

11. Conclusions and recommendations

This chapter starts with a summary of our analysis. It then provides important background for our recommendations. Lastly it presents eight recommendations. The order of the recommendations reflects the order of the analysis and not the importance of the recommendations.

11.1 Summary

ATP is a systemically important Pillar 1 pension provider—paying a guaranteed lifelong pension to almost all Danes from a fully funded balance sheet. Its provision of pensions should be seen in the context of the Danish pension system. ATP's pensions sit alongside the unfunded Danish state pension, which carries political risk, and alongside Pillar 2 occupational pensions, which have increasingly shifted toward unguaranteed market-rate products. These developments in the Danish pension system have made ATP's distinctive features—lifelong prefunded guaranteed pensions, collective risk pooling, and the absence of surrender risk—all the more important.

This distinctive role played by ATP serves as the starting point in our evaluation of the investment strategy. ATP cannot be evaluated in the same way as another occupational pension fund that invests in a market portfolio because its purpose, product, and constraints are different. ATP's investment performance cannot be evaluated against a market portfolio because holding only the market portfolio would deliver pension outcomes inconsistent with its guaranteed promise. Because ATP's investment strategy differs from those employed by the majority of Danish pension funds, there will be years in which ATP underperforms. Appropriate evaluation of ATP's investment strategy therefore focuses on how its hedging strategy, asset mix, risk level, use of leverage, rebalancing, and performance of liquid and illiquid assets have delivered on the pension promise. The pension promise covers the guaranteed pensions and the ambition to provide inflation indexation. It should be delivered in a way that maintains the ability to pay future bonuses, protects ATP's solvency, and sustains the long-run viability of its business model.

Behind ATP's simple pension product—lifelong guaranteed pensions—lies a sophisticated and complicated investment machine. This complexity reflects the ambitious combination of objectives and constraints that ATP must satisfy. The primary constraint is that 80 percent of contributions are set aside to fund the guaranteed pension, which earns a nominal return in force at the time of contribution. The remaining contribution is allocated to the Bonus Potential, which serves as a collective buffer and a means to provide write-ups to the nominal guarantee. The new business model introduces the Market Return Portfolio, which for members more than 15 years from retirement allows for direct market exposure on a portion of their contributions through a variable annuity (which provides a longevity guarantee but no interest rate guarantee) and the Supplementary

Hedge Portfolio, which uses the value released by the illiquidity spread on the discount curve to support additional risk-bearing. The new business model has increased complexity.

The guaranteed pension is based on tariffs that already price in expected inflation and a real return. ATP strives to further index the pension guarantees to realized inflation. But only 20 percent of the contribution is allocated to a Bonus Portfolio that strives to meet realized inflation on the entire guaranteed portfolio. ATP must therefore generate a very high return on the Investment Portfolio. This requires higher risk-taking in the Investment Portfolio than would be standard in other pension funds. ATP will meet its inflation indexation targets in most, but far from all, future conditions. According to ATP's internal Asset Liability Management model calculations, the probability of meeting the inflation indexation target is 61 percent over a 10-year period where long-run inflation is 2 percent (see Section 8.4.4).

ATP's investment beliefs and overall investment strategy are largely in line with best practice and make use of ATP's comparative advantages. The major elements of ATP's investment strategy are the separation of the portfolio into a Hedge Portfolio and risk-taking portfolios, treating the level and composition of risk as a first-order decision, diversifying across a small number of rewarded risk factors, and prioritizing strategic over tactical asset allocation. They are grounded in modern portfolio theory and are consistent with ATP's investment beliefs. The use of leverage and derivatives to scale a risk parity investment strategy to a high level of risk exploits the comparative advantages of ATP's product. These elements of ATP's investment strategy set it apart from other pension funds. ATP has built a strong investment organization with a culture consistent with its investment beliefs, and the execution of the investments has been excellent with no major operational incidents identified during the review.

Because the different parts of ATP's balance sheet serve different purposes, no single statistic can suffice to rate ATP's performance. The Hedge Portfolio should be evaluated by how well it protects the value of the guaranteed pension promises, not by whether it produces high standalone returns. The risk-seeking portfolios—the Investment Portfolio, the Market Return Portfolio, and the Supplementary Hedge Portfolio—should be evaluated by whether they generate adequately compensated returns at the chosen level of risk, to support future bonuses and inflation compensation without placing undue pressure on ATP's solvency. At the same time, the hedging of long-dated guarantees (partly through instruments that do not require full cash funding upfront) gives ATP low-cost funding capacity that supports the leverage used by the risk-seeking portfolios. This interaction is one of ATP's comparative advantages, but it also means that performance has to be evaluated at different levels: at the whole balance sheet, portfolio by portfolio, by investment strategy, and by the liquid and illiquid assets held by the different portfolios.

Taken at these different portfolio levels, the performance varies. From 2001 to 2025, ATP's balance sheet grew from DKK 245 to DKK 694 billion reflecting an average annual

investment return on all assets under management of 5,6 percent.¹ A 60-40 portfolio of global equities and global bonds would only have grown the balance-sheet to a value of 656 billion in 2025, everything else equal. But from 2015 to 2025, the average annual return on all assets under management was only 0.8 percent per year compared to 6 percent for a 60-40 portfolio. In all years over the evaluation period, ATP's Hedge Portfolio has consistently met the requirements of ATP's pension guarantees and, in some periods, generated excess returns relative to the liabilities. Over the period from 2002 to 2025, ATP's risk-seeking portfolios outperformed a 60-40 equity-bond benchmark by 4.7 percent per year. But from 2022 to 2025, ATP's risk-seeking portfolios returned -5,8 percent per year, underperforming against a 60-40 portfolio that returned 4,5 percent per year. While ATP should monitor its performance relative to other funds and investment strategies, it should also maintain the best overall investment strategy that meets its liabilities and objectives, while remaining transparent about the implications for the volatility of the investment results and its relative performance.

There are elements within the overall investment strategy that need to be reconsidered.

The risk level in the Investment Portfolio is high. The volatility target is three times the volatility of a 60-40 equity-bond portfolio. This is higher than typical actively managed funds with long-only benchmarks and is comparable to the risk levels of some of the most risk-intensive hedge fund strategies. This risk limit is also unusually high when measured against the 1-in-200-year solvency benchmark that is standard in the European pension and insurance regulation standards (Solvency II).

The addition of the Supplementary Hedge Portfolio has added both risk and complexity. Introduced partly with an ambition to increase returns, the Supplementary Hedge Portfolio is designed to exploit the value released by applying an illiquidity spread to support additional risk-taking. This exposes ATP's guarantees to new risks. ATP operates the Supplementary Hedge Portfolio with buffers that delay the transfer of gains and losses to the Bonus Potential. Sufficiently large losses reduce the Bonus Potential and may affect ATP's ability to meet the guarantees. Furthermore, the Supplementary Hedge Portfolio relies on ATP's ability to hold risky and illiquid assets through market downturns. The operation of the portfolio is also difficult to explain to members.

The high required return on investments, the risk of failing to deliver on the guaranteed nominal pensions or meet the intended indexation of pensions, the complexity of the investment strategy, and the operation of the Supplementary Hedge Portfolio all create reputational risk for ATP.

¹ The growth rate of the balance sheet is not equal to the investment return on all assets under management due to cash flow effects arising from benefits paid and premiums received. The average return over the same period on the 60-40 portfolio was 5.6 percent, which is similar to ATP's investment returns over the period.

When ATP experienced losses in 2022, the share of illiquid investments was too high and led to concentration risk in the Investment Portfolio. In addition, the overall added return from illiquid investments has been less than 1 percent per year over the evaluation period, which is low relative to the return suggested by some economic models required to compensate investors for the complexity, governance burden, and the constraints on rebalancing associated with illiquid assets. ATP started to lower its investments in illiquid assets in 2020 and today it constitutes 17 percent of assets under management. The next step is to develop a framework for the optimal allocation to illiquid investments, improve its deal selection, and build a stronger performance assessment.

Within large direct private markets, there have been some investments that have performed very poorly. These deals were large and illustrate the dangers of concentration risk. On some metrics, private market investments have outperformed public market investments similar in size. But compared to market capitalization-weighted global equity benchmarks, ATP has realized little or no illiquidity premium. ATP's indirect investments in private markets through funds, managed by Private Equity Partners, have avoided extreme returns and have relatively low costs compared to other funds-of-funds.

Danish equities have a material overweight in ATP's investments relative to global equity benchmarks and, like with illiquid investments, can result in concentration and rebalancing risk. As of year-end 2025, ATP had approximately 5 percent of its assets under management in Danish equities, constituting approximately 10 percent of risk in the Risk-seeking portfolios. ATP's Danish equities have historically performed very well, and ATP plays a positive role in the governance of Danish firms. Home bias is also the norm among institutional investors. However, Danish equities also have some degree of rebalancing risk ATP should revisit the share of Danish equities and unless ATP can continue to demonstrate that its local advantages translate into better risk-adjusted outcomes for members, should reduce the home bias.

More generally, ATP should assign a more explicit role to returns in its investment policy, while still maintaining risk exposures. To date, ATP has not adopted benchmarks in its investment strategy. Benchmarks should be used to assess whether returns are being delivered, while incentives should remain aligned with harvesting rewarded long-run return premiums that are not fully captured in market capitalization-weighted benchmarks. Without explicit benchmarks, it is difficult to evaluate whether realized returns reflect the compensation expected for the risks taken, to distinguish skill from factor risk exposure, and to measure the value of active management beyond factor risk exposures.

ATP is a low-cost provider, yet this is one of several aspects of ATP that is poorly reflected in public discussion. In addition, the complexity of ATP's investment structure, the use of leverage and derivatives, and the separation between hedging and risk-seeking portfolios create misunderstandings about both performance and risk. Strong returns on the Hedge Portfolio during periods of falling interest rates have at times been interpreted as investment success rather than as a mechanical offset to a corresponding increase in the

value of liabilities. Likewise, losses on the risk-seeking portfolio in volatile years have been interpreted as failures of strategy when they represent the foreseeable cost of an investment strategy that is structurally positioned to bear occasional losses. The resulting gap between perception and reality sometimes distorts the public debate about ATP's mandate and diverts attention from the long-horizon pension outcome that ATP is designed to deliver.

ATP needs to communicate its results in a way that focuses on the overall pension outcome rather than selectively highlighting performance in different subportfolios as has occasionally occurred in its history. Consistent, ex-ante framing of why ATP is structured as it is—and what members should expect in different market environments—would better align public perception with the underlying reality. This would in turn support better governance.

ATP has an important role to play in the Danish pension system and in many ways plays it very well. ATP has a different product in terms of its guaranteed nominal pensions, desired indexation of pensions, and component of market exposure, leading it to have a unique investment strategy. In our experience, ATP does better than many other pension funds in terms of matching liabilities to assets, harvesting rewarded risk premiums, and not succumbing to peer risk. Also, ATP is more advanced in its thinking on pension objectives than most pension funds.

Our analysis and recommendations set a comparatively high bar. However, even if they are implemented, there will be years when ATP underperforms against other pension funds. That is the price of being different. But it is a price worth paying if ATP fulfills its role in the long run. Most of ATP's members will be around in the long run.

11.2 ATP's role in the pension system and implications for the evaluation

ATP's investment strategy must be assessed on how it delivers pension payments as a part of the overall pension system that has changed since ATP was established. ATP is a funded Pillar 1 pension provider. Its purpose is to generate a guaranteed, lifelong pension to virtually all Danes. ATP was established at a time when few Danes had occupational pension arrangements. Today, most Danes have access to occupational pensions, but a sizeable minority do not.

ATP must play a complementary role in the Danish pension system to justify its existence. Most Danes rely for their pension income on the Danish state pension and occupational pensions. ATP distinguishes itself from the Danish state pension by being funded. It distinguishes itself from the occupational pensions that increasingly have no guarantees by having a large, guaranteed component. The Danish state pension is subject to political risk, and the occupational pensions are subject to market risks. In principle, there

is therefore a role to play for ATP in complementing both the Danish state pension and occupational pensions.

The challenge for this value proposition is that ATP's share of total pension income is small. This applies even for the sizeable group who have no occupational pension income as this group receives additional Danish state pension based on means testing. The most obvious way to resolve this is to raise ATP contributions for all; another way is to increase the contributions and subsequently the pensions only for the sizeable minority that do not have occupational pensions. The latter has been done but only on a limited scale. Contributions to ATP fall outside our mandate, but the role of ATP in the pension system and how it complements other sources of pension income is our starting point for evaluating the investment strategy. Our analysis therefore starts from the position that despite the relatively small size of ATP pension payments, ATP must deliver pensions that generate value for pensioners in the context of the overall pension system.

ATP should balance differentiating itself from the occupational pension schemes and, at the same time, provide value to those that do not have occupational pensions. The first objective supports having some guarantees. The second objective supports investing some of the funds in equities and alternative assets—sources of return to which individuals without occupational pensions are known to have limited exposure. Over the long run, these assets provide more inflation protection than long-term bonds.

ATP has three major comparative advantages.

First, ATP can offer a standardized pension product because it complements occupational pensions rather than substituting for them. Therefore, ATP is, for most members, a supplement to occupational pension schemes. It does not need to provide the same level of customization for those who have occupational pensions. Occupational pensions can be designed taking ATP's construction into consideration. This allows ATP to offer a simple pension product—a basic lifelong income stream. In this sense, ATP can be the Model T Ford of the Danish pension system—a standardized product that delivers reliable income for most people at scale.² This scale should make it possible to deliver a pension at a lower cost than the occupational pension schemes and thus contribute to the overall efficiency of the pension system. Below, we will conclude that ATP delivers on this comparative advantage.

Second, ATP's long-dated liabilities and its use of partially unfunded hedging instruments allow it to deploy capital efficiently. ATP's large guarantees are partially hedged by instruments, such as interest rate swaps, that do not require cash up front, and ATP's liabilities are long term. ATP therefore sits on a large funding base that can be used to apply leverage in its Investment Portfolio at low cost. This allows ATP to run more

² Henry Ford is attributed the quote in relation to the Ford Model T: "Any customer can have any color that he wants as long as it is black." This allowed Ford to produce cars with great economies of scale. In addition, black color dried the fastest.

sophisticated strategies than other asset managers who cannot take leverage or are restricted to long-only investment strategies.

Third, ATP's scale could in principle give it advantages in private markets. ATP is a large pension fund, at present the second largest in Denmark. This could give it negotiating power and a skill base that may be used in private markets, where smaller investors face higher costs or limited access. We circle back to this comparative advantage later and conclude that in practice this has not always generated excess returns.

ATP is constrained by law in terms of its investment strategy, and an evaluation must take these constraints into consideration. ATP's investment results cannot be compared to those of the Government Pension Fund Global (GPF), commonly referred to as the Norwegian oil fund, or market-based occupational pension funds, to mention a few examples. The major constraint is the guaranteed pension that ATP must deliver on parts of the contributions. ATP is also required by law to deliver a lifelong pension. Both requirements generate value to the overall pension system, but they also impose restrictions on ATP's investment strategy. In the subsequent sections, our basic premise is that ATP should exercise its comparative advantages. Our guiding principle is that ATP, within its constraints and with due regard to the overall pension system, should deliver the best possible pension. In practice, that assessment will be made by looking at components of ATP's investment strategy. However, before we address these, there are several more fundamental questions that need to be considered.

11.3 The inflation objective and the overall design of ATP

In addition to the mandate, the Board of ATP asked us to pinpoint elements beyond the investment strategy that have significant investment implications for ATP. As stated above, ATP's investment strategy reflects both the constraints imposed by legislation and key decisions by ATP's Board. All constraints and decisions have a shadow price. A shadow price is the opportunity cost of the constraint, i.e., what could have been achieved in terms of the overall objective had the constraint not been there? As this goes beyond our mandate, we do not make any recommendations.

Two important elements that have implications for the investment strategy are ATP's interpretation of the inflation indexation objective, and that contributions are not indexed to wage inflation. A less ambitious inflation index objective combined with contributions indexed to wage inflation could generate the same pensions at a more moderate required return. This would allow the ATP architecture, including the Bonus Portfolio, Market Return Portfolio, and Supplementary Hedge Portfolio, to be less ambitiously designed and lower downside risks to the guaranteed pensions (Section 8.7.5).

The inflation indexation in the ATP Act can be interpreted in different ways. The ATP Act contains two inflation-related objectives: indexation of pensions and indexation of ATP

assets. The founders of ATP did not appear to view indexation of pensions as a central objective (Section 6.4.3). Moreover, the resulting double inflation objective is difficult to justify in theory: ATP must first price expected inflation into the guaranteed pension and then seek additional returns to compensate for realized inflation. The nominal guaranteed pension, the tariffs, already contains a component of expected inflation. In addition, there is an ambition to index the tariffs with realized inflation. The doubling of inflation is very ambitious.

ATP has set itself an ambitious inflation indexation objective that drives a complicated design. ATP sees its interpretation as following from the ATP Act (see discussion in Section 6.4). The inflation indexation objective in the ATP Act deserves clarification by lawmakers. ATP's investment strategy—including its use of leverage, asset mix, risk targets, and investment strategy—are partly based on this interpretation.

For a member, higher pension payments could come from two sources: growth in contributions or higher investment returns. Holding the contribution fixed, higher pension payments can only be achieved by taking on higher risk and thereby generating high investment returns. Under the current set up, because contributions are not indexed and the inflation objective for tariffs is pursued only through the Investment Portfolio, the burden falls exclusively on generating high investment returns. This requires an investment excess return of approximately 17 percent that needs to be generated by the Investment Portfolio and the Supplementary Hedge Portfolio, as shown in Section 7.5.1. This is an ambitious return target that requires taking substantial risk and leverage as shown in Section 7.5.2. Holding the investment return fixed, higher pensions can be achieved by growth in contributions (with the caveat that another way of increasing pension benefits would be required for existing pensioners as they are no longer making contributions). Hence, for a given desired pension payment, there is a trade-off between increasing expected returns with associated risks for the guaranteed pensions and growth in contributions. The size of contributions falls outside our mandate, but increasing contributions could lower required returns.

The risk taking in the Investment Portfolio is exemplified by the target given by the Board to management to run a 30 percent volatility portfolio. The 30 percent target is a high level of risk for any fund (Section 7.5.3). For comparison, a 60-40 equity-bond portfolio has a volatility of 9-10 percent. This level of risk taking is very high for actively managed funds with long-only major market benchmarks. It is comparable to the risk levels of some of the most risk-intensive hedge fund strategies. It is also unusually high measured against the 1-in-200-year solvency benchmark that is standard in the European pension and insurance regulation standards (Solvency II). Even at this high risk level, the ambitious inflation-indexation objective is not assured: according to ATP's internal Asset Liability Model calculations, the probability of meeting the indexation objective is 61 percent over a 10-year horizon for long-run inflation averaging 2 percent (Section 8.4.4). In the Solvency II framework, ATP's risk limits correspond to a solvency coverage ratio of around 100

percent—well below other large Danish pension funds. This comparison should be interpreted with some caution, given that ATP's structure differs from ordinary pension funds, but it illustrates that the chosen risk level is high (Section 5.6).

The investment risk—with a high level of risk exposure and leverage giving rise to reputational risk—is taken in three risk-seeking portfolios: Investment Portfolio, Market Return Portfolio, and Supplementary Hedge Portfolio.

The Investment Portfolio corresponds to the Bonus Potential on the liability side. Its risk target is set by the Board based on Asset Liability Model analysis and a stated risk appetite. The Investment Portfolio is the main vehicle through which ATP takes discretionary investment risk to meet the inflation indexation.

The Market Return Portfolio gives members direct risk exposure to the market before conversion into guaranteed benefits. Introduced as part of the new business model, the Market Return Portfolio is a fully funded portfolio. Gains and losses in the Market Return Portfolio will raise and lower, respectively, future pension payments but will not endanger the guaranteed obligations.

The Supplementary Hedge Portfolio is the most distinctive part of ATP's risk-seeking architecture and is intended to generate additional returns from the value released by using a higher discount rate. The higher discount rate is justified by the fact that ATP's liabilities are illiquid. Therefore, they should be discounted with a rate that is higher due to the inclusion of an illiquidity spread. The Supplementary Hedge Portfolio was introduced partly to provide additional risk-bearing capacity. It is designed so that gains and losses are absorbed by buffers and only flow into the Investment Portfolio once they exceed certain thresholds, and therefore the Investment Portfolio covers part of the risk in the Supplementary Hedge Portfolio's risk. The idea behind the Supplementary Hedge Portfolio is that, if ATP can stay the course, temporary losses will be reversed and, over the long run, the higher expected return on risky and illiquid assets will be rewarded in bearing short-term volatility. This is different from the investment portfolio where ATP will reduce absolute risk after losses.

The Market Return Portfolio and the Supplementary Hedge Portfolio have increased risk taking at ATP. When the portfolios were introduced as part of the new business model, ATP did not lower the level of risk in the Investment Portfolio. The risk in the Investment Portfolio was held constant even though the introduction of the Market Return Portfolio and the Supplementary Hedge Portfolio reduced the required return ATP needed to generate to support the inflation-indexation objective. The high level of risk-taking in the Investment Portfolio has exposed ATP and its Board to reputational risk, as the experience of recent years has shown. The Supplementary Hedge Portfolio not only increases risk taking but also adds complexity through its buffer feature.

Risk-taking in the Investment Portfolio raises the question of what the risk should be managed against. There are two starting points: the Bonus Potential or the total balance

sheet. ATP has no equity, but the Bonus Potential in some ways works as equity. Assessments that characterize ATP as taking high risk relative to the Bonus Potential take this perspective. On the other hand, when measuring the risk relative to ATP's entire balance sheet, the level of risk-taking is low to moderate. In addition, ATP's unencumbered cash has remained above 10 percent of the balance sheet throughout the evaluation period (Section 8.5.4), providing the operational liquidity to support the derivative-implemented leverage without forced asset sales.

ATP's risk-taking should be assessed relative to the Bonus Potential when it comes to possible losses and relative to ATP's balance sheet in relation to leverage. The guaranteed liabilities are ultimately what ATP has promised its members. Losses are absorbed by the Bonus Potential and should affect guaranteed liabilities only in extreme circumstances, such as those defined in the Solvency II framework. ATP should aim to maintain a positive Bonus Potential and thereby honor its guarantees. ATP is designed as a guaranteed product, and this guarantee is one of its core contributions to the Danish pension system. If ATP were instead a market-based product, like many occupational pensions today, it would lose a large part of its "raison d'être." Therefore, ATP's risk taking should be assessed relative to the bonus potential. ATP's balance sheet ultimately determines the possible leverage and is therefore relevant relative to leverage. If ATP was a market-based product, risks should be assessed against its balance sheet.

Because ATP's risk capacity is constrained by the Bonus Potential rather than the full balance sheet, its returns cannot be meaningfully compared to funds with larger risk-bearing capacity, such as sovereign wealth funds or market-based occupational pensions. A fund that can use its entire balance sheet to take risk is far less constrained than ATP. ATP can only take risks that expose approximately 1/6 of its balance sheet, whereas a market-based fund can use its entire balance sheet.

11.4 Recommendations

11.4.1. ATP's investment beliefs

ATP's investment philosophy integrates key elements of modern portfolio theory, empirical evidence, and the practice of large investors. Most importantly, ATP starts from its pension promise, which leads to the separation of the Hedge Portfolio, which is designed to support the nominal guarantees, and the risk-seeking portfolios, which are designed to generate returns that can support bonus payments and indexation (Sections 5.1 and 6.5). The core financial beliefs are based on principles that are well-supported in the academic literature (Section 5.4). These are: Risk is the first-order decision, diversification is the only free lunch, compensated risk comes from a limited number of factors, strategic asset allocation matters more than tactical asset allocation, and markets are on average "efficiently inefficient." These beliefs also fit ATP's product design: non-withdrawable

contributions, long-dated liabilities, and a large Hedge Portfolio all give ATP comparative advantages in long-horizon investing, derivatives implementation, and low-cost use of leverage. We agree with this core philosophy.

Our reservation is ATP's investment beliefs in private-market investments.

Theoretically illiquid assets can provide access to sources of returns that are not available in public markets, and ATP's long horizon means that it can bear some illiquidity risk. However, the academic evidence does not support any presumption that private-market investments reliably outperform public markets after fees and adjusting for risk (Section 5.3.4), and ATP's own track record on illiquid investments is mixed, especially in more recent years (Section 8.6.5). We endorse ATP's use of public market equivalents for assessing illiquid investments as it highlights how much value is being added in exchange for multi-year lockups, valuation uncertainty, fee complexity, concentration risk, and rebalancing constraints. Illiquidity and complexity are not, in themselves, sources of return; they are sources of risk that should be compensated by higher expected returns. ATP's policy on private markets should highlight its comparative advantages.

ATP's resulting total portfolio looks very different from many institutions. The separation of its risk-seeking portfolios from a Hedge Portfolio, use of leverage and using derivatives, and pursuit of diversification by obtaining exposure to a parsimonious number of factors rather than using asset class buckets also causes ATP's portfolio to deviate significantly from market capitalization weighted benchmarks, 60-40 equity-bond portfolios, and the portfolios of most institutional portfolios. This makes resulting performance harder to communicate and exposes ATP to peer risk when conventional benchmarks outperform.

Recommendation 1 (Maintain investment beliefs generally, but reconsider beliefs on illiquid assets): We recommend that ATP generally maintains its investment beliefs; however, ATP could reconsider the purpose of and its comparative advantages in illiquid assets. While peer risk should not be part of the foundation for constructing ATP's portfolio, it needs to be addressed in communications.

11.4.2. ATP's overall investment strategy

ATP maintains a sensible separation of its assets into two main types of portfolios, the total risk-seeking portfolio and a Hedge Portfolio. The risk-seeking portfolios consist of the Investment Portfolio, the Market Return Portfolio, and the Supplementary Hedge Portfolio. The Hedge Portfolio is the largest and matches the guarantees. Having a Hedge portfolio that matches guaranteed liabilities is consistent with best practice and financial theory (Section 5.1), as is the separation between assets held to secure guaranteed liabilities and assets held in risk-seeking portfolios to generate surplus returns.

The substantial variation of the Hedge Portfolio and ATP's liabilities presents a communication challenge. The market value of the liabilities is especially sensitive to movements in interest rates. The Hedge Portfolio, by design, also moves with changes in

interest rates. For example, with increasing interest rates both the value of the liabilities and the Hedge Portfolio will decrease. Hence, performance in the Hedge Portfolio should be evaluated by how well it protects the guaranteed liabilities rather than by its standalone returns. This should be consistently reiterated in communications.

Recommendation 2 (Investment strategy should maintain matching assets to liabilities): We recommend that ATP maintains its overall investment strategy of separating the funds according to their purpose: maintaining a Hedge Portfolio that matches its liabilities and a risk-seeking portfolio. However, ATP should put more effort into communicating the consequences of its investment strategy, including the volatility of the Hedge Portfolio.

11.4.3. Risk-taking and leverage

The Investment Portfolio is managed as a risk parity portfolio. In principle, risk parity delivers the highest expected return for a given level of risk by diversifying across more asset classes and risk premiums than a simple equity-bond portfolio (Section 5.4.1). This investment strategy is also used by some other international institutional investors (Section 5.5.2). ATP maintains factor exposures to produce the target volatility and takes leverage to scale the risk parity diversified strategy to that target.

The inflation indexation objective requires a high return. The total risk target is a board decision. The objective, which includes expected inflation, and indexing pension payments to realized inflation—requires an excess return of approximately 17 percent to be covered by the Investment Portfolio and the Supplementary Hedge Portfolio as a whole (Sections 7.4.1 and 8.7.5). Only 20 percent of contributions flow to the Bonus Potential, but ATP aims to deliver inflation indexation on the full pension promise and not solely on the Bonus Potential. Thus, a relatively small risk-bearing portfolio must generate returns to support indexation of a much larger guaranteed benefit roughly four times its size. Tax and investment costs are also included in the 17 percent.

ATP operates with a level of annualized volatility in the Investment Portfolio of 30 percent in addition to the risk in the Supplementary Hedge Portfolio. Neither an unlevered equity-bond portfolio nor an all-equity portfolio comes close to this risk level. A diversified risk parity portfolio levered approximately 5-6 times can achieve this risk level. An all-equity portfolio levered roughly 2 times, or a 60-40 portfolio levered 3-4 times, can in principle deliver the same risk level, but they have a lower Sharpe ratio than a diversified risk parity strategy. Translated into the Solvency II framework, ATP's risk limits correspond to a pension fund having a solvency coverage ratio of approximately 103 percent. This is well below the level that most pension funds aim for (Section 5.6). Given ATP's importance in the Danish pension system, a more conservative position than the regulatory floor seems warranted.

ATP should reconsider its risk-taking, if it wants to reduce the risk of not honoring the guaranteed pensions. The objective should be to bring ATP's risk of not being able to

honor its guarantees somewhat below the implicit probability of insolvency assumed in the leading pension and insurance standards as reflected in Solvency II. The level of risk should reflect the systemic role of ATP and the solvency ratios of other pension providers with guaranteed products. (We do not recommend that ATP should be subject to Solvency II as this would give rise to difficulties for a fund without explicit capital.) Reducing the risk-taking would have the cost of lowering expected pensions. Pensions can be maintained by lifting contributions, but contributions fall outside our mandate.

Once the total level of risk is set, the case for risk parity is strongest as a method of allocating risk. The risk parity strategy is consistent with ATP's investment beliefs and the comparative advantages arising from its product. That is, diversification is the only free lunch, that compensated risk is represented by a limited number of broad factors, and the most important investment decision is the amount of risk rather than the allocation of capital. ATP's risk parity strategy is enabled by a well-functioning treasury capability, allowing it to use leverage and derivatives efficiently within the liquidity available, and takes advantage of the product's non-withdrawable contributions and long-dated liabilities.

Risk parity strategies are consistent with the economic theory of portfolio choice under two important conditions (Section 5.5.2): a low risk-free rate and a sufficiently low stock-bond correlation. The low risk-free rate allows an investor to employ leverage to scale a diversified portfolio to a desired target risk level, and the low or negative stock-bond correlation makes the portfolio diversified with a risk/reward ratio sufficiently high to justify leveraging in the first place. Historically, risk parity has outperformed a 60-40 equity-bond portfolio in eight out of ten 10-year periods (Section 7.3.4).

Both conditions were violated in 2022 when interest rates rose sharply as central banks raised policy rates to combat inflation and stocks and bonds both fell together. Bonds experienced the worst returns in a century (Section 8.2.1). Because risk parity holds more fixed income exposure relative to a 60-40 portfolio, and because it uses leverage to scale diversified risk, risk parity is vulnerable to periods when bonds do not diversify equities. ATP stayed the course and maintained its risk targets, consistent with its investment beliefs and long-run comparative advantage and did not abandon its risk-parity framework. The 2022 experience does not invalidate ATP's risk parity strategy, but it does show the need to monitor macro developments, including inflation risks, as these influence correlations. A portfolio may be well diversified in terms of risk, but the expected returns on its risks can be temporarily low (see also Recommendation 7).

Because many pension funds do not run risk parity at the total portfolio level, ATP also bears peer risk. Even when risk parity outperforms over the long run, risk parity returns can diverge significantly from other institutions in the short- and medium-term. ATP should report performance against both risk-parity and simple 60-40-style benchmarks, stress the strategy under adverse stock-bond correlation regimes, and communicate clearly that peer underperformance can occur for extended periods (see also Recommendation 8).

Recommendation 3 (Maintain risk parity strategy, but reconsider level of risk in the Investment Portfolio): We recommend that ATP maintains its risk parity strategy for the Investment Portfolio but reconsiders the total level of risk in the Investment Portfolio. The concern is not the leverage itself, which is competently implemented by ATP's treasury operations, but the absolute level of risk which is high relative to other pension funds of similar systemic importance.

11.4.4. Market Return Portfolio and Supplementary Hedge Portfolio

The Market Return Portfolio is a simple way for ATP to introduce market exposure for its members. The Market Return Portfolio invests in risky assets. It supports the annuity with market exposure and is the perfect hedge of the reserve related to the annuity on the liability side. It introduced risky assets to ATP's members without jeopardizing the guarantees. We believe this is an advantage for the members, especially those members that otherwise do not receive market exposure in the pension system or in private savings.

The Supplementary Hedge Portfolio is a complex way for ATP to generate a surplus on top of the guarantees. The Supplementary Hedge Portfolio is an overlay portfolio as it does not have its own funding base, apart from the accumulated undistributed surplus, and uses the loss absorbing capacity available due to illiquidity in the guarantees. The capital allocated to the Supplementary Hedge Portfolio comes from discounting ATP's guaranteed liabilities by a risk-free rate that is not reduced by a liquidity spread (Section 6.5.3). The illiquidity spread is unobservable, but ATP uses a conservative estimate that limits the risks that the allocated capital must be reduced. Furthermore, there are buffers in the Supplementary Hedge Portfolio that limit the impact of the return, both losses and gains, that must be transferred to the Investment Portfolio. In the normal course of business, ATP must derisk and sell risky assets during market downturns to protect the guaranteed liabilities. The Supplementary Hedge Portfolio mitigates this procyclical behavior, which makes it a better fit for holding illiquid investments.

The Supplementary Hedge Portfolio raises the risk that ATP cannot honor its guarantees. There is already a risk, due to the high target risk level and use of leverage, that ATP cannot meet its guaranteed liabilities. The probability of negative Bonus Potential is 0.3 percent on a 10-year horizon at the current risk level in the Investment Portfolio without the Supplementary Hedge Portfolio. Including the Supplementary Hedge Portfolio, as in ATP's current strategy, the probability is 0.6 percent over a 10-year horizon. The probabilities assume management action and are therefore lower than what would follow from a Solvency II framework. These percentages should therefore be interpreted with care. The introduction of the Supplementary Hedge Portfolio doubles the risk of ATP not meeting its guarantees. This is non-trivial for a major pension fund like ATP. Some argue that accepting the risk that ATP cannot honor all its guarantees is a small price to pay for higher average returns, and that the needed reductions in guarantees necessary to regain solvency will be limited.

However, by putting the guaranteed pensions at risk, ATP affects its role in the pension system.

ATP's ability to stay the course in the Supplementary Hedge Portfolio may be affected by reputational pressure. Should ATP be forced to liquidate its loss-making positions at the worst possible time—when prices are low but expected returns are high—losses may be substantial. This might happen if the Board were to become risk averse in these times. It can also happen if the Board is replaced because of the losses and a new board seeks to cut the losses of its predecessors. Reducing this risk of liquidation requires that the Board be regularly reminded of the risks it has chosen to take and that these risks be communicated clearly to the public.

When the Supplementary Hedge Portfolio was introduced, the risk in the Investment Portfolio was kept constant despite opportunity to lower the risk. The required excess return to meet ATP's double inflation indexation objective is approximately 17 percent for the Investment Portfolio, if the Supplementary Hedge Portfolio was not introduced (Sections 7.4.1 and 8.7.5). This corresponds to a volatility of 40 percent in the Investment Portfolio. With the addition of the Supplementary Hedge Portfolio, it would be possible to meet the double inflation indexation objective with the same probability at a lower volatility in the Investment Portfolio of 30 percent. However, ATP chose not to decrease the volatility with the intention of improving the likelihood of meeting its inflation objective.

Recommendation 4 (Prioritize risk taking in the Market Return Portfolio over the Supplementary Hedge Portfolio): We recommend that ATP prioritizes the Market Return Portfolio over the Supplementary Hedge Portfolio if the risk-taking level is to be reduced. The Market Return Portfolio is a simple way to enable exposure to risky sources of return for its members without generating risk to the Bonus Potential. ATP should be cognizant of the complexity and risks of the Supplementary Hedge Portfolio, in particular through the buffer element. The Supplementary Hedge Portfolio requires continuous awareness of its risk by the Board and communication to the public.

11.4.5. Illiquid investments

Illiquid investments can offer additional diversification and expand the mean-variance frontier and can generate an illiquidity premium. The long-dated liabilities and its size should give ATP a comparative advantage in investing in illiquid markets. Illiquid investments are potentially a good fit for both the Market Return Portfolio and, albeit some caveats also for the Supplementary Hedge Portfolio, given their capacity to hold onto investments over the long term.

Illiquid investments are difficult to assess in practice (Section 5.3.4). Private markets have high fees, are difficult to evaluate, valuations are smoothed, and performance depends heavily on vintage, manager selection, governance rights, and bargaining power. Also, performance measures such as internal rates of return do not measure the returns an

investor actually receives in illiquid investments, total value to paid-in capital does not take into account the time period over which returns are generated, and public market equivalents are dependent on the matching equivalent chosen in public markets (Sections 5.3.4 and 8.6.5). These difficulties necessitate several different performance measures—each with their own strengths and weaknesses.

ATP's experience in private market investing is mixed with poor performance in certain large investments. Overall, ATP's illiquid portfolio has outperformed a 60-40 portfolio on some metrics. Also, many of its illiquid asset investments have outperformed their asset-specific references. For example, the private equity portfolio has outperformed small stocks. However, it has underperformed global equity markets. Even an investor of the size of ATP may not be able to access the best deals and is at a disadvantage in its ability to attract staff with expertise who can negotiate with firms offering private investments. ATP has recently experienced poor performance in certain large illiquid investments that have had high public visibility. ATP has analyzed the performance and concluded several lessons. ATP invests in private markets both directly through Global Direct Investments and indirectly using funds with Private Equity Partners. The returns received by ATP from Private Equity Partners investments have not experienced the extreme negative returns of Global Direct Investments. Compared to other funds-of-funds, Private Equity Partners is relatively inexpensive and provides diversified exposure to illiquid investments that bigger investments do not. Historically, most of the private equity exposure has been through Private Equity Partners.

ATP's experience in private market investment also showed that there are rebalancing and concentration risks. Large holdings of illiquid investments constrain an investor's ability to rebalance unless it is willing to take losses from realizing its illiquid investments. During the downturn in 2022, 70 percent of the risk in the Investment Portfolio was due to illiquids. As a result, most of ATP's rebalancing activities at this time had to be done through public market exposures. This created a less well-balanced portfolio. In addition, if the investments in specific private market deals are significant, concentration can result in both poor performance and the risk of negative publicity—as was the case with Northvolt, TDC, and Copenhagen Airport. ATP decided to reduce its illiquid exposure in 2020, but the share of illiquid investments peaked in 2022 because of earlier commitments, the inability to decrease illiquid positions, and the steep decline of liquid assets during the bear market.

ATP needs a more complete framework for both determining the share of illiquid assets in the portfolio and for assessing its comparative advantage in generating outperformance in illiquid assets. The academic literature suggests that large illiquid positions bring significant risks of concentration and the inability to rebalance the broader portfolio (Section 5.4.4). There is a need to further develop a framework for assessing when ATP can most advantageously bear concentration risk, its comparative advantages in different segments of the illiquid market space, and the best ways to access private markets. We have seen different performance metrics for illiquid investments that give rise to different

conclusions. Some of this reflects the imperfect nature of illiquid asset performance metrics (Section 5.3.4). ATP already has a rigorous approach for matching illiquid investments to equivalent factor exposures in liquid markets, but more work is needed.

The broader measurement framework should be part of ATP's regular communication. Public market equivalents, constructed by matching illiquid investments with equivalent factor mimicking positions, should remain the primary measure of whether illiquid investments have added value relative to liquid alternatives. We recommend that ATP regularly communicates a separate breakdown of its performance in illiquid markets in addition to its performance in liquid markets to make it clear whether illiquidity, complexity, and fees have been adequately compensated.

Recommendation 5 (Further develop the illiquid investment framework): We recommend that ATP extends its illiquid investment framework to include the share of illiquid assets and articulates its comparative advantage for generating outperformance. ATP's considerations should include both the risk of being exposed to concentration risk in volatile markets, the effects illiquid assets have on its rebalancing policy, and whether it can harvest an illiquidity premium.

11.4.6. Danish equities

ATP has had impressive performance in its portfolio of Danish equities. The return from 2015 to 2025 has been 12.1 percent per year (see Section 8.7.2). The strong contribution to the performance of ATP's Danish equity portfolio is due to two active decisions: first, the overweight of Danish equities compared to the weight of Denmark in the global equity portfolio, and second, superior selection of specific stocks within the Danish market. ATP has demonstrated a comparative advantage due to its knowledge of the Danish market and its engagement with Danish companies.

The Danish equity market shares many of the characteristics of the global equity market but it is a small market. Danish companies operate in global markets. Danish companies are also distributed across sectors. Thus, the investments do not significantly skew the portfolio in terms of country or sector exposure. However, Danish equities are a small portion of global equities, less than one percent.

There is recognition that ATP plays a positive role in the Danish capital market. ATP plays a role as an investor in the corporate governance of Danish companies by expressing its views both at general assemblies and at bilateral meetings. ATP is also active in pressing companies to address Environmental, Social, and Governance (ESG) risks. All of this contributes to the development of Danish capital markets.

Nevertheless, ATP's allocation to the Danish stock market is substantially more than the size of the Danish stock market relative to global stock markets. This gives rise to concentration risk. The outperformance of the Danish stock market relative to global stock market is unlikely to be a permanent feature. The Danish stock market is also less liquid

than the global market. Furthermore, it is more difficult politically for ATP to reduce its holdings of Danish stocks during a market downturn than to reduce its holdings of international stocks. Developments during the downturn in 2022 support this assertion (Sections 8.6.5 and 8.7.4). Thus, Danish stocks share some of the problems of illiquid investments.

Many investors have a home bias, but this is not in itself an argument for the material overweight of the Danish portfolio. A home bias is that investors are more invested in their national market than its relative share would suggest. Globally, investors in most countries have a home bias (Sections 5.6 and 8.7.4). The Swedish and Dutch pension funds are respectively 33 percent and below 5 percent invested in their local stock markets out of their overall stock market investments. Danish investors also have a home bias. A home bias can be justified by better knowledge of national markets and the legal system, among other reasons. However, only continued risk-adjusted outperformance on Danish equity can justify the extent of the home bias that ATP exhibits.

Recommendation 6 (Develop a quantitative framework for Danish equities): We recommend that ATP explicitly states its investment rationale for the size of the position in Danish equities relative to the global portfolio and its superior ability to select stocks within the Danish market. Given the rationale, it should compute the optimal weight in Danish equities and continuously assess whether the Danish allocation generates a return that can justify the deviation from a more global portfolio.

11.4.7. A stronger returns-based framework

ATP can complement its strong factor risk exposure and risk management framework with a more deliberate returns-management framework. The risk side of investment management is one of the strengths of ATP. ATP is highly disciplined in adjusting risk exposures to targets (Sections 7.5.1 and 8.5.2), managing leverage and derivatives, and monitoring liquidity (Section 7.6.3). The investment process could be broadened to place greater emphasis on whether those risk exposures are expected to be adequately compensated. An enormous literature in financial economics documents that risk-reward trade-offs vary over time (Section 5.2). A portfolio that is well-balanced from a risk perspective may not be attractive if the expected return for taking those risks has fallen.

ATP can adopt a stronger benchmark culture. ATP should not, however, adopt a single benchmark for the whole portfolio given that ATP comprises multiple subportfolios with distinct mandates and different risk-return profiles (with the separation of hedging and risk-seeking portfolios being most important). The Hedge Portfolio should be benchmarked against the time-varying value of liabilities to isolate any active deviations from pure liability matching. The Investment Portfolio could be benchmarked against a diversified risk parity benchmark at comparable risk, but we recommend choosing a more conventional market capitalization portfolio, such as a 60-40 global equity-bond portfolio potentially scaled to

achieve the long-run volatility target set by the Board. (These were some of the comparison portfolios that we used to measure the performance of the total portfolio, the subportfolios, and the factor-based investment strategies in Sections 8.5 and 8.6.) The Market Return Portfolio and Supplementary Hedge Portfolio should also have benchmarks that reflect their specific objectives and risk budgets.

Benchmarks would help make ATP's active investment choices more transparent and easier to evaluate. First, ideal benchmarks are explicit, transparent, and are investable at scale. Second, the active decisions—taking leverage to achieve a higher target risk and deviating from the market to harvest long-run factor risk premiums—can be separately measured. Performance attribution can also identify the remaining residual active management within the factor sleeves and the value-added from illiquid investments. A credible benchmark culture rests on further design choices. Benchmarks should be set by the Board rather than by the investment staff who are evaluated against them. Benchmarks should also be stable but periodically reviewed, say every three to five years. Performance should be evaluated net of all costs, including external management fees, transaction costs, and the financing costs of leverage, so that the benchmark represents what members would have received under the passive alternative.

Benchmarks help in communicating performance. ATP's investment strategy is deliberately different from conventional pension portfolios—and the product of ATP is especially different from market rate products—and therefore there can be large deviations between ATP's results and other institutions. Clear benchmarks can help explain underperformance due to the cost of maintaining hedging guarantees, from an unfavorable environment for various chosen factors, poor implementation, or from poor active management in excess of factor exposures. Combined with ex-ante education on when and why certain factor positions, active strategies, or illiquid asset sectors are expected to out- or underperform, benchmarks help the Board and stakeholders to distinguish between periods when ATP should stay the course and periods when certain aspects of the investment strategy should be reconsidered. A clear benchmark culture also anchors the conversation about acceptable tracking error, deliberate deviations, and acceptable losses.

Developing a stronger benchmark and return culture requires explicit support from the Board. A return-management framework should not be interpreted as a constraint on active risk-taking; rather, it should create the conditions for taking active risk deliberately, measuring it properly, and rewarding it when it adds value. This requires time, analytical resources, data infrastructure, and investment talent. Benchmarks can also provide a rigorous foundation for evaluating and rewarding investment staff for the active value they add in excess of the benchmarks, aligning compensation with value creation for member outcomes. The same benchmarks should be adopted internally and reported in external communications. Benchmarks also require the Board to tolerate periods of underperformance when active positions are well justified ex ante and remain consistent with ATP's mandate. In setting permissible deviations from benchmark, the Board should

consider both the average deviation (tracking error) and set typical ranges of deviations that would be expected under different market conditions. Tracking error should also be determined considering the comparative advantages of ATP. Without that support, benchmarks can become defensive tools that discourage differentiated investment decisions rather than instruments for improving accountability and long-term returns.

Recommendation 7 (Adopt a more return-focused investment framework): We recommend that ATP adopts a more explicit focus on returns. In addition to maintaining target risk exposures, ATP should regularly assess whether each major exposure is expected to earn sufficient return for its risk, liquidity, leverage, and complexity. This assessment should be anchored in transparent benchmarks, with active risk limits set relative to those benchmarks, and there should be a process for periodic review of the benchmarks.

11.4.8. ATP communication

Communication of pension fund performance is inherently difficult. It often ends up in a very simplified comparison of short-term asset returns relative to other pension funds (Section 10.1). This could make sense if pension funds were pure asset managers. However, they are not. Their purpose is to deliver a pension.

Communication of pension funds should therefore focus on how they fare in delivering on their pension objective. The pension objective is often specific to the pension fund. ATP's objective is primarily to deliver on its guarantees, and secondarily to inflation index the tariffs. This is what ATP's performance measurement should focus on and not the performance of a subportfolio or performance relative to other pension funds. When the value of ATP's Hedge Portfolio drops because interest rates increase, the losses can seem immense. However, they reflect similar movements in ATP's liabilities and should not influence ATP's capacity to deliver on its guaranteed pensions.

Pension fund performance cannot be compared without considering the pensions a pension fund is supposed to deliver. It is much easier to deliver a high return on assets if that is the only requirement. If the Fund is also restricted in terms of the pensions that must be provided, there is not the same degrees of freedom in terms of investments, and it is less possible to deliver the same absolute returns.

Pension fund communication must focus on the long term and be consistent. Pension funds must deliver in the long run. Investment strategies should not be guided by short-term considerations. There is already too much of a tendency of herd behavior among many funds. It is reputationally costly to stick out compared to others, which risks driving short-term behavior rather than optimal long-term behavior. A good example of herd behavior is the increased allocations to equities across many Danish pension funds (Section 5.6.2). It is not enough to have an optimal long-term strategy—one also needs to be consistent in communicating it. This includes exercising up-front transparency, specifically acknowledging that there will be periods of underperformance.

ATP has at times been selective in its communication. When interest rates dropped, the focus was on the gains on the Hedge Portfolio (Section 10.2). The focus was on the Investment Portfolio in some periods when it outperformed. This has not helped when there were losses on both portfolios. ATP needs to stand by its investment strategy and communicate consistently on how it fares against the objective of delivering on its pension objectives.

ATP's reporting on subportfolios should be the second layer in the communication and should be made relative to relevant benchmarks. The Hedge Portfolio should be assessed relative to the promised guarantees. The Investment Portfolio should be compared to an appropriate benchmark. The same applies to both the Market Return Portfolio and the Supplementary Hedge Portfolio. More specific strategies should also be assessed relative to benchmarks.

The third layer in communication should be how the various portfolios contribute to the overall results. The purpose is not to focus on one summary number; the reporting of the performance of various parts of the portfolio should be consistent with the accounts. Another aspect of being consistent is reporting on costs, so that the ultimate goal of paying the promised pensions is met in an efficient manner. The fact remains that ATP is a very low-cost provider (Section 8.7.7). This is one of several areas where public perception does not reflect reality.

Communication should also be reflected in the way ATP is managed. There needs to be consistency in what you say you do and what you do. Therefore, the focus of the Board of ATP should be on the pensions that ATP delivers. The most important discussion in the Board should be on the trade-off between pension levels and the risks to those pensions. This also has the advantage of being a trade-off that most informed members of the public can relate to. It is the job of the investment strategy to clarify what the trade-off is and to implement it. Subsequent performance evaluations can then give input to the Board on how this has been done.

Recommendation 8 (Consistent communication centered on pensions): We recommend that ATP communicates consistently, centering its communication on the pensions it delivers. The management of ATP should be aligned with this communication focusing on the trade-off between pension levels and pension at risk. The secondary level of communication can focus on performance of the investment strategies relative to benchmarks and show how the performance contributes to the ultimate goal of paying pensions. Persistent misunderstandings in public discussion—on costs, on the role of leverage and derivatives, and on the function of the Hedge Portfolio—make it ATP's responsibility to report regularly and proactively so that public debate is anchored on the outcomes ATP is structured to deliver.