Risk and Financial Condition Report 2019

atp

Contents

A. Summary **3**

B. Activities and Results **4**
B.1. Activities 4
B.2. Pension Activity Results 6
B.3. Hedging and Investment Activity Results 6
B.4. Results of other Activities 8
B.5. Any other Information 8

C. System of Governance **9**
C.1. Generel Information on the System of Governance 9
C.2. Fit & Proper 14
C.3. Risk Management System including own Risk and Solvency Assesment 15
C.4. Internal Control System 17
C.5. Internal Audit Function 18
C.6. Actuarial Function 19
C.7. Outsourcing 19
C.8. Any other Information 20

D. Risk Profile **21**
D.1. Pension-related Risk 22
D.2. Market Risk 22
D.3. Counterparty Risk 24
D.4. Liquidity Risk 24
D.5. Operational Risk 25
D.6. Other Material Risk 25
D.7. Any other Information 26

A. Summary

ATP´s Risk and Financial Condition Report
ATP issues this report in accordance with the Executive Order on reporting and disclosure of information by ATP 'Bekendtgørelse om indberetning og offentliggørelse af oplysninger for ATP'. The requirements for ATP's report reflect the requirements for the Report on Solvency and Financial Condition, which must be issued by pension providers subject to the pan-European Solvency II rules, but with due consideration for ATP's special circumstances. The special circumstances include the fact that ATP has no equity capital and is not subject to solvency capital requirements. ATP's report will consequently differ from other pension providers' reports.

This report is a supplement to the ATP Group's annual report and contains further information about ATP's activities and results, system of governance and risk profile in its capacity of pension provider. The report thus covers the activities related to the management of ATP Lifelong Pension 'ATP Livslang Pension', but not ATP's administration on behalf of external parties.

Activities and Results
In 2019, ATP generated a profit for the year of DKK 30.8 bn before life expectancy update driven by high returns from tne investment portfolio. The Supervisory Board decided not to allocate a bonus to the members in 2019 in order to keep an adequate level of investment flexibility to preserve the long-term purchasing power of the pensions and in light of the fact that the value of guaranteed benefits has increased.

ATP has adjusted its life expectancies primarily as a consequence of a minor fall in longevity in Denmark. The adjustment led to a reduction of DKK 3.2 bn in the value of guaranteed benefits and a corresponding increase in the bonus potential.

ATP generated a profit for the year of DKK 34.0 bn after life expectancy update. The profit is embedded in ATP's bonus potential, which amounted to DKK 126.0 bn at the end of 2019.

System of Governance
The Danish ATP Act 'ATP-loven' lays down objectives and frameworks for ATP's governance, including that ATP must be managed by a Board of Representatives, a Supervisory Board and a Chief Executive Officer (CEO). The Supervisory Board decides the overall objectives and strategies for the management of ATP's material activities and lays down the accompanying principles through written policies and guidelines. The CEO handles the day-to-day management in accordance with instructions laid down by the Supervisory Board. The CEO is assisted in the day-to-day management by the other members of the Group Management body. ATP is of the opinion that the system of governance reflects the nature, scale and complexity of the risks associated with ATP's activities.

Risk Profile
The overall risk profile for ATP is stated using a proprietary risk model to calculate the aggregate risk, supplemented with other risk assessments and analyses. The purpose of these risk calculations is to provide a varied and detailed overview of the specific risks to which ATP is exposed. ATP's financial robustness is assessed by comparing the calculated risks with the bonus potential constituted by ATP's free reserves. As a general principle, the overall risks must be aligned with the bonus potential.

The overall assessment is that ATP's risk and financial condition is adequate.

B. Activitites and Results

B.1.ACTIVITIES

ATP was set up in 1964 as an independent institution, established by statute. ATP manages activities linked to the ATP Lifelong Pension 'ATP Livslang Pension' scheme and performs administrative services on behalf of external parties.

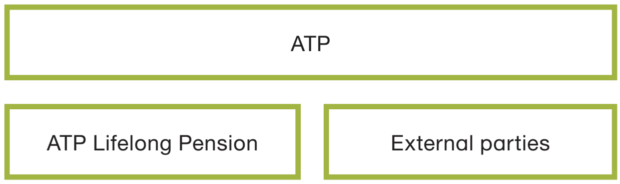
ATP Lifelong Pension is a supplement to the state-funded old-age pension and is today an integral part of the basic Danish pension cover. ATP, in combination with the state-funded pension system, constitutes pillar 1 of the Danish pension system. The scheme contributes to ensure a high minimum pension in Denmark and is also part of the foundation upon which other pensions rest. ATP Lifelong Pension is Denmark's largest supplementary pension scheme and thus contributes to providing basic financial security for Danish pensioners.

ATP Lifelong Pension is a mandatory scheme for all wage earners as well as the vast majority of transfer income recipients. Moreover, a number of groups – including disability pensioners – may choose to make voluntary contributions to ATP. ATP has over five million members, one million of whom are pensioners receiving lifelong pension from ATP. In recent years, payouts from ATP have exceeded contributions.

In addition to ATP Lifelong Pension, ATP performs administrative services on behalf of labour market organisations, local authorities and the Danish government. The services consist of collection of contributions, payment of benefits as well as membership and client administration for a number of labour market, social security and welfare schemes. These tasks are performed by ATP on a cost recovery basis – i.e. without profit to ATP. ATP is currently Denmark's largest disbursement institution, managing two thirds of the welfare benefits disbursed in Denmark. Payments in the order of DKK 280 bn were made in 2019.

This report only describes ATP in its capacity of pension provider and therefore activities related to the management of ATP Lifelong Pension. The report consequently does not cover ATP's administration on behalf of external parties.

Chart B.1 ATP´s activities



Supervision of ATP

The Danish Ministry of Employment has the primary legislative authority in ATP's activity area. The Danish Ministry of Employment is also responsible for the supervision of ATP.

ATP is also subject to supervision by the Danish Financial Supervisory Authority, who especially focuses on financial, managerial and pension-related matters. The Danish Financial Supervisory Authority submits an annual report on the supervision of ATP to the Ministry of Employment. ATP is informed about the contents of this report.

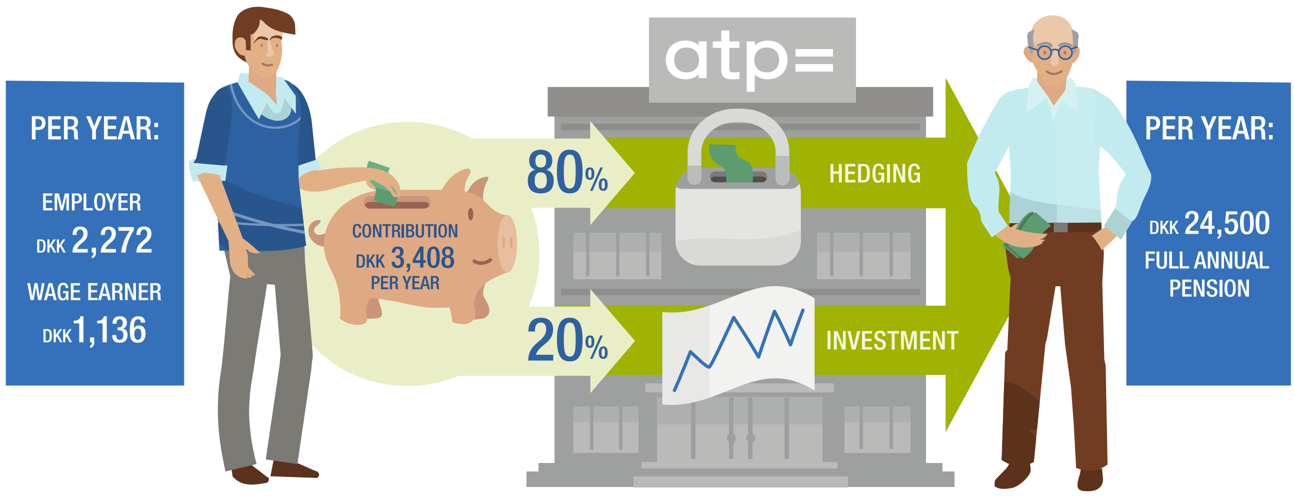
The supervision is performed through close contact between ATP, the Danish Ministry of Employment and the Danish Financial Supervisory Authority.

ATP Lifelong Pension

Pension contributions paid to ATP are divided into guarantee contributions and bonus contributions, which constitute 80 per cent and 20 per cent, respectively, of the contribution payments. The guarantee contributions are used for life-long, guaranteed pension benefits to ATP's members, while the bonus contributions are passed on to the bonus potential. The bonus potential, which constitutes ATP's free reserves, is used to increase, over time, the lifelong guaranteed benefits, thereby preserving the long-term purchasing power, and to cover increased life expectancies, thereby ensuring life-long benefits.

ATP's investments reflect the structure of the pension product and are basically divided into a hedging portfolio and an investment portfolio.

Chart B.2 How ATP Lifelong Pension works



The objective of the hedging portfolio is to safeguard ATP's ability, at all times, to deliver on the guarantees issued. The hedging strategy is to ensure that the market value of the hedging portfolio after tax fluctuates in line with the guaranteed benefits when interest rates change.

The principal objective of the investment portfolio is to generate a return that will allow ATP both to build up reserves for unforeseen events such as increased life expectancies, and to raise the guaranteed benefits, thereby preserving the long-term purchasing power of the pensions.

Result for ATP in its capacity of pension provider
The result for ATP in its capacity of pension provider relates to the management of ATP Lifelong Pension and is embedded in the three areas: Pension, Hedging and Investment.

Pension activity results include changes in the value of the guaranteed benefits due to received contributions and pension benefits paid as well as expenses related to the administration of the pension scheme.

Hedging activity results comprise the return on the hedging portfolio after tax as well as changes in the value of the guaranteed benefits due to maturity reduction and change in interest rates.

Investment activity results include the return on the investment portfolio after tax and investment expenses.

In 2019, ATP generated a total profit of DKK 30.8 bn before life expectancy update. The Supervisory Board decided not to allocate a bonus to the members in 2019 in order to keep an adequate level of investment flexibility to preserve the long-term purchasing power of the pensions, and in light of the fact that the value of guaranteed benefits has increased.

In 2019, ATP adjusted its long-term life expectancy forecast primarily as a consequence of a minor fall in life expectancy. This implied a reduction in the value of the guaranteed benefits of DKK 3.2 bn and a corresponding increase in the bonus potential.

In 2019, ATP generated a profit of DKK 34.0 bn after life expectancy update. The profit was embedded in ATP's bonus potential, which amounted to DKK 126.0 bn by the end of 2019.

There were several changes in the system of governance of ATP in 2019. These are described in chapter C.1.

Table B.1 Pension activity results

DKKm	2019	2018
Contributions	10,061	9,871
Pension benefits	(17,054)	(16,878)
Change in guaranteed benefits due to contributions and pension benefits etc.	8,099	8,505
Administration expenses	(201)	(197)
Other items	7	9
Pension activity results before bonus and life expectancy update	**912**	**1.310**
Life expectancy update	3,231	(20,025)
Bonus allowance for the year	-	-
Pension activity result before bonus and life expactancy update	**4,143**	**(18,715)**
Guaranteed benefits	759,628	693,373
Bonus potential	125,980	92,086
Bonus rate	**16.6**	**13.3**

B.2. PENSION ACTIVITY RESULTS

Pension activity results before life expectancy update were DKK 0.9 bn, as indicated in Table B.1.

Total pension benefits amounted to DKK 17.1 bn in 2019. At end 2019, 1,057,000 pensioners received ATP Lifelong Pension, and approximately 40 per cent of the Danish old-age pensioners have no other pension income other than ATP and the old age pension.

Total contributions amounted to DKK 10.1 bn in 2019, which is almost unchanged compared to 2018. Contributions are divided into a guarantee contribution and a bonus contribution. The guarantee contribution, amounting to 80 per cent, is used for the purchase of pension. The bonus contribution amounts to 20 per cent. The bonus contribution is transferred to the bonus potential which enables an increase in the life-long guarantees as well as coverage of longer life extectancies.

In 2019, administrative expenses for ATP were DKK 201 mn, which is at the same level as the previous year. Administrative costs amounted to 0.02 per cent compared to ATP's total asset value and this is low in international comparison.

In connection with the interim report for H1, ATP performed the annual update of its life expectancy. The update led to a reduction of the value of the guaranteed benefits of DKK 3.2 bn. Since 2010, ATP has added provisions to longer life expectancies for a total value of DKK 54 bn as life expectancies for a 65-year-old has increased by more than three years since 2009.

At year-end 2019, the value of the guaranteed benefits was DKK 759.6 bn, and the bonus potential was DKK 126.0 bn, giving a bonus rate of 16.6 per cent. This is an increase of 3.3 percentage points relative to year-end 2018, when the bonus rate was 13.3 per cent.

B.3. HEDGING AND INVESTMENT ACTIVITY RESULTS

The total hedging and investment activity results were DKK 29.9 bn in 2019, against DKK -6,8 bn in 2018, as indicated in Table B.2.

Hedging activity results

ATP Lifelong Pension is a product based on guarantees and the objective of the hedging portfolio is to safeguard ATP's ability, at all times, to deliver on the guarantees issued. The hedging strategy is to ensure that the market value of the hedging portfolio after tax fluctuates in line with the guaranteed benefits when interest rates change.

The total hedging activity results were DKK -4.1 bn in 2019 as stated in Table B.2. The value of the guaranteed benefits increased markedly in 2019 due to falling interest rates in Europe. The hedging portfolio is designed to protect the benefits against such interest rate fluctuations, and also in 2019 the hedging worked in line with the purpose.

Results of hedging of guaranteed benefits before the effect of yield curve break were DKK 1.1 bn. Guarantees

Table B.2 Hedging and Investment activity results

DKKm	2019	2018
Hedging activity results	(4,142)	(3,079)
Investment activity results	34,045	(3,718)
Hedging and investment activity results	**29,903**	**(6,797)**

Table B.3 Hedging activity results

DKKm	2019	2018
Change in guaranteed benefits due to change in discount rate[1]	(68,282)	(19,958)
Change in guaranteed benefits due to maturity reduction	(4,055)	(7,908)
Change in guaranteed benefits[1]	**(72,337)**	**(7,866)**
Return in hedging portfolio	86,710	32,932
Tax on pension savings returns	(13,267)	(5,039)
Return in hedging portfolio after tax	**73,443**	**27,893**
Results of hedging of guaranteed benefits[1]	**1,106**	**27**
Change in guaranteed benefits due to yield curve break[2]	(5,248)	(3,106)
Hedging activity results	**(4,142)**	**(3,079)**

[1] Before effect of yield curve break.
[2] "Yield curve break" is the point on the yield curve at 40 years where the guaranteed benefits shift from being discounted by a fixed rate to being discounted by a market rate.

up to 40 years are hedged on the basis of the market yield curve, which is used for valuation of the guaranteed benefits. Thereby hedging can be done efficiently. Valuation of guarantees beyond 40 years is based on a fixed rate of 3 per cent, cf. fact box B.1.

Guaranteed benefits, which change during the year from being more than 40 years to being less than 40 years, also change from valuation based on a fixed rate of 3 per cent to a valutation based on a market rate. When market rates are below 3 per cent this implies a loss of bonus potential, while market rates above 3 per cent implies an increase in the bonus potential. ATP calls this effect "the yield curve break".

In 2019, market rates were below 3 per cent generating a loss of DKK 5.2 bn due to the yield curve break. This implied that Hedging in total generated a loss of DKK 4.1 bn. The loss implies a reduction of the bonus potential, and an increase in the value of the guaranteed benefits. This has no impact on ATP's total asset value.

Investment activity results

In 2019, investment activity generated a profit of DKK 40.7 bn before expenses and tax. The result of investment activity is stated in Table B.4, and the composition of the

Table B.4 Investment activity results

DKKm	2019	2018
Investment return	40,705	(3,714)
Expenses	(937)	(953)
Tax on pension savings returns and income tax	(5,723)	949
Investment activity results	**34,045**	**(3,718)**

investment return is stated in Chart B.3.

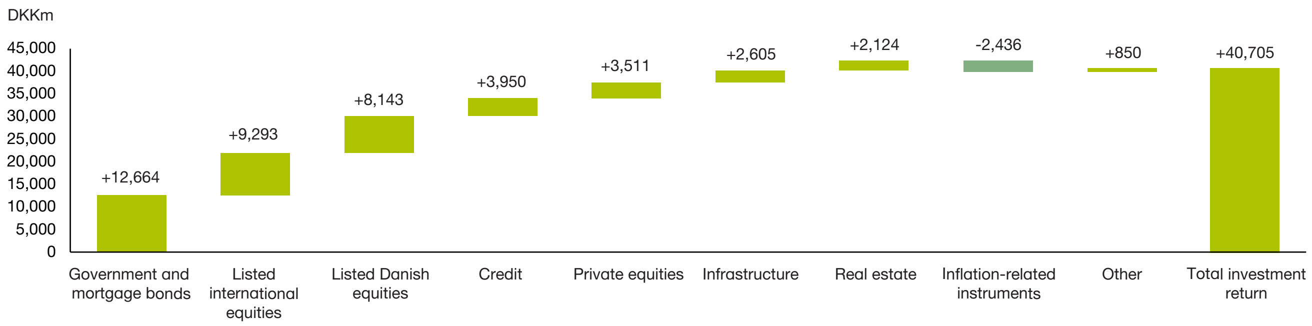
In a well-diversified portfolio with a high degree of risk diversification, some investment types will outperfom others. In 2019, particularly investments in government bonds and mortgage bonds as well as listed equities contributed positively to the result. On the other hand inflation-related instruments including insurance against rising inflation contributed negatively.

The ability to generate high returns relative to the amount of risk is measured by risk-adjusted returns, which is calcu-

Fact box B.1 ATP's yield curve for valuation of the guaranteed benefits

ATP's yield curve for valuation of guaranteed benefits comprises a market-based segment and a fixed-rate segment. A characteristic of the market-based segment is that it is hedgeable. The fixed-rate segment for valuation of liabilities 40 years or more into the future reflects a conservative projection of the long-term return. Guarantees between 0 and 40 years are measured on the basis of a market yield curve consisting of yields on Danish and German government bonds and interest rate swaps denominated in Danish kroner and euros. For the valuation of guarantees after 30 years, the level is kept at the level of 30-year market rates. The interest rate beyond 40 years has been fixed at 3 per cent. Consequently, there is a discontinuity in the yield curve around the 40-year mark, where the curve changes from a market rate to a fixed interest rate of 3 per cent.

Chart B.3 Composition of investment return in 2019



lated as return relative to risk. In 2019, the risk adjusted return was 1.2 and over the last 5 years it was 0.7.

Market risks, which are necessary in order to generate a return, are managed in the investment portfolio based on a risk budget and limits to ensure diversification. The investment portfolio pursues a risk-based investing approach, the focus of which is on risk rather than on the amount invested. Consequently, with the same risk, it is possible to purchase a larger portfolio of bonds than of equities, which are traditionally more risky.

The investment portfolio generally consists of funds from the bonus potential. Funds not tied up in the hedging portfolio as a result of the use of derivatives (swaps) are, moreover, available for investment in the investment portfolio on market terms. In practice, this means that the investment portfolio can operate with a balance sheet higher than the bonus potential, but within the same risk budget. The market value of the investment portfolio was DKK 354.9 bn at end-2019.

ATP has no direct investments in securitisations, but holds minor indirect positions through ATP's fund investments.

B.4. RESULTS OF OTHER ACTIVITIES

ATP is not engaged in other activities in its capacity of pension provider.

B.5. ANY OTHER INFORMATION

There are no other relevant information with respect to ATP's activities.

C. System of Governance

C.1. GENERAL INFORMATION ON THE SYSTEM OF GOVERNANCE

Board of Representatives and Supervisory Board
The Danish ATP Act lays down objectives and frameworks for ATP's governance. ATP is managed by a Board of Representatives, a Supervisory Board and a Chief Executive Officer (CEO). The organisation of ATP's senior management is illustrated in Chart C.1.

The composition of ATP's Board of Representatives and Supervisory Board reflects the so called Danish model under which the employees and employers have a say in the labour political process. The Board of Representatives comprises 15 employer representatives, 15 employee representatives and a Chairman. The Chairman must not be affiliated with any employee or employer organisations. The Supervisory Board is composed of members of the Board of Representatives and comprises six employer representatives, six employee representatives and the Chairman of the Board of Representatives.

The members of the Board of Representatives and the Supervisory Board are appointed by the Minister for Employment upon the recommendation of the labour market organisations. They are appointed for three-year terms, the aim being to achieve a balanced composition of men and women on the boards. Members may be reappointed, and no age limit applies. Further information about the members of the Board of Representatives and the Supervisory Board is found in ATP's annual report and on ATP's website www.atp.dk.

The Board of Representatives ordinarily convenes once a year. The Board of Representatives' work includes approval of the ATP-contribution, ATP's annual report and pay policy as well as determination of the remuneration for the members of the Board of Representatives and the Supervisory Board. The Board of Representatives also elects ATP's Chairman and auditor.

The Supervisory Board ordinarily convenes seven times a year and has the overall responsibility for ATP. The Supervisory Board decides the overall objectives and strategies for ATP and lays down the accompanying principles through written policies and guidelines. The Supervisory Board performs a number of tasks of special relevance to ATP in its capacity of pension provider. In this connection, the Supervisory Board determines ATP's desired risk profile, including the framework for ATP's investments, and identifies, quantifies and assesses material risks faced by ATP. The Supervisory Board also approves the basis for calculation and valuation of ATP's pensions.

The work of the Board of Representatives and the Supervisory Board is further specified in rules of procedure. ATP's Supervisory Board has set up four Supervisory Board committees in the form of an Executive Committee, a

Chart C.1 Board of Representatives and Supervisory Board

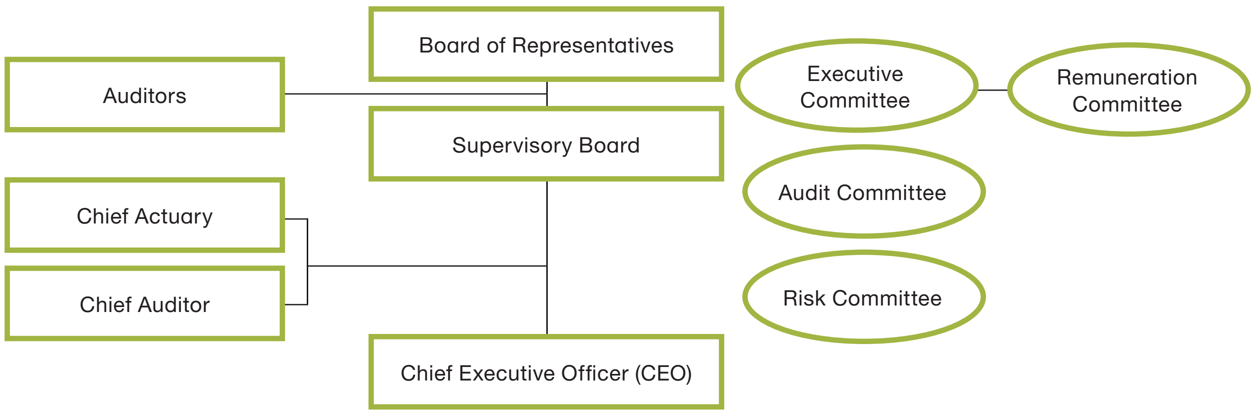
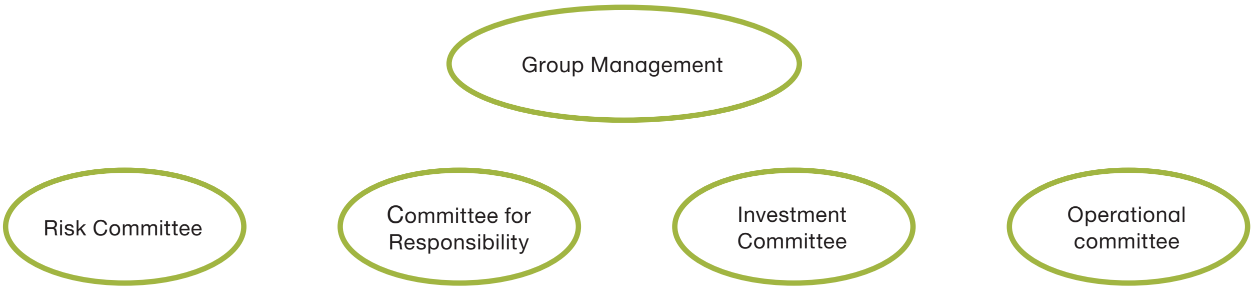


Chart C.2 ATP's management and related committees



Remuneration Committee, an Audit Committee and a Risk Committee, which replaced the former ORSA Commitee as of 7 February 2019. The Executive Committee has three members: the Chairman of the Supervisory Board, who is also the Chairman of the Executive Committee and two members of the Supervisory Board, appointed by the employer and employee representatives, respectively, on the Supervisory Board. The Executive Committee normally meets seven times per year.

The Executive Committee prepares the Supervisory Board's decisions and has the power, in selected areas, to make decisions as authorised by the Supervisory Board. These decisions are subsequently approved by the Supervisory Board.

The Executive Committee is also responsible for performing the duties of ATP's Remuneration Committee. The duties are integrated in the agendas of the Executive Committee on an ongoing basis and comply with the processes applicable for the Executive Committee. The primary duties of the Remuneration Committee are to prepare Supervisory Board decisions on remuneration, including pay policy and guidelines for incentive programmes.

In 2019, one more member with audit experience was included in the Audit commitee. The Audit Committee thereby comprises four members in the form of the Chairman of the Supervisory Board, who, as independent Supervisory Board member, also serves as the Chairman of the Audit Committee, the other two members of the Executive Committee and a member of the Supervisory Board with audit experience. The Audit Committee normally meets four times a year. The Audit Committee ensures that ATP's financial reporting process, internal control system, internal audit and risk management systems are effective. The statutory auditing of annual reports and the auditor's independence are also checked, in particular with respect to the provision of other services to ATP.

The Risk Committee consists of the Chairman of the Supervisory Board and three Supervisory Board members with operational experience and expertise in relevant specialist fields. The committee ensures the best possible basis for the Supervisory Board's risk and solvency assessment of ATP. As part of this the committee prepares the risk policy and investment guidelines, information security policy and reports about ATP's risk management, ORSA, information security managament and operational risks before Supervisory Board meetings. The Risk Committee convenes a minimum of four times a year.

The Supervisory Board has appointed the CEO to handle the day-to-day management of ATP. The Supervisory Board has also appointed a Chief Actuary, who is responsible for technical tasks pertaining to insurance. The Supervisory Board has laid down the Chief Actuary's tasks in a function description. The Supervisory Board has also decided that ATP must have an internal audit function, which will perform audit tasks in ATP in collaboration with the external auditors. The Chief Auditor reports to the Supervisory Board.

Chart C.3 Group Management

Chief Executive Officer*

Bo Foged

Responsible for the day-to-day management of ATP in accordance with the instructions issued by the Supervisory Board and the other statutory tasks incumbent on the CEO.

Vice Chief Executive Officer and Chief Financial Officer**

Martin Præstegaard

Responsible for Corporate functions including legal, IT, HR, accounting and finance for ATP.

Interim Chief Investment Officer***

Bo Foged

Responsible for the investment management and for monitoring that investments are made in accordance with the strategy and guidelines laid down by the Supervisory Board, hereunder corporate social responsiblity.

Executive Vice President for pension, risk management and compliance, Chief Risk Officer (CRO)

Kim Kehlet Johansen

Responsible for risk management of investment, pension-related and operational risks, including information security. Also responsible for the pension product, ATP Livslang Pension and Arbejdsmarkedets Erhvervssygdomskontrol (AESK).

Executive Vice President for Pension and Social security

Anne Kristine Axelsson

Responsible for membership administration connected with ATP Livslang Pension, including payments and collection of contributions as well as administration of AES and several other schemes on behalf of external parties.

Executive Vice President for Udbetaling Danmark

Carsten Bodal

Responsible for ATP's administration of Udbetaling Danmark.

Executive Vice President for Communication and External relations

Annemette Moesgaard

Responsible for ATP's internal and external communication, including press relations. Also responsible for ATP's branding.

* As of 18 juni 2019
** As of 1 September 2019
*** As of August 2019

Chief Executive Officer (CEO) and other senior executives
The CEO handles the day-to-day management in accordance with instructions laid down by the Supervisory Board. The CEO has organised the management of ATP and associated bodies as stated in Chart C.2. The CEO is assisted in the day-to-day management by the other members of the Group Management body. The Group Management is the decision-making body in relation to all major strategic decisions concerning the day-to-day management. Chart C.3 shows the members of the Group Management and describes their respective areas of responsibility. Areas of responsibilities are delegated by the CEO to the other members of the Group Management in accordance with special instructions.

In addition to the Group Management, the CEO has set up management bodies in ATP as stated in Chart C.2. The CEO participates in the management bodies, which shall ensure efficient and transparent decision-making processes.

Chart C.4 Officers responsible for the statutory key functions

Risk management function Key person responsible: *Kim Kehlet Johansen, Chief Risk Officer* Responsibility: Monitoring and ensuring that ATP's risk profile is in accordance with the Supervisory Board's desired risk profile and that the risk management system functions adequately	**Compliance function** Key person responsible: *Morten Stein Salmark, Head of Operational Risk and Compliance* Responsibility: Monitoring and assessing whether ATP has efficient methods for identifying and reducing the risk of non-compliance with applicable legislation, market standards and internal sets of rules
Internal Audit function Key person responsible: *Christoffer Max Jensen, Internal Chief Auditor** Responsibility: Conducting audits in accordance with the established audit plan and assessing the internal control system	**Actuarial function** Key person responsible: *Camilla Fredsgaard Larsen, Chief Actuary* Responsibility: Calculation of pension provisions and ensuring that the underlying assumptions and methods are appropriate.

* As of 1 March 2019.

The Risk Committee is the decision-making body for fundamental risk management issues. The committee is also responsible for ensuring the managerial handling of major and thematic risk management and valuation issues. In addition, the committee is responsible for monitoring ATP's most material risks.

The Committee for Responsibility is the decision-making body for and coordinator of ATP's social responsibility in connection with investments including active ownership, climate and coordination of votings in connection with foreign equitites.

The Investment Committee is the decision-making body ensuring managerial handling of major strategic investment topics and is responsible for briefing on ATP's investment conditions.

The Operational Committee is the body for major strategic operational conditions. The committee is also responsible for ensuring the managerial handling of major and thematic operational issues.

Furthermore, supplementary forums have been set up in a number of more specific areas, the decision-making powers of which concern more tangible aspects of ATP's current operations.

Key persons in ATP

Key persons in ATP comprise the persons responsible for the statutory key functions, i.e. the risk management function, the compliance function, the internal audit function and the actuarial function, as well as the members of the Group Management. By the end of 2019, ATP had a total of nine key persons, as the CRO is both a member of the Group Management and has been appointed as the officer responsible for the statutory risk management function. Furthermore, the CEO was also interim CIO. Chart C.4 shows the persons responsible for the four key functions and the associated areas of responsibility. The officers responsible for the four statutory key functions are appointed by the CEO. The Chief Actuary and the Internal Chief Auditor is, however, appointed by the Supervisory Board. Solely the Supervisory Board can dismiss an officer responsible for a statutory key function. The four key functions are described in further detail in sections C.3 to C.6.

Changes to the system of governance in 2019
In 2019, there were several changes to the system of governance. As of 18 June Bo Foged was appointed as Chief Executive Officer. From 26 November 2018 untill 18 June 2019 Bo Foged was interim Chief Executive Officer after Christian Hyldahl. In the same period Emil Fannikke Kjær was interim Chief Financial Officer for Bo Foged.

As of 1 September Martin Præstegaard was appinted as Vice Chief Executive Officer and Chief Financial Officer replacing Bo Foged as Chief Financial Officer.

In August, Chief Investment Officer Kasper Ahrndt Lorenzen resigned and Bo Foged was appointed as interim Chief Investment Officer. As at 1 March 2020, Mikkel Svenstrup will accede as Chief Investment Officer.

ATP's Group Management as of end-2019 is presented in Chart C.3.

ATP's Remuneration Policy
In accordance with the Executive Order on Remuneration for ATP and other organisations, ATP is subject to a number of rules on its remuneration policy, remuneration and disclosure requirements, including frameworks for the awarding and payment of variable remuneration, in the same way as the rest of the financial services industry.

The Remuneration Policy is determined with due consideration for the promotion of sound and efficient risk management and with the object of securing a long-term commonality of interest between ATP's members, management and other employees.

Remuneration and fees are fixed on the basis of the market level, taking into account the complexity of ATP's activities, relevant business experience and organisational responsibilities, among other factors. Furthermore, remuneration and fees are defined on the basis of ATP's specific needs, including the need to ensure ATP's ongoing ability to attract and retain the best qualified Supervisory Board members, managers and employees.

ATP uses remuneration pay as an active tool that supports commercial development by focusing on target and performance-related management and promotes behaviour that creates value as well as sustainable and extraordinary results.

Members of the Board of Representatives, the Supervisory Board and, if relevant, the Supervisory Board committees, are paid a fixed annual fee, which reflects the number of board and committee meetings. They are not covered by any variable remuneration agreements, incentive schemes, pension agreements or severance pay agreements.

The CEO, the other members of the Group Management, the Chief Actuary and the Chief Auditor are paid a fixed remuneration and also receive certain employee benefits. A pension contribution of up to 20 per cent is paid as part of the fixed remuneration, which thus does not include variable remuneration elements, incentive schemes or early retirement schemes.

The other employees, including portfolio managers, are covered by a remuneration package which – in addition to containing the above remuneration elements – may also include variable remuneration elements. Incentive schemes for portfolio managers are based on the following three components:

- ATP's investment and hedging activity results
- The performance in the individual portfolio manager's department in the form of, for example, returns, investment processes etc. or combinations thereof
- The individual portfolio manager's own performance in the form of, for example, his or her contribution to returns, investment processes, teamwork etc. or combinations thereof.

ATP's CEO and Chief Investment Officer determine which portfolio managers are covered by the minimum investment results, which ATP must achieve before bonus starts to be earned as well as the weighting of the three components.

The variable remuneration components cannot exceed 100 per cent of the basic remuneration, including pension contributions per year, and they are paid out over three years. In certain cases, variable remuneration elements can be withheld, or a demand can be made that they be repaid.

In 2019, a total of 21 portfolio managers received variable remuneration elements earned in the calendar year in the form of the above incentive schemes.

C.2. FIT & PROPER

The fit & proper requirements in the Danish ATP Act apply to members of the Supervisory Board, the CEO and key persons. The persons in question must be subjected to a fit & proper assessment by the Danish Financial Supervisory Authority on commencement of their employment and in connection with any subsequent change in their duties.

A person who is covered by the fit & proper requirements must at any given time:

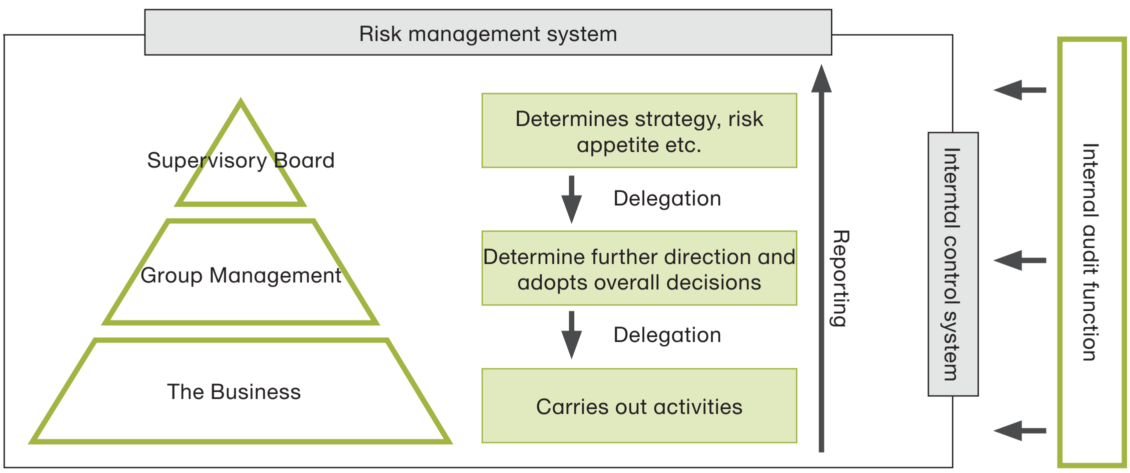
- have sufficient experience to be able to perform the duties entailed by his or her position
- have a sufficiently good reputation, be honest and show integrity.

ATP's fit & proper policy covers the fit & proper requirements, identification of persons who are covered by the fit & proper requirements, the knowledge and experience requirements for the whole Supervisory Board, the procedure for obtaining the Financial Supervisory Authority's fit & proper assessment and, finally, the fitness-assessment for other employees.

Members of the Supervisory Board, the CEO and key persons must provide information about their fit & proper circumstances in connection with their appointment to the Supervisory Board or employment with ATP, as well as if there is a subsequent change in these circumstances.

When submitting the information to the Danish Financial Supervisory Authority, ATP submits a declaration with a reasoned statement confirming that the persons are fit & proper to hold the positions in question. It is assessed whether the key person has sufficient experience, skills, knowledge and expertise. Emphasis is on the person having the relevant education and training in relation to the nature, scope and complexity of the risks associated with ATP, and in relation to the statutory requirements for the education and training of the person in question. In addition, emphasis is on the person having experience from previous relevant employment and to some degree management experience and training.

Chart C.5 Risk management system



The Supervisory Board assesses on an ongoing basis whether its members collectively possess the necessary knowledge and experience of ATP's risks to ensure sound operations of ATP's activities. Based on the Supervisory Board's annual self-assessment, an evaluation is made of the need for relevant competence development for the Supervisory Board. The Supervisory Board is broadly composed in terms of the education and training of its members, who have completed either short, medium or long-cycle study programmes, for several of them supplemented with continuing education and training in both Denmark and abroad. The composition means that the members bring diverse and nuanced skills and qualifications to their work on the Supervisory Board. Many of the Supervisory Board's members have experience from large organisations and board work in general. The Supervisory Board members also have skills and management experience from national and international financial business as well as pension, insurance and banking.

C.3. RISK MANAGEMENT SYSTEM INCLUDING OWN RISK AND SOLVENCY ASSESSMENT

The risk management system comprises all strategies, processes and reporting procedures necessary to identify, measure, monitor, manage and report the risks to which ATP is exposed. The overall framework for the management of ATP also includes the internal control system, which comprises the general control environment and control activities, among other elements. There is a close connection between the risk management system and the control system, as controls provide attention to the risks that are to be managed. Controls can thus be regarded as risk reducing measures. The connection is illustrated in Chart C.5.

The Supervisory Board has the overall responsibility for the risk management in ATP and lays down the overall principles for this in a policy. The policy establishes the desired risk profile through guidelines and risk tolerance limits on which ATP's risk management must be based. The policy also identifies material risks, and principles are defined for how the risks must be stated.

The desired risk profile for ATP established by the Supervisory Board states that ATP prioritises high certainty in the pensions and that the funds are invested with the purpose of achieving good, stable returns, so that the purchasing power of the pensions can be preserved. To support this, the Supervisory Board has laid down a framework for the overall risk aimed at protecting ATP's bonus potential and ATP's financial robustness.

ATP's overall risk is associated with the three risk categories: investment, pension-related and operational risks. They are all regarded as material, and the Supervisory Board has laid down detailed instructions for them as part of the clarification of the desired risk profile:

- **Investment risks**
  Investment risks consist primarily of market risks and associated counterparty, concentration and liquidity risks. Market risk exposures with the purpose of generating a return, are managed in the investment portfolio based on a given risk budget and risk diversification limits. Market risks associated with the guaranteed benefits are managed in the hedging portfolio to ensure that the interest rate risk associated with the guaranteed benefits is hedged. The other investment risks follow as a consequence of the market risk exposures ATP has chosen. For this reason, consequential risks are accepted, but ATP seeks to limit them as much as possible. Consequential risks are described in further detail in fact box C.1.

  ATP works to integrate responsibility and ESG information into its investments. Further information about ATP's work to ensure social responsibility in the investments made is found in ATP's reports on responsibility, which are available on ATP's website www.atp.dk.

- **Pension-related risks**
  Pension-related risks follow directly from the structure of ATP's pension product, including the lifelong guarantees given. ATP has material risk exposure against life expectancies, as the determination of the value of the guaranteed benefits is closely linked to the members' life expectancies. Increased life expectancies mean

Fact box C.1 Consequential investment risks

Counterparty risks
Risks associated with potential breaches of agreements by financial counterparties – including counterparties for derivatives, which are especially used for interest rate hedging.

Concentration risks
Risks arising from a disproportionate dependence on a specific form of exposure, such as specific asset categories, investment markets or individual investments.

Liquidity risks
Risks associated with incomplete honouring of claims for payment or provision of security.

that ATP must make larger provisions to cover the guaranteed benefits, as pension payouts must be made for longer periods. ATP has chosen not to hedge its life expectancy risk and must therefore itself cover any losses in the event of increased life expectancies.

- **Operational risks**
  Operational risks are associated primarily with the risk of financial losses, reputational damages and compliance-related impacts resulting from inexpedient or insufficient internal procedures, human errors and system errors or from ATP's co-operation with external business partners and suppliers. The risks can also be due to external events, such as effects associated with the entry into force of new regulation, or lack of compliance with current legislation, market standards or internal rules or cyber security breaches and security breaches. Assesments of risks related to the processing of personal data also includes the consequence from the perspective of the registered person. ATP recognises that operational risks cannot be completely avoided, but wishes to minimise the risks with due consideration for a weighing of consequence and probability against the risk minimisation of costs. The Supervisory Board has decided that compliance risk must be avoided as far as possible.

The CRO is responsible for the risk management function, which monitors and ensures that the risk management system is sound and adequate and in compliance with the Supervisory Board's risk guidelines. In addition, the CRO submits proposals for ATP's risk policy as part of the Supervisory Board's determination of ATP's desired risk profile. The Supervisory Board has at its disposal a number of reports which form the basis for the monitoring of the risk profile, among other supervisory activities. The Supervisory Board receives a monthly report on significant matters related to ATP's risks and financial condition. In the report, information is also provided about the utilisation of the limits laid down by the Supervisory Board. The Supervisory Board also receives an annual report on pension-related risks, including the life expectancies of ATP's members. In addition, the Supervisory Board receives an annual report on operational risks and an annual report on information security.

The CEO receives a report on ATP's risks at Risk Committee meetings which are held approximately seven times per year. Furthermore, the CEO receives a bimonthly briefing on responsibility and active ownership in connection with investments from the Committee for Responsibility.

Managers and employees in ATP's pension and investment business also have access to general and detailed infor-

Chart C.6 ORSA wheel

mation about ATP's risks and financial condition, which is updated and verified daily. The information is revised and adjusted on an ongoing basis to ensure that it covers all relevant conditions over time.

ATP's risk and solvency assesment

ATP's Supervisory Board performs an annual own risk and solvency assessment (ORSA).

ATP has no equity capital and is not subject to a solvency capital requirement. ATP's risk and solvency assessment is therefore based on a calculation of the overall risk using a proprietary risk model, supplemented with other risk assessments and analyses. The purpose of these risk calculations is to provide a varied and detailed overview of the specific risks to which ATP is exposed. ATP's financial robustness is assessed by comparing the calculated risks with the bonus potential constituted by ATP's free reserves.

The ORSA wheel is centered around the 'Organisation' component, which describes how ATP has organised and structured its risk management system. The 'Organisation' is laid down in function descriptions.

The 'Strategy' component contains the Supervisory Board's established strategy and the overall objectives for ATP. The next three components, 'Risk identification', 'Risk appetite' and 'Risk measurement', concern identification of the most significant risks, establishment of the desired overall risk profile and risk calculation principles. These parts are determined through the Supervisory Board's risk policy.

The 'Risk assessment' component concerns the assessment of ATP's short-term and long-term condition and is performed based on the preceding components. The risk assessment constitutes a significant part of the Supervisory Board's own risk and solvency assessment and is performed based on a number of risk assessments and analyses. They map how different stresses affect ATP's financial robustness, in both the short term and the long term, as well as the risks associated with the calculation of the value of the guaranteed benefits and the importance thereof to ATP's financial robustness. Under 'Risk assessment', the Supervisory Board also reviews whether the way in which ATP has organised its activities supports an efficient risk management system.

The Risk Committee set up by the Supervisory Board has special tasks in relation to the ORSA wheel. The Risk Committee supports the Supervisory Board's ORSA wheel and thus supports performing an overall own risk and solvency assessment for ATP. In this connection, the Risk Committee focuses on key issues in relation to the ORSA wheel which – due to complexity, scope etc. – may benefit from being subjected to further, more detailed processing. In this connection, the committee prepares the risk policy and investment limits, policy for information security and reporting on ATP's risk management, own risk and solvency situation (ORSA), information security and operational risks, respectively, before Supervisory Board approvement.

The ORSA report contains the overall conclusion on the ORSA work, i.e. the assessment of ATP's risk and solvency as well as an assessment of the way in which ATP has organised its activities.

The risk management function is responsible for providing the complete overview of ATP's risk and solvency, including the actual preparation of the ORSA report. The ORSA report is prepared in a dialogue with the ORSA Committee, where one of the special focus areas is the design of the risk analyses on which the own risk and solvency assessment is based. The ORSA report is discussed and subsequently approved by the Supervisory Board.

C.4. INTERNAL CONTROL SYSTEM

The Supervisory Board has established a policy for internal control in ATP aimed at ensuring that sufficient systematic internal control is performed.

The CEO ensures a satisfactory performance of tasks and internal control system. This takes place through appropriate organisation with clearly defined areas of responsibility, tasks, powers, authority and reporting lines as well as the resources required.

The CEO and the management of the individual units asseses the internal control methods within their area of responsibility based on the information they receive through continuous reporting. On this basis, the management initiates the necessary corrective measures. The internal control is an integral part of management at all levels in ATP.

The internal control system is based on the fundamental principle that controls are performed by a person other than the person who performs the primary task (the four eyes principle). In cases in which it is not prudent for the control to be performed within the same unit, the control is performed in a unit other than the unit performing the task.

Areas with potential conflicts of interest with the controlling officer's other tasks are identified, minimised and monitored. Functions are separated in such a way that faults and deviations that occur in one place in the organisation are ascertained and corrected elsewhere.

Business procedures describe the performance of and follow-up on the internal control and ensure compliance with internal and external requirements for the necessary documentation.

Where relevant, internal controls are established as IT-supported, automatic controls, which especially applies in customer-oriented processes and other high-risk areas.

Compliance function

The overall responsibility of the compliance function is to monitor and assess whether ATP has efficient methods for identifying and reducing the risk of non-compliance with applicable legislation, market standards and internal rules (compliance risk). The compliance function also presents proposals for ATP's compliance policy for use by the Supervisory Board in its preparation of the policy.

The person responsible for the compliance function reports to the CRO, but may contact the Supervisory Board directly and may express concerns as and when appropriate. The person responsible for the compliance function has monthly meetings with the CEO. The compliance function prepares an annual compliance plan and a follow-up report, which the key person responsible presents to the Audit Committee and the Supervisory Board.

C.5. INTERNAL AUDIT FUNCTION

ATP has established an Internal Audit function in accordance with applicable legislation. The Internal Audit function is headed by a Chief Auditor referring to the Supervisory Board. The Supervisory Board is solely responsible for hiring and dismissal of the Chief Auditor and for the terms of employment as well as the Internal Audit budget. Moreover, Internal Audit is solely subject to the instructions of the Supervisory Board, and the Chief Auditor and Internal Audit staff must not participate in other work than auditing in the ATP Group. Restrictions cannot be imposed on the Internal Audit function in relation to the work that is regarded as necessary to enable the Internal Audit function to meet its auditing responsibilities. The Internal Audit function has access to the Supervisory Board's protocols and other records which are regarded as relevant and is entitled to demand all the information that Internal Audit function finds necessary to conduct its audit. This ensures that the internal audit works independtly of the business and the Group Management.

The Chief Auditor has been made responsible for the Internal Audit function, and the internal audit work is performed within the framework of the internal audit policy as well as the Executive Order on Auditing 'Revisionsbekendtgørelsen' and the Executive Order on Management and Control of ATP 'Ledelsesbekendtgørelsen for ATP'. The distribution of responsibilities between the Internal Audit function and the external auditors is laid down in an audit plan. The Internal Audit function conducts audits of all material and risky areas.

In accordance with the Executive Order on Auditing 'Revisionsbekendtgørelsen', the Supervisory Board has decided that the Chief Auditor provides the financial statements with an auditor's report. As part of the auditing methodology, a quality assurance system, containing principles for conduct, relations and performance of audit tasks, has been prepared and implemented to ensure independence and objectivity.

The Internal Audit function must not be responsible for or conduct internal controls. The Chief Auditor and the Internal Audit staff must not participate in tasks which may place the Chief Auditor in a situation in which he or she provides opinions or information on matters or documents for which the Chief Auditor or Internal Audit staff have prepared the basis.

C.6. ACTUARIAL FUNCTION

The Supervisory Board has appointed the Chief Actuary responsible for the Actuarial function in ATP. The Chief Actuary is employed by and reports to the Supervisory Board.

The Actuarial function is responsible for the calculation of pension provisions and for ensuring that the underlying assumptions and methods are appropriate. This comprises ATP's proprietary life expectancy model. The Actuarial function also works closely with the risk management function on the management of pension-related risks. The Actuarial function explains all significant consequences of changes in data, methods or assumptions for the calculation of pension provisions.

The Actuarial function also performs tasks that belong under the Chief Actuary. The Chief Actuary is entitled to demand all information that the Chief Actuary finds necessary to conduct its work, including the Supervisory Board's protocols. The actuarial function is entitled to access all the information that the function finds necessary to conduct its tasks.

The Actuarial function reports at least once a year to ATP's Supervisory Board on whether the calculation of pension provisions is reliable and adequate. The Actuarial function belongs to the CRO organisationally, but the person responsible for the actuarial function is obliged to contact the Supervisory Board directly to express concerns in cases in which he or she finds this necessary.

C.7. OUTSOURCING

The Supervisory Board has laid down guidelines for outsourcing in ATP. The Supervisory Board approves the outsourcing of significant activities and the most important principles for such outsourcing.

Prior to any outsourcing decision, an assessment is made of whether the supplier is able to perform the outsourced tasks satisfactorily and in accordance with ATP's requirements. For outsourcing of significant activities to an external supplier, the assessment will be made as part of a tender procedure in accordance with the applicable EU rules. The assessment includes verification that the supplier has the ability and capacity necessary to handle the task satisfactorily, including the permits required under applicable legislation for the task in question.

In connection with outsourcing, requirements are made for reporting from the supplier to ensure efficient monitoring and control of the supplier's compliance with the applicable legislation and the outsourcing agreement. The CEO is responsible for ensuring that ATP has the necessary resources and enough insight to monitor and check that the supplier and the contract performance meet the requirements and to hand over the outsourcing to another supplier or insource the tasks.

Agreements with a supplier are made in writing and lay down the rights and obligations of ATP and the supplier. The Supervisory Board's guidelines lay down a number of specific requirements for the contents of an outsourcing agreement, and special requirements apply in connection with the outsourcing of discretionary portfolio management and outsourcing of the IT area.

The status of outsourcing of significant activities is reported to the Supervisory Board each quarter, and the guidelines are reviewed once a year concurrently with reporting on the performance of the outsourced tasks.

ATP has outsourced the following material activity areas to external suppliers:

- Delivery of IT capacity in the form of servers and other technical infrastructure components (outsourced to KMD A/S)
- The administration of ATP's portfolio of physical real estate, ownership of interests/loans in associated companies and subsidiaries as well as ownership of interests/loans in real estate fund units (outsourced to the subsidiary ATP Ejendomme A/S)

ANY OTHER INFORMATION

ATP is of the opinion that the system of governance reflects the nature, scale and complexity of the risks associated with ATP's activities.

The system of governance is structured in accordance with the Danish ATP Act and the Danish Financial Supervisory Authority's Executive Order on Management and Control of ATP as well as the Executive Order on Remuneration Policy and Remuneration Disclosure Requirements for ATP etc. Furthermore, ATP complies with the recommendations from the Committee on Corporate Governance with the relevant adjustments for ATP's special circumstances.

ATP's Board of Representatives, Supervisory Board, CEO and appointed key persons have specified areas of responsibility, tasks and powers. These are documented in procedures, terms of reference, policies, CEO instructions and function descriptions, which are reviewed at least once a year.

D. Risk Profile

D. RISK PROFILE

ATP has no equity capital and is not subject to a solvency capital requirement. ATP's overall risk profile is therefore based on a calculation of the aggregate risk using a proprietary risk model, supplemented with other risk assessments and analyses. The purpose of these risk calculations is to provide a varied and detailed overview of the specific risks to which ATP is exposed. ATP's financial robustness is assessed by comparing the calculated risks with the bonus potential constituted by ATP's free reserves. ATP can cover its risks according to a large number of risk assessments and analyses. The overall assessment is that ATP's risk and financial condition is adequate.

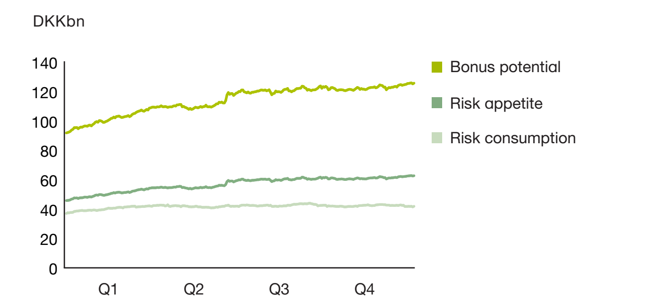
ATP's risk profile is described in the following; first based on ATP's overall risks and then based on each of the underlying risk categories.

ATP's overall risks

ATP determines its risk consumption, i.e. ATP's quantitative target for overall risk, on a daily basis. Risk consumption is determined using ATP's proprietary risk model, which includes risks across the risk categories: market risks, pension-related risks, counterparty risks and operational risks.

From 2019 the risk consumption measure was changed in order to simplify ATP's risk management. The risk measure and the time horizon was changed to Expected Shortfall (ES) with a confidence level of 99 per cent and a three-month time horizon. The risk consumption expresses the average of the 1 per cent biggest loss of ATP on a three-month horizon.

Chart D.1 ATP´s overall risk in 2019



In order to protect ATP's bonus potential and economic independency, the Supervisory Board has determined a risk budget, which is an upper limit for the risk consumption. Due to the new estimate and the new time horizon, the risk budget was changed in 2019 to half the bonus potential. Thereby the protection level was kept at the same level as before.

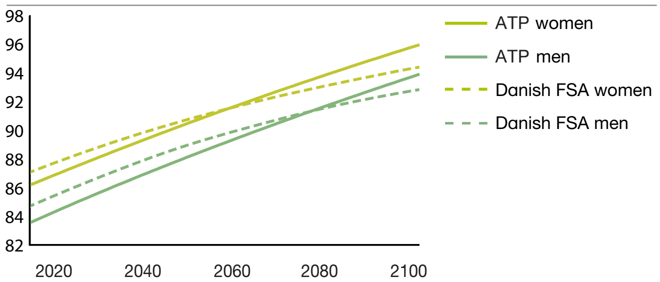
The development in bonus potential, risk budget and risk consumption is shown in Chart D.1. The risk consumption amounted to DKK 42.2 bn at end-2019, and thereby it was lower than the Risk budget, which amounted to DKK 63.0 bn.

The following subsections describe ATP's risk profile in relation to the underlying risk categories.

D.1. PENSION-RELATED RISK

ATP pays out a monthly lifelong pension to its members. Accordingly, increasing life expectancies (longevity risk) is the greatest pension-related risk facing ATP.

Chart D.2 Life expectancies



Unexpected increased life expectancies entail a loss in the bonus potential resulting from ATP having to make larger provisions to cover the guaranteed benefits, as pension benefits must be made for longer periods. ATP has chosen not to hedge its life expectancy risk and must therefore itself cover any losses in the event of increased life expectancies.

ATP asseses life expectancies closely based on a proprietary life expectancy model.

Since 2010 ATP has provided DKK 54 bn to increased life expectancies. These provisions have reduced ATP's bonus potential, but in contrary to for instance investment loss it has not reduced the total asset value of the members. The additional provisions due to longer life expectancies express longer life expectancies for ATP's members. Consequently, the provisions are beneficial for the members.

The assesment of life expectancy in other Danish pension funds are based on life expectancy assumptions made by the Danish FSA. Chart D.2 shows the life expectancies of 65-year-old men and women based on ATP's and the Danish FSA's assumptions, respectively.

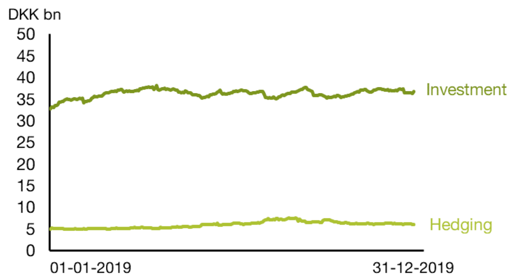
The FSA's life expectancy assumptions are based on data from Danish life insurance and pension funds with 2.9 million members and population figures for the total population. ATP's life expectancy model is based on data from ATP's 5 million members and data concerning 330 million inhabitants in 18 OECD countries. The FSA data concerns people covered by insurance, while ATP's data also include people without insurance. Hence, the data sets are not directly comparable.

Pension-related risk is the risk category, which contributes the second-highest risk in the calculation of ATP's overall risks. In ATP's life expectancy model, pension-related risks have been stated at DKK 14.2 bn at end-2019.

D.2. MARKET RISK

Market risk exposures with the purpose of generating a return are managed in the investment portfolio based on a given risk budget and risk diversification limits. Market risks associated with the guaranteed benefits are managed in the hedging portfolio to ensure that the interest rate risk associated with the guaranteed benefits is hedged to the greatest possible extent. ATP follows a well-defined strategy and works on the basis of a risk framework with detailed risk limits and close risk monitoring.

Chart D.3 Market risks



Market risks are the risk category, which contributes the highest risk in the calculation of ATP's overall risks (risk consumption[1]). In ATP's proprietary model, market risks have been calculated at DKK 39.5 bn net of tax by the end of 2019.

Market risks related to the hedging portfolio and the guaranteed benefits

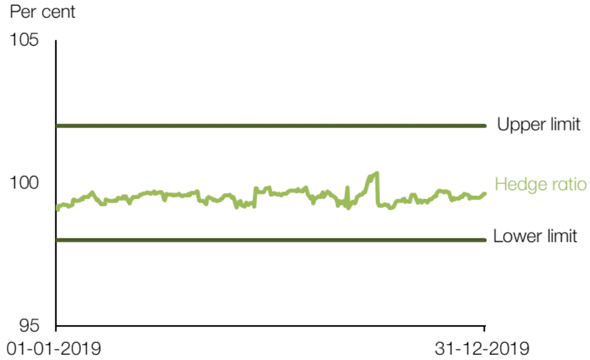
Market risks in the hedging portfolio and the guaranteed benefits consist mainly of interest rate risks. The hedging portfolio generally has the same interest rate sensitivity as the guaranteed benefits. A general interest rate change has a large impact on ATP's total asset value, while the bonus potential will be virtually unaffected, as changes in the hedging portfolio and the value of the guaranteed benefits will largely offset each other. Market risks related to hedging activities are therefore extremely limited, which is also shown by Chart D.3, which shows market risks calculated using Expected Shortfall.

The hedging ratio[2], which indicates the ability of the hedging portfolio to hedge the interest rate sensitivity of the guaranteed benefits, was 99.6 per cent as of end-2019. The hedging ratio was close to 100 per cent throughout 2019, cf. Chart D.4.

The interest rate sensitivity of the guaranteed benefits is linked to yields of Danish and German government bonds and interest rate swaps denominated in Danish kroner and euros. This means that, in order to reflect this interest

1 The risk consumption also includes risks related to the break in ATP's yield curve.
2 The hedging ratio is calculated as the difference between the duration of the guaranteed benefits and the hedging in relation to the duration of the guaranteed benefits.

Chart D.4 Hedging ratio



rate sensitivity, the hedging portfolio must contain significant exposure to Danish and German government bonds and interest rate swaps denominated in Danish kroner and euros.

At year-end 2019, the market value of Danish government bonds totalled DKK 257 bn, while German government bonds totalled DKK 191 bn. Therefore, ATP has considerable exposure to the Danish government and the German government. Regarding interest rate swaps, ATP trades with several different financial counterparties, and thus, ATP does not have significant exposure against individual counterparties. See chapter D.3 for more information about ATP's counterparty risks.

Market risk associated with the investment portfolio

ATP's market risks primarily consist of investment portfolio market risks. Market risks are undertaken in the investment portfolio to generate a return that will allow ATP to build up reserves to cover events such as increased life expectancies thereby ensuring life-long pensions and to increase the guaranteed benefits, thereby preserving the long-term purchasing power of the pensions.

The investment portfolio is managed with the purpose of obtaining a stable return which is as independent of economic cycles as possible. The composition of the investment portfolio is therefore based on a strategy of risk diversification on four fundamental factors: equity factor, interest rate factor, inflation factor and other factors. The risk associated with each investment can be attributed to the four different risk factors, depending on the types of risk to which the investment is exposed.

ATP's risk management framework provides indicators for the distribution of risk on the four fundamental risk factors in the investment portfolio with a view to ensure appropriate risk diversification on the four factors. The risk allocation has been determined as each risk factor's share of the sum of risk for the four factors. ATP's Supervisory Board has set a long-term reference and upper and lower limits for each risk factor's share of the overall risk of the investment portfolio. The reference and the actual risk allocation are shown in Table D.1 together with expected shortfall calculated for the four risk factors in ATP's investment portfolio.

Table D.1 Market risk on factors by the end of 2019

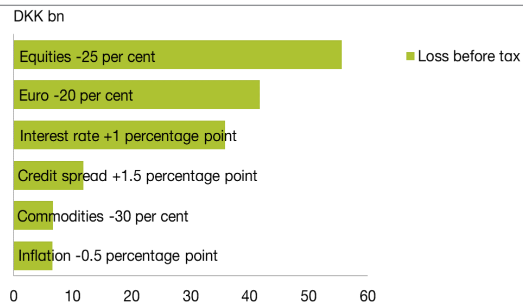
Risk factor	Expected Shortfall in DKKm	Risk allocation, year-end in per cent	Long-term reference in per cent
Equity	36,108	43	35
Interest rate	28,688	34	35
Inflation	11,625	14	15
Other	7,684	9	15

At end-2019, the allocation in equity factor was above the reference, whereas the allocation in, especially, other factors was below the reference. However, the allocation was within the upper and lower risk allocation limits established by the Supervisory Board.

Individual stresses

ATP also highlights market risks associated with the investment portfolio and the hedging portfolio by making individual stresses for a number of market risk factors. The indivi-

Chart D.5 Individual Stresses by the end of 2019



dual stresses are based on ATP's risk modelling. A selection of the individual stresses are shown in Chart D.5 that shows ATP's loss before tax as a result of the individual stresses. The chart shows, among other things, that ATP's exposure against the equity factor is high as the equity stress of 25 per cent implies a loss of DKK 56 bn before tax. The chart also shows that if the fixed-rate policy is abandoned and the rate of the euro falls by 20 per cent, ATP may incur a loss of DKK 42 bn as a result of a decrease in the value of ATP's euro-denominated assets. The exchange rate movement of 20 per cent corresponds to the decrease in the rate of Swiss franc (CHF) relative to euro (EUR). This occurred at the beginning of 2015 as a result of the Swiss Central Bank's removal of the fixed exchange rate against the euro. In light of the confidence in the Danish fixed exchange rate policy, ATP accepts a material exposure to euros. ATP's investments are generally hedged into Danish kroner and euros. Thus, the exposure to currencies other than Danish kroner and euros was close to zero at year-end 2019.

D.3. COUNTERPARTY RISK

Counterparty risks are risks associated with financial counterparties' potential breach of agreements entered into in connection with contracts on derivatives, forward exchange transactions, reverse repo transactions or repo transactions.

The use of derivatives, especially for interest rate hedging, represents a particular risk for ATP. Changes in the value of these instruments will generate a liability or a receivable between ATP and its counterparties. ATP may therefore incur a loss if – for example because of a bankruptcy or liquidation – a counterparty is in breach of a concluded agreement. In order to reduce counterparty risk, both ATP and its counterparties require that collateral is provided for mutual receivables. Collateral is typically provided so that the market value of the collateral exceeds the market value of the related contract by a certain margin.

Counterparty risks only contribute marginally to the overall risks (Risk consumption). In ATP's proprietary risk model, counterparty risks have been calculated at DKK 1.3 bn as of year-end 2019 net of tax.

Table D.2 Counterparty risks by the end of 2019

All counterparties	DKKbn
Market value of contracts	24,302
Market value of collateral	29,544
Net exposure	29

The total net exposure in Table D.2 is defined as the sum of net exposures for all counterparties with a positive net exposure. Net exposure per counterparty is measured as the difference between the market value and the value of the collateral. A positive net exposure is the same as under collateralisation and captures the loss that ATP will realize if the contracts are terminated immediately after the breaches of contract.

In practise there is a risk that the contracts cannot be terminated immediately after a breach. In such case, there will be a period in which the market value of the contracts may increase without further collateralisation from the counterparty. Therefore, the loss may be bigger than the net exposure indicates. ATP is particularly exposed to this if the counterparty breach occurs in combination with a large drop in interest rates.

D.4. LIQUIDITY RISK

Liquidity risks are risks associated with any incomplete honouring of claims for payment or provision of collateral.

ATP has developed a model for liquidity risk management to ensure that ATP is, at any given time, able to meet its contractual obligations, either to obtain liquidity or to provide collateral. This must be done by ensuring that sufficient liquidity can be obtained to meet liquidity requirements in the short term (five banking days) and the long term (one year).

Table D.3 indicates the liquidity which ATP is able to obtain as well as ATP's liquidity needs within a given time frame. Liquidity can be obtained through sales of assets, but they can also be raised in the repo market. Differences in the

Table D.3 Liquidity risks by the end of 2019

DKKbn	Short term: 5 days	Long term: 1 year
Total liquidity	551	730
Total liquidity requirements	238	567

liquidity of the assets are taken into account in the calculation. I.e. the liquidity that can be obtained relative to the market value of the assets. The liquidity need includes both the draw on liquidity following from the continuation of ATP's activities (for example, payment of pension benefits) and an extraordinary draw on liquidity resulting from unfavourable conditions (for example market stress).

The table shows that sufficient liquidity can be obtained to meet liquidity requirements in both time frames.

D.5. OPERATIONAL RISK

Operational risks are associated with trading activity, valuation, risk measurement, payments from and payouts to ATP's members as well as operation of systems and information security. In ATP's proprietary risk model, operational risks have been calculated at DKK 2.6 bn as of year-end 2019.

ATP has identified the pension and investment activities for which the occurrence of an operational incident is assessed to have the greatest consequences. In 2019, the identified operational incidents were related to errors in:

- Measurement of life expectancies, risk consumption, provisions, guaranteed benefits and market risk
- Analyses which form part of the strategic decision-making basis.
- Communication with members as well as payment of benefits and collection of contributions.
- Information security and cyber security.

ATP performs risk assessments with a fixed interval to identify the most important potential risks and to consider the need for further action to ensure that the risk is in line with the risk taking. The Supervisory board receives reporting on operational risks on an annual basis, and operational risks are also reported to the CEO on a quarterly basis.

Operational incidents are registered and categorised systematically. Observed incidents and near misses are registrered and categorised to monitor operational risks that have an impact on ATP. This is to ensure a follow-up on the processes which caused the incident or the near misses. The Supervisory Board is informed at the firstcoming Board meeting in case of significant incidents and the follow-up.

ATP finds that the management of operational risks is adequate.

D.6. OTHER MATERIAL RISK

ATP has no other material risks.

D.7. ANY OTHER INFORMATION

ATP must invest the assets in accordance with the 'prudent person principle', which means that ATP must invest the assets so that the members' interests are safeguarded in the best possible way. ATP complies with this principle by structuring its investment strategy and the accompanying risk management based on the pensions that the members have been promised. This means that the assets will be invested in a way that supports stable pensions, which are continuously regulated to secure the members' purchasing power over time.

ATP's investments are basically divided into a hedging portfolio and an investment portfolio, which reflect the design of the pension product and which are managed in accordance with principles and guidelines based on the portfolio objective. The objective of the hedging portfolio is to safeguard ATP's ability, at all times, to deliver on the guarantees issued. Hedging is planned to ensure that the market value of the hedging portfolio after tax fluctuates is in line with the guaranteed benefits when interest rates change.

The objective of the investment portfolio is to generate a return that will allow ATP both to build up reserves for events such as increased life expectancies in order for ATP to ensure life-long guarantees and to build up reserves to be able to increase the guaranteed benefits to preserve the purchasing power. In order to achieve a high risk-adjusted return, which is as independent of economic cycles as possible and to protect pensions in relation to an increase in inflation, the Supervisory Board has laid down guidelines for risk diversification and risk tolerances.

ATP's overall investments are thus structured based on the nature of the liabilities and with limits aimed at ensuring that the investment strategy is and remains expedient and robust in relation to fluctuations in the financial markets.

The 'prudent person principle' also entails that investments can only be made in assets and instruments with risks which can be identified, measured, managed, monitored and reported on. In accordance with this, the ATP Supervisory Board has defined the types of assets and instruments in which ATP may invest and require that investments may only be made when there is an adequate operational and risk management setup. This means that ATP can handle the assets and instruments, and that they are included in the ongoing calculation and monitoring of risks as well as in ongoing and interim reporting to the Supervisory Board and the management in general.