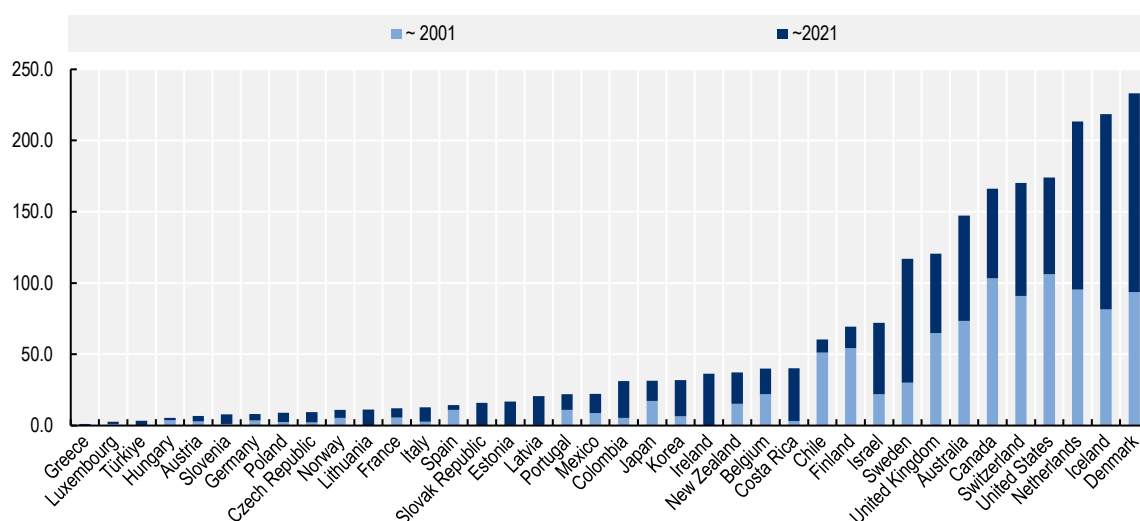


1 Policy guidance on developing asset-backed pension arrangements

This chapter provides policy guidance on how best to develop asset-backed pension arrangements. It uses the experiences of OECD member countries to identify the key challenges and considerations ahead of introducing or reforming asset-backed pension arrangements, during the implementation phase of a reform, and when trying to maintain or strengthen existing asset-backed pension arrangements.

Pension arrangements where assets accumulate to generate a pool of savings earmarked to finance retirement have been growing around the world.¹ Many countries have undertaken pension reforms to introduce, expand or strengthen these asset-backed pension arrangements in recent decades. Countries' experiences present important lessons for future reforms. Some countries' reform processes were true success stories when faced with challenges, while others were less so. Some countries failed to anticipate important elements of an asset-backed pension scheme's success, forcing them to make further reforms down the track. Some have schemes that continue to be resilient and popular, while others have abandoned or downsized their asset-backed pension arrangements. To better inform future reform endeavours, it is important to explore what countries learned from their experiences – what worked well, and what they would have done differently in hindsight. While there is no recipe for success that would apply to all asset-backed pension systems perfectly, it is still possible to draw on countries' experience to offer options to policy makers wishing to undertake similar reforms in the future. Figure 1.1 provides a view on the increase of assets earmarked for retirement over the last two decades in the OECD.²

Figure 1.1. The growing importance of asset-based pensions (assets earmarked for retirement as % GDP)



Source: OECD Global Pension Statistics.

Developing asset-backed pension arrangements can take many forms. It could refer to introducing asset-backed arrangements where they are not already in place, such as by creating a defined contribution (DC) system or transforming an unfunded defined benefit (DB) system into an asset-backed arrangement. It could involve widening the population of an existing asset-backed pension system, such as introducing mandatory coverage or automatic enrolment, or creating schemes that cater to workers that are not already covered (e.g. the self-employed). Developing asset-backed pension arrangements may also refer to reforms that strengthen an existing system, such as by increasing mandatory contribution rates or introducing tax incentives that prompt additional voluntary contributions.

The chapter is structured such that it separately considers policy challenges at different stages of developing asset-backed pension arrangements.

The first section outlines what countries may need to consider ahead of introducing or reforming asset-backed pension arrangements. It explores what policy makers need to do so that they can announce a reform that is clear in terms of not only its design, but also how it will be well-managed and safe, and why

it is needed. It discusses different options in terms of institutional and legal arrangements for the pension industry, different supervisory structures to accompany reform, as well as mechanisms aimed at protecting pension assets. It also discusses how communication can help policy makers shift public opinion in favour of reform. These considerations are typically those that come before a reform starts, to ensure that strong institutions and a robust regulatory framework support the system's design.

The second section looks at the next stage in developing asset-backed pension arrangements and discusses challenges and policy considerations that arise during the implementation phase of a reform. These considerations include making sure policy makers have the right operations, powers, and functions to regulate and oversee the new arrangements. The section also discusses other practical challenges, like clarifying to pension providers what their role will be, dealing with the costs of reform, and communicating about the reforms to individuals.

The third section discusses key considerations for policy makers in maintaining and strengthening asset-backed pension arrangements once they are in place. It therefore represents the final phase in the chronology of developing asset-backed pension arrangements. This section focusses on practical considerations to ensure the success of the arrangements. It discusses the following main challenges that policy makers have faced in maintaining and strengthening asset-backed pension arrangements: maintaining high standards of governance of pension schemes; ensuring strong investment returns; aligning fees with the cost of providing the services offered; addressing loss of trust in pension systems and low levels of public knowledge about pensions; and ensuring strong risk management processes.

The purpose of this chapter is to provide policy makers with a comprehensive framework for developing asset-backed pension arrangements. It does not revisit some issues, such as the structure of pension systems or the potential design or parameters of different asset-backed pension arrangements (e.g. contribution rates, tax incentives). Instead, it focuses on practical considerations to ensure the success of the arrangements. By bringing together the lessons countries have learned along different phases of the process, the chapter aims to share real-world experiences in a comprehensive, all-inclusive product. Throughout the discussion, the chapter also draws on the best practices outlined in the OECD Core Principles of Private Pension Regulation (the Core Principles) (OECD, 2016^[1]).

The final section provides policy guidance for future reforms to introduce and implement asset-backed pension arrangements, and to help policy makers maintain and strengthen existing arrangements.

1.1. Considerations ahead of introducing or reforming asset-backed pension arrangements

This section focuses on the practical matters policy makers may need to consider ahead of introducing or reforming asset-backed pension arrangements. It envisages a situation where policy makers already have a policy reform in mind and wish to ensure the success of that reform. It focusses on the most essential structural, legal, and practical considerations that are important to consider ahead of the reform.

This section first discusses the different institutional and legal structures available to policy makers in deciding how the pension industry will function. It then discusses the governance requirements that help ensure pension providers' management act in the best interests of members. Next, it considers how policy makers can address risks that may arise if financial markets are incomplete or lack depth, or in situations of high inflation. It then considers different supervisory structures to monitor pension schemes' compliance with legal requirements, as well as mechanisms aimed at protecting pension assets. Finally, it explores how policy makers can shift public opinion in favour of reform. Section 1.2 will explore other selected considerations that are concerned with the implementation phase of the reform.

1.1.1. Deciding on an institutional and legal structure for asset-backed pension provision

Policy makers have a role in determining the institutional set-up of prospective asset-backed pension arrangements. This involves a decision about which type of provider it will authorise to offer asset-backed pension plans, including aspects like cost, trust, and market concentration; what legal structures to put in place; and what types of services would be performed by different entities in the industry.

The question of what type of entity should provide retirement benefits ultimately refers to who should assume responsibility for asset-backed pension arrangements. This is a different question to licensing criteria for providers, which are concerned with verifying individual providers within an established system.³ Rather, the main decision here is whether pension provision should be part of existing financial entities' functions, or whether to set up independent standalone pension entities.

The experience of OECD countries shows that there is a spectrum of ways in which pension provision is integrated into financial services entities. On one end of the spectrum is a situation where pension provision is simply provided by an existing entity such as a bank, mutual fund, or insurance company. An example is Korea, where occupational and personal pension contracts are part of the broad service offering of these companies. On the other end is a model of pension provision that has no ties to the rest of the financial services industry. Here, asset-backed pension providers are independent, standalone entities, which are not owned by providers of other financial services. The not-for-profit Dutch pension funds and the independent industry funds in Australia are examples of this model. Most OECD countries lie somewhere in the middle of the spectrum. That is, asset-backed pension providers are independent entities that retain ties to existing financial services providers. For example, in Latin America, most countries have followed the Chilean approach of allowing only specialised fund management companies to manage the mandatory individual retirement accounts. While banks, investment companies, and other financial institutions can own these pension entities, they are legally separate from the financial group to which they belong (Queisser, 1998^[2]).

Different aspects may be considered when deciding which type of entity to authorise. Cost to members can influence the choice of pension provider. One consideration is whether potential providers have existing synergies they can leverage to keep costs down and minimise the disruption of transitioning to new provider types. That is, some providers have access to operational and financial frameworks through their existing lines of business, while others might have access to them through their parent company. This may help keep costs down at least in the short term, but the marginal benefits may be lower once the industry builds scale. Another important factor in determining whether the provider would deliver good value is whether they have a profit motive. In Australia for example, union groups were instrumental in setting up not-for-profit superannuation funds, known as industry funds, which have consistently delivered good outcomes at lower costs than for-profit superannuation funds. Public providers or low-cost providers may also be introduced to compete with other market players. This is what the United Kingdom did when setting up NEST. However, any efforts by public entities to set up public providers or low-cost providers should come with strict governance requirements to ensure the entity is independent and investment decisions are made at arm's length from the government (OECD, 2018^[3]). It is also important to bear in mind that setting up public providers comes with a cost too, and prospective members, or ultimately taxpayers, will bear that cost.

Trust is also an important factor in determining which providers policy makers select. Providers need to instil confidence in the public that they will protect members' assets and transfer funds to their rightful owners. This is why having providers that the public is likely to trust is essential, but that question can depend on the context of the country. Some countries have a high level of trust in entities such as banks. For example, when Korea introduced voluntary asset-backed pension arrangements, the banks were a natural choice of provider because the public trusted them. In other countries, being able to show that entities are independent or not-for-profit helps to build trust in that system. Lithuania, for example, recently introduced a public annuity provider, and the authorities chose for this function to be performed by an

existing public entity, SoDra (the public State Social Insurance Fund Board), partly because of the public's trust in it.

Finally, policy makers may wish to avoid situations of market concentration when selecting the type of pension provider. In this respect, policy makers may wish to allow different entities to be pension providers, which can encourage competition and new players to enter the market.⁴ Additionally, the threat of entry in itself can counteract dominance. Offering a range of pension provider types effectively shifts the choice to stakeholders. But the reality remains that it can be difficult to reduce certain players' financial dominance. Around the time that Estonia introduced asset-backed pensions, the banking sector was very dominant and the market was becoming more concentrated (Lillelaid, Tali and Auväärt, 2009^[4]). The government therefore allowed a range of entity types, including non-bank financial services providers and independent entities, to enter the market. While this could have been a good way to bring in new players, today there are five fund managers in the second pillar, and the banks own four.

The choice of the type of legal structure of pension providers is also an important feature to consider. There are three main types: fund type, contractual type, and trust type. The fund type involves an independent entity with legal personality and capacity and thus its own internal governing board. Examples include the foundations and associations in countries such as Denmark, Finland, Italy, Japan, the Netherlands, and Switzerland, as well as corporations in Australia and Germany (e.g. *Pensionkassen*). The contractual type consists of a segregated pool of assets without legal personality and capacity that is governed by a separate entity such as a bank, insurance company, or pension fund management company. Examples of countries with contractual type arrangements are Chile, the Czech Republic, Mexico, Portugal, and Türkiye. The governing body of such a fund is usually the board of directors of the management company. The trust type is a legal form that has trustees who legally own the pension fund assets. The trustees must administer the assets in the interests of the plan participants who are the beneficiaries of the investment. Examples include Australia, the United Kingdom and the United States (Stewart and Yermo, 2008^[5]).

A final consideration regarding the institutional setup is the types of services that different entities would perform within the asset-backed pension arrangement structure. Pension provision is not a single service, but rather, the accumulation of many distinct services, including collection, payment, investment management, and insurance. This raises the question of which entities should be responsible for carrying out the different services, but also whether responsible service providers should have permission to subcontract their tasks. There are different considerations that may be relevant to policy makers in determining the extent to which providers will have to integrate services. Having entities responsible for all or most aspects of pension services provision can simplify the system and avoid fees paid to various subcontractors. However, having specialised entities may be more cost effective, since having specialised service providers should result in a more cost-efficient, and therefore cheaper, service. It can also reduce barriers to entry that come with having to provide bundled services. Countries' experiences differ in this regard. Korea, for instance, requires different entities to be responsible for managing accounts and investing assets. In Chile, on the other hand, single providers bundle four different services: management of accounts, investments of pension funds, payment of pensions and the intermediation of the disability and survivorship insurance (Iglesias-Palau, 2009^[6]).

1.1.2. Ensuring good governance

Good governance is key to ensuring that the assets in asset-backed pension arrangements are managed prudently and in the best interests of beneficiaries (OECD, 2018^[3]). It is important to bear in mind governance needs when introducing or expanding asset-backed pension arrangements, to be sure that those who are responsible for the stewardship of pension assets are fit for the job, look out for the interests of members, and are open and transparent about what they do.

The goal of good governance is to minimise agency problems and avoid conflicts of interest in order to enhance investment performance and benefit security. Good governance is also a means of ensuring that

pension entities make prudent decisions without the government needing to make prescriptive regulation, helping to build trust among the public in any new systems. Conversely, a perception of poor governance is particularly damaging to pension entities and a system more generally, as trust is difficult to rebuild. As such, it is important that policy makers pay due regard to the governance of prospective pension entities as an essential component of any successful reform.

Good pension entity governance starts with ensuring that an independent board is responsible for the entity and for ensuring it will pay retirement incomes to members. The role of the independent governing body is outlined in Core Principle 3 (OECD, 2016^[11]). The governing board should be the ultimate decision-maker, and therefore should be the final line of accountability. This means it would bear responsibility for strategic decisions such as investment policy, choosing services providers, and reviewing the entity's performance. Its role and responsibilities should also be clearly distinguished from those of the management team of the entity. Policy makers can rely on legal instruments to clarify the powers and duties of governing boards, with a particular focus on strategic decisions and functions such as the choice of investment policy, the selection and monitoring of key staff, and the monitoring and disclosing fund performance. They can also require that a pension entity's internal governance documents clearly define the responsibility of the board with respect to a mission statement, and require it to abide by clear and measurable objectives.

But having regulation requiring an independent governing board alone is not enough. The experience of OECD countries has revealed potential areas of governance weaknesses that could serve as lessons for other countries embarking on reforms (Stewart and Yermo, 2008^[5]). This includes that the responsibilities of board members are not clearly defined, leaving the board with an unclear mission; excessive emphasis on stakeholder representation at the cost of expertise; and a failure to address potential conflicts of interest.

Having a mission statement is important to ensure the goals of a pension fund and the responsibilities of board members are clear (OECD, 2018^[3]). This element is too often overlooked. For example, one survey of senior pension fund executives revealed that a lack of focus or clarity in mission was a main area of performance shortfall (Ambachtsheer, Capelle and Lum, 2008^[7]). To address this issue, policy makers can require that pension providers' governance documents define a clear role and responsibility for the board with measurable objectives or operational goals (Clark and Urwin, 2008^[8]). They can also encourage members of the board to annually restate that they are aware of their governance obligations or to conduct self-assessments (Stewart and Yermo, 2008^[5]).

The composition of boards is another important consideration policy makers could address ahead of setting governance standards. A governing board should have the necessary expertise to make decisions on behalf of members and to constructively challenge the proposals of the management team. This means having a governing board with members whose combined experience includes the knowledge and understanding of all matters directly relating to the pension provider. This can include investment matters, risk management, funding policies, actuarial skills, and so on.

There is also a case for board members to be representatives of key stakeholders in the arrangement. Participatory rules governing the composition of pension provider boards are quite common in many OECD countries. For example, in Iceland, Belgium, Switzerland, and the Netherlands, the governing board of occupational plans must have an equal representation of employee and employer representatives. Employee or member representation helps ensure that the pension provider acts in beneficiaries' interest. Employer representatives in DB plans help ensure costs remain reasonable, investments are made prudently, and that any employer liabilities are kept under control. And as outlined in Core Principle 3.5, appointing members and beneficiaries of representative organisations can promote accountability to plan members and beneficiaries (OECD, 2016^[11]).

However, stakeholder representation comes with risks to board performance. For example, a study of the performance of public pension fund boards in the United States showed that boards with higher relative representation by state officials or plan participants underperformed. They tended to make poorer

decisions in terms of private equity investments due in part to lower levels of financial experience (Andonov, Hochberg and Rauh, 2018^[9]).

A potential role for policy makers is to take regulatory steps that strike a balance between stakeholder representation on boards with the best interests of members. For example, there is no reason an employee representative cannot also be someone who is skilled at investment decision-making and capable of challenging investment advisors. Policy makers can use regulation to enforce minimum standards of competence and experience in the governance of pension funds (Core Principle 3.6) (OECD, 2016^[11]). This imposes a duty to search for appointees capable of making prudent decisions and holding their own with experts, putting experience and representation on an even footing. In the United Kingdom, for example, the Pensions Act 2004 provided that pension fund trustees should have at least a high-school education, knowledge and understanding consistent with their responsibilities, and be drawn from and represent the employer (plan sponsor) as well as employees (beneficiaries). There is evidence that such steps have improved the performance of board members in the United Kingdom (Clark, 2007^[10]).

The potential for conflicts of interest is another key challenge policy makers can account for ahead of introducing or expanding asset-backed pension arrangements. There tends to be three main types of conflicts of interest that are particularly relevant to pension arrangements:

- Conflicts between the personal interests of governing body members and the interests of plan members. This type of conflict can arise when governing body members stand to personally benefit from their role. An example is the Swissfirst affair involving *Pensionskassen* in Switzerland, where pension fund managers were trading the same shares as the pension funds which employed them (Stewart and Yermo, 2008^[5]).
- Conflicts between the duty a governing body member owes to members and their duty to other persons or entities. Examples include when board members are employer, employee or government representatives. When the employer is also the administrator or pays for the administration of the pension plan, they may wish to reduce administration costs, which could be in conflict with the members' interests to get high standards of administration. Alternatively, employer representatives could also have conflicts regarding funding decisions since an employer would be responsible for paying additional contributions. Employers could also receive incentives (such as favourable banking terms) if they select a particular pension provider or services provider for their retirement plan, which can affect their decisions regarding the plan. Equally, employee representatives may be inclined to favour the interests of employees, to the detriment of retired members who may be receiving benefits from a pension plan. Additionally, in the case of public pension entities, decisions of the members of the governing body nominated or appointed by the government could be subject to political interference. This is particularly important when it comes to investment decisions, since the pension entity may well invest more heavily in government bonds in the early days of operation or may be a co-investor alongside governments in certain projects for economic or social ends that do not necessarily result in good investment returns to members (Mitchell, 1998^[11]).
- Conflicts that arise between the interests of members and the financial group to which a provider belongs and its shareholders. This issue is particularly pertinent to pension arrangements that are run on a for-profit basis.⁵ For instance, a conflict can arise if the provider selects entities from the same financial group to perform a service. These situations raise questions of why the governing board selected a particular entity to perform a service, and how the parties agreed on a price for the service. The Australian Royal Commission raised these concerns after uncovering instances of significant dealing between entities within financial groups that involved little to no negotiation of fees charged by the relevant trustees (Commonwealth of Australia, 2019^[12]). Alternatively, since some pension entities have a profit motive, the interests of their shareholders can conflict with those of members. For instance, the costs of marketing campaigns to grow membership can increase profits, which benefits shareholders, but their costs ultimately fall on existing members.

Policy makers may wish to consider how they would address potential conflict of interest issues ahead of announcing policies that introduce or expand asset-backed pension arrangements. Doing so starts with regulation that imposes a high standard of integrity and professionalism, but also clear criteria to disqualify members from the governing body (Core Principle 3.6). Additionally, it is essential that from the outset, governing bodies with members appointed by the government are subject to requirements that they maintain an arm's length relationship from the government, to avoid the perception of interference (OECD, 2018^[3]). Having independent members in governing bodies can also reduce the risk of conflicts of interest arising. Policy makers can also take steps to promote risk-based internal controls such as an audit function, an internal conflict of interest policy, independence and impartiality standards, and whistle-blower provisions (Core Principle 3.11) (OECD, 2016^[1]).

Additionally, as a check on all governance matters, policy makers can impose a high standard of disclosure and transparency on pension providers from the outset. Core Principle 3.13 requires that governing bodies disclose all relevant information to all parties involved (notably pension plan members and beneficiaries, supervisory authorities, auditors, etc.) in a clear, accurate, and timely fashion (OECD, 2016^[1]). Disclosure of decisions in simple terms can encourage good behaviour, since the members and the public could hold the managing board accountable for any shortcomings.

1.1.3. Managing with capital markets that are incomplete or lack depth, or situations of high inflation

The experience of OECD countries has shown that introducing asset-backed pension arrangements can come with risks when capital markets are incomplete or lack depth, or in situations of high inflation. Namely, there is a risk that pension providers may not have access to the range of financial instruments they need to diversify investments and match the time structure of assets and liabilities. There is also a risk that inflation would erode the value of nominal bonds. While these are by no means the only risks facing newly established asset-backed arrangements, they warrant special attention because they relate to the economic context in which asset-backed pensions will operate. Therefore, the risks may call for bespoke, and sometimes transitional, policy solutions.

This sub-section discusses how policy makers have mitigated those risks either by imposing investment restrictions or by nudging pension providers into particular asset classes.

The risk of having few financial instruments for pension providers to invest in

There is a risk that pension providers may not have access to a range of financial instruments with different risk/return profiles, especially when financial markets are incomplete or lack depth. Such cases may lead to a situation where pension providers are unable to diversify their investments due to a limited range of investment vehicles in which to invest. Furthermore, if the domestic financial market does not provide access to instruments such as equities, providers may not be able to achieve a high rate of return at an acceptable level of risk without investing abroad. A small or underdeveloped domestic market may also inhibit pension providers' abilities to match the time structure of assets and liabilities.

Related to the paucity of financial instruments in which to invest may be a situation where pension providers simply lack the skills and experience in investing in a range of financial instruments or offshore markets. This can further increase the investment risk that members or sponsors will ultimately bear. Notwithstanding, the experience of OECD countries has shown that having access to a range of financial instruments through a well-functioning financial system is not essential during the embryonic phase of asset-backed systems. But access to domestic or international developed financial systems certainly becomes more important as the system grows.

Regulating pension providers' investments while allowing the financial market and providers' skills to develop in parallel can be one approach to manage the risk of insufficient financial instruments being

available and the inexperience of pension providers. In this sense, asset-backed pension arrangements and financial markets develop in tandem, and policy makers gradually loosen investment restrictions over time as the financial market becomes more developed. This approach is in line with Core Principle 1.5, which states that “the development of well-functioning and transparent capital markets and financial institutions should be promoted to enable the development of new financial instruments and markets to support pension provision” (OECD, 2016^[11]).

The experience of some OECD countries has shown that it is possible to devise a strategy to manage investments through quantitative restrictions in the early years of an asset-backed arrangement while also developing or deepening domestic financial markets. Quantitative investment restrictions tend to be maximum or minimum allowable thresholds, referring to asset classes, geographical restrictions, investment vehicles or degrees of concentration (OECD, 2015^[13]). While the OECD generally recommends caution in implementing some quantitative investment limits, they can be justified in the early years of a system to protect members.⁶ Under strategies that see asset-backed pension systems and financial markets develop at the same time, some OECD member countries have placed limits on investments in equities and international securities, with a view to relaxing those restrictions over time. This effectively required pension asset managers to start by investing in domestic fixed income assets like government bonds. If the starting point is an immature financial market, gains from financial sector development will initially be concentrated in the development of the government bond market, and long-term lending through banks. This would also help in developing the sovereign yield curve, which is an important part of capital market development (Barr and Diamond, 2008^[14]). Having a yield curve can then help price corporate sector bonds and can contribute to the acceptance and use of indexed bonds (Roldos, 2004^[15]). Over time, capital supply increases coupled with governments’ loosening of any investment restrictions tends to lead to the development of the equity and corporate bond markets, asset-backed securities, and alternative investments (Impavido, Musalem and Vittas, 2002^[16]). At this point, retirement savings managers will be able to access a greater range of financial instruments. In this respect, a reform that sees financial markets develop produces favourable conditions to realise the aims of the pension reform itself. Making such investment regulations part of a clear strategy that sees them ultimately being wound down can provide certainty to investors and can help build trust among the public.

Chile offers an example of a gradual approach to reforming asset-backed systems and financial markets at the same time. During the early years, investments by pension fund administrators (AFPs) were largely restricted to government securities, bank deposits, investment-grade corporate bonds, and mortgage bonds. In 1985, they were allowed to invest in equities, although the limit was set at 5% of the funds and with restrictions on the type of issuing firm they could invest in. As such, many AFPs invested exclusively in newly privatised firms. In 1989, the government lifted restrictions on equity investments and allowed AFPs to invest in real estate (Edwards, 1998^[17]). Research focussing on this period has shown that pension funds’ rising investment needs prompted new entities to be created and made the financial market deeper, more liquid, and more competitive (Holzmann, 1997^[18]).

However, a downside to having investment regulations that concentrate retirement savings in bond markets in early years is that the portfolio would be more exposed to default risk and concentration risk. While many countries’ bond markets offer relatively safe investment vehicles, history has shown that it is not always the case. In Argentina, for example, during the 1990s, many retirement savings portfolios were concentrated in government-issued debt, leaving pension funds vulnerable to government default.⁷ By the time the government defaulted in January 2002, nearly 80% of Argentine retirement savings were invested in government securities (Kay, 2009^[19]). Another downside to having an undiversified portfolio with a concentration in fixed income assets is that this can lead to low returns in the early years. Relative to a more diversified portfolio that includes instruments with higher returns, a portfolio of predominantly fixed income assets may yield a lower return, in particular during periods of prolonged low interest rates. The longer a portfolio has this investment strategy, the lower incomes will be in retirement, due to lower

compounding. Finally, investment restrictions inevitably hinder pension providers' governing bodies from pursuing unfettered investment strategies that they may view to be in the best interests of members.

Allowing retirement savings investors to invest offshore is another way to mitigate the downside risk of having few domestic financial instruments with different risk/return profiles, but comes with challenges. Investing in offshore markets can make it possible to achieve higher returns and greater investment diversification without having to wait for a domestic market to develop. However, in countries with less developed financial markets, it is more likely that domestic fund managers may lack the skills to invest in a range of instruments, including those that allow them to hedge currency risk. Some countries also took the view that allowing investments to go offshore can impede the development of local financial markets. This is why some countries like Chile and Mexico established jurisdiction-based investment limits in the early years of the asset-backed pension system. The limits ensured pension assets remained in the country to help bolster the domestic, albeit emerging, capital market, in line with an intention to use asset-backed arrangements to develop capital markets.⁸

However, jurisdiction-based restrictions present a dilemma for regulators if fear of capital flight conflicts with members' interests. On the one hand, regulators may have goals to develop a local capital market and potentially boost economic growth, while also preventing a potential increase in the cost of domestic capital due to capital outflows (Barr and Diamond, 2008^[14]). On the other hand, they have a role to ensure members can access potentially better returns and are able to diversify their investments through access to foreign markets. Jurisdiction-based investment restrictions could be justified on the basis that fund managers may lack the skills to develop prudent investment strategies involving overseas opportunities. Otherwise, policy makers should exercise caution when imposing investment restrictions whose primary purpose is not to protect members' retirement income security. Notwithstanding, there is an argument that limits on overseas investment do not have a strong impact on retirement asset investments, at least in the early years of the schemes, due in part to home country bias and local investors' lack of familiarity in foreign securities and the use of hedging instruments (Vittas, 1999^[20]).

The risk of high inflation

Another risk that policy makers may wish to account for is inflation risk. All countries face this risk, albeit to different degrees, given the long-term nature of retirement saving. High inflation erodes the real value of nominal bonds. As such, bursts of high inflation can cause a sharp decline in the value of retirement assets invested in bonds that are not fully indexed (Barr and Diamond, 2008^[14]). The problem is greater when more assets are concentrated in nominal bonds and in the domestic market, or any single geographical market.

As a first best solution to manage inflation risk, governments that plan to introduce or expand asset-backed pension arrangements could focus on establishing a credible long-term macroeconomic framework to avoid circumstances of high inflation from the outset (Impavido, Musalem and Vittas, 2002^[16]). But history has shown that some countries are not able to do so, or unexpected bouts of inflation emerge even after many years of stability. As such, policy makers can take steps to help pension providers manage and control inflation risk.

One way to help pension providers partially hedge against inflation risk is for governments to issue inflation-indexed bonds, shifting the inflation risk onto the issuer. While many OECD countries already issue such bonds,⁹ many OECD and most non-OECD countries still do not and may wish to consider doing so ahead of further developments to asset-backed pension arrangements. Pension providers are natural purchasers of such bonds. The benefits of doing so was evident in Türkiye, which experienced double-digit inflation between 2017 and 2019. Despite having a high concentration of retirement savings invested in domestic government bonds, inflation-indexed bonds largely shielded assets from large devaluations.

Some countries have gone further than issuing standard inflation-linked bonds. Israel, for example, issues special inflation-linked non-tradeable bonds that are earmarked for pension fund investment. These bonds

offer a stable rate of return that is higher than regular long-term inflation-linked government bonds, effectively acting as a subsidy to the members of the asset-backed pension scheme. Pension funds are required to invest a minimum of 30% of their assets in these bonds (OECD, 2011^[21]). Uruguay, on the other hand, issues wage-indexed bonds since the constitution links the minimum value of pension payments to nominal wages.¹⁰

Alternatively, to help pension providers hedge against inflation risk, policy makers can take steps that lift any unnecessary quantitative investment restrictions imposing minimum investments in fixed income assets. Stock values, like the values of underlying companies, can maintain a positive relationship with the economy, so are less likely to lose their real value. However, they can significantly increase the risk profile of investments.

1.1.4. Deciding on a supervisory structure

The discussion so far has focussed on how to regulate asset-backed pension arrangements, but it is also important to be clear about how the government will monitor a pension scheme's compliance with those requirements, and how closely. This is why, prior to introducing or reforming asset-backed pension arrangements, policy makers may wish to consider what type of entity will supervise the arrangements, and how that supervisor will function.

A starting point for this question is whether existing supervisory arrangements (such as the existing financial services regulator) are sufficient to oversee the asset-backed pension scheme, or whether a new regime is needed. The experience of OECD countries shows that both supervisory models work well, and the choice of supervisory setup may simply depend on the country context and any specific needs.

Some OECD countries opted for specialised supervision. This involves the government setting up a new supervisor that is independent from supervisory authorities of other entities, although they would work in collaboration and co-ordination with them. In general, countries with mandatory private pension plans have tended to set up specialised supervisors. This is particularly the case when specialised entities, such as standalone pension funds, are responsible for pension provision (Impavido, 2013^[22]). However, questions of public trust can also be particularly relevant to this decision. For example, Chile created a new specialised supervision entity with the sole purpose of controlling pension funds and their respective management companies. This was because the public did not view the existing institutions very positively, and the authorities preferred having an entity the public might trust (Iglesias-Palau, 2009^[6]). Furthermore, the authorities thought that there might be a conflict of interest if an entity supervised both the investors and the issuers of financial assets.

On the other hand, some countries chose not to set up specialised supervisors, instead integrating supervision of pension providers into existing authorities. Examples include many countries in the European Union, such as Germany, France, and the Netherlands. In some countries, the reason for retaining the existing supervisor is that plans were voluntary and the sector was small. Still, some countries, like the Netherlands, have a mandatory and large asset-backed pension scheme, but the supervisor is the Central Bank, which also supervises other financial services. Similarly, Colombia opted to have AFPs licensed, regulated and supervised by the Financial Superintendence of Colombia, which already supervised the banking system, insurance companies, and other financial institutions. Its decision was motivated by the fear that an additional supervisor might be subject to regulatory capture (Queisser, 1998^[2]). Estonia, on the other hand, merged three separate financial supervisory authorities (for banking, securities, and insurance) into one (the Financial Supervisory Authority, FSA) just before it implemented the mandatory asset-backed pension system. The rationale was to make supervision more effective and ensure the same quality of supervision across all parts of the financial sector. It also allowed the FSA to control all actors of the pensions industry, which covered investment companies, banks, stock exchanges, and life insurance companies (OECD, 2011^[23]). Australia has unspecialised supervision, but assigns

market conduct and prudential supervision to two different supervisory entities. This helps to have a clear focus in terms of the responsibilities, but requires significant co-ordination efforts.

Irrespective of the supervisor type, policy makers can bear in mind supervisory principles that will help build confidence in the system. Following Core Principle 6, such principles include (OECD, 2016^[1]):

- the strategic objectives of supervisory oversight
- how supervision will be operationally independent
- the resources and legal power the supervisor will need to supervise effectively
- the supervisory regime that would apply to prospective pension providers
- how the supervisor would maintain the confidentiality of information.

1.1.5. Protecting the retirement savings of members

When introducing or expanding asset-backed pension arrangements, policy makers may wish to consider what mechanisms might be needed to protect the assets that underlie asset-backed pension arrangements. Some countries may already have protections in place through their existing legislation, but others may need to introduce changes to account for the new or reformed asset-backed pension arrangement. This sub-section outlines the most important protection mechanisms. They include legal provisions that protect the interest of members if pension providers or sponsors become insolvent, requirements to ring-fence assets, audit requirements, and updates to contract or judicial systems.

Having asset-backed pension arrangements does not immediately imply that members are protected from insolvency risk. Having insolvency legislation in place is important to protect the accrued rights of members and beneficiaries in the event that pension providers' or sponsors' functions discontinue. Such provisions should ensure that contributions are preserved, and that the law stipulates priority creditors' rights for members, sponsors, and pension funds and/or pension entities (Core Principle 7) (OECD, 2016^[1]).

To support insolvency legislation, countries can also put in place insolvency insurance regimes. Germany, for example, has a pension protection scheme (PSVaG) guaranteeing occupational pensions in the event of insolvency of the employer. Colombia set up a guarantee fund backed by a state guarantee of retirement savings in AFPs. The law requires that AFPs contribute to the financial sector guarantee fund (FOGAFIN), which protects members' contributions in the case of an AFP's liquidation. The fund guarantees the mandatory contributions and the interest generated from them, as well as voluntary contributions up to a ceiling of 150 minimum salaries (Queisser, 1998^[2]).

Related to insolvency protection is legislation that requires retirement savings to be ring-fenced. Having ring-fenced assets is beneficial in that it sends a key message to pension asset holders that their assets are safe and cannot be appropriated for other means. Ring-fencing provides that retirement savings are segregated from the assets of a plan sponsor, the assets of a pension provider, or other assets managed by a pension provider's parent company. However, there are many possible techniques for distinguishing or segregating one set of assets, liabilities or activities from another. These include methods for setting up separate funds, identifying and tracing particular assets and liabilities, as well as techniques for protecting one set of assets from the economic fate of the other, such as providing them with a privileged status in the case of bankruptcy (van Meerten, 2009^[24]). In practical terms, ring-fencing suggests at the very least separate accounting for contributions, expenses, investments, taxation, and benefits.

Regulation that enforces audit requirements on pension funds can serve a whistle-blowing function, adding protection to retirement savings. Audit requirements of pension funds tend to refer to the review of financial statements, internal controls, the accounting and actuarial assumptions used by the plan manager, and so on, and help ensure the transparency and financial resilience of pension funds. However, auditors can also serve as a supervisor's eyes on the ground, with regulations often providing for a supervisor's ability to

contact the auditor to request clarifications or access the auditor's working papers. In some cases, supervisors can also require auditors to report serious regulatory breaches (Impavido, 2013^[22]).

Finally, ensuring that existing legal structures will be sufficient to uphold the rights of members and beneficiaries is important. Core Principle 1.6 states that a country's legal system should enable the enforcement of contracts pertaining to private pensions (OECD, 2016^[1]). In particular, there should be a body of ethical, professional and trained lawyers and judges, and a court system whose decisions are enforceable. Comparable standards should apply in cases where alternative dispute mechanisms exist.

1.1.6. Building support for change

A final, but essential, element policy makers may wish to consider ahead of introducing or expanding asset-backed pension arrangements is how to build support for change. The process of building public support can require a long lead time and significant investment in public education and stakeholder engagement. However, the experience of OECD countries has shown that failing to build an evidence base for change and obtain consensus from veto groups can be fatal to reform. This is why shifting public opinion in favour of change could start with a process that builds the case for asset-backed pension system reform, followed by consensus building efforts.

Having a public that accepts or even welcomes asset-backed pension system reforms has proven to be the optimal platform for success. An example of such a case is Sweden's introduction of the Premium Pension scheme. At the time, many Swedish people were already investing in mutual funds and benefitting from good capital market returns, raising interest in fund-based retirement saving. This prompted greater demand for having an asset-backed component of the pension system where the public can further tap into market returns. Ultimately, this led to a reform with bipartisan support. However, most countries have had to grapple with a public that is more resistant to asset-backed pension system reforms, going to great lengths to secure public acceptance.

Establishing independent inquiries is a good way to build a case for asset-backed pension system reform. Such inquiries are useful to explore the case for change and propose a roadmap for reform. Their independence can also add credence to what may otherwise carry a perception of partiality. For example, the UK Government asked the Pensions Commission to carry out an independent inquiry in 2004 to analyse the pension system against the changing socio-economic and demographic background and make recommendations for reform. The commission's findings were instrumental because they were persuasive and ultimately underpinned the reforms that introduced automatic enrolment and created NEST.

Public awareness campaigns can also help build society's acceptance of the need for change. They help disseminate information about any key risks due to existing systems and make the case for change. Countries such as Poland, Latvia and Slovenia undertook such campaigns before embarking on the process of introducing their asset-backed pension schemes. Romania contributed to the public dialogue by organising debates with representatives of society, including employers, pensioners, and trade unions. In Poland, policy makers relied on a public relations company to help with the relationship with the media (Chlon-Dominczak and Mora, 2003^[25]).

Raising public awareness in a way that supports reform is not without challenges, however. Some countries' experience has shown that raising public awareness takes time and can have little or no effect (Chlon-Dominczak and Mora, 2003^[25]). Furthermore, many people are simply myopic and uninterested in learning about potential pension system changes. Others may view pension systems as being complex, and poorly targeted communication can lead to additional confusion or misconceptions.

Different approaches can help address these challenges. OECD research on national pension communication campaigns identifies useful lessons to draw on (OECD, 2014^[26]). For example, communication campaigns are efficient and effective when they target specific groups. This involves dividing a population according to perceived levels of awareness, interest, and willingness to engage and

take action. Then policy makers can deliver different messages according to the target group. Finally, the more focussed the campaign, the greater its chances of success. This is why any messages it delivers should be short and simple, with complex details broken down into component parts and delivered in phases. To avoid confusion, public communication campaigns that aim to raise awareness of the need for reform should not pre-suppose a particular reform. They should focus on the key message, which is the case for asset-backed pension system reform. Communicating details of policy design and how any new asset-backed pension system will function is a different message, so is better left to the implementation phase of the reform process.¹¹

Policy makers may also still need to focus some efforts on building a consensus with key veto groups. Depending on the country context, it may be essential to engage with employer, employee, and pensioner representatives. According to a survey of experts and decision makers involved in several countries' pension reform processes, many policy makers view consensus between those groups as an important factor leading to the successful completion of the coalition-building phase. This is why any reform process is more likely to be successful if it brings together a range of political players and social partners (Chlon-Dominczak and Mora, 2003^[25]). Active negotiation with social partners is more likely to achieve significant reform, as was the case under the Italian Dini reform. The government negotiated intensively with the social partners, culminating in a national pact that was agreed with the trade unions (Baccaro, 2002^[27]). Similarly, in Denmark, the occupational schemes started in the private sector with contributions of 0.9% of salary but extended in successive bargaining rounds because of a political consensus between a coalition government and trade unions, who formed a 'joint declaration'.¹² Conversely, in Peru and Colombia, policy makers originally intended for a new asset-backed DC system to replace the public pay-as-you-go (PAYG) scheme. But the resistance of trade unions, the social insurance bureaucracy and other groups proved fatal to those plans. When the government ultimately introduced the DC schemes, they could only offer them as an alternative to the existing public pension scheme without any obligation for new labour force entrants to join them (Queisser, 1998^[2]).

1.2. Challenges and policy considerations that arise during the implementation phase of a reform to develop asset-backed pension arrangements

This section considers the implementation phase of a reform. From the perspective of policy makers, this phase of a reform is distinct from the pre-reform phase, in that it comes with different needs and challenges. The implementation phase is less concerned with laying the groundwork for reform. The main considerations for policy makers during an implementation phase are making sure regulators and supervisors have the right operations, powers and functions in place to regulate and oversee the new asset-backed pension arrangements, and clarifying the role of pension entities. Policy makers also need to deal with other practical challenges, like dealing with the costs of reform and communicating about the reforms to individuals.

1.2.1. Revising the key functions of regulators, supervisors, and pension entities

When introducing or expanding asset-backed pension arrangements, policy makers need to consider how to operationalise the main functions that will underlie new or reformed schemes. Regulators, supervisors, and pension entities will all ultimately take on new roles once reforms are in place. As part of an implementation process, policy makers need to anticipate any new or revised functions any entity will need to assume. They also need to clarify what those functions should entail with enough time for any processes to be put in place. This section explores the relevant potential functions of government bodies and pension entities. It does not attempt to outline all the functions these entities would carry out, but rather, to highlight the ones that may warrant special attention as part of a process to develop asset-backed pension arrangements.

Operational considerations for regulating and supervising asset-backed pension arrangements

Policy makers should consider what operational capabilities government agencies might need to handle new or reformed asset-backed pension arrangements. While countries are likely to already have practices in place to regulate and supervise financial services providers, it is useful to revisit them in the context of introducing or expanding asset-backed pension arrangements.

Authorities may wish to consider what practical steps they need to take to ensure their own operations and systems are fit for purpose to support a reformed asset-backed pension system. Authorities implementing reforms should consult widely to understand what changes need to be made and take a realistic view concerning the time and resources needed to put them in place. Drawing on examples from countries that have needed to reform their operations and systems to adapt to new or reformed asset-backed pension systems, considerations could include:

- The introduction of personal identification systems and accounts. There may need to be a national strategy to enumerate workers and their dependents as well as employers (Holzmann and Hinz, 2005^[28]). While some countries may already have such a number (e.g. social security number), others do not and may need to put in place an alternative enumeration methodology.
- IT systems that accompany the new reforms. For example, administrative systems within the civil service may be needed to keep track of detailed information, such as fund administration details and costs. A digital portal may also need to be developed to facilitate any reporting by funds. If a specialised public entity is set up as part of the reforms, that entity will likely need a comprehensive system built to support its operations.
- Procedures and staff to manage and implement the application of any preferential tax treatment of retirement savings.
- Any agencies or teams that need to be created to supervise the new entities.

The importance of considering operational capabilities should not be discounted, since experience has shown that reforms have at times stalled due to operational shortcomings. In Mexico for example, the government was obligated to reschedule a pension reform for six months because the government was not ready with the unique identification system. Furthermore, it was not ready with systems for the collection of contributions by the country's social security institute and their transfer to AFOREs (Grandolini and Cerda, 1999^[29]).¹³ Similarly, in Latvia, reforms were postponed to allow time for the administrative systems to develop (Holzmann and Hinz, 2005^[28]). The introduction of the Swedish Premium Pension System (PPM) also necessitated a delay due to the necessary IT development.¹⁴ The experience of countries has shown that not setting aside enough time to set up and test systems and new procedures can create reputational and operational risks, jeopardising the ability to deliver on a reform.

Policy makers may also need to set up systems of collaboration between government agencies. This is because asset-backed pension systems often involve overlapping areas of government responsibility, since the arrangements typically permeate financial markets, the tax system, and the social security system. Expanding asset-backed arrangements means policy makers may need to set up mechanisms for co-ordination between entities to ensure collaboration but also to delineate lines of responsibility. As an example of how this is done, in the United States, three agencies work in concert to enforce the Employee Retirement Income Security Act (ERISA), which regulates occupational pensions. These are the Internal Revenue Service (IRS), the Department of Labor (DOL) and the Pension Benefit Guaranty Corporation (PBGC).¹⁵ Since the work of the DOL and the IRS often overlap, the two entities signed a memorandum of understanding (MOU) that developed collaboration procedures. That MOU guides whether issues presented in an investigation of employee benefit plans by one agency should be referred to the other agency, thereby avoiding duplicate investigations. There is also a manual to guide referrals of matters and collaboration between the two agencies.¹⁶

Sharing information of mutual importance between government agencies can also help with supervision, consumer protection, and policy making. Data sharing has its advantages, as it helps public agencies uncover correlations that tackle multi-dimensional problems but would otherwise be invisible. It also helps speed searching and processing when it comes to supervision (Law Commission, 2013^[30]). With regards to policy design, administrative datasets are a rich source of demographic and financial information, potentially providing insights into behavioural responses.

There are some legal hurdles that restrict the flow of information between different entities that while justifiable, may need to be addressed. Privacy and security concerns are indeed legitimate and important to uphold. As such, policy makers have a role in considering how best to balance the need to protect individuals' privacy and the necessity for public authorities to carry out their functions. While this is not an issue that is unique to asset-backed pension arrangements, policy makers may need to re-appraise data sharing needs since these arrangements, by their nature, tend to touch different public administrations. One way to overcome these challenges is for the legal framework to allow authorities to share information under certain, clearly specified, conditions. Another way to promote co-ordination and information sharing, particularly when it comes to devolved supervision, is to have the chief supervisors of different agencies participate on each other's boards or create a commission of capital market supervision comprising the head of each supervision agency (Rocha, Hinz and Gutierrez, 2001^[31]).

Licensing requirements

Legal provisions set out licensing procedures and prerequisites for pension entities to operate. In some countries, licensing is one of the main roles of the supervisor, particularly if there are a large number of small open funds. Some supervisors even have a distinct unit for this process (Rocha, Hinz and Gutierrez, 2001^[31]). According to Core Principle 2.18, legal provisions should clearly state the requirements for registration and licensing of pension entities (OECD, 2016^[11]). Licensing in most countries requires that the pension entity submits documents to the relevant authority prior to the start of operations, to prove that the entity has met its legislative requirements. Licensing practices can depend on a pension entity's construction and countries' own circumstances. But in general, many countries typically require that entities submit, where relevant, a business plan, governing plan, risk management policy, investment policy, funding policy, governance framework, details of technical skills, reinsurance arrangements, and proof of starting capital (OECD and IOPS, 2007^[32]).

The legal provisions regarding licensing requirements may need to be revisited in the context of reforms that introduce or expand asset-backed pension arrangements. While many countries already have licensing procedures in place for pension entities or other financial providers, an implementation phase is a useful juncture to re-examine whether they continue to be appropriate and address existing shortcomings in a licensing regime. This is particularly relevant if the new arrangements are markedly different to what preceded them, so regulators and supervisors may need to reconsider the standards which they require pension entities to meet. For example, moving from a voluntary to a mandatory asset-backed pension arrangement might come with a greater sense of responsibility for the oversight over assets, and therefore a higher licensing standard to ensure sufficient technical skills that may not be within existing providers' capabilities. To meet the new requirements, existing providers may need to adapt their processes or take on new resources. This was the case, for example, in Italy with the introduction of automatic enrolment (Rinaldi, 2010^[33]).

While it is important for licensing authorities to ensure the licensing process is to a suitable standard, timeliness also matters. Any licensing changes should ideally happen with sufficient time for pension entities to arrange their processes and obtain approvals to offer products. This helps ensure the smooth functioning of the reform and helps avoid uncertainties and perceptions of delay.

Additionally, revising licensing arrangements involves trade-offs in terms of complexity and efficiency. Licensing rules involve a balancing act between creating an environment that encourages providers,

particularly new entrants, to enter the market, while also protecting the rights and interests of plan members. In this regard, policy makers should consider revising licensing rules before reforming asset-backed arrangements, such that they create a fertile environment for providers and adequate competition without compromising on members' interests. For example, the Australian supervisor (APRA) tried to strike the right balance by not creating undue barriers to entry throughout the licensing process by creating a centralised licensing team; assisting new entrants via the public application form that lists the items required for a license application; promoting transparency, as the fees and costs of a license application are publicly disclosed; putting a statutory timetable of 90 days to assess a license application; and assessing new entrants against the same standards as incumbent providers.

Supervisory functions and frameworks

As part of an implementation phase, policy makers may wish to consider what additional steps might be needed to ensure the supervisor's capacity and functions are in line with the goals of a reform. Those steps can involve those that come with the setup of a new supervisory body, or indeed additional requirements on an existing supervisory body to ensure it is prepared for the new or expanded asset-backed arrangements. These include steps to ensure the supervisor is independent, proactive, well-financed, and professional, in line with Core Principle 6 (OECD, 2016^[1]). Insulating supervisors from external pressure is also particularly important, since history has shown that times of crisis in particular have led to pressure on supervisors to exercise leniency or delay interventions (Rocha, Hinz and Gutierrez, 2001^[31]). The supervisor also needs to set up processes to vet license applications, issue regulation, and have the powers to undertake tasks such as inspections. It may also take on new roles that are directly linked to the new arrangements. The supervisor may also need to put in place processes to publish reports and statistics. Depending on the scale of the asset-backed arrangements, these changes can call for a large number of staff, and particularly those with professional expertise in fields such as investment, finance, actuarial, and accounting (Hu and Stewart, 2009^[34]). Existing structures may simply not have enough personnel with the experience, and may have to recruit and train extensively.

There may also be a need to set up or adapt a system to monitor and inspect the activities of pension providers and apply sanctions where necessary.¹⁷ Monitoring activities can include processes to revise the reports of the financial status of pension providers as well as on-site reviews, and these functions can vary in their scope, objectives, and frequency. For instance, they can involve a review of all activities, financial statements and adherence to investment limitations. They can be regular or done on an ad-hoc basis in response to a complaint or signs of a problem. Relatedly, authorities need the power to apply sanctions for remedial and punitive purposes. Depending on the supervisory approach, supervisory authorities may need the power to direct pension providers to change their operations or commence civil or commercial proceedings (Rocha, Hinz and Gutierrez, 2001^[31]). The punitive and enforcement powers should be transparent, and the supervisor should provide guidance and certainty to supervised entities regarding how and when these powers will be applied. Policy makers can consider and address such issues as part of an implementation process to asset-backed arrangements, to instil confidence in the system and provide transparency to providers about how their activities will be monitored and issues resolved.

Contribution collection and record-keeping

Implementing a reform that introduces or expands asset-backed pension arrangements involves a decision about how the government or private providers will administer key functions, like the collection of contributions and record-keeping, that underlie those arrangements. Different countries have arrived at different arrangements and centralised these functions to different extents, in line with what they intended to achieve.

Contributions can either be remitted to a government agency or tax authority to then be remitted to the pension entity, or they can be remitted directly to the pension entity. The argument for using a centralised government agency is that doing so would minimise costs to members if the government can leverage existing functions and processes. For instance, entities that already have procedures in place to receive transfers from other activities or programmes, such as a PAYG public system, may be able to expand those capabilities with little additional effort and take advantage of larger scale. However, a disadvantage may be that there could be a lag in contributions reaching pension entities. In countries like Mexico, Latvia, and Sweden, contributions are collected by relevant central agencies (the Mexican Social Security Institute, the State Social Insurance Agency, and the Swedish Pensions Agency, respectively) (Tapia and Yermo, 2008^[35]). By contrast, when contributions are made directly to the pension entity, the contribution process can be simpler and faster. But the process can be more costly and monitoring compliance can be more difficult, since relying on pension entities means that additional processes are required to track contributions and identify shortfalls (Holzmann and Stiglitz, 2001^[36]).

Greater digitalisation and innovations in data sharing are likely to diminish the differences between these two approaches. That is, the relative cost advantages of having centralised institutions being responsible for collecting contributions can fall as digital innovations are likely to increase the effectiveness of operations. The same goes for potential lags in contributions reaching pension entities, which is likely to be less of a concern as financial transactions become faster. Monitoring compliance with contribution requirements may continue to be a key issue, requiring data matching and processing to ensure the right contributions are being paid.

Policy makers can also consider who should be responsible for keeping records and the types of information they hold. Like with contributions, countries can choose to centralise record-keeping operations, but in practice, pension providers more commonly have that responsibility than centralised institutions. Exceptions include the Central Registrar for Securities in Estonia, the State Social Insurance Agency in Latvia and the Swedish Pensions Agency in Sweden, which keep centralised records (Tapia and Yermo, 2008^[35]).

Where pension providers are responsible for record-keeping, policy makers have a role in setting regulation that helps ensure that record-keeping is accurate, kept for a reasonable amount of time, and that pension entities collect a minimum or standardised set of information. Establishing and communicating such rules before new asset-backed arrangements are in place can help ensure pension entities establish the right processes to collect the necessary information. It also helps ensure regulators and supervisors can monitor compliance with the arrangement's rules and uphold members' rights. For example, the Pensions Regulator in the United Kingdom provides detailed guidance of the information trustees are required to collect and maintain. It states that they are required to keep records of meetings and decisions, funding levels, member information, and details of their assets, contributions received, and all other payments to and from the scheme. This record-keeping makes it possible for the Pensions Regulator to uniquely identify a member to uphold their rights, and the standardised information makes it possible to build large datasets of member information.¹⁸

A related consideration regarding record-keeping is ensuring the security of data. The current environment of online accounts and processes presents new problems for pension entities. Namely, the risk of cyber-attacks and scams is a real threat to members' accounts. The rise in such attacks was particularly evident during the recent COVID-19 crisis, which showed a significant increase in malevolent and criminal activity around the withdrawal of retirement savings (OECD, 2020^[37]). As such, it is more important than ever for pension entities as well as policy makers to be vigilant of such risks and proactively consider ways to protect their records from incidents, ahead of any reforms.¹⁹ Relevant regulation can include requiring a risk assessment for data security and a cybersecurity plan for any entities managing retirement savings.

Data reporting

Policy makers should take stock of the data they would need to collect from pension entities to undertake key functions as part of the implementation phase. Supervisors and regulators collect data from pension entities for different reasons, and those needs can help determine what data it would collect and to what level of detail. The main reasons for data reporting include:

- to monitor the pension system and address any shortcomings in plan and/or entity performance. Collecting data allows regulators and supervisors to run algorithms that identify problems plans and/or entities may face, which is particularly essential in risk-based systems.
- to provide plan members with summaries of their entitlements, through benefit statements or tools like dashboards. Such platforms can also allow individuals to track their accounts, particularly inactive or lost accounts, which is a useful feature that is particularly salient in asset-backed pension arrangements.²⁰
- for policy research and development. Data filings make it possible for policy makers to understand how well a system is functioning and delivering in terms of the adequacy of future retirement incomes.²¹ It also makes it possible for policy makers to simulate and understand alternative policies or parameters, providing an essential part of planning for reforms.
- to inform public disclosure of details of plan and/or entity performance and other relevant information like fees and charges. Many supervisors and regulators provide plan and/or entity assessment and comparison services, which require standardised reporting by pension entities.²² Reporting can also include information on Environmental, Social and Governance (ESG) investments.
- to evaluate supervisory work, make necessary changes to their own procedures and deploy resources to address key issues.

Policy makers face a trade-off between the benefits and the costs of data reporting. As part of a reform process, policy makers may wish to reflect on their ongoing needs and priorities, and the data reporting that would support those ends. But when determining the extent of those needs, they ultimately face a trade-off between the amount of data needed and the costs of complex reporting. Data that is more granular than what is needed for the most essential purposes, such as compliance, are certainly valuable. They provide more information to members and useful insights into different reform scenarios using real-world data. But excessive disclosure requirements can lead to concerns about over-regulation, and can drive up costs to members if the requirements are too onerous. As such, policy makers should weigh these factors in setting reporting requirements.

Policy makers may also wish to consider setting up automated reporting processes or digital reporting platforms to reduce the burden on pension entities. For example, the UK's Pensions Regulator has an online portal called Exchange, which makes it possible to conduct its reporting requirements online. The implementation phase of a reform would be the ideal time to launch tools such as these, so that pension entities can familiarise themselves with them and prepare their reporting processes accordingly.

Policy makers should communicate any reporting requirements to pension entities ahead of the commencement of new schemes, so that pension entities are aware of their responsibilities and set up processes to collect and report information. While reporting requirements certainly do change over time, having a good idea of reporting needs from the outset gives pension entities greater certainty of reporting costs and avoids them having to change systems and processes over time.

1.2.2. Costs of developing asset-backed pension arrangements

Another practical consideration when developing asset-backed pension arrangements is recognising and managing the costs of the reform. This is an important element of the implementation phase, since that is

when the costs of reform will arise, and policy makers need to take steps to finance them. Reform costs are inevitable, whether they are due to the deficits arising from structural reforms or administrative costs of the reforms themselves. Bearing in mind that there is no perfect approach to managing costs, this subsection explores the practical considerations for policy makers that come with the process. It discusses how costs arise, how OECD member countries have financed them, the sources of uncertainty, and how costs can fall on different groups of individuals disproportionately.

The magnitude of any costs depends on the type of reform being undertaken. Therefore, it is relevant to distinguish the three main models of reform that expand asset-backed pension arrangements: substitutive reform, where an unfunded public system is closed and replaced by an asset-backed system; parallel reform, where the public system is not closed but reformed, an asset-backed system is created, and the two compete against each other; and mixed reform, where the public system continues and supplementary asset-backed arrangements are added or expanded to complement the public pension system (de Mesa and Mesa-Lago, 2006^[38]). The direct costs of a structural reform depend on the extent to which an asset-backed system substitutes a PAYG system, or the extent to which contributions are diverted from public pension systems to asset-backed systems, creating a fiscal deficit in the public system. In this case, government revenue declines while expenditure is maintained in order for it to honour the claims of workers who have contributed to the old system, making implicit debt explicit. Substitutive reforms, therefore, tend to have higher costs than reforms that create mixed system.²³ The OECD *Recommendation for the Good Design of Defined Contribution Pension Plans* (2022^[39]) recommends that PAYG and asset-backed pension arrangements should complement each other and not compete.

While the main costs arise due to a fiscal deficit, reforms also come with administrative costs. Although a reform from unfunded pensions to asset-backed pensions may reduce the role of the state in the pension system, new or reformed asset-backed arrangements can expand it in terms of regulation, supervision, guarantees or financing (de Mesa and Mesa-Lago, 2006^[38]). Administrative costs can arise notwithstanding the type of reform, substitutive, parallel or mixed. These costs are important to bear in mind, and can be large, particularly where significant reform to government administrations is needed.

Reform costs can be financed through different options. These include raising higher taxes, diverting funding from other government expenditure, and issuing new debt. No matter how the costs are financed, doing so is complicated by the possibility that current or future generations may, at least in the short term, pay twice – for the pensions of today's retirees and for their own future pensions.²⁴ And the time path of the cost burden can fall on different generations depending on the financing mechanisms:

1. defaulting on pension promises, such as by reducing benefits, means current generations bear the cost of reforms
2. increased contributions or taxes in order to finance the pensions of the current generation means that the following generation bears the cost
3. financing the reform through public borrowing means that potentially many successive generations bear the cost (European Commission, 2001^[40]).

Countries may use a combination of financing arrangements depending on political and fiscal considerations. For example, in Chile, the government used a mix of financing sources for its reform. The government issued financial instruments called recognition bonds to each worker who switched to the new system to recognise rights from the PAYG system.²⁵ The government used its resources to finance the fiscal deficit due to the reform, with expenditure averaging about 3.25% of GDP per year (Superintendency of Pension Fund Administrators, 2010^[41]). In the years following the introduction of the asset-backed scheme, the deficit was mainly financed through public savings, which in turn came from tightening up other expenditure and levying a temporary tax. The government also sold public debt to the pension funds.

The cost of asset-backed pension arrangements may be hard to quantify, and a challenge for policy makers throughout an implementation phase is accounting for the cost of uncertainty itself and managing it.

Uncertainty can stem from system design features. For example, many Central and Eastern European countries gave workers a choice between being part of a reformed public pension scheme alone or having a mix of public and private schemes. Similarly, in Colombia, members can switch over time between the new and old systems, making membership estimates uncertain during the implementation phase and into the future. The availability of such options comes at a cost, like any optionality around financial offerings would, but also because it creates a greater administrative burden to the government. Policy makers should therefore consider the financing of such costs as they would other costs.

The administrative costs of asset-backed pension arrangements themselves ultimately often fall on members, in particular initial cohorts. When asset-backed pension arrangements are starting out, there is a risk that the initial costs of the arrangements are larger than the ongoing costs. This is in line with the experience of many OECD countries, such as the Latin American countries that introduced DC arrangements to replace PAYG public pensions in the 1990s (Valdes-Prieto, 2001^[42]). As such, there can be a role for policy makers to consider mechanisms that smooth these costs over time. One such mechanism came in the form of a loan from the government to set up NEST as a default low-cost provider in the United Kingdom. The Department for Work and Pensions provided NEST with a loan drawdown facility to cover its up-front costs, with ongoing repayments to be made from fees.²⁶ Having this mechanism makes it possible for NEST to repay more of its loan as its asset base grows, thereby spreading the costs over its ongoing membership and not disproportionately burdening initial cohorts.

Finally, indirect costs can also arise if a reform makes one group of people financially worse-off than another. Asset-backed arrangements do not necessarily lead to unfavourable distributional impacts, but depending on the design of pre- and post- reform pensions, reforms can lead to a change in the actuarial fairness of a system. In practice, many reforms that involve a shift towards greater actuarial fairness are achieved through transitions from DB to DC arrangements. Greater actuarial fairness can lead to a removal of redistributive features, which in turn can lead to adverse distributional impacts. For example, DB systems often have built-in redistributive effects – from one generation to another, from people who die young to those who die old, from people on one part of the income distribution to another, and typically men subsidise women because the latter tend to have longer life expectancies (Deacon, 2007^[43]). By contrast, little redistribution takes place in a pure DC system without longevity pooling. Moreover, a shift to a more actuarially fair system can disadvantage women who tend to live longer than men (Lindbeck and Persson, 2003^[44]).

1.2.3. Communication about reforms

Good communication about reforms is essential to a successful implementation phase. Even the most considered and carefully designed reforms can fail if they are not communicated appropriately. Communication as part of an implementation process should be distinct from communication which aims to build the case for reform and obtain the backing of stakeholders, as discussed in Section 1.1. The two phases could be linked, where one introduces the potential reforms and another links back to it to remind people about the change and explain their new responsibilities or choices, where relevant. But the key messages should be distinct. This sub-section explores the main practical considerations for policy makers who need to communicate with the public the details of reforms and any choices that people need to make, once a reform process is underway.

The experience of OECD countries provides lessons for future reform campaigns that policy makers may undertake as part of an implementation phase. Certainly, communication is not homogenous and there is no ‘one-size-fits-all’ communication strategy. However, there are principles that can apply in a general sense and which future reformers can adapt to their own situations. These principles are that:

- people respond to clear and simple messages
- people need support to make choices

- policy makers can use different distribution channels to disseminate messages and tailor them to audiences
- policy makers should control the narrative about the reform and ensure the messages do not lead to unrealistic expectations
- timeliness makes communication campaigns more effective
- communication should be in line with any default rules
- employers may need specialised communication to understand their responsibilities.

People respond to clear and simple messages

A lesson from many reform campaigns is to communicate clearly and simply and not to introduce complex issues that can overwhelm people (OECD, 2014^[26]). It applies to any communication about asset-backed pension arrangements such as pension statements, projections, or communicating on investment strategies (see, for example, OECD (2020^[45])). In the context of reforms, communications should focus on expected retirement incomes rather than rates of return, since a rate of return to savings is a concept that is difficult for people to process. It can create uncertainty and sometimes wrong decisions, working against the purposes of reforms (Rudolph, 2019^[46]). Rather, concepts like portfolio performance should be communicated more simply, using intuitive methodologies like traffic lights or ratings systems (OECD, 2020^[45]). With these principles in mind, policy makers should tailor their communications to individuals, notwithstanding the communication channel, so they can better understand any changes and choices they need to make.

In this context, governments should also not overestimate their own abilities to communicate effectively with individuals. The experience of some countries when introducing campaigns is that, upon discovering the difficulty of communicating with the public, particularly using accessible language and through different channels, they had to call on external support. Estonia, for example, identified the difficulty of doing so, calling on an external provider to bridge the communication gap with the public (OECD, 2008^[47]). This experience is a reminder that governments should not shy away from seeking help from communication experts to help communicate complex concepts effectively to the public.

People need support to make choices

Communication is crucial when people need to make choices affecting their retirement incomes. Populations generally have low levels of financial awareness, knowledge, confidence, and skills to make choices on their own, particularly vulnerable groups. During a reform process, a priority for policy makers is therefore to help such groups navigate the choices and added risks that come with saving for retirement.

Countries' experiences illustrate the importance of comprehensive communication and the value of financial literacy initiatives. They show that campaigns that provide simple, digestible information about the options available can genuinely help fill information gaps and build people's confidence to make decisions. They also show that explaining clearly how to make choices can make people more likely to take action. Providing information that helps boost people's financial literacy can also help them navigate essential financial matters such as debt, savings and insurance (OECD, 2014^[26]). For example, when Sweden introduced its asset-backed premium pension, there was a huge marketing initiative prior to launching the platform that centred on individual choice. The goal of the campaign was to promote active selections, facilitate savers' management of pension funds, and increase their knowledge of premium pensions and fund management. The goal was also to make sure that all insured persons gained an understanding of the system and had a basic knowledge of how the system works and what consequences it has for their own pensions (Riksrevisionen, 2004^[48]). The Swedish Premium Pension Authority, which was responsible for the communication campaign, provided savers with a selection package containing a catalogue with information about the different available choices and instructions outlining how to make

selections. At the same time, private companies launched advertising campaigns and other forms of consumer communication to encourage as many savers as possible to choose their fund. The campaign was successful, resulting in 59% of people making an active choice and a further 20% of people reporting 'consciously' having chosen the default AP7 fund (Regeringskansliet, 2017^[49]).

Having in place projection and comparison tools for people to use as the new systems are being introduced can also be particularly beneficial. Projection tools, particularly those which are personalised and combine information regarding potential incomes from many different retirement sources, can help people understand how reforms may affect them and can help guide any decisions they need to make, such as whether to participate in asset-backed arrangements and how much they need to contribute to achieve their retirement income goals. Similarly, if the reforms come with choices, such as between providers or investment strategies, user-friendly comparison tools can help guide people's decision-making. Reform times present unique opportunities to engage people and get them to make a good choice, since people tend to engage rarely with their asset-backed pension arrangements.

Regulators and supervisors may have a role in ensuring accurate and effective tools are available to the public. They may make such tools available themselves, or pension entities or other services providers may do so. When a country's authorities make the tools available themselves, they naturally have greater control over the content and can better ensure its accuracy. They may also have the advantage of greater visibility across different pension entitlements from other parts of the system, which means they might be able to provide a richer set of information such as a pensions dashboard. Alternatively, if pension entities or other private sector providers make available such tools, the role of policy makers is typically to make sure the information they provide is accurate and standardised to the extent possible across different providers. In this regard, they can make use of guides such as the IOPS Good practices for designing, presenting and supervising pension projections (IOPS, 2022^[50]).

Finally, policy makers may wish to regulate any advice or guidance that third parties provide to ensure people have the right support to make choices about new asset-backed arrangements. Advice given by external parties, whether they be comparison sites or financial advisors, can also be crucial to the success of reforms. As such, as part of a reform, policy makers may wish to revise any financial advice regulation to ensure it remains transparent and discloses clearly any commercial interests (OECD, 2016^[51]). Alternatively, the government may choose to directly participate in this area by making available a publicly funded, independent advice service. This is available in the United Kingdom, whose Pension Wise service provides free advice to guide people in selecting retirement income products.²⁷

Policy makers should use different distribution channels to disseminate messages and tailor them to audiences

There are many ways to communicate with the public about reforms. Traditional distributional channels include television, radio, newspapers, and press releases, as well as printed material such as information booklets and posters. But with the rise of the Internet and other technology, and people's increased ease of doing business on it, information can be more easily disseminated through advertisements, pop-ups, and social media. Social media in particular offers an opportunity to adopt a more dynamic communication strategy. Namely, information on age, gender, profession, and educational attainment can make it possible for policy makers to personalise content to people depending on what they are more likely to understand and respond to. Social media also speeds up the messaging and any necessary changes that need to be made to communications. Social media also makes it possible to create two-way conversations, where users can use a reply function to ask questions and receive answers within a social media post. However, doing so requires significant resources.

Different distribution channels should also be used to tailor messages to audiences. As the OECD Recommendation of the Council on Financial Literacy emphasises, policy makers should identify relevant target audiences and have effective initiatives to reach them. They should also account for the specific

needs of particular sub-segments of the target groups (such as lone parents, elderly women, or young entrepreneurs). This means taking into account a wide range of cultural, religious and socio-economic factors that may impact on such audiences' financial literacy and well-being (OECD, 2020^[52]). In doing so, policy makers can send tailored messages that account for people's specific strengths and preferences. Leveraging more recent technological tools, such as social media and big data can help segment an audience to send more tailored messages. Furthermore, working with trusted stakeholders such as employers and social partners, who have an expert understanding of a target group, can be a good way for policy makers to understand their audience's needs and to reach that group.

Engaging the press also remains an effective way for governments to reach out to the public. The government can engage the mainstream press so that it places articles, interviews or advertisements in traditional media outlets to raise awareness about any changes. While traditionally press releases have been the primary avenue of releasing information to the press, direct engagement can also be particularly beneficial. In-person meetings and information sessions can also be a good way to update the press of policy reforms and answer any questions, to ensure the information they disseminate is accurate. As an example, when the Lithuanian Government created a centralised annuity provider, the government hosted information sessions to the press with a trusted partner, in this case the OECD, to explain the details of the reforms, explain concepts such as the importance of longevity protection, and answer any questions. Similarly, when Poland introduced individual accounts in the 1990s, it focused on educating journalists in the initial stages, who in turn explained pension changes and answered people's questions in newspapers (OECD, 2008^[47]).

Policy makers should control the narrative about the reform and ensure messages do not lead to unrealistic expectations

Policy makers should control the narrative about the reform to ensure the messages that the public receives are accurate. Losing control of the narrative can happen, for example, if people mix up the messages provided by the government and those from providers. The experience of some OECD countries has shown that external stakeholders' messaging can overshadow the government's messaging. For example, in Hungary, government information was overshadowed by a high-level advertising campaign by private pension providers. But some countries actively addressed these risks. In Estonia, for example, private providers agreed to postpone their advertising until the government's communication campaign was completed. In Poland, the government went as far as restricting the marketing campaigns used by pension providers during its own campaign (OECD, 2014^[26]). However, in the age of social media and mass information sharing, it is more important than ever for policy makers to actively promote its own narrative when it comes to a reform. Social media is a powerful messaging force, and one which may not always disseminate correct information. As such, policy makers dedicating resources to actively participating in social media dialogue can help counter the effects of misinformation to some extent.

Relatedly, the information that policy makers put in the public domain should not lead to unrealistic expectations. In particular, areas of uncertainty should be clear when reforms lead to a system with uncertain outcomes, as is often the case with DC arrangements. For instance, when Chile underwent a systemic reform in favour of a DC asset-backed pension arrangement, the communication with the public emphasised the financial potential of the new system. It promised that people could attain up to a 70% replacement rate from the new asset-backed pension arrangement. The expected returns from asset-backed pension arrangements fell over time, but the promise of a 70% replacement rate remained embedded in the public's expectations, leading to a loss of trust in the system (Mesa-Lago, 2020^[53]). Such experiences highlight the importance of careful messaging that does not raise expectations against the backdrop of an unknown future. Instead, policy makers should communicate with the public about risks and uncertainties in a simple, understandable, and clear way.

Timeliness makes communication campaigns more effective

Starting communication campaigns early and giving people time to process information can add to a reform's success. Given the priorities of a reform, policy makers can overlook the importance of timely communication and underestimate its relevance to the success of asset-backed arrangements, particularly when those arrangements rely on people making choices, such as taking up voluntary arrangements or opting out. The experience in Türkiye, for example, was that communication about auto-enrolment may have been rushed when reforms were introduced, leading to strong negative opinion from organised groups and high opt-out rates (Rudolph, 2019^[46]). Similarly, when Italy introduced auto-enrolment, the communication did not happen until right before the new rules were put in place, making it feel rushed (Rinaldi, 2010^[33]). This potentially increased people's anxiety about the changes and led them to opt out. The UK's automatic enrolment campaign, on the other hand, relied on years of preparation and careful crafting, which likely contributed to its success (Rudolph, 2019^[46]).

There are no firm rules when it comes to the optimal timing of communication campaigns, but the experience of OECD countries reveals the importance of careful planning and giving the public time to process information. Campaigns that require people to make choices, such as opting out or taking up voluntary arrangements, benefit from large campaigns that reiterate messages over time to instil confidence in the reforms. Enough time also makes it possible for policy makers to take stock of public opinion and people's understanding of reforms and fill any information gaps with new or revised messages. This was a part of the campaign to introduce individual accounts in Poland. Once the campaign started, the Office for Pension Reform took stock of people's understanding and found shortcomings in the effectiveness of the campaign. It responded by changing its media plan and marketing design, which led to focus groups showing a greater level of public understanding (Chłoń-Domińczak, 2000^[54]). Similarly, where reforms involve complex messages, phased campaigns that build on information over time can help break up multiple messages and make them more digestible (OECD, 2014^[26]). Different phases can also target different audiences. For example, an initial stage could focus on opinion leaders, who can subsequently provide independent information and advice to others (OECD, 2008^[47]). These potential benefits can only be achieved through campaigns with longer lead times.

Communication should be in line with any default rules

Where a default exists, the communication should be in line with the default rule. Defaults can work as a nudge, particularly when they contribute to improved retirement outcomes. Communication about reforms should be in line with the intended nudge. The experiences of Italy and the United Kingdom when introducing automatic enrolment show that the different outcomes in the two countries are to some extent linked to the different messages communicated regarding the default.

In Italy, the communication mainly focused on encouraging people to make an active choice, which may have contributed to a higher opt-out rate. Employers were asked to inform their employees of the auto-enrolment mechanism, specifying the possibility to opt-out. Employers also had to ask each worker to complete a form issued by the relevant ministries reporting whether or not they accepted the change. A broader campaign also focused on the importance of choosing, with slogans like "choose today thinking about tomorrow" (De Benedetto, De Lorenzis and Ales, 2008^[55]). The main downside of such messaging and specifically requesting that employees make choices is that it does not accord with auto-enrolment's reliance on inertia.

Conversely, the communication by the UK Government regarding its auto-enrolment scheme focused messages on the benefits of being part of a pension plan. The government released a guide, which aimed to instil confidence in the automatic enrolment scheme. The guide suggested simple, consistent language intended to evoke a particular response from workers. For example, so that people feel "this is being done to help me, but I can make choices if I want to", the guide suggests messages such as "You will have your own pension pot and can make choices about it if you want to (but you don't have to)" (Department for

Work & Pensions, 2014^[56]). The “we’re all in” campaign similarly focused messages on being covered and featured advertising with people stating “I’m in”. Making the main focus on being covered rather than the opportunity to opt out helped focus the public on the benefits of coverage (Department for Work & Pensions, 2014^[57]).

Employers may need specialised communication to understand their responsibilities

Policy makers have a role in communicating with social partners to help them understand their responsibilities under reforms. While communication on reforms is often focused on individuals and their choices, it is important that policy makers communicate with different groups who have new responsibilities arising out of a reform. These include employers, whose new responsibilities may include selecting and contributing to new plans. As such, they need to understand and prepare for any changes.

Employers may have specific needs when it comes to communication and may turn to different sources of information than individuals do. For example, when the United Kingdom reformed workplace pensions in 2008, the Department for Work and Pensions commissioned a market research company to understand the needs of small and micro employers to help them implement and comply with the new requirements. The report found that small employers turned to a number of sources to make decisions, including peers, their trade association, the media, and the government. But the report also emphasised the importance of the most trusted sources, such as accountants, with whom policy makers can engage to help ensure messages are heard and believed. The report found that small and micro employers also expected that they would receive a letter from the relevant government department explaining the changes and their responsibilities. Employers wanted this letter written in plain English with no jargon and laid out in a visually accessible format, clearly explaining the actions they needed to take (Hall, 2010^[58]).

1.3. Considerations for policy makers in maintaining and strengthening asset-backed pension arrangements once they are in place

This section discusses key considerations for policy makers in maintaining or strengthening asset-backed pension arrangements when established. It therefore represents the final phase in the chronology of developing asset-backed pension arrangements. Like previous sections, this section focuses on practical considerations to ensure the success of asset-backed pension arrangements. It discusses the main challenges that policy makers face in maintaining asset-backed pension arrangements: maintaining high standards of governance of pension schemes; ensuring strong investment returns, since the adequacy of retirement incomes from asset-backed pension arrangements hinges on asset values accumulating sufficiently over time; aligning fees with the cost of providing the services offered, since high fees can lead to a significant reduction in pension savings; addressing loss of trust in pension systems and low levels of public knowledge about pensions; and ensuring strong risk management processes to protect assets from internal and external threats.

1.3.1. Maintaining high standards of governance by addressing its shortcomings

Policy makers in many countries have faced ongoing challenges to ensuring that the people entrusted with the stewardship of retirement assets continue to have the requisite skills and attributes and act in the best interests of members. While Section 1.1 discussed the basic requirements for good governance, such as having an independent governing body comprised of suitable individuals that administers pension funds and acts in the best interest of members, this sub-section discusses governance shortcoming that may arise as the system develops and how policy makers can address them. The main challenges include that governing bodies can: lack the necessary skills or have skills that deteriorate over time; fail to vigilantly oversee outsourced responsibilities; fail to undertake mergers even if doing so would be in the best

interests of members; fail to appropriately manage conflicts of interest; and lack the diversity that would enable them to better represent their members. This sub-section also discusses the main practical steps countries have taken to maintain good governance standards.

Governing body skills and knowledge

While many countries already have skill and knowledge requirements for members of governing boards, having the right mix of skills on governing boards can be difficult for smaller schemes. For example, a governance review of pensions conducted in 2001 in the United Kingdom flagged the lack of skills and knowledge many trustees, particularly those of smaller schemes, had in investment matters. The report found that they received little training, leaving them unable to make effective decisions or challenge the decisions of others on asset allocation or the management of funds (Myners, 2001^[59]). More recently, a 2019 report by the Pensions Regulator similarly found that there was a strong correlation between scheme size and governance behaviours, with smaller schemes having lower quality governance and administration, across both DB and DC schemes. A survey it commissioned found that around 60% of schemes with less than 100 members did not meet any of the five Key Governance Requirements set by the Pensions Regulator, which include a requirement around knowledge (OMB Research, 2019^[60]).²⁸ The regulator stated that providing clearer communications and education was not always enough to drive up standards, even when coupled with enforcement activity (The Pensions Regulator, 2019^[61]). There are concerns that small funds may not have access to or may not afford to appoint governing body members or trustees that have the sufficient skill, nor can they draw from a broad set of skills from a sponsor's workforce (Stewart and Yermo, 2008^[5]). Further, smaller schemes may have fewer checks and balances to identify trustee skill deficits in the first place.

Governing body skill deficiencies are not exclusively an issue for smaller funds. For instance, a governance survey carried out by the Australian Productivity Commission interviewed the CEOs of large superannuation funds. It found that only 55% strongly agreed that their board had the right mix of capabilities, and only 59% strongly agreed that their boards had effective processes for selecting, developing, and terminating directors. Some respondents also raised concerns about the appointment of nominees with skills and experience that were not well suited to the board's needs (Productivity Commission, 2018^[62]).

Finding the right balance between representation and governing body skill and knowledge has been an ongoing challenge in keeping asset-backed pension arrangements robust and well-managed. It is common for governing bodies to rely on non-professional or lay governing members or trustees. In some jurisdictions, these members are typically employee or employer representatives, who play a valuable role in securing buy-in and ensuring the interests of beneficiaries and sponsors are upheld. The OECD Core Principles of Private Pension Regulation support this type of representation (OECD, 2016^[1]). But representation should not come at the cost of good decision-making, as already emphasised in Section 1.1. Country experiences confirm the challenge that come with people who may have no prior experience in investment or capital markets being responsible for people's retirement savings. In Ireland, a 2006 report cited independent research that found that many trustees that represented members needed to be assisted on some key issues such as investment decision-making (The Pensions Board, 2006^[63]). The Pensions Regulator in the United Kingdom found that small and micro schemes are more likely to have lay trustees who rely more on external advisers and services providers to support compliance (The Pensions Regulator, 2019^[61]). A Swiss study also found that 70% of governing bodies it sampled had trustees that were not selected due to their specialised knowledge regarding pension issues (Ammann and Ehmann, 2017^[64]).

Policy makers have relied on different approaches to address challenges regarding governing body skill and knowledge. Their main policy responses have included more stringent standards, internal or external governance reviews, training programmes, and information campaigns.

A direct way some policy makers have aimed to raise skill and knowledge standards is to increase the regulatory standard for governing body members. While most countries have tended to favour lighter touch approaches, increasing requirements for potential governing board members is an option some countries have favoured. Australia, for example, has recently taken steps to broaden licensing requirements for trustees, requiring them to hold an Australian Financial Services license. The new licensing process requires potential licensees to show the regulator that they have the appropriate knowledge and skills to provide superannuation trustee services.

Policy makers are also increasingly requiring governing bodies to conduct internal reviews such as self-assessments to encourage them to identify and address skills gaps. Some jurisdictions have requirements in place for pension providers to have, use and disclose a process to assess their board's performance relative to its objectives and to assess the performance of individual directors. The Canadian provinces of Alberta and British Columbia have passed legislation that requires a regular assessment of pension plans. Such a review would include governance, investment, and performance of trustees.²⁹ Australia also recently passed laws that require the board to conduct annual outcomes assessments to determine whether the trustee is promoting the financial interests of beneficiaries. This requires considerations of product performance, by comparing fees and costs, returns, and risks with other comparable products on the market. The European Union's IORP II Directive also aims to improve self-assessment processes of occupational pension schemes in Europe. The directive states that governing boards should consider reviewing their membership at least once every three years.³⁰

A skills matrix can be one of the tools for internal reviews and improve a board's capability to govern effectively. A skills matrix is a visual tool, which boards can use to illustrate individual board members' skills or the board's skills as a collective. The Australian regulator (APRA) provides an example on its website.³¹ The rationale behind a skills matrix is that it allows board members to identify and assess critical skills gaps and guide training and development. It would also guide board appointments, succession planning, and the selection of new members. An independent review by the Australian Productivity Commission stated that a skills matrix would also make it possible to provide boards and CEOs with greater ability to push back against standard or unsuitable board nominations by sponsoring entities (Productivity Commission, 2018_[62]).

Some jurisdictions mandate independent expert reviews instead of self-reviews by governing bodies. Monitoring and assessing its own performance is one of the most difficult things a governing body can do, as people's general reluctance to acknowledge their own shortcomings can stymie their ability to identify and disclose their own weaknesses. Disclosure requirements and skill matrixes can also be ineffective if governing bodies treat them simply as box-ticking exercises. External review processes, where independent third parties perform this function, could bring a more objective perspective. These reviews would certainly provide perspectives that encourage governing bodies to undertake training or to appoint additional experts to their boards (Stewart and Yermo, 2008_[5]). Their independence and outsider perspectives can also help reassure stakeholders that the board is managed well (Miller and Funston, 2014_[65]). As an example, some jurisdictions in the United States, such as Ohio and New York, statutorily require reviews of asset-backed public pension funds.³²

Other jurisdictions have embedded governance structures that help with independent reviews through an internal mechanism. For instance, Germany has a dual board structure, where the management board is assessed by the supervisory board. Similarly, in the Netherlands, schemes can have a permanent independent body within the pension fund supervise them (Stewart and Yermo, 2008_[5]). This structure separates the monitoring and supervision functions from the active management function, helping to identify issues such as a skills deficit through an internal mechanism.

Promoting better training for governing body members is another way governments have tried to address knowledge and skill shortcomings. Governance rules often require a certain standard of skills and knowledge and for governing body members to understand the principles of good governance when they

are appointed. However, governing body members can fail to update their knowledge and keep abreast of evolving governance responsibilities. Ongoing training makes it possible for governing bodies to update their knowledge and understanding, and to reacquaint themselves with their fiduciary duties.

Some jurisdictions have opted for mandatory training for governing board members. A view that voluntary training ends up being sporadic and poor quality motivated many policy makers to make such training mandatory. For instance, in 2006, Ireland found that when trustees undertook training, they did so within the first year of an appointment, with few trustees taking up refresher courses (The Pensions Board, 2006^[63]). To improve trustee knowledge, it passed legislation in 2010 to mandate that trustees receive training within six months of their appointment and at least every two years thereafter.³³ The Irish Pensions Authority also publishes lists of registered trainers for trustees of occupational schemes.³⁴ Similarly, regulations in the Netherlands require trustees to take courses on pension fund investments and governance, and to do so regularly to update their knowledge (Van Dalen et al., 2012^[66]). However, the difficulty with mandatory training requirements is that they can increase the regulatory burden on trustees such that many, particularly lay trustees, will no longer be willing to do the job.³⁵

To make the training less onerous and less costly, some jurisdictions have introduced online training sessions. Examples include the e-learning programmes in the United Kingdom and Ireland.³⁶ Subscriptions to the e-learning programme in the United Kingdom, the Trustee toolkit, are generally high, with coverage extending to 84% of schemes and 74% of individual trustees, and 42% of trustees having accessed the toolkit in 2018 (The Pensions Regulator, 2019^[61]).

Other countries have taken a lighter touch regarding training regimes, avoiding introducing firm mandates. In the United States, for example, imposing skill and training requirements on fiduciaries is seen as unnecessary since fiduciaries tend to be senior managers or delegated experts (Stewart and Yermo, 2008^[5]). In the United Kingdom, the regulator believes that attaining an appropriate level of knowledge and skills should not be a one-time event, and trustees should be able to demonstrate ongoing learning since the regulatory environment continues to change (The Pensions Regulator, 2019^[61]). The industry has developed professional trustee accreditation programmes, and the regulator has stated that these programmes are positive steps towards trustees meeting the standards the regulator accepts.³⁷ It has also expressed hope that the accreditation route becomes the norm across the industry to encourage professional trustees to be accredited (The Pensions Regulator, 2019^[61]).

A related consideration for policy makers is the accessibility of training programmes. This is important to bear in mind, as evidence suggests that some training programmes can be overly academic and therefore of limited practical value to governing bodies (McKinsey Switzerland, 2020^[67]). It is therefore not enough for pension funds to provide training to governing body members or trustees, but for that training to be effective and relevant to their day-to-day functions.

Regulators have also launched campaigns to help raise awareness among governing boards of their responsibilities and how to improve their skills and knowledge. For example, in the United States, the Employee Benefits Security Administration has been promoting The Fiduciary Education Campaign for many years. This includes nationwide educational seminars and webcasts to help plan sponsors understand rules and meet their responsibilities to workers and retirees, thereby improving their financial security. The UK regulator launched a campaign called the 21st Century Trusteeship Campaign, which ran for one year. It used targeted communications and education to help trustees understand the basics of good governance. The campaign had a dedicated web page and issued targeted monthly emails to trustees, scheme managers and advisers, linking to themes underpinning good governance. The emails provided examples of good behaviours and featured case studies on how to improve outcomes for members. The campaign also directed trustees to other useful tools such as the Trustee Toolkit and a risk matrix tool. However, the campaign only drove a relatively small number of trustees from being disengaged to engaged and the authorities did not see significant improvement overall in levels of engagement, particularly in relation to trustees of small and micro DC schemes (The Pensions Regulator, 2019^[61]).

Oversight of outsourced functions

Governing bodies of many pension funds outsource activities to specialised providers. They do so to take advantage of other entities' specialist knowledge, economies of scale, and flexibility. Outsourcing arrangements can be diverse, such as pension management, asset management, board support, and ICT (e.g. infrastructure services, data management). However, a key feature of good governance is ensuring any functions that governing bodies outsource to external services providers do not discharge it of its responsibility to a pension plan. This is in line with Core Principle 3.7, which states that a governing body should be able to understand any advice it receives from an external provider, and assess it, including its quality and independence (OECD, 2016^[11]). Doing so calls for ongoing attention and diligence regarding these services. Further, some outsourcing chains are becoming longer, and this can further reduce a governing board's visibility of outsourced activities, warranting greater attention from policy makers (Talsma, 2018^[68]).

In practice, however, some jurisdictions have found that governing bodies have not always upheld a high standard of oversight for outsourced functions. For example, the Australian Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry found evidence that some providers have taken a lax approach (Commonwealth of Australia, 2019^[12]). The Dutch Central Bank similarly conducted a survey that revealed shortcomings in the management of outsourcing. The survey found that outsourcing was often not registered centrally and that governing bodies often did not receive regular information about the management of outsourced and sub-outsourced tasks. It also found insufficient information about the quality of outsourced services and flagged the potential for risks to increase alongside a trend for greater cloud outsourcing (De Nederlandsche Bank, 2018^[69]).

Some countries have amended reporting and disclosure requirements to address shortfalls in the oversight of outsourcing activities. Supervisors typically require pension funds to meet basic reporting requirements at the very least. Recent regulatory changes have aimed to include disclosure of outsourced functions within some of the broader reporting requirements pension providers need to meet.³⁸ The EU IORP II Directive applied new procedural requirements for outsourcing scheme activities that trustees would be required to meet. These include matters such as having written agreements with services providers, and requirements not to outsource services if doing so would unduly increase the risks of the scheme. It also requires that governing bodies notify the relevant authority when they have outsourced any activity.³⁹ The Australian Productivity Commission also recommended that trustees conduct a formal due diligence of their outsourcing arrangements every three years, with a copy of the assessment to be provided to the supervisor (Productivity Commission, 2018^[62]).

Mergers and consolidation

Whether a governing body should actively consolidate has raised questions about good governance in some jurisdictions. A merger may be in the best interests of members if a provider is small and a larger entity is capable of delivering better value to members through greater scale.⁴⁰ A governing body may therefore be in a position to consider whether a merger or consolidation should happen and how a new merged entity would be managed and governed. By extension, a failure to merge or consolidate, when doing so is manifestly in members' interests, may constitute poor governance by pension entities. However, there is a lack of consensus regarding the benefits of consolidation. Box 1.1 presents arguments in favour and against consolidation. Policy makers considering encouraging greater consolidation should bear in mind the different arguments and adapt them to their country's own context.

Box 1.1. Arguments in favour and against consolidation

Arguments in favour of consolidation

Lower costs. Greater scale means the marginal cost of managing a larger pool of assets is smaller. Further, larger schemes tend to have greater power than smaller schemes when negotiating with services providers on fees. Larger schemes can also do more activities in-house, which can be cheaper. Evidence from different OECD countries supports the notion that member costs are generally higher in small schemes (see, for example IFF Research (2014^[70]); Bikker and De Dreu (2007^[71])). That said, other evidence qualifies this finding to certain kinds of costs, such as administration, rather than others, like asset management (Konkurrence- og Forbrugerstyrelsen, 2019^[72]). Further, some recent evidence has suggested that while economies of scale do bring down costs, their magnitudes may be smaller than they were in the past, particularly if smaller pension funds have already merged, leaving smaller gains to be had (Bikker and Meringa, 2021^[73]).

Better investment performance. At least historically, there is evidence to show that countries with fewer pension funds were more likely to have experienced higher real net returns (OECD, 2016^[74]). Larger schemes may be able to implement more sophisticated and diverse investment strategies. Further, they may have better access to a broader suite of investment opportunities, including illiquid assets such as private equities. Investing in these instruments often requires scale to invest in directly, and if not, many external managers only work with the largest investors. To access the investments, smaller pension funds tend to rely on fund-of-fund structures and listed funds, whose cost can be a deterrent (McKinsey Switzerland, 2020^[67]). However, some research disputes the argument that larger schemes achieve better investment performance. Some evidence shows that smaller pension entities can do just as well as larger ones in terms of investment returns. One possible explanation is that smaller pension entities may invest through smaller but highly reputable private equity managers that require fewer resources and are easier to access (Keskiner and Matthias, 2018^[75]).

Better governance. Larger funds may have better governance practices, since they invest in professional risk management and governance services. Further, they may have stronger and more professional talent with better capabilities to monitor and respond to new regulation. Better governance is argued to reduce risks, and in turn, increase risk-adjusted returns (Keskiner and Matthias, 2018^[75]). Some evidence has linked the poorer performance of smaller funds to them having less effective governance and risk management practices than larger schemes. For instance, a Swiss study attributed larger funds' better investment returns to them having institutionalised internal governance processes in place (Ammann and Ehmann, 2017^[64]).

Arguments against consolidation

Complexity and cost. Fund consolidation can be a complex process requiring expert advice on legal and administrative matters. The act of closing a scheme and transferring members to a new arrangement also comes at a cost, which can present significant outlays in a given year, although over time may save money (Department for Work & Pensions, 2021^[76]). It also calls for a consideration about how to uphold members' interests, such as investments under a new consolidation structure and how to give effect to preferences like incorporating ESG. Another argument is that consolidations may not be favourable to another party. Indeed, some schemes may not wish to accept 'low value' members (Department for Work & Pensions, 2021^[76]). Further, different benefit structures can be hard to combine, although there are examples of consolidation models that address this concern (Miller and Funston, 2014^[65]).

Loss of power and responsibility. Some sponsors or members may resist consolidation as they do not wish to lose representation and influence over a fund's direction.

Challenges in upholding members' rights. Some retirement savings contracts come with special arrangements like guarantees that people could lose if they are moved to alternative arrangements. This presents an added complication for trustees to navigate, calling for bespoke solutions such as compensating savers for surrendering guarantees (The Pensions Regulator, 2019^[61]).

Risk of too little competition or an oligopolistic market. A concern about having too few providers is the risk that they would hold too much market power and the market would become too concentrated, which can dampen competition and lead to higher costs to members.

Some countries have considered the issue of failures to merge and the barriers to consolidation. For example, a Royal Commission in Australia stated that a superannuation fund board should determine whether to merge with other superannuation funds based on what is in the best interests of members. However, it warned that some factors may cloud a governing board's judgement, such as whether its members would have a seat on the new board (Commonwealth of Australia, 2019^[12]). Relatedly, the Australian Productivity Commission stated that there was certainly potential for board composition decisions to have scuppered some merger discussions. Further, it flagged that it was often difficult for regulators and supervisors to address such situations, since they generally know little about mergers that governing boards may have considered but not completed (Productivity Commission, 2018^[62]). In the United Kingdom, research conducted by the regulator found that some small and micro schemes had a 'if it isn't broken, don't fix it' mind-set, which may limit the active consideration of consolidation. Further, it found that trustees at times simply did not have the knowledge and understanding of the wind-up process, or trustees considered the process long and laborious, discouraging them from undertaking it (The Pensions Regulator, 2019^[61]).

Regulators and supervisors in many countries have encouraged greater scheme consolidation in recent years to address governance shortcomings. Their intervention has most commonly involved nudging governing bodies to consider whether their members would be better served through a different pension arrangement, with a view to normalising better practices. Such efforts can help overcome governing bodies' inertia regarding consolidation by challenging cultural or practical barriers, often following a scheme review. As an example, the Pension Regulator in the United Kingdom has taken steps to expand an existing value for members assessment requirement to cover merger considerations. It has started requiring schemes with assets below GBP 100 million to compare their scheme performance to another and have discussions with a comparator scheme about the possibility of winding up.⁴¹ If they are not delivering good value, the government expressed an expectation that trustees would consolidate (Department for Work & Pensions, 2020^[77]).⁴² The Pensions Regulator has also recently revised its guidance on winding up to make the process easier for trustees to understand.⁴³ The Irish Pensions Authority has similarly flagged that one of its key goals was seeing the consolidation of DC schemes.⁴⁴ In the Netherlands, regulatory activity also helped nudge pension funds to consolidate. The regulator wrote to pension funds that were small and unlikely to fulfil governance requirements for running a pension fund, encouraging them to consolidate. Pension funds responded to the risk of further investigation, prompting an increase in consolidation activity.⁴⁵

Apart from efforts to see greater consolidation, the idea of greater disclosure of merger decisions has also been topical in some countries. The Australian Productivity Commission recommended improved reporting to address instances of failed merger attempts, which would have otherwise been in the best interests of members. In its independent review, it recommended that trustee boards should disclose to the supervisor any instances of them entering into a memorandum of understanding with another fund in relation to a merger attempt. Should a merger not proceed, the fund would be required to inform the supervisor of the

reasons why not, and the members' best interests assessment that informed the decision (Productivity Commission, 2018^[62]).⁴⁶

Conflicts of interest

Many OECD member countries continue to see conflicts of interest as a major governance challenge, despite the existence of legislation to mitigate it. A fundamental governance principle is that governing body members have a duty to act in the best interests of members. The Core Principles acknowledge, however, that some conflicts of interests may be inevitable, and should be appropriately managed (OECD, 2016^[1]). That said, even when jurisdictions have good conflict of interest rules, this can continue to be an area of concern that calls for ongoing attention and management.

Policy makers have taken steps in recent years to better address conflicts of interest. As explained in Section 1.1, conflicts of interest can arise when governing body members stand to personally benefit from their role, or when they are subject to external interference, whether that is from a related or parent company, shareholders, the government, or any other stakeholder. Country responses to address these different types of conflicts of interest have generally involved clarifying governance expectations, strengthening internal controls, promoting the presence of independent members on boards, and having stringent legal frameworks targeting certain categories of conflicts of interest.

Policy makers have taken action to clarify governing bodies' roles. Conflicts can continue to arise simply because governing body members may be uncertain of their roles and responsibilities or their best interest duty (Productivity Commission, 2018^[62]; The Pensions Board, 2006^[63]). Therefore, some policy makers have relied on educational support to clarify expectations and help providers prevent or manage conflicts. Some jurisdictions have also needed courts to hear test cases to clarify legislation. For instance, in Canada, court cases as well as regulatory guidelines have been needed to clarify that, when there is a conflict between an employer's own interests and their duties to members, the employer must still act in the best interests of members (Steele and Litner, 2017^[78]). Other jurisdictions have also released extensive guides to help governing body members understand their responsibilities and identify and manage conflicts of interest.⁴⁷

Strong internal controls should support conflict of interest rules. If procedures aimed at preventing conflicts of interest become mere formalities, those conflicts can persist despite the presence of frameworks and policies to counter them. Trustees can fail to manage conflicts effectively, despite having elaborate governance frameworks. For example, the Australian supervisor APRA realised that having a good set of frameworks and policies, with the audit and compliance functions doing their jobs, may not guarantee that things work as intended (Commonwealth of Australia, 2019^[12]). This is why it is important for policy makers to encourage governing bodies to develop strong internal control structures. Those internal controls can help ensure a strong risk management culture through actions like establishing communication channels between levels of management and having an adequate risk measurement and management strategy. While strong internal control structures may not ameliorate all conflicts of interest, they at least help avoid lax attitudes towards conflict prevention and can promote vigilance among governing body members. Policy makers can encourage internal controls through codes of practice or through direct enforcement activity. A governing body that is effectively made up of two boards – a supervisory board and a management board – is another way to make it easier to identify and manage conflicts of interest through an internal mechanism.

A further trend among countries aiming to address conflicts of interest is to have independent governing body members. Independent members aim to bring an independent view on functions and can help overcome some concerns about conflicts of interest, particularly those that arise due to conflicts between shareholder interests and those of members.⁴⁸ Policy makers can either mandate having independent members or encourage their presence on boards. In the United Kingdom, for instance, the law has limited the number of trustees that a sponsor can appoint, and this has resulted in a growing use of independent

trustees. However, in some countries, promoting independent trustees has proved problematic since doing so can come with excessive costs, particularly for smaller plans. These concerns have strengthened the case for consolidation of some smaller pension funds, since economies of scale can make it possible for pension entities to adopt more sophisticated governance structures.

A final approach that policy makers have taken to address conflicts of interest is to have stringent legal frameworks to target certain categories of conflicts of interest. The United States is an example of a jurisdiction that has implemented a framework that prohibits certain transactions that may raise conflicts of interests. The relevant legislation, the Employee Retirement Income Security Act (ERISA), provides for blanket rules on prohibited transactions. These apply in addition to fiduciary duties and operate to prohibit transactions that are described as ‘per se’ violations. This means that no fiduciary misconduct needs to occur for there to be a breach of the prohibition of the transaction provisions. Broadly speaking, these prohibitions refer to transactions between a plan and a certain party of interest, and instances of self-dealing (Reish and Faucher, 2009^[79]). While the system is complex, it is relatively easy to enforce. Further, the legislation provides for a number of exceptions to the rule, making the legislation flexible.

Diversity of governing body members

An emerging issue in the context of governance shortcomings is a lack of diversity in governing boards. Proponents of greater diversity make the case that boards should better represent the demographics of their members in order to give effect to their interests. Evidence of low board diversity within pension providers has surfaced in recent years. In the United Kingdom, in 2016, 83% of members of governing bodies were male (PLSA, 2016^[80]), and around half of chairs and a third of trustees were over 60 years old (The Pensions Regulator, 2019^[61]). A Dutch study found that only 40% of pension funds had one trustee younger than 40. It also found that funds with higher average board ages tend to invest more conservatively. This effect was evident in funds whose trustees were also beneficiaries, suggesting that trustees may unconsciously apply their own preferences when making investment decisions, leading to bias (Bauer et al., 2020^[81]). Another study using Polish data found that during the global financial crisis, the age of independent board members was negatively correlated with fund performance (Jackowicz and Kowalewski, 2012^[82]). Both studies also highlighted a downside of diversity, finding that funds with more women on boards tended to invest less in equities.

A failure to apply term limits to governing body members can limit diversity, since it precludes new members who are more diverse and who bring new perspectives from joining. The Australian Royal Commission found that while many funds have term limits, some have applied those limits prospectively, leaving some board members in place for too long (Commonwealth of Australia, 2019^[12]). The Australian supervisor APRA also recently flagged that boards too often invoke ‘special circumstances’ to extend board member tenure beyond a maximum term. It views this as poor succession planning and stated that boards should treat this as the exception rather than the norm.⁴⁹ In a Swiss study, only 18% of boards were found to have established term limits for their trustees (Ammann and Ehmann, 2017^[64]).

Some countries are taking steps to implement greater diversity. While there appears to be little regulatory action in this regard, there are examples of industry-led regulation. The Code of the Dutch Pension Funds, for instance, states that each governing body should have at least one man and one woman, one person younger and one person older than 40 years old.⁵⁰ Pension funds follow the code under the comply-or-explain principle, which means if they do not comply, they must explain in their annual report why they have not met this standard. By 2016, the proportion of boards with at least one woman increased to 60% from 40% in 2007. Following the introduction of the code, the proportion of trustees under 40 had not changed significantly. However, this could be explained by legislative changes in 2014 that called for greater experience for people to be hired as trustees, which younger candidates may not be able to meet (Bauer et al., 2020^[81]).

1.3.2. Improving investment returns

A common criticism of asset-backed pension arrangements is that returns may not be meeting expectations. Asset-backed pension arrangements lose credibility when the value of retirement savings does not grow the way people expect. This is a concern that has accompanied asset-backed pension arrangements in many countries, particularly given recent years' low growth environment. Low returns afflict DC pension arrangements since they present a direct threat to retirement income adequacy. Low returns also affect DB arrangements by making it more financially burdensome for sponsors to keep a pension promise.

There are different reasons for low investment returns. One is a high exposure to low-risk assets, which has become more concerning in recent years, as returns have trended downwards on traditional asset classes such as government bonds. Investment managers may invest retirement savings in low-risk assets because of investment restrictions, to manage minimum return guarantees, or to meet members' own preferences and behaviours. But further, poor performance by investment managers can also contribute to low returns even when they are able to invest in better-performing asset classes.

Investment rules and restrictions

Some countries have asset class limitations that restrict the amount of assets that pension providers can invest in riskier asset classes. Most commonly, the limits apply to investments such as shares or certain classes such as foreign investments or alternatives (OECD, 2015^[13]; 2021^[83]). Portfolio limits can be costly because they can preclude investment in higher-return assets, leading to reduced returns. Proponents of portfolio limits often justify them on the basis that they can protect members against decreases in the value of their assets or large swings in those values. Some policy makers also argue that if pension providers under-perform or fail due to risky investments, governments might feel obliged to step in to protect retirees, which can be costly to the public purse (World Bank, 2000^[84]). Another reason why investment restrictions might exist is that when some countries introduced asset-backed pension arrangements, they lacked sophisticated financial instruments and pension providers were inexperienced in investment matters. Some countries also placed investment restrictions on foreign assets, so that retirement savings can help develop domestic capital markets. For these reasons, policy makers put investment restrictions in place with the view to gradually loosening them over time as the financial market became more developed and experience in investment deepened (Section 1.1).

Policy makers should favour a risk-based approach over quantitative investment limits (OECD, 2016^[11]).⁵¹ Loosening any ongoing unnecessary asset class limitations should certainly be a priority for countries seeking to foster strong investment performance in asset-backed pension arrangements. In contrast to strict quantitative limits, risk-based requirements impose a higher risk charge for investments with a higher level of risk, providing an incentive to better manage them (OECD, 2015^[13]). That said, while loosening investment rules can help, doing so does not automatically lead to more diversified portfolios. Indeed, many countries with relatively liberal investment rules may continue to see low investment in riskier assets, for reasons discussed in the subsequent sub-sections.

Poorly designed default arrangements are a type of investment rule that can reinforce individuals' tendencies to select low-return investments. Default strategies allocate suitable investments to people when they do not make their own decision. However, in some countries, such as Latvia, default investment strategies continue to be relatively conservative, so would do little to counter individuals' tendencies towards low-risk assets. In such instances, policy makers could consider revising default investment strategies.

Guarantees

Investment in products that offer minimum return guarantees, capital guarantees, or a benefit promise can lead to lower investment returns. Guarantees can reduce the scope for pension providers to invest in higher-risk assets, since doing so can reduce the chances they will be able to meet the guarantee promise. Guarantees also come at a cost, especially as they get more generous, so they can reduce the expected value of retirement savings, thereby reducing the rate of return net of fees (Antolín et al., 2011^[85]).

Although guarantees can reduce returns to members, it is easy to understand why they continue to be popular. The equity market crashes that came with crises such as the Great Recession and the COVID-19 pandemic were a stark reminder of the vulnerability of pension savings. It is natural for people to want greater security for their retirement savings when confronted with events like these. Guarantees therefore help alleviate people's concerns. And products with guaranteed returns or capital guarantees remain commonplace in many countries. They include occupational pension plans like cash balance plans in the United States and Japan, or personal pension plans like the German Riester plans and the Pan-European Personal Pension Product.

Policy makers in many jurisdictions face a fine balance when developing the regulatory framework so it promotes products that make asset-backed pension arrangements more palatable, or those that yield better retirement outcomes via higher returns. In order to keep asset-backed pension arrangements delivering good returns, policy makers in many countries have grappled with the question of whether guarantees are worthwhile. Certainly, many other conflicting considerations are relevant to this question. Decisions about whether guarantees are desirable for DC plans, for example, can depend on the context of the system. If unfunded public pensions are already likely to provide sufficient retirement income, guarantees add relatively less value. In such contexts, the OECD generally advises countries that it would be sensible to take steps to nudge people away from guaranteed return products to those that pave the way for better performance.⁵²

Policy makers in some jurisdictions have taken steps to shift away from guaranteed products. In Denmark, for example, the government made an agreement with the pension sector to support the development of pension products with low or no guarantees. The agreement made it easier for consumers to reselect and move to non-guaranteed products. This has led to a change in the range of products available in recent years, with an increasing percentage of new contributions going towards non-guaranteed products (Finanstilsynet, 2017^[86]). The German Government has also passed new laws to allow pure DC schemes, with no minimum benefit or interest guarantees based on collective bargaining agreements, to complement existing occupational schemes. Other countries have taken lighter steps to nudge people away from guaranteed products. The main avenue is through default arrangements that automatically assign more suitable investment strategies to people based on their risk profiles through arrangements like life cycle products. Other countries have opted for greater disclosure requirements to encourage people to engage more with risk, as is discussed below.

Member preferences and behaviours

Even countries that do not have asset class limitations or guarantee requirements can struggle with a population's reluctance to engage with risk when individuals have investment choice. Ideally, individuals would behave rationally by investing such that their risk-return combination reflects their investment horizon, degree of risk aversion, and their portfolio of assets. However, individuals tend neither to follow traditional assumptions nor maximise their self-interest, often because they lack the ability or the will to optimise their investments (Tapia and Yermo, 2007^[87]). This is partly due to low levels of financial literacy, and partly due to conservative biases, which can reflect an innate tendency to avoid revising behaviours or beliefs even when presented with compelling evidence of the benefits of different behaviour. Equally, many people tend not to seek out financial advice that would otherwise help them optimise their decisions, defaulting to their own intuition. These individual preferences and behavioural patterns often manifest in

an overexposure to low-return products, even when consumers are presented with theoretically more suitable options.

Policy makers can take steps to ensure people's investment choices better reflect their risk and return preferences. Their efforts can be part of broader financial education and communication initiatives, as discussed later in this section. But further, campaigns explicitly targeted at encouraging people to engage with their investment choices can also be effective if designed well. For example, when Sweden launched a campaign encouraging people to make active decisions about their investment strategies when the Premium Pension was introduced, a large number of people actively made a decision. As a result of the campaign, they tended to invest more in equities and active management (OECD, 2020^[88]). Furthermore, how pension providers communicate about investment strategies matters to how people perceive them, influencing their choices. Using simple, straightforward, and adapted communication that is standardised as much as possible can help people understand and compare the different risk, return and cost profiles of investment strategies (OECD, 2020^[45]). Limiting available choices can also help prevent instances of choice overload, which can discourage people from improving their situation (OECD, 2018^[89]).

Policy makers have also aimed to address people's unwillingness or inability to select appropriate investment strategies by relying on defaults. Defaults, particularly those that aim to match people's investment strategy with the appropriate risk profile for their age, are one way to counter people's tendency to make poor choices when given the opportunity. Evidence shows that defaults have been broadly successful in all jurisdictions, as a significant proportion of people remain invested in a default (OECD, 2020^[88]). However, as already discussed, the effectiveness of defaults hinges on their design, as conservative defaults may be counterproductive, reinforcing existing biases.

Investment manager performance

A final driver of poor returns in asset-backed pension arrangements is also that investment managers may perform poorly, even when they are able to invest in asset classes that should otherwise yield higher returns. This can be down to a lack of skill by investment managers, or simply little incentive to improve due to weak competition and a disengaged consumer base.

Policy makers in some jurisdictions have taken steps to penalise poorly performing providers. For example, in Australia, underperforming funds are required to send letters to their members to inform them that their fund was underperforming and to prompt members to consider moving to other products.⁵³ Other jurisdictions, such as Chile and Peru, have also required that investment managers provide a minimum guarantee that is established with reference to a peer benchmark. However, evidence in those countries has shown that these guarantees encourage herding behaviour, and the OECD has previously recommended that countries rely on independent investment benchmarks to avoid herding in investment behaviour (OECD, 2019^[90]). Promoting competition can also help ensure that the market penalises poorly performing investment managers in favour of better performing ones. Measures to stimulate competition are discussed in the next sub-section.

1.3.3. Aligning fees with the cost of the services offered

A common problem that many countries face regarding asset-backed pension arrangements is that people perceive those arrangements to be expensive. Perceptions of poor cost-adjusted value have led some populations to reject asset-backed pension arrangements, particularly voluntary ones. In this regard, asset-backed pensions, particularly DC pension arrangements, differ from unfunded public pensions. Pension provision, whether funded or unfunded, comes at a cost. That cost is quantifiable and at least partially explicit when assets accumulate to fund retirement income, and fees directly counter their growth. That is, members can see the way costs affect their savings in a way they may not in other pension arrangements.

That is not to say that concerns about excessive costs are unfounded. The experience of many countries provide evidence that prices are often high, particularly when pension providers are for-profit entities and there is far from effective competition.

Prices will inevitably be high if there is no pressure to force them down. There are many reasons why fees for pension provision can be high relative to the costs providers incur. These include a lack of competition and the creation of duplicate accounts when members move jobs. Policy makers in many countries have taken action to address these issues, either by fostering competition, by directly intervening in a market in a way that forces down prices, or by avoiding the duplication of accounts.

Fostering competition

Strong competition is one way to put downward pressure on prices, but is not easily realised in the market of asset-backed pension provision. A competitive market calls for many producers that compete with each other to satisfy the wants and needs of their consumers. Equally, it calls for consumers who shop around for products and make rational choices in their best interests. However, a common feature of asset-backed pension arrangements around the world is weak competition, which leads to less efficient operations and relatively high costs. Further, the potential quality of services such as investment management and advice, as well as the available product range, is often limited relative to what members would achieve in a more dynamic market.

There are both supply-side and demand-side impediments to a competitive market in asset-backed pension provision. Supply-side impediments relate to the structure of a market and the products that are available in it. They include market concentration, vertical integration, conglomerate integration, barriers to entry, and heterogeneity of products. Demand-side impediments are concerned with consumer attitudes. Switching costs, search costs, and lack of consumer awareness and financial literacy are key barriers to consumers' involvement in a market for retirement savings provision. Additionally, a robust consumer protection regime should complement a competitive market.

Supply-side factors

A market for retirement savings provision that has too few providers, or a high concentration of providers, may hinder competition. For competition to work well, there should be a reasonable variety of pension providers and services providers for consumers to choose from. High concentration can be conducive to a lack of pressure to reduce fees. Studies from some OECD countries have revealed evidence of concentration in some markets for retirement savings provision. For example, a study of competition among AFOREs in Mexico between 2012 and 2018 found a negative Panzar-Rosse H-statistic, which points to monopolistic behaviour (Arteaga García and Almendárez Carreón, 2020^[91]). To prevent a single provider from becoming too dominant, Mexico has capped the potential market share each provider can have at 20%. However, the relationship between competition and concentration is ambiguous. Concentration can in fact be the product of heavy competition that leads to increased consolidation (Bikker and Spierdijk, 2008^[92]). Therefore, any quantitative analysis of concentration alone is not enough, often calling for a case-by-case qualitative analysis of different market features.⁵⁴

Vertical integration is usually viewed as pro-competitive but can lead to poor outcomes for members when combined with governance shortcomings. Vertical integration refers to the co-ordination of successive stages of production or distribution under the same control (Kessler and Stern, 1959^[93]). Many financial institutions have already integrated some or all of their supply chain into a single business model. The supply chain can include the design of different products, their sale, management of funds or insurance policies on behalf of clients, provision of financial advice, and distribution of products. The main purpose of vertical integration is to substitute market exchanges with internal exchanges within the boundaries of a firm (Coase, 1937^[94]). Competition authorities generally view vertical integration as pro-competitive, since it often brings together non-competing firms, whose interests are aligned with consumers' (OECD,

2019^[95]). Vertical integration can decrease transaction costs and allow for better co-ordination regarding product design (European Commission, 2008^[96]). Further, a vertically integrated business can enable firms to reduce production costs by realising economies of scope, or cost savings that come from producing a greater variety of goods (Farsi, Fetz and Filippini, 2008^[97]). However, vertical integration can intersect with governance shortcomings to lead to poor outcomes for members. For example, the Australian Royal Commission identified a case where a pension provider entered into service agreements with other entities within its financial group, even though the pricing was not the best they could do for the members. Although the entity knew fees were high, an internal bureaucracy within the financial group meant that fees could only be reduced if there was approval from other parts of the group (Commonwealth of Australia, 2019^[12]).

Conglomerate integration can lead to bundling and cross-selling opportunities, which may lead to worse outcomes for members. Conglomerate integration refers to a business being integrated across parts of a different supply chain. In the financial services sector, providers often offer products across the banking, insurance, and retirement savings industries, creating integrations across different supply chains. Conglomerate integration makes it possible for businesses to offer various financial products and services that are bundled together and sold as a package. Bundling can be efficient, allowing consumers to access a number of products at the same time and potentially at a lower cost (Productivity Commission, 2018^[98]). However, it allows firms to leverage their presence in one market to enter another and use revenues from one function to recover costs from another. In this respect, scale in one market bolsters another activity, obscuring prices and making it hard for competitors to compete (Productivity Commission, 2018^[98]).⁵⁵ Bundling can also be a concern if people are not aware that they are paying for ‘add-ons’ to pension products, or the impact that the cost of additional products can have on their retirement savings.⁵⁶ Cross-selling of products is also an issue that arises in the context of conglomerate integration, and occurs when companies sell related or complementary products to a consumer. For instance, banks can cross-sell other products like pension products to an existing banking clientele. Conglomerate integration therefore creates an incentive for an entity to promote its own products, even if that is not necessarily in the best interests of members.

In response to concerns that come with vertical and conglomerate integration, policy makers are more likely to address the practices that interact with integration.⁵⁷ Country authorities rarely directly dismantle vertically integrated markets. They tend to address other shortcomings, such as governance, which, combined with a vertically integrated arrangement, can lead to poor outcomes for members. It is the same for conglomerate integration. The Danish Competition and Consumer Authority, for example, has proposed that a working group be set up to develop measures to restrict bundling and cross-subsidisation between different costs by pension companies. The view is to create a more transparent market and make prices more comparable (Konkurrence- og Forbrugerstyrelsen, 2019^[72]). The Danish Financial Supervisory Authority have similarly proposed banning pension companies from bundling pension and insurance products to directly address the prevalence of loss-making sweetener deals on insurance that encourage purchases of pension products, distorting competition in the pension sector.⁵⁸ Further, the Australian Government banned superannuation funds from charging insurance premiums in inactive accounts to avoid duplicate insurance policies.⁵⁹

High barriers to entry, whether formal or informal, can also affect competition. The theory of contestable markets posits that competition is determined not by the number of incumbents but by freedom of entry (Baumol, 1982^[99]). Contestable markets operate under a threat of entry if rival firms can enter a market when incumbents charge prices above marginal costs and earn abnormal profits (Claessens, 2009^[100]). Formal barriers to entry are commonplace for retirement savings provision. These can include legal provisions on licensing or minimum capital requirements. Such regulatory barriers exist to ensure pension entities have the capacity to perform their functions and to do so without detriment to members. However, regulators and supervisors face a careful balancing act between encouraging greater competition in the market and ensuring that providers are well placed to uphold members’ interests. Informal barriers to entry include the relatively large, fixed costs that can come with retirement savings provision, which can deter

new entrants. Additionally, recognised or trusted players with existing links to consumers (e.g. banks and insurance companies) naturally have an advantage over incumbents without the same brand name recognition. Furthermore, competition is typically limited to workers who first enter the labour market and those who transfer from other providers. Customers of pension providers tend to be more disengaged and shop around less frequently. This means that providers that first entered the market for retirement savings provision were able to gain members quickly and achieve the economies of scale they needed to remain competitive. Newer entrants, on the other hand, often fail to get the same traction to achieve the scale to compete with incumbents.

Policy makers can take steps to alleviate both the formal and informal barriers to entry in markets for retirement savings provision. Although many regulations exist to protect consumers from unsuitable products and providers, authorities may need to revise rules that excessively restrict barriers to entry. In this regard, authorities may wish to implement regular procedures to reassess the impact of regulation on the market and implement reforms if necessary. Further, policy makers can take steps that address the informal barriers to entry. Many of those barriers stem from new providers' inability to gain a foothold in the market, which in turn relates to consumer disengagement and behaviours. Policy makers who have set up auction or tender mechanisms have made it possible for a provider to capture new default entrants in countries such as New Zealand, Chile, and Peru. This can enable them to gain the scale and market power they would not otherwise be able to achieve, thereby reducing the informal barriers to entry. In Chile, for example, two new pension fund providers entered the market thanks to the auction mechanism.

Standardisation is the main policy response when heterogeneous products reduce competition. Heterogeneous products allow providers to differentiate their products from the competition and allow consumers to select from a variety of products. However, if firms decrease price comparability, they can decrease people's sensitivity to that price and therefore increase margins. In that sense, heterogeneity makes it easier for firms to raise prices without the risk of losing customers (Bikker and Spierdijk, 2008^[92]). For instance, if one DC pension provider offers an investment option with a risk/return profile that is not available with another provider, they could get away with charging a higher investment fee. A main response from policy makers is to have products that are standardised to the extent possible. One example is the market for pension pay-out products in Chile, where all providers are required to meet the same design specifications. That is, pay-out products need to fit within a list of prescribed types, such as programmed withdrawal, life annuity, or deferred life annuity. Therefore, providers directly compete on price instead of being able to differentiate themselves to the extent that they can unilaterally raise prices.

Demand-side factors

Switching costs may hinder competition, but may be justified when too frequent switching may result in worse outcomes for members. A purely competitive market calls for customers seamlessly switching from the least competitive to the most competitive pension providers.⁶⁰ In practice, however, seamless switching rarely exists because of the existence of switching costs. Explicit switching costs can come in the form of exit fees and switching fees. They are justified as switching is administratively burdensome and come with transaction costs, while it can also constrain a provider's ability to hold illiquid assets. However, providers may also set higher fees than the true costs of switching to deter customers from changing providers and consolidate market power. Switching costs can also come in the form of foregone benefits when customers eligible for certain benefits with their provider can lose them if they leave. In Denmark, for example, many people in older schemes face a disincentive to switch as they would lose their guarantees or profit-sharing bonuses (Konkurrence- og Forbrugerstyrelsen, 2019^[72]). Further, artificial switching costs can exist in the form of psychological barriers to switching, for example due to brand loyalty or the logistical effort people experience when switching provider.

While competition theory would generally view switching costs unfavourably, the market for asset-backed pension provision poses unique concerns that justify their existence. Frequent switching can lead to worse net investment performance for individuals, higher liquidity needs for funds, and higher volatility in financial

markets (OECD, 2020^[88]). In Mexico, for example, where sales agents were particularly active in convincing participants to change providers, more than half of annual transfers between 2011 and 2014 were to funds offering lower returns (OECD, 2016^[101]).

Policy makers face a tension between imposing switching costs if they are desirable and removing them if not. In countries where excessive switching poses a serious risk of destabilising markets or producing poor outcomes for members, regulators have understandably effectively imposed switching costs to moderate their impact. Such steps have come in the form of explicit limits (e.g. limits on the frequency of transfers) or implicit limits (e.g. putting in place administrative procedures, processing times, and requirements around financial education before switching) (OECD, 2020^[88]). When the market for retirement savings provision is characterised by low switch rates and lacks the dynamism to push prices down, policy makers have taken steps to remove impediments to switching. An example is the treatment of exit fees. Australia, for instance, has banned providers from charging exit fees to customers when they switch providers.⁶¹ Similarly, the Danish competition authority recommended that any fees for transferring a retirement savings pot should be cost-based. Further, it recommended that transferring small pots should be free (Konkurrence- og Forbrugerstyrelsen, 2019^[72]). Policy makers can also reduce switching costs by making it easy for members to switch. Sweden, for example, has an online platform that allows customers to change their pension provider simply and seamlessly.⁶²

Comparison and advice services can reduce search costs and make it easier for consumers to exercise competitive pressure. Search costs refer to the time, effort, and money required to obtain information about a product and compare alternative options. Consumers face high search costs when products are hard to understand and compare, and have complex interactions with tax and public pension systems. Finding products and investment options that match the preferences and risk profiles of savers is also challenging because it requires balancing risks and consumption needs now and in the future. Consumers may also perceive ‘choice overload’ when confronted with many confusing options they do not understand. Further, search costs are even higher for people with low financial knowledge. Because of search costs, consumers may make suboptimal decisions, such as not purchasing a retirement savings product, or not shopping around for better deals.

Disclosure standards decrease search costs by making comparisons easier. Supervisory authorities in many jurisdictions have taken efforts to require that providers make available information about pension products and their performance in a simplified and standardised format. Doing so makes it easier for people to compare options and make informed decisions about retirement planning and saving, although disclosure standards may still fail to be effective for consumers with low levels of financial knowledge. Many jurisdictions also provide comparative online platforms on their websites to help consumers compare different funds’ performance and cost.⁶³ Some countries have also taken steps to provide independent financial advice to individuals on matters relating to retirement. In the United Kingdom, for instance, a public service called Pension Wise provides free one-on-one appointments for independent financial guidance on different retirement product options.⁶⁴

Low levels of financial knowledge and consumer disengagement can reduce consumer pressure on providers. In many jurisdictions, consumer knowledge about financial products and pensions is low (OECD, 2020^[102]). From a competition perspective, this means that they often do not shop around in the market for retirement savings provision. Further, many behave in a way that is counter to their best interests, because low levels of financial knowledge make it harder for consumers to compare prices and exercise judgement. Consumer disengagement is also a common demand-side determinant in the market for retirement savings provision. Consumers are commonly myopic and tend to put off engaging with their retirement planning. Many are unwilling to make the effort to seek out pension products or shop around if they are not getting good value from their existing provider. Consumers may also be disengaged simply out of loyalty to an existing brand. Further, consumer disengagement can be the result of behavioural biases. Biases not only result from myopia, but also sensitivity to how choices are framed. Consumers may prefer to maintain the status quo even if they could benefit from other options, due to loss aversion and “choice overload”. Thus,

the costs and complexity of retirement savings decisions could mean that doing nothing is a rational response for consumers, something competition authorities must recognise, rather than assuming irrational consumers are the source of the problem.

Financial literacy initiatives can help address such competition issues. Public information and education campaigns can promote understanding about saving for retirement. Such efforts are in line with the OECD Recommendation of the Council on Financial Literacy, which states that policy makers should promote awareness and understanding about financial services and their risks, empower individuals to evaluate products, services and providers available to them, promote awareness and understanding of individuals' rights and responsibilities, prompt individuals to act in ways that are beneficial to them, and provide unbiased generic advice to guide individuals through complex systems. It also states that financial literacy campaigns should identify target audiences and address them through effective tailored initiatives (OECD, 2020^[52]). Effective initiatives can include financial education in schools and campaigns targeted at particular groups, such as employees (OECD, 2022^[103]). These initiatives can have the effect of improving financial knowledge, which in turn can address consumer disengagement. Policy makers have also undertaken initiatives to prompt providers to address consumer disengagement. For instance, in the United Kingdom, the Financial Conduct Authority requires providers to send a wake-up pack to consumers within two months of reaching the age of 50 to provide them with relevant and adequate information about their retirement options. They should follow a simple format, with a single summary page document, a fact sheet, and risk warnings. Their design intends to be uncomplicated and easy to understand.

Consumer protection regime to ensure healthy competition

Finally, beyond addressing demand-side and supply-side impediments to competition in a market for asset-backed pension provision, policy makers also need to have a robust complementary consumer protection regime.⁶⁵ Such a regime refers to the regulatory measures and supervisory controls over market practices and pension providers, to protect members and beneficiaries in a system (Paklina, 2016^[104]). Consumer protection warrants special consideration in the context of competition in a market for asset-backed pension provision. This is because pensions represent a unique segment of a financial market that is characterised by long-term contracts, complex transactions, products that can be difficult for consumers to understand, and a generally disengaged client base. Pension providers may, intentionally or otherwise, take advantage of such a situation. Consumers would be particularly vulnerable absent oversight from regulatory, supervisory, and competition authorities and there is vast scope for market failures to arise.⁶⁶ Policy makers across different countries have a range of practices aimed at enhancing consumer protection (Paklina, 2016^[104]).⁶⁷ The potential interventions that are particularly pertinent to regulating competition are listed below, noting that measures are not typically taken in isolation, but as a collection of efforts. Further, there exists a natural overlap between some measures that improve competition and those that aim to better protect consumers.

- *Regulation of pension product design.* The design of products has a bearing on the value that members will get from their products, so standardising products or putting in place approval mechanisms for financial products can improve the standards for appropriate products. Supervisors can also choose to ban certain products.
- *Regulation of pension product marketing.* Regulating the way providers market products helps avoid situations of inexperienced or vulnerable consumers purchasing inappropriate or unsuitable products. In many countries, policy makers evaluate and monitor the advertising and sales strategies pension providers use to attract new members. In some, the use of advertising or sales forces is prohibited.
- *The regulation of financial advice.* Many countries have regulated the quality of financial advice consumers receive. Measures include imposing a best-interest obligation on advisors giving personal advice to clients, introducing a ban on conflicted remuneration, or lifting the professional, educational and ethical standards of financial advisers.

- *Governance regulations.* Governance regulations reduce potential conflicts of interest and other shortcomings. Governance rules are one of the main avenues to protect pensions against mismanagement in the context of poor individual understanding and stickiness of clientele that should switch. Governance requirements that can help protect against activities that harm consumers include board suitability requirements and assessment processes, disclosure and reporting requirements, and measures to address conflicts of interest.
- *Consumer education and financial literacy programmes.* As discussed above, these aim to improve awareness of pension issues and the literacy of individuals.

Direct market interventions

Policy makers in some jurisdictions have directly intervened in markets for asset-backed pension provision upon finding that efforts to improve competition were not enough to bring down fees. Examples of such efforts include pricing regulations like charge caps to explicitly control fees, and performance fees to better align fees with outcomes (OECD, 2018_[105]). Some countries have relied on structural solutions, which involve direct intervention in the structure of a market. These include taking steps like introducing tender or auction mechanisms for the right to act as a default provider, forcing providers to compete. Other approaches have included setting up low-cost centralised institutions that compete with other market participants (OECD, 2018_[105]). Having default pension products or providers is another way policy makers have aimed to bring down prices. They are a strong tool to address fee levels in the market, since rival providers will need to compete with a default.

Avoiding the duplication of accounts

The international experience has also shown that people may pay high fees because they have duplicate accounts. A proliferation of inactive accounts is commonplace in many jurisdictions, particularly those that have mandatory or automatic enrolment into occupational pension plans. Inactive accounts are often due to people moving workplaces, since employees are often assigned to a new fund by default. This can lead to a large number of small pots that can be costly to administer relative to the size of the savings. Further, for members it means they can pay duplicate fees, which can significantly erode retirement savings. It also means that members may pay multiple times for add-ons to pension products, like insurance premiums where they are charged. In response, some jurisdictions have put in place rules such as ‘stapling’ a fund to a member, so their plan follows them when they move jobs. Further, putting in place industry-wide or multi-employer plans has been one way to avoid the creation of new accounts when workers move jobs within the same industry.

1.3.4. Addressing loss of trust and low knowledge about pensions

Many countries have grappled with low trust in asset-backed pension arrangements. Low trust can stem from misinformation or fear of losing potential retirement benefits. In some countries, fixed expectations, such as receiving a certain replacement rate at retirement, are embedded in the public psyche, leading to loss of confidence in the system when people’s expectations are not realised. Furthermore, as successive crises have shown, when asset prices crash, people may understandably feel concern that their retirement savings are disappearing. This can cause people to lose faith in asset-backed pension arrangements, which are particularly vulnerable to swings in financial markets. Further, many countries have experienced a loss of trust in the institutions (both public and private) that are responsible for retirement savings provision. This loss of trust can stem from issues such as low returns, high fees and high-profile governance failures. Experiencing numerous reforms have also caused some populations to question whether asset-backed pension arrangements will exist in the future. This is particularly an issue when populations have witnessed neighbouring countries having renationalised private savings, leading people to worry that their savings may be taken by the government.

Policy makers generally also grapple with people's low level of knowledge about their pensions. Low understanding exacerbates any existing mistrust in a system, since people tend not to trust things they do not understand. Many people do not understand how retirement systems work and lack even basic understanding of financial concepts. This is particularly worrisome in countries with more individualised asset-backed pension arrangements, where people take on greater responsibility for their retirement income adequacy. Policy makers face a major challenge to ensure that people are adequately informed about pension systems and the options they have to improve their financial well-being in retirement.

These challenges call for a range of communication efforts and financial literacy programmes. They can include national communication campaigns that disseminate broad messages about asset-backed pension arrangements and reforms, as well as more tailored campaigns that connect more directly with individuals. Targeted financial literacy interventions are also a useful way policy makers have aimed to engage individuals with their pensions.

Ongoing national pension communication campaigns should be part of an overall national strategy for financial education aimed at improving the financial awareness and literacy of a population. This is in line with the OECD Recommendation of the Council on Financial Literacy (OECD, 2020^[52]). National pension communication campaigns are effective when designed according to clearly set and measurable objectives (OECD, 2014^[26]). These objectives may be defined by governments, pension supervisory authorities or other public entities, possibly in consultation with stakeholders. Some key objectives directly relevant to efforts to keep asset-backed pension arrangements robust and functioning well include raising public awareness about retirement savings, strengthening public trust in the institutions that deliver them, improving people's understanding and knowledge about retirement income, or influencing individual behaviours with respect to saving. Many policy makers view such initiatives as ongoing priorities and have recurrent public campaigns to achieve their objectives.

Countries have also taken varied approaches to providing routine communication that helps increase people's general levels of knowledge about pensions. Most jurisdictions have websites and other public documentation that help people understand asset-backed pension systems. Those that are most effective provide simple and clear messages that are free of jargon and easily accessible. Some jurisdictions have more recently also employed more innovative approaches to communicate with the public. The Swedish pensions dashboard (*Minpension*), for example, has Facebook, Twitter, and Instagram accounts, which it uses to promote key pension issues and to entice members of the public to engage with the dashboard. The site also has a blog and a podcast where experts talk about issues affecting people's pensions. Private sector operators have also launched a Pension Awareness Week in Ireland and a Pension Awareness Day in the United Kingdom. These initiatives aim to raise awareness about financial planning through roadshows, seminars and online tools delivered in an interactive and accessible format.⁶⁸

To complement broad messaging efforts, policy makers in many countries also provide more personalised information to the public. Personalised information that is easy to access and understand is particularly useful, since people are more likely to respond to information they perceive as relevant to them. Many countries have therefore taken steps to communicate with the public through pension statements and online tools. The Swedish Government, for example, sends out the well-known annual pension statement, the 'Orange Envelope', to individuals. The statement provides information on the value of people's different pension schemes and their evolution over time, contributions, as well as performance and administrative fees. The *Minpension* dashboard site was also established to provide real-time information about pensions from the different available schemes, including private pensions, by automatically collecting pension information from different pension companies. It shows the user the current value of pension entitlements, a projection of potential retirement income and a simulator to model changes in the projection at different retirement ages. Additionally, in the United States, the Setting Every Community Up for Retirement Enhancement Act of 2019 (SECURE Act) amended ERISA's participant disclosure rules to require that administrators of DC plans provide participants with two new "lifetime income illustrations" at least annually. The new disclosure purports to help participants prepare for retirement by providing two alternative

illustrations of their estimated monthly payments if their account balance was converted into a stream of lifetime payments, either a single life annuity, or a qualified joint and survivor annuity.⁶⁹

Further to personalised communication efforts, policy makers can also use targeted financial education interventions in order to keep people informed and engaged about their pensions. Targeted interventions differ from broader communication campaigns in that they are more focused attempts at engaging people. When designing targeted financial education interventions for retirement saving, policy makers can consider different components, such as setting (schools, workplaces, the community, the home, etc.), mode of delivery (video, in person, online, written material, etc.), timing (random, teachable moments), duration, and frequency (Atkinson et al., 2015^[106]). And indeed, there are many examples of such interventions from OECD countries. To name a couple, these include interventions in the workplace (e.g. seminars, workshops, financial advice, financial wellness programmes) (OECD, 2022^[103]) and interactive tools that make engaging with pensions more palatable (e.g. gamification) (Atkinson et al., 2015^[106]).

In addition to efforts to inform people about pensions in a general sense, policy makers have also taken steps to directly address loss of trust in pension arrangements. Policy makers in some jurisdictions have released information aimed at countering misinformation or unrealistic expectations. For example, the Chilean Pension Superintendence has set up a web page explaining myths and truths about the pension system. The page aims at dispelling myths that lead to overestimations about potential retirement incomes.⁷⁰ Further, major events, such as crises, have called for specific campaigns to help restore confidence in a system. For example, around the time when financial markets crashed in 2020, the Australian regulators issued guidance to trustees that they should communicate often, clearly and accurately to members, providing balanced and factual information.⁷¹ Similarly, the Pensions Regulator in the United Kingdom issued guidance to trustees, suggesting that they review their member communications, highlighting how volatility can affect members over different time periods, and advising members to carefully consider getting investment advice before switching funds in the current market.⁷²

Further to communication and education efforts, policy makers should consider and address how their policy decisions could lead to a loss of trust. Messaging efforts and educational campaigns are one way to help improve people's knowledge about pension systems, by boosting trust through greater understanding. Addressing shortcomings such as governance failures, low returns, and high fees can also help manage loss of trust. Policy makers should deal with such issues in a timely way, so that the public can see the government is rectifying problems with the system. There should also be appropriate dispute resolution processes for members to raise any concerns and achieve a timely resolution. Ideally, however, policy makers should take steps to prevent any issues from arising in the first place, rather than respond to shortcomings after they arise and erode trust in a system. In doing so, public communication campaigns can then focus on the high design and governance standards of those arrangements. Furthermore, policy makers can take steps to avoid a perception that asset-backed systems may not exist in the future, by avoiding repeated reforms that confuse people and foment fears that their savings will not exist to finance their retirement.

1.3.5. Ensuring strong risk management processes to protect pension assets

Maintaining and strengthening asset-backed pension arrangements requires appropriate risk management to ensure those arrangements are resilient and responsive to risks. Policy makers and pension providers have a number of potential risks to contend with in order to protect the interests of members and ensure their assets are being managed appropriately. Relevant categories of risk to pension arrangements include investment risk, counterparty risk, liquidity risk, operational risk, external risks, and so on. Pension funds offering DB arrangements or guarantees also need to manage the risk they may not be able to meet their benefit promise. The importance of monitoring and managing these risks is addressed in the OECD Core

Principles of Private Pension Regulation (OECD, 2016^[11]) and in the OECD/IOPS Good Practices for Pension Funds' Risk Management Systems (OECD/IOPS, 2011^[107]).

Regulators and supervisors face the ongoing challenge of ensuring that pension entities have suitable risk management processes in place. A good risk management process calls for having a governing body that defines and implements a risk management system. That system includes strategies, processes, and reporting procedures to identify, measure, assess, control and report on risks. Having a good risk management process also calls for a governing body that ensures the system is working well and adapts it when necessary. It also means having an investment policy that makes it possible to identify and manage investment risk. This policy could cover elements such as asset allocation, performance objectives, diversification, liquidity needs, and how the fund will cover ESG risks.

Further, pension entities should have internal control mechanisms and good information and reporting channels, as part of their risk management. Internal controls refer to physical controls for checking compliance with policies as well as processes of verification. Internal controls also refer to internal audit and compliance functions that report directly to a governing board on matters regarding financial reporting, fraud, safeguarding assets, and compliance with laws. For risk management systems to operate well, effective information flows are also necessary. That is, the organisation should have information flowing upward and downward. Upward information flows ensure a governing body is aware of any risks, while downward information flows ensure policies and procedures are communicated to lower-level personnel (OECD/IOPS, 2011^[107]).

1.4. Policy guidelines for developing asset-backed pension arrangements

Developing, introducing and expanding, asset-backed pension arrangements is a relevant policy option for many countries in order to diversify the sources to finance retirement and make pension systems more resilient. Assessing the reforms that have happened to date provide lessons and good practices for others, and it is clear that this process is by no means easy or straightforward. This is why it is important to take stock of countries' experiences, with a view to sharing best practices and lessons countries have learned along the way.

This chapter explored different stages in developing asset-backed pension arrangements. It focused first on the practical matters policy makers may need to consider ahead of introducing or reforming asset-backed pension arrangements, looking at the essential structural, legal, and practical considerations that are important to consider ahead of the reform. The chapter then considered the implementation phase of such a reform. This phase is concerned with making sure regulators and supervisors have the right operations, powers and functions in place to regulate and oversee the new asset-backed pension arrangements, and that pension providers are well aware of what their role will be. This phase is also the right time for policy makers to consider the different costs of reform and to communicate about the reform to individuals. Finally, the chapter discussed key considerations for policy makers in maintaining or strengthening existing asset-backed pension arrangements in order to ensure their continued success. It discussed the main challenges that policy makers face in maintaining asset-backed pension arrangements related to governance, investment performance, competition, loss of trust in pension systems, low levels of knowledge about pensions, and risk management processes.

The main policy guidelines distilled for each of the three stages are summarised below (Table 1.1 to Table 1.3).

Table 1.1. Summary: Key considerations ahead of introducing or reforming asset-backed pension arrangements

	Key considerations ahead of introducing or reforming asset-backed pension arrangements
Institutional structure	<ul style="list-style-type: none"> • Type of provider and degree of integration into existing financial service entities • Legal structure of providers • Split of services by different entities
Governance	<ul style="list-style-type: none"> • Having an independent governing board • A clear mission statement • Balancing stakeholder representation and expertise • Addressing any conflicts of interest • High standard of disclosure and transparency
Managing situations of immature financial markets	<ul style="list-style-type: none"> • Developing financial markets and asset-backed pension arrangements in tandem • International diversification of investments
Managing inflation risks	<ul style="list-style-type: none"> • Inflation-indexed bonds • Diversification of investments
Supervisory structure	<ul style="list-style-type: none"> • Whether to rely on existing arrangements or set up a new supervisory regime
Protecting assets	<ul style="list-style-type: none"> • Protection from provider insolvency • Ring-fencing assets • Audit requirements • Ensuring existing structures uphold the rights of members and beneficiaries
Building support for change	<ul style="list-style-type: none"> • Raising public awareness of a case for reform • Reaching a consensus with key veto groups

Table 1.2. Summary: Key considerations during the implementation phase of reforms developing asset-backed pension arrangements

	Key considerations during the implementation phase
Operational capabilities to regulate and supervise new arrangements	<ul style="list-style-type: none"> • Government agencies' operations, systems, procedures and staff are fit for purpose • Smooth collaboration and information sharing between different government agencies
Licensing requirements	<ul style="list-style-type: none"> • Re-examining licensing procedures and addressing existing shortcomings • Allowing sufficient time for pension entities to adapt to new licensing procedures • Balancing complexity and efficiency of licensing procedures
Supervisory functions and framework	<ul style="list-style-type: none"> • Ensuring the supervisor's capacity and functions are in line with the goals of the reform • Setting up or adapting monitoring, inspection and sanction systems
Contribution collection	<ul style="list-style-type: none"> • Whether contributions are remitted to a government agency or directly to the pension entity
Record keeping	<ul style="list-style-type: none"> • Whether record keeping is centralised or under the responsibility of pension entities • Data security
Data reporting	<ul style="list-style-type: none"> • Taking stock of data needs • Balancing the benefits and the costs of data reporting
Costs of reforms	<ul style="list-style-type: none"> • Considering both costs arising from structural reforms and administrative costs • Considering the different financing arrangements and their implications for different groups of individuals • Considering spreading the costs when initial cohorts disproportionately bear costs
Communication about reforms	<ul style="list-style-type: none"> • Clear and simple messages • Supporting choice • Using different channels and tailor messages to audiences • Controlling the narrative about reforms • Timely messages • Messages in line with any default rules • Specialised communication to employers

Table 1.3. Summary: Key considerations to maintain and strengthen existing asset-backed pension arrangements

	Key considerations to maintain and strengthen asset-backed pension arrangements
Addressing governance shortcoming	<ul style="list-style-type: none"> • Addressing governing body skill and knowledge deficiencies through more stringent standards, internal or external governance reviews, training programmes, and information campaigns • Ensuring a high standard of oversight for outsourced functions by amending reporting and disclosure requirements • Encouraging greater scheme consolidation • Addressing conflicts of interest by clarifying governance expectations, strengthening internal controls, promoting the presence of independent members on boards, and having stringent legal frameworks targeting certain categories of conflicts of interest • Encouraging industry-led initiatives to improve diversity in governing bodies
Improving investment returns	<ul style="list-style-type: none"> • Loosening investment restrictions • Nudging people away from guaranteed-return products, in particular when the asset-backed arrangement is a small component of the overall pension system • Educating people so they can select an investment strategy in line with their risk tolerance • Designing default investment strategies that match people's risk exposure with their age • Penalising poorly performing providers with measures stimulating competition
Aligning fees with the costs of the services	<ul style="list-style-type: none"> • Fostering competition by reducing barriers to entry, standardising products, reducing search and switch costs for members, or promoting awareness and understanding about asset-backed pension arrangements to empower individuals to exercise competitive pressure • Developing a robust consumer protection regime by regulating product design, marketing initiatives and financial advice, as well as through good governance and consumer education
Addressing loss of trust and low financial knowledge	<ul style="list-style-type: none"> • Developing a range of communication efforts and financial literacy programmes through national communication campaigns, tailored campaigns that connect more directly with individuals, and targeted financial literacy interventions
Risk management processes	<ul style="list-style-type: none"> • The governing body defines and implements a risk management system • Internal control mechanisms, and good information and reporting channels

1.4.1. Ahead of introducing or reforming an asset-backed pension arrangement

Ahead of introducing or reforming an asset-backed pension arrangement, policy makers should consider the different aspects of institutional and legal set-up when deciding how the pensions industry will function. There are trade-offs involved in the choice of pension provider for prospective pension arrangements, depending on whether pension entities would be part of existing financial entities' functions, or set up as independent standalone entities. Policy makers should consider factors such as which entities can provide good value, what would be convenient and simple, which providers the public would trust, and concerns about market concentration. Relatedly, policy makers need to select the legal structures for pension funds and decide the types of services that different entities would perform within the asset-backed pension arrangement structure.

Another important consideration is governance. Governance regulation should aim to avoid a situation where board members' responsibilities are unclear, where stakeholder representation on boards leads to poor outcomes for members, and governing boards have conflicts of interest. These risks call for regulations around membership of boards and impose minimum 'fit and proper' requirements, suitability standards, and penalties for breaches of duty.

Policy makers may also need to plan for and address situations of inflation risk and instances of having few investment instruments. Approaches to address these risks depend on different countries' contexts and the trade-offs involved. These include having a strategy to develop financial markets at the same time as asset-backed pension arrangements, allowing offshore investment, and issuing specialised bonds.

To complement regulatory changes, it can be important to revise any supervisory arrangements in place. This can include setting up a specialised supervisor in light of the new asset-backed pension arrangements and making clear key supervisory duties that will allow policy makers to instil trust in the system.

Mechanisms may also be needed to protect the assets held in asset-backed pension arrangements. This can include legislation to protect members from insolvent providers or sponsors, requirements to ring-fence assets, and audit rules.

Policy makers also need to build support for change. They can do so by commissioning independent reviews and engaging in public information campaigns aimed at educating the public about the need for reform. They can also complement such efforts with targeted engagement with key players such as social partners, since consensus for reform is essential to success.

Taking such considerations into account allows policy makers to send clear messages to the public ahead of undertaking reforms that introduce or expand asset-backed pension arrangements. That is, alongside a certain design, asset-backed pensions will have a reliable institutional set-up. Those who govern the pension providers will do so independently and without conflict. Conditions will adapt so savings can be invested in a range of instruments and protected from the risk of devaluation. A reliable supervisor will promote the stability, security, and good governance of pension funds. The legal system will protect assets and uphold members' rights. And finally, there is a real case for change that the public can get behind.

1.4.2. Implementation phase of a reform to develop asset-backed pension arrangements

When implementing a reform that introduces or expands an asset-backed pension arrangement, policy makers need to consider how to operationalise the main functions that will underlie new or reformed schemes. This entails defining or revising the new roles and functions that regulators, supervisors, and pension entities will have to assume. Key considerations include:

- Governments might need additional operational capabilities to handle new or reformed asset-backed pension arrangements. They may need to reform or update government agencies' functions, for example by building new operating systems, introducing new practices, training staff, and setting up collaboration mechanisms between different agencies.

- Supervisory authorities may need to revise licensing requirements for pension entities, supervisory powers, and procedures to monitor the activities of providers and resolve problems.
- Policy makers may also need to consider key aspects of account administration, such as contribution collection, record-keeping, and data reporting. Namely, they may wish to reconsider whether such functions should be centralised or done by providers, and what data they need to collect.

Policy makers also need to consider the cost of developing asset-backed pension arrangements. Any fiscal deficits that arise due to structural reforms come with costs. Those costs depend on the extent to which an asset-backed system replaces an unfunded one, diverting contributions from unfunded to asset-backed arrangements. Administrative costs can also arise because a new system may require greater public functions such as regulation, supervision, guarantees, or financing. Different cohorts of individuals may bear these costs, depending on the structure of financing arrangements. Relatedly, reforms themselves can lead to some individuals being worse off than others. These issues mean that policy makers face the challenge of estimating and financing the costs of a reform, while also bearing in mind the impacts those changes may have on individuals.

Finally, policy makers should bear in mind the lessons from other countries' experiences when communicating about their own reform.

- Communication should be clear and simple to make it most effective and should avoid complex concepts that can overwhelm people.
- Policy makers have a role in supporting people who have to make choices, by providing information in a clear way, making available digital tools, and potentially providing advice services.
- Policy makers can make use of different distribution channels to disseminate information and tailor it to audiences. Different distribution channels include traditional media like the press and more recent developments like social media.
- Policy makers should control the narrative about the reform and ensure that communication does not lead to unrealistic expectations, which can erode people's confidence in the schemes over time.
- Timeliness makes communication campaigns more effective.
- Any communication on reforms that rely on default rules should complement that rule, such that the communication and policy strategies are aligned.
- Policy makers should remember to include employers in their communication strategy, and bear in mind the particular communication needs that come with their added responsibilities.

1.4.3. Maintaining or strengthening an existing asset-backed pension arrangement

Policy makers find themselves needing to take steps to maintain and strengthen asset-backed pension arrangements, even when those arrangements are set up and implemented well as many issues can arise that prevent them from achieving their objectives.

Policy makers should address governance shortcomings when existing requirements are not enough to forestall governance failures. The main ongoing issues for policy makers have been a lack of governing body skill, poor oversight of outsourced functions, failures to merge or consolidate, conflicts of interest, and a lack of diversity among governing body members. Countries have addressed these different areas of concern by:

- Assessing board performance through self-assessment processes, external expert reviews, or internal governance structures.
- Improving governing body skills through ongoing training programmes and educational campaigns.

- Amending reporting and disclosure requirements to better document outsourced activities, increasing transparency and accountability.
- Requiring or nudging schemes with poor performance to consolidate.
- Clarifying conflict of interest rules through educational support and test cases.
- Requiring better internal controls and independent governing body members to better identify and manage conflicts of interest.
- Encouraging greater diversity among governing bodies.

Policy makers should also create a favourable environment to improve investment returns. Low investment returns can lead to criticisms that asset-backed pension arrangements are not succeeding in growing assets enough to fund retirement. This is particularly a concern for DC arrangements. Low returns can be due to over-investment in traditional asset classes or poor performance by investment managers. To address the main drivers of low returns, countries can consider:

- Loosening investment restrictions that constrain investment in riskier asset classes, while strengthening risk management.
- Taking steps to shift away from products with guarantees, which can reduce the scope for investment in higher-return assets. Such steps would be particularly relevant in systems where asset-backed pension arrangements are a smaller component of the broader pension system.
- Implementing default arrangements that assign people to assets suited to their risk and return profiles.
- Policy makers can make use of broad financial education and communication initiatives and encourage providers to better communicate about the different risk and return profiles of investment strategies. This can help address the conservative biases that lead members to favour low-risk investment strategies.
- Taking steps to encourage better performance by investment managers, such as by removing barriers to competition and disclosing to consumers when their funds are underperforming.

Different mechanisms can be put in place to ensure that fees are aligned with the cost of the services offered. A common criticism of asset-backed pension arrangements is that people may view them to be expensive. Fees can be high because of low competition in the market, member disengagement, and the existence of duplicate accounts. Steps taken to address these issues include:

- Fostering competition by addressing supply-side and demand-side factors impeding competition. Measures include reducing barriers to entry, standardising products, reducing search and switch costs for members, or promoting awareness and understanding about asset-backed pension arrangements to empower individuals to exercise competitive pressure.
- Setting up a robust complementary consumer protection regime by regulating product design, marketing initiatives and financial advice.
- Direct intervention in the market, such as charge caps, performance fees, and auction mechanisms. However, policy makers should design these interventions with care and monitor them to ensure they are achieving their goals.
- Stapling funds to members or creating industry-wide or multi-employer plans, to avoid duplicate accounts.

Maintaining asset-backed pension arrangements requires ensuring that people trust pension systems, understand them and understand what they need to do to secure an adequate retirement income. This has been a challenge in many countries. To address loss of trust and low knowledge about pensions, countries have undertaken:

- Pension communication campaigns that raise awareness about retirement savings and influence people's decisions to save more.
- Campaigns that dispel misconceptions about pension systems and reassure people during crises.
- Targeted financial education interventions that reach people through diverse settings, such as workplaces and the community, or through innovative digital tools.
- Policy actions that prevent erosion of trust in pension arrangements, such as those that address governance shortcomings, high fees, or low returns. Policy makers have also established dispute resolution systems to uphold members' interests.

Finally, asset-backed pension arrangements call for resilience and responsiveness to risks. Risks that affect these types of arrangements include investment risk, counterparty risk, liquidity risk, and operational risks. In order to address these risks, countries generally:

- Have in place risk management strategies that include strategies to identify, measure, assess, control and report on risks.
- Have internal control mechanisms, and good information and reporting channels.

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Notes

¹ Analyses of the growth of asset-backed pension arrangements are available in OECD (2016_[119]), OECD (2018_[120]), and OECD (2021_[115]).

² In Figure 1.1 "~" means around. The chart shows the amount of assets in funded and private pension plans, expressed as a % of GDP, at the end of 2001 and 2021 or the nearest year available, when possible. Instead of 2001, data refer to the end of: 2005 for Belgium, Luxembourg and Mexico; 2006 for France; and 2007 for Greece. Data for Lithuania and Ireland are not available for the earliest time reference (~2001). Instead of 2021, data refer to the end of 2020 for Belgium and France. There is a methodological break in series for some jurisdictions (namely Belgium, Canada, Costa Rica, Finland, Hungary, Iceland, Portugal, the Slovak Republic and Switzerland) between 2001 and 2021, which needs to be accounted for when analysing the evolution of the amount of assets. OECD (forthcoming_[124]) contains more [country-specific](#) notes.

³ Authorisation or licensing criteria are concerned with factors such as having a business plan, a starting capital, 'fit and proper' requirements, and so on.

⁴ However, it is important to strike a good balance in the number of providers to encourage competition, while avoiding unsustainable and underperforming providers.

⁵ Not-for-profit entities can also suffer from conflicts of interest. For example, when Hungary had mandatory individual DC accounts, most pension funds were not-for-profit institutions sponsored by financial institutions. While the fact that members of the board of directors and the board of supervisors were selected by the annual general assembly should have aligned the interest of members with those of fund managers, in practice, financial institutions found it easy to put their candidates on the supervisory board (OECD, 2008_[123]). Ultimately, the governing bodies of the not-for-profit funds were generally ineffective in looking after the best interest of members (Stewart and Yermo, 2008_[5]). This was even clearer when evidence emerged showing that pension funds sponsored by financial institutions tended to charge higher fees than funds sponsored by large employers (OECD, 2008_[123]).

⁶ Core Principle 4.14 states that portfolio limits that inhibit adequate diversification or impede the use of asset-liability matching or other widely accepted risk management techniques and methodologies should be avoided. The matching of the characteristics of assets and liabilities (such as maturity, duration, currencies, etc.) should not be impeded.

⁷ This was not due to investment restrictions forcing investments into government bonds. Rather, retirement savings investors had few alternatives. Investment-grade investment instruments were in short

supply because larger firms found it cheaper to borrow from banks than to turn to the capital markets, while smaller firms did not meet investment-grade requirements.

⁸ In Chile, fund managers were allowed to invest up to 9% of the fund in foreign securities only by 1992 (Edwards, 1998_[17]). Similarly, Mexico only allowed investment in foreign instruments in the case of Mexican issuers in the early years of the asset-backed pension arrangements (Sales-Sarrapy, Solis-Soberon and Villagomez-Amezcuca, 1998_[110]). Colombia, on the other hand, did not impose such restrictions on overseas investment (Queisser, 1998_[2]).

⁹ The United Kingdom has been issuing inflation-linked bonds since 1981, Australia since 1985, Canada since 1991, Sweden since 1994, the United States since 1997, France since 1998, Italy since 2003, Japan since 2004 (in this case deflation-linked bonds) and Germany since 2006 (Schich, 2019_[109]).

¹⁰ The constitutional requirement meant that insurers who had to pay annuities were exposed to movements in real wages, prompting them to leave the market. Since the state-owned insurance company was left as the only active player in the market, the government intervened to issue a long-maturity bond tied to nominal wages (Saráchaga, 2019_[108]).

¹¹ Communication campaigns aimed at explaining the details of reforms and different stakeholders' roles are discussed in Section 1.2.

¹² <https://www.eurofound.europa.eu/publications/article/2003/introduction-of-labour-market-pensions-strengthens-bargaining-system>

¹³ The social security institute (IMSS) was responsible for the collection of the contributions, auditing and enforcement powers, and ensuring that employers and workers comply with obligations (Sales-Sarrapy and Solis-Soberon, 1998_[111]).

¹⁴ The government outsourced the IT development to an external agency, with less than a year until the first fund selection would take place. The Swedish authorities deemed it a costly but necessary solution to build the system under significant time constraints. Still, the system was not ready in time (Riksrevisionen, 2004_[48]).

¹⁵ The DOL regulates and supervises the occupational pension system, with a role in providing guidance to fiduciaries as well as enforcing the legislation. The IRS administers the Internal Revenue Code and determines the tax-qualified status of plans. It has jurisdiction over eligibility, vesting, and funding requirements under ERISA. The PBGC primarily focuses on the DB plan funding and insurance requirements of ERISA.

¹⁶ <https://www.dol.gov/agencies/ebsa/about-ebsa/our-activities/enforcement/oe-manual/relationship-with-irs>

¹⁷ See also Core Principle 6 (OECD, 2016_[1]).

¹⁸ <https://www.thepensionsregulator.gov.uk/en/trustees/managing-db-benefits/governance-and-administration/record-keeping/what-records-to-keep>

¹⁹ This is in line with Core Principle 5.20, which states that: *Members' pension plan and personal information should be protected through appropriate control and protection mechanisms. These mechanisms should define the purposes for which the data may be collected, processed, held, used and disclosed (especially to third parties)* (OECD, 2016_[1]).

²⁰ For example, in Australia, the MyGov platform allows individuals to view multiple accounts and consolidate them through a simple online process: <https://moneysmart.gov.au/how-super-works/consolidating-super-funds>

²¹ Previous OECD research has shown that data constraints are the primary reason why many policy makers do not conduct regular retirement income adequacy assessments (OECD, 2020^[116]).

²² A recent example is the heat maps which the Australian superannuation supervisor (APRA) released to compare different MySuper products with a view to lifting industry practices.

²³ The transition cost of introducing a competing parallel system may be similar to the transition cost of a substitutive reform if most workers prefer to switch to the asset-backed system.

²⁴ There is an argument in the academic literature on the matter that, over time, the costs could be compensated for by lower public spending on pensions, and the benefits of deeper capital markets. Should a reform lead to wholesale productivity gains, such that society as a whole benefits from the reform, there can be a situation where the gains of some do not come at the cost of losses for others (Arrau, 1990^[112]).

²⁵ Such recognition bonds were valued by calculating how much the old system was worth to all individuals alive. Namely, the value was calculated as the capital needed to enable a person to obtain a lifetime stream of income equivalent to 80% of their taxable income from 1978-80, adjusted for contribution years. Each recognition bond was readjusted by CPI every year and accrued 4% real interest ever year.

²⁶ https://resources.nao.org.uk/pensions_landscape/the-nest-loan.html

²⁷ <https://www.pensionwise.gov.uk/en/financial-advice>

²⁸ The Key Governance Requirements are: 1. Trustee boards must possess or have access to the knowledge and competencies necessary to properly run the scheme. 2. Trustee boards must assess the extent to which charges/transaction costs provide good value for members. 3. Core scheme financial transactions must be processed promptly and accurately. 4. Trustees of master trusts must meet independence requirements. 5. Trustee boards must ensure the default investment strategy is suitably designed for their members.

²⁹ Employment Pension Plans Act (Alberta) s 41(1), Pension Benefits Standards Act (British Columbia) s41(1).

³⁰ <http://data.europa.eu/eli/dir/2016/2341/oj>

³¹ See: <https://prod.apra.shared.skpr.live/superannuation-how-a-skills-matrix-can-help-transform-board-capability>

³² See, for example, the independent review of the New York State Common Retirement Fund: <https://www.osc.state.ny.us/files/common-retirement-fund/resources/pdf/nyscrf-fiduciary-and-conflict-of-interest-review-2019.pdf>

³³ Social Welfare & Pensions Act, 2008.

³⁴ https://www.pensionsauthority.ie/en/trustees_registered_administrators/trustee_training/

³⁵ <https://www.ipe.com/news/lay-trustee-role-increasingly-difficult-to-sustain-industry-says/10052583.article>

³⁶ <https://trusteetoolkit.thepensionsregulator.gov.uk/>; <https://trusteetraining.pensionsauthority.ie/about/>

³⁷ See, for example, the Pension Management Institute's accreditation programme: <https://www.pensions-pmi.org.uk/knowledge/pmi-news/pmi-launches-accreditation-programme-for-professional-trustees/>

³⁸ For example, typical reporting requirements include reporting on information on the structure of the governing board, decision-making procedures, risk management procedures, valuation methods, outsourced functions, etc. These functions are discussed in the IOPS Guidelines for the Supervisory Assessment of Pension Funds (IOPS, 2008_[113]).

³⁹ <http://data.europa.eu/eli/dir/2016/2341/oj>

⁴⁰ Generally, consolidation can either come in the form of mergers or other integrated structures. Mergers or value transfers involve a fund being absorbed into a larger fund, with either the initial fund ending its operations or becoming a sub-fund of the larger entity. With integrated structures, schemes can share certain functions such as communications, payroll, and other administrative tasks without pooling assets. However, it is more common for consolidation to involve a collective fund, such as industry funds and master trusts, under which independent entities pool retirement savings which are not from the same company or holding group of companies (Hu et al., 2007_[122]). Each scheme has its own ring-fenced assets and liabilities, and existing scheme rules remain unchanged. The benefit of such schemes is that they can pool governance, legal, actuarial, administration and investment functions, saving time and money and making large-scale direct investing more feasible.

⁴¹ Previous value for members assessments required trustees to take into account costs and charges, investment returns and various elements of governance and administration such as quality of communication with members, effectiveness of managing conflicts of interest etc. (Department for Work & Pensions, 2020_[77]). The new requirements broaden the requirements to include merger considerations (<https://www.gov.uk/government/consultations/improving-outcomes-for-members-of-defined-contribution-pension-schemes/annex-e-statutory-guidance-value-for-money-and-consolidation>)

⁴² Notwithstanding, the Pensions Regulator has the power to issue an order to wind up the scheme, to remove trustees in certain circumstances, or to appoint new trustees to properly manage the scheme's assets. However, it would be unlikely to issue such orders, except in exceptional circumstances.

⁴³ <https://www.thepensionsregulator.gov.uk/en/trustees/managing-dc-benefits/closing-your-dc-scheme>; A number of consolidation solutions are available in the United Kingdom, such as buy-outs, master trusts, and commercial consolidators (AON, 2019_[114]). Commercial consolidators have recently emerged as a solution to transfer risk from a DB scheme to a standalone entity, a superfund. Superfunds replace the employer's covenant with capital from investors.

⁴⁴ [Pensions_regulator's_annual_report_2020_statement \(pensionsauthority.ie\)](https://www.pensionsauthority.ie/en/Pensions_regulator's_annual_report_2020_statement)

⁴⁵ <https://www.willistowerswatson.com/en-GB/Insights/2017/08/Pension-scheme-consolidation-lessons-from-overseas>

⁴⁶ This recommendation has not yet been implemented in Australia.

⁴⁷ See, for example, guidance from the Pensions Regulator in the United Kingdom: <https://www.thepensionsregulator.gov.uk/en/document-library/regulatory-guidance/conflicts-of-interest>

⁴⁸ Independent governing board members can also bring specialised governance expertise to a board. There is also evidence that their presence can improve fund performance, although during crisis times this can have the opposite effect (Jackowicz and Kowalewski, 2012^[82]).

⁴⁹ <https://prod.apra.shared.skpr.live/news-and-publications/apra-deputy-chair-helen-rowell-speech-to-aist-online-chairs-forum>

⁵⁰ <https://www.pensioenfederatie.nl/website/pension-fund-governance>

⁵¹ A combination of risk-based and quantitative approaches may also be applied.

⁵² See, for example, OECD Reviews of Pension Systems: the Czech Republic (OECD, 2020^[121]).

⁵³ <https://www.legislation.gov.au/Details/F2021L01077>

⁵⁴ A quantitative analysis of market features typically refers to concentration measures like the number of providers, concentration ratios, and the Herfindahl-Hirschman Index.

⁵⁵ For example, there is a concern in Denmark that commercial pension companies, which are incorporated life insurers, compete to attract consumers by setting relatively low or even loss-making insurance premiums and administration costs, while setting higher prices for asset management. The Danish Competition and Consumer Authority has flagged this bundling practice as a key area of concern for competition (Konkurrence- og Forbrugerstyrelsen, 2019^[72]).

⁵⁶ For example, in Australia, people often get default insurance products with their retirement savings plans. People who have duplicate pension plans are likely to also have duplicate insurance policies. This leads to over-insurance, while duplicate insurance premiums erode pension assets over multiple accounts.

⁵⁷ Periodic competition reviews that focus on the market for pension provision are also important. There is a case for reviews to focus on financial system integration in particular, including ex post reviews of merger decisions. Doing so matters because certain market structures (such as vertical integration) can either create a benefit or a detriment to consumers, so governments need to carefully assess any regulation of integration with respect to potential consumer harm (Productivity Commission, 2018^[62]).

⁵⁸ <https://www.europeanpensions.net/ep/Absolutely-crucial-for-Danish-pension-industry-to-bundle-products.php>

⁵⁹ <https://www.legislation.gov.au/Details/C2019A00016>

⁶⁰ In some jurisdictions, the choice of pension provider, including a decision to switch provider, lies with employers or unions (e.g. occupational plans). A key mechanism to ensure that members ultimately reap the benefits of competition, when individual choice does not exist, is having effective governance mechanisms. This means having sound evaluation mechanisms with regular checks on the performance of pension providers and a requirement to shop around at specific intervals.

⁶¹ <https://www.legislation.gov.au/Details/C2019A00016>

⁶² <https://www.pensionsmyndigheten.se/other-languages/english-engelska/english-engelska/changing-funds-within-premium-pension>

⁶³ In Australia, for example, the supervisor publishes comparative assessments of the performance of every default retirement savings product from different providers, across different criteria. See <https://www.apra.gov.au/mysuper-product-heatmap>.

⁶⁴ <https://www.moneyhelper.org.uk/en/pensions-and-retirement/pension-wise>

⁶⁵ The nexus between consumer protection and competition is recognised in the OECD Recommendation on High-Level Principles on Financial Consumer Protection, which includes a specific principle on “Competition” (OECD, 2012_[117]).

⁶⁶ In some countries, social and labour laws can offer strong consumer protection as well.

⁶⁷ Research in this area has also informed the IOPS Good Practices on the Role of Pension Supervisory Authorities in Consumer Protection Related to Private Pension Systems (IOPS, 2018_[118]).

⁶⁸ See <https://pensionsawarenessweek.ie/> and <https://pensionawarenessday.com>.

⁶⁹ On 26 July 2021, the DOL released temporary implementing FAQs, clarifying the upcoming deadlines for disclosure of lifetime income illustrations.

⁷⁰ [Myths and truths about the Chilean pension system - SP. Superintendency of Pensions - Government of Chile \(spensiones.cl\)](#)

⁷¹ [apra-asic-letter-on-COVID-19-1-april-2020-1.pdf](#)

⁷² [\[ARCHIVED CONTENT\] DC investment: COVID-19 guidance for trustees | The Pensions Regulator \(nationalarchives.gov.uk\)](#)



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