is no real incentive for them to dedicate more resources to stewardship activities (Bebchuk and Hirst 2019). In addition to limited stewardship activities, there is also evidence on poor voting records on sustainability issues, and significant variation between the

largest asset managers (InfluenceMap 2019; ShareAction 2019). In a private retirement system where the majority of savers increasingly invest through passive funds, this is becoming a major concern. Notably, Australian super funds—which have more actively managed investments—are insourcing a growing proportion of their asset management, while at the same time, they are increasingly adopting sustainable investment activities and undertaking stewardship of their assets. A few larger plans in the UK and US—mainly public plans—with internal investment teams and sufficient resources are also adopting this model. While this potentially addresses the sustainability shortcomings of service providers for sizable public plans, such an option may not be available to smaller retirement plans lacking internal investment expertise.

Australia, the UK, and the US represent more than half of the total private retirement assets globally. Given that all three markets rely heavily on the fund management industry, the practices of the largest firms are vital determinants of the sustainability practices of private retirement systems. The investment consultant market is similarly dominated by a small number of firms. For instance, in the US, the top 10 consulting firms account for 80 percent of institutional, tax-exempt assets under advice (\$24 trillion) and the top 20 for over 90 percent. In the UK, two firms (Mercer and Aon/WTW)⁵ have an estimated combined market share of 40 percent. In Australia, four consulting firms dominate the industry. In essence, a few international firms hold significant market shares and therefore they can exert influence on the extent to which retirement plans consider sustainability issues.

Moreover, investment consultants are instrumental in determining the degree of sustainability embedded in the investment strategies of the retirement plans they advise (PRI 2017a). They provide a range of advisory services ranging from funding, to asset allocation, manager selection, platform recommendations, fund options, and reporting processes. They

frequently train sponsors and trustees on approaches to investment and emerging investment trends, and they are generally a recognised source of authority and knowledge. The influence of consultants is especially marked in the OCIO and fiduciary management markets, which are relatively small but are the fastest-growing areas for consulting services. Therefore, investment consultants are already key actors in facilitating the sustainability of private retirement systems, and their continued expansion in services will only further emphasise their importance.

We also note that the UK Competition and Market Authority found that, although retirement plans accounted for 90 percent of consultants' revenues, most trustees did not engage with them. In addition, consultants usually do not include new investment strategies in their watch lists until these have built a three-year track record, and we have learned that there are still relatively few sustainable investment funds that meet this threshold. This has been a particular barrier for the adoption of new TDFs focusing on sustainability by US 401(k) plans. The investment consulting sector—despite pockets of excellence—has also generally failed to incorporate ESG considerations into standard advice templates (PRI 2017b). The market power, resources and influence of asset managers, investment consultants, and other service providers imply that they are often better placed than retirement plan sponsors to drive responsible investment and stewardship, yet to date there are few incentives to do so. Overall, their lack of incentives in practice—which are driven mainly by offering low-cost products and services in competitive markets—lead to limited execution. We find that legal and regulatory frameworks focused on reducing costs—for example, the UK charge cap and class action suits in the US—are important measures to protect savers from high costs and fees in fragmented retirement systems. Nevertheless, they are also very likely to contribute to the lack of incentives on sustainability. We find this to be a key structural challenge, which may undermine long-term system sustainability.

Principal-Agent Conflicts in Personal Pensions. Next, we examine the role of principal-agent conflicts in personal pensions and how it contributes to private retirement system sustainability. To this end, we again examine the 2019 data from national retirement and pension agencies, regulators and industry associations cited previously. Nevertheless, there are limited data available on service providers, market shares, and investment products, which makes it difficult to judge some aspects of the market. Personal pensions constitute a large and growing share of private retirement systems in all three countries. In Table 1, we showed that IRAs in the US account for 36.7 percent of total US retirement system assets. In Australia, self-managed super funds account for 25.5 percent, and personal pension assets in the UK account for 17 percent.

We conclude that individual savers in personal pensions tend not to have the same level of access to portfolio data as do institutional clients. Furthermore, many lack the time and resources to digest and analyse vast amounts of information, and large numbers will be insufficiently educated to make complex financial decisions. As a result, many rely on their independent financial advisers (IFAs), which is a fragmented market consisting of thousands of firms. In addition, current regulatory regimes raise concerns over levels of consumer protection. For example, most IFAs in the US are not fiduciaries and operate under a lesser ‘suitability’ standard. Personal pension savers are product-takers—to an even higher extent than 401(k) plans—with little leverage relative to service providers from the concentrated fund management industry. Consequently, participants are disengaged from the process of choosing their product, provider, and investments. Cost, which is often a more comprehensible metric than value or quality, is often the focus guiding peoples’ decisions. For this reason, sustainability is often not considered as an asset feature, so providers have limited commercial incentives to introduce and promote new sustainable products and services. As a result, more than \$12 trillion of personal pension savings

are being managed across three countries with minimal stewardship and consideration of sustainability issues.

Conclusions and Implications

The aim of this study was to understand the policy frameworks and important structural variables—fund concentration, number and types of actors, and relative market power—within the private retirement systems in Australia, the UK, and the US. By reviewing policy and structure, we sought to better understand the behaviour of various actors, their key challenges, how retirement systems function, and their ability to align with sustainability objectives. We also identified key challenges for specific national retirement systems and analysed comparative aspects in relation to policy and regulation, structure, governance, and the role of service providers. This, in turn, afforded us with new insights into how, or whether, specific system designs facilitate sustainable investments.

We identified three key issues: 1) the issue of market fragmentation, which tends to undermine the responsible investment support and activities among retirement plans; 2) the increasing importance of fund managers and investment consultants, along with their limited sustainable investment incentives; and 3) the growth and lack of a sustainability emphasis in personal pension systems.

While regulators in many parts of the world seek more sophisticated policies to align the financial system and economies with sustainability objectives, we conclude that one should not overlook the need to devote equal attention to retirement system structure, in ways to align these with sustainability policies. Furthermore, policymakers should consider fund consolidation in private sector retirement systems. The presence of well-governed, influential retirement plans with

cross-sectoral ownership of the economy and a universal ownership outlook and their relative weight in the financial system is key to counter collective action problems and drive how systemic sustainability issues are addressed by other actors. Fund consolidation may be achieved, for example, by raising the professional standards of trustees and fiduciaries or through introduction of new ESG-related obligations on pension funds (such as Taskforce for Climate-related Financial Disclosure by UK pension funds). Given the right regulatory options, as we've seen with UK master trusts and the Australian superannuation structure, this forces smaller pension funds (often single employer) which do not comply with new standards to consider letting assets being absorbed under available multi-employer alternatives. Fortunately, the emergence of environmental taxonomies will provide us with information about the extent to which various retirement plans perform relative to national goals. This has the potential to further our understanding on the relationship between structure, governance and sustainability performance and thereby better refine our policy recommendations in the future.

We also find room for concern, in that smaller retirement plans are less likely to consider responsible investment practices, while commercial service providers lack incentives to deviate from the 'norm.' Policymakers should therefore consider whether service-provider incentives should be aligned with sustainability incentives. Our findings also emphasize that it remains an open question as to whether beneficiary sustainability interests are truly being met and serviced. We therefore suggest that policymakers could do much to boost transparency in these markets, helping generate better-informed policies and provide beneficiaries with information relevant to their savings choices.

There remains much more to do to improve our understanding by analysing how ESG is being integrated and adopted across the board. In the future, it would be useful to study the proxy

voting behaviour of various actors including retirement plans (public and private), providers of personal pension products, and third-party managers. In a similar spirit, analysing ‘sustainable’ capital flows at the aggregate level would be useful as well. Furthermore, we identified other future research opportunities in personal pension markets including investigating asset concentration, market shares by various actors and sustainable product uptake. Lastly, our study concentrated on identifying structural characteristics of three main jurisdictions. We suggest that additional major retirement systems in terms of assets be analyzed, including Canada, Denmark, Japan, the Netherlands, and Sweden, as they are likely to face different structural challenges. By analysing these, we will better understand the common, comparable, and unique pension system challenges globally.

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Endnotes

¹ We use the OECD term ‘private retirement system’ which includes retirement plans and pension schemes that are not part of the social security or other statutory pension programme administered by the government—private pension schemes and retirement plans may be administered directly by an employer acting as the plan sponsor, by a private sector pension provider or other financial institution.

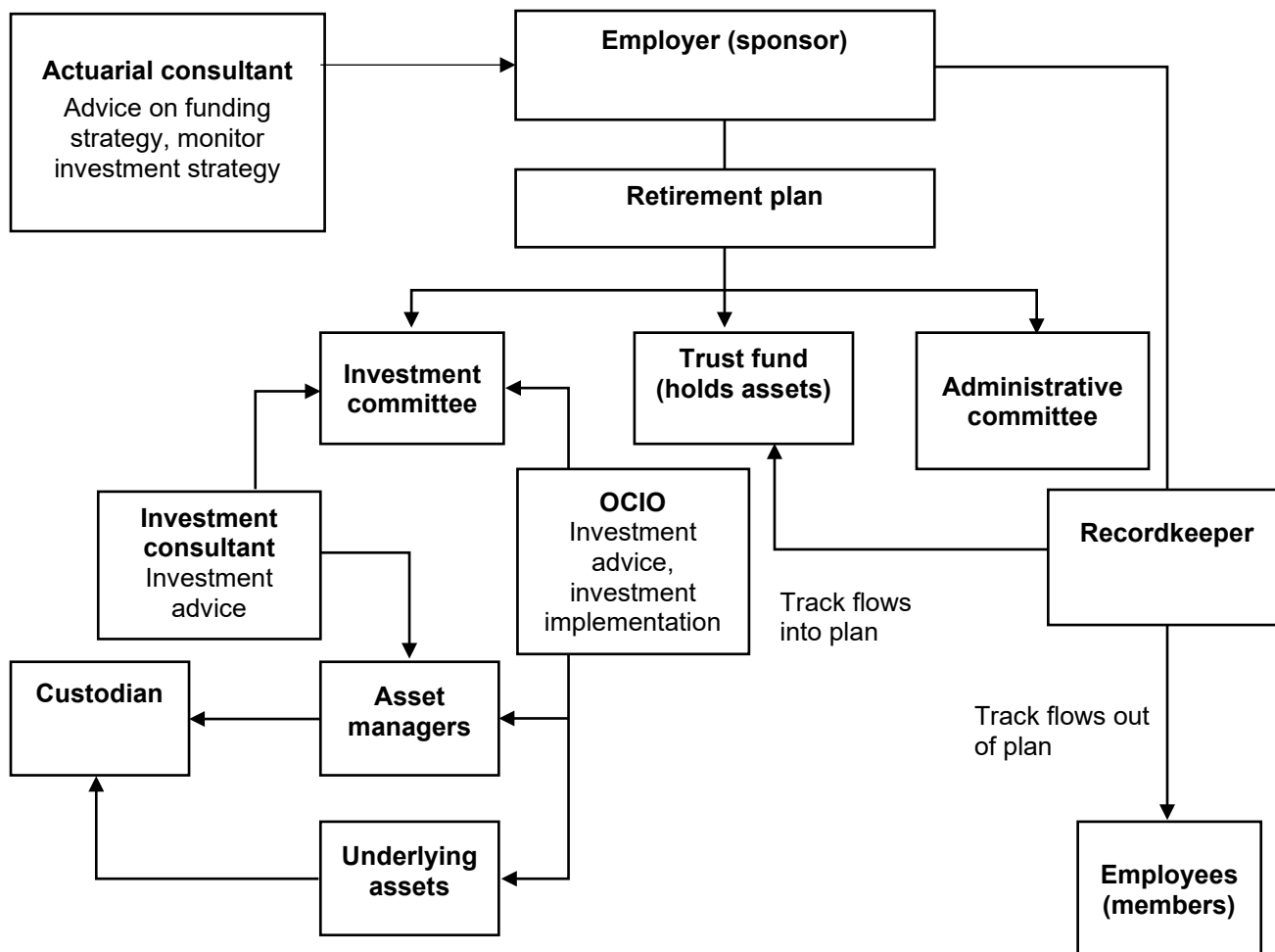
² PRI membership is a commitment to implement the six principles, including ESG incorporation, active ownership, and the annual public disclosure of information to document progress; this also entails a requirement to meet certain minimum requirements related to governance and implementation.

³ Data from the UK pension authorities do not allow the separation of DB and DC trust-based workplace assets to determine PRI signatory coverage.

⁴ Most new members of private sector workplace DC plans are automatically enrolled into the default option, which is likely to be a Target Date Fund (TDF) or other balanced strategy; 21% of 401(k) assets are in TDFs, rising to 49% of the assets of recently hired participants in their 20s.

⁵ A planned merger between the two firms was announced in 2020.

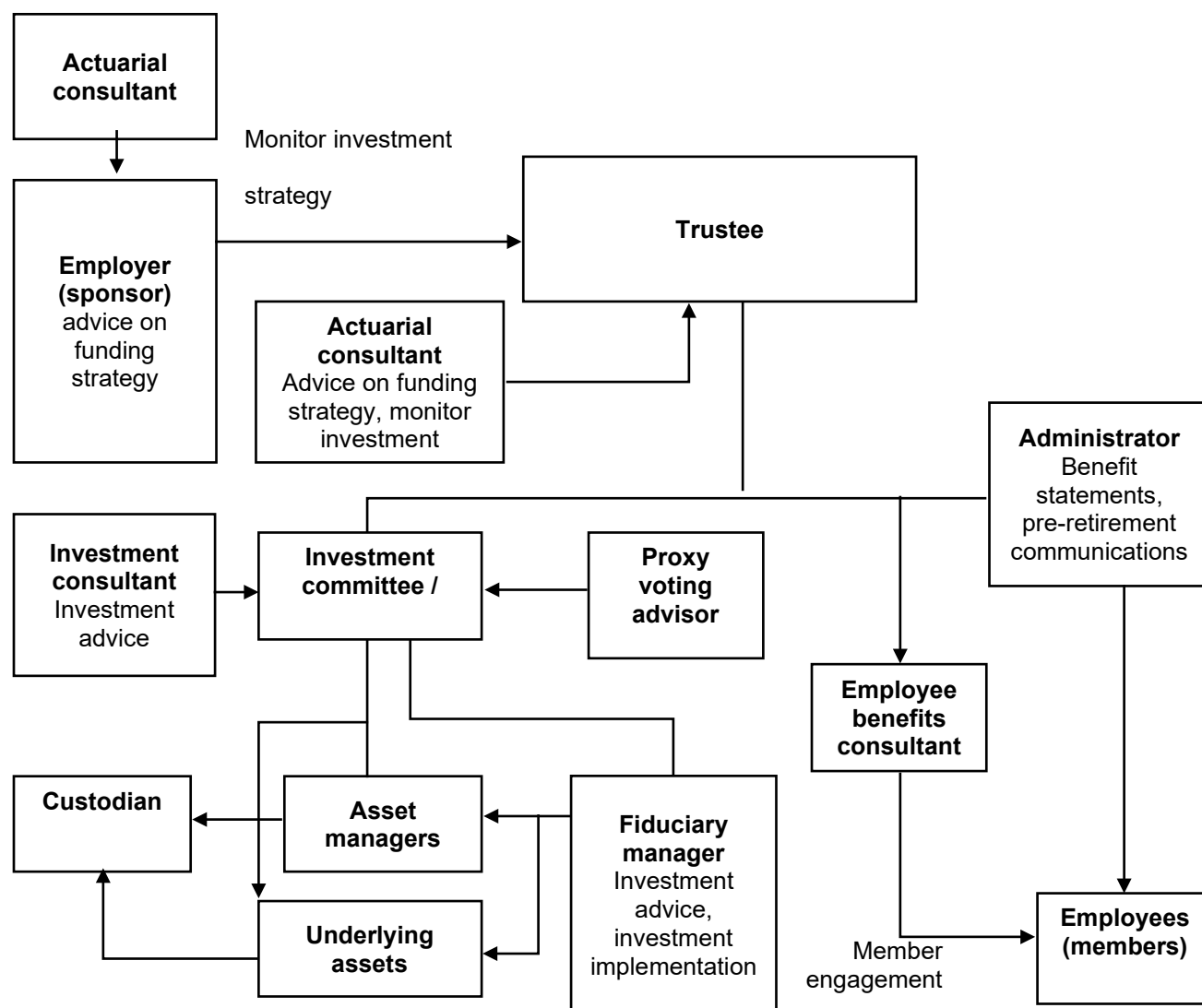
Figure 1. US private DB plan governance and investment decision-making chain



Note: Sponsors of private DB plans in the US routinely establish governing bodies that take on responsibility for managing and administering the plans. The governing body is comprised of plan fiduciaries who typically are corporate officers. The fiduciaries are the ultimate stewards of the assets and of beneficiaries' interests. The sponsor remains ultimately responsible for making up any shortfall in the plan's funding, so it has a continuing interest in the investment strategy. This dual role of fiduciaries and potential absence of impartiality influences the governance model. The figure also reveals a complex structure of advisors (actuaries and consultants), administrators, and asset managers. The investment chain has multiple entities involved in both investment strategy and execution and the structure and governance setup leave US private sector DB plans with limited influence on the complex intermediation chain.

Source: PRI (2020b).

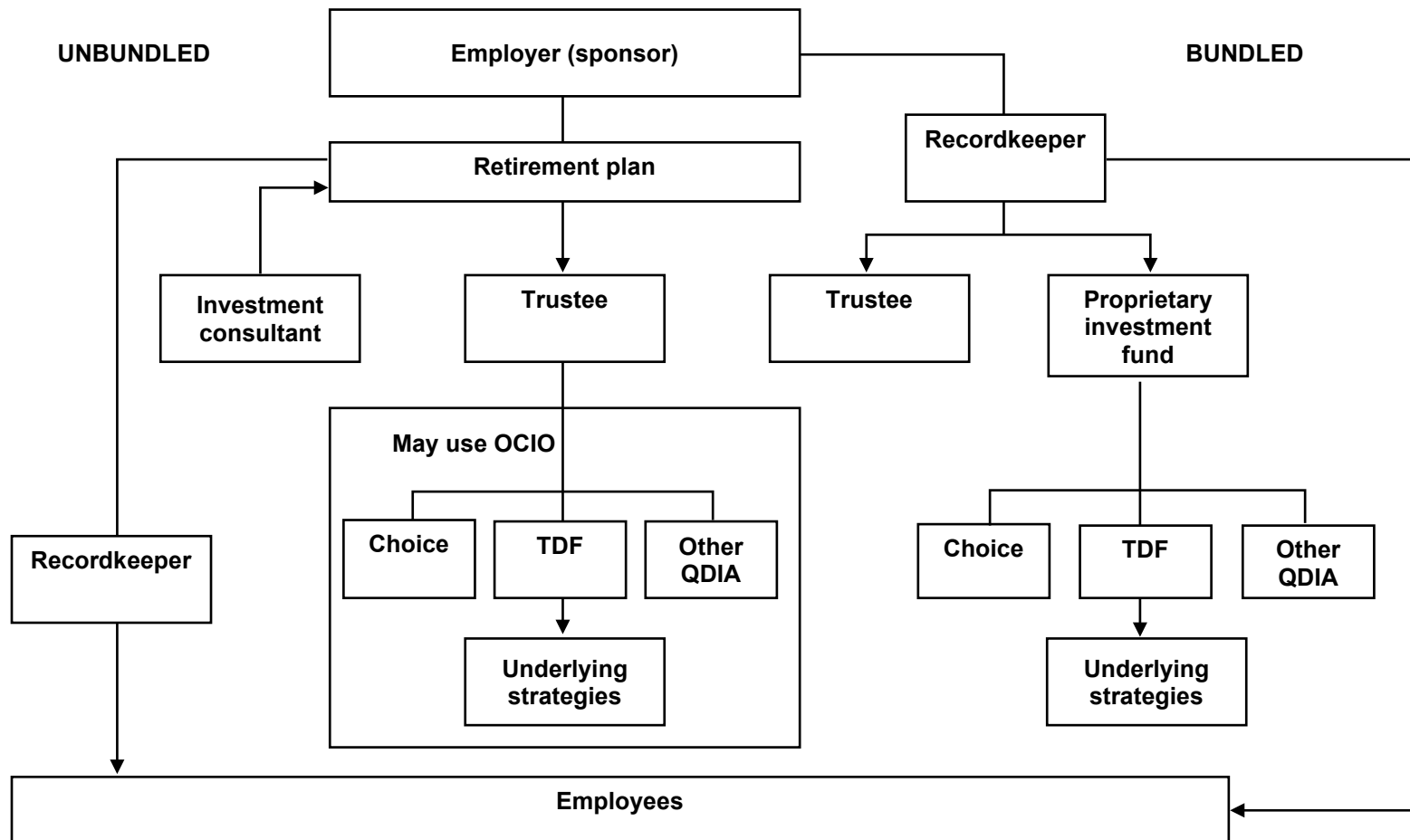
Figure 2. UK private DB plan governance and investment decision-making chain



Note: Sponsors in of private DB retirement plans in the UK routinely establish governing bodies that take on responsibility for managing and administering the plans. The governing body is comprised of independent trustees required to act impartially and in members' best interests. Trustees are the ultimate stewards of the assets and of beneficiaries' interests. The sponsor remains ultimately responsible for making up any shortfall in the plan's funding, so it has a continuing interest in the investment strategy. Trustees have the final say on investments. The investment chain has multiple entities involved in both investment strategy and execution, and the structure and governance setup leave private sector DB plans in the UK with limited influence on the complex intermediation chain.

Source: PRI (2020b).

Figure 3. US DC plan governance and investment decision-making chain



Note: The value chain of US 401(k) plans also includes a long chain of intermediaries between the ultimate owner of the invested assets of a 401(k) plan—the employee—and the actual investment decision. Plan sponsors are ultimately responsible for the design and operation of the plan. They usually use third-party trustees and recordkeepers for day-to-day operations, relying on external advisers in choosing the provider and determining the investment line-up. As plan participants are increasingly enrolled into a default option, termed in the US a QDIA, the selection of the default asset manager—and, where the QDIA is a Target Date Fund or a balanced fund, that

manager's selection of underlying instruments—will be the primary determinant of how DC assets are invested. The complex intermediation chain increases the risk of beneficiary or plan preferences on sustainability not being expressed in investment decisions or proxy voting behaviour.

Source: PRI (2020b).

Table 1. Asset concentration, growth trends, and PRI coverage within workplace retirement and personal pension systems

	Assets \$bn	# plans	Average plan size (\$bn)	5-year CAGR	PRI signatory base
US independent retirement accounts	11,025	N/A	N/A	8.6%	n/a
US public employees DB	6,730	190	35.42	5.3%	27%
US 401(k)	6,200	560,00	0.01	7.1%	<1%
US private sector workplace DB	3,380	46,500	0.07	2.4%	0%
UK private sector workplace DB	2,125	5,500	0.39	7.7%	18%*
Australia not-for-profit super funds	895	74	12.09	11.7%	75%
UK personal pensions	620	N/A	N/A	N/A	n/a
Australia self-managed super funds	515	N/A	N/A	5.1%	n/a
UK local government pension schemes	450	20	22.50	9.8%	66%
Australia retail super funds	430	112	3.84	3.1%	45%
UK workplace DC contract	240	12**	19.58	N/A	N/A
UK workplace DC trust	95	2,000	0.05	17.9%***	18%*

* UK data does not allow the separation of DB and DC trust-based workplace assets.

** 12 private pension providers cover more than 2,000 company schemes.

*** Excludes micro schemes.

Note: Personal pensions—such as independent retirement accounts and self-managed super funds—exhibit relatively high 5-year compound annual growth rates (CAGR) and are highly fragmented. The public sector retirement assets are significantly more concentrated across the three countries than private sector retirement assets with the exception of the UK workplace DC contract segment (this is due to a distinct feature of asset pooling of company schemes). Fragmented segments of retirement systems—i.e., exhibiting lower average plan size in asset terms—are less engaged on responsible investment than segments with concentration of assets using PRI membership as an indicator. Membership of the PRI entails a commitment to implement six principles, including ESG incorporation, active ownership, and the annual public disclosure of information to document progress; this also includes a requirement to meet certain minimum requirements related to governance and implementation. There are no institutional entities in the personal pension system eligible for PRI asset owner membership.

Sources: APRA, UK LGPS, TPR, FCA, EBSA, Investment Company Institute. All data (rounded) are from 2019.

Table 2. Country-by-country overview of private retirement assets, PRI coverage and DB/DC shares

	Total private retirement assets (\$bn)	Workplace retirement assets (\$bn)	Personal pension assets (\$bn)	Approximate total PRI signatory coverage	Approximate workplace PRI signatory coverage	DB as % of total workplace assets	DC as % of total workplace assets
Australia	1,945	1,430	515	47.1%	64%	14%	86%
UK	3,650	3,030	620	19.5%	23.5%	70%	30%
US	27,570	17,860	9,720	8.1%	12.5%	53%	47%

Exchange rates used: \$1= A\$1.45, \$1= £0.76

Note: The US private retirement system with a total of more than \$27trn in assets dwarfs those of Australia (\$1.95trn) and the UK (\$3.65trn). The PRI's signatory base covers nearly 50% of the assets in the Australian retirement system and over 60% of workplace retirement savings. In the UK, the figures are 19.5% and 23.5% respectively. In the US, PRI signatories hold only 8% of system assets and 13% of workplace retirement assets. Just over half of the total workplace assets across these three countries are held in DB plans. The general trend from DB to DC is all but complete in Australia, with only a handful of super funds offering purely DB plans and is gathering pace in the UK and the US. In both the UK and the US, public sector workplace retirement provision remains primarily DB. The private retirement systems include retirement plans and pension schemes that are not part of the social security or other statutory pension programme administered by the government. This can either be: 1) workplace plans which are linked to an employment or professional relationship between the plan member and the plan sponsor and are established by employers or groups thereof (e.g. industry associations) and labour or professional associations, jointly or separately, or 2) personal pensions which are established and administered directly by a pension fund or other financial institution without intervention by employers and where individuals independently purchase and select material aspects of the arrangements while employers may make contributions.

Sources: APRA, TPR, FCA; ICI, PRI signatory database. All data (rounded) are from 2019.

Table 3. Asset concentration of outsourced private retirement assets by top asset management firms per country

	Market concentration of externally managed retirement assets	Largest asset managers	
Australia	Top 10 asset managers > 50% of assets	State Street Global Advisors AMP Group Commonwealth/Colonial Group Vanguard IFM Investors Macquarie Bank Group BlackRock Schroder Investment Management UBS Asset Management BT Investment Management	
UK	Top 3 asset managers > 70% of assets	Legal and General Investment Management Insight Blackrock	
US	Top 10 asset managers for DB have >20% of assets	DB	PIMCO NISA Investment* BNY Mellon* Goldman Sachs Group Legg Mason*
	Top 10 asset managers for DC have >50% of assets	Both	BlackRock State Street Global Advisors Prudential Financial JP Morgan AM Northern Trust
		DC	Vanguard Fidelity Investment Nuveen T Rowe Price Capital Group

* Not PRI signatories

Note: The asset management industry's assets under management have continued to rise steadily over the past ten years, with US firms leading the pack. US asset managers also have the largest market share across the three private retirement systems examined. In Australia the 10 largest asset managers hold more than 50% of outsourced retirement assets. The UK retirement asset management market is extremely concentrated, with the top three providers managing over 70% of total outsourced assets under management. In the US, the top 10 asset managers for DB plans are responsible for over 20% of outsourced DB assets and the top 10 managers for DC plans for nearly 50% of outsourced DC assets.

Sources: P&I The Largest Money Managers (2019), IPE (2019), Australian Managed Funds industry, FSC/Morningstar (2016), PRI signatory database (2020).

Appendix

Table A1. Sources for country-by-country retirement system analysis

	Sources
<p>Australia</p> <ul style="list-style-type: none"> • Australian Prudential Regulation Authority • Productivity Commission • Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry • Responsible Investment Association Australasia • Financial Services Council • Financial Services Council/ Morningstar 	<p>APRA - Annual Superannuation Bulletin (2019)</p> <p>APRA - Annual Fund-Level Superannuation Statistics (2019)</p> <p>APRA - Quarterly Superannuation Performance Statistics (September, 2019)</p> <p>APRA - Climate change: Awareness to action (2019)</p> <p>PC - Superannuation: Assessing Efficiency and Competitiveness, Inquiry Report, No. 91 (2018)</p> <p>RC - Background Paper 25: Legal framework governing aspects of the Australian Superannuation System (2018)</p> <p>RIAA - Responsible Investment Benchmark Report (2019)</p> <p>RIAA - Responsible Investment Super Study (2019)</p> <p>FSC - State of the industry report (2019)</p> <p>FSC/Morningstar - Australian Managed Funds Industry (2016)</p>
<p>UK</p> <ul style="list-style-type: none"> • The Pension Regulator • Financial Conduct Authority • Department of Workers and Pensions • ShareAction/UNISON • ShareAction 	<p>TPR - DC trust: scheme return data 2019 (2020)</p> <p>TPR - Automatic enrolment – Commentary and analysis: April 2018-March 2019 (2019)</p> <p>FCA - Consultation on proposed amendment of COBS 21.3 permitted links rules (2018)</p> <p>FCA - Independent Governance Committees: extension of remit. FCA Policy Statement PS19/30 (2019)</p> <p>FCA - Effective competition in non-workplace pensions (2019)</p>

<ul style="list-style-type: none"> • Competition and Market Authority • Willis Tower Watson • The Investment Association • Pension Protection Fund • IPE • Local Government Pension Schemes 	<p>FCA - Patient Capital and Authorised Funds, Discussion Paper DP18/10 (2018)</p> <p>DWP - Investment Innovation and Future Consolidation: A Consultation on the Consideration of Illiquid Assets and the Development of Scale in Occupational Defined Contribution schemes (2019)</p> <p>DWP - The Occupational Pension Schemes (Investment and Disclosure) (Amendment) Regulations (2019)</p> <p>ShareAction/UNISON - Responsible Investment in LGPS – Research and review of the pension fund’s investment strategy statements (England and Wales) (2019)</p> <p>ShareAction - Is regulation enough? A review of UK master trusts’ ESG policies (2019)</p> <p>ShareAction - Voting Matters (2019)</p> <p>CMA - Investment Consultants Market Investigation (2018)</p> <p>WTW - FTSE 350 DC Pension Survey (2019)</p> <p>IA - Investment Association Annual Survey (2018)</p> <p>PPF - Purple Book (2019)</p> <p>IPE - The UK’s biggest asset managers (2019)</p> <p>LGPS - Local government pension scheme (2020)</p>
<p>US</p> <ul style="list-style-type: none"> • Employee Benefit Research Institute • Employee Benefits Security Administration • Investment Company Institute 	<p>EBRI - Putting Numbers to the Shifting Retirement Landscape, Fast Facts (2020)</p> <p>EBRI - EBRI Issue Brief no. 456: IRA Balances, Contributions, Rollovers, Withdrawals, and Asset Allocation, 2016 Update (2018)</p> <p>EBSA - Private Pension Plan Bulletin, Public Plans Database (2018)</p>

<ul style="list-style-type: none"> • The BrightScope/Investment Company Institute • Milliman • Callan • Influence Map • Pensions & Investments 	<p>ICI - ICI Research Perspective, Vol. 25 No. 10 (December 2019)</p> <p>ICI - ICI Quarterly Retirement Market Data (Second Quarter 2019)</p> <p>ICI - ICI Research Perspective, Vol. 24 No. 10 (December 2018)</p> <p>The BrightScope/Investment Company Institute - Defined Contribution Plan Profile: A Close Look at 401(k) Plans (2016)</p> <p>Milliman - Corporate Pension Funding Study (2019)</p> <p>Callan - DC Trends Survey (2019)</p> <p>Influence Map - Asset Managers and Climate Change – How the sector performs on portfolios, engagement and resolutions (2019)</p> <p>P&I - The Largest Money Managers (2019)</p>
<p>Global</p> <ul style="list-style-type: none"> • Willis Tower Watson • Mercer • PRI 	<p>WTW - Global Pension Assets Study (2020)</p> <p>WTW - The world's largest 500 fund managers (2019)</p> <p>Mercer - Melbourne Mercer Global Pension Index (2019)</p> <p>PRI - Signatory database - internal database of signatory organisations and their assets under management based on annually reported information</p>