

Annual Report 2022



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100 years of ABP – With a good pension, we can go further

In 2022, ABP celebrated its one hundredth anniversary: a historic milestone and an opportunity for reflection with our stakeholders. As well as looking back at the highlights and challenges of the past century, we took the opportunity to look ahead at how we as a pension fund can contribute to financial security and social stability.


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Anita de Horde co-founded the Finance for Biodiversity Foundation. Starting in 2020 with a group of 26, the foundation now comprises 130 international financial institutions which have committed to contribute to nature and biodiversity conservation.



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In addition to his daily work as HRM manager at University Medical Center Groningen, Eric van Boven devotes at least one day a week to his role on the Accountability Body. In 2022, he was elected for a third term as a representative of the employees.

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Reader's guide

Pensions are a complex subject. In addition, we are obliged to report on certain elements in our annual report. Although we aim to explain everything to readers in the clearest possible way, it is not always possible to avoid the use of fixed terms. These terms are explained or defined in the [Glossary](#) at the end of this annual report.

ABP at a glance

Profile

More than three million participants and almost 3,500 employers in the government and education sectors, as well as a number of independently affiliated employers, have entrusted their pensions to ABP, one of the largest pension funds in the world. It is our duty to implement the pension scheme as established by our social partners on the Dutch Pension Board (Pensioenkamer). ABP determines the strategy and policies, while the administration of the pension scheme has been outsourced to APG. ABP has offices in Heerlen and Amsterdam.

A good pension for our participants, which they can enjoy in a livable world. That is ABP's mission. We believe in the power of sharing both risks and good fortune, and of harnessing economies of scale. Participants and employers pay contributions that we invest in a professional, sustainable and responsible manner to accrue and preserve pension capital.

Our goal is to be the preferred pension fund for participants and employers. We achieve our goal by putting participants and employers at the center of our services, by making every effort to provide good pensions for the future, and by ensuring that pensions remain an attractive employee benefit.

Get to know ABP

Building a good pension together in a livable world

 **3.0 million**
participants

 **3,459**
employers

Core values



We are **engaged** with each participant



We are **professional**



We work in a **sustainable** way

 **€459.5**
billion of
available assets

 **39**
employees at
year-end (37.5 FTEs)

Key figures



Active participants
1,232,782

2021: 1,203,358



Pension contributions
12,993
(€ million)

2021: 12,720



Funding ratio
110.9%

2021: 110.6%

Former participants
783,397

2021: 940,146

Pension benefits
13,712
(€ million)

2021: 12,908

Policy funding ratio
118.6%

2021: 102.8%

Pensioners
997,317

2021: 974,772

Provision for pension liabilities
414,265
(€ million)

2021: 498,797



Discount rate
2.57%

2021: 0.57%

Affiliated employers
3,459

2021: 3,468

Available assets
459,495
(€ million)

2021: 551,644



Total return
-17.6%

2021: 11.4%

Performance in 2022 and goals for 2025



Sustainable and responsible investing

% of assets invested in SDGs
Goal for 2025 **20%**

Invested in SDG 7
Affordable and clean energy
Goal for 2025 **€18.4 billion**
€15 billion



CO₂ footprint of equities portfolio compared with 2015
Goal for 2025 **-58%**
-40%



NPS
Participants **-27**
Employers **31**
2021: -23 2021: +22



Increase
Ambition on January 1
2023: 11.96% 2022: 2.39%

Actual
January 1, 2023 **11.96%** July 1, 2022 **2.39%**

Multiyear figures

	2022	2021	2020	2019	2018
Total assets (A) (in € mln)	459,495	551,644	495,335	465,619	398,971
Retirement and surviving dependants' pensions	412,207	496,768	527,935	473,558	409,486
Incapacity pension	1,986	1,912	1,832	2,664	1,414
Policyholders' risk	73	117	98	108	108
Provision for pension liabilities (B) (in € mln)	414,265	498,797	529,865	476,330	411,008
General reserve (C= A-B) (in € mln)	45,230	52,847	-34,530	-10,711	-12,037
Funding ratio (A/B) (in %)	110.9	110.6	93.5	97.8	97.1
Discount rate as at year-end (in %) ¹	2.57	0.57	0.19	0.74	1.39
Policy funding ratio (in %)	118.6	102.8	87.6	95.8	103.8
Minimum capital requirement (+ 100)	104.2	104.2	104.2	104.2	104.2
Capital requirement (+ 100)	128.8	126.3	125.8	126.7	128.2
Real funding ratio (in %)	90.7	83.6	72.1	77.5	84.9
Future-proof indexation funding ratio (in %)²	130.8	123.0	121.4	123.6	122.2
Pension contributions (net) (in € mln)³	12,993	12,720	11,741	11,041	10,267
Pensions (in € mln)	13,712	12,908	12,382	11,597	11,110
Numbers (year-end)	-				
Participants	1,232,782	1,203,358	1,178,215	1,150,592	1,128,671
Former participants	783,397	940,146	930,241	954,702	952,476
Pensioners	997,317	974,772	943,318	910,741	886,529
Total	3,013,496	3,118,276	3,051,774	3,016,035	2,967,676
Affiliated employers/sub-employers	3,459	3,468	3,557	3,593	3,643
Employed by ABP (average)	39	42	43	43	42
Employed by consolidated entities	3,300	3,124	3,013	2,939	3,152

¹ Based on the interest rate term structure published by De Nederlandsche Bank (DNB, Dutch Central Bank)

² This is based on the amended indexation ambition as of January 2016 and/or the price development.

³ 2022: excluding VPL buy-in

	2022	2021	2020	2019	2018
Other information					
Contribution rate for retirement and surviving dependants' pensions in %	24.4	24.4	22.4	22.9	21.9
Contribution rate and recovery supplements	1.5	1.5	2.5	2.0	1.0
Contribution rate for incapacity pension, average (in %)	0.6	0.7	0.8	0.5	0.5
Price indexation (in %) ¹	11.96	2.39	0.71	2.84	2.08
Indexation declared for coming year (in %) ²	14.35	0	0	0	0
Cumulative indexation arrears (in %) ³	19.95	22.82	19.95	19.11	15.82
Asset management expenses in % (excl transaction costs)	0.51	0.98	0.66	0.57	0.6
Transaction costs	0.12	0.10	0.12	0.09	0.10
Pension administration costs per participant (in €)	89	72	67	68	72
Service score (CEM max = 100)	⁴		80	87	86
Z score	1.4	-0.1	1.2	-1	0.7
Performance score (norm: > 0)	2.4	2.0	2.2	2.4	3.5
Return total (= direct + indirect, in %)	-17.6	11.4	6.6	16.8	-2.3
Total return, 3-year average (in %)	-0.7	11.5	6.8	7.1	4.8
Total return, 5-year average (in %)	2.2	7.9	7.5	6.7	6.2
Total return, 10-year average (in %)	5.1	8.5	7.7	8.4	8.7
Total return, 15-year average (in %)	5.1	6.7	6.6	7	6.6

1 Statistics Netherlands' Consumer Price Index (CPI) (reference period of September 1, 2020 to September 1, 2022).

2 Indexation of 2,39% as of July 1, 2022. 11,96% as of January 1, 2023.

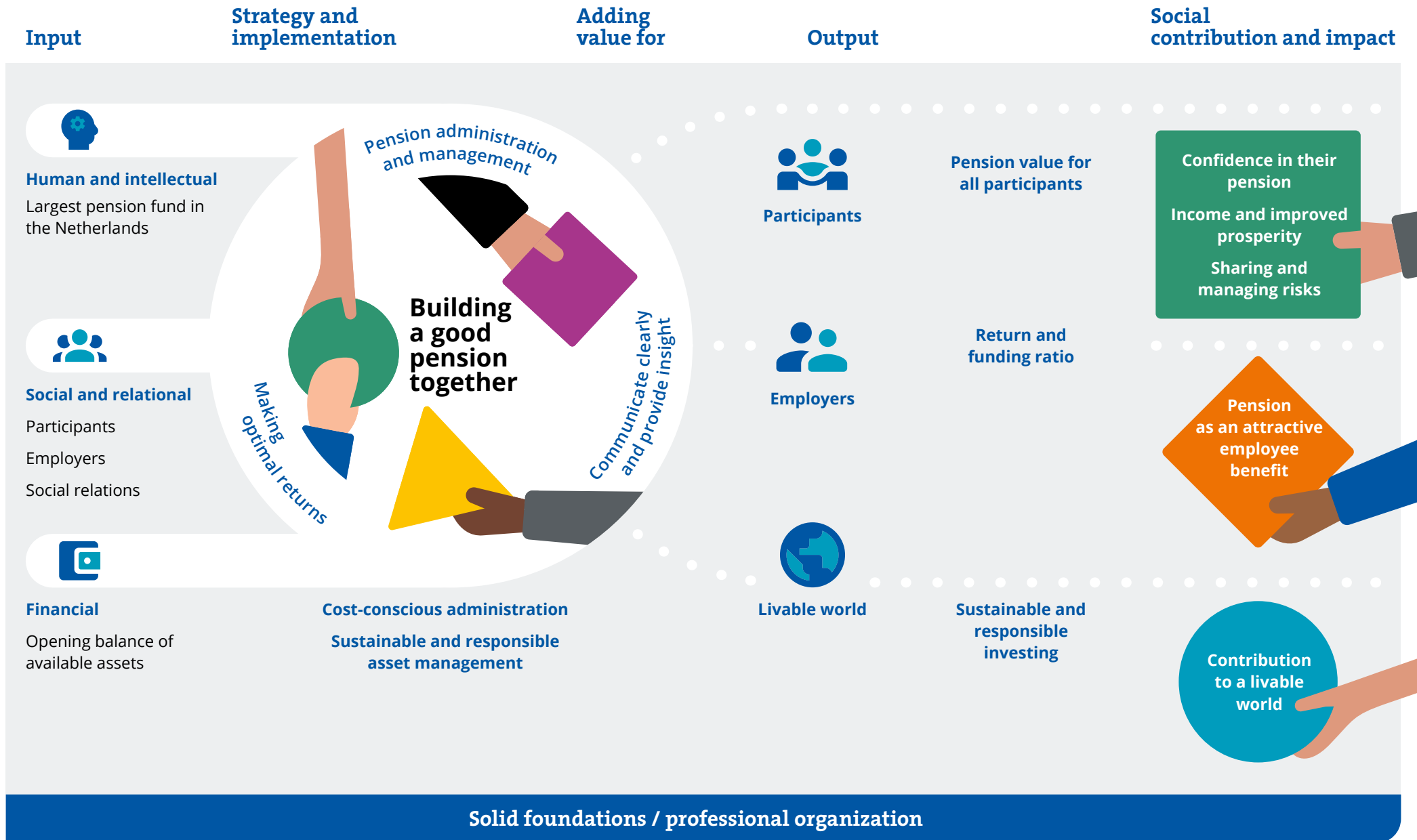
3 Calculated from the introduction of the average salary scheme (2003)

4 The 2022 service score will not be available until after the annual report is published.

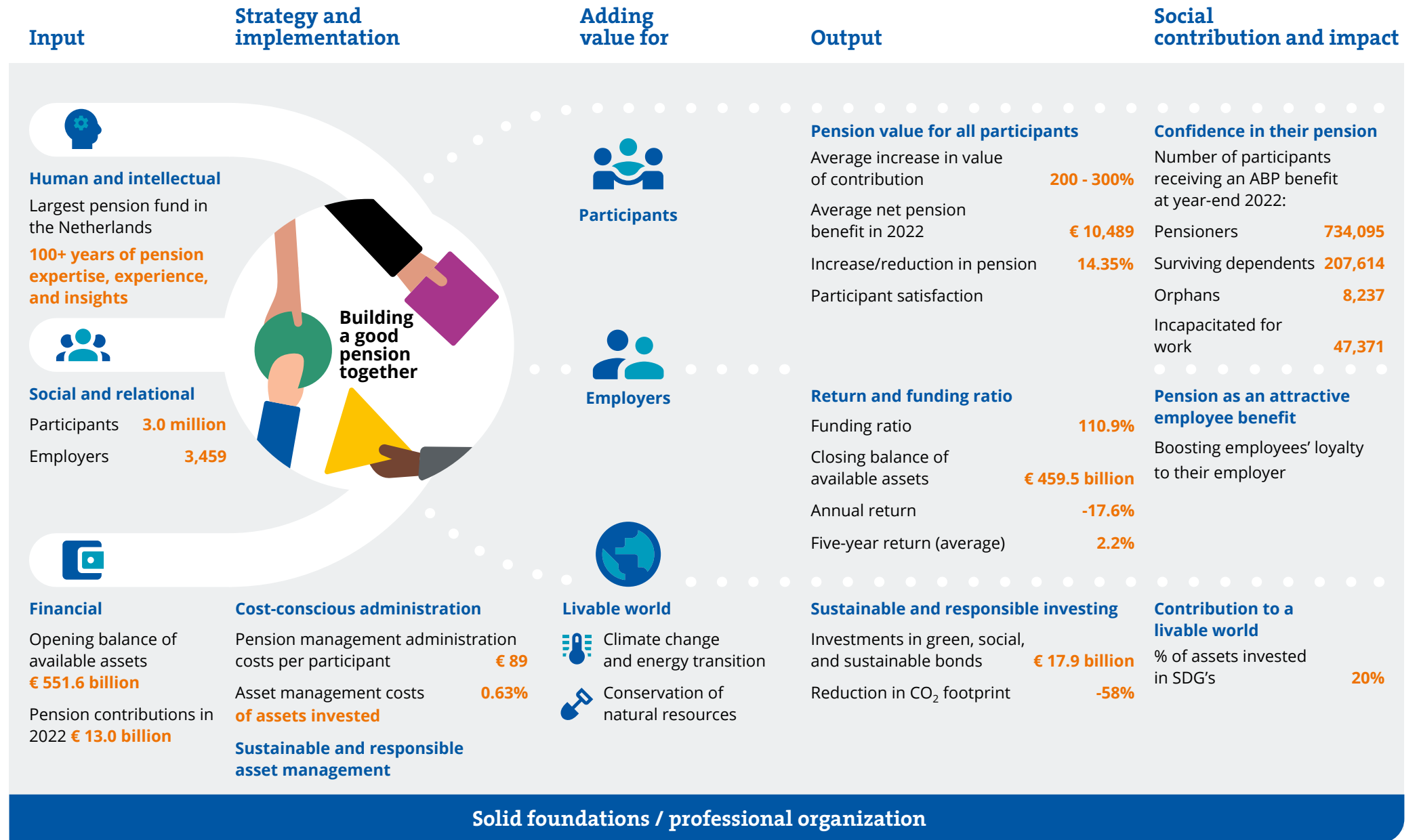
How ABP adds value

ABP is responsible for the pensions of over three million participants. We aim to give our participants peace of mind and control over their pensions. We also aim to ensure they can enjoy their pensions in a livable world. That's why we invest sustainably. As the largest pension fund in the Netherlands, we also have a social function. Through our pensions, we can therefore add value in a variety of ways.

How ABP adds value – Overview



How ABP adds value



100 years of ABP in 2022

A good pension will take us further

> Watch the video

1922

ABP was founded in 1922 as the pension fund for the public sector and education. We reflected on this milestone together with APG in a number of ways in 2022, by looking back, but most importantly by looking forward. Because the last century has shown us that a good pension will take us further. In an entirely different and changing world, we continue to stand for the same values as 100 years ago, with a sharp focus on the challenges of today, tomorrow and the future.

The year 2022 was an anniversary year for the largest pension fund in the Netherlands. We celebrated our 100-year anniversary first and foremost with our stakeholders, participants and employers. It made for a wonderful overview of the history, growth and future of ABP. We also asked three stakeholders how they, based on their involvement and expertise, view the question of how pensions can bring us all – participants, employers, society and the world we live in – further forward. These interviews are interspersed throughout the Board report.

100 years of history

The passing of the Pensions Act in 1922 laid the foundations for the collective pensions in the Netherlands, and thus for one of the most sound pension systems in the world.

> View our history

ABP | **100** Dutch pension fund





100 stories

What does a pension really mean to people? ABP and APG employees went looking for stories.

› View **all stories**



Encounters: a road trip across the Netherlands with ten different generations

A road trip right across the Netherlands, which saw ten Dutch citizens, each born in a different decade, engage in a dialogue with each other. About the Netherlands of the past, today and the future. About their dreams, worries and ambitions. A journey rich in encounters.

› Watch **the documentary**



100 years of ABP

We look back, pause to reflect on today and continue to work together towards a good pension for everyone.

› Watch **100 years of ABP at a glance**



'Women and income' exhibition

We looked back at the 100-year struggle for equal rights and equal treatment for women and men and looked forward to what lies ahead for this struggle. Sophie van Gool opened this exhibition in Heerlen. Subsequently, the exhibition travelled across the Netherlands.

The meeting

We are on the verge of updating our pension system. We also face huge challenges in areas such as sustainability, quality of life and work. APG and ABP both invited 100 people to take part in a discussion.

› View **all meetings**



Board report

Foreword

Last year, we were able to increase the pensions of our more than three million participants. That's excellent news, particularly in these times of high inflation. If you look at ABP's funding ratio at the beginning and end of 2022, it doesn't seem as if much has changed. But that seemingly stable figure masks a tumultuous year.

A welcome increase for our participants

The year in which ABP turned 100 was a year of unprecedented turbulence, with global turmoil and uncertainty due to the war in Ukraine, plummeting stock markets, rising energy prices, climbing interest rates and inflation at a record high. Despite all that, we were able to increase pensions twice. How this increase will affect our participants became clear to me in early 2023 when I attended the National Education Expo. A retired couple sought me out to thank me for raising their pensions. It was inspiring to see our participants' happiness with my own eyes. Encounters like these are why we do what we do!

The increase in our participants' pensions was only possible because ABP's financial position allowed it. We were also able to take advantage of more flexible rules, because we had declared our intention to switch to the revamped pension system. Our social partners had expressed the same intention. This allowed us to achieve our ambition to provide our participants with an indexed pension. Naturally, we completed thorough calculations and made a careful and balanced consideration of all the interests involved.

Moving to a new system with confidence

There is, however, a complex story behind the increases. Pensions are sometimes not increased even when the economy is doing well. In addition, the old pension rules did not work well for people who frequently change employers. This is among the many reasons why it was necessary to change the system. We were therefore happy to see significant steps being taken in 2022 towards the introduction of the Future of Pensions Act (Wet toekomst pensioenen, Wtp). We think it's important that the good aspects of the current system be retained. In the new system, we will continue to share in each other's bad luck and good fortune, and participants will get a pension for the rest of their lives. They must be able to count on that. We sincerely hope the new Act

will come into force on 1 July. It will ensure that pensions are clearer and more personal, and that pension accrual is better aligned with the more dynamic careers of many participants.

A good pension in a livable world

Given the developments in the world, merely providing a pension with good purchasing power is no longer sufficient. As ABP marks its one hundredth anniversary, there are many complex issues that must be solved: climate change and the loss of biodiversity and natural spaces represent increasing risks for us all. Participants and employers are asking us to fulfill a broader range of responsibilities. Accordingly, in 2022 we expanded our ambition: ABP will provide a good pension in a livable world. With investable assets of over 459 billion euros, we can and we want to make a difference. That is why we consider returns, risk, costs, and sustainability performance with every investment decision we make. Based on scientific research and our own experience, we are convinced we can increase the sustainability of our investment portfolio without compromising returns. As a first step, in late 2022 we adopted a new and ambitious climate policy for our investments. We will take further steps in 2023. The bar has been significantly raised.

We are not initiating this change on our own. In 2022, we spoke with participants, employers, and other stakeholders, such as experts from the government, the business community, academia, and social organizations. We wanted to hear their experiences and views, and share the direction in which we want ABP to head. Together we can go further, and we will need each other if we're going to successfully tackle the major challenges facing society.

ABP has also worked hard on its own organization, including introducing a new governance model. Our experiences over the past twelve months have shown us that our new governance structure enables us to operate more decisively.

A word of thanks

The level of engagement from participants, employers and other stakeholders which the Board was privileged to witness in 2022 was heartening. I would therefore like to take this opportunity to personally thank everyone who made a contribution.

In a year of major changes both internally and all around us, our ABP colleagues likewise did a tremendous job. They enabled the Board to make decisions in a deliberate, well-informed manner. To this end, they worked closely with APG, our pension administrator, whose staff members also did a great deal of hard work. I extend many thanks and compliments to them, also on behalf of my two colleagues on the Executive Board.

I would like to express a special word of thanks to Corien Wortmann, whose term of office ended in late 2022. In the eight years in which Corien was Chair of the General Board, we came to know her as knowledgeable, experienced and affable professional who served the interests of participants and employers with enthusiasm. We would like to extend our warmest thanks for her boundless dedication. We will miss her. However, in Loek Sibbing we have found an experienced and expert successor.

Collectivism and solidarity remain important values

We embark on 2023 with confidence. It will undoubtedly be another tumultuous year. It will also be the year of the introduction of our tightened strategy, which includes a focus on pensions as an attractive employee benefit

in a livable world. We will actively work to achieve a sustainable and stable pension system based on collectivism, while preserving solidarity.

Pensions are directly linked to the uncertainties of life. They are a mechanism based on sharing successes and collectively dealing with setbacks and bad luck. In a world of increasing individualization and polarization, every day workers in the government and education sectors look for the things that connect us, so we can collectively advance as a society. As a pension fund for the government and education sectors, we are proud to share those values.

Harmen van Wijnen

Chair of the Executive Board of ABP

Blog by Harmen van Wijnen

Harmen van Wijnen regularly writes a personal blog on current issues: abp.nl/over-abp/actueel.

Our environment in 2022

During the reporting year, the world around us was characterized by turmoil and increasingly urgent challenges. ABP was impacted by these developments. At the same time, as a major financial institution with a social function, we are fully aware that we also have an impact on the world around us. In this section, we outline the key developments, how ABP dealt with them, and how we have tried to create a positive impact.





The economy and financial markets: historically high inflation, falling stock markets

When 2022 began, inflation was already on the rise. It was exacerbated by the Russian invasion of Ukraine, which caused a sharp rise in oil, gas and food prices and steepened the increase in inflation. Central banks were forced to intervene and put up interest rates. This led to a sea change in the financial markets, which had benefited from monetary stimulus policies for many years. Financing costs went up and the economic outlook worsened, resulting in a steep drop in the value of existing bonds. Company stocks also dropped in value. Simultaneous losses on equities and bonds, uncommon in recent years, made 2022 a bad investment year. The third consequence of the interest rate hikes was the dominant one for pension funds: the value of pension liabilities decreased markedly, which improved the funding ratio, in spite of the negative returns.

The asset management costs of large institutional investors have been a social issue for years: are they proportionate and acceptable? This question has been the subject of attention from the ABP Board for some time. In 2022, we commissioned an investigation into asset management costs. Cost awareness is also one of the key focus points in our new [Investment Beliefs](#).

Against this background, halfway through 2022 ABP was able to increase pensions for the first time since 2008, by 2.39% – the same percentage as the price indexation for 2021. After careful consideration of all interests in combination with the financial position of ABP, at the end of 2022 it was decided to increase pensions for 2023 by 11.96%, which is equal to the price indexation for 2022. A more detailed explanation can be found in the [‘Adding value for participants and employers’ section](#).

New pension system provides opportunities for participants

The transition to the new pension system is one of the biggest changes in the history of Dutch pensions. ABP has the duty to carry out this major task in a controlled and balanced way by the set deadline. We are confident that we can do so, but clarity with regard to the legislation is urgently needed. ABP has set up a large-scale program for the introduction of the new pension contract (NPC), in close collaboration with APG, which has its own program. By proceeding carefully and communicating effectively, we will try to address concerns and avoid possible misunderstandings. Our calculations show that, in general, the system has the potential to work out well for our participants. Because ABP is not required to hold large buffers, pensions can be increased more quickly when the economy is doing well; at the same time, there is an opportunity to cut pensions during economic slowdowns. The NPC allows risks to be evenly distributed across all participants, and limited where necessary.



Future of Pensions Act submitted to the Dutch Senate

The bill for the Future of Pensions Act was submitted to the Dutch House of Representatives in March 2022. Together with four other large pension funds, ABP wrote a letter to the House of Representatives in which we explained why we thought it was important that the new system be introduced. Under the proposed new legislation, funds would not be required to hold such large buffers, creating more opportunities to raise pensions when the economy is doing well. That is more logical and thus easier to understand for participants. Moreover, the new system is a better fit for our changing labor market. The bill was passed by the House of Representatives on December 22, 2022. The Senate is expected to pass the bill by the summer of 2023.

ABP has been preparing for the introduction of the new pension contract (NPC) for some time. Our social partners on the Pension Board will determine the content of the scheme, based on the new legislation. In 2022, ABP supported the Pension Board by sharing its subject-matter knowledge and guiding the Board through the process. The Pension Board has formed working groups to clarify the decisions it will need to make during the transition to the NPC. The working groups are also giving attention to how the complexity of the existing pension scheme can be reduced during the transition. The Pension Board will have to make a decision about this too.

It is important that we ensure that participants and employers feel properly included in the implementation of these upcoming changes. For ABP, the most

important task now is to ensure all administrative records and all our processes are in order, to ensure that we will be ready to switch over smoothly to the NPC by the set deadline and that participants can continue to have confidence in their pensions.

To address this challenge and other challenges in areas such as sustainability, ABP introduced a new one-tier governance model on January 1, 2022. Under this new model, ABP has a General Board consisting of an Executive Board and a Non-Executive Board. The sector is following this change with interest. We are happy to provide information to stakeholders about our experiences with the new governance model, and to share the lessons we have learned (see also the 'Governance' section).



Sustainability: a greater focus on nature and biodiversity

We invest with impact, and changes in the world also have an impact on us. The climate, nature, and biodiversity continued to be important themes in the world around us in 2022. During the UN climate summit in Egypt, delegates discussed the fact that the world is not on course to limit global warming to two degrees: if we continue on our current course, the temperature rise will reach 2.8 Celsius by the end of this century. One-third of the world's population is ill prepared for the natural disasters that will ensue. ABP is committed to the Paris Climate Agreement, which is based on maximum global warming of 1.5 degrees Celsius.

We want our participants to be able to enjoy a good pension in a livable world. That's why we believe it is important to invest sustainably. By investing in companies and projects that contribute to important transitions in our world, we reduce the climate risks in our investment portfolio and take advantage of opportunities that arise in innovative companies and emerging sectors. With our investments, we can and we want to contribute to a sustainable, fair economy, in which possible environmental impacts are reflected in costs.

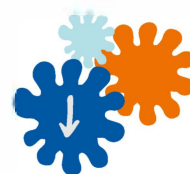
We recognize the urgency and necessity to accelerate. ABP is already in the process of tightening its sustainable and responsible investment policy. In 2022, we made adjustments to our Investment Beliefs and published a new climate-related voting policy and a new climate policy. As part of this process, ABP conducted dialogue sessions with advocacy organizations. We incorporated their input and knowledge into our preparations for tightening our sustainable and responsible investment policy, along with scientific insights and input from stakeholders. More detail can be found in the [‘Contributing to a livable world’ section](#).



Labor market shortages noticeable in all sectors

In 2022, labor market shortages were felt in all sectors across the Netherlands. On the one hand, this increased the importance of pensions as an attractive employee benefit. Pensions can also be used as a tool for long-term employability and thus staff retention.

On the other hand, the shortages also had an effect on ABP as a knowledge-intensive organization. We continue to raise our profile as an attractive employer in our search for staff who feel a connection with our mission. In 2022, we restructured our organization and invested in further development. This should help us to attract and retain good people. APG, our pension administrator, has also been dealing with this challenge. We regularly discuss this at Board level, as ABP has a direct interest in the continuity and professionalism of APG being safeguarded.



Decreasing impact of Covid

On the whole, Covid had less of an impact than in previous years. We have learned to live with coronavirus, also given the levels of immunity acquired through vaccinations and previous waves. In the new life expectancy estimate from the Royal Dutch Actuarial Association – which ABP uses for its contribution calculations – there are no apparent long-term effects from the Covid pandemic. More information on this topic can be found in our explanation of [development of contributions](#).

100 years of ABP – With a good pension, we can go further



‘Personal pension assets provide more scope’

Roger Planje

Pensions Program Director for the Ministry of Social Affairs and Employment

With a team of thirty professionals within the Ministry of Social Affairs and Employment, Roger Planje is focusing on preparations for and the introduction of the Future Pensions Act (WTP).

‘The original intention of employers when they created pensions was to alleviate the suffering of widows and orphans and prevent poverty in old age. These days, pensions have a different function: how do participants want to spend the third stage of their lives? Today’s civil servants, and I see this in my own team as well, no longer spend forty years working for the government. And conversely, people are increasingly joining the civil service from the private sector. The new pension system is a better fit for this changing labor market. Because instead of entitlements, as a participant you accrue personal assets that are easily transferable. It’s also more transparent. In the current system, pension funds sometimes made promises they were unable to keep: they saw their assets increase, but were not allowed to raise pension payments accordingly. With the new pension system, that will be a thing of the past.

A personal pension pot fits in well with the trend towards individualization. Fortunately, there will still be solidarity in the new system, and participants will still all share in the risks. I can also see it having a positive social effect: since you can be more flexible with your personal pension pot, there’s greater scope for things like voluntary work and informal care. Pension funds will need to carefully guide their participants through the transition to the new system. For example, how will calculations be done at the moment of transition, and what individual decisions must be made? We’re going to include standards for decision-making guidance in the legislation.’

Working together to build a good pension in a livable world

In 2022, the strategic plan was extended by one year. We did this deliberately, so that the strategy for 2023 to 2025 can be shaped within the new governance structure. In this section, we outline our progress towards the goals set for 2022 and explain what we have done to tighten our strategy.



Building a good pension together

Our strategic roadmap



Good services

- 1** Our **pension management** (administration and communication) is focused on the experience of participants and employers.
- 2** Our **asset management** delivers an optimal return in a sustainable and responsible manner.



Attractive employee benefit

- 3** Our **pension scheme** is simple, controllable, and explainable.
- 4** Our **financial structure** has an equilibrium between contribution, certainty, and ambition.



Good pension for the future

- 5** We are committed to a good **pension system** in the Netherlands.
- 6** We are the **pension experts**, including in pension innovation.



Solid foundations

- 7** We have a **professional Board** with very broad support.
- 8** We have a grip on **activities outsourced** to APG.
- 9** Our **internal operations** are in order.

Progress in 2022

We extended the annual plan for 2021 to also cover 2022: this plan, based on ABP’s strategic road map, was still appropriate for this reporting year. For 2022, we aimed to make progress on all sub-strategies in the strategic road map, with a focus on:

- continuing the program focused on improving our administrative records;
- tightening and accelerating the introduction of our Sustainable and Responsible Investment Policy;
- making preparations for the introduction of the NPC;
- employees and the Board working together in the new ABP organizational structure.

In the sections on our results in 2022 (pages 32 through 72), we provide further details of what we have achieved and where we are lagging behind. On the whole, the General Board is satisfied with the progress achieved, particularly in view of the significant changes made to ABP’s organizational structure.

Towards a new strategy

In 2022, the Board took steps towards a review of ABP’s strategy. The fact that a new governance structure had been introduced and the old strategic plan was nearing its end date provided momentum to carry out this task. We requested an external adviser to guide us through setting a vision for 2030 and strategic pillars for the period from 2023 to 2025. After the summer break, interviews were held with the Board, ABP staff, the APG Executive Board, APG staff, and other internal and external stakeholders.

KPIs for 2022

	Result	Sub-strategy ¹
rNPS participants	-27 ²	1 3
rNPS for employers	30.8	1 3
CES for participants	72%	1 3
CES for employers	97%	1 3
Reputation with stakeholders	7.5	1 4 6
Participant support for sustainable and responsible investment	6.2	2
Pension scheme	Expansion of services for participants and employers; improving administrative records	3
New pension contract	Continuation of NPC program	5
Solid foundations	Introduction of and operating under the new governance model	7 8 9

1 The numbers refer to the strategic road map shown on the previous page.
 2 For ABP, the relational NPS (rNPS) measurement stopped in early 2022. The score reported for 2022 was obtained using a different method from previous years, due to a difference in target group selection, the context of the questionnaire, timing, and a lack of weighting. In 2022, the relational NPS for participants fluctuated around -30. After the pension increase was announced in late November, the score rose to -8 in December. Accordingly, the average score was -27.

The input from these conversations and all relevant documentation that was already available (such as participant and stakeholder surveys and benchmarks) was used to fine-tune the vision and write the first draft of the new strategy. The draft has been extensively reviewed; even ABP staff have given their feedback.

Outlook

We predict that the challenges ABP faced in the reporting year will continue to apply in 2023. It will be another tumultuous year, but ABP will continue on its chosen path. Priority will be given to the following matters:

- Intensification of preparations for the introduction of the NPC, with an action plan for the transition, implementation and communication. Where relevant, we will include participants and employers in a timely manner in the implementation of the upcoming changes;
- Setting the new strategy, following scrutiny by stakeholders and extensive consultation with the accountability body, which must issue an opinion on the matter. We will then begin the implementation process, which will involve translating the strategy into policies and communications;
- Setting the new Strategic Investment Plan (StIP). In the new StIP, we will work towards a new strategic asset allocation. This will be based on trends and developments, the new revised strategy, our Sustainable and Responsible Investment Policy, the ALM analysis, and the updated Investment Beliefs;
- further tightening the Sustainable and Responsible Investment Policy, to make a greater contribution to a livable world.



Important topics for stakeholders

To contribute to confidence in pensions and the achievement of our goals, in 2022 we engaged in a dialogue with our stakeholders. Naturally, we also joined with them in celebrating ABP's one hundredth birthday in a manner befitting ABP's social function. In addition, new research was conducted to identify the topics that are important to our stakeholders.



Who are our stakeholders?

Based on our primary objective, we focus on our participants and employers: we put them at the center of everything we do. We also consider society as a whole to be one of our stakeholders, because what we do has social and public impact. We recognize specific groups of stakeholders within society.



Primary ABP target groups

- Active participants, former participants, and pensioners
- Employers



Internal stakeholders

- Accountability Body
- ABP staff



Regulators

- De Nederlandsche Bank (Dutch Central Bank)
- Autoriteit Financiële Markten (Authority Financial Markets)
- European Insurance and Occupational Pension Authority
- Netherlands Authority for Consumers & Markets



Sociale partners

- Dutch Pension Board
- Sectoral Consultative Committee for Defense
- Government sectors
- Sector employers
- Sector trade unions



Other stakeholders

Among others:

- APG
- Employees' and employers' organizations
- Special interest organizations (e.g. Federation of Dutch Pension Funds, Dutch Association of Insurers, Eumedion)
- Public authorities
- Political centers in The Hague and Brussels
- Media
- Experts and science
- NGOs (e.g. environmental organizations)

ABP seeks to engage in a dialogue

As the largest pension fund in the Netherlands, ABP is at the center of Dutch society. We believe it is important to engage in regular dialogue with our stakeholders. We do that as part of our day-to-day operations, but we also actively create other opportunities for dialogue.

These include opportunities to hear from participants and employers about what they think of our service delivery, or to request feedback and input from civil society organizations for our revised Sustainable and Responsible Investment Policy.

Stakeholders	Form of dialogue	Frequency	Contents
Primary stakeholders	Meetings with employers	Three times online, once in person	Dialogue and presentation on the financial position of the fund, the contributions and indexation policy, and the new pension contract
	Informal contacts with employers	Very frequently	
Primary stakeholders	Meetings with participants	Twice	Dialogue and presentation on current developments in the fund, the indexation ambition, financial position, and state of affairs around the new pension contract
	Panels, events, and other informal contacts	Very frequently	
Internal stakeholders	Meeting between Executive Board and staff	Twice	Dialogue on the review of the strategic plan, relevant current events, and governance
Other stakeholders	Biodiversity & Nature Dialogue Table	Once	Dialogue on the draft Biodiversity and Nature Policy
Other stakeholders	Climate Dialogue Table	Once	Dialogue on the draft Climate Policy
Other stakeholders	Consultation between ABP's Executive Board and APG's Executive Board	Four times	Administration of the pension scheme and topical issues
Social partners	Various meetings	One meeting with sector trade unions, two meetings with sector employers	New pension system and choice of contract, the financial position of the fund, and the fine-tuning of the Sustainable and Responsible Investment Policy

In 2022, we had frequent contact with participants and employers, our key stakeholders. We have contact with these groups on a daily basis, by responding to questions, by dealing with complaints and objections seriously, and by asking them how we can improve our service delivery and develop new services through co-creation. To this end, in 2022 we once again made use of our permanent panels of participants and employers. In addition, at a number of specific times during the reporting year we chose to engage in a dialogue with all our stakeholders.

These dialogue events enabled us to hear our stakeholders' views and concerns and find out what they think is important, and conversely we were able to tell them about what ABP is working on. This allows us to make constant improvements and contribute to confidence in pensions.

The table on the previous page lists the main dialogue events with our stakeholders in 2022, along with the content of the dialogue.

Involvement of the Board

The General Board was kept informed in 2022 of the content and progress of the research into what ABP's stakeholders think is important. It also contributed to the qualitative testing of the shortlist of material topics; the thirteen key topics were approved by the Executive Board.

Material topics updated

Because so much is changing in the world around us and because we are currently recalibrating the ABP strategy, in the reporting year we commissioned research to identify what our stakeholders think is important (material) about and for ABP. This was an update of the outcomes from 2021. Qualitative and quantitative analyses were performed by the external agencies Sinzer and Motivaction. Based on extensive preliminary research and qualitative interviews, a shortlist of thirteen material topics was drawn up. This shortlist was then quantitatively tested for stakeholder support.

In this annual report, we are reporting on the thirteen topics that ABP's internal and external stakeholders believe are the most important. These thirteen topics are listed in the table below. We are also reporting on topics arising from laws and regulations and our own policies.

The results we achieved in the reporting year, and which we are explaining in this Board Report, we have linked to our value creation model. This makes it clear how we have added value and what dilemmas have arisen in the context of our strategy.

For 2023, the focus will be on further increasing the confidence of our stakeholders. As a Board and as an organization, we will again engage in a dialogue, particularly with our primary groups of stakeholders: participants and employers.

The key material topics

Material topic	Definition
Confidence of participants and employers (see pages 15 , 20 , 25 , 33 , 51 , 78)	The level of confidence that participants and employers have in the pension system as a whole and in ABP in particular
Accessibility of pensions for participants and employers (see page 51 ff)	The extent to which participants and employers perceive the pension scheme to be simple, practicable and easy to explain
Balanced pension scheme (see pages 15 , 33 , 34)	The extent to which participants and employers perceive that the interests of different groups, e.g. different generations, are considered in a balanced way
Innovation capacity (see pages 51 , 54 , 59)	The ability of ABP to update and improve its service delivery, to respond to the changing needs of participants and employers
Digital security and privacy (see pages 69 , 71 , 79)	The security and privacy of the data of participants and employers
Future-proof investment portfolio (see pages 15 , 36 - 40)	The extent to which ABP's investment selection and risk management make the financial performance of the investment portfolio future-proof
Climate change (see pages 20 , 59 , 79)	The extent to which physical developments such as flooding and forest fires, and transitional developments such as regulations, reputation, and lawsuits relating to climate change, affect the value of ABP's investments.

Material topic	Definition
Sustainable and responsible investment (see pages 15 , 56 - 65)	The extent to which ABP, through its investment decisions, has an impact, either positive or negative, on people, human rights, and the environment: the energy transition and biodiversity
A robust pension (see pages 15 , 6 - 10 , 33 ff)	A robust pension is the result of a balance between risk and return, which matches the willingness of participants and is achieved at an acceptable cost (both financial and social)
Transition to the new pension contract (see pages 20 , 20 , 22 , 33 , 51 , 104 , 104)	The extent to which the transition to the new pension contract goes smoothly within ABP and for participants and employers
Future-proof pension system (see pages 20 and 20)	ABP's influence on the extent to which the pension system is future-proof, through engagement with developments in laws and regulations and collaboration within the sector
Good governance, business ethics, and transparency (see pages 83 - 90)	The extent to which ABP's business ethics, good governance, and transparency have an influence on business continuity
Engagement and long-term employability of staff (see pages 71 and 72)	The attraction and retention of engaged staff with good long-term employability, through good employment and contracting practices (including a safe working environment, training and development opportunities, diversity and inclusion)



Adding value for participants and employers

ABP realized a negative investment return in 2022. However, the effect of the interest rate hikes on pension liabilities was greater, resulting in a rise in the funding ratio. Thanks to the adjusted calculation rules, we were able to increase pensions for the first time in twelve years. As expected, total administration costs increased; as a Board, we were extremely critical of this fact.

Pension increases

ABP's ambition is to ensure its pensions keep pace with the price movements calculated by Statistics Netherlands. In late November 2022, based on a positive recommendation from the accountability body, ABP decided to increase pensions by 11.96% for 2023. In determining the size of a pension increase, ABP always looks at the period from one September to the next; in this case, from September 2021 to September 2022. Over that period, prices rose by 11.96%. Pensions had already been increased by 2.39% in July 2022 – the full indexation for 2021. Before that, there had not been an increase since 2008. Indexation arrears remain at the same level as at the end of 2020; at the end of 2022, they were a maximum of 19.95% (this percentage will vary between participants).

This historic increase was made possible because Carola Schouten, the Minister for Poverty Policy, Participation and Pensions, relaxed the indexation rules with effect from July 1, 2022 for funds that are planning to switch to the revamped pension system. One of the rules is that to be able to apply an indexation adjustment, the average funding ratio must be higher than 105%. With a policy funding ratio of 118.1% at the end of October, ABP more than met this criteria. With full indexation, the current funding ratio fell at the end of October from 125.5% to 112.1%. ABP is therefore maintaining a financial buffer which, based on current estimates, is sufficiently large to enable a responsible transition to the new pension system and sufficiently robust in these uncertain times.

In making its decision, the Board examined many different scenarios and dilemmas. In addition, we explicitly considered the potential generational effects of the applied scenarios. We also bore in mind the fact that older participants have not seen an increase to their pension for many years, but it is equally important for younger participants who have recently joined the pension scheme for there to be enough money left in the scheme to maintain confidence in pensions. We also gave extensive consideration to the potential

impact on the funding ratio at the moment we switch over to the new pension contract. We involved the Accountability Body in our decision-making, and it issued a positive recommendation.

We were pleased to finally be able to implement increases again after all these years. It was positive news at a time when our participants are seeing an erosion of their purchasing power.

Funding ratio development (factors and their effect in percentage points)

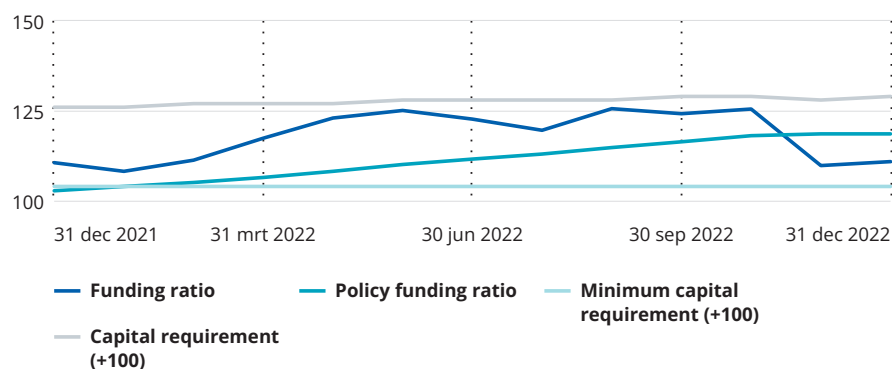
	2022	2021
Funding ratio at previous year-end	110.6	93.5
Contribution vs accrual	-1.6	-1.2
Change in the interest rate term structure	48.0	6.5
Return on investments	-19.5	10.7
Interest added to the liabilities	0.6	0.5
Update of actuarial assumptions on liabilities	-0.6	0.5
Indexation	-11.0	0.0
Other	-15.6	0.1
Funding ratio as at year-end	110.9	110.6

The rise in the discount rate produced the biggest increase: 48 percentage points. This increase was even greater than the effect of the negative investment return on the funding ratio (-19.5 percentage points). The implemented indexation ultimately resulted in a drop in the funding ratio of 11 percentage points. Due to the method used by the Dutch central bank (DNB) for calculation of the development of the funding ratio, combined with the sharp rise in the discount rate, in 2022 a sizable 'Other effects' item was added to account for the effect of these factors on the development of the funding ratio.

The funding ratio is an indicator of a pension fund's ability to make current and future pension payments. It is an expression of the relationship between

the available assets (€459 billion) and ABP's liabilities (€414 billion). At the end of 2022, the current funding ratio was 110.9%. The policy funding ratio (the average of the current funding ratios over the past 12 months) increased in 2022, from 102.8% to 118.6%. This funding ratio is used to determine whether pensions can be increased.

Development of funding ratio in 2022



Development of contributions in 2023

The pension scheme is approved by our social partners, and was not amended in 2022. The ABP Board sets pension contributions on advice from the accountability body.

The effective contribution percentage for the retirement and surviving dependents' pensions will increase in 2023: from 25.9% to 27.9%. This does not automatically mean that employers and employees will pay more for pensions. For participants, it depends on the portion of their income on which they pay their contribution and the effect of the raised pension contribution threshold (no pension contributions are paid on the portion of their income

below the threshold). Accordingly, the payable contribution may even decrease in some cases.

For employers, overall contributions will fall, because the 3% contribution for the early retirement, pre-pension and life-course savings scheme (VUT-, Prepensioen- en Levensloopregeling, VPL) is set to expire. The expiry of this contribution component after fifteen years will make the pension scheme somewhat easier to understand. Furthermore, after many years the mark-up of 1.5% on contributions will no longer be charged, because the policy funding ratio is above 110%.

The discount rate for contributions has been gradually reduced in recent years from 2.8% to 2.0%. For 2023, it is at the ideal percentage (2.0%), meaning no further gradual changes to contributions are required. The accountability body has issued a favorable opinion on contributions for 2023.

Recovery plans submitted

In the spring of 2022, ABP submitted a recovery plan. We were required to do so because at the end of 2021 the policy funding ratio was below the required level of around 126%. Our recovery plan needs to show whether we are able to return our policy funding ratio to the required level within the prescribed recovery period. ABP did not have to apply for the exemption for pension funds in order to increase pensions. In other words, ABP is recovering under its own steam. In the spring of 2023, ABP submitted a new recovery plan for 2023.

ABP also fulfilled the statutory requirement to submit a feasibility test to the regulator (the Dutch central bank) for 2022. The feasibility test provides insight into the relationships between the financial structure, the anticipated pension result, and the associated risks.

Contributions

as a percentage of pensionable salary (salary less contribution threshold)

	2023	2022
Contribution rate for retirement and surviving dependents' pensions	27.9	24.4
Contribution supplement on the contribution rate for retirement and surviving dependents' pensions	0.0	1.5
Contribution rate for retirement and surviving dependents' pensions, including supplements	27.9	25.9
- payable by employers	19.5	18.0
- payable by employees	8.4	7.9
Sector-based contribution for incapacity pension (average) (1) ¹	0.6	0.6
- average payable by employers	0.4	0.4
- average payable by employees	0.2	0.2
- Subtotal expressed as contribution base (average)	28.5	26.5
- Subtotal expressed as a percentage of salary (average)	20.7	19.6
Purchase of conditional retirement and surviving dependents' pension rights	0.0	3.0
- payable by employers	0.0	3.0
- payable by employees	-	-
- Total as percentage of salary (average)	20.7	22.6
The state pension offsets for the years in question amount to (in €):		
for group and individual schemes	16,350	14,850
for sector-specific schemes	25,050	22,350

1 For the purpose of this overview, the Incapacity/disability pension (AOP) contribution has been converted from the AOP state pension contribution threshold to the retirement benefit/surviving dependants' benefit (OP/NP) contribution threshold.

Composition of contributions

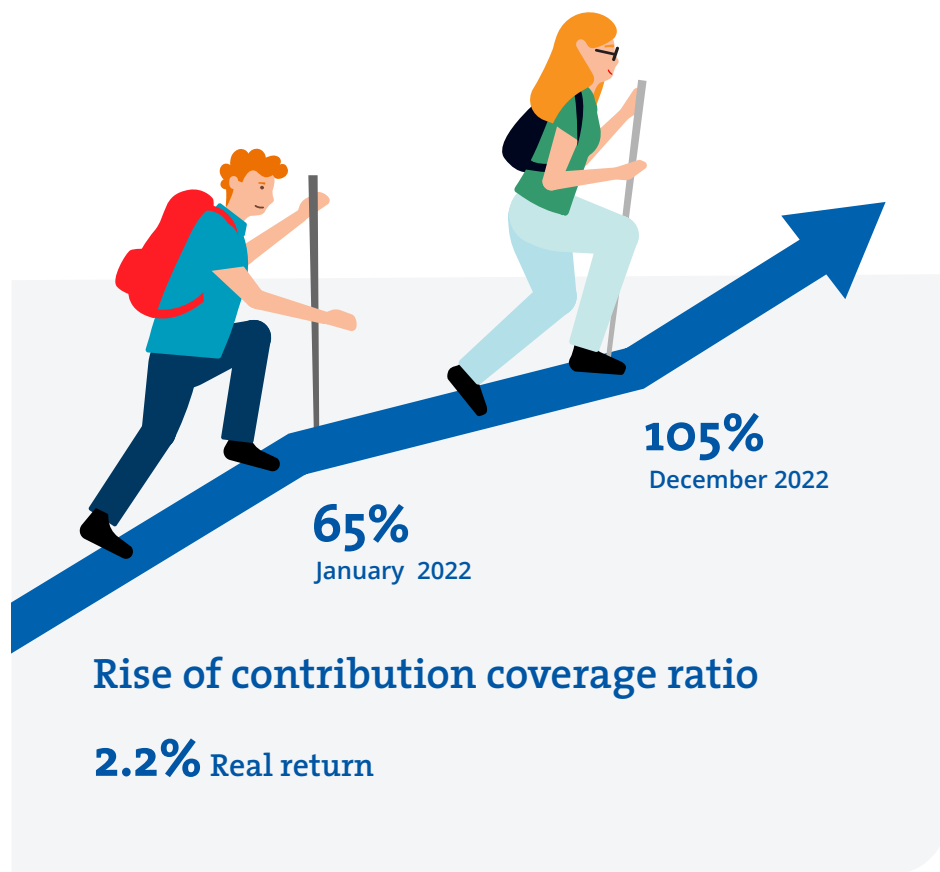
in € mln	Actual	Damped cost-covering	Undamped cost-covering
a. portion for vested liabilities	7,090	7,090	18,688
b. pension administration cost markup	95	95	95
c. solvency margin markup	1,865	1,865	4,915
d. portion for contingent liabilities (indexation)	2,623	2,623	-
e. markups/markdowns on the damped cost-covering contributions	602	-	-
Total amount of contributions 2022	12,275	11,674	23,698
Total amount of contributions 2021	11,844	11,502	25,112

The Pensions Act (Pensioenwet, PW) stipulates that the actual contribution, the moderated cost-covering contribution, and the unmoderated cost-covering contribution must be quantified in euros. The unmoderated contribution is calculated based on the interest rate term structure determined by the Dutch central bank (DNB). The moderated contribution is calculated based on an expected real investment return (2.2% for 2022).

The Royal Dutch Actuarial Association (AG) issued a new life expectancy estimate in 2022. An effect of the Covid pandemic is visible in the new estimate, but the AG has chosen to quickly phase out this effect in its estimations. The long-term impact of Covid is therefore limited. Overall, life expectancy is increasing; the effect of this on our funding ratio was a drop of 0.6 percentage points. If the Covid effect nonetheless proves more significant in the years ahead, resulting in more people dying than expected, that would then lead to an increase in the funding ratio. In other words, by following the AG's calculations ABP is playing it safe.

Contribution coverage ratio

At the start of 2022, the contribution coverage ratio was around 65%; at the end of the reporting year, it was around 105%. The contribution coverage ratio is an expression of the relationship between the contributions paid in a year and the value of the pension accrual in the same year, which translates to an increase in the provision for pension liabilities. The contributions paid are based on a real return of 2.2%. The accrual of pension rights is measured based on the prescribed interest rate term structure, making the contribution coverage ratio sensitive to interest rates.



Our investments in 2022: -17.6% return

With our strategic investment portfolio, we aim to provide a good pension in a livable world. Accordingly, we invest sixty percent of the portfolio in marketable securities such as equities and real estate, and the remaining forty percent in fixed-income securities. With this ratio, we are aiming to achieve a good return while covering between thirty and fifty percent of the interest rate risk. Within the marketable securities, as well as listed equities, we primarily invest in the real economy. A substantial portion of opportunities to invest in the real economy relate to investments that are not traded on financial markets, including investments in buildings and infrastructure (real assets) and private investments in companies' equity and debt capital (private equity and private debt). With such investments, we can take advantage of our long-term horizon and contribute to our impact objectives.

In the turbulent market conditions of 2022, ABP realized a negative return of -17.6%, compared with a positive return of 11.4% in 2021. This return amounts to -€96.6 billion (2021: €56.3 billion). Negative returns were realized in the fixed-income investments (-19.7%) and equities (-15.1%) categories in particular, as well as in a number of alternative investments (private equity and opportunities). However, hedge funds and commodities performed well. The interest-rate hedge reduced our return by -5.1% (2021: -1.3%); see below in this section.

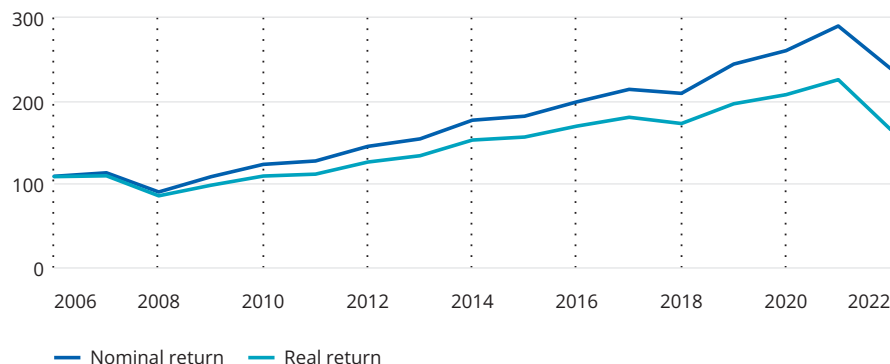
Return and benchmark

Category	Weighting %	Portfolio return %	Portfolio return € mrd	Benchmark return %	Difference %	Relative contribution %	Relative contribution € mrd
Return and benchmark¹							
Fixed-income investments	40.2	-19.7	-44.1	-19.8	0.1	0.1	0.4
Government bonds	9.9	-17.3	-8.9	-17.4	0.1	0.0	0.2
Long-term government bonds	12.7	-33.0	-25.6	-33.0	0.0	0.0	0.0
Corporate bonds	11.2	-13.4	-8.6	-13.7	0.4	0.1	0.4
Emerging-market bonds	6.4	-3.3	-1.0	-2.9	-0.4	0.0	-0.1
Inflation-linked bonds	0.1	2.7	0.0	1.4	1.3	0.0	0.0
Equities	26.6	-15.1	-25.4	-13.5	-1.9	-0.6	-3.0
Developed markets	19.6	-14.2	-18.3	-13.0	-1.3	-0.3	-1.6
Emerging markets	7.0	-18.0	-7.0	-14.9	-3.7	-0.3	-1.4
Alternative investments	22.8	10.5	13.1	3.8	6.4	1.4	8.0
Private equity	9.4	-1.7	-0.7	-10.3	9.7	0.7	4.3
Commodities	6.1	24.3	8.7	26.0	-1.3	-0.1	-0.4
Opportunity Fund	0.1	2.8	0.0	-12.1	17.1	0.0	0.1
Infrastructure	5.4	6.0	1.3	-4.2	10.7	0.5	2.5
Hedge funds	1.9	18.9	3.8	10.0	8.0	0.3	1.5
Real estate	10.9	-8.8	-4.8	1.5	-10.1	-1.2	-6.3
Real estate	10.9	-8.8	-4.8	1.5	-10.1	-1.2	-6.3
Overlay	-0.5	-6.5	-35.7	-6.6	0.1	0.1	0.2
Interest rate hedging		-5.1	-28.3	-5.1	0.0	0.0	0.0
Inflation hedge		0.0	0.0	0.0	0.0	0.0	0.0
Currency hedge		-1.6	-8.6	-1.5	0.0	0.0	0.2
Other		0.2	1.4	0.0	0.0	0.0	0.1
Active Asset Allocation						0.0	0.0
	100.0%	-17.6	-96.6	-17.4	-0.3	-0.3	-0.6

¹ The outperformance is calculated geometrically. It is possible that the figures may not exactly add up to the total shown due to rounding effects

The table shows the returns of the various investment categories compared with the benchmark. The 'Relative contribution' column shows the contribution made by a particular category to the total return, both as a percentage and in absolute amounts. For long-term investors such as pension funds, as well as examining the annual return, it is relevant to assess the return over a longer period. We periodically compare our strategic investment portfolio, which comprises thirteen investment categories, with a basic combination of equities and government bonds in a 60:40 ratio. Over the past five years, the basic 60:40 portfolio has performed better than our strategic portfolio. This is the result of an exceptional period in which government bonds benefited strongly from falling interest rates, while equities surged on the back of stimulus packages from central banks and governments. However, we assume that the diversification in our strategic portfolio will contribute to the achievement of our ambition over the long term. We will assess this in the Strategic Investment Plan, for which our updated Investment Beliefs will serve as a starting point.

Cumulative return
(2005 = 100)



The graph below shows the cumulative nominal and real returns for the past fifteen years. The real return is calculated by adjusting the nominal return for inflation.

Since 2016, ABP's real return has been calculated on the basis of price inflation (up to 2015, the real return was calculated on the basis of wage inflation). In 2022, the nominal return was -17.6%, and the real return was -26.4%.

Breakdown of ABP return ¹	2022	2021	2020	2019	2018
Investment portfolio	-12.5	12.6	5.5	15.0	-2.7
Interest-rate hedge	-5.1	-1.3	1.1	1.8	0.4
Total	-17.6	11.4	6.6	16.8	-2.3

¹ investment portfolio return was calculated by adding the total and the interest rate hedge

In 2022, we increased the hedging of the interest rate risk for liabilities from 28% to 44% and the hedging of the interest rate risk for the funding ratio from 27% to 41%. By doing so, ABP implemented its policy of increasing interest rate risk hedging over the long term.

Sale of remaining investments in Russia

Due to the invasion of Ukraine, in early 2022 we decided to sell all of ABP's remaining investments in Russia. Because of the complicated situation in Russia and the fact that trading in Russian equities is currently prohibited by international sanctions, implementation of this decision has been complex. The Russian investments have now all been valued at zero, and APG will sell our investments as soon as that is possible and responsible. We are monitoring developments closely.

Investment Beliefs updated

In 2022, we adopted a new set of Investment Beliefs, setting out our vision and attitude with regard to return, risk, costs, and sustainability. An important change from the previous Investment Beliefs is an explicit statement that ABP has an impact on society and society has an impact on ABP. Sustainability, cost awareness, and investing in the Netherlands have also been embedded more firmly in our Investment Beliefs. The accountability body issued a favorable opinion on the new Investment Beliefs.

ABP's Investment Beliefs are the starting point for all our investments. They are

a direct translation of our mission statement: ensuring participants can enjoy a good pension in a livable world. The Investment Beliefs document sets out the things we believe are important and our approach to fundamental decisions. The Beliefs thus provide an important framework to guide APG and other fund managers, and help us make consistent decisions and justify them to our stakeholders. The Investment Beliefs have been published [on our website](#).

In 2022, an impact analysis was performed to ascertain the ultimate impact of investing in accordance with our new Investment Beliefs. Based on this analysis, we expect at least an equal return with an unchanged risk; in terms of sustainability and costs, it is predicted that the new Investment Beliefs will have a positive effect. For example, over time, transaction costs are expected to be lower due to the new principles. After all, we are investing for the long term, not changing our investments every couple of months or engaging in short-term speculation.

The next step is to finalize our new Strategic Investment Plan (StIP) for 2023 to 2025, which is based on our Investment Beliefs. Preparations for the new StIP began in 2022; the plan is expected to be completed by the middle of 2023. We will then shape the investment mandates for the actual implementation. This process will take one to two years in total.

New ALM study lays foundations for Strategic Investment Policy

In 2022, we reviewed ABP's risk appetite. To this end, an additional ALM study was performed in 2022. This study, in which we looked at the balance between contributions, certainty and ambition, gave us as a Board the information required to determine the Strategic Investment Policy and the discount rate for contributions. The 2022 ALM study took into account the latest insights from the new pension contract project. The Board decided to reduce the range for hedging of the interest rate risk to between forty and fifty percent. The discount rate for contributions and other aspects of the Strategic Investment Policy were not changed.

Investing in the Netherlands

ABP aims to provide a good pension in a livable world. In doing so, we believe it is important that we also have an impact on the daily lives of our participants during their pension accrual 'journey'. We do this by investing in the Netherlands. For example, in 2022 we invested in fiber-optic networks, mortgages, and an innovative Dutch supplier of energy infrastructure solutions that helps B2B clients make their energy consumption low carbon and more efficient. We have also tried to make a difference to the energy transition in the Netherlands through ANET (see below). In 2023, we will update our program for investing in the Netherlands, based on the new Investment Beliefs and the StIP. We have engaged in discussions with APG on this matter.

In 2022, through ANET (ABP Netherlands Energy Transition Fund), we invested in the solar energy company Enie (now named Soly) and startups contributing to the energy transition. ANET was created for investments in relatively small Dutch projects and companies focusing on the energy transition.

Further reduction of positions in hedge funds

Since 2019, ABP no longer treats hedge funds as a separate investment category. Because we invest with a long-term horizon, speculating on short-term trends through hedge funds is not appropriate for us. In 2022, we made the decision to completely stop investing in hedge funds within existing categories such as equities. We began to rapidly phase out our existing hedge fund investments, by either selling them or converting them to equities. We were careful to ensure a prudent and controlled exit from this category. By the end of 2022, a 1.9% allocation remained.

Investigation into underperforming equity returns

In 2022, our total investment portfolio underperformed the benchmark, as contained in the standard portfolio, by 0.3%. The ABP Board has been voicing concerns about the underperformance in the returns on equities for several years already. Based on long-term historical data, APG conducted an

investigation into these results. The investigation showed that the average results are below the benchmark, whereas the goal is to outperform the benchmark. This goal was not achieved. Moreover, other large pension funds are seeing the same picture: for liquid investment categories, including developed market equities, it is difficult to outperform the benchmark. The findings from this investigation served as important input for us as a Board, particularly in the formulation of our new Investment Beliefs.

Administration costs: focus on cost awareness

We divide the administration costs into pension management costs and asset management costs. The Board monitors these costs closely. We also believe that the social context in which the costs are incurred is important: ABP is a financial institution with a social function. We insist that this context always be taken into account.

Pension management costs

Total pension management costs amounted to €197 million in 2022. This was an increase of €41.2 million from 2021. The costs per participant came to €89, an increase of €17 from 2021. It can be seen from the table below that regular costs rose slightly. The largest cost increase in 2022 was due to the investments to improve our administrative records and data quality through the Grip on Data program, and to prepare for the new pension contract (NPC), both of which required a lot of resources from both ABP and APG. Total pension management costs also include a sum of €11.1 million in costs incurred by ABP; details of these costs can be found in note 13 to the company financial statements.

Pension management costs

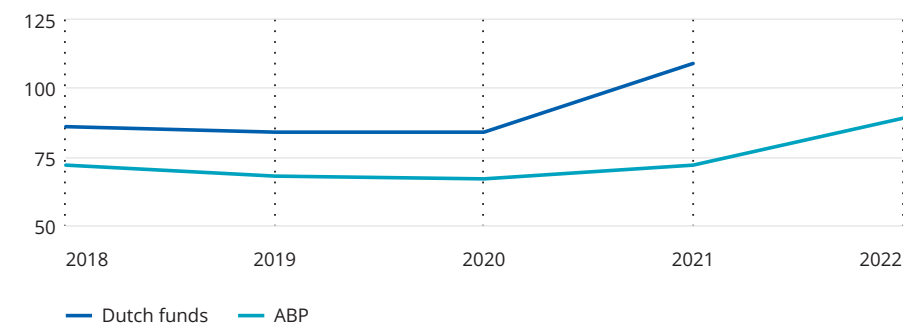
	2022	2021	2020	2019	2018
Pension management administrative expenses (x € 1,000)	197,515	156,363	141,149	141,129	144,729
Number of participants (active and retired)	2,230,099	2,178,130	2,121,533	2,061,333	2,015,200
Cost per participant in €	89	72	67	68	72
Difference vs last year	17	5	-1	-4	-4

Breakdown of pension administration costs between regular and strategic projects

	2022	2021
Regular administration costs (x €1,000)	151,899	147,460
Grip on Data Project	27,645	7,828
New Pension Contract Project	17,970	1,075
Total	197,515	156,363
Number of participants (active participants and pensioners)	2,230,099	2,178,130
Regular administration costs (price per participant)	68	68
Grip on Data Project	12	4
New Pension Contract Project	8	0
Total	89	72

We consider it important to compare ABP's pension management costs with those of comparable pension funds. To this end, we use the Cost Effectiveness Measurement (CEM) benchmark for pension administration. At €89, our costs per participant in 2022 were below the average figure for large Dutch pension funds of €109 (this is the average for 2021, as the CEM figures for 2022 are not yet available).

CEM benchmark



Outlook for 2023

Pension management costs will increase further in 2023. We predict that regular costs will rise as a result of general cost movements in 2023, but the biggest increase will come from the NPC program. The costs for the Grip on Data program are expected to remain at a comparable level to that of 2022.

Asset management costs

Investment costs fall and transaction costs rise

Asset management costs fell significantly in 2022 from 2021 levels. This was mainly due to the lower costs for private equity performance fees, resulting from a slightly negative overall return in 2022. As a result, the reserves created in previous years for the payment of performance fees were partially released in 2022. Conversely, management fees and transaction costs rose in 2022. The table below provides an overview of all investment and transaction costs. The developments in each category are explained in greater detail on the following pages.

Investment costs comprise management and performance fees. Management fees increased by €112 million, while a drop of €2,631 million was recorded for performance fees. The higher management fees were caused partly by an increase in APG's management fee and partly by increased management

fees for external asset managers. The management fees are relatively fixed and for the most part are not linked to the development of the assets. The rise in APG's management fee compared with 2021 is mainly due to regular price movements (collective labor agreement, market data, and IT licenses), digitalization programs, the new pension contract (NPC), withdrawal from mutual funds, and a further increase in internal management activities for alternative investments. Because of the expansion of the alternative investments portfolio, mainly due to higher committed amounts for private equity, the management fees for private equity in particular increased in 2022. The other increases from external managers related to regular price movements.

At the asset category level, the performance fees for private equity in particular fell sharply in 2022, while increasing for hedge funds due to the realized returns and positive currency effects; this is explained further below. For all

Investment costs and transaction costs

	2022		2021		2020		2019		2018	
	€ mln	%	€ mln	%	€ mln	%	€ mln	%	€ mln	%
Management fee	551	0.110	493	0.100	409	0.089	380	0.086	362	0.088
External asset managers' fees	979	0.200	908	0.180	835	0.183	851	0.193	794	0.194
Custody fees	46	0.010	50	0.010	58	0.013	51	0.012	53	0.013
Other expenses	165	0.030	178	0.030	174	0.038	172	0.039	161	0.039
Management fees	1,741	0.350	1,629	0.310	1,476	0.323	1,454	0.33	1,370	0.334
Performance fees	797	0.160	3,428	0.660	1,540	0.337	1,058	0.24	1,090	0.266
Investment costs	2,539	0.510	5,057	0.980	3,016	0.660	2,512	0.570	2,460	0.600
Transaction costs	622	0.120	539	0.100	532	0.116	431	0.089	397	0.097
Total cost asset management	3,161	0.630	5,596	1.080	3,548	0.776	2,943	0.659	2,857	0.697

asset categories, ABP's performance fees are paid out of realized returns. An overview of the returns achieved is provided on page 37.

The table below shows the gross and net returns.

Return in relation to investment costs

in € million	Total 2022	Total 2021
Gross-return	-94,244	61,477
Investment costs	-2,538	-5,057
Net return	-96,782	56,420
Management fee	1,741	1,629
Performance fees	797	3,428
Investment costs	2,538	5,057

Asset management costs in context

Partly due to the size of ABP's investment portfolio, the asset management costs are high in absolute terms. The question is regularly asked whether it is socially responsible to pay these sorts of amounts. The Board critically monitors asset management costs, and therefore decided to commission an external investigation into the principles influencing our asset management costs for the portfolio as a whole. The results of this investigation are provided further on in this section.

Asset management costs can be most accurately assessed if account is taken of the (targeted) return, the risk diversification, the size of the assets invested, and the realized performance.

Management fees

The Board can partially influence these costs with decisions on the distribution of the portfolio between liquid and illiquid asset categories, as well as by closely monitoring the costs of our pension administrator and the engaged external asset managers. Investments in liquid asset categories generally have lower costs than illiquid investments, particularly if the liquid asset categories comprise passive investments. Our revised Investment Beliefs state a preference for a passive approach. This will give us more control over costs. ABP aims to find an optimal balance between 'internally' managed portfolios and outsourcing to specialist external managers.

The complete phasing-out of the hedge fund portfolio will take several years, since these investments are primarily illiquid. From 2023, we will no longer use an external, relatively expensive 'fund-of-fund' manager. Furthermore, opting for more direct investments in infrastructure rather than in funds has meant that the amount of management fees paid to external managers is now relatively low.

Performance fees

For mandates to external asset managers, APG makes agreements on performance fees for us. External managers only receive a performance fee if they realize a return that exceeds a minimum agreed (benchmark) return. ABP pays this performance fee from the extra return realized. A higher return benefits our participants, but it also means higher costs. Performance fees in relation to illiquid investments are paid on the basis of realized returns. Until this time, these performance fees are determined (but not necessarily paid) based on unrealized returns.

Consequently, in the case of lower or negative performance over a certain period, the reserve for performance fees may be lowered, resulting in a negative performance fee, as happened with private equity and corporate bonds. This does not mean that the cumulative performance fee for an external manager for a certain period will be negative.

Transaction costs

Transaction costs are charged when investments are bought and sold. They are affected by the volume of assets under management, the chosen investment style (active or more passive) and the amount of interest rate hedging, which increased this year.

Cost analysis completed

ABP commissioned Mercer to carry out an analysis of the asset management costs for its entire portfolio. The initial aim of the analysis is to gain a better understanding of the composition and structure of the various asset management cost categories and to assess whether these costs are in keeping with market rates. This is not so much about the absolute costs in euros, but about the underlying fee agreements. A significant portion of the costs is made up of performance-related fees, which fluctuate in line with the realized absolute and relative returns. The analysis, which is based on costs incurred in 2021, was completed in the spring of 2023. The Board will work on addressing the results of the analysis of the cost levels for the individual investment categories in 2023.

The main conclusions of the analysis:

- On average, the fee ABP pays to APG (management fee) is in keeping with market rates for both the liquid and illiquid asset classes.
- The fee structure of a management fee and a performance-related fee which ABP has chosen for a number of the liquid asset classes (including equities in developed markets, emerging markets and EMD), is less common in the market. Only a management fee is usually charged for these classes. The thinking behind this choice is that a relatively low management fee combined with a performance-related fee provides the manager with an incentive to deliver

a maximum return given the permitted risk budget. If the target return is not realized, ABP only pays the manager the relatively low management fee. On average, the management fee ABP pays to external managers for liquid investments is lower than the market rate.

- The performance fees ABP paid to external managers in 2021 for liquid investments for outperforming the benchmark were limited in euro terms. This was due to an underperformance in relative returns in that year. If the realized relative returns had been in line with the expected relative return (on which the performance fee is based), the total costs (i.e. management fee plus performance fee) would have been higher than what can be considered in keeping with the market rate.
- The fee structure ABP has chosen for the illiquid asset classes, consisting of a management fee and a performance-related fee, is typical in the market for these classes. On average, the management fee ABP pays to external managers for illiquid investments is in keeping with market rates. For categories such as private equity, the fee is lower than what can be considered in keeping with the market rate. On average, the performance fees ABP pays to external managers for illiquid investments are in keeping with market rates.

Development of management fees by category

In € mln	2022				2021			
	Average managed assets	Costs in € mln	% per class	% of total	Average managed assets	Costs in € mln	% per class	% of total
Fixed-income investments		210	0	0.040		204	0.000	0.039
Government bonds	107,588	17	0.020	-	98,935	14	0.014	0.003
Corporate bonds	58,991	143	0.240	0.030	71,933	138	0.192	0.027
Emerging-market bonds	30,421	50	0.160	0.010	27,532	52	0.188	0.010
Inflation-linked		-	-	-		3	0.000	0.001
Inflation-linked bonds	-	-	-	-	1,502	2	0.118	0.000
Alternative Inflation	431	-	0.010	-	686	1	0.135	0.000
Equities		254	0	0.050		273	0.000	0.053
Developed markets	110,664	148	0.130	0.030	139,940	158	0.113	0.031
Emerging markets	34,652	105	0.300	0.020	40,187	114	0.285	0.022
Alternative investments		1,189	0	0.240		1,086	0.000	0.209
Real estate	53,909	210	0.390	0.040	48,622	188	0.387	0.036
Private equity	45,549	591	1.300	0.120	35,605	538	1.510	0.104
Opportunity Fund	528	12	2.250	-	556	10	1.794	0.002
Commodities	34,621	60	0.170	0.010	31,250	44	0.139	0.008
Infrastructure	22,945	110	0.480	0.020	17,946	105	0.583	0.020
Hedge funds	16,857	206	1.220	0.040	16,862	202	1.195	0.039
Overlay		89	-	-		64	0.000	0.012
Overlay & other	-16,168	89	-	0.020	-13,341	64	0.000	0.012
Total management fees	500,988	1,741	-	0.350	518,216	1,629	0.000	0.314

Development of performance fees by category

In € mln	2022				2021			
	Average managed assets	Costs in € mln	% per class	% of total	Average managed assets	Costs in € mln	% per class	% of total
Fixed-income investments		-53	0	-0.010		239	0	0.046
Government bonds	107,588	-	-	-	98,935	-	-	-
Corporate bonds	58,991	-54	-0.090	-0.010	71,933	233	0.323	0
Emerging-market bonds	30,421	-1	-	-	27,532	6	0	0
Inflation-linked		-	0	-		-	-	-
Inflation-linked bonds	-	-	-	-	1,502	-	-	-
Alternative Inflation	431	-	-	-	686	-	-	-
Equities		112	0	0.020		-16	-	-0.003
Developed markets	110,664	79	0.070	0.020	139,940	-32	-0.023	-0.006
Emerging markets	34,652	33	0.100	0.010	40,187	16	0.041	0.003
Alternative investments		737	0	0.150		3,206	-	0.619
Real estate	53,909	144	0.270	0.030	48,622	61	0.126	0.012
Private equity	45,549	59	0.130	0.010	35,605	2,835	7.961	0.547
Opportunity Fund	528	2	0.300	-	556	17	2.994	0.003
Commodities	34,621	8	0.020	-	31,250	-14	-0.045	-0.003
Infrastructure	22,945	19	0.080	-	17,946	32	0.177	0.006
Hedge funds	16,857	505	3.000	0.100	16,862	275	1.628	0.053
Overlay		-	0	-		-	-	-
Overlay & other	-16,168	-	0	-	-13,341	-	-	-
Total performance fees	500,988	797	0	0.160	518,216	3,428	-	0.661

Development of transaction costs by category

In € mln	Transaction costs 2022	Transaction costs 2021
Fixed-income investments		
Government bonds	60	19
Corporate bonds	116	121
Emerging-market bonds	60	64
Inflation-linked		
Inflation-linked bonds	0	2
Alternative Inflation	0	-
Equities		
Developed markets	25	32
Emerging markets	70	82
Alternative investments		
Real estate	21	26
Private equity	-12	-8
Opportunity Fund	0	1
Commodities	13	14
Infrastructure	43	61
Hedge funds	52	64
Overlay		
Overlay & other	171	61
Total	622	539

Development of investment costs by category

In € mln	2022				2021			
	Average managed assets	Costs in € mln	% per class	% of total	Average managed assets	Costs in € mln	% per class	% of total
Fixed-income investments		157	0	0.030		443	0.000	0.086
Government bonds	107,588	17	0.020	-	98,935	14	0.014	0.003
Corporate bonds	58,991	90	0.150	0.020	71,933	371	0.516	0.072
Emerging-market bonds	30,421	51	0.170	0.010	27,532	58	0.211	0.011
Inflation-linked		-	0	-		3	0.000	0.001
Inflation-linked bonds	-	-	-	-	1,502	2	0.118	0.000
Alternative Inflation	431	-	0.010	-	686	1	0.135	0.001
Equities		366	0	0.070		257	0.000	0.050
Developed markets	110,664	227	0.210	0.050	139,940	126	0.090	0.024
Emerging markets	34,652	139	0.400	0.030	40,187	131	0.326	0.025
Alternative investments		1,926	0	0.380		4,290	0.000	0.828
Real estate	53,909	353	0.660	0.070	48,622	250	0.513	0.048
Private equity	45,549	651	1.430	0.130	35,605	3,372	9.471	0.651
Opportunity Fund	528	13	2.550	-	556	27	4.789	0.005
Commodities	34,621	68	0.200	0.010	31,250	30	0.095	0.006
Infrastructure	22,945	130	0.560	0.030	17,946	136	0.760	0.026
Hedge funds	16,857	711	4.220	0.140	16,862	476	2.823	0.092
Overlay		89	0	0.020		64	0.000	0.012
Overlay & other	-16,168	89	0	0.020	-13,341	64	0.000	0.012
Total management and performance fees	500,988	2,539	0	0.510	518,216	5,056	0.000	0.976

Development of total investment costs by category

The 'Total investment costs' table shows the total management and performance fees for each investment category. In addition, two ratios are presented to provide more insight into the amount of the costs and their development over time: '% by category' and '% of total'. The first ratio expresses the costs for an investment category as a percentage of the net asset value (NAV) of that investment category. This provides insight into how expensive an investment category is. The second ratio expresses the costs for an investment category as a percentage of the total assets of the pension fund. This ratio provides insight into which investment category made the greatest contribution to the total costs.

The investment mix is one of the main determining factors for the total investment costs. As shown in the table, the costs for alternative investments (0.38%) are higher than those for fixed-income investments (0.03%). Private equity and hedge funds are the asset categories with the highest fees. The two categories combined make 12.5% of the portfolio but are responsible for 53.6% of the asset management costs. We as the Board critically assess these costs in relation to the expected positive contribution of these categories in terms of return as well as risk diversification.

The actual costs of illiquid investments in the fourth quarter are not always available in time. When this is the case, the actual costs in the first through the third quarter are recognized, supplemented by an estimate for the fourth quarter

Development of management fees

See the 'Total management fees' table. The management fees are relatively fixed and for the most part are not linked to development of the assets. For the portfolio as a whole, management fees rose by 0.04 percentage point to 0.35%. This was partly due to higher costs (€58 million) on the part of APG, our pension administrator. As previously mentioned, this was due to regular price developments and strategic programs. The increase was also caused by higher costs for alternative investments (€103 million), half of which related to private equity, in respect of which multi-year commitments were entered into with external managers in previous years. For a number of asset categories, there were relatively minor differences in the management fees for each investment category, resulting from regular price developments in comparison with 2021. For real estate, primarily within US and European portfolios, we saw higher management fees for external managers (+€18 million). Finally, with regard to commodities, management of the illiquid portfolio (Natural Resources) has been partly shifted to the US and Hong Kong, while higher management fees apply to the liquid part of the portfolio due to the engagement of a new team for the selection and monitoring of external mandates.

Development of performance fees

See the 'Total performance fees' table. Total performance fees have fallen significantly since 2021 in both absolute and relative terms. The main categories to see a drop in performance fees were private equity and corporate bonds, while the fees for hedge funds and developed market equities rose. These fluctuations were due to the realized returns of these asset categories in 2022 and 2021 relative to the benchmark or the (absolute) target return. Performance fees for equities rose due to good results, particularly at Quant Strategies, while for real estate we saw higher performance fees in the US and European portfolios in particular. Performance fees also increased for the Natural Resources portfolio (+22 million).

In 2022, the hedge funds category achieved a gross return before deduction of costs of €4.5 billion. After deduction of all management and performance fees, the net return was €3.8 billion (18.9% net return). At first glance, ABP's costs appear high in comparison to other pension funds. In 2022, we commissioned an analysis of our costs and how they might be reduced over time; see also the 'Cost analysis completed' text box earlier in this section.

In the case of equity investments, the performance fees for external managers are calculated on the basis of the return realized relative to a benchmark return. In 2022, the returns realized for both developed market equities and emerging market equities were below the benchmark. Nevertheless, there were still costs for performance fees because individual benchmark agreements had been made with the external managers. This fact, in combination with differences in performance, led to performance fees being awarded to individual external managers who perform well, while the overall performance at the asset category level was negative. See also the explanation under 'Asset management costs in context', earlier in this section.

The 'Return and benchmark' table shows the net returns for all asset categories in percentage and absolute terms.

Development of transaction costs

Total transaction costs rose by €83 million to €622 million in 2022. At the asset category level, there were no significant differences compared with 2021. The exception was a cost increase for Overlay & other, due to higher costs for interest rate hedging, among other factors.

Reconciliation of asset management costs

The asset management costs are recognized in the financial statements in accordance with the Dutch Accounting Standard 610. This relates to the invoiced costs. Non-invoiced asset manager costs are netted against investment results in the financial statements. As a result, the costs recognized in the company financial statements (see under 'Investment results (net)' in the notes to the statement of income and expenses) are lower than the amount recognized in the Board report. The reconciliation between the two is presented in the table below.

Reconciliation of asset management costs in the financial statements

in € million	Total 2022	Total 2021
Report of the Board of Trustees		
Management fees	1,741	1,629
Performance fees	797	3,428
Transaction costs	622	539
Total	3,160	5,596
Financial Statements		
Directly invoiced costs: Management fee	683	609
Variance:	2,477	4,987
Relates to directly invoiced costs (part of the investment results in the financial statements)		

Market comparison of asset management costs

We consider it important to examine how ABP's asset management costs compare with those of other national and international funds, and to assess whether these amounts have been used effectively. Accordingly, ABP annually takes part in a Cost Effectiveness Measurement (CEM) benchmarking survey, in which costs and realized (excess) returns are compared with those of our national and international peers. The Board is aware of the limitations of benchmarking surveys. The peer group against which ABP compares its asset management costs consists of international pension funds, as these are of comparable size. ABP's costs are higher than those of its international peers. This is because implementing the decisions we make for our investment portfolio involves higher costs. For example, for private equity we use external fund managers, rather than investing directly in companies.

The peer group against which ABP compares its returns and added value consists of Dutch pension funds, due to the specific regulations that apply to Dutch pension funds. The benchmarking surveys show that, over the past five years, and after deduction of all costs, ABP is in the top quartile (25%) of funds in terms of realized added value (this is the difference between the actual realized return and the benchmark return). The most recent CEM report (for the 2021 financial year) shows that ABP's average added value over a five-year period (which amounts to 1%) is higher than the average scores for both its Dutch (0.3%) and international peers (0.3%). Nearly all of this added value is generated through investments in illiquid categories. Therefore, the costs incurred add value overall. We incorporated this insight into our updated Investment Beliefs, so that for liquid categories we take a low-cost index solution as a starting point for building a portfolio.

Control over pensions for participants and employers

Contact with participants

Given all the developments in 2022, we believe it is more important than ever to maintain close relations with our participants and stay in touch with them. With more than three million participants, we need to be smart about how we do it. We therefore try to strike an optimal balance between personal contact and written and digital communications. The goal is to give participants peace of mind about their pensions and control over their financial situation, now and in the future.

Towards the NPC

Although the new pension contract (NPC) does not really affect participants yet, in 2022 we did a great deal of work behind the scenes to prepare for the transition to the NPC. We made our processes even more customer-focused, conducted experiments and research to determine the best way to communicate about the NPC, and drafted general principles for our delivery of the new services. In addition, the website onsnieuwepensioen.nl (our new pension) was developed. This was a pension sector initiative to which ABP contributed. We also posted a dossier about the NPC on the ABP website, for interested participants.

Pension value transfers

Participants can request the transfer of the value of their pension assets to a different pension fund, for example if they change jobs. Such value transfers can only be carried out if the funding ratios of the two pension funds involved meet a certain threshold. Since the funding ratios of ABP and the other pension funds involved were high enough, we were able to carry out the requested value transfers in 2022.

Small pensions (between €2 and €594.89 gross per year) are transferred automatically, regardless of the size of the funding ratio. In 2022, a clean-up operation was performed for all small, pre-2018 ABP pensions. Due to the

finalizing of the legislation, we were able to carry out this operation at the end of 2022. Mainly due to these automatic value transfers, the number of non-contributing participants decreased significantly in the reporting year.

Meetings and campaigns

- Pensioen3daagse – During the annual three-day pension event Pensioen3daagse, we launched a campaign to highlight the effect of life events on pensions. This included emphasizing the importance of keeping details to date in MijnOmgeving (MyEnvironment). The ABP campaign reached more than 2 million people via social media and 60,000 ABP participants directly via email.
- ‘We moeten praten’ (We need to talk) campaign – We ran this campaign in September 2022, with the aim of making participants aware of the importance of pensions, even at a young age. The campaign reached over 1.4 million people in the Netherlands between the ages of twenty and thirty, and contributed to greater confidence in ABP within this target group.
- Pension app launch campaign – The new ABP app received a small-scale launch in 2021. In 2022, we ran a campaign to encourage participants to use the app and to explain how it could help them. The app has now been downloaded more than 50,000 times.
- Realitycheck – This program focused on raising awareness about pensions among participants, particularly women, with the aim of increasing their financial resilience. A range of campaigns in 2022, both online and in

person, led to more than 92,000 visitors going to the website realitycheck.nl for tips and inspiration, while over 15,000 people completed the e-learning module to better understand their financial position.

ABP website improved

The updated website, ABP.nl, went live in early 2022. The website better reflects ABP’s refreshed house style and updated positioning. The home page and news overview were completely redesigned. In addition, we offer visitors the opportunity to read relevant information immediately, by placing it at the bottom of each page. The content management system, which was also upgraded in late 2022, enables us to make communications more personal and relevant.

Legally required pension communications

ABP annually sends the legally required Uniform Pension Statement (Uniform Pensioenoverzicht, UPO) to all participants. We send these statements to inform our participants on the financial status of their pension. As well as UPOs, participants can view their pension entitlements online at Mijnpensioenoverzicht.nl (MPO). Statutory guidelines apply to both the content and the sending of UPOs. Each year, all UPOs must have been sent by the reference date of September 30. ABP did not manage to meet this deadline for all participants in 2022, mainly because information was missing for a number of participants. We agreed a realistic target with APG: 99.0% of participants should receive a letter with their UPO or access to their UPO via MPO in MijnABP (MyABP) by September 30, 2022, and this should be the case for 99.80% of participants by December 31, 2022. This target was achieved. Where participants had not received a UPO by December 31, 2022, we sent them a letter informing them of this fact, and their questions were answered in person.

We naturally took the opportunity to celebrate ABP’s one hundredth anniversary with participants and employers.

Sending of pension statements

	2022	2021
UPO		
Sent UPOs on September 30	99.46%	99.42%
Sent UPOs on December 31	99.93%	99.97%
Participants with access to MPO on December 31	99.97%	99.93%
GUPO		
Sent GUPOs on December 31	99.97%	99.98%
SUPO		
SUPOs made available on December 31	99.80%	99.80%
EUPO		
EUPOs made available on December 31	90.14%	92.46%

With regard to pensioners, the statutory guideline states that all GUPOs (UPOs for pensioners) must be sent by December 31. As in previous years, this target was not met, because the necessary information was lacking in a number of cases. In addition, for some time we have unfortunately been unable to include surviving dependents' pension rights in the GUPOs of some of our pensioners. This issue has not yet been completely resolved. We agreed a realistic target with APG for GUPOs: 99.80% of the target group should receive a GUPO by December 31, 2022. This target was achieved.

Pursuant to the Pensions Act, pension administrators must make a UPO available to former participants (also referred to as 'sleepers' in the Netherlands). This type of UPO is known as a SUPO. ABP did so in 2022. We agreed a realistic target with APG for SUPOs: 99.80% of former participants should receive a letter with their SUPO or access to their SUPO via MyABP by December 31, 2022. This target was achieved.

The EUPO is the UPO for ex-partners of participants. By law, ABP must actively provide a EUPO, in digital or hard-copy format, once every five years. The agreement made with APG was that 99.80% of ex-partners should receive a EUPO by December 31, 2022. This target was not achieved, mainly because the information necessary to create an accurate EUPO was missing for a number of participants.

Complaints and appeals

ABP continually works to improve its services, based on feedback from participants who have filed a complaint. Special processes (feedback loops) have been set for this purpose. On our website, participants can read about what was done in response to key pieces of feedback.

Partly because of this continuous improvement, fewer complaints were filed in 2022 than in 2021. We particularly noticed a drop in complaints about information provision, processing delays, and customer friendliness. This was partly due to better expectation management, with response times for requests being estimated and communicated more accurately. Letters are also amended more quickly when participants perceive them to be unclear. However, we noticed a rise in complaints about laws and regulations. This was primarily due to new legislation concerning small pensions: participants expressed unhappiness with the fact that their small pensions were automatically transferred to their current pension provider. However, ABP is legally obligated to cooperate with such operations. We also noticed a rise in complaints about pension calculations. This was mainly related to the processing of the pension increase, where participants had opted, when applying for their pension, to receive a fixed amount until a certain date. This was not directly reflected in the most recent increase. It is a lesson we will take on board for future increases.

Complaints (subjects and number of complaints)

	2022	2021	2020	2019	2018
Information provision	216	237	420	34	63
Processing delay	14	47	7	10	25
Application of laws and regulations	33	11	85	11	30
Customer friendliness	111	136	164	3	7
Pension calculation and payment	88	77	24	30	46
UPS	0	0	0	0	0
MijnABP	76	78	83	0	0
Other	13	13	21	32	60
Complaints ANW compensation	0	0	0	0	358
Pilot complaints through KCC	0	0	0	124	0
Total complaints	551	599	804	244	589
Outstanding on December 31	16	9	16	4	3

Appeals

	2022	2021	2020	2019	2018
Appeals lodged	33	52	37	36	27
Appeals procedures terminated without ruling	2	9	3	7	7
Ruling: decision upheld	35	43	26	24	25
Ruling: decision overturned	3	3	1	1	10
Outstanding on December 31	18	27	30	23	19

The most important issues raised in appeals related to the calculation of the retirement and surviving dependents' pensions. These concerned various aspects of pension calculation. Due to the complexity of the pension scheme, a number of specific subjects keep recurring. These include ABP's lack of authority under Section 61 of the ABP Privatization Act to make a decision concerning pension accrual in the period before 1996 (ABP Act), or the right

of participants to a conditional pension and non-contributory pension accrual when they are incapacitated for work. The Appeals Committee made 38 rulings in 2022. In 35 cases, the participant's appeal was rejected and declared to be unfounded. In three cases, the Appeals Committee upheld the appeal and ruled in favor of the participant. In two cases the appeal was withdrawn, and the Appeals Committee no longer had to make a ruling: in one of the cases, the appeal was withdrawn after ABP agreed with the participant, while in the other case, the participant withdrew the appeal after ABP provided a more detailed explanation of the case in its statement of response. In one case, an employer filed a provisional appeal, which did not proceed to a definitive appeal. Since the third quarter of 2021, ABP has published summaries of the Appeals Committee's rulings on its website.

In June 2022, pension funds in the Netherlands adopted guidelines on properly dealing with complaints (Goed omgaan met klachten). To this end, a baseline assessment was conducted to determine the extent to which funds are complying with the guidelines. By January 1, 2024, pension funds must have implemented the guidelines and have a total score of 84% or higher. ABP obtained a total score of 89% in the baseline assessment, which means we have already met the standard set for 2024. However, there is room for improvement. We are working with APG to analyze how we can further implement the guidelines in 2023 to improve our handling of complaints. Involvement from the Board will be important in this regard. Accordingly, from 2023 the complaints policy will be evaluated annually and discussed with the Board.

Support for employers

We know from research that employers, like participants, want peace of mind and control over the employee benefit of pensions. Pensions are one of the ways employers can demonstrate good employment practices. ABP is looking at how it can support employers in this regard. At a strategic level, this support

is about solutions for long-term employability, while at a more operational level it is about providing pension data and information to employees.

Updates on the NPC

In the reporting year, ABP proactively informed employers about key developments around the new pension contract (NPC). We did this by posting a special dossier on our website. This dossier has been frequently consulted, by over 6,800 unique visitors.

More active pension ambassadors

For several years now, organizations such as the National Police, provincial authorities, vocational secondary schools and various municipal authorities have been using pension ambassadors. These are staff members who provide accessible information about pensions to their colleagues. ABP ensures these ambassadors have accurate knowledge and information. Forty pension ambassadors were trained in 2022, bringing the total number of pension ambassadors to 230. We focused considerable attention on pension ambassadors during a webinar in June, after which we received even more registrations. We expect to be able to train twice as many ambassadors in 2023.

Meetings and campaigns

- Online webinars – In 2022, there were three webinars for employers, in which various topics were discussed and information was shared. The topics covered in the webinars included operational pension support for employers, the new pension system, and long-term employability. The webinars scored around 8.0 in evaluations.
- Annual meeting with ABP – During the annual meeting with employers, the Executive Board engaged in a dialogue with executives from around sixty employers. We updated them on various matters and listened to them to learn what is going on in their organizations. The employers indicated that the topics were appropriate to their needs.

- Long-term employability information campaign – The information campaign on long-term employability covered important, topical HR themes, such as labor market shortages, with a focus on the practical reality for employers. Translating pensions into a long-term employability incentive is an ongoing challenge. We have seen little to no increase in the number of participants taking advantage of pension options, such as temporarily contributing more or less to their pension or choosing a part-time pension. In 2023 and beyond, we want to provide employers with more concrete tools for these options.
- Refresher sessions – In 2022, based on employer demand, we started providing employers with information we hoped would prove useful, along with a summary of current issues affecting participants. In total, we organized 21 refresher sessions to update the pension knowledge of our employers' HR professionals.
- FAQ campaign – In this new campaign, ABP provides employers with information relating to the questions they ask most frequently. Topics include pensions and incapacity for work. We saw high volumes of click-throughs to web pages on these topics. We will continue this campaign in 2023 with a range of popular questions from employers.

Due in part to the pressure on ICT capacity, development of the new Werkgeversspiegel (employer mirror) platform is behind schedule. This platform provides pension data that employers can use for their strategic HR policies. It will be a focus for us in 2023. The plan is to supply employers with data from their own organization that they can compare with data from their sector. Employers can access the portal through Mijn Organisatie (My Organization), ABP's new online HR portal. This will help strengthen the connection with this group that is so important to ABP.



Contributing to a livable world

The way we invest our participants' pension money affects the world in which they live. And conversely, the changing world has consequences for ABP's investments. We are committed to increasing our positive impact on the world and to reducing the negative impact and the risks to our investments. We do so through sustainable and responsible investment. We tightened our policy in 2022 so that we can realize the intended effects more quickly. In the area of ESG, the focus in 2022 was on climate and biodiversity.

Sustainable and responsible investments in 2022

Focus on 2 transitions



Climate change



Conservation of nature and biodiversity

Exclusion



Exclusion policy

No investments in:

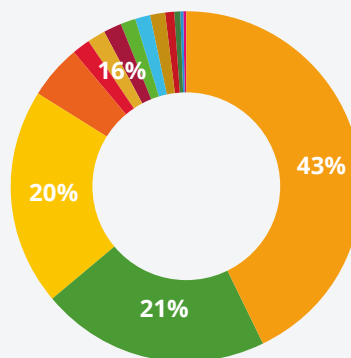
- Weapons prohibited by international agreements
- Nuclear weapons
- Tobacco
- Government bonds of countries under a UN or EU binding arms embargo



ABP is the most sustainable Dutch pension fund (VBDO)

For the fifth year in a row

Top 3 SDG investments



Investments in green, social, and sustainable bonds

2021

€17.9 billion

€14.9 billion

Performance in 2022 and goals for 2025



% of assets invested in SDGs **20%**

2021 18.1%

Goal for 2025 **20%**

Invested in SDG 7

Affordable and sustainable energy

€18.4 billion

2021 €18.5 billion

Goal for 2025 **€15 billion**



CO₂-footprint of equities

portfolio compared with 2015 **-58%**

2021 -48%

Goal for 2025 **-40%**



Preconditions

Respect for human rights
Good corporate governance



ABP complies with the:

- IMVB covenant
- SFDR regulation
- OECD guidelines



Sustainable and responsible investments

To inject additional pace into the realization of our mission, we made as started on tightening and accelerating our ‘Sustainable and Responsible Investment’ (SRI) policy. In 2022, we embedded sustainability even more firmly in our updated investment convictions (for more information, see the [‘Adding value for participants and employers’](#) section). Another concrete result is our new climate policy, which we adopted at the end of 2022 (see below in this section).

Our investments have an impact on the world, and conversely the world has an impact on our investments. In order to offer an inflation-proof pension in the long term, we need to invest sustainably and responsibly in a fair economy. For us, this means that profits should not be detrimental to people and the planet. This is the only way in which we can achieve an inflation-proof pension in a livable world, while minimizing the risks. We want our investment portfolio to generate a good and socially responsible return, which is why we are creating a portfolio with a real impact. To this end, we also consider return, costs and risk.

Effect on return and risk

Sustainable and responsible investment fits in with managing risks that affect the investment portfolio. The extent to which companies adapt their products and processes to the consequences of the energy transition and contribute to it is an example of this. Academic research shows that different ways to invest sustainably can have a neutral to positive effect on the risk-return profile of portfolios. ABP invests sustainably and responsibly in order to realize a good pension. In addition, our investment portfolio has an impact on society. That is why sustainable and responsible investment is important for a healthy, good and responsible old age for our participants.

We are updating our policy step by step. In 2022, we discussed our SRI policy with many stakeholders, including academics, sustainable financial institutions and activist groups. We will take their valuable input on board in further tightening our policy. More information can be found on our website, in the [‘Sustainable and responsible investment’](#) dossier.

Focus on two transitions

During the reporting year, we shifted the focus of the existing SRI policy to two major societal transitions; digitalization of society is no longer our primary focus. We did this in order to create greater impact.



Climate change

ABP aims to achieve a climate-neutral investment portfolio by 2050 and to comply with the arrangements made as part of the financial sector’s Climate Commitment. These arrangements are about contributing to the funding of the energy transition in the Netherlands: measuring and reporting the CO₂ footprint of investments and formulating CO₂ reduction targets and other targets for 2030. We want to act in line with the Paris Climate Agreement, by making every effort to limit the rise in global temperatures to a maximum of 1.5 degree Celsius.



Conservation of nature and biodiversity

Biodiversity is a key factor in a sustainable economy: companies should not make a profit at the expense of the environment and nature. Biodiversity is directly related to climate change. ABP aims to invest in sustainable solutions, and thus make a contribution to nature conservation and biodiversity protection and promotion.

Important preconditions

We consider respect for human rights by the companies in which we invest to be a precondition for fair progress in the major transitions. We also consider good corporate governance to be an important condition that companies need to meet to successfully accommodate the transitions.

Acceleration of our new climate policy

In 2022, we worked on tightening ABP's climate goals. The new policy was published at the end of 2022. An important acceleration is our increased investment in renewable energy. ABP's target for 2030 is to invest a total of €30 billion in the climate transition. Of this amount, €10 billion relates to 'impact investments'. These are investments that make an immediate and demonstrable difference. In this context, we also consider the location where we can make a difference for our participants, which is in the Netherlands. In order to make a contribution to the energy transition, we also need to invest in smart networks, insulation, (green) hydrogen and other forms of renewable energy, clean mobility and energy storage. For example, we aim to invest directly in solutions that prevent climate change, such as the construction of large wind farms in the North Sea. We also want to invest in measures to protect the world against the consequences of climate change, such as infrastructure that helps combat flooding and real estate built to withstand climate change and heat stress. Another key target of our climate policy is to halve the CO₂ footprint of our entire investment portfolio by 2030 relative to 2019. Our ultimate ambition is to achieve an investment portfolio with net zero CO₂ emissions by 2050.

Progress on contribution to climate transition in 2022

Divesting from fossil fuel producers

In 2022, we implemented our decision of October 2021 to sell investments in producers of oil, gas and coal. At year-end 2021, our investments in equities and bonds of companies in the fossil fuel industry totaled €8.5 billion; by year-end 2022, that figure had decreased to €0.9 billion. The remaining amount concerns shares and bonds of companies in emerging markets. Our pension administrator APG collectively invests on behalf of several pension funds collectively in 'investment pools'. Although most of our investments have already been unbundled from the other pension funds, this process takes more time for emerging markets. We aim to sell these investments in the course of 2023.

At year-end 2022, we still had €5.6 billion in illiquid investments in the fossil fuel industry. These investments cannot be sold as quickly as equities and bonds. Illiquid investments in the fossil fuel industry will be sold in the coming years; any investments that cannot be sold will be removed from the portfolio when they mature.

Mapping climate risks, investing in solutions

ABP maps the risks of climate change for its investments. For this purpose we use the framework developed by the Task Force on Climate-related Financial Disclosures (TCFD). We also implement measures to control climate risks in the investment portfolio. We distinguish between physical risks and transition risks. Transition risks are associated with the transition to an economy based on renewable energy. In our engagement and voting policy, we focus especially on sectors with a high climate impact. Physical risks are related to the effects of climate change on, for example, buildings and infrastructure. Our efforts are directed primarily at obtaining insight into the physical risks based on the location of our investment.

Tightened climate voting policy

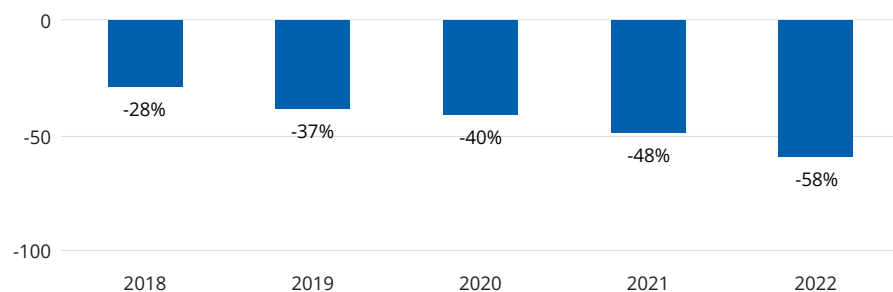
Since the spring of 2022, ABP applies tightened rules for climate-related voting at shareholder meetings. The tightened rules relate to votes on the climate plans of companies, climate resolutions put forward by shareholders, the appointment of the chair of the Supervisory Board and the remuneration policy. The climate voting policy applies to approximately 2,000 listed companies in the energy sector and in other sectors that have a major impact on the climate. Examples include the mining sector, the steel industry and the transport sector. We disclose on [our website](#) how we voted.

Less CO₂ and greenhouse gases

ABP maps the amount of CO₂ emitted by the companies in which we invest, and how much of that amount can be allocated to us. The CO₂ footprint of our equities investments has decreased by 58% since 2015. This means that our target (-40% by 2025) has been achieved. In 2022, we formulated new targets: net zero greenhouse gas emissions by 2050 and a 50% reduction in greenhouse gas emissions by 2030 relative to 2019 for the entire investment

Reduction of CO₂ footprint of portfolio since March 31, 2015¹

(Target: -40%)



¹ The CO₂ footprint of equities investments is calculated based on the equities portfolio as at year-end 2022. In previous years, we reported the CO₂ footprint based on the composition of the portfolio as at March 31 following the reporting year.



Climate transition

Sustainable battery-powered trains

Alpha Trains is a lease company for passenger trains and locomotives. ABP owns 50% of this company. Alpha Trains concluded a lease contract with Niederbarnimer Eisenbahn (Non-Executive Board) in 2022 for the supply of 31 battery-powered trains. The new battery-powered trains will make rail traffic between Berlin and the Polish border more sustainable. The operation of new trains is expected to save 4.4 million liters of diesel a year. This means a reduction in CO₂ consumption equivalent to the annual consumption of more than 16,000 Dutch households. What is more, it generates a good return.



Learn more about **this topic**



portfolio. The latter target applies to the entire investment portfolio and throughout the supply chain, which means that the emissions resulting from, say, corporate procurement and the use of products are included as well.

Progress made on contributions to conservation of nature and biodiversity in 2022

ABP expects companies in high-risk sectors to adjust their business models in order to combat the loss of biodiversity. Together with others, we support the development of measurable criteria that will help us make a better assessment of the risks. These not only include risks relating to biodiversity loss, but also risks for companies that are dependent on nature. We also want to make an active contribution to the conservation of flora and fauna, the restoration of ecosystems and biodiversity, the promotion of circularity and the fight against deforestation.

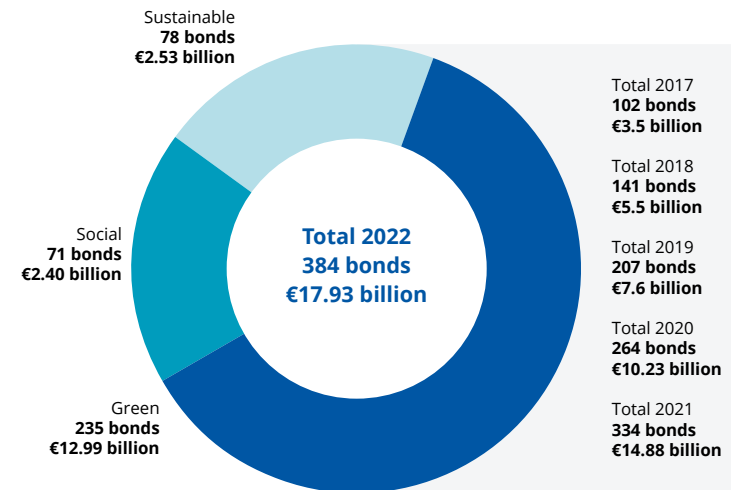


Climate transition

Largest investment ever in solar energy

In 2022, ABP acquired a 49% stake in Gemini, a large-scale solar energy generation and storage project in the United States – our largest investment in solar energy to date. The project in the US state of Nevada generates approximately 690 megawatts (MW) of solar energy and 1,416 megawatt hours (MWh) in battery storage, and is expected to become operational in 2023. This currently largest solar energy project in the US will supply renewable energy to more than 400,000 American households at peak times. This will prevent the emission of 1.5 megatons of CO₂ generated by fossil energy use.

ABP investments in green, social, and sustainable bonds



In 2022, ABP invested in the first green government bond of Canada, one of the last large developed countries to use this instrument to fund the greening of the economy. We also invested in green bonds of the French bank BCPE, the US food multinational Archer Daniels Midland, soft-drink giant PepsiCo and the German state of North Rhine-Westphalia. The revenue generated by these bonds is put towards climate and biodiversity projects, involving areas such as sustainable aquaculture and livestock farming, sustainable food systems and new plastics reduction.

Other examples can be found below, under ‘Contribution to the Sustainable Development Goals’.

Developments in human rights and good governance

Human rights

A livable world respects and protects human rights. ABP wants the companies in which we invest to respect the human rights of employees, local communities, and other stakeholders. This is also crucial for our investments. After all, companies that show due care for human rights are usually less exposed to the risk of reputational damage, delays, legal proceedings, and fines. The United Nations Guiding Principles on Business and Human Rights (UNGP) serve as our guideline.

We assess the potential human rights risks attached to our investments. We will use our influence as an investor to raise awareness of these risks among companies and, where necessary, urge them to avoid or address any involvement with human rights violations.

APG is among the initiators of the [Corporate Human Rights Benchmark \(CHRB\)](#). The CHRB compares the human rights performance of companies operating in high-risk industries. The CHRB is a key source of information

Acting in accordance with OECD guidelines

The EU is currently considering whether the standards laid down in the OECD guidelines for multinational enterprises should be made mandatory. This means that companies, when producing or procuring goods and services worldwide, must be mindful of human rights and the environment in order to prevent abuses. In February 2022, the National Contact Point (NCP) – which mediates disputes on the application of the guidelines – complimented our pension administrator on the manner in which we embrace our responsibility as a shareholder and act in accordance with the OECD guidelines. It did so following a case about alleged abuses at McDonald's.

on companies in which ABP can and wants to invest. In addition to this, the benchmark provides input that enables us to start human rights conversations with companies. The most recent benchmark, published in November 2022, shows that companies across the board achieve a higher score than before, but that many companies still underperform. In 2022, we raised the topic of human rights with 60 companies. We also engaged 79 companies in a dialogue about labor standards, including workplace safety and the right of workers to organize.

In March 2022, we decided to sell our investments in Russia. This was in response to the Russian military strike on Ukraine. These investments made up less than 0.1% of invested assets. We had already significantly reduced our investments in Russia in the preceding years. Because of a binding EU arms embargo, ABP did not invest in Russian government bonds anyway. As soon as the market conditions and statutory rules allow this, APG will sell our remaining investments, which have meanwhile been valued at zero.

In 2022, we collaborated with other Dutch financial institutions in mapping human rights risks and exchanging information on these risks. Obtaining information about this is not easy in countries that restrict civil liberties (such as freedom of speech and press freedom). The institutions involved will report on progress in 2023.

Good governance

As a major investor, ABP can influence decisions made by the companies in which we invest. We want to exercise this influence to improve their financial results and to urge them to grow into more sustainable and socially responsible enterprises. Our investors therefore engage in a dialogue with these companies and take the information they receive into account in their investment decisions. [The overview on our website](#) summarizes the companies we engaged in an improvement dialogue in 2022 and the topics addressed in that dialogue.

We will also exercise our voting rights at shareholder meetings. Key topics for ABP are sustainability and the appointment and remuneration of executives. ABP believes that bonuses must be in proportion to performance. In 2022, we voted against 48% of the remuneration proposals.

Another focus area is diversity in the executive boards of the companies in which we invest. In our opinion, it is important for executive boards to have the right capabilities. We are also eager to see executive boards represent a cross-section of society. Research has shown that diverse executive boards take better decisions. We encourage such diversity by voting in favor of or against candidates. In 2022, we voted against 19% of the proposed appointments. On our [website](#), we provide insight into how we voted at shareholder meetings.

Contribution to the Sustainable Development Goals

ABP aims to make a contribution to the Sustainable Development Goals (SDGs) through its investments and other activities. These goals were adopted by the United Nations in 2015 with the intention of building a better and sustainable world. In particular, we focus on the following SDGs:

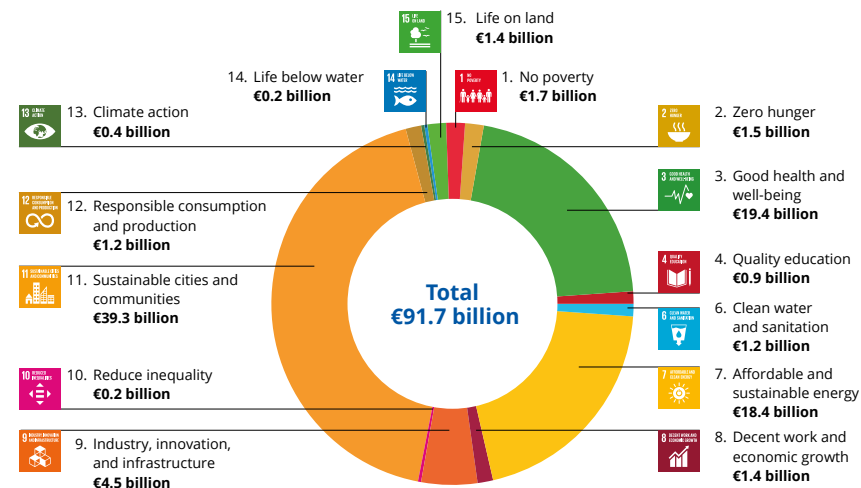
Climate

- SDG 7: Affordable and clean energy
- SDG 11: Sustainable cities and communities
- SDG 13: Climate action

Nature and biodiversity

- SDG 6: Clean water and sanitation
- SDG 12: Responsible consumption and production
- SDG 14: Life below water
- SDG 15: Life on land

Investments per SDG



New fund for sustainable loans in emerging countries

In 2022, ABP invested €570 million in a new fund for sustainable private loans in emerging countries. These loans fund projects and companies that help achieve access to clean energy, sustainable production and infrastructure, food security and inclusive finance, among other things. The fund, set up by the provider ILX, selects and pools loans issued by institutions such as the World Bank, the African Development Bank and the Dutch development bank FMO. In the coming three years, it will be filled with private loans to companies and projects that face major sustainability challenges. Through ILX, ABP can invest in loans to companies and projects in emerging markets that offer an attractive return as well as contributing to the Sustainable Development Goals. Examples include sustainable transport, solar parks, improved and sustainable farming methods and funding of local businesses.

Examples of investments in SDGs in 2022



Evoqua Water Technologies

Contributes to SDG 6:

Clean water and sanitation

The world is increasingly faced with challenges around water scarcity, pollution and climate change. Combined with urbanization and population growth, these challenges are putting our available water supplies under pressure. Evoqua is a wastewater treatment company that is committed, among other things, to the efficient use, saving and reuse of water.



Groendus

Contributes to SDG 7: Affordable

and clean energy

In May 2022, ABP acquired a 50% interest in an innovative and leading player in the market for sustainable energy for companies, public authorities and institutions.

Groendus originated in 2021 from a merger of six specialist companies active in solar projects, smart metering services and sustainable energy solutions. Today, Groendus has built more than 300 solar power plants in the Netherlands and has ambitions to expand this number. Groendus also aims to offer customers more and more sustainability solutions, such as smart charging and battery storage.



Soly

Contributes to SDG 7:

Affordable and clean energy

ABP invested in the Dutch solar and energy company Soly.nl in March 2022. Consumers can buy or rent solar panels from Soly.nl or take out a solar energy contract. Companies can lease or buy solar panels,

charging stations and batteries. We made this investment within the ABP Dutch Energy Transition Fund (ANET), which has been set up specifically to help fund the energy transition in the Netherlands.



Vesteda

Contributes to SDG 11:

Sustainable cities and communities

Property fund Vesteda analyzed the sustainability of all 28,000 rented homes in the Netherlands in 2022. This 'baseline measurement' will help Vesteda to identify further opportunities to improve the sustainability of these homes. That's better for tenants and better for returns. ABP is one of the largest investors in Vesteda.



Avantium

Contributes to SDG 12:

Responsible consumption and production

Avantium is a chemical technology company that produces plastics and chemicals. It is a frontrunner when it comes to renewable chemistry. Avantium is committed to a circular economy and only develops biobased materials that are in line with the principles of the circular economy. One of its innovations is a plastic called PEF made from plant residues instead of crude oil. A normal PET bottle takes 500 years to decompose, whereas a PEF bottle may degrade into compost in as little as one year.



Green bonds

Contribute to SDG 13: Climate action

ABP contributes to climate adaptation and resilience, including by investing in green bonds issued by the Dutch government. One of the ways the proceeds from these bonds are

used is to strengthen dikes and flood defenses to ensure that they meet strict new standards. The impact of climate change is particularly severe in poorer countries. Through green bonds issued by the French development bank AFD, we are helping to improve water management in countries such as Bangladesh and Cambodia.



Green bonds issued by Netherlands

Water Boards Bank

Contribute to SDG 14: Life below water

The Netherlands Water Boards Bank (NWB) uses the returns from green bonds to provide loans to the Dutch water boards (the public authorities responsible for flood protection, water management and water quality). Adapting to climate change has become one of their most important tasks. They do this through activities such as funding flood defenses and pumping stations, as well as taking part in biodiversity projects, such as dredging water beds, water treatment, water transportation, wastewater treatment, and the discharge of sewage sludge.



Westrock

Contributes to SDG 15: Life on land

Westrock is an American supplier of paper and packaging materials.

The company works with environmental specialists and family landowners to ensure that commercial forests are managed in a sustainable way. Westrock adheres to the principles of the Ellen MacArthur Foundation for circular design: efforts are made to minimize waste and pollution early in the process at the product design stage.

SFDR and IMVB covenant

In 2022, ABP gave further shape to the commitments under the European Sustainable Finance Disclosure Regulation (SFDR), which contains requirements on disclosures regarding the sustainability of investments. The SFDR report is included in an appendix to this annual report.

In the covenant on international socially responsible investment (Internationaal Maatschappelijk Verantwoord Beleggen, IMVB), the Dutch pension sector, government, trade unions and civil society organizations have set out agreements to prevent abuses in companies in which the sector invests. The covenant is based on the rules for multinational enterprises adopted by the Organization for Economic Cooperation and Development (OECD) and the UNGP. A summary of the results of engagement pathways completed in 2022 in the context of our inclusion policy, as agreed in the IMVB covenant, can be found on [our website](#). ABP also took part in the ‘deep track’ of the IMVB covenant, in which a limited number of pension funds jointly engaged with a technology company, a mining company and an online-platform company. For each pathway, a report describing the lessons learned is available on [the covenant website](#).

Tax behavior policy

Responsible tax behavior is an essential component of corporate social responsibility. It fits in with ABP’s wider investment convictions, in which we consider return, risk, costs and sustainability. The core elements of ABP’s tax behavior policy are:

- complying with laws and regulations;
- ensuring proper tax governance and transparency about taxation;
- promoting responsible tax behavior among parties with and in which we invest by entering into international partnerships with other (reputable and responsible) investors;
- acting in accordance with initiatives of supranational organizations in the area of taxation.

ABP ensures that its own tax liabilities are determined within these frameworks. In 2022, we had APG draw up a set of criteria which we use as a yardstick in reviewing our investments and engaging with companies.

ABP also initiated a dialogue with listed companies about the importance of responsible tax behavior. The structural dialogue which ABP initiated with other large institutional investors in 2019 (the Tax Platform) was continued in 2022 and has resulted among other things in ABP’s contribution to the European Commission’s public consultation on withholding tax. In addition, ABP contributed to public consultations on an individual basis and conducted open and constructive discussions with the European Commission (DG TAXUD). The purpose of this dialogue is to translate the EU’s political wishes into effective and efficient tax policy. To this end, ABP shares its knowledge and experience as an institutional investor. ABP is also in dialogue with other international institutions that promote responsible tax behavior.

In 2022, VBDO named ABP [the most sustainable pension fund investor for the fifth year in a row](#).

The current fragmented landscape of voluntary and mandatory public tax reports is driving the demand for one global standard. ABP is conducting discussions with relevant parties in order to explore the options for achieving one single standard.

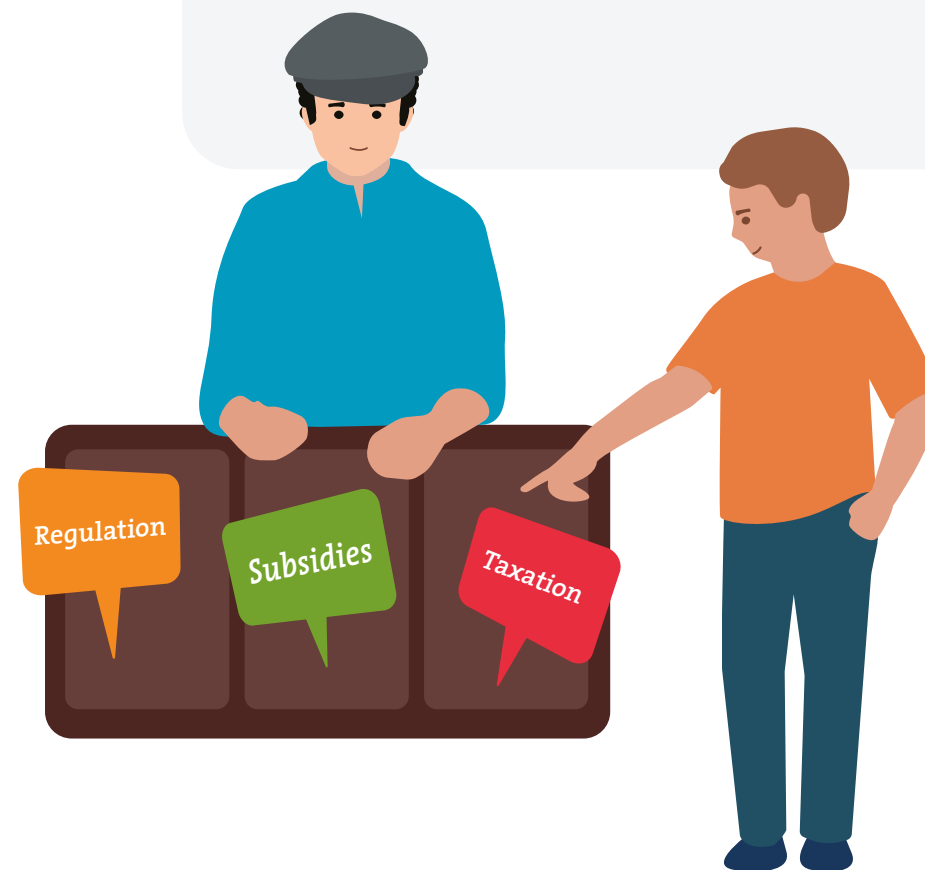
Apart from the social and governance aspects, ABP believes that the sustainability approach also has a link with taxation. In our view, policymakers have three instruments to bring about green behavior:

- regulation, such as prohibiting particular behavior or laying down reporting requirements;
- subsidies, to promote the investments necessary for the transition;
- taxation, in order to attach financial consequences to the negative impact of behavior on society.

Two of these three elements hinge on taxation, because governments need it to raise public revenue to fund expenditures (subsidies) and because it is an instrument to realize behavioral change (pricing/taxing). This makes taxation a key pillar of governments' sustainability policies, which is why we regard our own tax behavior policy as an integral part of improving sustainability for a livable world.

We plan to update our tax behavior policy in the next three years, with the aim to incorporate current developments in the areas of sustainability and taxation in this policy. In this context, we make a distinction between the minimum requirements to which our investments are subject and our ambitions. To this end, we maintain an active dialogue with parties such as listed companies, institutional investors, regulators and other standard setters, and NGOs. We also participate in the dialogue on tax reporting standards, for example through consultations and informal discussions. In addition, we take the initiative to bring parties together.

How do we bring about green behavior?



100 years of ABP – With a good pension, we can go further



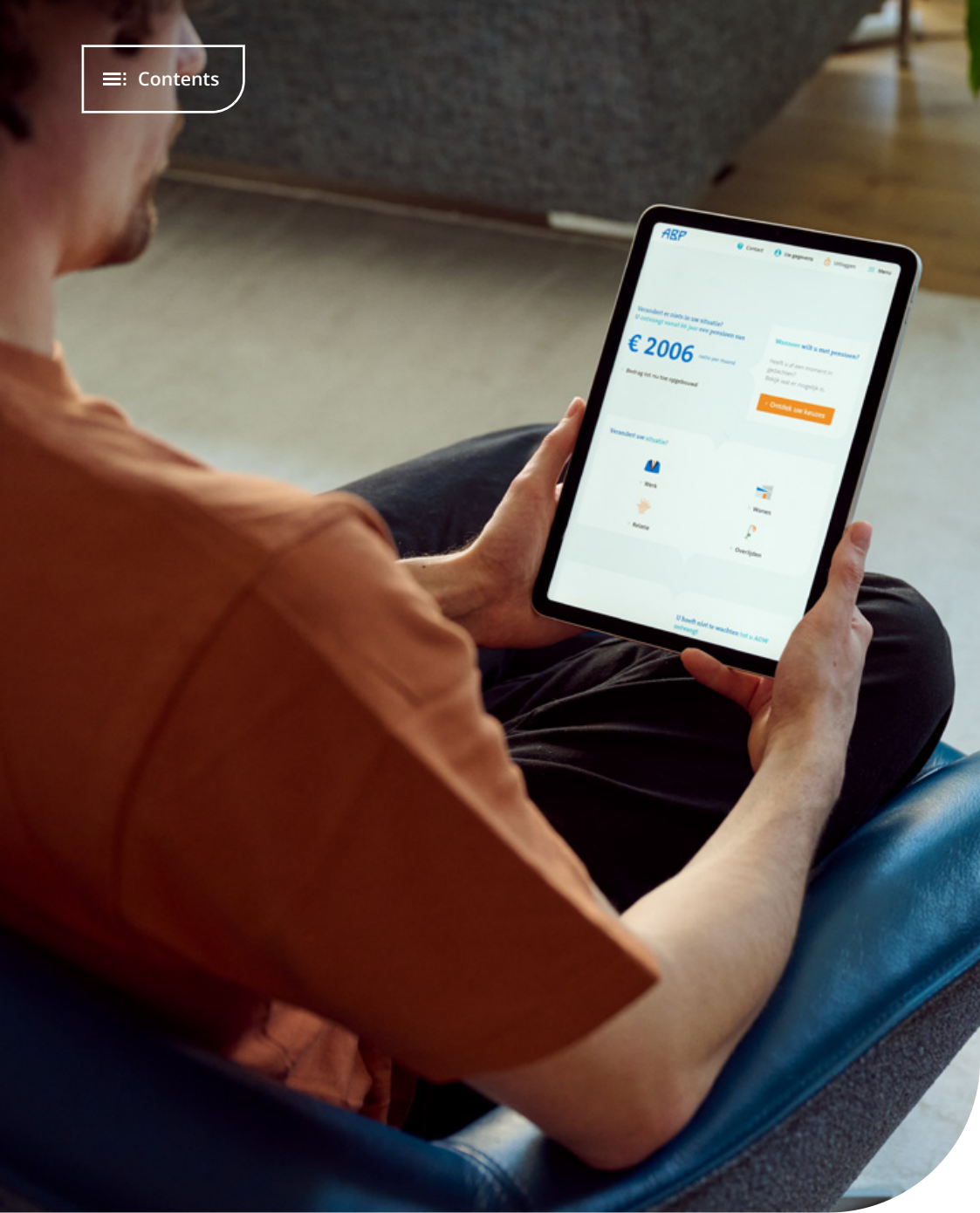
‘ABP can start a larger movement’

Anita de Horde
 Founder of Finance for Biodiversity Foundation

Anita de Horde co-founded the Finance for Biodiversity Foundation. Starting in 2020 with a group of 26, the foundation now comprises 130 international financial institutions which have committed to contribute to nature and biodiversity conservation.

‘Briefly put, our foundation helps financial institutions improve the impact on nature and biodiversity through their activities and investments. So that they invest in a way that will help the world, rather than destroy it. Given the alarmingly fast decline in biodiversity and the threat to nature, social impact is now as just as important as financial indicators. ABP embraces this view and our pension administrator and asset manager APG has likewise committed itself to our promise: ‘we have a responsibility towards future generations and must invest our money responsibly’.

At the request of ABP, I took part in a stakeholder meeting regarding the new sustainable and responsible investment policy in the area of biodiversity in 2022. The meeting was attended by a mix of experts, including highly critical ones, and people really listened – it was amazing! I am pleased that ABP takes social impact seriously, has ambitions and is not afraid to pick up this gauntlet. In this way, they can set an example to other financial institutions and create a larger movement. ABP announced its new Climate Policy at the end of 2022. I am impressed with the plans and curious about the next ambitious steps in relation to biodiversity. Daring to take action, that is what matters.’



Working on solid foundations and a professional organization

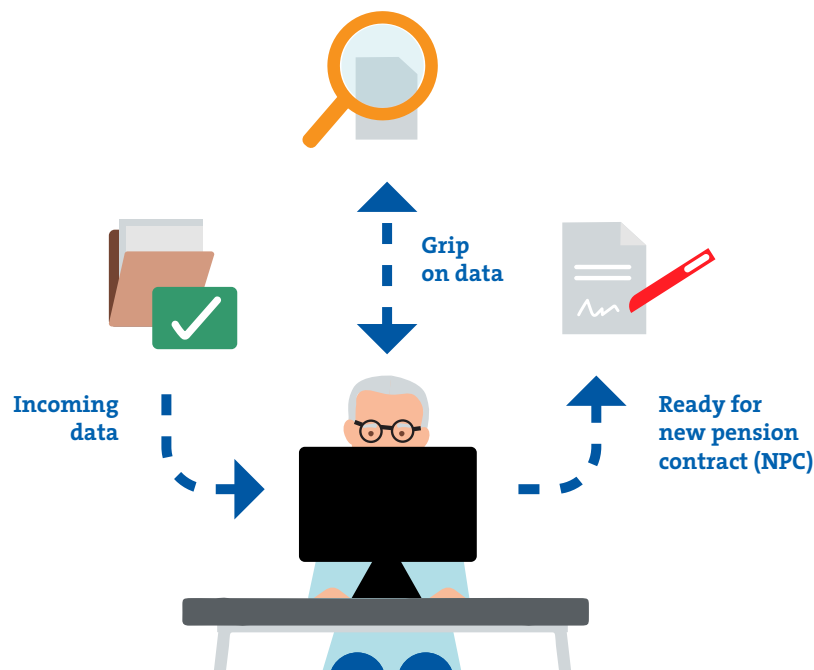
During the reporting year, we invested in the further professionalization of our organization. Much attention was given to improving our data and administrative processes. Other important aspects in this context are digital security and privacy. We also restructured the organization in line with the new governance model, while more firmly embedding our steering role in the collaboration with APG.

Data and processes in order

In recent years, ABP devoted much consideration to putting its data and processes in order. Our main task is to ensure that all current administrative processes function properly, so that participants receive what they are entitled to and everything is ready in time for the careful transition to the new pension contract (NPC). This will also help to restore confidence in the pension sector.

Three flows are distinguished where our data quality is concerned:

- all new incoming data must be good;
- inaccuracies in the existing administrative records must be remedied, which we do by means of the Grip on Data program;
- systems must be ready for migration to the new NPC.



Progress made on quality of new incoming data

We carefully analyze the accuracy, completeness and timeliness of new participant data which we receive from employers, government bodies and welfare agencies (Social Insurance Bank (SVB) and Employee Insurance Agency (UWV)). In addition, we carry out checks at employers in order to ascertain whether all employees have been registered and the correct salary has been communicated to ABP. We made further improvements to this process in 2022.

Progress on Grip on Data

In 2022, we prepared a new action plan for the Grip on Data program. This program was launched in 2019 in order to remedy the inaccuracies in the existing administrative records. These were due to causes such as incorrect manual entries in the past, incorrect data supplied by third parties and missing participant data in our administrative records. The current action plan, drawn up in 2021, proved to be incomplete. New search methods which prompted more thorough analyses revealed new inaccuracies. The new action plan describes the remedial actions to be performed so that ABP will be able to migrate responsibly to the NPC on January 1, 2026. In order to properly prepare for this migration, our administrative records will need to be in order by January 1, 2025. We have set the bar high and face major challenges, which we monitor carefully in collaboration with APG.

Subsequent payments in relation to concurrent service years dossier

ABP made over 50,000 subsequent payments to pensioners entitled to a higher pension on account of concurrent service years. Because the payment of this pension component was overdue, ABP paid statutory interest to compensate the financial loss incurred. Altogether, approximately €28 million was paid in statutory interest. Some participants also suffered a tax disadvantage, because the amount which they should have received spread out in the past was now paid as a lump sum. This put them in a higher tax bracket, for example, or meant that they were no longer eligible for tax rebates or allowances. ABP compensated this loss as well, which involved a total amount of approximately

€19 million. Around 24,000 pensioners with a tax disadvantage accepted the compensation we proposed; a small group opted to put forward their own substantiated proposal.

The total group of participants entitled to subsequent payments includes around 13,000 participants who received this subsequent payment in 2022. In the first half of 2023, we will also assess whether these participants sustained a consequential adverse tax impact.

Compliance with the Data Quality Standards Framework

In preparation for the transition to the NPC, the Federation of Dutch Pensions Funds (Pensioenfederatie) created a Data Quality Standards Framework. ABP made a substantive contribution to this framework. Among other things, this standards framework identifies critical data elements (CDEs). Pension funds have to assess the quality of these CDEs. For each CDE, the pension fund decides what data aberrations are acceptable in light of the transition to the NPC. In 2023, ABP and APG will determine the first key CDEs, which are expected to number more than 40. If it is found that these elements must still be remedied prior to the transition to the NPC, this will be done in the Grip on Data program. ABP and APG hold weekly progress meetings on this point.

Focus on digital security and privacy

In view of an increasingly digitalized society and a growing cyber threat, ABP has a strong focus on digital security and monitoring the privacy of participants and employers. In this area, too, we collaborate closely with APG. We constantly evaluate and improve our policies in areas such as cyber security and information security and the associated measures. In addition, we periodically review the effectiveness of the measures. For example, in 2022 APG conducted the periodical TIBER test together with DNB in order to assess the effectiveness of the cyber security measures.

Capacity is a challenge

All programs and actions in relation to our data quality require much time and knowledge. ABP has freed up a dedicated team for this purpose, which consults with the teams at APG. The capacity available at APG and the firm deadlines are a key concern for ABP's Board. During the reporting year, the Executive Board regularly discussed this aspect with APG's Management Board. The Executive Board also asked what APG might need from ABP in order to meet the deadlines set and guarantee the quality of the remedial actions. The tight labor market and the specific knowledge required to carry out the remedial actions are a point of shared concern in this respect.

In specific situations, the remedial actions will inevitably involve the use of remedial margins. An example of this is a difference in a participant's entitlements under two different APG systems. If this difference is less than €10 gross, we have opted to set the entitlement at the outcome most advantageous for the participant. Determining the exact value to the nearest cent would require a great deal of costly capacity on the part of APG. Through this approach, we ensure that our capacity is devoted to the major remedial actions, so that ABP will have its administrative records in order in good time for a responsible transition to the NPC.

Investing in the development of our organization

Organizational restructuring: a necessary intervention with impact

ABP restructured its organization in 2022, starting with the introduction of a new governance model (discussed in more detail in the [‘Governance’](#) section). We opted for more direct management in order to bring the organization in line with the new governance model and increase its agility. This organizational restructuring had a major impact in an already eventful and busy year. It was an intensive process, in which employees participated and contributed ideas in a joint effort to give shape to the ABP of the future: an organization that is ready to face both current and future challenges. In consultation with the Executive Board, the HR department and external support, the needs of the organization and its employees were considered at great length. A number of colleagues decided to continue their careers elsewhere. ABP provided these employees with guidance. Obviously, we are grateful for their contributions.

Growth of our employees

For a knowledge-intensive organization like ABP, committed employees are essential. One of our priorities is ensuring the long-term employability of our staff. To this end, we link ABP’s professional mission to the personal ambitions of our employees. In order to provide staff with the best possible support, we updated our job classification system and job profiles in 2022. As part of this, we also updated the job titles in collaboration with our employees. In doing so, we not only focused on the organization’s current and future needs, but also on the creation of logical and challenging opportunities for career advancement. We completed this process with a kick-off for the new organization.

ABP encourages employees’ continuous development, including by enabling them to attend seminars, take courses or receiving coaching. The HR cycle of planning, performance and appraisal was updated in 2022.

The new HR cycle is primarily about looking ahead and coaching employees in their development. The appraisal process has been disconnected from remuneration to create space for meaningful discussions. We want to continue this process in 2023, with the main focus being on the personal development of our employees.

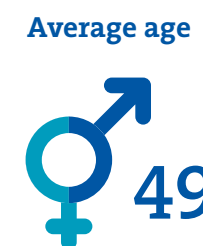
ABP’s organization at a glance

Data as at December 31, 2022



Age distribution

15-25	0	0
25-35	4	1
35-45	4	2
45-55	7	3
55 and over	6	12
Total	21	18



Staff turnover

Inflow	9
Outflow	12

Number of staff members who left ABP following the reorganization 4

Diversity enriches our organization

The Board is convinced that diversity enriches our organization. Diversity is always a fixed element and a topic of discussion in the procedure for recruiting and selecting Board members and employees. In this respect, the added value that a new candidate profile may provide is the crucial factor. The plan for 2022 was to update and broaden ABP's diversity policy, but unfortunately we were prevented from doing so this year by the urgent developments that required much of our attention, including the two pension increases and the introduction of the new governance model. This subject is now on the agenda for 2023.

Balance in hybrid working

After the measures during the Covid pandemic, we tried to find a new balance in hybrid working in 2022. Our employees all have well-equipped home offices. At the same time, ABP invested in the Heerlen and Amsterdam offices to provide an inspiring work environment that encourages collaboration. In each team, agreements have been made about the ideal combination of working from home and at the office.

Employee engagement survey

ABP conducts an employee engagement survey every year. The outcomes in 2022 were largely the same as those in the previous year. Employees experience pride and trust in each other, and feel appreciated by their colleagues. The survey provides the Board with valuable reference points for making improvements. Thus, we will continue to devote time and attention to work stress management and internal communication.

Further professionalization of collaboration with APG

During the reporting year, we also took steps to further professionalize the collaboration with APG as part of the new organizational structure. ABP is the principal and determines the policy, while APG is the *trusted advisor* and pension administrator. Because our new organizational structure and management entailed a change to processes, we devoted extra attention in 2022 to clearly expressing our expectations, wishes and requirements in our role as principal. We do so both at Board level and in our operations. We ensure that potential bottlenecks can be discussed. As part of this, we focus on our shared priority: the interests of our participants and employers. The ABP Participant Compass (Deelnemercompas) and Employer Compass (Werkgevercompas) provide guidance in this respect.



How ABP manages risks

We strengthened our risk management during the reporting year, among other things by introducing first-line risk reporting and setting up a new internal control framework. In this section, we also explain what risks received particular attention in 2022 and what measures were taken.



What our risk management looks like

In the context of the introduction of new the governance model and the new Key Function Holder for Risk Management, the risk management framework was adjusted and tightened. This framework consists of a number of fundamental, directly interrelated risk management building blocks. In this section, we briefly explain those elements and indicate what was changed and improved in the reporting year.



Governance and organization

ABP has based its risk management on the *three lines of defense model*; the design of this model was not changed in 2022.

First line

The Executive Board is responsible for the day-to-day operations and the associated risks.

Second line

The Key Function Holder for Risk Management (KFH RM) has an independent position and is responsible for providing a counterweight to the first line. The KFH RM gives an independent opinion on the effectiveness of ABP's risk management. The Key Function Holder for Risk Management closely consults with the Key Function Holder for Actuarial and with the Compliance Officer.

Third line

The Key Function Holder for Internal Audit checks whether the interaction between the first and second lines is functioning correctly and gives an objective, independent opinion on this.

Culture and conduct

Culture and conduct are important pillars in successful risk management. It starts with our Board, which largely sets the tone in terms of an alert and open organizational culture and which should set the right example for responsible and ethical behavior. In implementing the new governance model in 2022, we gave particular consideration to the (new) division of duties within the Board. In addition, we tightened the policy on ancillary positions and updated the Code of Conduct, which was then signed by all ABP employees and direct stakeholders. For more information, see the ['Governance' section](#).

Risk taxonomy

Environmental risks

- Support among participants, employers and other stakeholders
- Economic and social developments
- Financial trends

Strategic risks

- ABP services
- Pension as an attractive employee benefit
- Good pension for the future

Risks to solid foundations

- Governance and organization
- Operational implementation
- Reporting

Risks to ethical foundations

- Culture
- Behavior
- Compliance

Risk strategy and appetite

Risk principles remained unchanged

The goal of ABP's risk management is to create and protect value. ABP's proactive and integrated risk management ensures that the risks that threaten the realization of ABP's strategic goals are identified, analyzed, and controlled. We have adopted six guiding risk principles that apply to all our activities and which were not changed in 2022:

- Our risk management distinguishes between risks taken with the aim of generating a return and risks arising from the performance of our core duties.
- We strive to create a culture that does justice to risk management, and as the Board we promote the importance of risk management in our words and our deeds: the tone at the top is critical. We ensure that risk management is integrated in the day-to-day work at all levels in the organization.
- Decision-making is always preceded by an adequate risk assessment, with transparency regarding the relevant facts on which the decisions is based. The probability and impact of identified risks are always assessed in advance, and risk management must be in line with our risk appetite.
- Risk management is an inseparable part of the primary processes. Risks are allocated to the logical portfolio owner and are independently monitored.
- We apply the principle of proportionality when implementing controls: the advantages must outweigh the costs.
- Risks are constantly changing. We act on new and changing risks.

What risks we identify

ABP has divided the risks into four main categories. The diagram below shows to what extent we are prepared to accept risks in each category and how we assessed these risks during the reporting year.

Assessment of risks against risk appetite

Sub-strategy	Risk appetite	Risk assessment
<p>1. Our pension management (administration and communication) is focused on the experience of participants and employers</p>	<ul style="list-style-type: none"> ● Low BP is <i>not</i> prepared to run the risk of being overtaken by the market and disappointing participants and employers who feel that they are no longer at the center. ● Low ABP is <i>not</i> prepared to run the long-term risk of inadequate agility to deliver future-proof services. 	<ul style="list-style-type: none"> ● Low ABP received a score of well over 72% on participant satisfaction. The CES score from employers rose to 97%. We continually work on improving our services based on feedback from participants who have a complaint. This helped to reduce the number of complaints submitted in 2022 compared to 2021.
<p>2. Our asset management delivers an optimally sustainable and responsible return</p>	<ul style="list-style-type: none"> ● Low ABP is <i>not</i> prepared to run the risk of being unable to make an active contribution to a sustainable and responsible world and intends to achieve this with sustainable and responsible investments. ● Low ABP is <i>not</i> prepared to run the risk of inadequate accessibility of investment data in any circumstances, including circumstances that are not foreseeable at present. 	<ul style="list-style-type: none"> ● Low ABP took the first steps in 2022 to tighten and accelerate its Sustainable and Responsible Investment policy. This year, we have further embedded sustainability in our investment tenets and we exercise our voting rights at shareholder meetings.
<p>3. Our pension scheme is simple, controllable, and explainable</p>	<ul style="list-style-type: none"> ● Average In the short term, ABP is prepared to run an <i>average</i> risk of negative sentiment and of limited deviation in monetary claims for individual participants, if improvements in data quality lead to an inappropriate impact for the collective interest. ● Low ABP is <i>not</i> prepared to run the risk that participants do not receive the pension to which they are entitled or do not have adequate insight into their pension. 	<ul style="list-style-type: none"> ● Average Our most important task is to ensure that all current administrative processes are sound, so that participants receive what they are entitled to and everything is ready on time for the careful transition to the new pension contract (NPC). A more comprehensive explanation is included in the 'Data and processes in order' section on page 69.
<p>4. Our financial structure has an equilibrium between contribution, certainty, and ambition</p>	<ul style="list-style-type: none"> ● Low ABP is prepared to run a slight risk that the long-term ambition of a 100% pension result will not be achieved. ● Average In the short term, ABP is prepared to run an <i>average</i> risk that pension entitlements will need to be reduced. 	<ul style="list-style-type: none"> ● Long Term: High Due to the maximum indexation arrears of 19.95%, we do not expect to achieve a 100% pension result in the long term. A more comprehensive explanation of the pension increase in 2023 is included in the 'Adding value for participants and employers' section on page 33. ● Short Term: Average The funding ratio at year-end 2022 was 110.9%, which means there is an average risk of pension reductions.
<p>5. We are committed to a good pension system in the Netherlands</p>	<ul style="list-style-type: none"> ● Average ABP is prepared to run an <i>average</i> risk of negative sentiment due to a position adopted by ABP on the modernization of the pension system. ● Average In the short term, ABP is prepared to run an <i>average</i> risk that an adopted position disrupts the dialogue with stakeholders. 	<ul style="list-style-type: none"> ● Average The transition to the new pension system is one of the biggest in our history. The confidence of participants and employers in the pension system as a whole and in ABP in particular is paramount. ABP has a duty to ensure the controlled and harmonious execution of this major task, within the specified deadline.
<p>6. We are the pension experts, including in pension innovation</p>	<ul style="list-style-type: none"> ● Average ABP is prepared to run an <i>average</i> risk of missing out on radical innovations that can potentially determine the relevance of ABP in the long term. ● Low ABP is <i>not</i> prepared to run the risk of missing out on process and product innovations in the short and medium term. 	<ul style="list-style-type: none"> ● Low ABP is committed to digital security and adequately protecting the privacy of our participants. Policy in areas such as cybersecurity and the corresponding measures are evaluated and improved on a continuous basis.
<p>7. We have a professional Board with very broad support</p>	<ul style="list-style-type: none"> ● Low ABP is <i>not</i> prepared to run the risk of insufficiently solid foundations in the short and medium term. Therefore, ABP is not prepared to run the risk of inadequate data quality in the short or medium term. 	
<p>8. We have a grip on activities outsourced to APG</p>	<ul style="list-style-type: none"> ● Average ABP is prepared to run an <i>average</i> risk that the construction drawings of the solid foundations do not anticipate every conceivable scenario in the long term. 	<ul style="list-style-type: none"> ● High The quality of the data in our pension administration is a continuous item of attention for Risk Management. Our data quality policy focuses on three aspects: getting our administration in order, keeping our administration in order, and getting it ready for the new pension contract (NPC). ABP and APG are working closely together in a major program to improve our administration.
<p>9. Our internal operations are in order</p>		

Risk policy and process

Our risk management is characterized by a systematic, iterative approach: the evaluation of a building block (see the illustration earlier in this section) suggests potential improvements not only for that particular building block but also for the other building blocks. This creates a continuous improvement process in the area of risk management.

Risk Self-Assessment Manual

We drew up a manual for Risk Self-Assessments during the reporting year. This manual gives an additional impulse to the quality and uniformity of our risk management process. We used the manual in 2022 within the NPC program and for data quality purposes.

Tightened comprehensive crisis management plan

We updated the integrated crisis management plan during the reporting year. We do so on a regular basis, and the introduction of the new governance model provided a good opportunity. We also wanted to include the lessons learned from a crisis simulation exercise held earlier. The plan clearly describes what ABP regards as a crisis and how we want and need to act in such a situation. The plan comprises a wide range of scenarios and examples, as well as a detailed working procedure for the various roles in the organization. Cyber security is also a key part of the plan.

Own risk assessment

Since January 2019, pension funds are required to carry out a periodical own risk assessment (ORA) and share the results of that assessment with the regulator, the Dutch central bank (DNB). An ORA must be performed every three years, or as soon as possible after a change in the risk profile. A regular ORA will be carried out again in 2023.

Risk monitoring and reporting

Improved design of integrated risk reporting

To aid the further development of risk management, the General Board adopted the improved design of integrated risk reporting in 2022. One of the improvements is that the reports now include the second-line opinions. This gives the Board a better understanding of the development of risks and the effectiveness of the controls. This updated design will be applied from 2023 and developed further where necessary.

Data and systems

Improvement of internal control framework

Administrative, support and control operations relating to the workflows within the ABP organization and in the interaction with APG are time-consuming. During the reporting year, we made preparations for a new internal control framework. This framework provides insight into the workflows and ensures that we can check better and faster whether everyone within ABP observes and correctly applies the agreed controls. The reason why we developed this framework is directly associated with the adjustment to the governance model and the restructuring of our organization. After all, these changes also have an impact on the design, existence and operating effectiveness of the risk management and control systems.

A workflow management system will be developed in line with the framework. This system will ensure that everyone has access to the same up-to-date information at all times, which will collaboration more efficient. As registration will take place directly at source, fewer data will need to be recorded and checked in the interim. Moreover, errors will be flagged up in time due to built-in checks and balances and will therefore be quicker and easier to rectify. We carried out a detailed assessment during the reporting year. This

provided us with a clear understanding of the improvements to be made in the efficiency and effectiveness of processes within the ABP organization. The implementation of the system has been scheduled for 2023. We are developing the system in consultation with APG to ensure that our respective systems are properly aligned, which will facilitate collaboration and control.

Key themes and focus areas in 2022

Increase in pensions

For the first time in years, ABP was able to increase pensions again in 2022. This was an important topic also from a risk management perspective: we devoted much attention to weighing up the interests of all stakeholders, also with a view to the impact of the transition to the new pension contract. We also took into account the importance of timely, clear communication about the decision, and what it means for participants and employers.

Interest-rate exposure of the funding ratio

Like most other pension funds, ABP has partly hedged the interest-rate risk. If investment returns are positive and market interest rates go up, the funding ratio will rise. If investment returns are negative and interest rates go down, the reverse applies. For example, if the interest rate falls quickly by one percentage point at the beginning of 2023 and the marketable securities in our portfolio do not rise in value, the funding ratio will fall from 111% to 99%. The table shows the interest-rate exposure of the funding ratio in more detail.

Interest-rate exposure of the funding ratio

Change in the market interest rate

Return on marketable securities	-1.0%	-0.5%	0.0%	0.5%	1.0%
30%	117%	124%	131%	138%	145%
20%	111%	117%	124%	131%	138%
10%	105%	111%	118%	124%	130%
0%	99%	105%	111%	117%	123%
-10%	93%	99%	104%	110%	116%
-20%	87%	92%	98%	103%	108%
-30%	81%	86%	91%	96%	101%

Investment in general

The risk appetite for our investments reflects how ABP weighs up the extent of investment risk in qualitative and quantitative terms against the contribution and the ambition of the fund. We redetermined the risk appetite in 2022, based on regulations issued by DNB and in consultation with the Accountability Body. In doing so, we further tightened the short-term quantitative risk appetite. The action plan drawn for this purpose in 2021 had been largely implemented by the end of 2022. The tightened risk appetite was taken into account in the ALM study carried out in 2022. Because the world is changing before our eyes, we used updated scenarios so as to keep the risk management as realistic as possible.

ABP's investment convictions were renewed in 2022 and published on [our website](#). These convictions form the foundation for our investment process. Although it is the first line that is responsible for determining the revised risk appetite and the new investment convictions, Risk Management was also involved in this process.

Furthermore, we considered the seismic changes in the financial markets and the effect of these changes on the investment portfolio, and therefore also on the derivatives portfolio, from a risk management perspective. These changes caused major problems at pension funds in the United Kingdom. ABP performed stress tests to monitor whether the fund can weather such shocks. These tests revealed that ABP is able to withstand them.

Sustainable and responsible investment

Risk management is an integral part of all ABP's policy plans. When adopting the new, tightened elements of our Sustainable and Responsible Investment Policy, we again identified the risks and took appropriate measures where necessary, which measures have been embedded in the policy. Risks are assessed in all the stages of decision-making and considered from various perspectives, including in terms of return, social impact, environmental and climate impact, communication, level of support among our stakeholders, and feasibility. More information on this is provided in ['Contributing to a livable world' section](#).

Risk management is an integral part of ABP's new climate policy, which explicitly addresses climate risks (as explained in more detail in the ['Contributing to a livable world' section](#)). In drawing up this new policy, we devoted much attention to mitigating potential reputational risks and how operational consequences translate within ABP and APG.

ABP monitors the climate risks by means of a dashboard that uses short-term, medium-term and long-term data and scenarios. There is no standardized method just yet for measuring climate risks, but ABP has developed its own method in consultation with APG, with input from external consultants and our investment experts. The dashboard helps us keep track of these crucial risks, both to society and to our investment portfolio, and take targeted action where required.

Cyber resilience and privacy

Risk Management keeps a close eye on cyber resilience and privacy. Information security was constantly on the agenda in 2022, as explained in more detail in the box on page [70](#).

Data quality

The quality of the data in our pension administration is a continuous item of attention for Risk Management. Our data quality policy focuses on three aspects: getting our administrative records in order, keeping our administrative records in order and preparing our administrative records for the new pension contract (NPC). In this context, we comply with the Data Standards Framework laid down by DNB and the guidelines of the Federation of Dutch Pension Funds.

By the middle of 2022, a new action plan was drawn up to improve our administrative records. The basic principle is that participants receive what they are entitled to. To this end, the following aspects are also taken into account:

- Costs – these must be justifiable in relation to the size of the group of participants concerned;
- Time – given that the new pension system will be introduced on January 1, 2026, we must be ready by January 1, 2025 to carry out trial migrations and report on them to DNB.

ABP and APG are working closely together in a major program to improve our administrative records. We will inform the participants for whom remedial actions are required, as comprehensively and as early as possible.

For more information, see also the ['Working on solid foundations and a professional organization' section](#).

New pension contract

The introduction of the new pension contract (NPC) is a major and complex project. Among other things, it affects our support base of participants and employers, our processes, and our IT systems and data quality. ABP has initiated a major program to ensure careful implementation, with a risk self-assessment (RSA) as a fixed element that is updated each quarter. These RSAs will help ABP to identify the most important risks relating to the introduction of the NPC. We further refined and improved the RSA process in 2022 in order to obtain an even better understanding of the risks associated with the introduction of the NPC and take action in time.

Fraud prevention

The Board sets great store by fraud prevention, with a view to protecting the interests of participants and employers and safeguarding ABP's reputation as a reliable pension fund. In 2022, ABP updated the Code of Conduct (as described in more detail in the section [on our governance](#)), and appointed a new independent confidential counselor in order to make confidential notifications as easy and hassle-free as possible. ABP also monitors its outsourcing partners in various places in order to detect potential fraud. Thus, we investigate suspicions of fraud on a case-by-case basis to determine whether fraud has indeed been committed. Furthermore, we have introduced controls to prevent and combat fraud, including mandatory four-eye checks, a fraud help desk, adequate segregation of duties and employee screening.

Collaboration with APG

The introduction of ABP's new organizational and governance structure also entailed a change to the outsourcing risk. ABP has tightened its management of the outsourcing policy and processes, focusing on how ABP can remain in control and, for example, on how to deal with any subcontracting by APG, which is to be discussed with APG. These risks have our constant attention and are also regularly discussed with DNB.

In-Control Statement

The Board's In-Control Statement for 2022 is based on the above-mentioned developments and activities in the area of risk management at the fund and the pension administrator.

ABP's Board is responsible for the fund's financial position and hence for the design, existence, and operating effectiveness of the risk management and control systems. The purpose of these systems is to monitor progress on the achievement the pension fund's strategic, operational, financial and compliance objectives and to enable reliable financial reporting. Furthermore, these systems are designed to identify and mitigate the risks that the pension fund takes and to which it is exposed as a result of the environment in which it operates. The risk management systems also have to ensure strict compliance with relevant laws and regulations. The Executive Board periodically discussed its assessment of the design, existence, and operation of the fund's risk management and control systems during 2022.

The internal risk management and control systems are designed to provide reasonable assurance with regard the identification and management of risks. The systems cannot provide absolute assurance that the strategic, operational and financial objectives will actually be achieved, nor can the systems prevent all material errors and instances of fraud or non-compliance with relevant laws and regulations. The Board has taken measures to mitigate the impact of the aforementioned risks as much as possible. The Board notes that due to the nature of the pension fund's activities, some risks, such as those relating to demographic changes and developments in the financial markets, are beyond its control.

ABP adjusted and tightened the risk management framework in 2022 by introducing the new governance model, redefining the key functions based on the 'three lines of defense model', and designing a new internal control framework. The Board discusses the fund's risk management partly on the basis of the design for integrated risk reporting, which was improved in 2022, and the key function holders' reports. In addition, the Executive Board's responsibilities include giving an independent assessment of the fund's own risk management and of the risk management performed by the pension administrator in respect of the outsourced processes. The external auditor advises ABP on the basis of findings from regular audit procedures and specific audits conducted at the request of ABP. ABP also engages other external parties for specific audits. The pension administrator has in place a comprehensive control framework of process descriptions, controls and test reports to safeguard and maintain effective risk management. The results of the assessment of this control framework, including the management statements issued by the pension administrator's executive board and senior management, ISAE 3402 type II and ISAE 3000 reports, and periodical reports, as well as the fund's own risk management, provide the Board with a sufficient basis for its own In-Control Statement (ICS).

The Board's In-Control Statement for 2022 makes an explicit statement on the quality of the risk management and control systems that safeguard the achievement of the fund's financial reporting objectives. The decision to focus on financial reporting in the In-Control Statement was partly prompted by international societal developments in relation to reporting around internal risk management, and by the Dutch Corporate Governance Monitoring Committee's recommendations on the best practice provision in Dutch Corporate Governance Code regarding the In-control Statement. This In-Control Statement concerns the financial reporting risks relating to the financial statements 2022, the figures presented in the Board report 2022, the Z score for 2022, the annual reporting for 2022 to DNB, and the quarterly reports for 2022.

Based in part on the In-Control Statements for 2022 received from the pension administrator, that Board declares that the internal risk management systems are designed to control the strategic, financial, operational and compliance risks relating to the achievement of ABP's objectives.

With respect to the financial reporting risks, the Board declares that given the scope described above, the internal risk management and control systems in 2022 provided reasonable assurance that the aforementioned financial reporting products contain no material misstatements that could have an effect on ABP's ability to continue as a going concern.

100 years of ABP – With a good pension, we can go further



‘Clarity is a key concern’

Eric van Boven
Member of the Accountability Body

In addition to his daily work as HRM manager at University Medical Center Groningen, Eric van Boven regularly devotes more than one day a week to his role on the Accountability Body. In 2022, he was elected for a third term as a representative of the employees – and before that he was even involved in the precursors of the current Accountability Body.

‘The fact that pensions get us further is undeniable: when you stop working, you want to go on living the way you did and keep enjoying yourself. This can be difficult on just a state pension. Through my role on the Accountability Body, I want to help ensure that participants receive the best and fairest pension possible. We advise and challenge the Board. In 2022 we did so with respect to the pension increase, for example. I think that the Board did the right thing: after years without an increase, there was now space for doing so. The Board considered its decision carefully, and clearly explained its reasons.

The new pension contract will be one of my personal priorities in the coming period. The transition of the existing rights to the new system of pension assets must be organized properly, so as not to disadvantage future generations. The greatest challenge for me is explainability: the NPC must also make pensions more understandable for participants. As well as striking a balance between the interests all target groups, this is another aspect which the Accountability Body will monitor closely. Soon a plethora of new specific rules will apply, and it is important that everyone understands what is happening.’

The first year with a new governance model

2022 was the first year in which ABP was run under the new one-tier governance model, with a General Board consisting of an independent Executive Board and a Non-Executive Board that represents the interests of the social partners and pensioners. This is also known as a 'inverted mixed' governance model. We performed an interim evaluation halfway through 2022, followed by an in-depth evaluation in the first quarter of 2023. The outcomes and other relevant developments in relation to our governance will be explained in this section.



Legal structure

Stichting Pensioenfond ABP was founded in 1922, with its registered office in Heerlen, the Netherlands; ABP was privatized in 1996. ABP operates only in the Netherlands and is a foundation incorporated under Dutch law, in accordance with the statutory requirements for pension funds. The foundation is registered with the Chamber of Commerce under number 41074000. The articles of incorporation were last amended on January 1, 2022, due to the transition to the new inverted mixed governance model. The pension regulations were last amended on October 1, 2022. The administration of the pension scheme is placed with APG Groep N.V., in which ABP holds 92.16% of the shares. ABP has been a Public Interest Entity since January 1, 2020.

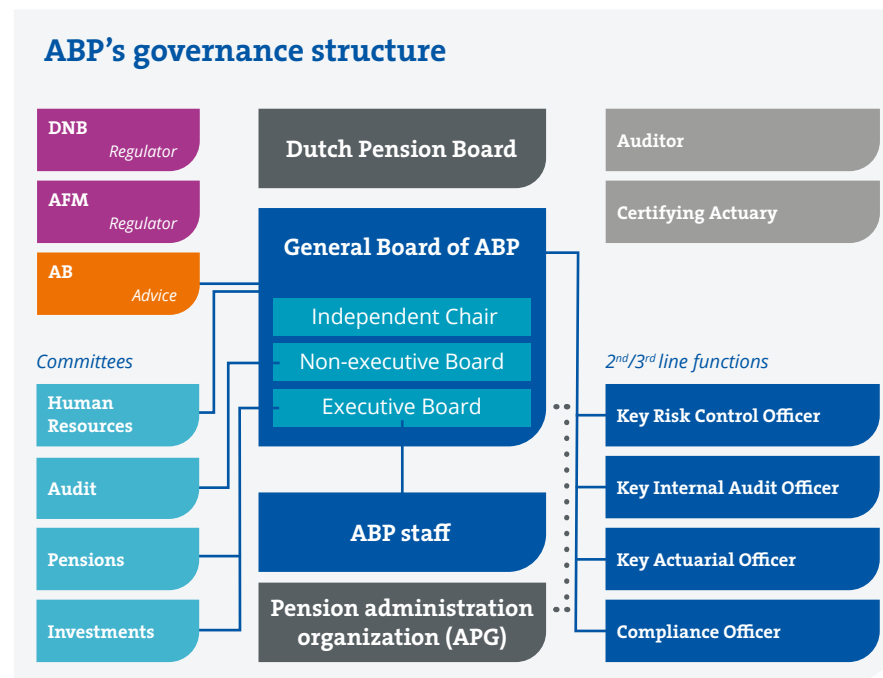
De Nederlandsche Bank (DNB, the Dutch central bank) is the external prudential supervisor of ABP. The duty of DNB is to safeguard the stability of the Dutch financial system. ABP reports to DNB on compliance with regulations that promote financial soundness. The Dutch Authority for the Financial Markets (AFM) supervises ABP's market conduct, such as our compliance with our statutory obligation to issue pension statements.

ABP's governance structure

From January 1, 2022, ABP's governance is based on the so-called inverted mixed governance model, which is more in line with the challenges facing ABP (for more detail, see the 'Our environment in 2022' section). This decision was prompted by a number of reasons.

- A clearer delineation of responsibilities will contribute to more strategic management, faster decision-making, and greater efficiency;
- Three full-time Executive Board members can manage the fund on a daily basis and give shape to the collaboration with APG to ensure the best possible pension administration;

- The design of the new governance model helps us give shape to the social and public function of ABP as a financial institution. In this context, the interaction with our environment – including our social partners – is of vital importance.



General Board

The General Board is responsible for the strategy and policy of ABP. The General Board consists of an Executive Board and a Non-Executive Board. The Chair of the General Board, Ms. C. Wortmann, has a liaising role between the Non-Executive Board and the Executive Board.

We follow a set procedure in recruiting and selecting Board members. First, the Non-Executive Board draw up a job profile, which in addition to a general part contains specific provisions on the knowledge, experience and

competences required for the vacancy. The HR Committee performs all the preparatory work. We request the nominating organization to nominate a candidate on the basis of the adopted job profile. Once the nomination has been received, it is reviewed by the General Board, which subsequently takes a substantiated decision on the appointment. The appointment of the independent Chair does not involve a nomination by the social partners or the pensioners’ representatives. Based on the profile adopted, this person is selected by an ABP selection committee applying its own recruitment and selection procedure, and proposed to the General Board for appointment. In all cases, the appointment is made by the Board subject to approval by DNB. After DNB has assessed the candidate, the appointment can be finalized.

Executive Board

The independent Executive Board has three members:

- Harmen van Wijnen, Chair;
- Yolanda Verdonk-van Lokven, responsible for pensions;
- Dominique Dijkhuis, responsible for investments.

Loek Sibbing taking over chairmanship baton from Corine Wortmann

Effective March 7, 2023, Loek Sibbing (63) has been appointed independent Chair of the General Board of ABP. He has succeeded Corien Wortmann, who stepped down effective January 1, 2023. Loek Sibbing has been a member of ABP’s Board since 2019. He has many years’ international experience in management and supervisory roles at pension funds, institutional asset management companies, and investment funds.

The Executive Board is tasked with preparing and implementing ABP’s strategy and policy. In addition, it is responsible for the daily management of the fund. The various portfolios are divided between the three members: Legal, HR and Organizational Development, IT and Data, Finance, Communication, Public Affairs, and Internal Control. The Executive Board reports to the General Board.

Non-Executive Board

The Non-Executive Board carries out the internal supervision, which includes supervising the activities of the Executive Board. Important topics addressed by the Non-Executive Board are adequate risk management and a balanced consideration of interests by the Board. Among other things, the Non-Executive Board formulates a supervision plan and holds separate meetings. The Non-

Retirement schedule

ABP Board of Trustees	Board member	End of term
Mw. C.M. Wortmann-Kool	Non-Executive Board	01-01-23
Mw. C.M. Mulder-Volkers	Non-Executive Board	01-04-23
Dhr. X.J. den Uyl	Non-Executive Board	01-04-23
Dhr. A. van Vliet	Non-Executive Board	16-02-24
Dhr. A. Boonen	Non-Executive Board	01-01-25
Dhr. P. Fey	Non-Executive Board	01-05-25
Mw. A. Gram	Non-Executive Board	01-06-25
Dhr. P. Rosenmoller	Non-Executive Board	01-12-25
Dhr. H.J. van Wijnen	Executive Board	01-01-26
Mw. D. Dijkhuis	Executive Board	01-01-26
Mw. Y. Verdonk - van Lokven	Executive Board	01-02-26
Mw. V. van der Meer – Gangapersadsing	Non-Executive Board	01-04-26
Dhr. A. Slager	Non-Executive Board	01-06-26
Mw. M. ten Kroode	Non-Executive Board	14-11-26
Mw. K. Nauta	Non-Executive Board	01-03-27
Dhr. A.J.M. Sibbing	Non-Executive Board	07-03-27

Executive Board renders itself accountable for the performance of these duties in this annual report.

The Non-Executive Board consists of 13 members, including the Chair of the General Board. Nine members are nominated by the social partners (employers and employees) and three by the pensioners' representatives in the Accountability Body. The Chair is appointed by the General Board.

Committees

The Pensions Committee and the Investments Committee are responsible for preparing strategy and policy in these key policy areas. Accordingly, these preparations need not involve the entire General Board and duties are allocated among the General Board members. The committees also act as a sounding board for the Executive Board. Both committees consist of a combination of at least one Executive and four Non-Executive Board members of the General Board.

The Audit Committee supports the Non-Executive Board in the performance of its supervisory duties. This committee consists of three Non-Executive Board members and three external members.

The duties of the HR Committee include preparing policy regarding fitness and remuneration of ABP's Board members and senior management, and supporting the General Board in formulating job profiles and in recruiting and selecting Board members, key function holders and the external members of the Audit Committee. The HR Committee handles the preparations for the evaluations of the General Board and the Non-Executive Board and holds annual performance appraisal interviews with the Executive Board members.

The various key function holders may attend these meetings when they consider this useful.

Key function holders

ABP had three key function holders in 2022. The position of Key Function Holder for Risk Management is an internal position; Veronique Achmad took up this role in 2022. The Key Function Holder for Internal Audit (Tijds Wolffenbuttel) was appointed in 2022 as well. The position of Key Function Holder for Actuarial was already an external position (held by Rob Schilder of Willis Towers Watson), and this remained unchanged in the reporting year.

Accountability Body

The ABP's Accountability Body consists of 48 members, divided between various groupings:

- 19 members representing employees;
- 13 members representing pensioners;
- 16 members representing employers.

The Accountability Body's principal duty is to advise the ABP Board. This usually involves mandatory requests for opinion on matters set out in the Accountability Body's Regulations (Reglement verantwoordingsorgaan), such as the adoption and amendment of the contribution policy, recovery plans or the Strategic Investment Policy. If no unanimous opinion can be reached, the Accountability Body issues an opinion supported by the majority. Such an opinion will include the dissenting views as well.

Each year, the Accountability Body gives its opinion on the actions of the Board, including the investment policy conducted by the Board and policy choices it made for the future. This opinion is included in the present annual report. The Accountability Body also provides the Board with solicited and unsolicited advice on policy. In addition, the Accountability Body reviews whether decisions are balanced and in line with ABP's core values.

Once every four years, some members of the Accountability Body are elected in elections in which those represented can vote; only the 16 members

representing the employers are appointed by employers' organizations. Elections were held by the middle of 2022. These elections went well, with all those involved cooperating in a pleasant and constructive manner. All ABP's active participants and pensioners were notified at the time of the nomination of candidates, and subsequently via a notice of election. A total of 154 candidates took part (83 participants, 71 pensioners), and 180,215 votes were cast (with a turnout of 8.5%). After their appointment, the new members attended a three-day training course provided by the external training agency SPO. This course involved a detailed explanation of topics such as the pension system and the advisory role of the Accountability Body. The members also received in-house training specifically about ABP. On this occasion, ABP Board members and employees shared information and answered questions on subjects such as strategy, investments, pension communication and pension policy.

ABP organization

The introduction of the Executive Board has created a flatter organization, because the layer of management consisting of the Executive Office and Management Team has been removed. Most employees are now linked directly to an Executive Board member. We appointed a manager in areas where more operational guidance was required, such as a team manager for the secretarial

office. In this way, we ensure that employees receive attention and support and that the duties and responsibilities of the Executive Board members remain manageable. New teams have been grouped under the various portfolios of the Executive Board members.

ABP does not fall under any collective labor agreement. ABP has a staff manual which sets out all the arrangements between the employer and the employee, for example with regard to salary, sickness absence and mobility. This also ensures that all colleagues are treated equally.

Developments during the reporting year

Culture, Conduct and Role Awareness program

A transition plan was formulated to ensure the smooth introduction of the new governance model. A key element of this plan is our Culture, Conduct and Role Awareness program. Through this program, the existing and new Board members were prepared for their new roles. Under the guidance of the consultancy firm Mens&Kennis, the Board followed a balanced pathway helping it to define the culture and conduct required to be successful as a Board in the various bodies. The topics addressed in this context included the requisite competences in the various roles, with consideration being given to individual scores and team scores on various aspects. Another topic was strengthening team spirit, with attention for norms and values and expressing mutual expectations, among other things. Where conduct is concerned, consideration was given for example to effective and ineffective patterns and recognizing these patterns, and possibilities to display new conduct by identifying and adjusting ineffective conduct.

Evaluation of the new governance model

The first interim evaluation of the new governance model in August 2022 reflects satisfaction on the part of the General Board: we have taken a step

For more information on the development of our organization, see the ['Working on solid foundations and a professional organization' section](#).

in the right direction. On this occasion, the Board immediately introduced a number of improvements. For example, the Executive Board's reports were aligned more closely to the General Board's need for information, while we explicitly addressed robust decision-making and clarified the manner in which supervision is fleshed out. We discussed the workload within the Executive Board and took steps towards a more balanced distribution of duties. (More detail can be found elsewhere in this section, under 'Self-evaluation and development of the Board'.) The next evaluation, which started at the end of

Faster decision-making by the Board thanks to Equilibrium Model of Development

In order to improve the Board's decision-making process, especially with regard to complex decisions such as increasing pensions, we use the Equilibrium Model of Development effective from the reporting year:

- Orientation: gather information, identify the problem/issue, what ideas have been put forward, what decisions were taken earlier, etc.;
- Evaluation: decide whether we have all the information we need and what our options are, structure the information, consider the pros and cons, hear proponents and opponents, etc.;
- Control: the actual decision-making.

If steps one and two are successfully completed, step three should not take long. In addition, this structured approach involves the Board in the decision-making process and prevents last-minute surprises. In a complex or more political environment, it ensures a more explicit separation of facts and opinions. It also increases transparency in decision-making and therefore facilitates accountability.

2022, focuses on the question to what extent we are achieving the intended goals of the new model. This evaluation will be completed in the second quarter of 2023, which means that the experiences gained by the departing Chair of the General Board can still be taken into account.

Consultations in 2022

Board meetings were held on a regular basis during the reporting year. In addition, Board members held more informal talks during the year on an ad hoc basis.

The Executive Board met nearly every week throughout the year. During these meetings, we discussed current themes that were important to our participants and employers. The increase in the pensions for 2022 and 2023, in combination with ABP's financial position, played a key role in these discussions. At most of the weekly meetings, the Executive Board addressed the preparations for the transition to the new pension contract. In doing so, the Executive Board prepared the decision-making by the General Board. Much attention was also devoted to the Sustainable and Responsible Investment Policy. In addition, the Executive Board addressed the following topics, among others: application of the new governance model, the completion of the reorganization of ABP and the recalibration and tightening of ABP's strategy. We also spoke about the effects of geopolitical developments on our investment portfolio and the further development of our risk management. The collaboration with APG and operational outsourcing also had the Executive Board's constant attention. Improving the quality of our data was a further important recurring item. In 2022, a new reporting format was developed which the Executive Board uses in reporting to the General Board.

The General Board met 13 times in 2022. The discussions at these meetings concerned the same subjects, whereby the transition to the new pension contract, the pension increase and the Sustainable and Responsible Investment policy required most of the Board's time.

The Non-Executive Board held seven independent meetings during the reporting year, which are described in more detail in [the Non-Executive Board's report](#).

For important issues, the Board requests an opinion from the Accountability Body. In 2022, (a delegation from) the General Board held seven consultative meetings with (a delegation from) the Accountability Body. The requests for opinion discussed related to subjects such as the Actuarial and Technical Business Report (ABTN), the early indexation decision for 2022, the Contribution and Indexation Memorandum 2023, and various formal regulations. The Board takes the Accountability Body's opinion into consideration before taking a final decision. We also held a number of thematic sessions with the Accountability Body to discuss current themes such as sustainable and responsible investment and the new pension contract.

Presence of Board

Meeting	Number of meetings	Participation rate
Board meeting ¹	10	96%
Non-executive board	7	92%
Two-day board meeting	3	98%
Board committee on pensions	7	100%
Board committee on investments	6	94%
Audit committee ²	7	90%
Supervisory meeting ³	5	94%
Total		95%

1 Included are only formal board meetings including thematic sessions of more than 30 minutes

2 Including a meeting between Audit committee and the Accountability Body

3 In the Supervisory meeting the non-executive board meets the Board

Policy on ancillary positions updated

ABP has a Code of Conduct that addresses conflicts of interest. In addition, we have a policy on ancillary positions. This policy is a further elaboration of the rules laid down in the Code of Conduct. The policy on ancillary positions was revised and adopted in 2022. The roles involved and the process were re-examined and adjusted where necessary, and stricter safeguards were incorporated in order to prevent conflicts of interest. For example, the role of the HR Committee in the context of ancillary positions has been described more clearly, while the opinion issued includes multiple scenarios with regard to potential conflicts of interest. These scenarios are part of the assessment of the application. The policy was adopted at the end of 2022.

Self-evaluation and development of the Board

The Board also consciously devotes time at fixed intervals to consider its development in the context of our Fitness policy. We thus comply with the statutory requirements in DNB's Policy Rule on Fitness (Beleidsregel Geschiktheid).

The self-evaluation takes place once a year at a predetermined moment. During the reporting year, it focused on the extent to which the goals formulated in respect of good governance are achieved through the implementation of the inverted mixed governance model. The Board monitored the functioning of the new governance model during the year as well: the model was evaluated after each meeting, in order to learn and adjust where necessary. The interim evaluation of the new inverted mixed governance model zoomed in on three key areas that are vital to the success of this new governance model: decisiveness, collaboration with APG and the Board members' awareness of their respective roles. Based on the outcomes of the interim evaluation, the Board worked on various improvement proposals during the remaining months of 2022. In this context, specific consideration was given to effective supervision, the robustness of the decision-making process, the workload within the Executive Board and the Non-Executive

Board's range of duties. The Board also completed the Culture, Conduct and Role Awareness program during 2022 under the guidance of Mens&Kennis (as described earlier in this section). At several moments, we devoted time and energy to the conduct side of the transition to the new governance model.

Compliance with statutory guidelines and codes

External compliance

ABP is subject to the Code of the Dutch Pension Funds (Code Pensioenfondsen). This Code, which overlaps to some extent with the Dutch Corporate Governance Code, focuses specifically on the pension sector. We comply with the norms laid down by this code, subject to the following qualifications:

- Norm 16 states that members of the Board, the Accountability Body, the internal supervision body and other co-policymakers sign the fund's internal code of conduct and an annual declaration of compliance, and conduct themselves accordingly. The compliance statement for 2022 in respect of the ABP Code of Conduct has been signed by the members of the Executive Board and the members of the Non-Executive Board. In addition, the members of the Accountability Body have signed the Code of Conduct specifically in respect of the Accountability Body, which was renewed in 2022.
- Norm 39 states that the appointment of a member of the Accountability Body is the responsibility of the Board, whereas the dismissal of a member of the Accountability Body is the responsibility of the Accountability Body. Members of ABP's Accountability Body are appointed by the nominating parties, because this is more in line with the governance of ABP.

ABP meets the statutory requirements under the Pensions Act (Pensioenwet, PW) and the PIE requirements for good governance of pension funds. There were no instances of:

- incremental penalty payments or administrative fines during the reporting year (as referred to in Section 96(a) PW);
- instructions issued to the pensions administrator as referred to in Section 171 (as referred to in Section 96(b) PW);
- a court-appointed administrator as referred to in Section 173 PW (as referred to in Section 96(c) PW).

ABP has complied with the principles of the Federation of Dutch Pension Funds' Code of Conduct for the processing of personal data by pension funds (Gedraglijn Verwerking Persoonsgegevens Pensioenfondsen). Furthermore, the Board has decided to apply the Senior Officials in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet Normering Topinkomens, WNT) voluntarily with effect from January 1, 2022 for the remuneration of boardmembers. ABP has also fulfilled the obligation to enter Board members in the UBO register. Pursuant to the obligations arising from the SFDR, ABP has included information in Appendix IV on the sustainability of our investment portfolio in accordance with the definitions of the SFDR.

Compliance with our internal rules

The ABP Code of Conduct has been signed for 2023 by the entire organization, including the members of all its management bodies. Furthermore, a new application was put into operation during the reporting year through which abuses can be reported anonymously as well. A new confidential counselor has also been appointed. We specifically highlighted both subjects at internal level in order to raise awareness.

With regard to compliance with the ABP Code of Conduct, integrity, and the whistle-blower scheme, no reports were made and no unusual incidents occurred during the reporting year.

General Board



ABP's General Board (GB) consists of:

- | | | |
|---|---------------------|--------------------------|
| 1. Conchita Mulder-Volkers | 5. Krista Nauta | 10. Yolanda Verdonk |
| 2. Patrick Fey | 6. Loek Sibbing | 11. Anne Gram |
| 3. Vandena van der Meer-
Gangapersadsing | 7. Alfred Slager | 12. Marjolein ten Kroode |
| 4. Harmen van Wijnen | 8. Paul Rosenmöller | 13. Dominique Dijkhuis |
| | 9. Xander den Uyl | 14. Aldert Boonen |

The General Board (GB) comprises the Executive Board (EB) and the Non-Executive Board (NEB). Harmen van Wijnen, Dominique Dijkhuis and Yolanda Verdonk make up the EB. The other Board members in the photo make up the NEB.

One Board member is missing in the photo: André van Vliet.

Accountability and supervision



Report of the Non-Executive Board

2022 was an eventful year, with the biggest shock being Russia's invasion of Ukraine. It was also a memorable year for the Non-Executive Board. Our supervisory duties began on January 1, 2022, with the introduction of the new inverted mixed governance model.

Brief review

Halfway through 2022, ABP was able to increase pensions for the first time since 2008, by 2.39%. After carefully considering all interests as well as the financial position of ABP, it was possible to implement a historic increase of pensions by 11.96% at the end of 2022. The General Board also took progressive steps in the policy around the sustainability of the investment portfolio. A great deal of work was done to prepare for the introduction of the new pension contract (NPC), in collaboration with social partners and APG. ABP's target date for the introduction of the NPC is January 1, 2026. That may seem a long way off, but there is still a great deal of preparation to be done. We must ensure that participants receive the correct amounts, both now and in the future when the new pension contract is introduced. In our supervisory role we have monitored the progress made on all these themes, which will have a significant impact on the future of the fund and the confidence of participants in ABP.

Procedure

The responsibility for internal supervision within ABP has been assigned to the Non-Executive Board. We are supported in this by the Audit Committee. In 2022, we performed our duties in accordance with our supervision plan. The supervision plan is based on seven themes that we monitored throughout the year. Within these themes, we monitored four strategic priorities in particular:

- balanced consideration of interests in decisions relating to the NPC;
- sustainable and responsible investment;
- application of the new governance model;
- data quality.

In order to properly perform the Non-Executive Board's supervisory duties, its members worked in pairs, each of which addressed one or more supervisory themes which they monitored during the reporting year. To this end, they relied on the quarterly reports of the Executive Board, the reports of key function holders and conversations with the Executive Board. The Audit Committee challenged the Non-Executive Board and provided it with its own observations. In this way, the *checks and balances* between the Executive Board and the internal supervisory function (Non-Executive Board) have been reinforced.

To provide as transparent an account as possible of our activities during the past year, on April 20, 2023 the Non-Executive Board presented a comprehensive report to the Accountability Body on all of the aforementioned themes. The Non-Executive Board has decided to include a summary of that report in this annual report. The summary is limited to the key findings from the supervision of the aforementioned strategic priorities, based on which the Non-Executive Board has also made a number of recommendations.

Observations and recommendations of the Non-Executive Board

Balanced consideration of interests in decisions relating to the NPC

The Non-Executive Board closely monitored the balanced consideration of interests in the General Board's decision-making in relation to the NPC, in particular with respect to the early indexation decision (a 2.39% increase) and the decision to increase pensions by 11.96% with effect from January 1, 2023. We conclude that the General Board has considered the interests of all groups of participants in a balanced manner in these decision-making processes and has clearly communicated these decisions to all stakeholders (social partners, the Accountability Body, participants and employers).

Recommendations to the General Board

- Keep to the agreement to review the contribution policy in the first half of 2023, and conduct this review when the final version of the transitional financial assessment framework has been publicized.
- When communicating with participants, consider the expectations they may have with respect to subsequent indexations.
- Ensure that the Accountability Body is kept informed of each step in the process.
- In the [assessment framework for the balanced consideration of interests](#), the General Board has identified three target groups: active participants, deferred participants and pensioners. When making decisions in relation to the NPC, it may be necessary to define these target groups more precisely, for example by making reference to specific age cohorts within each of these target groups. We advise the General Board to assess this when making decisions in relation to the NPC.

Sustainable and responsible investment

In December, when it published the goal of achieving a 50% CO₂ reduction by 2030, ABP provided specific information on how it will assess potential investments. In addition, ABP aims to invest a total of €30 billion in the energy transition over the same period. ABP has decided to make more direct (impact) investments, such as developing offshore wind farms. We would like to gain insight into the impact of the adjusted investment policy on the organization. We will include this in our supervision in 2023.

Focus on the risk/return ratio, including in relation to sustainability

Achieving a good return by taking a responsible level of risk is important to ensure ‘a good pension for participants’. ABP wishes to contribute to a livable world. We have observed that the rest of the world does not always follow the lead taken by the EU, which is introducing ever stricter requirements with regard to environmental protection and CO₂ reduction. We believe this raises the question whether ABP has a sufficiently clear picture of how this could

affect its investments and thus participants’ pension payments. As ABP’s new sustainability policy takes shape, ABP will need to explicitly substantiate on an ongoing basis how it strikes the balance between sustainability, risk, return and costs. These considerations are made at the overall portfolio level and as part of ABP’s role as a long-term investor. In this context, sustainability does not come at the expense of the risk/return ratio.

Recommendations to the General Board

- Provide insight into how the adjusted investment policy impacts the organization.
- Always substantiate how sustainability decisions are made, in the context of ABP and also in relation to sustainability, risk, return and costs.

Application of the new governance model

The General Board has evaluated the new inverted mixed governance model and identified a number of improvements that could be made to it. For this interim evaluation, the General Board obtained input from other stakeholders (such as the Accountability Body, APG and staff). It will do the same for its evaluation of the model in early 2023. In the context of our supervisory duties, we as the Non-Executive Board have observed that the General Board has taken a serious approach to the application of the inverted mixed governance model and reflects on its own actions, taking into account the goals of the model (such in terms of effective governance, collaboration with APG and role awareness). The interim evaluation also produced a positive assessment of the transition to the new model.

The General Board is ensuring that the new roles and structures are also expressed in culture and behavior. To this end, it has taken a number of steps, including engaging a boardroom coach. We believe this has significantly contributed to team building within the General Board. All Board members are aware of the various roles on the Board and help each other to remain

aware of the distinctness of these roles, both during meetings and in meeting evaluations.

Recommendations to the General Board

- Continue to monitor the application of the new governance model by evaluating meetings as a supplement to the formal evaluation.

Data quality (in the lead-up to the NPC)

A great deal of work was done in 2022 to prepare for the introduction of the NPC. As part of our internal supervisory role, we monitor the decision-making process and the preparations for the implementation of the NPC.

Decision-making process

The NPC program is divided into a number of workflows, such as complexity reduction, pension scheme, and introduction, with an overarching workflow for product planning. We advise the General Board to monitor the integration of the various workflows throughout the preparation and transition period. The interdependencies between the workflows, process steps and stakeholders (social partners, Accountability Body, APG) create a challenging and complex process requiring constant attention and resources. The Non-Executive Board has been informed that the Executive Board intends to reassess the design of the NPC program in 2023. We will continue to monitor this development closely.

Preparations for implementation

We are also closely following developments in the area of data quality and ICT/change capacity. The Non-Executive Board notes that the Executive Board is vigilant and focused in its management of data quality, having set clearly defined KPIs for APG. Ensuring that the administrative records, processes, and data are put in order within the required time frame continues to be an area of concern, due in part to the capacity available at APG.

Recommendations to the General Board

- Monitor the integration of the various workflows throughout the preparation and transition period.
- As the definitive implementation dates are set and these dates come closer, it will be increasingly important to closely monitor the general progress of the adjustments to the information provision and to flag deviations from the schedule at an early stage, in coordination with APG. Continue to set the right example in your role of commissioning and managing activities.

A word of thanks

The Non-Executive Board would like to express its gratitude to the Executive Board, ABP's staff members and the Accountability Body, Audit Committee, Investment Committee and Pensions Committee, as well as all other parties involved, for their participation in the open dialogue and fruitful collaboration.

Amsterdam, 20 April 2023

On behalf of the Non-Executive Board

Loek Sibbing, Chair



Report of the Accountability Body

This report gives further details of how the Accountability Body performed its duties and exercised its powers in 2022. First, we describe the duties and composition of the Accountability Body. Subsequently, we describe how often the Accountability Body met during the reporting year. We then turn to the items discussed during the year, involving (in order) requests for opinion, other matters, our opinion on the actions of the Board in 2021, and thematic meetings.

1. Duties and powers of the Accountability Body

ABP is required by law to appoint an Accountability Body. The duties and powers of the Accountability Body are established in the Pensions Act, the Articles of Incorporation of ABP, and the Accountability Body's Regulations. The duty of the Accountability Body is to submit opinions to the Board, either on request or on its own initiative. The Articles of Incorporation of the Stichting Pensioenfondsen ABP state that an opinion must be requested for at least the following topics:

- the adoption and amendment of the communication and information policy, the Contribution and Indexation Memorandum, the communication and information policy, the Actuarial and Technical Business Report (ABTN), the strategic multiyear plan and investment policy, the recovery plan, and the internal complaints and disputes procedure;
- entering into, amendment, or termination of the outsourcing agreement(s) with the pension administrator(s);
- the remuneration policy;
- the form and design of the internal supervision;
- the transfers in or out of liabilities of the fund;
- liquidation, merger or demerger of the fund;
- entering into, amendment or termination of a pension administration agreement;
- conversion of the fund to another legal form;
- job profiles for the external members of the Audit Committee;
- general job profiles for the members of the Executive and Non-executive Board;
- amendment of the Articles of Incorporation and the regulations for the bodies of ABP (other than pension regulations).

Three Non-Executive Board members are appointed on the binding nomination of the representatives of the pensioners in the Accountability Body.

These persons join the Non-executive Board on behalf of the pensioners. The Board will appoint these individuals on the basis of the eligibility profile and with due regard for the binding nominations. During the reporting year, Ms. Marjolein ten Kroode was nominated as Board member on behalf of pensioners. She has now been appointed following approval by DNB. In December 2022, the pensioners' representatives started with the recruitment and selection process to find successors for Ms. Mulder-Volkers and Mr. Den Uyl with effect from April 1, 2023. This process was not yet complete at the time of preparation of this report. The pensioners' representatives held two meetings with the Board members representing pensioners in the course of the reporting year.

In 2022, the members of the Accountability Body were able to make a binding nomination for one external member to be appointed to the Audit Committee.

The Audit Committee consists of three Non-Executive Board members and three external members. In the reporting year, the Accountability Body nominated Mr. Paape as an external member of the Audit Committee. This person was appointed by the Non-executive Board for a term of three years with effect from February 2022 in accordance with the rules in the Articles of Incorporation.

The Accountability Body annually assesses the performance of the General Board.

The General Board, consisting of three Executive Board members and thirteen Non-Executive Board members, renders itself accountable to the Accountability Body in respect of ABP's policy for the future and how that policy was in the past year. This accountability is rendered on the basis of the annual report, the financial statements, and other relevant information. In addition,

the Accountability Body also meets once a year with the compliance officer, the external auditor, the external actuary, and the key function holders as part of the annual reporting process.

The Accountability Body uses these discussions and this information to express an opinion on the actions of the Board.

2. Composition of the Accountability Body

Elections

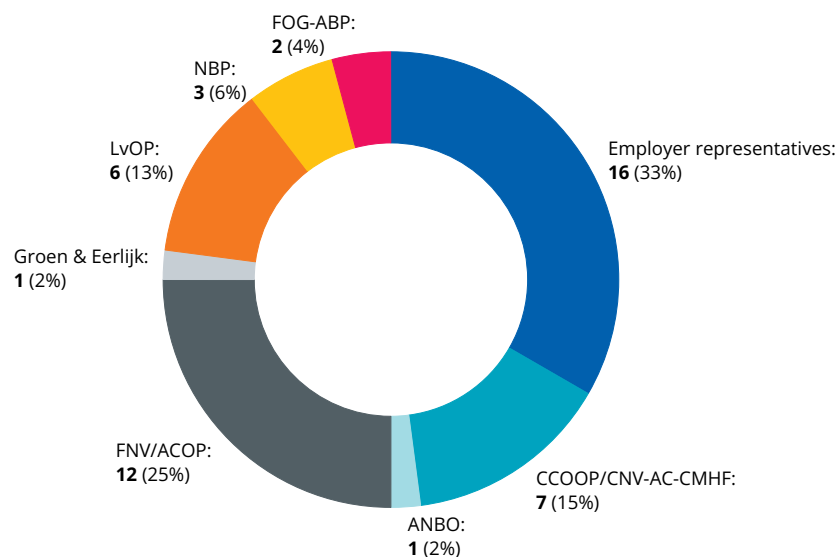
The Accountability Body has 48 members, with 32 members representing the participants and the pensioners, and 16 members representing the employers. The employers' representatives are appointed by the employers' organizations. The members representing participants and pensioners are elected every four years. Elections were organized in the period from April 4, 2022 through April 25, 2022 (see also the disclosures in the Governance section of annual report). The Accountability Body was involved in the process of the organization and design of the elections from an early stage. Among other things, attention was paid to the communication strategy in each phase (such as the nomination of candidates and the voting period in the election timeline). In addition, an electoral committee was formed to monitor compliance with the Election Regulations. The Accountability Body was also involved in the evaluation of the elections.

With effect from July 1, 2022, the allocation of seats on the Accountability Body is as follows:

- 19 members representing participants;
- 13 members representing pensioners;
- 16 members representing employers.

The members representing participants and pensioners are elected once every four years. The members representing employers are appointed by the employers' organizations.

The Accountability Body has seven groups with elected members and an employers' group with appointed members. As of July 1, 2022, the seats are allocated as follows among the groups:



3. Meetings during the reporting year

Separate meetings

The Accountability Body met separately on 13 occasions in 2022 to make preparations for its meetings with the Board. At the start of July 2022, an inaugural meeting took place during which the newly assembled Accountability Body agreed working arrangements for the period ahead.

Committee and group meetings

The separate meetings of the Accountability Body were typically preceded by meetings of the various groups and committees. The Accountability Body includes various groups working on the basis of their own vision and ambition. The Accountability Body also has four committees: the Finance Committee, Communication Committee, Investment Committee, and General Committee.

These committees carry out preparatory work for the meetings between the Accountability Body and the Board, and then advise the Accountability Body on the positions to be taken. The committees do not have decision-making powers. At the end of 2022, the Accountability Body also set up an internal working group to support the committees. Acting as a gateway, this working group will prepare the examination of the requests for opinion on the new pension contract in the years ahead.

Meetings with the Board

Six meetings were held with the Board in 2022. The main items of discussion were the improvement of records, preparations for the implementation of the new pension contract, and the requests for opinion submitted to the Accountability Body by the Board (see item 4). The Board also held a number of thematic sessions to update the Accountability Body on current themes. This concerned the new pension contract and reducing the complexity of the pension scheme, the risk appetite in both the current and the new pension contract, and the Sustainable and Responsible Investment Policy (see item 7).

Meetings with the Non-executive Board

Two meetings were held with the Non-executive Board through December 31, 2022. The inverted mixed governance model requires that the Non-executive Board renders itself accountable to the Accountability Body on its internal supervision activities. As part of its reporting, the Non-executive Board provides an activity statement every six months. In addition, Non-Executive Board annually prepares an annual internal supervision report which is discussed with the Accountability Body. Furthermore, the Accountability Body has dialogue with the Non-executive Board in preparation for the adoption of its findings and its opinion on the actions of the Board. The topics discussed predominantly related to the interim evaluation of the transition from the equal representation governance model to the inverted mixed governance model (on January 1, 2022), the Sustainable and Responsible Investment Policy, improving the quality of the administrative records, and whether the right balance was struck in the decision-making around the early indexation of the pensions by 2.39%.

4. Requests for opinion

The Accountability Body advises the Board. The next sections discuss the requests for opinion that were addressed in the 2022 reporting year.

Request for opinion on the 2022 recovery plan

The law requires pension funds to submit a recovery plan if their policy funding ratio is too low. At year-end 2021, the policy funding ratio stood at 102.8%, whereas the required ratio was 126.3%. Therefore, the Board prepared a new recovery plan and submitted this to the Accountability Body for an opinion.

The Accountability Body issued a favorable opinion on the recovery plan in March 2022. A minority of the Accountability Body considered that an opinion on a mandatory calculation exercise would have no merit and therefore abstained from giving an opinion.

Request for opinion on amended fund documents (Board Regulations, Regulations for the Audit Committee)

In connection with the decision to move to a different governance model (the inverted mixed governance model) with effect from January 2022, several fund documents have been amended or drafted for which the Accountability Body has the right to express an opinion. The Accountability Body issued a favorable opinion on the Board Regulations and the Regulations for the Audit Committee as early as November 2021. In March 2022, updated versions of these regulations were submitted to the Accountability Body for an opinion. Both sets of regulations had been expanded with further detail on the operation of the inverted mixed governance model and therefore required an opinion once more. The Accountability Body issued a favorable opinion in respect of both regulations.

Request for opinion on the Contracts and Service Level Agreements (SLAs)

As part of the annual policy cycle, the updated SLAs, which contain the administration agreements made between ABP and APG on the administration of the pension scheme, were discussed with the Accountability Body in April 2022. The Accountability Body requested that consideration be given to a more effective outsourcing relationship with APG as the pension administrator (grip on the administration) and inclusion of the recommendations made by the auditor and the actuary in the 2023 SLA. The recommendations, which the Board adopted, related to expansion of the instruments deployed to make adjustments, in particular when performance lags behind earlier agreements. The Accountability Body subsequently issued a positive opinion with regard to the SLAs in April 2022.

The Board will hold further discussions with the Accountability Body at the start of 2023 on the set-up of future requests for opinion on the SLAs (it is proposed that future discussions focus on strategic outlines rather than the detailed catalog and its underlying activities). The Accountability Body was appreciative of the Board's proposal to discuss this matter at the start of 2023.

Request for opinion on the ABP Code of Conduct for Board members and employees

The 2021 Code of Conduct and the procedures set out therein were rendered inapplicable by the decision to move to the inverted mixed governance model with effect from January 1, 2022. The Code of Conduct for Board members and employees was therefore revised accordingly. The Accountability Body issued a favorable opinion in respect of the amended Code of Conduct for Board members and employees in April 2022.

Request for opinion on a Code of Conduct for members of the Accountability Body

In 2021, the Accountability Body expressed a desire to establish a separate Code for its members. The provisions governing members had until then been part of the general Code of Conduct. This change was in part motivated by a desire on the part of the Accountability Body to have greater clarity on how to handle the confidentiality of meeting documents and the consultation of its membership. The Accountability Body issued a favorable opinion in April 2022.

Request for opinion on early indexation with effect from July 1, 2022

The proposed decision by the Board to increase pensions by 2.39% with effect from July 1, 2022 and also increase the pension entitlements of ABP participants (who have yet to take retirement) by 2.39% was discussed in June 2022. With the increase being applied from July 1, pensioners would receive a subsequent payment of 1.2% in respect of the first six months of 2022. The Accountability Body welcomed the proposed decisions and issued a unanimous positive opinion.

Request for opinion on the Actuarial and Technical Business Report (ABTN)

All pension arrangements are laid down in ABP's policy, which is officially referred to as the Actuarial and Technical Business Report (ABTN). In connection with the annual update of the ABTN, the Accountability Body was asked to give an opinion on the proposed decision-making with respect to the 2022 ABTN. The Accountability Body issued a positive opinion on the request for opinion on the ABTN in September 2022.

Request for opinion on the Contribution and Indexation Memorandum 2023

The Contribution and Indexation Memorandum 2023 was discussed in November 2022. The memorandum constitutes a request for opinion on the proposed pension increase and the setting of the contributions. The

memorandum formed the subject of discussions with the Board, during which questions were asked and both sides exchanged views. A majority of the members of the Accountability Body (41) issued a positive opinion. Seven members gave a negative opinion.

The members of the Accountability Body who gave a positive opinion stated that it is the ambition and objective of ABP to (fully) index pensions. It is therefore incumbent on the Board to do so where this can be achieved in a responsible manner. Furthermore, the Board provided a detailed description of the process by which the interests of all participant groups and the risks were weighed up. According to these members of the Accountability Body, this description, together with the financial position as outlined by the Board, provided sufficient grounds to grant full indexation at 11.96% and they therefore endorsed the Board's decision. A few members of the Accountability Body who issued a negative opinion stated as their argument that the risks had not been assessed in sufficient depth, prompting a concern that the interests of young employees in particular had not received adequate consideration. This led the members in question to conclude that there was only scope for partial indexation, also because this would leave greater buffers for times of economic uncertainty. These members believed this to be of particular relevance with regard to the new pension contract, since this could result in the individual pension pots of employees in various age categories and pensioners being filled in a more balanced manner.

Request for opinion on Investment Beliefs

The Investment Beliefs form the foundation for the investment process of ABP and have a significant impact. They establish a common basis, set guidelines for investment choices, and provide frameworks for the pension administrator APG. The Accountability Body issued a positive opinion on the request for opinion on the Investment Beliefs in November 2022.

Request for opinion on an extension of the Strategic Investment Plan 2022

The Strategic Investment Plan is part of the regular recalibration of ABP's financial policy. It lays out the key investment decisions that ABP has to make, namely:

- the desired strategic asset allocation across investment categories. The risk profile of this asset allocation will be analyzed in the light of all rights and obligations at fund level, in both the short and the long term;
- the return target per investment category, expressed as one or more benchmarks;
- the extent to which ABP is prepared to allow the actual investment portfolio to deviate from the strategically intended portfolio, temporarily or otherwise;
- consideration of balance sheet risks, including the mitigation of interest-rate and currency risk.

In November 2022, the new Strategic Investment Plan had not yet been completed. The Board therefore proposed to extend the 2022 Strategic Investment Plan without any changes until the new plan has been adopted (which is anticipated in the second quarter of 2023). The Accountability Body conveyed its disappointment that the original timeline had not been met, asked the Board to include the Accountability Body in the preparation of the revised Strategic Investment Plan in a timely manner, and gave a positive opinion in respect of the proposed extension of the Strategic Investment Plan.

5. Other issues

Improving records and data

Given that January 1, 2026 has been set as the key implementation date for the new pension contract, the Accountability Body devoted continuous attention to the timely improvement of records and data throughout the reporting year. Through the "Grip on Data" program, ABP actively continues to seek out opportunities to simplify the pension scheme and keep inaccuracies to a minimum, in order to ensure that all participants receive the benefits they are entitled to. At the start of 2022, the Board highlighted that the January 1, 2023 deadline for cleaning up the records would not be achievable as a result of additional remedial actions that had been identified. A new deadline has been set for January 1, 2025. There has been an exchange of ideas between the Board and the Accountability Body on issues including the remedial actions identified, the implementation costs of the project and the preparation of alternative scenarios (preparing a plan B), and an impact analysis if it is found that the January 1, 2025 date is not feasible.

Increased ambition relating to climate and energy

The Accountability Body discussed sustainable and responsible investing with the Board a number of times during the year. The Board announced in 2021 that it was intending to tighten its Sustainable and Responsible Investment Policy. The Board also stated that the implementation of policy no longer adequately met expectations from the public, including participants and employers. At the start of 2022, the Accountability Body used its discussions with the Board to request attention for matters such as the process followed, substantiation of decision-making, the considerations of various alternatives by the Board, and how policy changes are linked to maintaining return, with a view to obtaining greater insight into the decision-making process.

Evaluation of the policy on ancillary positions

The Accountability Body made various observations and raised a number of substantive questions regarding ABP's policy on ancillary positions in 2021. The Board subsequently reviewed and tightened its policy on ancillary positions in 2022, partly due to pressure from the Accountability Body. The Accountability Body endorsed the improved process agreements, in particular the annual review of all ancillary positions held amongst the Board.

Impact of the state of war in Ukraine

Following the Russian invasion of Ukraine, the Board decided to sell all investments in Russia and Belarus. The Board involved the Accountability Body in this process. There was also a further exchange of views on how to strike a balance between ensuring a good pension for participants and socially responsible investment.

Evaluation of incident handbook

Proper administration of the pension scheme requires the pension administrator to respond to incidents in an adequate, timely and fully transparent manner. With a view to streamlining this process between ABP and pension administrator APG, a new pension administration incident handbook was developed in 2019, in part based on a recommendation by the Accountability Body. An assessment was conducted and discussed with the Accountability Body in 2022. The Accountability Body believes that the incident handbook will contribute to controlled and ethical business operations.

Value of current pension pots in the context of the new pensions system

The pension pot was implemented in Mijnapb.nl for all active participants in 2017. The reason for this was the sentiment among a large number of participants that there would be no pension left for them in future. Consequently, the pension pot was developed and co-created with participants as a communication concept.

In discussions with the Board, the Accountability Body has signaled concern as to the future of the model in the transition to the new pensions system. It is expected that the current pension pot will not correspond with the individual pension pot in the new system. The Accountability Body stressed the importance of preventing confusion among participants. In 2023, the Board will engage in further dialogue with the Accountability Body on possible adaptations of this communication tool.

Outcomes of the interim evaluation of the inverted mixed governance model

ABP switched its governance model to the inverted mixed governance model on January 1, 2022. This transition included arrangements to evaluate the new governance model at specific times. As a result of the interim evaluation, the Accountability Body raised questions in September 2022 on matters including the relationship with APG as the pension administrator and the division of tasks within the Non-executive Board and among the members of the Executive Board. The Accountability Body also requested attention to be paid to the (continued) periodic evaluation of the inverted mixed governance model and the provision of an adequate instrument that can be used for ongoing measurement of the effectiveness of the governance model.

Role of the Accountability Body in the new pension contract

The new pension contract has many facets, including new legislation, pension arrangements, communication and IT. In 2023, the Board and the Accountability Body will work towards what is known as the request for opinion on conversion. Conversion is the process of transferring and reworking existing pension entitlements accrued by participants to an individual entitlement to assets in the new contract. As part of this request for opinion, the Accountability Body will be asked to give an opinion on the manner in which Board intends to approach the conversion. In light of the fact that the Accountability Body is expected to have an enhanced right to prior consultation in relation to the new pension contract, it is the intention of both

the Accountability Body and the Board to enter into discussions regarding the various aspects of this contract at an early stage. In November 2022, the Board and the Accountability Body jointly established the schedule for 2023. The Board has given the Accountability Body an undertaking to promote sharing of the required information with the Accountability Body at the earliest possible stage. As indicated previously, the Accountability Body set up an internal working group at the end of 2022 that will prepare requests for opinion in relation to the new pension contract.

Risk appetite in the current scheme

The Pensions Act and the Financial Assessment Framework Decree require ABP to determine the risk appetite in consultation with the fund bodies, including the Accountability Body. The risk appetite is an element of the pension triangle that is used to balance contributions, ambition and risk. Lower contributions mean greater risks need to be taken in order to achieve the same ambition. The determined risk appetite can be used to assess the feasibility of the pension scheme.

In various sessions held in June and September 2022, the Board and the Accountability Body exchanged views on an acceptable level of risk for different age groups. The Accountability Body stated its preference to not have any increase in risk compared to the current level. The Accountability Body also raised questions with regard to the design of the associated participant survey, the development of the participant population of the fund, and the manner in which this development will be taken into account in determining the risk appetite. It was furthermore agreed that the Accountability Body will in future be able to submit a request for a potential adjustment of the risk appetite. Such a request will then be considered by the Board in any decision to review the risk appetite.

Improved collaboration

The Accountability Body and the Board agreed in the second quarter of 2022 to launch a process aimed at improving collaboration, under the guidance of an external party. The objective of the process is to establish a set of agreements on effective mutual interaction, both within the Accountability Body itself and in interactions between the Accountability Body and the Board. The first sessions were held in December 2022 and the intention is to complete the process around the middle of 2023.

6. Assessment of the Board's management in 2021

On April 28, 2022, the Board rendered itself accountable to the Accountability Body for the policy it conducted in 2021. Prior to this meeting, the substance of the annual report and financial statements was examined in a committee meeting attended by the external auditor, the external actuary, and the ABP compliance officer, who gave further explanations.

The final assessment expresses the opinion of the Accountability Body regarding the management by the Board. The Accountability Body makes recommendations for improvements to and adjustments of policy. There is room for separate groups to state different points of view or comments if they so wish.

With due regard for the findings and recommendations, the Accountability Body has reached a favorable opinion on the Board's actions with respect to the conducted policy, the policy choices made and compliance with the principles of good pension fund governance. One member of the Accountability Body gave a negative opinion and a small number of others abstained from giving an opinion.

The Accountability Body's findings and recommendations have been shared with the Board. These are included in ABP's annual report for 2021.

The Board periodically reports to the Accountability Body on the follow-up given to the recommendations.

7. Thematic workshops

New pension contract

A separate thematic workshop on the new pension contract was held in January 2022. The Accountability Body was involved in the program and related projects for realizing the transition to the new pension contract. This also involved a review of the dilemmas and challenges and a more in-depth look at the timeline and the division of the roles between the various stakeholders. Discussions were also held with the Board on reducing the complexity of the current scheme, in order to allow conversion to the new scheme. The Board and the Accountability Body devoted attention to complex topics such as Appendix K and the budgeting for funded rights of military personnel predating June 1, 2001; the complexity in the pension scheme with regard to the occupational disability pension, the invalidity pension and the surviving dependents' pension; and a pension contract for the self-employed.

Moving forward in a sustainable and responsible manner

At a thematic workshop in September 2022, the Board updated the Accountability Body on the role and responsibility of ABP with regard to sustainability, as well as the focus in the current policy on the three transition themes (climate, digitalization, and the conservation of natural resources) and respect for human rights as a precondition in all of this. An additional session with a delegation from the Board was organized at the request of the Investment Committee within the Accountability Body, for the purpose of delving deeper into the strategy of the inclusion policy. Examples of the

topics discussed during this session included the transparency and tightening of the inclusion criteria (including at sector level), the impact of engagement, the withdrawal from investments in fossil fuel producers, and the management of the pension administrator APG with regard to tightening the Sustainable and Responsible Investment Policy. In November 2022, a small group of ABP employees gave a presentation to the Investment Committee on the StIP and the revised ABP Investment Beliefs were discussed. There was no dialogue with the Investment Committee regarding the new inclusion criteria of ABP as a delay was incurred in this area.

Risk appetite in the new pension contract

A thematic workshop on the risk appetite in the new pension contract was held in November 2022. Among other matters, the Accountability Body was involved in the process for determining the risk appetite in the new pension contract, the similarities and differences with the risk appetite in the current scheme, and how this relates to the financial structure. There was also an exchange of thoughts on the findings of the various surveys into the risk preferences of ABP participants and the translation of these findings into a proposal for the risk appetite.

The Board will meet again with the Accountability Body at the start of 2023 to discuss the risk appetite in the new contract and evaluate whether the adopted approach and the proposed risk appetite are viewed favorably by the Accountability Body.

Opinion of the Accountability Body

The General Board annually renders itself accountable to the Accountability Body for the policy it has conducted and for its compliance with the principles of good pension fund governance as referred to in the Pensions Act (Implementation) Decree (*Besluit uitvoering Pensioenwet*) and the Occupational Pension Scheme (Obligatory Membership) Act (*Wet verplichte beroepspensioenregeling*) of December 18, 2006.

In this context, the Accountability Body shares its findings with the General Board, gives its opinion on the General Board's actions in 2022 and accordingly makes recommendations for 2023.



General

The Accountability Body's opinion in respect of 2022 addresses the following topics in the following order:

- the annual report and financial statements;
- functioning of the governance model;
- grip on pension administration;
- the new pension contract (NPC);
- investments and the sustainability policy;
- the reputation of ABP.

The Accountability Body bases its findings on its joint meetings with the General Board, its consultations with the Non-Executive Board, and the (draft) annual report for 2022.

The Accountability Body appreciates the efforts made by the General Board during the reporting year in terms of involving the Accountability Body in the decision-making, policy decisions and strategic developments.

Annual report and financial statements 2022

Findings

In connection with the (draft) annual report, a delegation from the Accountability Body took note of the reports and held discussions with the external auditor, the certifying actuary, the compliance officer and the key function holders.

The Accountability Body appreciates the extensive reports drawn up and explained by the external auditor, the certifying actuary and the compliance officer, and the level of detail of their conclusions and recommendations.

The Accountability Body wishes to express its appreciation for the transparency of the annual report and the clear presentation of the financial statements 2022. In this respect, the Accountability Body concludes that the principles of good pension fund governance have been observed.

The Accountability Body has the following observations and recommendations with respect to the annual report and financial statements 2022.

Return relative to the benchmark

In 2022 ABP realized a negative return of -17.6%. This negative return is due in part to the turbulent market conditions in 2022. When the return is compared with the benchmark, it is striking that the average return is below the benchmark, whereas the goal is to outperform the benchmark.

The causes and potential points for improvement are only explained to a limited extent in the annual report 2022. Whether ABP can achieve its ambitions for a good pension depends on whether it is able to realize a good return. The new Strategic Investment Plan (StIP), containing the updated Investment Beliefs, will be drafted in 2023.

APG's compliance with the Money Laundering and Terrorist Financing (Prevention) Act (Wwft)

In 2022, the Board reported to the Accountability Body that APG is insufficiently demonstrably compliant with the Money Laundering and Terrorist Financing (Prevention) Act (*Wet ter voorkoming van witwassen en financieren van terrorisme*, Wwft). The report on this issue which APG promised to provide in the fourth quarter of 2022 has not yet been delivered. The audit report states that no Wwft-related compliance incidents were reported in 2022. The report and explanatory notes drawn up by the compliance officer state that checks have been intensified and that these checks yielded findings that have been notified to the regulator. These findings related specifically to sanction regulations introduced in response to Russia's invasion of Ukraine. With regard to the

Wwft, the compliance officer has stated that there is no immediate reason to assume that APG is not compliant. An in-depth file review has been conducted, which has found that the correct process steps are being followed. However, Wwft compliance is not currently demonstrable without conducting an in-depth file review.

The Accountability Body notes that the annual report does not mention the extent to which APG is compliant with the Wwft. It is good to see that a file review has been conducted from which it has emerged that the correct process steps are being followed. At the same time, we note that an inability to demonstrate compliance with the Wwft without conducting an in-depth file review presents risks. It is extremely time-consuming, if not impossible, to review all files in this way.

Recommendations

The Accountability Body asks the General Board:

- to draw up the new StIP on the basis of the principle that the return for the equities category should outperform the benchmark in the years ahead;
- to take management action to ensure that APG is demonstrably compliant with the Wwft for all files as soon as possible.

Functioning of the governance model

Findings

ABP introduced a new governance model on January 1, 2022. This involved converting the equal representation governance model, in which the General Board consists of employer, employee and pensioner representatives, into an inverted mixed governance model (*omgekeerd gemengd model*, OGM). Under this governance model, ABP has an Executive Board consisting of independent full-time Executive Board members and a Non-Executive Board. The Non-Executive Board is made up of employer, employee and pensioner

representatives. There is also an Audit Committee that supports the Non-Executive Board in its supervisory duties. The Audit Committee consists of three Non-Executive Board members and three external members. The Non-Executive Board and the Executive Board together comprise the General Board. The aim of introducing a new governance model is to manage ABP more effectively through a better division of responsibilities and to optimize the fund's day-to-day management and the collaboration with APG.

The Accountability Body observes that it takes time to properly embed such a major change and to make the switch to the proper implementation of the new roles. The Accountability Body has noticed that in some areas, the Executive Board, Non-Executive Board and General Board are still exploring how to properly give shape to their duties and responsibilities on the basis of a good awareness of their respective roles. At the same time, we see that steps are being taken in the areas of decisiveness, collaboration with APG and role awareness.

It is still too early to arrive at a balanced opinion on the functioning of the model. It has been agreed that an extensive evaluation of the model will take place after one year. The evaluation report will be made available to the Accountability Body in the first part of the calendar year 2023. Based on this evaluation report, the Accountability Body will issue an opinion on the functioning of the new model.

Recommendations

The Accountability Body asks the General Board:

- to continue to evaluate the functioning of the new governance model according to a fixed methodology in the years ahead, to ensure that the evaluations can be compared. The Accountability Body assumes that the General Board is willing to discuss the interim evaluations with the Accountability Body;

- to reflect in the evaluation on decisiveness and collaboration with APG on a number of specific topics such as the investment results, the SLA 2023, grip on data, the quality of the pension records and Wwft compliance.

Grip on pension administration

Findings

In past years, the topic of the administration of the pension scheme by APG has been discussed several times in consultations between the Accountability Body and the General Board. Although the administration of the pension scheme is largely going smoothly, there have been a number of incidents in recent years that have demonstrated a need to improve elements of the pension records. An initial action plan within the ‘Grip on Data’ program implemented in 2021 revealed that more remedial actions were needed than originally thought. A follow-up plan was drawn up in 2022. The plan is designed to ensure that the pension records are fully in order by January 1, 2025, to guarantee a successful transition to the new pension contract (NPC). The Accountability Body observes that the Executive Board manages APG in a focused and constructive manner in order to achieve the goals and has taken note of the fact that the General Board has full confidence in the new action plan submitted by APG in June 2022. The Accountability Body continues to monitor the progress of the project with interest.

A subject that is closely related to proper pension administration is the reduction of the complexity of the scheme. Mainly due to the multitude of provisions applying under transitional law (particularly Appendix K), the ABP pension scheme has become so complex that this poses an obstacle to its administration. Over the years, the Board has sought to reduce this complexity. Its success in this endeavor has been limited, mainly because this needs to be done through changes to the pension regulations, for which primary authority

lies with the social partners in the Pension Board. The General Board has now decided to simplify the scheme in the context of the introduction of the NPC.

The report of the certifying actuary notes that the pension indexation awarded in July 2022 was not entirely consistently and transparently accounted for in the pension records. Consequently, it cannot be established from the movements in the provision whether the indexation has been applied to all pension entitlements. This may require performing additional control procedures and remedial actions. APG has stated that it is prioritizing adjusting its procedures to ensure that future indexations will be accounted for under the correct movement code.

Recommendations

The Accountability Body asks the General Board:

- in the context of implementation of the NPC, to devote explicit attention – both in its communications to participants and employers and in rendering itself accountable to the Accountability Body with regard to striking the right balance – to how the existing rights under the relevant transitional law (Appendix K) are taken into account in the transition to the NPC;
- to consider looking at obtaining additional certainty in relation to the potential risks involved in the realization of the ‘Grip on Data’ program, for example by commissioning a prospective risk assessment by an external party;
- to develop a contingency plan for the possibility that not all data is in order and available in time for the implementation of the NPC;
- to ask APG to substantiate that the indexations granted in July 2022 and January 2023 have been correctly applied to all pension entitlements and that its internal procedures have been adjusted to avoid a recurrence of this situation.

New pension contract (NPC)

Findings

At the end of 2022, the Dutch House of Representatives approved the Future of Pensions bill. Although the bill is yet to be debated in the Senate and the effective date of January 1, 2026 still seems a long way off, ABP has continued to make preparations. The Accountability Body thinks this is advisable in view of the complexity and scale of the transition to the new contract, where all the available time will be needed in order to ensure a diligent process.

The introduction of the NPC is the most significant change in years for the participants of ABP. For the Accountability Body, it is therefore essential that it is properly involved by the General Board throughout the process. The Accountability Body notes that the General Board is open to this and welcomes this commitment by the General Board. In addition, it is important that the Accountability Body is not only provided with information on those items regarding which it has the formal right to prior consultation, but is comprehensively informed with respect to the NPC. This is essential for the Accountability Body to be able to properly weigh up all the relevant aspects and to appropriately fulfill its enhanced right to prior consultation. This will contribute to a diligent process. Two preparatory sessions on the NPC have now taken place in the reporting year. The main focus was on the proposed phasing. There were no substantive discussions, because the House of Representatives had not yet passed a final resolution.

With regard to and for the purpose of issuing advice on the substantive choices that ABP needs to make, the Accountability Body has set up a separate preparatory working group. The working group is assisted by an external advisor.

In terms of the process, the Accountability Body notes that the period within which the Accountability Body is required to issue thorough and sound advice

in 2023 is very short. The Accountability Body believes there is a genuine risk that it will prove impossible to issue sound advice within this period.

Recommendations

The Accountability Body asks the General Board:

- to prioritize effective communication by ABP with participants and employers, addressing both the additional risks and additional opportunities. The new Act provides for a statutory communications plan prior to the introduction of the NPC. Since this is a major operation, the Accountability Body requests that ABP's Board informs participants and employers at an early stage – in advance of the statutory communications plan – of the impending changes and the background and reasons behind them;
- partly in view of the enhanced right to prior consultation, to set up a diligent process that allows sufficient time for the Accountability Body to carry out a proper assessment;
- to include the Accountability Body early on in the process, including in terms of providing it with information, for example during the Board's orientation phase;
- in the context of the Accountability Body's right to prior consultation and providing information to the Accountability Body, to consistently make a clear distinction in relation to different aspects of the NPC between matters that are prescribed (by the legislator, Dutch central bank (DNB) or Pension Board) and aspects where the General Board makes its own policy decisions, so that the Accountability Body can weigh this up properly;
- to pay attention to active participants, pensioners and deferred participants as part of the balanced consideration of interests in its policy decisions.

Investments and sustainability policy

Findings

2022 was an eventful year, in which ABP realized a negative investment return of -17.6%. The effect of the interest rate hikes on pension liabilities was greater, resulting in a rise in the funding ration and an increase in pensions for the first time in twelve years. Asset management costs fell in 2022 from 2021 levels.

The Strategic Investment Plan (StIP) sets out the main investment decisions, such as the desired strategic asset allocation, the return target and the consideration of balance sheet risks. As the new StIP had not yet been completed in November 2022, the General Board proposed to extend the plan without any changes until the new plan is adopted (which is anticipated in the second quarter of 2023). The Accountability Body is disappointed that the original timeline has not been met, but has stated that it is positive that the updated Sustainable and Responsible Investment Policy, the new Investment Beliefs and the updated ALM can be included in the new StIP.

In October 2021, the Board announced that it would tighten the Sustainable and Responsible Investment Policy (as part of the change of course) and acknowledged that the implementation of this policy no longer matched with expectations of the public, including participants and employers. With regard to the change of course, the Accountability Body used its discussions with the General Board at the start of 2022 to ask for attention to matters such as the process followed, and substantiation of the General Board's decision-making and the consideration it has given to various alternatives. The Accountability Body emphasized the need to consider question of how policy changes are linked to maintaining an adequate return and how they contribute to the objectives of sustainable and responsible investment. The Accountability Body has conducted and continues to conduct this dialogue on the basis of a shared sense of responsibility for the pensions of all participants. Further to the General Board's substantiation of its decision-making and of its considerations

made (in which the General Board argued that responsible investment does not mean a lower return), the Accountability Body stated that it welcomes the decision and is opting for a sustainable way forward.

The Accountability Body sees positive improvements in the climate policy, such as a tightening of the CO₂ target by setting absolute percentages. However, the Accountability Body notes that the inclusion criteria are still lacking. The General Board has stated that it will provide the Accountability Body with the necessary information and that it will involve the Accountability Body in the process at an early stage.

The risk appetite regulations have also been submitted to the Accountability Body for its information. The Accountability Body has asked several questions to obtain clarification on the risk appetite survey and has asked the General Board to involve the Accountability Body at an early stage in the design of a new risk appetite survey among participants.

Recommendations

The Accountability Body asks the General Board:

- to continue to actively communicate with participants to allay concerns that sustainable and responsible investment means a lower (long-term) return;
- to provide the Accountability Body insight into the inclusion criteria, and publicize the inclusion criteria for each sector;
- to provide insight into how the pension administrator APG is managed with regard to the investment policy and into the costs APG incurs in relation to the investment policy;
- to ensure that in the annual report and the StIP, insight is provided into how the costs of asset management are calculated, into the development of trends over the years, and into how the General Board manages these costs. The Accountability Body calls on the General Board to focus on achieving a good return at acceptable costs as part of reassessment of the investment costs;

- to involve the Accountability Body at an early stage in the design of a new risk appetite survey for participants and to provide insight into how the point of view of the participants affects the risk appetite;
- to provide insight into and render account in respect of the effectiveness of the instruments for sustainable and responsible investment (such as the inclusion policy and engagement processes);
- to inform the Accountability Body about strategic plans in relation to investments that are shared publicly.

Reputation

Findings

In part in response to past incidents and an external evaluation, the Board initiated various actions, which were implemented partly in 2021 and partly in 2022, from stricter compliance with existing policy and updating the existing ABP Code of Conduct for Board members and employees to launching a culture project that was supported by an external agency. In the spring of 2022, the Accountability Body discussed the updated Code of Conduct, which includes the tightened policy on ancillary activities and the strengthening of the position of the compliance officer. The Accountability Body has issued a favorable opinion on the updated ABP Code of Conduct for Board members and employees, and also welcomes the increased awareness within the General Board in the broader area of reputational risks.

Recommendations

The Accountability Body asks the General Board:

- to continue to look more explicitly at the reputational consequences of major, high-impact Board decisions and to timely communicate the consequences to the Accountability Body.

Relationship between the Accountability Body and the General Board

Findings

A new Accountability Body took office halfway through the reporting year. The introduction of the new governance model has once again clearly demonstrated the benefit of investing in the relationship between the Accountability Body and the General Board. Steps taken in this area at the end of 2022 and continuing into 2023 include the engagement of a boardroom coach, with the aim of improving both the internal operations of the Accountability Body and the collaboration between the Accountability Body and the General Board. The Accountability Body takes a positive view of the intentions expressed and a number of initial results of this process. There is scope to further improve our collaboration, particularly in relation to time-sensitive topics such as the contribution and indexation memorandum and the NPC.

For the proper functioning of the Accountability Body it is also important that all facilities for the members of the Accountability Body are in order. The Accountability Body notes this has not been the case in every respect, for example in the area of ICT. Talks on improvements have now started between the Board and the Accountability Body.

Recommendations

The Accountability Body asks the General Board:

- to invest in optimal facilities to enable the Accountability Body to perform its duties properly.

Opinion

Based on its findings and the findings of the auditor, the certifying actuary, the Compliance Officer and the Non-Executive Board, the Accountability issues a positive opinion on the actions of the General Board with respect to the policy it has conducted, its policy decisions and its compliance with the principles of good pension fund governance.

General Board's response to the opinion issued by the Accountability Body

The General Board has taken note of the findings and recommendations of the Accountability Body with interest. The General Board thanks the Accountability Body for the positive opinion it has issued on the policy the Board conducted in 2022. The Board will provide feedback in the usual manner with regard to the recommendations made by the Accountability Body.

In conclusion, the General Board would like to express its appreciation for the engagement and collaboration with the Accountability Body. A special word of thanks goes out to the members who retired as from July 1, 2022, for their involvement and contributions during the past term of office, and to the new members for their hard work during the busy induction period in the second half of 2022. The Board looks forward to further building on the relationship in 2023.

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In contrast to customary practice, ABP presents its company financial statements before the consolidated financial statements. The reason for this is that the company financial statements offer the best insight into the pension fund's financial position and are in line with other external publications and the policy information presented in the Board report.

Company balance sheet

After appropriation of net income (expense) for the year

in € mln	Notes	31-12-2022	31-12-2021
Assets			
Real estate		75,112	77,826
Equities		172,287	228,837
Fixed-income investments		185,350	219,233
Derivatives		23,871	34,234
Other investments		35,239	37,257
Investments	1	491,859	597,387
Other assets	2	2,164	1,976
Total assets		494,023	599,363

in € mln	Notes	31-12-2022	31-12-2021
Capital and liabilities			
General reserve		45,230	52,847
Specific reserves		6	760
Equity	3	45,236	53,607
Provision for pension liabilities	4	414,265	498,797
Cash collateral received		5,316	14,977
Short positions		156	-
Short-term borrowing		3,129	6,806
Derivatives		25,215	21,235
Investment-related liabilities	5	33,816	43,018
Other liabilities	6	706	3,941
Total capital and liabilities		494,023	599,363

Company statement of income and expenses

in € mln	Notes	2022	2021
Income			
Pension contributions (net)	7	17,013	12,604
Investment results (gross)		-96,103	57,029
Less: asset management costs		-679	-609
Investment results (net)	8	-96,782	56,420
Total income		-79,769	69,024
Expenses			
Pension payments	9	-13,712	-12,908
Movements in provision for pension liabilities			
- pension accruals		-23,442	-20,546
- indexation		-55,230	-
- added interest		2,488	2,842
- utilized for pensions		13,810	12,864
- utilized for pension administration costs		122	105
- change in market interest rate		151,032	34,220
- change in actuarial assumptions		-2,749	2,560
- result on actuarial assumptions		140	702
- change in respect of value transfers		-439	-211

in € mln	Notes	2022	2021
- other movements in provision for pension liabilities		-1,200	-1,468
Total movements in provision for pension liabilities	10	84,532	31,068
Coverage from cost mark-up in pension contributions	11	95	116
Value transfers	12	480	242
Pension administration costs (net)	13	-198	-156
Interest charges on investment-related liabilities		-69	-16
Other income and expenses	14	270	-211
Total expenses		71,398	18,135
Balance of income and expenses		-8,371	87,159
Appropriation of the balance of income and expenses:			
- added/charged to general reserve		-7,617	87,377
- added to specific reserves		-754	-218

Company cash flow statement

in € mln	Notes	2022	2021
Opening balance of cash		1,528	1,356
Movements			
Cash flows from pension activities:			
- contributions received		12,993	12,720
- value transfer payments received	12	1,395	284
- pensions paid	9	-13,712	-12,908
- value transfer payments made	12	-919	-42
- operating expenses paid	13	-190	-141
- other movements		603	64
Cash flow from pension activities		170	-23
Cash flows from investment activities:			
- repayments and sales of investments		170,194	102,318
- advances and purchases of investments		-144,936	-65,025
- direct investment income		8,181	5,515
- indirect realized results from derivatives and results on exchange		-22,457	-11,103
- investment expenses paid		-633	-591
- collateral received		-9,522	-10,515
- other movements		414	-20,404
Cash flow from investment activities		1,241	195
Closing balance of cash		2,939	1,528

Notes – general

Features of the pension schemes

Introduction

ABP is the pension fund for people who work for the government and in education. The content of a pension scheme is determined by the Pension Board (Pensioenkamer) of the Council for Public Sector Personnel Policy (Raad voor het Overheidspersoneelsbeleid, ROP). ABP only administers a pension scheme after it has assessed the financial feasibility, practicability and explainability of scheme agreed to by the Pension Board.

The legal relationship between ABP and the affiliated employers is set out in the administration regulations, which are concluded by ABP and the participants in the pension regulations.

The administration regulations contain provisions governing mandatory and voluntary affiliation, data and information to be provided, and the payment of pension contributions. The pension regulations contain provisions governing pension entitlements and pension rights. The contents of both these regulations are available at the pension fund's website (www.abp.nl). This section outlines the main features of the pension schemes.

General

Employees accrue their pensions during their working life, which become payable on retirement, becoming incapacitated for work, or, in the case of a surviving dependents' pension, on the death of the employee. The contributions for pension accrual are not regarded as taxable salary and are, therefore, free of tax. However, pension payments are taxed in accordance with the reversal rule (omkeerregeling), with the exception of the net pension

(nettopensioen), which is paid out free of tax. The accrued pension rights represent contingent liabilities of the pension fund toward its participants. The pension fund retains all risks and does not reinsure risks. Pension accrual ceases on the termination of participation.

Recipients of public-sector redundancy pay, participants entitled to severance pay, and recipients of unemployment benefit or an invalidity benefit continue to partially build up pensionable years of service. In the case of participants incapacitated for work due to a work-related accident or occupational disease, pension accrual is continued for the pensionable years of service up to a maximum of 100%.

The annual accrual depends on the following five factors: the accrual rate, state pension offset, pensionable income, qualifying amount, and the part-time factor. The pensionable income comprises the regular pay, regular bonuses and pensionable variable bonuses from the preceding calendar year. The qualifying amount affects the rate at which the pension product is accrued. Pension contributions are charged on the portion of employees' gross pay in excess of the state pension offset (the state pension offset represents the portion of the employee's gross pay from which the state pension contribution is deducted) and then paid by employers. The state pension offset for the pension contribution may differ from the offset applied for the accrual of new pension entitlements, as the latter is income-dependent, whereas the state pension offset is identical for everyone. Pursuant to the Pension Agreement, 70% of the contributions (for retirement pension (OP), surviving dependents' pension (NP) and occupational disability pension (AOP)) is paid by the employers and they deduct 30% from their employees' pay. These percentages differ for contributions for the purchase of a conditional pension.

Agreements can be made at individual or collective level, with due regard for the pension regulations, on the inclusion of certain variable income components in the pensionable pay. However, pursuant to statutory provisions, some income components do not qualify as part of the pensionable pay.

As of January 1, 2022, the maximum pensionable salary is set at €115,866 (in 2021: €112,189) for full-time employment (this amount is adjusted once a year by means of a ministerial regulation).

ABP strives to invest the paid in pension contributions in a socially responsible manner where possible and to achieve an optimal return. The goal of the investment policy is to realize sufficient long-term returns for index-linked pension entitlements and pension rights with affordable pension contributions and at acceptable risks.

Indexation increases pension entitlements and pension rights and, therefore, the unconditional liabilities of the pension fund. Each year, ABP assesses whether an increase is feasible, with the ambition being to fully index for inflation based on the consumer price index (CPI).

Indexation is only provided when the fund's financial position permits it. The indexation ambition also extends to providing post indexation to make up for periods when ABP did not fully index for inflation or to make up for indexation reductions. If the pension fund's financial position is inadequate, then nominal pensions must, as a last resort, be reduced to improve the position.

The pension products

The pension products are the retirement pension (OP), surviving dependents' pension (NP) (which comprises the partner's pension (PP) and orphan's pension), occupational disability pension (which comprises the ABP

occupational disability pension (AAOP) and redeployment allowances (HTP)), and individual voluntary pension supplements.

Retirement pension (OP)

The retirement pension scheme is an average pay scheme in which pension is accrued in respect of the pensionable income during each year of service. This accrual confers a lifelong right to a pension. Flexible pension rights accrued prior to 2006 have been converted into retirement pension rights on an actuarially neutral basis.

Participants can opt, at the time of their full or partial retirement and within certain bandwidths, to advance or defer the time at which their pension becomes payable, convert pension (for example, OP to or from PP), and temporarily receive a higher or lower pension. Participants can also opt to accrue extra pension after leaving employment or continue their participation in the scheme on a voluntary basis.

Surviving dependents' pension (NP)

The partner's pension is accrued based on capital funding equal to 70% of the retirement pension, irrespective of the time of death. This avoids a difference in the partner's pension before and after state pension age. There can also be a right to an orphan's pension in the event of death. The right to an orphan's pension payment ends when the orphan attains age 25.

Incapacity pension (AAOP) and non-contributory accrual in the event of incapacity for work (PVAO)

Participants with a right to AAOP also have the right to PVAO in proportion to the degree of their incapacity for work (provided that this is not the consequence of a work-related accident or occupational disease) to a maximum of 50%. The amount of the AAOP is based on daily wage under the Work and Income (Capacity for Work) Act (Wet werk en inkomen naar arbeidsvermogen) and the degree of incapacity for work.

Purchase of conditional pension

Following the abolition of the early retirement scheme (vervroegde uittredingsregeling, VUT) and the pre-pension scheme, employers and employees had the option in 2006 and 2007 of making agreements on additional pension accrual for past years of service. In 2006, the scheme was amended to enable the purchase of conditional pension for periods prior to 2006 in which the pension accrual was less than the amount permitted under the tax regulations. This means that the entitlements were conditional and became unconditional on January 1, 2023, or upon retirement prior to this date. Therefore, the scheme is only applies to participants who have been in continual employment since December 31, 2005 and who were born on or after January 1, 1950, or who were born before January 1, 1950 and who did not qualify for the flexible pension and early retirement benefit (Flexibel Pensioen en Uittreding, FPU) on January 1, 2006. As at December 30, 2022, all entitlements under the early retirement, pre-pension and life-course savings scheme (VUT-, prepensioen- en levensloopregeling, VPL) were purchased. The VPL purchases are part of the pension accrual.

Voluntary products

The pension regulations include provisions providing various options for the voluntary accrual of extra OP/NP or for the voluntary continuation of the OP/NP scheme after leaving employment.

Net pension

Participants with an income above the maximum pensionable salary (set at €115,866 as from January 1, 2022 and adjusted once a year by ministerial regulation) may participate in the net pension scheme (ABP Nettopensioen). This scheme, a defined contribution scheme, provides for supplementary pension accrual. The amount of this supplementary pension is determined by the pension contributions paid in, the returns on these contributions and the purchase rates (which are influenced in particular by the variable mark-up and

interest rate) at the retirement date. This pension scheme is voluntary and contributions are paid in from the net salary.

Pension conversion options

The pension scheme offers various conversion options, such as the converting the retirement pension (OP) to partner's pension (PP) at the time the pension becomes payable, or vice versa. The OP (accrued to 2021) can also be converted against the right to partner's pension at the time at which participation ends (other than on the OP becoming payable or on death).

Value transfer

Participants who enter into employment with an employer that is not affiliated with ABP can transfer the pension assets accrued with ABP to another pension fund. On their retirement, former participants will receive the pension from the pension fund to which the accrued pension assets were transferred, not from ABP. The converse is also possible: participants who enter into employment with an employer affiliated with ABP can transfer the pension accrued with another pension fund to ABP. The current conditions governing such value transfers are posted on the ABP website.

Pension scheme for military personnel

Professional military personnel participate in a separate pension scheme that is also implemented by ABP. Employees with the status of professional member of the armed forces, former professional member of the armed forces entitled to an occupational disability pension, and former professional member of the armed forces entitled to a severance payment or unemployment benefit participate in this sectoral scheme. Civilian personnel employed by the Ministry of Defense participate in the ABP average-pay scheme. The pension scheme for military personnel was converted into an average-pay scheme specifically for military personnel in 2019.

Accounting policies – general

Stichting Pensioenfondsen ABP, with its registered office in Heerlen, the Netherlands, registered with the Chamber of Commerce under number 41074000, has prepared these financial statements in accordance with Dutch generally accepted accounting principles, the statutory provisions with regard to financial statements set out in Title 9, Book 2 of the Dutch Civil Code, and the Dutch Accounting Standards. These financial statements have been prepared on a going concern basis.

The pension liabilities and the corresponding investments in the balance sheet are mainly of a long-term nature. The 'investment-related liabilities' item is also of a long-term nature, but is presented separately in the balance sheet pursuant to the Dutch Accounting Standards. The other balance sheet items are presented under other assets and other liabilities, with equity serving as a balancing item.

All revenue and expenses are attributed to the period in which they relate. Movements in equity relate exclusively to the accounting for the net income (expense) for the year. The items in the statement of income and expenses are in large part determined by the principles for the measurement of investments and the provision for pension liabilities applied in the balance sheet.

The accounting policies applied for the company financial statements are identical to those applied for the consolidated financial statements. Amounts are rounded to millions of euros unless otherwise stated. These financial statements relate to the 2022 fiscal year that ended on the balance sheet date of December 31, 2022.

Principals of valuation and determination of results

Netting

Financial assets and financial liabilities are netted and presented as a net amount in the balance sheet only when there is a statutory or contractual right to net and simultaneously settle the asset and liability and, moreover, it is also the intention to settle the items in this manner. Interest revenue and interest expense related to the presented netted financial assets and financial liabilities are also netted.

Estimates

Estimates and assumptions used in preparing the financial statements impact the reported assets, liabilities, revenue and expenses. This is, in particular, applicable to the determination of the provision for pension liabilities and the measurement of non-listed investments. It is possible that the measured value and actual value are subsequently found to differ.

Recognition

Assets and liabilities are measured at current value unless otherwise stated. Assets are recognized on the balance sheet when it is probable that the future economic benefits will flow to the pension fund and the value of the assets can be measured reliably. Assets that do not comply with these criteria are not recognized in the balance sheet and are classed as off-balance sheet assets. Liabilities are recognized on the balance sheet when it is probable that the settlement will result in an outflow of resources and the amount thereof can be measured reliably. Liabilities that do not comply with these criteria are not recognized in the balance sheet and are classed as off-balance sheet assets.

Revenue is recognized in the statement of income and expenses when an increase in economic potential related to an increase in an asset or a decrease in a liability has arisen and the amount thereof can be measured with sufficient reliability. Expenses are recognized when a decrease in economic potential

related to a decrease in an asset or an increase in a liability has arisen and the amount thereof can be measured with sufficient reliability. Revenue and expenses are allocated to the period to which they relate.

An asset or liability is no longer recognized on the balance sheet when a transaction results in the transfer of all or virtually all future economic benefits and all or virtually all risks relating to the asset or liability to a third party. Assets and liabilities are no longer recognized on the balance sheet from the time at which the probability of future economic benefit and reliability of the measurement of the value conditions are no longer met.

Changes in accounting estimates

The actuarial assumptions were changed in 2022, which in total resulted in a € 2.7 billion decrease in the provision for pension liabilities. The impact on the funding ratio was -0.6 percentage point.

This is mainly due to the transition of the AG projection table from AG2020 to AG2022. The updating of the Royal Dutch Actuarial Association's mortality projection (AG2022) has led to a €3.0 billion increase in the provision for pension liabilities. Life expectancy is rising faster than assumed in AG2020 projection table. The increase in life expectancy is due to the addition of European data from 2019 to the AG2020 projection table and the improvement of the closing methodology.

The transition to new flex factors (for bringing forward or deferring pension payments) has been accounted for. The new flex factors were determined on the basis of a discount rate of 2.0% (previously: 2.2%) and the new GO1719 assumptions. This leads to a decrease of the provision for pension liabilities by €0.4 billion.

Updating the R/N factors leads to a €0.1 billion increase of the provision for pension liabilities. An R/N (Real/Notional) factor is the ratio between the

actual annual payments to Appendix K and the notional entitlements. These entitlements are termed notional entitlements because, by contrast to regular retirement pension (OP) and surviving dependents' pension (NP) entitlements, participants do not accrue entitlements for Appendix K. That is because the amount of the supplement depends in part on the (concurrent) service years in the period up to 1995. This period of service is converted into a 'notional entitlement' to enable the measurement of the provision for Appendix K on the basis of present value factors. A further explanation is included in the note to the 'provision for pension liabilities' item and the 'movement in provision for pension liabilities' item in the 'Change in actuarial assumptions' section.

A further explanation is included in the note to the 'provision for pension liabilities' item and the 'movement in provision for pension liabilities' item in the 'Change in actuarial assumptions' section.

Principles for foreign currency translation

The year-end balances of assets and liabilities held outside the eurozone are translated into euros based on the exchange rates prevailing on the balance sheet date. The rates used for translation purposes are the World Markets Company fixing rates (WM) on the last day of trading for the year, at 16:00 GMT, as published by Reuters. The resulting translation differences are recognized under the 'investment result' item. Revenue and expenses in foreign currencies are translated into euros based on the exchange rates prevailing on the transaction dates. Differences between the transaction exchange rate and the settlement exchange rate are also recognized under the 'investment result' item.

Principles for the measurement of assets and liabilities

Investments

General

Investments are measured at current value. The following measurement methods are used, in the following order of priority and depending on the availability of objective data, to measure the current value. A tiered approach is adopted in which the next lower-ranking measurement method is used only when a higher-ranking method has been found inapplicable. In view of their small size, the investments for the ABP Nettopensioen and ABP ExtraPensioen schemes are recognized under the 'investments' item, even though these are investments at the participants' risk. The accounting policies apply to both investments at the pension fund's risk and investments at the participants' risk.

Mark-to-market

In normal market conditions, investments are usually measured using prices supplied by independent price providers. These prices are not only stock exchange quotations, but also prices supplied daily by independent price providers.

Broker quotes

When no stock exchange quotations or quoted prices supplied by independent price providers are available or these cannot be regarded as realistic in the prevailing market conditions, the measurement of the current value is based on quotes by at least three brokers.

Mark-to-model

When no stock exchange quotations or quoted prices supplied by independent price providers are available or these cannot be regarded as realistic in the prevailing market conditions and broker quotes are also unavailable, the current value is approximated using the measurement models managed by the

pension administrator. Account is then also taken of insolvency and illiquidity risks according to basic, stress, and extreme stress scenarios.

The measurement models managed by the pension administrator, including the associated assumptions, are evaluated by an external specialist at least once a year.

These measurement models are based on generally accepted principles. To this end, based on market parameters such as credit spreads, best estimates are made of the expected future cash flows, which are then discounted using discount rates based on appropriate interest rate curves.

Volatilities and correlations are estimated using information from sources in the public domain. Credit risks are estimated using reference bonds. The interest rate curves used in the models are based on standards such as interbank interest rates and listed swap curves and forward curves in the swaps and futures markets.

The measurement models managed by the pension administrator are used primarily for interest rate swaps, private loans, and mortgage portfolios. For the interest rate swaps, discount curves are created on the basis of interest rates obtained from price providers, which are then used to discount the future cash flows. Risks are smaller when collateral has been provided, in which case a lower interest rate curve is used. The cash flows for the fixed long-term interest component follow from the contract, while the cash flows for the variable short-term interest component are based on forward rates derived from the market. Interest rate curves supplied by price providers are likewise used for private loans. To this end, a variable spread is applied that depends on the borrower's sector. In addition, an inflation curve derived from the market is taken into account. For the mortgage portfolios, a yield curve is applied that is based on consumer rates with markdowns for the compensation for expired

optionalities and fee for granting and servicing mortgages that are included in the consumer rates.

External estimates

When no mark-to-market, broker quote, or mark-to-model measurement method is available, the current value is measured using estimates of the current value of the relevant investments periodically supplied by external parties. The external estimates category is subdivided into investments with and without an external independent assessment.

Internal estimates

When no reliable information is available to serve as input for the measurement models managed by the pension administrator, the current value is determined based on an internal estimate. An external assessment is carried out whenever possible with respect to the assumptions.

The tiered approach to the measurement methods referred to above is applied to all investment categories.

Presentation of net current assets

Investments are measured inclusive of associated receivables, cash, and liabilities, where these are not available for use for purposes other than investment transactions. Subsequent to their initial recognition, these receivables and payables are measured at amortized cost. In view of the short term to maturity, value is virtually equal to the face value less any provisions deemed necessary for irrecoverability risk. More details on the measurement of each investment category are given below.

Real estate investments

Real estate investments are measured at current value, where possible on the basis of market quotations. When these are not available, real estate

investments are measured at net asset value. Capital interests in real estate funds are measured at net asset value.

Equities

Investments in equity, convertible bonds and private equity are measured at current value, where possible on the basis of market quotations.

Fixed-income investments

Bonds and index-linked bonds are measured at current value, where possible on the basis of market quotations and adjusted for the attributable accrued interest.

Mortgage loans are measured at current value on the basis of a model with a variable spread for the prepayment, credit and illiquidity risks. The accrued savings capital is deducted from savings-based mortgages.

Investments in private loans are measured at current value on the basis of a model, where necessary adjusted based on market information, supplemented with a variable spread for the illiquidity and counterparty risks and adjusted for the attributable accrued interest. The current value of private loans is measured by calculating the present value of the contracted cash flows from these loans based on market interest rates appropriate for the remaining term to maturity. Real estate capital leases are measured with variable spreads for illiquidity credit risks.

Derivatives

Derivative positions are measured at current value without netting. Measurement models based on certain assumptions, for example with respect to credit risk and interest rate curves, are used for specific instruments such as over-the-counter derivatives.

Other investments

Other investments are investments that cannot be allocated to any other investment categories. These are mostly commodities and absolute return strategies. These investments are measured at current value, where possible on the basis of market quotations.

Other assets

Participating interests are sustainable capital interests in which ABP can exercise a significant influence on the business and financial policy. These participating interests, like joint ventures, are measured at net asset value. Other capital interests are presented in the investment category to which they relate.

Tangible assets are measured at acquisition price less straight-line depreciation calculated over the estimated economic life of the asset concerned, or at lower value in use.

After first recognition, receivables, prepayments and accrued income are carried at amortized cost. In view of the short term to maturity, the carrying value is virtually equal to the face value less, where applicable, provisions deemed necessary for irrecoverability risk.

Cash is carried at face value.

Equity

Equity provides a source of funding to cover financial setbacks and also a source for possible future indexation. The legislation governing pension funds prescribes that the amount of a pension fund's equity must at minimum be equal to 4.2% of the amount of its provision for pension liabilities; for more information, see the 'Risk' [section](#). This can be regarded as a blocked reserve. If equity falls below this level, the deficit must be made up within the term prescribed by law.

Specific reserves are components of equity which the Board has set apart for a future purpose. For this reason, the specific reserves are not taken into account in the calculation of the funding ratio.

Provision for pension liabilities

The provision for pension liabilities is of a non-current nature. The provision at the risk of the pension fund comprises the average-pay schemes and years of service-related provisions for retirement pensions, surviving dependents' pensions and ABP occupational disability pensions (AAOP). In view of their small size, the provisions for the ABP Nettopensioen and ABP ExtraPensioen schemes are recognized under the provision for pension liabilities, even though these are provisions at the participants' risk.

The provision for pension liabilities is measured at the present value of the expected future pension payments. Indexation or reductions in the pension entitlements and pension payments are recognized as soon as the definitive decision has been made. The provision for pension liabilities is determined based on the nominal interest term structure applying on the balance sheet date, published by DNB.

The actuarial assumptions, including those for mortality rates, transfer probabilities, and partner frequencies, are in principle updated once every three years and evaluated in the interim. The actuarial assumptions for determining the impact of the transitional law relating to the privatization of ABP (overgangsrecht privatisering ABP, OPA) are updated annually. The mortality projection applied to determine the required amount of the provision for pension liabilities is based on the mortality projection tables of the Royal Dutch Actuarial Association (AG).

The following actuarial assumptions and methods are used for the measurement of the provision for pension liabilities for retirement pensions

and surviving dependents' pensions, and for ABP occupational disability pensions (AAOP):

- the nominal interest rate structure published by DNB for the measurement of the current value of the pension liabilities. "Market interest rate" and "current nominal market interest rate" in this document refer to the nominal interest term structure and current nominal interest term structure;
- the most recent AG projection tables;
- gender and age-related tables for change of circumstances probabilities, based on the observations for the pension fund's participants: death (of participants, of co-insured persons, and of dependents), invalidity, termination on leaving employment, and termination on receiving public-sector redundancy pay. The mortality tables take account of expected future mortality trends. Partner frequencies on death are also used;
- the assumption that participants and their dependents were born on July 1 for the determination of their age;
- parameters including the average annual pension accrual and the average age difference between partners at the time of death;
- due regard for decisions by the Board made up to the end of the reporting period relating to changes such as granting indexation, which go into effect on January 1 of the following year;
- foreseeable future changes to the state pension age (AOW);
- cost mark-up for future administrative costs (costs incurred in granting pensions and paying pension payments).
- Both the 'standard partner' and the 'nominated partner' method are used for the surviving dependents' pension.
 - Before reaching the state pension age, the 'standard partner' method is used, which is based on an average age difference between the participant and their partner.
 - After reaching the state pension age, the 'nominated partner' method is used, whereby a surviving dependents' pension is only reserved if a partner is actually present.

Provision for retirement pensions and surviving dependents' pensions

The retirement pension and surviving dependents' pension for death after age 65 are fully capital funded. The surviving dependents' pension on death before age 65 is also fully capital funded for years of service before July 1, 1999, and after January 1, 2018. The surviving dependents' pension on death before age 65 is, for years of service between July 1, 1999, and January 1, 2018, funded on a risk basis.

Provision for ABP occupational disability pension scheme (AAOP)

The AAOP scheme supplements the Invalidity Insurance Act (Wet op de arbeidsongeschiktheidsverzekering, WAO) benefit and since 2006 also the Work and Income (Capacity for Work) Act (Wet werk en inkomen naar arbeidsvermogen, WIA) benefit. This scheme provides for an occupational disability pension to supplement the WIA benefit. Both schemes are funded entirely on a risk basis. The provision relates only to payable pensions, including payable but not yet reported occupational disability pensions.

Provision for ABP Nettopensioen

The provision for the net pension scheme (ABP Nettopensioen) is equal to the current value of the investments following the conversion of contributions made at the participants' risk and expense for the purpose of supplementing their pensions. The provision is used for the purpose of a conversion into another pension product, which is permitted only on retirement, termination of participation, or death.

The value of the investments following the conversion of the contributions paid into the ABP Nettopensioen scheme includes the investment returns obtained on the total investments. The amount of the liability to the participants in the ABP Nettopensioen is equal to the value of the investments and is included in the provision for pension liabilities as the counterpart to the investments.

Provision for ABP ExtraPensioen

The ABP ExtraPensioen provision is equal to the current value of the investments following the conversion of contributions made at the participants' risk and expense for the purpose of supplementing their pensions. The provision is used for the purpose of a conversion into another pension product, which is permitted only on retirement, termination of participation, or death.

The value of the investments following the conversion of the contributions paid into the ABP ExtraPensioen scheme includes the investment returns obtained on the total investments. The equal liability to the participants in the AEP scheme is, as counterpart to the value of the investments, included in the provision for pension liabilities. ABP guarantees that participants receive at least the amount of their contributions when they call on their provision. Account is then taken of the investment returns on the investments following the conversion of the contributions at the time of the calculation.

Investment-related liabilities

The repayment obligation arising from short-term borrowing is measured at current value. Subsequent to initial recognition, this item is carried at amortized cost. In the absence of premium or discount, this value virtually equates to face value.

The measurement of the 'derivatives' item with a negative current value corresponds to the measurement of the derivatives with a positive current value. The short positions and collateral received are measured at current value.

Payables and other liabilities

Payables and other liabilities are measured at current value. Subsequent to initial recognition, payables and other liabilities are carried at amortized cost. In view of the short term to maturity, this is virtually equal to the face value.

Principles for the determination of results

General

The items in the statement of income and expenses are in large part determined by the principles for the measurement of investments and the provision for pension liabilities applied in the balance sheet. Realized and unrealized results are recognized directly in the statement of income and expenses.

Pension contributions (net)

Pension contributions are attributed to the period to which they relate after deducting the cost mark-up. The contributions are determined on the basis of information supplied by employers. Where the necessary information has not been received from employers, an estimate is made based on extrapolation. The coverage for collection costs is recognized under the actuarial gain/loss.

Investment results (net)

Investment results less asset management costs are attributed to the period to which they relate. Direct and indirect results from and costs (invoiced or to be invoiced) of investments are presented separately. Income from interest, dividends and suchlike is presented under direct results. Dividend is recognized at the time the dividend becomes payable. Value changes are indirect investment results and are attributed to the period in which they occur. Value changes comprise both realized and unrealized value changes.

Pension payments

Pensions are attributed to the period to which they relate.

Movement in provision for pension liabilities

Pension accrual

Pension accrual is attributed to the period in which the accrual of pension rights takes place. An exception to this is the 'continuation of active service computation' for pension accrual in the case of incapacity for work and death. The expense in respect of this future accrual of pension rights is recognized immediately in the year in which the participant becomes incapacitated for work or dies.

Indexation

Indexation is charged to the statement of income and expenses when a Board decision is made on or before the balance sheet date.

Added interest

The added interest is calculated on the basis of the nominal interest rate for a term of one year as included in the interest term structure published by DNB for interbank swaps at the end of the preceding fiscal year. The interest is calculated on the opening balance and the movements during the year.

Withdrawal for pension payments and pension management costs

The release from the provision for pension liabilities for pension payments and pension management costs is credited to the statement of income and expenses in the period in which the pensions and costs were foreseen when the provision was calculated.

Movements in market interest rate

The effect the transition from the interest term structure at the end of the preceding year shifted by one year to the interest term structure at the end of the reporting year has on the provision for pension liabilities is calculated at the end of the reporting period and recognized in the statement of income and expenses.

The DNB interest term structure for pension funds has been determined using the Ultimate Forward Rate (UFR) in the years since 2012.

Change in actuarial assumptions

The effect of the change in the actuarial assumptions on the provision for pension liabilities is calculated at the end of the reporting period and recognized in the statement of income and expenses.

Gain/loss due to change in actuarial assumptions

The gain/loss due to the change in actuarial assumptions is attributed to the period to which it relates.

Changes in respect of transfer of rights

Changes in respect of the transfer of rights are attributed to the period to which they relate.

Other movements in provision for pension liabilities

Other movements in the provision for pension liabilities are attributed to the period to which they relate.

Coverage from cost mark-up on pension contributions

The coverage from the cost mark-up on pension contributions is attributed to the period to which it relates.

Balance arising from transfer of rights

Amounts arising from transfers/acquisitions of rights are recognized at nominal value and are attributed to the period to which they relate.

Pension management costs (net)

The net pension management costs are attributed to the period to which they relate.

Interest charges on investment-related liabilities

Interest charges on investment-related liabilities are attributed to the period to which they relate.

Other income and expenses

Other revenue and expenses are attributed to the period to which they relate.

Basis of the cash flow statement

The cash flow statement has been prepared in accordance with the direct method. Cash flows are attributed to the cash-generating activities. Only the cash of ABP (and consolidated entities) is recognized in the opening and closing cash balances for the cash flow statement. Cash in mutual funds is not recognized.

Receipts and expenditures in foreign currencies on account of investment activities are translated into euros at the transaction date exchange rate. Differences between the transaction exchange rate and the settlement exchange rate are recognized under the 'investment results (net)' item. The same rules apply to investments outside the Netherlands.

As all receipts and expenditures on account of pension activities are in euros, there are no exchange differences with these activities.

Administration

ABP has largely outsourced the administration of the pension scheme to APG Groep NV, APG DWS en Fondsenbedrijf NV, and APG Asset Management NV. ABP has concluded long-term contracts for this purpose. The most important duties these pension administrators perform for the fund are pension management, asset management, communication, and support services for the Board.

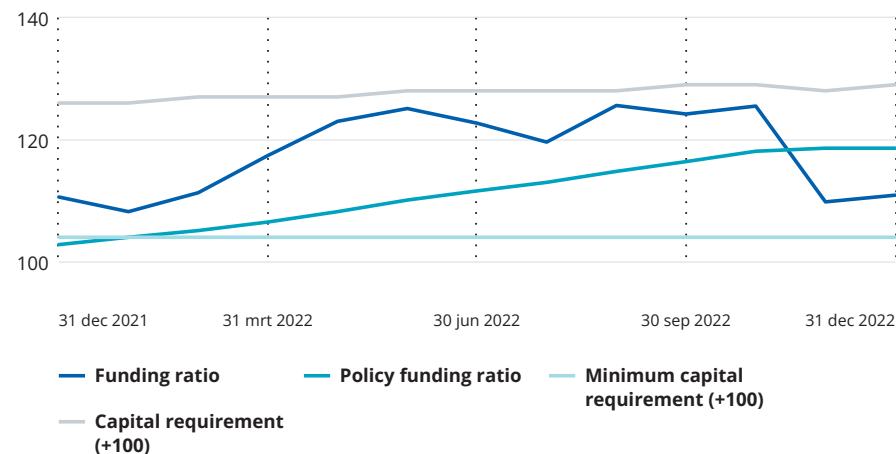
Risk section

The ‘Risk management’ section of the Board report sets out the risk policy and the design, existence and operating effectiveness of the internal risk management and control systems. This section is of a more quantitative nature and describes the movement in the funding ratio, the discount rate, the minimum capital requirement, the capital requirement, and the resulting deficit at year-end 2022. In addition, this section describes the methodology and outcome of the solvency test and the recovery plan that has been submitted. Lastly, we describe the derivatives portfolio, in view of the important role this fulfills in the control of the risks.

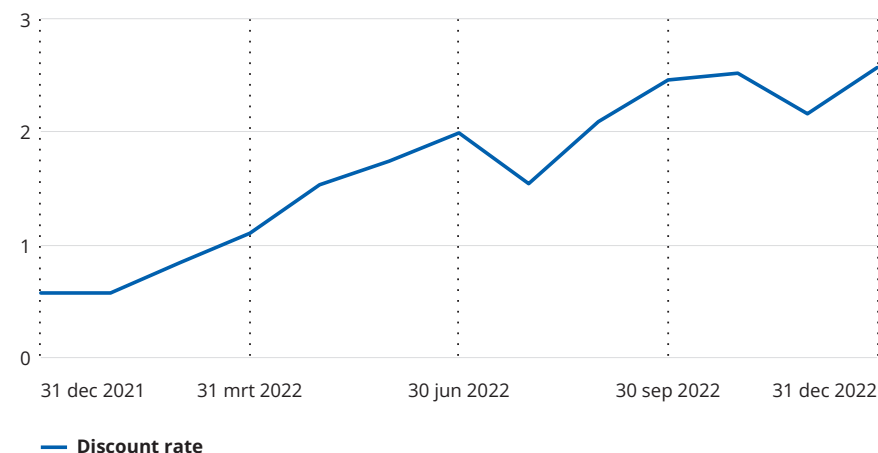
Development of policy funding ratio and discount rate in 2022

Two graphs are included below. The first graph shows the development of the funding ratio and the policy funding ratio during 2022 relative to the minimum required levels. The second graph shows the development of the discount rate.

Development of funding ratio in 2022



Development of discount rate in 2022



Policy funding ratio

The policy funding ratio is the average of the past 12 funding ratios. Averaging the funding ratios to obtain the policy funding ratio reduces fluctuations. The policy funding ratio plays an important role in the contributions, indexation, and recovery policy. At year-end 2022, the policy funding ratio was 118.6% (2021: 102.8%)

Real funding ratio

A real funding ratio of 100% would enable ABP to grant full indexation every year. This funding ratio is calculated by determining the indexation limit for full future-proof indexation. The real funding ratio is equal to the policy funding ratio divided by the future-proof indexation limit. At year-end 2022, the real funding ratio, based on price inflation as the ambition level, was 90.7% (2021: 83.6%). In accordance with the Pension Funds (Financial Assessment Framework) Decree, the new parameters for inflation forecasts and the maximum return to be recognized were applied for this calculation.

Position relative to minimum capital requirement

The funding ratio rose from 110.6% to 110.9% in the reporting year, which is comfortably above the minimum required funding ratio of 104.2%. In the first, second and third quarters, the funding ratio rose steadily to 124.2%. Rising interest rates made a major contribution to this. In the fourth quarter, ABP incorporated the pension increase of 11.96% in the funding ratio. This had a negative effect because the fund's liabilities increased in value.

The general reserve, the difference between the available assets and the value of the liabilities, therefore exceeds the minimum capital requirement. The minimum capital requirement itself is determined in accordance with Article 11 of the Pension Funds (Financial Assessment Framework) Decree. At year-end

2022, it came to 4.2% of the liabilities, which equates to €17.5 billion. See the table below.

Funding ratio: position relative to minimum capital requirement

in € mln	31-12-2022	31-12-2021
Calculated general reserve (relative to funding ratio)	45,230	10.9%
Less: Minimum capital requirement	17,478	4.2%
Surplus relative to calculated general reserve	27,752	6.7%

At year-end 2022, the pension fund had a surplus relative to the minimum capital requirement. At year-end 2022, the general reserve relative to the funding ratio was €45.2 billion, which equates to a coverage surplus (the difference between the general reserve and the minimum capital requirement) of €27.8 billion.

The position relative to the minimum capital requirement can also be determined on the basis of the policy funding ratio. In that case, there is a deficit, as the policy funding ratio (118.6%) was lower than the minimum required funding ratio (104.2%). See the table below.

Policy funding ratio: position relative to minimum capital requirement

in € mln	31-12-2022	31-12-2021
Calculated general reserve (relative to policy funding ratio)	77,088	18.6%
Less: Minimum capital requirement	17,478	4.2%
Surplus relative to calculated general reserve	59,610	14.4%

At year-end 2022, the pension fund had a surplus relative to the minimum capital requirement. The general reserve relative to the policy funding ratio was €77.1 billion at year-end 2022, which equates to a coverage deficit (the difference between the policy funding ratio and the minimum required funding ratio) of €59.6 billion.

Recovery plan

As the policy funding ratio was below the required funding ratio at year-end 2022, ABP was required to submit a recovery plan to DNB before April 1, 2023. The recovery plan showed that, under the regular policy, the policy funding ratio could grow to the level of the capital requirement in time. This means that no reduction in the context of the recovery plan will be needed in 2023.

Solvency test

Pension funds are governed by the Financial Assessment Framework (FTK), which is part of the Pensions Act, and are under the supervision of DNB. The Financial Assessment Framework provides for a solvency test to determine the funding ratio that a pension fund needs if a combination of shocks set out in the Financial Assessment Framework is to lead to a funding ratio of 100%. This funding ratio meets the prescribed capital requirement. Pursuant to the Financial Assessment Framework, the size of the shocks is predefined such that they occur with a frequency of once every 40 years. i.e. with a probability of 2.5% each year. The capital requirement gradually increased over the past year from around 126% to around 129% as a result of the rise in interest rates.

The risk factors defined by DNB are:

- S1 Interest rate risk
- S2 Equities and alternative investments risk
- S3 Currency risk
- S4 Commodity risk
- S5 Credit risk
- S6 Underwriting risk
- S7 Liquidity risk
- S8 Concentration risk
- S9 Operational risk
- S10 Active risk

The calculation of the capital requirement begins with the determination of the predetermined shocks associated with risk factors S1 through S10. These are then combined using the square root formula to obtain a total shock on the funding ratio. The square root formula takes account of the fact that the shocks will not necessarily occur simultaneously, so that the combined shock is less than the sum of the individual shocks (diversification effect).

The capital requirement is defined such that the combined shock leads to a funding ratio of 100%. The outcome fluctuates over time due to market conditions (such as interest and credit spreads). However, portfolio adjustments in combination with risk restrictions ensure that the funding ratio remains near the ratio of the strategic portfolio. The standard model sets the liquidity risk (S7), concentration risk (S8), and operational risk (S9) at zero. With the policy pursued, these risks have been assessed as not requiring an increase in the capital.

The S test is based on the Strategic Investment Plan (StIP) 2022, which will remain valid until July 1, 2023, as the new StIP has been delayed.

Equity position relative to capital requirement

The solvency test shows a capital requirement deficit at year-end 2022: the fund's capital is below the capital requirement. The following table presents the results from the standard test on the strategic portfolio under the StIP 2022 measured as at year-end 2022. The shocks are determined in the situation in which the funding ratio meets the capital requirement.

The capital requirement expressed as a percentage of the technical provisions has increased to 28.8% of the liabilities since last year. This increase was mainly caused by the high interest rates and the increase in the strategic hedging from 25% to 50%. The portion of the equity included under the capital requirement that was released as a result of this has been recognized in the S10 buffer. The capital requirement at year-end 2022 (€119.4 billion) is calculated on the basis of the long-term strategic goal under the StIP 2022. The equities and alternative investments risk is by far the largest component of the capital requirement.

Amount of deficit relative to capital requirement

in € millions and as percentage of the provisions

	31-12-2022	31-12-2022	31-12-2021	31-12-2021
Risk				
S1 Interest rate risk	10,279	2.5%	9,089	1.8%
S2 Equities and alternative investments risk	86,548	20.9%	102,173	20.5%
S3 Currency risk	41,657	10.1%	40,025	8.0%
S4 Commodity risk	11,206	2.7%	13,230	2.7%
S5 Credit risk	18,136	4.4%	24,330	4.9%
S6 Underwriting risk	11,498	2.8%	14,457	2.9%
S10 Active risk	43,614	10.5%	26,554	5.3%
Subtotal of all risks	222,938	53.8%	229,857	46.1%
Less: Diversification effect	-103,561	-25.0%	-98,668	-19.8%
Capital requirement	119,377	28.8%	131,189	26.3%
Less: Calculated general reserve (relative to policy funding ratio)	77,088	18.6%	14,008	2.8%
Deficit relative to calculated general reserve	-42,289	-10.2%	-117,181	-23.5%

(S1) Interest rate risk

The interest rate risk is derived from the interest rate sensitivity of assets and liabilities and is an important element for the mismatch risk. The mismatch risk is the difference between the interest rate sensitivity of the investments and of the liabilities. An increase or decrease in the interest rate affects the assets and liabilities and, as a result, the funding ratio. The interest rate risk S1 has decreased over the last decade as the interest rate shock is a fixed fraction of the interest rate curve, resulting in a lower interest rate that leads to a smaller interest rate shock. The interest rate rose in the past year, however, which is reflected in the increase in S1 (see table).

ABP uses the partial duration method to calculate the interest rate risk S1. This ensures that both the variation of the interest rate sensitivity along the curve and the stochastic cash flows are taken into account. On the basis of the partial durations pertaining to seven representative maturities, a set of cash flows is built that have the same interest rate sensitivity along the curve as the fixed-income investments portfolio itself. The interest rate shock is then determined on the basis of this set of cash flows.

In the S test, the yield rate curve by means of which the liabilities are discounted is shocked up and down by applying a maturity-dependent percentage. The interest rate risk is calculated on the basis of the scenario with the worst impact on the pension fund capital,

usually a decline in interest rates. Subsequently, to provide insight into the size of the shock, a number of examples are defined of maturity-dependent shocks to be taken into account. For example, a downward shock of 33% is applied to the five-year interest, a downward shock of 25% to the 10-year interest rate, and a downward shock of 24% to interest rates with very long maturities. The same shock in percentage points is then applied to the market interest rate curves used in measuring the swaps and the fixed-income investments.

More than half of the interest rate sensitivity of the investments originates from the fixed-income investments and the remainder from the interest-rate derivatives. The interest rate sensitivity is expressed in terms of duration, which is approximately equal to the average weighted maturity of all cash flows (coupons and repayments of principal) from the fixed-income investments and interest-rate derivatives. The duration can be interpreted as follows: a 1 percentage point fall in market interest rate will result in a percentage increase in the value of the portfolio equal to the duration of the portfolio.

The duration for the investments is determined on the basis of the ESTER curve. As the UFR curve is required by law to be applied to determine the value of the liabilities, the duration of the liabilities has however been determined on the basis of the UFR curve instead of the ESTER curve. Interest rate sensitivity will change with future changes in the UFR rate curve, such as the transition to UFR 50 in 2023. The impact of this is minimal.

Duration 2022

in € mln

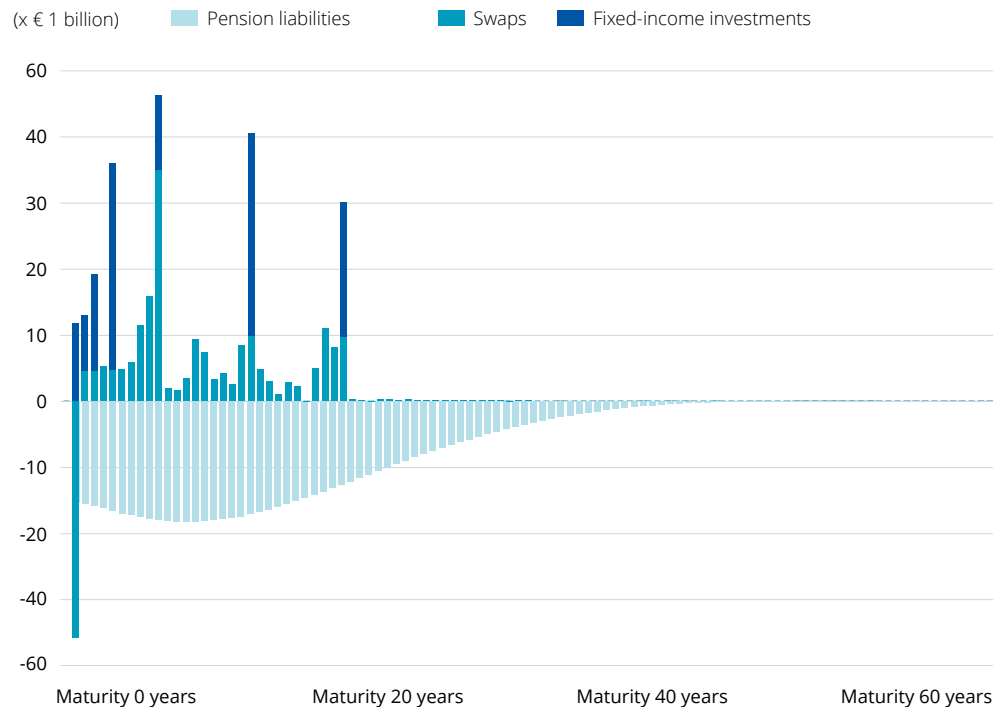
	Years	Market value	Impact +1%	Impact -1%	2021 in years
Duration of assets (excluding interest rate swaps)	3.5	467,534	-12,137	14,614	3.4
Duration of assets (including interest rate swaps)	7.1	454,227	-27,627	33,370	5.8
Duration of liabilities	17.3	414,265	-62,780	83,292	19.5

The duration for the total investments, excluding interest rate swaps, was 3.5 years, where the interest effect on assets other than fixed-income investments is not taken into account. A duration extension of the investments by means of interest rate swaps brings the interest sensitivity more in line with the interest rate sensitivity of the liabilities, which reduces the impact of a change in the interest rate on the funding ratio. The duration of the total investment portfolio, including interest rate swaps, was 7.1 years at year-end 2022.

The duration of the liabilities based on the UFR interest rate curve was 17.3 years. The interest rate hedging percentage is determined on the basis of a different interest rate curve, the Ester, and was about 40.4% at year-end 2022.

The chart Nominal cash flows presents the cash flows from the nominal pension liabilities in light blue and the cash flows from the swap portfolio in medium blue. The seven dark blue bars present the cash flow from the fixed-income investments portfolio. The individual cash flows of this portfolio are combined into seven maturity buckets to simplify the presentation. The combined cash flows result in the same change of value for S1 as the total of the individual cash flows. The chart also presents the extent to which ABP has hedged the interest rate risk and the extent to which the hedging is evenly distributed between the terms to maturity.

Nominal cash flows



(S2) Equities and alternative investments risk

To manage the price risks on investments in equities and alternatives, ABP applies a policy of maximum diversification across geographical regions, investment categories, and sectors. Information on this is provided in the notes to the company balance sheet. Equities and alternative investments make up 60% of the assets in the strategic portfolio. This includes the category of commodities, which accounts for 6% but is not part of S2. A 10% price drop affecting equities and alternative investments will reduce the funding ratio by 6 percentage points. The S test assumes a shock of 30% for developed-market equities, 40% for emerging-market equities, and 25% for unlisted real estate. For unlisted equity and alternative investments (private equity and infrastructure), the applied shock is 40%. The risks associated with unlisted equity and alternative investments are included in the equities and alternative investments risk (S2). Any related unhedged currency risks are included under the heading of currency risk (S3).

(S3) Currency risk

ABP is exposed to a currency risk as the pension fund also makes investments denominated in foreign currencies in the context of spreading risks, while pensions are payable in euros. The currency risk was mitigated as the largest foreign currency exposures were partly hedged in 2022; the strategic hedging is 50%. In the S test, a 20% shock is applied to the remaining post-hedging exposure to foreign currencies in developed markets relative to the euro. A 35% shock is applied to the remaining unhedged exposure to foreign currencies in emerging markets relative to the euro. The current value of the currency hedging derivatives is presented in the last table in the derivatives paragraph. The following table presents a breakdown of the investments before and after currency hedging.

Analysis of actual capital held by currency as at year-end 2022

in € mln	Before currency hedge	Currency hedge	After currency hedge
Currency			
Euro	183,408	108,596	292,004
US dollar	170,424	-84,725	85,699
Sterling	11,878	-6,215	5,663
Chinese Yuan	13,958	-	13,958
Yen	8,383	-4,714	3,669
Australian dollar	8,214	-3,666	4,548
Korean Won	3,612	-	3,612
Hong Kong dollar	5,264	-	5,264
Taiwan dollar	4,212	-	4,212
Indian Rupee	5,425	-	5,425
Canadian dollar	2,599	-1,586	1,013
Swiss franc	3,053	-2,202	851
Other	33,577	-	33,577
Total 2022	454,007	5,488	459,495
Total 2021	553,305	-1,661	551,644

At year-end 2022, the strategic currency risk hedging of equities and alternative investments denominated in the US dollar, Swiss franc, Japanese yen, Canadian dollar, Australian dollar, and Pound sterling was 50%, except for commodities, for which the currency risk is not hedged. The currency risk, in contrast, of fixed-income investments is fully hedged. A currency hedge involves a de facto conversion of an investment in a foreign currency into an investment in euros.

(S4) Commodity risk

The weighting of commodities in the strategic portfolio under the StIP 2022 is 6% and was largely built up using commodity derivatives, in practice. The active risk exposure is small, as part is actively mandated. In the S test, a 35% shock is applied to the market value of the commodities.

(S5) Credit risk

The investment portfolio is exposed to credit risks. Credit risk refers to the risk that a counterparty is no longer able to meet its payment obligations or that its financial situation deteriorates. The portfolio rating is an important indicator of the quality of the portfolio. The credit risk is partially hedged with credit default swaps. The fixed-income investments portfolio is classified into five rating classes for the purposes of the S test. These classes are AAA, AA, A, BBB, and, as fifth class, BB or lower.

The AAA rating class is subdivided into European AAA government securities and other AAA. The Financial Assessment Framework stress scenario applies a shock on the credit spread, ranging from 0 bp on European AAA government securities and 60 bp on other AAA to 530 bp on securities rated BB or lower.

The creditworthiness of investments is usually classified into credit ratings. A high credit rating indicates that the borrower is extremely creditworthy and it is highly probable that the loan will be redeemed. Credit ratings range from the highest rating, AAA (extremely creditworthy), to the lowest, D. The spread in fixed-income investments is such that 87% (2021: 86%) have a rating of BBB or higher (investment grade).

(S6) Underwriting risk

Retirement pensions and surviving dependents' pensions are payable for life. Pursuant to the legislation and regulations, the calculation of the provision for pension liabilities must take account of a foreseeable trend in future mortality rates. This is carried out using the AG Projection Table 2022, which is adjusted using correction factors specific to the pension fund as specified in the Actuarial Assumptions Study 2017-2019 to obtain a mortality table specific to ABP. In addition to mortality rates, ABP's actuarial assumptions also take account of, for example, transfer probabilities, partner frequencies and incapacity for work estimates. If the mortality rates follow the AG projections, then the life expectancy at year-end 2022 for a male aged 66 is 87.1 and for a female aged 66 is 89.4. The future average mortality rates may diverge from the projection, however, and actual mortality may also differ from average mortality within a finite population. That leads to uncertainty in the value of the provision for pension liabilities, which is expressed in S6. The shock applied in the provision for pension liabilities in the stress scenario, for this and other underwriting risks, is 2.78% this year.

(S7) Liquidity risk

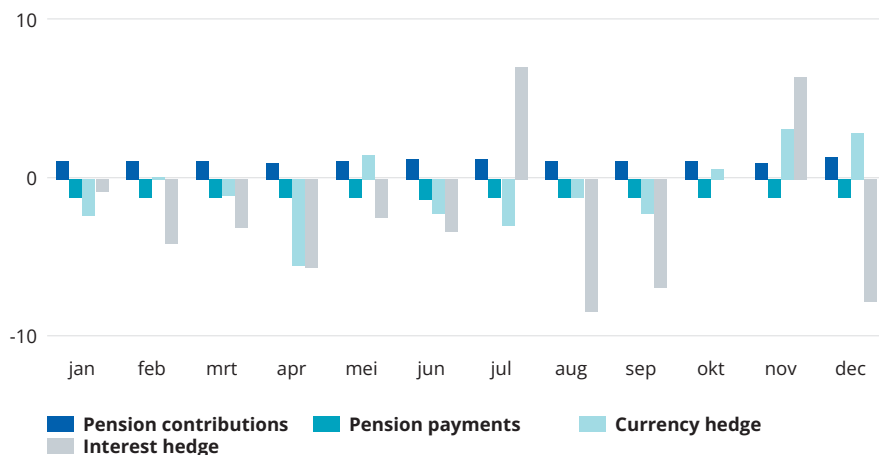
The liquidity risk is the risk that the fund has insufficient cash to meet its current payment liabilities, including pensions, or to deposit collateral for derivative positions. ABP's liquidity risk is minimal in normal circumstances because the majority of investments are in cash assets. There were no liquidity deficits in 2022.

Investing in illiquid investment categories reduces the flexibility available to the pension fund in the periodical rebalancing of the investment portfolio. A fund forced to sell illiquid assets at short notice will usually be unable to command a fair price. This is avoided by taking account of the reduced flexibility of illiquid investment categories in the rebalancing policy.

The following chart presents the monthly cash flow from the interest rate hedge, currency hedge, contributions, and pensions in 2022. Liquidity problems can arise when the negative cash flows become excessive. The chart shows that, in 2022, hedging the currency position demanded the most liquidity.

Liquidity flows

x € 1 miljard



(S8) Concentration risk

Concentration risk arises when a large proportion of the invested assets is invested with one party or in one investment category. In that case, the risks are greater than with a balanced spread of investments. The standard model has a concentration risk of zero. Based on the policy that has been applied, it has been assessed that there is no increased risk and therefore no need for an additional mark-up.

(S9) Operational risk

The operational risk is the risk of errors not being identified sufficiently promptly due to an incorrect operation of the organization. The Pensions Act allows the operational risk to be set at zero when there is no increased risk.

This condition was met in 2022. This statement is based on the reports from the pension administrator, based on which the Board monitors all aspects of the pension administration.

(S10) Active risk

The optimum asset mix is determined using the asset and liability management (ALM) approach. Each investment category is then populated with suitable assets, with departures from the benchmark being permitted within the predetermined maximum tracking errors, which leads to an active risk. The tracking errors for the various investment categories are measured with risk systems and continually monitored to determine whether they remain within the set limits.

S10 comprises a further component besides the required buffer for active risk. With effect from the Strategic Investment Plan 2019-2021, ABP decided to eliminate the strategic allocation to hedge funds and instead to adopt a higher strategic weighting to developed-market equities. This allocation shift resulted in a decrease in the strategic capital requirement. The same applies to the reduction of the strategic capital requirement resulting from the increase in the interest rate hedging percentage from 25% to 30% as of the start of 2022. Subsequently, a lot of extra capital requirement margin was released in 2022 as the strategic interest rate hedging percentage was increased further during the course of the year. It was then decided to provisionally retain the released capital requirement margin in a buffer in S10. However, it was decided in 2022, with the reassessment of the short-term risk appetite, to include these reserves in S10. Once the new risk appetite has been implemented (after the new strategic mix has been determined on the basis of the revised risk appetite), they will no longer be included in the capital requirement.

Climate risks

Governance of climate risks and opportunities

ABP's Board determines the policy, including the policy for Sustainable & Responsible Investment. In the policy, ABP sets the goals for climate policy, and ABP makes choices about how we aim to achieve those goals. The Board also establishes the Strategic Investment Plan and the allocation of the investments to different investment categories (strategic asset allocation).

As part of its responsibility, ABP's Board monitors climate-related risks and opportunities in the investment portfolio. For example, the Board and its various committees discussed the consequences of climate change for ABP as an investor several times in 2022, and presentations were given by our asset manager APG.

The governance for monitoring and managing climate risks and opportunities is embedded in the organization and processes of ABP and our asset manager APG.

- ABP has established a formal climate risk policy in which the details of the Strategic Investment Plan, including aspects related to climate risks and opportunities, have been documented together with the fiduciary management department. Together with fiduciary management, ABP also supervises the execution of the mandates issued.
- APG's portfolio management department is responsible for managing the investments within the issued mandate, including climate risks and opportunities. Investments above a certain size must be approved by the Committee on Investment Proposals (CIP)*, with sustainability risks (including climate risks) being explicitly considered.
- Second-line management of climate risks is the responsibility of ABP's risk management department.

Impact of climate risks

For ABP, climate change and the transition to new energy generation and sustainable energy sources are one of the major transitions that we want to respond to with our investment policy. Climate change has a decisive impact on the ability of companies to create long-term value. As an investor, we can also have an influence on this theme.

Climate change and the energy transition are one of the greatest challenges facing the world. We distinguish physical climate risks and transition risks.

- Physical risks are related to the impact of changing weather patterns, such as storm damage, prolonged drought and flooding.
- Transition risks are related to the impact of efforts being made to address the root cause of climate change - greenhouse gas emissions, such as legislation and regulations, technological developments and changes in market sentiment.

Transition and physical climate risks can eventually lead to changes in the valuation of companies and real estate in which we invest. For the impact on the valuation, a distinction can be made between liquid and illiquid investments.

With liquid investments, the financial markets estimate the value of a company on a daily basis. A lot of information about known climate risks is taken into account by market parties in the valuation. The occurrence of risks ultimately depends on the actual transition, whether it takes place and at what speed. We continuously monitor that.

For illiquid investments, determining the (financial) impact of climate risks is more complex. The transition path to 2050 is highly dependent on the available technology and the climate policies pursued by countries. A complicating factor is also that historical information offers little guidance because the world has to change radically in the future. Because of these uncertainties, we

use scenarios to identify climate risks and opportunities. These constructed images of the future describe what the world could look like in the future. The scenarios have different starting points with regard to climate policy and technological development. Scenario analysis helps to better understand what the road to 'Paris' could look like and what impact this will have on our investments. These analyses are performed at different levels. We take the results into account when making investment decisions. We also identify which part of our government bond portfolio is invested in countries with a high climate risk by examining both physical risks and transition risks. We use ND-GAIN indicators to determine a country's physical climate risk. These give an indication of how vulnerable a country is to the consequences of climate change and of the extent to which the country is prepared for it. Our qualitative scenario analyses, taking into account all the uncertainties that still exist at the moment, show that the future impact on the fund's financial position could be significant.

Based on the information currently known about climate risks, there is no impact on the valuations and financial position reported in the financial statements as at the end of 2022.

Risk restrictions

Investment risks need to be taken if indexation is to be feasible. These are risks in line with the pension fund's risk appetite that are consciously accepted for the purpose of realizing the long-term indexation ambition. Investment risks are limited with risk restrictions in the mandates, and the risk exposure is continually monitored. Risk limits have been adopted for both the entire portfolio and specific components of the portfolio, such as a maximum permitted active risk or a maximum allocation to a specific counterparty. In addition to specifying limits and adopting spreads, risks can also be mitigated with derivative financial instruments, or derivatives.

Derivatives

ABP uses derivatives to mitigate risks or make rapid tactical changes in the asset mix. Derivatives are financial instruments with a value partly dependent on one or more underlying financial instruments. Derivatives can be traded on the stock exchange or directly with players in the financial sector, the latter group of which are referred to as "over-the-counter" (OTC) derivatives. ABP makes use of both. Collateral that usually needs to be deposited with the counterparty when taking a derivative position serves as a form of buffer for fluctuations in the value and market value of the derivative position. The collateral comprises cash (or suitable securities), which is deposited with the counterparty to serve as assurance for the fulfillment of any liabilities when the value of derivatives fluctuates. Additional deposits or partial withdrawals of collateral are made, in principle, on a daily basis, as determined by movements in the position. Derivatives are mainly used to hedge currency and interest rate risks. As some investments are denominated in foreign currencies, most of which in US dollars, a portion of the currency risk is hedged to mitigate exchange rate risks to safeguard cash flows in euros. Derivatives are also employed to bring the interest rate sensitivity of investments more into line with the interest rate sensitivity of the future liabilities. This is achieved by extending the duration (weighted average maturity of all cash flows) of the fixed-income investments.

A limited portion of the derivatives portfolio is used as an effective means of creating positions in certain investments or of modifying features of a certain investment portfolio.

The following table presents the current value of the derivatives (swaps, futures, options, and forward currency contracts) attributed to the various investment categories together with the associated asset management overlay effect. The asset management overlay effect of the derivatives and short

positions was €6.6 billion at year-end 2022 (2021: €18.7 billion). The table shows that this asset management increased the interest in fixed-income investments and equities and reduced the interest in other investments.

Balance sheet before and after attribution of current value of derivatives

in € mln	Balance sheet at fair value	Attributed fair value of derivatives	Balance sheet after attributing fair value of derivatives	Asset management overlay effect	Balance sheet after asset management overlay effect 31-12-2022	Balance sheet after asset management overlay effect 31-12-2021
Real estate	75,112	-	75,112	-	75,112	77,826
Equities	172,287	284	172,571	-6,717	165,854	212,383
Fixed-income investments	185,350	-5,924	179,426	142	179,568	230,892
Derivatives: positive positions	23,871	-23,871	-	-	-	-
Other investments	35,239	4,296	39,535	6,575	46,110	55,051
Other assets	2,164	-	2,164	-	2,164	1,976
Total assets	494,023	-25,215	468,808	-	468,808	578,128
Pension fund capital	45,236	-	45,236	-	45,236	53,607
Pension liabilities	414,265	-	414,265	-	414,265	498,797
Investment-related liabilities incl. derivatives and short positions	33,816	-25,215	8,601	-	8,601	21,783
Other liabilities	25,371	-25,215	156	-	156	-
	706	-	706	-	706	3,941
Total capital and liabilities	494,023	-25,215	468,808	-	468,808	578,128

The following table presents a specification of the various types of derivatives. The underlying values of the futures and TBAs (to be announced) are based on the net exposure (balance of the long and short exposure). The underlying values of the other derivatives are based on the underlying notionals of the

derivative concerned, with all positions totaled as absolute values (sum of long and short exposure). The two largest items are the derivatives employed to mitigate the currency risk (forwards) and interest rate risk (interest rate swaps).

Analysis of derivatives by type

in € mln

	Receivables underlying value	Receivables fair value	Payables underlying value	Payables fair value
Currency derivatives				
Forwards	164,868	5,950	25,332	-210
Cross Currency Swap	-	-	-	-
Interest rate derivatives				
Interest Rate Swaps	312,953	16,645	149,733	-23,910
Inflation-linked swaps	2,460	100	7,617	-273
Fixed-income futures	5,188	149	12,646	-397
TBAs	219	11	4,021	-57
Other derivatives				
Credit Default Swaps	750	44	1,162	-11
Other Swaps	2,424	-	-	-
Other futures	3,632	972	5,298	-357
Total derivatives as at year-end 2022		23,871		-25,215
Total derivatives as at year-end 2021		34,234		-21,235

Short positions

A short position is created upon entering into the obligation to deliver securities at a future date without having possession of them at the time of entering into the obligation; the counterparty risk on a short position is mitigated by means of collateral. The short positions for investments were €156 for 2022 (2021: zero).

Notes to the company balance sheet

Amounts are in millions of euros unless otherwise stated.

General

The pension fund's available assets can be derived from the company balance sheet by deducting the 'investment-related liabilities', 'payables and other liabilities' and 'specific reserves' items from the total assets. The funding ratio is calculated by dividing the available assets by the provision for pension liabilities. The policy funding ratio, which forms the basis for supervision of the pension fund, is the 12-month rolling average of the funding ratios. The calculation of the funding ratio at year-end of the fiscal year is presented below:

	31-12-2022	31-12-2021
Total assets	494,023	599,363
Investment-related liabilities	-33,816	-43,018
Other liabilities	-706	-3,941
Specific reserves	-6	-760
Actual capital held	459,495	551,644
Provision for pension liabilities	414,265	498,797
Funding ratio	110.9%	110.6%
Policy funding ratio	118.6%	102.8%

Assets

1. Investments

Movements in the investments were as follows:

	Real estate	Equities	Fixed-income investments	Derivatives	Other investments	Total 2022	Total 2021
Opening balance of investments	77,826	228,837	219,233	34,234	37,257	597,387	572,116
Granted/bought	19,996	117,057	103,518	-	5,115	245,686	138,489
Repaid/sold	-16,479	-145,283	-91,679	-	-15,490	-268,931	-172,742
Change in value ¹	-4,897	-26,918	-43,498	-	3,682	-71,631	70,206
Other movements	-1,334	-1,406	-2,224	-10,363	4,675	-10,652	-10,682
Closing balance of investments	75,112	172,287	185,350	23,871	35,239	491,859	597,387
Of which:							
- listed						316,837	404,579
- unlisted						175,022	192,808

¹ Including movements up to the time of disposal

Definition

Investments comprise real estate, equities, fixed-income investments, derivatives, and other investments, including the associated receivables, cash, and payables. These can be held directly or indirectly through units in mutual funds managed by the pension administrator.

During 2022, ABP withdrew €103 billion from mutual funds. The underlying investments were transferred to ABP and are now held directly by ABP.

The withdrawal from the mutual funds is accounted for as a sale, and the acquisition of the investments now held directly has been largely accounted for as a purchase in the statement of movements in investments.

The other movement in derivatives in 2022 is mainly a consequence of an increase in interest rates, causing the interest rate derivatives to fall in value. The sale under other investments mainly concerns the phasing out of the Hedge Funds investments.

The 'other movements' item comprises movements in the receivables, cash, payables associated with the investments, and movements in the derivative positions.

The closing balance of the investments, €491.9 billion (2021: €597.4 billion) includes:

	31-12-2022	31-12-2021
Receivables, prepayments and accrued income	961	1,055
Collateral paid	6,421	2,489
Short-term lending (including CIS short-term lending)	18,282	23,615
Current account bank balances	2,493	1,253
Payables, accruals and deferred income (including debit balances on bank accounts)	-4,527	-2,450
Net assets included in current assets	23,630	25,962

The 'current account bank balances' item includes amounts invested in money market funds as call money. €617 million of the bank balances is not freely disposable (2021: €491 million). This relates to balances held on margin accounts in connection with future positions.

The liabilities recognized in investments comprise debit balances on bank accounts of €1.1 billion (2021: €1.2 billion).

The 'investments' item also includes:

- investments of €0.2 billion (2021: €0.2 billion) in favor of participants in the ABP Nettopensioen and ABP ExtraPensioen schemes.
- investments of €0.0 billion (2021: €3.0 billion) for the prefunding of the early retirement, pre-pension and life-course savings scheme (VPL). These investments are managed by ABP and are at the risk and expense of third parties. The movement during the fiscal year comprises the contributions received, €1,183 million (2021: €925 million) and a negative return of €19 million (2021: €18 million). As of December 30, the investments for the prefunding of the VPL scheme were transferred to the regular ABP portfolio.

ABP does not lend out investments.

Measurement and accounting for look-through for mutual funds

For the purposes of a meaningful presentation of the carrying value of the units in the mutual funds, these are classified according to the underlying investment categories where possible and in so far as this provides an improved view. In accordance with Dutch Accounting Standard 610 for Pension Funds (RJ 610 Pensioenfondsen), the positive and negative derivative and short-term borrowing positions included in the value of these units are recognized separately in the balance sheet. The specification of all investments is based on the underlying assets, including investments placed in mutual funds managed by the pension administrator.

The breakdown of the current value per investment category on the basis of the underlying measurement method can be presented as follows:

in %	Real estate	Equities	Fixed-income investments	Derivatives: positive	Investment related liabilities	Other investments	31-12-2022	31-12-2021
Mark-to-market	29	76	94	55	30	58	76	75
Broker quotes	-	-	-	-	-	-	-	-
Mark-to-model	-	-	2	45	70	-	-2	4
External estimates	71	24	4	-	-	42	26	21
Total	100	100	100	100	100	100	100	100

The classification presented in the above table is based on the methods used for the measurement of assets and liabilities described in the 'Accounting policies' section. The classification of 45% of the derivatives in the mark-to-model is due to the absence of stock exchange quotations. This applies to over-the-counter derivatives, for example, even though these can be measured objectively. Of the external estimates, 77% is based on an independent measurement.

The investments have been attributed to a measurement method on the basis of the following assumptions:

- Net current assets relating to an investment category, including deposits, repos, receivables, payables, cash, and investments in money market funds, are included in the 'mark-to-market' category.
- Private equity investments and investments in hedge funds are attributed to the 'external estimates' category. This also applies to investments in investment funds whose value is quoted by an external manager. Swaps are attributed to the 'mark-to-market' category when the price is supplied by an independent price provider. However, when swaps are measured

using a model because daily prices are unavailable, they are attributed to the 'mark-to-model' category.

- Currency forwards are attributed to the 'mark-to-model' category. When prices are not supplied by an independent price provider, mortgage-backed securities and asset-backed securities are attributed to the 'broker quotes' or 'external estimates' categories. Securities measured on the basis of less than three broker quotes are attributed to the 'external estimates' model category. Mortgage portfolios are attributed to the 'mark-to-model' category.

Most measurements of the investment portfolio are therefore based on information from independent data suppliers. Only a small fraction of the portfolio is measured with internal models.

These measurements are brought into line with International Financial Reporting Standards (IFRS) to provide a clearer insight into the figures. Under IFRS, it is customary to categorize investments on the basis of the fair value hierarchy, which consists of following three levels:

- level 1, direct quoted market prices: investments with quoted prices for identical assets or liabilities in active markets;
- level 2, derived market prices: investments other than level 1 investments measured using inputs comprised of observable data in the market;
- level 3, valuation models and techniques. investments measured with a measurement model using input comprised of significant unobservable input data.

The following table presents a combination of the measurement matrix in the previous table and the fair value hierarchy as applied internationally.

The attribution of investments to levels is based on the following assumptions and principles:

- investments in a mutual fund are attributed to a level, not the mutual fund as such. If the investment is in another investment fund, then that investment fund is attributed to a level;
- both investments and the receivables, payables, and cash are attributed;
- the following listed investments are attributed to level 1: equities, bonds, options, futures, money market funds, and cash;
- the following investments are attributed to level 2: investments priced based on Markit or similar price providers, investments priced on the basis of at least three broker quotes, and investments measured with a model

administered by the manager using observable market data. The following are also attributed to level 2: deposits, repos, receivables and payables, currency forwards, listed lookalike options, futures, and similar. Investment funds are also attributed to level 2 when units in that fund can be sold back to the fund at least once a quarter and at the reported price;

- investments not attributed to level 1 or 2 are attributed to level 3. These are mainly closed end funds in illiquid investments with units that cannot be bought back before maturity.

Breakdowns

The following tables present breakdowns of the investments by class, region, and currency (all in millions of euros). The currency table does not include the 'derivatives' item, as this is presented in a separate table together with derivatives with a negative current value and short positions. The investments do not involve securities lending.

in %	Direct quoted market prices	Derived market prices	Valuation models and techniques	Total
Mark-to-market	91	9	-	100
Broker quotes	-	-	-	-
Mark-to-model	-	100	-	100
External estimates	-	4	96	100
Total 2022	69	6	25	100
Total 2021	74	7	19	100

Investments by category

	Real estate	Equities	Fixed-income investments	Derivatives: positive	Other investments	31-12-2022	31-12-2021
Basic materials	12	8,094	787	400	1,700	10,993	14,236
Mortgages etc.	-	-	13,521	11	-	13,532	17,812
Real estate	42,384	3,040	336	-	-	45,760	55,294
Utilities	1,432	3,875	2,535	-	60	7,902	8,094
Telecommunications	3,357	3,439	2,987	-	-	9,783	11,376
Healthcare	225	19,196	2,186	-	5	21,612	27,007
Luxury goods	2,739	18,686	2,505	-	5	23,935	32,535
Energy	8,994	2,425	-	232	4,214	15,865	17,201
Manufacturing	15,030	16,277	2,770	-	-	34,077	39,169
Financial institutions	383	38,344	22,644	23,033	27,918	112,322	138,505
Convenience goods	-	12,549	1,067	46	1,222	14,884	17,615
Information technology	-	46,323	911	-	-	47,234	70,288
Public authorities	556	39	133,101	149	115	133,960	148,255
Total investments	75,112	172,287	185,350	23,871	35,239	491,859	597,387

Investments by region

	Real estate	Equities	Fixed-income investments	Derivatives: positive	Other investments	31-12-2022	31-12-2021
Netherlands	4,672	3,634	12,416	7,046	4,762	32,530	33,894
Rest of EMU	16,585	17,138	77,893	13,557	8,199	133,372	164,118
Rest of Europe	13,116	12,513	17,204	2,533	7,980	53,346	62,138
North America	23,182	96,365	54,361	716	11,638	186,262	240,013
Asia/Pacific	16,108	38,866	12,298	19	2,124	69,415	80,802
Other	1,449	3,771	11,178	-	536	16,934	16,422
Total investments	75,112	172,287	185,350	23,871	35,239	491,859	597,387

Investments by currency, excluding derivatives

	Real estate	Equities	Fixed-income investments	Other investments	31-12-2022	31-12-2021
Euro	24,425	21,330	99,691	18,769	164,215	178,409
US dollar	25,812	96,137	58,617	14,342	194,908	248,366
Sterling	7,807	4,383	7,286	417	19,893	29,266
Chinese Yuan	1,462	10,968	1,414	1	13,845	15,808
Yen	795	6,683	-2	-7	7,469	11,392
Australian dollar	4,780	1,930	972	1,368	9,050	9,405
Korean Won	-	4,212	-	-	4,212	6,471
Hong Kong dollar	4,309	956	-	59	5,324	5,809
Taiwan dollar	705	4,542	111	10	5,368	5,851
Indian Rupee	136	2,218	1,242	151	3,747	5,431
Canadian dollar	-	3,494	70	1	3,565	5,305
Swiss franc	220	2,723	78	4	3,025	4,218
Other	4,661	12,711	15,871	124	33,367	37,422
Total investments	75,112	172,287	185,350	35,239	467,988	563,153

The division between “Derivatives positive” and “Derivatives negative” in the currency table is partly influenced by the currency hedging positions. These positions are a snapshot. A forward currency contract is a contract to buy or sell a given amount of a currency at an agreed exchange rate on an agreed future date. Buying increases the currency position and selling decreases the position. Both positions are presented in the above table. The final balances are in part dependent on exchange rate movements since the conclusion of the contract.

Derivatives and short positions by currency

	Derivatives positive	Derivatives negative	Short positions	31-12-2022	31-12-2021
Euro	165,540	-31,718	-	133,822	182,075
US dollar	-115,445	7,219	-156	-108,382	-132,441
Sterling	-19,144	4,943	-	-14,201	-20,551
Chinese Yuan	215	-102	-	113	185
Yen	668	-4,467	-	-3,799	-6,320
Australian dollar	-4,286	-142	-	-4,428	-4,942
Korean Won	-	-	-	-	-1
Hong Kong dollar	-63	7	-	-56	-178
Taiwan dollar	-	58	-	58	17
Indian Rupee	-2,722	-12	-	-2,734	-2,628
Canadian dollar	48	-1	-	47	48
Swiss franc	-2,012	-163	-	-2,175	-2,524
Other	1,072	-837	-	235	259
Total investments in derivatives and short positions	23,871	-25,215	-156	-1,500	12,999

Notes by investment category

Real estate investments encompass investments in:

Real estate investments and infrastructure investments

	31-12-2022	31-12-2021
Residential property	13,795	14,783
Offices	5,286	7,165
Retail property	9,616	10,551
Industrial buildings	9,918	12,469
Hotels	2,870	2,200
Other	8,861	9,253
Total investment properties	50,346	56,421
Industrial companies	9,998	8,938
Energy	8,994	8,026
Telecommunications	3,357	2,381
Other	2,417	2,060
Total infra investments	24,766	21,405

The real estate investments comprise €9.8 billion in the name of ABP (2021: €3.7 billion) and investments of €65.4 billion through mutual funds managed by the pension administrator (2021: €74.1 billion).

The 'other' item includes other real estate investment assets and liabilities totaling €0.3 billion (2021: €0.7 billion).

All real estate investments are held indirectly via funds in the heritage portfolio or via the mutual funds.

Equities investments comprise:

Investments in equities

	31-12-2022	31-12-2021
Developed markets	96,083	141,208
Emerging markets	32,403	39,747
Private equity	43,175	44,339
Other	626	3,543
Total investments in equities	172,287	228,837

The investments in equities relate to €98.2 billion (2021: €17.4 billion) in the name of ABP and investments of €74.1 billion (2021: €211.4 billion) through mutual funds managed by the pension administrator.

Private equity investments relate, in particular, to equities in unlisted companies in sectors including the venture capital sector. The private equity investments comprise indirect investments of €36.1 billion (2021: €37.1 billion) and direct investments of €7.1 billion (2021: €7.2 billion).

Fixed-income investments comprise:

Fixed-income investments

	31-12-2022	31-12-2021
Government bonds	124,145	140,295
Corporate bonds	36,921	45,773
Mortgage loans	11,810	14,884
Mutual funds	7,671	7,359
Index bonds	313	767
Private loans and bank loans	1,968	3,061
Other investments	271	1,104
Other assets and liabilities	2,251	5,990
Total fixed-income investments	185,350	219,233

Fixed-income investments comprise investments of €181.2 billion (2021: €198.4 billion) in the name of ABP and investments of €4.1 billion (2021: €20.9 billion) through mutual funds managed by the pension administrator.

The short position of investments in the name of ABP was €156 million at year-end 2022 (2021: €0 million). The balance at year-end 2022 is recognized under the 'investment-related liabilities' balance sheet item.

The breakdown of the 'fixed-income investments' item by coupon rate is as follows:

Breakdown of fixed-income investments by coupon rate

	31-12-2022	31-12-2021
< 0%	7	1,088
0%-1%	35,782	52,315
1%-2%	32,327	38,819
2%-3%	34,644	34,118
3%-4%	24,244	28,180
4%-5%	27,916	31,061
> 5%	22,759	26,293
no coupon	7,671	7,359
Total fixed-income investments	185,350	219,233

The remaining term to maturity of the fixed-income investments as determined by the contractual redemption dates is as follows:

Breakdown of fixed-income investments by maturity

	31-12-2022	31-12-2021
Shorter than one year	6,343	9,421
Between one year and five years	39,801	38,147
Longer than five years	131,535	164,306
No maturity	7,671	7,359
Total fixed-income investments	185,350	219,233

The creditworthiness of fixed-income investments is usually expressed in terms of a credit rating. The ratings of the fixed-income investments are as follows:

Ratings of fixed-income investments

	AAA	AA	A	BBB	<= BB	No rating	Total
2022	36%	27%	11%	13%	9%	4%	100%
2021	33%	28%	11%	14%	11%	3%	100%

This table shows that 74% (2021: 72%) of the fixed-income investments have a rating of A or higher.

The duration of fixed-income investments is often used to provide an insight into the cash flows. The duration is the average weighted maturity of all cash flows (interest and principal redemptions) relating to the fixed-income products. The duration of the fixed-income investments is approximately 9 years (2021: approximately 10 years).

The breakdown of derivatives with a positive current value is as follows:

Samenstelling derivaten

	31-12-2022	31-12-2021
Currency derivatives		
Forward currency contracts	5,950	467
Interest rate derivatives		
Interest Rate Swaps	16,645	31,723
Inflation linked swaps	100	758
Fixed-income futures	149	98
TBA's (to be announced)	11	7
Other derivatives		
Credit default swaps	44	14
Other futures	972	1,167
Total derivatives with positive fair value	23,871	34,234

Negative derivative positions are presented on the liabilities side of the balance sheet, in accordance with Dutch Accounting Standards (Richtlijnen voor de Jaarverslaggeving).

The current value of derivatives depends on various factors, including securities prices, exchange rates and interest rates at year-end as compared with the security prices, exchange rates and interest rates at the time the derivative positions were opened.

Other investments

	31-12-2022	31-12-2021
Other investments	35,239	37,257

Other investments comprise €35.0 billion (2021: €37.0 billion) in the name of ABP and investments of €0.2 billion (2021: €0.2 billion) through mutual funds managed by the pension administrator. The other investments have decreased because the deposits of the APG Commodities Pool with APG Liquiditeitenbeheer are no longer included due to the transfer of the investments to ABP.

Other investments relate primarily to investments in hedge fund strategies in the amount of €8.0 billion (2021: €17.7 billion). This item also includes investments of €6.8 billion in commodities (2021: €3.9 billion). The carrying amount of other assets and other liabilities relating to investments included in the 'other investments' item was €20.4 billion (2021: €15.7 billion).

The short position of investments in the name of ABP was €0.0 at year-end 2022 (2021: €0.0) and is recognized under the 'investment-related liabilities' balance sheet item.

2. Other assets

	31-12-2022	31-12-2021
Participating interests	468	473
Tangible assets	33	41
Receivables, prepayments and accrued income	1,217	1,186
Cash	446	276
Total other assets	2,164	1,976

The 'cash' item includes current account bank balances. The full amount of the cash is at ABP's disposal. No other collateral has been furnished.

The 'participating interests' item relates to the direct capital interest in APG Groep NV. The movements in the 'participating interests' item were as follows.

Participating interests

	Total 2022	Total 2021
Opening balance	473	427
Change in value	105	115
Dividends paid	-110	-69
Closing balance	468	473

The tangible assets comprise:

Tangible assets

	31-12-2022	31-12-2021
Total buildings and fixtures	33	41

The 'tangible assets' item comprises buildings with an estimated economic life of 30 years and plant and equipment with an estimated economic life of 15 years.

The receivables, prepayments and accrued income comprise:

Receivables, prepayments and accrued income

	31-12-2022	31-12-2021
Receivables from employers	972	940
Receivables in respect of value transfers	160	178
Receivables from participants	7	2
Other receivables	78	66
Total receivables, prepayments and accrued income	1,217	1,186

The 'receivables' item includes no items with a remaining maturity of more than one year (2021: zero).

Liabilities

3. Equity

	Specific reserve	General reserve	Total
Opening balance 2021	978	-34,530	-33,552
Added from result	-	87,377	87,377
Utilized	-218	-	-218
Closing balance 2021	760	52,847	53,607
Opening balance 2022	760	52,847	53,607
Added from result	-	-	-
Utilized	-295	-7,617	-7,912
Utilized VPL	-459	-	-459
Closing balance 2022	6	45,230	45,236

Equity consists of the specific reserve and the general reserve. The general reserve is not only a source of funding for any setbacks but is also a funding source for future indexation.

Pursuant to the Financial Assessment Framework, pension funds are obligated to meet a capital requirement that is set on the basis of the pension fund's risk exposure. The capital requirement at year-end 2022 was €119.4 billion, which equates to 28.8% of the provision for pension liabilities. The law also obligates pension funds to hold capital in excess of the minimum capital requirement. ABP's standard minimum capital requirement equates to 4.2% of the provision for pension liabilities (2021: 4.2%). The minimum capital requirement at the end of the fiscal year was €17.5 billion. A comprehensive explanation of

ABP's position with respect to the capital requirement and minimum capital requirement is included in the 'Risk' section.

An updated recovery plan submitted to DNB on March 31, 2023 shows that the capital requirement can be met within the prescribed term. No supplementary measures are required in 2023.

With effect from 2010, ABP has formed a specific reserve for excess contributions received for the Purchase of Conditional Pension. The Purchase of Conditional Pension annually gives rise to a difference between the actuarially assumed and the actual purchase, annually resulting in a gain (loss) that is credited (debited) to this specific reserve. In 2022, this led to a withdrawal of €295 million from the specific reserve. As at December 30, 2022, the final balance of this specific reserve was €465 million before the conditional pension was purchased in full. With this purchase, the purpose of this specific reserve also ended and it amounted to zero at year-end. After completion of the purchase, a surplus of €6 million remained. This amount was added to a new specific reserve, the purpose of which will be determined by the social partners in 2023.

This specific reserve is not taken into account in the calculation of the funding ratio.

Appropriation of net income (expense) for the year

The annual report was adopted on April 26, 2023 by the Board of the Stichting Pensioenfondsen ABP.

It was determined that €754 million be withdrawn from the specific reserves in respect of the appropriation of the net income (expense) for the year and that the remaining €7.6 billion be withdrawn from the general reserve.

4. Provision for pension liabilities

Pension schemes

	OP/NP	AOP	Risk Participants	Total 2022	Total 2021
Opening balance	496,768	1,912	117	498,797	529,865
Add:					
- pension accruals ¹	23,159	283	-	23,442	20,546
- change in respect of value transfers in	1,339	-	-	1,339	211
- indexation	55,003	227	-	55,230	-
- change in actuarial assumptions	2,749	-	-	2,749	-
- other movements	1,149	95	-44	1,200	1,468
Total additions	83,399	605	-44	83,960	22,225
Less:					
- utilized for pension	-13,609	-201	-	-13,810	-12,864
- utilized for expenses	-117	-5	-	-122	-105
- change in respect of value transfers out	-900	-	-	-900	-
- added interest	-2,478	-10	-	-2,488	-2,842
- result on actuarial assumptions	-203	63	-	-140	-702
- change in market interest rate	-150,653	-379	-	-151,032	-34,220
- change in actuarial assumptions	-	-	-	-	-2,560
Total deductions	-167,960	-532	-	-168,492	-53,293
Closing balance	412,207	1,985	73	414,265	498,797
- of which, proprietary risk				414,193	498,680
- of which, participants' risk				73	117

¹ In the pension accrual the extra accrual VPL of 4.027 is included

The provision for pension liabilities is calculated based on the nominal interest rate term structure published by DNB, using the ultimate forward rate (UFR) method. The substitution interest rate derived from the interest rate curve was 2.57% (2021: 0.57%).

The provision for pension liabilities includes the impact of the transitional law relating to the privatization of ABP (OPA). This provision is part of the neutral conversion of all existing and future pension rights carried out on the transition from the ABP Act to the ABP pension scheme. Based on the pension fund's observations for 2021-2022, the annual update of the actuarial assumptions for

the determination of the provision for the impact of transitional law relating to the privatization of ABP (overgangsrecht privatisering ABP, OPA) has resulted in an increase in the provision for pension liabilities of €0.10 billion (2021: €0.13 billion).

The provision for participants' risk comprises €0.1 billion for ABP ExtraPensioen (2021: €0.1 billion) and €12 million for ABP net pension scheme (2021: €13 million). The liability to the participants in respect of the net pension scheme (ABP Nettopensioen) is equal to the value of the investments made

Provision for pension liabilities

	OP/NP	AOP	Participants' risk	31-12-2022	31-12-2021
Participants	194,648	-	73	194,720	253,848
Former participants	32,833	-	-	32,833	42,611
Pensioners	184,726	1,986	-	186,712	202,338
Total provision for pension liabilities	412,207	1,986	73	414,265	498,797

The scheme for professional military personnel accounted for €11.3 billion (2021: €13.9 billion) of the retirement pension/surviving dependents' pension (OP/NP) pension liabilities of €412 billion. The mark-up to cover costs relating to the future granting of pensions and pension payments included in the provision totaled €2.8 billion (2021: €2.6 billion). The collection costs are covered by mark-ups that have been factored into the contributions.

The General Administrative Order on Earlier Indexation (AMvB Eerder indexeren) gives pension funds the option to provide early indexation. This is subject to the policy funding ratio being at least 105% and the indexation provided by the fund must not exceed the rate of wage or price inflation in 2022. The requirement of future-proof indexation does not apply when the option under the General Administrative Order is used. However, early

for them at their risk and expense. The amount of €0.1 billion (2021: relating to the ABP ExtraPensioen scheme that is presented as the participants' risk €0.1 billion) concerns the return obtained on the contributions. The contribution to the ABP ExtraPensioen scheme is presented under the provision for the pension fund's risk and totaled €0.1 billion at the end of the fiscal year (2021: €0.1 billion).

The closing balance of the provision for pension liabilities relates to the following categories:

indexation is subject to the requirement that the funding ratio must not fall below 105% following the indexation. The Board's ambition is to let pensions increase in line with the development of prices, provided this is permitted by the fund's financial position, and provided that the funding ratio does not fall below 105% following the indexation. The realized price development for 2021 was 2.39%. The financial position at year-end 2021 did not permit indexation as of January 1, 2022. The Board's indexation ambition for 2021, which proved infeasible as of January 1, 2022, is to provide indexation equal to the price inflation for 2021 of 2.39%. Partly due to the strong improvement of the financial position in 2022 compared to 2021, the Board has decided to increase the accrued pension rights and pension entitlements by 2.39% as of July 1, 2022. The realized price development for 2022 is 11.96% (reference date August 31, 2022). The policy funding ratio on the reference date (October

31, 2022) was 118.1%. This was therefore higher than the statutory lower limit of 105%. In November 2022, the Board decided to index the accrued pension rights and pension entitlements as of January 1, 2023 by 11.96%.

The VPL entitlements purchased for beneficiaries have been recognized in the OP/NP category. The retirement pension entitlements to be purchased are only accrued once they have been funded. As at December 30, 2022, all VPL entitlements had been purchased. The VPL purchases are part of the pension accrual.

Occupational disability pensions based on the Invalidity Insurance Act (Wet op de arbeidsongeschiktheidsverzekering, WAO) and the Work and Income (Capacity for Work) Act (Wet werk en inkomen naar arbeidsvermogen, WIA) are presented under the occupational disability pension (AOP). This relates to invalidity pensions (invaliditeitspensioenen, IP), redeployment allowances (herplaatsingstoelagen, HPT), and ABP occupational disability pensions (ABP arbeidsongeschiktheidspensioenen, AAOP). For additional explanatory information on the movement in the provision for pension liabilities, see the notes to the company statement of income and expenses.

The 'General notes' section includes a detailed explanation of the nature of the various pension schemes included in the technical provision for pension liabilities.

5. Investment-related liabilities

	31-12-2022	31-12-2021
Cash collateral received	5,316	14,977
Short positions	156	0
Short-term borrowing	3,129	6,806
Derivatives	25,215	21,235
Total investment-related liabilities	33,816	43,018

Short-term borrowing of €3.1 billion (2021: €6.8 billion) included €1.1 billion in repos (2021: €0.0). Repos relate to bonds and index-linked bonds. A fee is charged for entering into repos. Cash is temporarily obtained to invest in accordance with strict guidelines for the purpose of generating additional returns to cover the non-return risk.

Collateral received relates to surety for opened transactions (derivative positions).

The short positions are specified as follows:

	31-12-2022	31-12-2021
Short positions		
Fixed income investments	156	-
Other investments	-	0
Total short positions	156	-

The negative derivative positions can be specified as follows:

	31-12-2022	31-12-2021
Derivatives with a negative current value		
Currency derivatives		
Forward currency contracts	210	2,193
Cross currency swaps	-	-
Interest rate derivatives		
Interest Rate Swaps	23,910	17,034
Inflation linked swaps	273	1,037
Fixed-income futures	397	81
TBAs	57	3
Other derivatives		
Credit default swaps	11	193
Other futures	357	694
Total derivatives with negative fair value	25,215	21,235

Negative derivative positions are presented on the liabilities side of the balance sheet, in accordance with Dutch Accounting Standards (Richtlijnen voor de Jaarverslaggeving). The current value of the 'derivatives' item depends on various factors, including securities prices, exchange rates and interest rates at year-end as compared with the security prices, exchange rates and interest rates at the time the derivative positions were opened. A further explanation is given in the note to derivatives with a positive value.

6. Payables and other liabilities

	31-12-2022	31-12-2021
Payables in respect of pensions	347	345
Liability in respect of purchased conditional pensions	-	2,951
Other payables	359	645
Total other liabilities	706	3,941

The 'payables and other liabilities' item, which is part of 'other payables', includes items with a remaining maturity of more than one year totaling €339 million (2021: €253 million).

The payables in respect of pensions include tax and social security contributions totaling €339million (2021: €326 million).

The liability in respect of purchased conditional pensions of €- million (2021: €2,951 million) concerns the payable to the employers' and employees' organizations arising from the prefunding received and the return on the associated risk-free investments. The prefunding concerns the spreading out of the pension contributions over several years before the peak in the purchases with regard to the VPL in 2022. As at December 30, 2022, all VPL entitlements had been purchased. The movement in the fiscal year comprises:

Development of liability in respect of purchased conditional pensions

	31-12-2022	31-12-2021
As at January 1 st	2,951	2,044
Contributions received	1,183	925
Return	-19	-18
Transfer to provision for pension liabilities	-4,115	-
As at December 31	-	2,951

Off-balance sheet rights and obligations

Liabilities arising from investments

The off-balance sheet liabilities and off-balance sheet assets concern commitments entered into with respect to investments relating to capital interests in investment subsidiaries and mutual funds managed by the pension administrator.

Liabilities entered into for real estate investments totaled €10.0 billion on the balance sheet date (2021: €11.5 billion).

Liabilities relating to shares have been entered into for private equity investments to make deposits on request. These liabilities totaled €20.5 billion on the balance sheet date (2021: €17.8 billion).

Liabilities entered into for investments in investment funds totaled €2.5 billion on the balance sheet date (2021: €2.5 billion).

Securities furnished as collateral were €0.6 billion (2021: € 0.0), and securities received as collateral were €0.0 billion (2021: €0.0). Securities totaling €0.5 billion have been deposited as initial margin (2021: €0.4 billion) were received as collateral (bilateral initial margin).

Securities totaling €13.2 billion have been deposited as initial margin (2021: €3.0 billion), and securities totaling €0.5 billion have been furnished as collateral (bilateral initial margin) (2021: €0.4). Securities received from repos totaled €2.8 billion (2021: €0.9 billion), and securities delivered for repos totaled €1.1 billion (2021: €0.0 billion). Cash posted for initial margin relating to derivatives totaled €0.6 billion (2021: €0.5 billion).

An intraday facility has been taken out with ABN-AMRO Bank NV for a total of €7.3 billion (2021: €6.3 billion). An intraday facility has also been taken out with ING for a total of €0.5 billion (2021: €0.5 billion). These facilities had not been drawn at year-end 2022. No collateral was furnished for these agreements/facilities.

Liabilities have been entered into for other investments totaling €2.2 billion (2021: €2.9 billion).

Other liabilities

A long-term contract has been concluded with the pension administrator APG Groep NV for services comprising support for the Board, pension management and communication, and asset management in the context of the administration of the pension schemes. APG Groep NV has in turn outsourced the activities to its APG DWS en Fondsenbedrijf NV and APG Asset Management NV subsidiaries.

A fiscal entity comprising ABP, APG Groep NV, and APG Groep NV subsidiaries and second-generation subsidiaries has been formed for value-added tax purposes. The companies in this fiscal entity are jointly and severally liable for their tax liabilities.

Notes to the company statement of income and expenses

Amounts are in millions of euros unless otherwise stated.

Revenue

7. Pension contributions (net)

Contributions by category

	OP/NP	AAOP		Total 2022	Total 2021
Employers' contributions	9,032	199	4,115	13,346	9,096
Employees' contributions	3,677	85	-	3,762	3,624
Total contributions (gross)	12,709	284	4,115	17,108	12,720
Less: collection cost supplements in contributions				-95	-116
Net contributions				17,013	12,604
Contribution rates (in %):	25.90	0.73		26.63%	

The above table presents a breakdown of the contributions from affiliated employers and employees. It also states the contribution rates. These relate to what is referred to as the “moderated cost-covering cushioned contribution” plus any contribution mark-ups or mark-downs due, for example, to a recovery plan or contribution discounts.

Gross contributions were approximately 38% higher in 2022 than in 2021, mainly due to the funding of VPL. The OP/NP contribution rate remained the same as in 2021.

The cost mark-up on the contributions serves in part to cover the collection costs. The collection mark-up on OP/NP contributions was 0.20% of the OP/NP contribution base in 2022 (2021: 0.25%).

The pension fund had 3,459 affiliated employers/sub-employers at year-end 2022 (2021: 3,468), who pay the full contribution, including the employees' share. The total of the pension fund's contributions relates to the actual contribution set for the reporting year plus an estimate of the contribution yet to be set for the reporting year and the finalized difference between estimates as compared with the preceding reporting year. The pension fund did not grant any contribution discounts in the meaning of the Pensions Act in 2022.

Composition of contributions

	Actual	Damped, cost-covering contributions	Undamped, cost-covering contributions
a. portion for vested liabilities	7,090	7,090	18,688
b. pension administration cost markup	95	95	95
c. solvency margin markup	1,865	1,865	4,915
d. portion for contingent liabilities (indexation)	2,623	2,623	-
e. markups/markdowns on the damped, cost-covering contributions	602	-	-
Total amount of contributions 2022	12,275	11,674	23,698
Total amount of contributions 2021	11,844	11,502	25,112

The table shows that in 2022 the actual contribution was higher than the moderated cost-covering contribution and lower than the unmoderated cost-covering contribution.

In the case of both the actual contribution and the moderated cost-covering contribution, contribution portion (a) for unconditional liabilities is based on the expected long-term nominal investment return, which is comparable to a substitution interest rate of 4.2%.

Contribution portion (b) for the mark-up for pension management costs concerns the mark-up to the pension contributions to cover collection costs.

The Pensions Act prescribes the quantification of the actual contribution, the moderated cost-covering contribution, and the unmoderated cost-covering contribution. The unmoderated contribution is calculated based on the interest rate term structure published by DNB, which corresponds to an average nominal discount rate at the start of the year of 0.57% (2021: 0.19%).

The composition of the contributions referred to above is:

The coverage for costs incurred in granting pensions and paying pension payments is included in the unconditional contribution portion (a).

Contribution portion (c) for the solvency mark-up is based on the required funding ratio for the strategic investment mix at the start of 2022. The solvency mark-up is 26.3% of the unconditional contribution portion (a).

In both the actual contribution and the moderated cost-covering contribution, contribution portion (d) for contingent (indexation) liabilities concerns the difference between the measurement of the pension accrual and risk coverages on the basis of the real yield curve (comparable to a substitution interest rate of 2.2%) and the measurement of these components on the basis

of the expected long-term nominal investment return plus the solvency mark-up, as included in contributions portions (a) and (c).

Contribution portion (e) for mark-ups or mark-downs on the moderated cost-covering contribution includes the difference between the moderated contribution on the basis of the real yield curve of 2.2% and the actual contribution on the basis of an estimated real return of 2.2%. In 2022, ABP also applied a 1.5 percentage point contribution mark-up of and a 0.9 percentage point contribution phasing for the retirement pension (OP) / surviving dependents' pension (NP) contribution for citizens. This means that on balance, a 0.6 percentage point contribution mark-up is allocated to portion (e). In concrete terms, this contribution phasing means that the increase in the OP/NP contribution in 2022 will be postponed to 2023, when the purchase of conditional pension (IVP) contribution will cease.

The comparison of the various portions of the contribution shows the effect of damping and the effect of taking (with the moderated approach) or not taking (with the unmoderated approach) account of expected investment yields.

The minimum contributions to be received equate to the moderated cost-covering contribution plus the recovery mark-ups. The actual contributions are equal to this.

The actual contributions presented in the table differ from the 'pension contributions (net)' item stated under revenue. The difference is explained in more detail in the table below:

Reconciliation of pension contributions

	Total 2022	Total 2021
Pension contributions (net)	17,013	12,604
Actual contributions	12,275	11,844
Difference	4,738	760
Regarding:		
VPL purchase contributions	5,481	850
Utilized VPL	-295	-
Utilized financing VPL	-459	-
Collection cost supplements in contributions	-95	-116
Other	106	26

The difference between the VPL purchase contributions (€5,481 million) and the net VPL contributions (€4,115 million) is due to the following items:

- an amount of €612 million related to VPL purchases during 2022. This amount consists of the total contribution revenue for VPL (€1,800 million) less the addition to the payable for the purchase of conditional pension rights (€1,188 million);
- a withdrawal of €295 million from the specific reserve related to VPL purchases during 2022 (until December 30, 2022);
- a withdrawal of €459 million from the specific reserve related to the funding of not yet purchased VPL as at December 30, 2022.

8. Investment results (net)

Investment results (net)

	Real estate	Equities	Fixed-income investments	Derivatives	Other investments	2022	2021
Direct results	1,564	1,438	4,962	1,752	197	9,913	9,451
Indirect results	-4,780	-26,804	-43,311	-34,307	3,186	-106,016	47,578
Asset management costs	-172	-277	-141	-2	-87	-679	-609
Total investment results (net)	-3,388	-25,643	-38,490	-32,557	3,296	-96,782	56,420

The direct results comprise nominal interest income and dividends. The pension fund is exempt from dividend tax. The indirect results concern the change in the current value of investments, including exchange rate gains/losses. The costs concern the sum total of the invoiced costs of the investments in the name of ABP, the asset management costs invoiced by the pension administrator, and the costs of the Board. When the costs are distributed between the various investment categories, those costs that are not directly attributable to an investment category are attributed pro rata to the invested capital. The financial statements present solely the invoiced costs. Non-invoiced costs are netted with the investment results. The [‘Asset management costs’ section of the Board report](#) provides explanatory information on the sum total of these costs.

The transaction costs have been netted with the investment results in the financial statements. The transaction costs totaled €622 million in the fiscal year (2021: €539 million). The [‘Asset management costs’ section of the Board report](#) includes a breakdown of the sum total of these costs.

The result on derivatives by type of derivative is presented below.

Result on derivatives

	2022	2021
Interest rate derivatives	-29,440	-5,864
Currency derivatives	-10,672	-11,964
Other derivatives	7,555	-1,571
Total result on derivatives	-32,557	-19,399

The loss on derivatives in 2022 is a consequence of the increase in interest rates, leading to a decrease in the value of the interest rate derivatives, and a decrease of the US dollar price in euros, leading to a decrease in the value of the currency derivatives (in particular with respect to the sale of US dollars).

Expenses

9. Pension payments

Pension payments by type

	Total 2022	Total 2021
OP/NP	-13,489	-12,654
AOP	-223	-254
Number of recipients as at year-end:		
OP/NP	949,946	927,350
AOP	47,371	47,422

The 'pension payments' item relates to the retirement pensions (NP), surviving dependents' pensions (NP), and occupational disability pensions (AOP), with the latter comprising the ABP occupational disability pension (AAOP), invalidity pension (IP), and redeployment allowances (HPT).

10. Movement in provision for pension liabilities

	Total 2022	Total 2021
Pension accruals	-23,442	-20,546
Indexation	-55,230	-
Added interest	2,488	2,842
Utilized for pensions	13,810	12,864
Utilized for pension administration costs	122	105
Change in market interest rate	151,032	34,220
Change in actuarial assumptions	-2,749	2,560
Result on actuarial assumptions	140	702
Change in respect of value transfers	-439	-211
Other movements in provision for pension liabilities	-1,200	-1,468
Total movements in provision for pension liabilities	84,532	31,068

Below, the movement in the provision for pension liabilities is explained by component.

Pension accrual

The 'pension accrual' item reflects the effect on the nominal pension liabilities of one year's additional service, the continuation of the active service computation in the event of incapacity for work, and death.

Indexation

Indexation is charged to the statement of income and expenses when a Board decision is made on or before the balance sheet date. The Board has decided to increase the pensions by 2.39% as of July 1, 2022. The indexation of 2.39% is included in the entitlements during the 2022 fiscal year. In addition, the Board decided in November 2022 to grant an indexation of 11.96% as of January

1, 2023. Both indexations lead to an increase in the provision for pension liabilities of €55.2 billion.

Added interest

The value of the pension liabilities increases annually due to the pension accrual and any indexation provided, as well as the accrual of interest. The interest accrual in the reporting year is calculated based on the one-year interest rate from the nominal interest term structure at year-end of the previous fiscal year, which was -0.49% (2021: -0.53%).

The negative one-year interest rate from the nominal interest term structure at year-end of the previous fiscal year reduced the pension fund's liabilities. Therefore, when this interest rate is negative, the added interest is in effect revenue.

Withdrawal for pension payments

The provision for pension liabilities is determined by calculating the present value of the expected future pension payments on an actuarial basis, i.e. by taking into account the gain/loss due to the change in actuarial assumptions. The sum determined through this actuarial calculation is withdrawn from the provision each year to fund the actual pension payments to be paid that year.

Withdrawal for pension management costs

The pension management costs, consisting of costs incurred in granting pensions and paying pension payments, are covered by means of a withdrawal from the provisions. The mark-ups as determined in the Actuarial Assumptions Study 2017-2019 applied to the withdrawal made in 2022. Accordingly, the OP/NP payment mark-up was 0.45% (2021: 0.45%) of the provision for pension liabilities, and the mark-up for costs incurred in granting pensions was 0.40% (2021: 0.40%) of the provision for deferred pension liabilities, the occupational disability pension collection mark-up was 0.00% (2021: 0.00%)

and the payment mark-up was 2.50% (2021: 2.50%) of the provision for occupational disability pensions.

Movements in market interest rate

The interest rate term structure at year-end 2022 as published by DNB corresponds to a nominal interest rate of 2.57%. The interest rate term structure at year-end 2021 corresponded to a nominal interest rate of 0.57%.

The effect of the second step of the UFR change results in an increase in the provision of €4.2 billion as of January 1, 2022 and is part of the movement in market interest rate. At the aggregate level, the movement in the interest rate term structure leads to a decrease in the provision for pension liabilities.

Change in actuarial assumptions

The 'change in actuarial assumptions' item relates to the following financial effects:

- The transition to new flex factors (for bringing forward or deferring pension payments) has been accounted for. The new flex factors were determined on the basis of a discount rate of 2.0% (previously: 2.2%) and the new GO1719 assumptions. This leads to a decrease of the provision for pension liabilities by €0.4 billion.
- Updating the R/N factors leads to a €0.1 billion increase of the provision for pension liabilities. An R/N (Real/Notional) factor is the ratio between the actual annual payments to Appendix K and the notional entitlements. These entitlements are termed notional entitlements because, by contrast to regular retirement pension (OP) and surviving dependents' pension (NP) entitlements, participants do not accrue entitlements for Appendix K. That is because the amount of the supplement depends in part on the (concurrent) service years in the period up to 1995. This period of service is converted into a 'notional entitlement' to enable the measurement of the provision for Appendix K on the basis of present value factors.

- The updating of the Royal Dutch Actuarial Association mortality projection (AG2022) leads to a €3.0 billion increase in the provision for pension liabilities. Life expectancy is rising faster than assumed in projection table AG2020. The increase in life expectancy is due to the addition of European data from 2019 to the Forecasting Model AG2020 and the improvement of the closing methodology.

Gain/loss due to change in actuarial assumptions

The gain/loss due to the change in actuarial assumptions largely relates to the transition to the AG2022 mortality projection table.

Change in respect of transfer of rights

	2022	2021
Value transfers out	900	30
Value transfers in	-1,339	-241
Total change in respect of value transfers	-439	-211

Other movements in provision for pension liabilities

The Other movements are primarily due to:

- Improved actuarial valuation due to the transition to Innovation of Year-end Reporting (Jaarwerk Vernieuwing). This leads to an increase in the provision for pension liabilities by approximately €0.4 billion.
- Non-regular benefits. The non-regular benefits amounted to €286 million in 2022 and can mainly be attributed to retroactively granted benefits or subsequent payments.
- With the Grip on Data project, the combination of new data submission, adjustment of interest rate term structure and indexation leads to a decrease in the provision for pension liabilities by approximately €0.2 billion.

- Administrative (retroactive) adjustments lead to an increase of the provision for pension liabilities by around €0.25 billion.

11. Coverage from cost mark-up on pension contributions

	2022	2021
Coverage from cost mark-up on pension contributions	95	116

The coverage from the cost mark-up on pension contributions serves to fund the collection costs. The collection mark-up on OP/NP contributions was 0.20% of the OP/NP contribution base (2021: 0.25%).

12. Value transfers

	2022	2021
Value transfers In	1,399	284
Value transfers out	-919	-42
Total net value transfers	480	242

Both the value transfers in and the value transfers out increased in comparison with 2021. The positive result on value transfers is due to the fact that the interest on value transfers in 2022 was lower than the interest on changes in the provision. From November 1, 2021, ABP's funding ratio once again allowed individual value transfers in and value transfers out. However, the funding ratio is not relevant for value transfers in and value transfers out for small pensions of between €2 and €503.24 gross a year, and value transfers in and out are therefore permitted even when the funding ratio is too low to allow for regular value transfers.

13. Pension administration costs (net)

	2022	2021
Salaries (including social security charges)	-8	-8
Pension charges	-1	-1
Other staff costs	-1	-1
Depreciation	-7	-16
Third-party services, pension administration	-195	-145
Third-party services, asset management	-551	-493
Third-party services, other	-20	-20
Other operating expenses	-9	-8
Subtotal	-792	-692
Less: income from work on behalf of third parties	20	15
Less: attributed to asset management costs	574	521
Pension administration costs (net)	-198	-156

The directors' remuneration and salaries include the amounts paid in 2022 to Board members, (external) members of fund bodies and employees of ABP. ABP has opted to voluntarily apply the Senior Officials in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet Normering Topinkomens, WNT) for the remuneration of its Board members as of January 1, 2022. The WNT does not apply to ABP employees. The other operating expenses relate primarily to accommodation and regulatory costs.

The cost increase in 2022 is mainly due to the investments to improve our administration and data quality through the Grip on Data (GoD) program and the preparations for the NPC, which is now taking shape and requires a lot of capacity from both ABP as APG.

Executive Office Management

	Total 2022	Total 2021
HJ van Wijnen	-	282,245
RLS Verjans	-	274,700

Since the governance change in effect as of January 1, 2022, ABP has an Executive Board instead of an Executive Office. For more information, [see the 'Remuneration' section](#). The average number of staff was:

Average number of staff

	2022	2021
Full-time equivalents	39	41
Individual employees	40	42

The staff participate in ABP's pension scheme. ABP, in its role as employer, is not obligated to pay supplementary contributions in the event of deficits other than the annual contributions. This means that recognizing the contribution as an expense suffices.

14. Other income and expenses

	2022	2021
Other income	277	10
Other expenses	-7	-221
Total other income and expenses	270	-211

Other income mainly relates to the write-down of the payable related to the Grip on Data (GoD) program.

Notes to the company cash flow statement

Amounts are in millions of euros unless otherwise stated.

The breakdown of the 'cash' item is as follows:

	31-12-2022	31-12-2021
Investments	2,493	1,252
Cash	446	276
Total cash	2,939	1,528

Cash flow from pension activities

The contributions received in the cash flow statement comprise contributions totaling €11,810 million, as well as the contributions received in respect of the payable for the purchase of conditional pension rights totaling €1,183 million. The difference with the net contributions according to the statement of income and expenses is the purchased VPL in the amount of €4,115 million.

The increase in the contributions received in 2022 is largely due to the growth in the number of participants, as well as due to the 2 percentage point increase in the retirement pension (OP) / surviving dependents' pension (NP) contributions compared with 2021.

The increase in the pension payments paid is mainly due to a higher average amount per beneficiary (due to early indexation).

The 'other movements' item mainly concerns internal recharges.

Cash flow from investment activities

The cash flow statement presents cash flows from direct investment revenue and exchange rate gains/losses on bank accounts.

The 'other movements' item arises from a number of effects, including movements in the 'negative bank account balances' item, movements in the short-term money market products, effects of exchange rate differences, internal recharges, and the look-through methodology used in the investment pools.

Other notes

Actuarial analysis

	Notes	2022	2021
Result on contributions			
Pension contributions (net)	7	17,013	12,604
Pension accruals	10	-23,442	-20,546
Subtotal		-6,429	-7,942
Results on interest			
Investment results (net)	8	-96,782	56,420
Interest charges on investment-related liabilities		-69	-16
Added interest	10	2,488	2,842
Change in market interest rate	10	151,032	34,220
Subtotal		56,669	93,466
Results on indexations			
Indexation	10	-55,230	-
		-55,230	-
Result on pensions			
Pensions	9	-13,712	-12,908
Utilized for pensions out of the provision for pension liabilities	10	13,810	12,864
Subtotal		98	-44
Result on expenses			

	Notes	2022	2021
Pension administration costs (net)	13	-198	-156
Utilized to cover pension administration costs out of the provision for pension liabilities	10	122	105
Collection cost supplements in pension contributions	11	95	116
Subtotal		19	65
Other results			
Result on actuarial assumptions	10	140	702
Other income and expenses		270	-211
Value transfers	12	480	242
Change in provision for pension liabilities in respect of value transfers	10	-439	-211
Change in actuarial assumptions	10	-2,749	2,560
Other movements in provision for pension liabilities	10	-1,200	-1,468
Subtotal		-3,498	1,614
Total result = net gains and losses		-8,371	87,159

Remuneration

Remuneration must be suitable for the social financial institution ABP and must be explainable to the outside world. Members of the Board receive remuneration for their activities. ABP has opted to voluntarily apply the Senior Executives in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet Normering Topinkomens, WNT) for the remuneration of its Board members as of January 1, 2022. The remuneration received by members of the Executive Board of ABP is subject to a maximum corresponding to the WNT standard.¹ The remuneration is based on the remuneration policy adopted by the Board and on which the Accountability Body has issued advice.

The remuneration policy is based on fixed remuneration determined on the basis of the time invested in the ABP Board or other position. The independent Chair receives a fixed remuneration based on an agreement for services. This fixed remuneration is based on the number of days on which the independent Chair is active for the Board. The fixed remuneration amounts to €123,120 on an annual basis for a three-day working week based on 95% of the WNT standard. Non-Executive Board Members receive a fixed remuneration of €71,821 per year for a time commitment of 1.75 days per week based on 95% of the WNT standard. No social security or pension accrual is linked to the remuneration of the Chair and the Non-Executive Board members.

The members of the Executive Board are employed by the pension fund and receive a salary, including WNT-related personnel and pension charges, of €216,000 on an annual basis for full-time employment based on 100% of the WNT standard.

Indexation of the remuneration of the members of the Board is dependent on the development of the WNT. The members of the Board did not receive

¹ It is important to note that in the context of the WNT, the members of the Non-Executive Board are not regarded as members of a supervisory body, but as general directors (algemeen bestuurders).

bonuses, loans, advances, or guarantees.

Remuneration of Non-Executive Board members

	2022	2021 ¹
C.M. Wortmann-Kool (chairman)	123,120	130,000
A. Boonen ²	71,821	97,280
M. Doornekamp (until 10-1-2021)	-	67,500
P. Fey ²	71,821	90,000
A. Gram (from 6-1-2021)	71,821	52,500
M. Ten Kroode (from 11-15-2022)	8,978	-
V. van der Meer-Gangapersadsing (from 4-1-2022)	53,865	-
C.M. Mulders-Volkers	71,821	90,000
K. Nauta	71,821	90,000
P. Rosenmöller (from 12-1-2021)	71,821	7,500
A.J.M. Sibbing	71,821	97,280
A. Slager (from 6-1-2022)	41,895	-
M. Snel (until 9-1-2021)	-	60,000
P..A Stork (until 1-1-2022)	-	90,000
X.J. den Uyl	71,821	90,000
A. van Vliet	71,821	92,720
J.P.C.M. van Zijl (until 4-9-2021)	-	27,198
Total remuneration Non-Executive Board	874,245	1,081,978

¹ The 2021 figures are not adjusted to the WNT

² fees paid to the appointing bodies

The WNT is applied with effect from January 1, 2022. The remuneration shown for the Non-Executive Board members for 2021 is still based on the policy

applicable at that time.

The remuneration of the Executive Board members, which consists of the remuneration plus taxable expense allowance per individual director, as

Remuneration of Executive Board members

	Remuneration plus taxable expense allowance	(Allowed) Excess	Total remuneration plus taxable expense allowance 2022	Total remuneration plus taxable expense allowance 2021 ¹
H.J. van Wijnen (chair from 1-1-2022)	216,000	2,081 ²	218,081	-
D.F. Dijkhuis (from 1-1-2022)	216,000	-	216,000	-
Y.E.M. Verdonk - van Lokven (from 2-1-2022)	198,000	-	198,000	-
Total remuneration Executive Board	630,000	2,081	632,081	-

¹ As of 1-1-2022 ABP has a changed governance structure and introduced an Executive Board. Therefore no 2021 figures are available for the Executive Board members.

² Allowed excess of WNT limit caused by redemption of holiday payment of previous employment.

Members of fund bodies (including external members)

in €	2022	2021
Audit Committee	52,938	-
Appeals Committee	39,915	37,545
Accountability Body	242,338	253,289
Supervisory Board	-	130,000
Total remuneration of members of fund bodies (including external members)	335,191	420,834

explained in the table below, and non-WNT-related personnel expenses, amounts to €670,328. The non-WNT-related personnel expenses consist of a number of social security and pension contributions and untaxed expense allowances that are not subject to the WNT.

The members of the fund bodies listed in the left-hand table do not sit on the Board, with the exception of the chair of the Appeals Committee and three of the six members of the Audit Committee. The external members of the Audit Committee receive fixed remuneration of €17,750 per year. All members of the Appeals Committee receive fixed remuneration of €4,977 per year and remuneration per hearing day of €386. The remuneration for the chair of the Appeals Committee is not part of the WNT remuneration for an ABP Board member. The members of the Accountability Body receive an allowance of €326 per consultation meeting with the Board or for separate and independent meetings and €163 per committee meeting.

Related-party transactions

Related-party transactions take place at arm's length. The remuneration of the Board is explained in the 'Remuneration' section.

ABP is the lessor of part of the APG business premises, which is leased at market level. The yield was € €5.9 million in the reporting year (2021: €6.5 million) and will be €3.2 million in 2023.

Stichting Pensioenfonds ABP, APG Groep NV, APG DWS and Fondsenbedrijf NV, APG Asset Management NV, APG Trading BV, as well as Entis Holding BV and Entis BV jointly form a fiscal entity for value-added tax purposes.

List of mutual funds managed by the pension administrator

The majority of the invested assets have been placed in mutual funds managed by the pension administrator in which ABP participates. These mutual funds are:

Mutual funds

- APG Alternative Credits Legacy Pool
- APG Developed Markets Equity Pool (to September 2022)
- APG Emerging Markets Debt Pool (to June 2022)
- APG Emerging Markets Equity Pool
- APG Euro Plus Treasuries Pool¹
- APG Fixed Income Credits Pool
- APG Hedge Funds Pool
- APG Index Linked Bonds Pool¹
- APG Private Equity Pool 2009
- APG Private Equity Pool 2010
- APG Private Equity Pool 2012
- APG Private Equity Pool 2013
- APG Private Equity Pool 2014-2015
- APG Private Equity Pool 2016-2017
- APG Private Equity Pool 2018-2019
- APG Private Equity Pool 2020-2021
- APG Private Equity Pool 2022-2023
- APG Opportunities Pool 2012
- APG Long Duration Treasury Pool¹
- APG Infrastructure Pool 2011
- APG Infrastructure Pool 2012
- APG Infrastructure Pool 2014
- APG Infrastructure Pool 2016
- APG Infrastructure Pool 2017
- APG Infrastructure Pool 2017 II
- APG Infrastructure Pool 2020-2021
- APG Strategic Real Estate Pool
- APG Tactical Real Estate Pool (to January 2022)

¹ Only investments ABP Netto Pensioen in mutual funds

Consolidated balance sheet

After appropriation of net income (expense) for the year

	Note	31-12-2022	31-12-2021
Assets			
Real estate		74,842	77,270
Equities		172,078	225,984
Fixed-income investments		185,322	218,713
Derivatives		23,871	34,234
Other investments		34,478	35,493
Investments	1	490,591	591,694
Other assets	2	2,425	2,260
Total assets		493,016	593,954

	Note	31-12-2022	31-12-2021
Capital and liabilities			
Group equity	3	45,281	53,659
Provision for pension liabilities	4	414,265	498,797
Collateral received		5,316	14,977
Short positions		156	-
Short-term borrowing		1,817	1,077
Derivatives		25,215	21,235
Investment-related liabilities	5	32,504	37,289
Payables and other liabilities	6	966	4,209
Total capital and liabilities		493,016	593,954

Consolidated statement of income and expenses

in € mln	Note	2022	2021
INCOME			
Contributions (net)	7	17,013	12,604
Investment results (gross)		-96,203	56,954
Less: asset management costs		-536	-508
Investment results (net)	8	-96,739	56,446
Total income		-79,726	69,050
EXPENSES			
Pensions and other benefits	9	-13,712	-12,908
Total movements in provision for pension liabilities	10	84,532	31,068
Collection cost supplements in pension contributions		95	116
Value transfers	11	480	242
Pension and insured benefit administration costs (net)	12	-220	-180
Interest charges on investment-related liabilities		-88	-18
Other income and expenses		269	-211
Total expenses		71,356	18,109
Balance of income and expenses		-8,370	87,159
Total direct movements in the pension fund capital		-5	-1
Comprehensive result		-8,375	87,158

Consolidated cash flow statement

in € mln	Note	2022	2021
Opening balance of cash		2,095	1,849
Movements			
Cash flows from pension and insurance activities:			
- contributions received		12,993	12,720
- value transfer payments received	11	1,395	284
- pensions and other benefits paid	9	-13,712	-12,908
- value transfer payments made	11	-919	-42
- operating expenses paid		-202	-154
- other movements		565	78
Cash flow from pension and insurance activities		120	-22

in € mln	Note	2022	2021
Cash flows from investment activities:			
- repayments and sales of investments		170,194	102,318
- advances and purchases of investments		-144,936	-65,025
- direct investment income		8,181	5,515
- indirect realized results from derivatives and results on exchange		-22,457	-11,103
- investment expenses paid		-633	-591
- collateral received		-9,522	-10,515
- other movements		414	-20,331
Cash flow from investment activities		1,241	268
Closing balance of cash		3,456	2,095

Notes – general

Accounting policies – general

The accounting policies applied for the company financial statements are identical to those applied for the consolidated financial statements and these are binding on group companies and other consolidated entities.

Below we explain the basis for consolidation and the accounting policies for the additional items presented in the balance sheet and statement of income and expenses as a result of the consolidation.

Basis for consolidation

Capital interests (other than investments) in entities where control can be exercised over management decisions and financial policy are recognized in the consolidated financial statements by applying the integral consolidation method. Intercompany transactions and underlying financial liabilities are eliminated. Consolidation goes beyond the legal form of the capital interest and provides direct insight into the financial position of the entire group. Joint ventures are recognized as capital interests.

The direct capital interests and most significant capital interests included in the consolidation are listed in the 'Other notes' section.

The values of units in mutual funds are recognized under the applicable investment categories. In accordance with the Dutch Accounting Standard for Pension Funds (RJ 610), the positive and negative derivative positions, short-term borrowing positions, short positions, and liabilities arising from received

collateral included in the value of these units are recognized separately in the balance sheet (pursuant to RJ 610.211).

Principles for the measurement of assets and liabilities

Other assets

The intangible assets included in the 'other assets and liabilities' item are carried at acquisition price less straight-line amortization, where applicable, taking account of any impairment losses. The amortization period is based on the expected economic cost recovery period. The identifiable assets and liabilities of an acquired company are recognized in the balance sheet at current value on the acquisition date. Goodwill arising on acquisition is measured on first recognition as the difference between the acquisition price and the current value of the identifiable assets and liabilities.

Derivative positions held by subsidiaries and second-generation subsidiaries other than positions opened in the context of investments are measured at cost using the cost price hedge accounting method.

Payables and other liabilities

The provision for deferred taxes included under provisions relates to the deferred tax liabilities arising from temporary differences between the carrying values and tax bases of assets and liabilities. The calculation takes account of rates in effect in future years in so far as these have already been set. The provision is measured at current value.

Other provisions are measured at the present value of the expected future expenditure, taking account of actuarial assumptions, where applicable. The discount rate used is based on the year-end interest rate for investment-grade Dutch corporate bonds, taking account of the remaining term of the provisions. The discount rate for provisions with an expected term of longer than 15 years is based on the interest rate for long-term government bonds.

Risk section

The risks to which ABP is exposed as a pension fund are explained in the notes to the company financial statements. The consolidated financial statements also show the financial positions of the entities in the group consolidated with the integral consolidation method. These relate, in essence, to the pension administrator, capital interests in which investments are placed, and APG Liquiditeitenbeheer BV (hereinafter 'APG LB').

The following section, which supplements the risk section in the company financial statements, provides information on the consolidation of APG LB, the effect of the consolidation on the balance sheet and the associated risk profile, as well as the specific risks of APG LB.

General

Since December 2017, surpluses of the mutual funds are placed with APG LB and deficits of the mutual funds are supplemented by APG LB by means of deposits. APG LB transfers these surpluses and deficits to the pension funds.

The shares in APG LB are held by the mutual funds' custodians.

As ABP has indirect control of APG LB, this company must be included in the consolidation.

This consolidation involves the elimination of the positions in APG LB held directly by ABP and indirectly through the mutual funds.

The mutual funds are investment pools without legal personality in which participants acquire rights in proportion to their investment. Participants do not have control or policy-making influence in respect of each other's assets. All participants can withdraw from the mutual fund in accordance with rules specified in advance in the mutual fund documents. The values of units in mutual funds are recognized under the applicable investment categories. In accordance with the Dutch Accounting Standard for Pension Funds (RJ 610), the positive and negative derivative positions, short-term borrowing positions, short positions, and liabilities arising from received collateral included in the value of these units are recognized separately in the balance sheet (pursuant to RJ 610.211).

Effect on the balance sheet and the associated risk profile

In 2022, the effect of the consolidation on the balance sheet and the associated risk profile was largely caused by APG LB. The consolidation of APG LB resulted in an increase in the 'investments' and 'investment-related liabilities' items.

The consolidation of APG LB does not result in a materially different risk profile in comparison with the company balance sheet, as the task is to place mutual fund surpluses with APG LB and to have mutual fund deficits supplemented by APG LB by means of deposits. APG LB then transfers these deposits to ABP and the other participating pension funds. APG LB conducts transactions only with participating mutual funds and pension funds.

Notes to the consolidated balance sheet

Amounts are in millions of euros unless otherwise stated.

Assets

1. Investments

	Real estate	Equities	Fixed-income investments	Derivatives	Other investments	Total 2022	Total 2021
Opening balance of investments	77,270	225,984	218,713	34,234	35,493	591,694	551,614
Granted/bought	19,996	117,057	103,530	-	5,115	245,698	138,489
Repaid/sold	-16,479	-145,283	-91,691	-	-15,490	-268,943	-172,742
Change in value ¹	-4,897	-26,918	-43,498	-	3,682	-71,631	70,206
Other movements	-1,048	1,238	-1,732	-10,363	5,678	-6,227	4,127
Closing balance of investments	74,842	172,078	185,322	23,871	34,478	490,591	591,694

¹ Including movements up to the time of disposal.

Investments are presented inclusive of the associated receivables, cash, and payables. Investments can be held directly or indirectly through units in the mutual funds established by the pension administrator.

The 'other movements' item includes movements in the receivables, cash, and payables associated with the investments and the movements in the derivative positions.

The values of units in mutual funds are recognized under the applicable investment categories. In accordance with the Dutch Accounting Standard for Pension Funds (RJ 610), the positive and negative derivative positions, short-term borrowing positions, short positions, and liabilities arising from received collateral included in the value of these units are recognized separately in the balance sheet (pursuant to RJ 610.211).

The closing balance of the investments totaling €490.6 billion (2021: €591.7 billion) can be broken down as follows:

	31-12-2022	31-12-2021
Listed	316,837	404,579
Unlisted	173,754	187,115

The closing balance of the investments totaling €490.6 billion (2021: €591.7 billion) includes:

	31-12-2022	31-12-2021
Receivables, prepayments and accrued income	961	1,055
Collateral paid	6,421	2,489
Short-term lending (including CIS short-term cash positions)	16,970	17,885
Current account bank balances	2,494	1,254
Payables, accruals and deferred income	-4,527	-2,450
Net assets included in current investments	22,319	20,233

The 'current account bank balances' item includes balances of margin accounts held in connection with future positions totaling €0.6 billion (2021: €0.5 billion). These balances are not freely disposable.

The payables, accruals and deferred income under investments include bank account debit balances totaling €1.1 billion (2021: €1.2 billion).

Investments for participant schemes are an integral part of the investments.

Breakdowns

The following tables present breakdowns of the investments by class, region, and currency (all in million euros). The currency table does not include the 'derivatives' item, as this is presented in a separate table together with derivatives with a negative current value and short positions.

Investments by category

	Real estate	Equities	Fixed-income investments	Derivatives: positive	Other investments	31-12-2022	31-12-2021
Basic materials	12	8,094	787	400	1,700	10,993	14,236
Mortgages etc.	-	-	13,521	11	-	13,532	17,812
Real estate	42,384	3,040	336	-	-	45,760	55,294
Utilities	1,432	3,875	2,535	-	60	7,902	8,094
Telecommunications	3,357	3,439	2,987	-	-	9,783	11,376
Healthcare	225	19,196	2,186	-	5	21,612	27,007
Luxury goods	2,739	18,686	2,505	-	5	23,935	32,535
Energy	8,994	2,425	-	232	4,214	15,865	17,201
Manufacturing	15,030	16,277	2,770	-	-	34,077	39,169
Financial institutions	113	38,135	22,616	23,033	27,157	111,054	132,812
Convenience goods	-	12,549	1,067	46	1,222	14,884	17,615
Information technology	-	46,323	911	-	-	47,234	70,288
Public authorities	556	39	133,101	149	115	133,960	148,255
Total investments	74,842	172,078	185,322	23,871	34,478	490,591	591,694

Investments by region

	Real estate	Equities	Fixed-income investments	Derivatives: positive	Other investments	31-12-2022	31-12-2021
Netherlands	4,402	3,425	12,388	7,046	4,001	31,262	28,201
Rest of EMU	16,585	17,138	77,893	13,557	8,199	133,372	164,118
Rest of Europe	13,116	12,513	17,204	2,533	7,980	53,346	62,138
North America	23,182	96,365	54,361	716	11,638	186,262	240,013
Asia/Pacific	16,108	38,866	12,298	19	2,124	69,415	80,802
Other	1,449	3,771	11,178	-	536	16,934	16,422
Total investments	74,842	172,078	185,322	23,871	34,478	490,591	591,694

Investments by currency, excluding derivatives

	Real estate	Equities	Fixed-income investments	Other investments	31-12-2022	31-12-2021
Euro	24,356	21,176	99,691	17,800	163,023	176,174
US dollar	25,711	96,088	58,589	14,516	194,904	245,928
Sterling	7,786	4,377	7,286	455	19,904	28,901
Chinese Yuan	1,462	10,968	1,414	1	13,845	15,808
Yen	795	6,683	-2	-6	7,470	11,307
Australian dollar	4,706	1,930	972	1,373	8,981	9,340
Taiwan dollar	-	4,212	-	-	4,212	6,471
Hong Kong dollar	4,309	956	-	59	5,324	5,661
Indian Rupee	705	4,542	111	10	5,368	5,851
Canadian dollar	136	2,218	1,242	151	3,747	5,420
Korean Won	-	3,494	70	1	3,565	5,305
Swiss franc	220	2,723	78	6	3,027	4,178
Other	4,656	12,711	15,871	112	33,350	37,116
Total	74,842	172,078	185,322	34,478	466,720	557,460

Derivatives and short positions by currency

	Derivatives: positive	Derivatives: negative	Short positions	31-12-2022	31-12-2021
Euro	165,540	-31,718	-	133,822	182,075
US dollar	-115,445	7,219	-156	-108,382	-132,441
Sterling	-19,144	4,943	-	-14,201	-20,551
Chinese Yuan	215	-102	-	113	185
Yen	668	-4,467	-	-3,799	-6,320
Australian dollar	-4,286	-142	-	-4,428	-4,942
Taiwan dollar	-	-	-	-	-1
Hong Kong dollar	-63	7	-	-56	-178
Indian Rupee	-	58	-	58	17
Canadian dollar	-2,722	-12	-	-2,734	-2,628
Korean Won	48	-1	-	47	48
Swiss franc	-2,012	-163	-	-2,175	-2,524
Other	1,072	-837	-	235	259
Total	23,871	-25,215	-156	-1,500	12,999

The division between 'Derivatives positive' and 'Derivatives negative' in the currency table is partly influenced by the currency hedging positions. These positions are a snapshot. A forward currency contract is a contract to buy or sell a given amount of a currency at an agreed exchange rate on an agreed future date. Buying increases the currency position and selling decreases the position. Both positions are presented in the above table. The final balances are in part dependent on exchange rate movements since the conclusion of the contract.

Notes by investment category

Real estate investments encompass investments in:

Real estate investments

	31-12-2022	31-12-2021
Residential property	13,795	14,783
Offices	5,286	7,165
Retail property	9,616	10,551
Industrial buildings	9,918	12,469
Hotels	2,870	2,200
Other	8,836	8,863
Total investment properties	50,321	56,031
Industrial companies	9,998	8,938
Energy	8,994	8,026
Telecommunications	3,357	2,381
Other	2,172	1,894
Total infra investments	24,521	21,239

The 'other' item includes other assets and other liabilities relating to investments totaling €69 million (2021: €152 million).

Equities investments comprise:

Investments in equities

	31-12-2022	31-12-2021
Developed markets	96,083	141,208
Emerging markets	32,403	39,747
Private equity	43,175	44,340
Other assets and liabilities	417	689
Total investments in equities	172,078	225,984

Private equity investments relate to equities in unlisted companies in sectors including the venture capital sector. Indirect investments totaled €7.1 billion (2021: €7.2 billion), and direct investments totaled €36.1 billion (2021: €37.1 billion).

Fixed-income investments comprise:

Fixed-income investments

	31-12-2022	31-12-2021
Government bonds	124,145	140,295
Corporate bonds	36,921	45,773
Mortgage loans	11,810	14,884
Mutual funds	7,671	7,359
Index bonds	313	767
Private loans and bank loans	1,968	3,061
Other investments	271	1,104
Other assets and liabilities	2,223	5,470
Total fixed income investments	185,322	218,713

The short position at year-end 2022 was €156 million (2021: €0 million). The balance at year-end 2022 is recognized under the 'investment-related liabilities' balance sheet item.

The breakdown of the 'fixed-income investments' item by coupon rate is as follows:

Breakdown of fixed-income investments by coupon rate

	31-12-2022	31-12-2021
< 0%	7	848
0%-1%	35,782	52,037
1%-2%	32,327	38,819
2%-3%	34,644	34,116
3%-4%	24,244	28,180
4%-5%	27,888	31,061
> 5%	22,759	26,293
No coupon	7,671	7,359
Total fixed-income investments	185,322	218,713

The remaining term to maturity of the fixed-income investments as determined by the contractual redemption dates can be presented as follows:

Breakdown of fixed-income investments by maturity

	31-12-2022	31-12-2021
Shorter than one year	6,315	8,901
Between one year and five years	39,801	38,147
Longer than five years	131,535	164,306
No maturity	7,671	7,359
Total fixed-income investments	185,322	218,713

The creditworthiness of fixed-income investments is usually expressed in terms of a credit rating.

The ratings of the fixed-income investments can be specified as follows:

Ratings of fixed-income investments

	AAA	AA	A	BBB	<= BB	No rating	Total
2022	36%	27%	11%	13%	9%	4%	100%
2021	33%	28%	11%	14%	11%	3%	100%

This table shows that 74% (2021: 72%) of the fixed-income investments have a rating of A or higher.

The duration of fixed-income investments is often used to provide an insight into the cash flows. The duration is the average weighted maturity of all cash flows (interest and principal redemptions) relating to the fixed-income products. The duration of the fixed-income investments is approximately 9 years (2021: approximately 10 years).

The breakdown of derivatives with a positive current value is as follows:

Derivatives	31-12-2022	31-12-2021
Currency derivatives		
Forward currency contracts	5,950	467
Cross-currency swaps	-	-
Interest rate derivatives		
Interest Rate Swaps	16,645	31,723
Inflation linked swaps	100	758
Fixed-income futures	149	98
TBAs	11	7
Other derivatives		
Credit default swaps	44	14
Other swaps	-	-
Other futures	972	1,167
Total derivatives with positive fair value	23,871	34,234

Negative derivative positions are presented on the liabilities side of the balance sheet, in accordance with Dutch Accounting Standards (Richtlijnen voor de Jaarverslaggeving). The current value of derivatives depends on various factors, including securities prices, exchange rates and interest rates at year-end as compared with the security prices, exchange rates and interest rates at the time the derivative positions were opened.

Other investments

	31-12-2022	31-12-2021
Other investments	34,478	35,493

Other investments relate to investments in hedge fund strategies in the amount of €8.0 billion (2021: €17.7 billion). This item also includes investments of €6.8 billion in commodities (2021: €3.9 billion). The carrying amount of other assets and other liabilities relating to investments included in the 'other investments' item was €19.6 billion (2021: €13.9 billion).

2. Other assets

	31-12-2022	31-12-2021
Participating interests	1	2
Intangible assets	1	2
Tangible assets	100	92
Receivables, prepayments and accrued income	1,361	1,324
Cash	962	841
Total other assets	2,425	2,261

The 'cash' item includes deposits of €210 million (2021: €230 million). €12.3 million of this cash is not freely disposable (2021: €9.3 million). No other collateral has been furnished.

The tangible assets comprise:

Tangible assets

	31-12-2022	31-12-2021
Buildings	33	41
Other	67	51
Total tangible assets	100	92

The 'buildings' item comprises buildings with an estimated economic life of 30 years and plant and equipment with an estimated economic life of 15 years. The 'other' item relates to furniture, equipment and furnishings with an estimated economic life of between five and ten years, and computers with an economic life of between four and five years.

The receivables, prepayments and accrued income comprise:

Receivables, prepayments and accrued income

	31-12-2022	31-12-2021
Receivables from employers	972	940
Receivables in respect of value transfers	160	178
Receivables from participants	7	2
Other receivables	222	204
Total receivables, prepayments and accrued income	1,361	1,324

The 'receivables' item includes no items with a remaining maturity of more than one year (2021: zero).

Liabilities

3. Group capital

	Pension fund capital	Minority interests	Total 2022	Total 2021
Opening balance	53,607	50	53,657	-33,503
Fund result	-8,371	-	-8,371	87,160
Change in minority interests	-	-5	-5	-
Closing balance of group equity	45,236	45	45,281	53,657

As a result of the consolidation, the group equity in the consolidated balance sheet is €45 million higher than the equity in the company balance sheet. This difference is due to third-party minority interests in participating interests included in the consolidation.

APG Groep NV's dividend distributions take account of restrictions prescribed by the applicable legislation and regulations, including the Markets in Financial Instruments Directive (MiFID).

4. Provision for pension liabilities

	31-12-2022	31-12-2021
Proprietary risk	414,193	498,680
Policyholders' risk	73	117
Total provision for pension liabilities	414,266	498,797

For additional explanatory information on the provision for pension liabilities, see the notes to the company statement of income and expenses.

5. Investment-related liabilities

	31-12-2022	31-12-2021
Collateral received	5,316	14,977
Short positions	156	-
Short-term borrowing	1,817	1,077
Derivatives	25,215	21,235
Total investment-related liabilities	32,504	37,289

Collateral received relates to surety for opened transactions (derivative positions).

Short-term borrowing of €1.8 billion (2021: €1.1 billion) includes €1.1 billion of repos (2021: €0.0 billion). A fee is charged for entering into repos. Cash is temporarily obtained to cover the non-return risk.

Negative derivative positions are presented on the liabilities side of the balance sheet, in accordance with Dutch Accounting Standards (Richtlijnen voor de Jaarverslaggeving). The negative derivative positions can be specified as follows:

Derivatives with a negative current value

	31-12-2022	31-12-2021
Currency derivatives		
Forward currency contracts	210	2,193
Interest rate derivatives		
Interest Rate Swaps	23,910	17,034
Inflation-linked swaps	273	1,037
Fixed-income futures	397	81
TBAs	57	3
Other derivatives		
Credit default swaps	11	193
Other futures	357	694
Total derivatives with negative fair value	25,215	21,235

6. Payables and other liabilities

	31-12-2022	31-12-2021
Provisions	75	77
Long-term liabilities	1	11
Payables in respect of pensions	348	345
Other payables	542	3,776
Total payables and other liabilities	966	4,209

The 'payables and other liabilities' item, which is part of 'other payables', includes items with a remaining maturity of more than one year totaling €240 million (2021: €253 million). No securities have been furnished.

Provisions

The provisions relate primarily to personnel-related provisions and the provision for deferred taxes.

Long-term liabilities

Long-term liabilities after consolidation total €1 million (2021: €11 million), which relate to loans by third parties in which a capital interest is held. An amount of €1.0 million of the closing balance has a remaining term of more than five years (2021: €10.9 million). The interest rate is 7.25% per annum (2021: 7.25% per annum). No security has been furnished.

Payables in respect of pensions

Payables in respect of pensions includes tax and social security contributions totaling €345million (2021: €326 million).

Other payables

The purchase of conditional rights totaling €- million (2021: €2,951 million) was released as of December 30 and is explained in more detail in the notes to the company balance sheet.

Off balance rights and obligations

Liabilities arising from investments

Liabilities entered into for real estate investments totaled €10.0 billion on the balance sheet date (2021: €11.5 billion).

Liabilities have been entered into for private equity investments to make deposits on request. These liabilities totaled €20.5 billion on the balance sheet date (2021: €17.8 billion).

Liabilities entered into for investments in investment funds totaled €2.5 billion on the balance sheet date (2021: €2.5 billion).

Securities furnished as collateral were €0.6 billion (2021: € 0.0), and securities received as collateral were €0.0 billion (2021: €0.0). Securities totaling €0.5 billion have been deposited as initial margin (2021: €0.4 billion) were received as collateral (bilateral initial margin).

Securities totaling €13.2 billion have been deposited as initial margin (2021: €3.0 billion), and securities totaling €0.5 billion have been furnished as collateral (bilateral initial margin) (2021: €0.4 billion). Securities received from repos totaled €2.8 billion (2021: €0.9 billion), and securities totaling €1.1 billion were issued (2021: €0.0 billion). Cash posted for initial margin relating to derivatives totaled €0.6 billion (2021: €0.5 billion).

An intraday facility has been taken out with ABN-AMRO Bank NV for a total of €7.3 billion (2021: €6.3 billion). An intraday facility has also been taken out with ING for a total of €0.5 billion (2021: €0.5 billion). These facilities had not been drawn at year-end 2022. No collateral was furnished for these agreements/facilities. APG Liquiditeitenbeheer B.V. does not have any credit facilities.

Liabilities have been entered into for other investments totaling €2.2 billion at the balance sheet date (2021: €2.9 billion).

Other liabilities

Liabilities arising from current leases of €207.6 million were open at the balance sheet date (2021: €264.5 million), of which €18.6 million falls due within one year (2021: €14.8 million), €65.0 million within one and five years (2021: €62.7 million), and €124.0 million after five years (2021: €186.9 million).

Liabilities arising from long-term vehicle leases totaled €5.4 million (2021: €6.7 million), of which €2.3 million (2021: €2.7 million) falls due within one year after the close of the fiscal year and €3.1 million (2021: €4.0 million) between one and five years. Lease costs including fuel advance of €2.8 million (2021: €3.0 million) were recognized in the reporting year. The lease obligation is determined excluding fuel advance.

Liabilities arising from maintenance and other contracts totaling €63.8 million were open at year-end (2021: €60.0 million), of which €26.0 million (2021: €20.1 million) falls due within one year and €37.8 million in the following years (2021: €39.9 million). No obligations are due after five years.

At the end of the reporting period, the group entered into investment commitments of € 4.0 million (2021: €11.1 million).

In 2022, APG provided a loan of 2.0 million euros to Festina Finance for prefunding project costs. In addition, in 2023 the loan amount will be increased by two tranches totaling 4 million euros. Repayment of the loan amount and the accumulated interest (5% annually) will take place from January 1, 2027. The total term is 9.5 years and security has been issued for the loan amount by the director-major shareholder of Festina Finance.

A fiscal entity comprising ABP, APG Groep NV, and APG Groep NV subsidiaries and second-generation subsidiaries has been formed for value-added tax purposes. The companies in such a fiscal entity are jointly and severally liable for their tax liabilities.

Notes to the consolidated statement of income and expenses

Amounts are in millions of euros unless otherwise stated.

Revenue

7. Pension contributions (net)

	Total 2022	Total 2021
Total contributions (net)	17,013	12,604

8. Investment results (net)

	Real estate	Equities	Fixed-income investments	Derivatives	Other investments	2022	2021
Direct results	1,558	1,438	4,962	1,752	-231	9,479	9,080
Indirect results	-4,753	-26,626	-43,228	-34,306	3,231	-105,682	47,874
Asset management costs	-130	-217	-115	-2	-72	-536	-508
Total investment results (net)	-3,325	-25,405	-38,381	-32,556	2,928	-96,739	56,446

Expenses

9. Pensions and other benefits

	Total 2022	Total 2021
Total pensions and other benefits	-13,712	-12,908

The 'pensions and other benefits' item concerns retirement pensions (OP) and surviving dependents' pensions (NP), occupational disability pensions (comprising ABP occupational disability pensions (AAOP), invalidity pensions (IP) and redeployment allowances (HPT)), as well as benefits under life and non-life insurance products.

10. Movement in provision for pension liabilities

	2022	2021
Movements	84,532	31,068

For additional explanatory information on the movement in the provision for pension liabilities, see the notes to the company statement of income and expenses.

11. Balance arising from transfer of rights

	2022	2021
Value transfers	480	242

12. Pension management costs

	2022	2021
Salaries (including social security charges)	-421	-384
Pension charges	-39	-40
Other staff costs	-44	-20
Depreciation	-18	-26
Third-party services	-184	-138
Other operating expenses	-176	-159
Subtotal	-882	-767
Less: income from work on behalf of third parties	223	223
Less: attributed to asset management costs	437	364
Pension and insured benefit administration costs (net)	-222	-180

The 'other operating expenses' item primarily concerns IT costs and accommodation costs of the pension administrator.

The average number of staff was:

	2022	2021
ABP	39	42
Consolidated entities	3,300	3,124
(Of whom, employed outside the Netherlands)	263	246
The further analysis is:		
- management and corporate staff	741	727
- administrative units	2,602	2,439
- service units	-	-

The staff of the pension fund (ABP) and the staff of the pension administrator (APG) are participants in the ABP pension scheme or in the APG company pension fund. Neither scheme obligates the employer to make supplementary contributions to the pension fund in the event of deficits other than the payment of the annual contributions. This means that recognizing the contribution as an expense suffices.

The Stichting Personeelspensioenfonds APG (PPF APG) company pension fund scheme qualifies as an average pay scheme. Indexation of granted pension entitlements and rights is only applied when the pension fund's financial position offers sufficient scope. PPF APG has entered into a pension administration agreement with the employers that sets out the rights and obligations. More information, including on the financial position of the fund, is available on the PPF APG website.

Post-balance sheet events

Adjustment of UFR

The DNB interest term structure for pension funds has been determined using the Ultimate Forward Rate (UFR) in the years since 2012.

In 2022, the Parameters Committee recommended an adjustment of the UFR method. It was recommended to use the market interest rate for maturities of up to 50 years and to extrapolate for longer maturities on the basis of the market interest rate between 30 and 50 years. DNB has decided to adopt the advice of the Parameters Committee with effect from 2023. The effect on the funding ratio of the transition to the UFR 50 is estimated at -0.4 percentage point.

The transition to the UFR 50 will take place on January 1, 2023. The effect of the change from the current UFR to UFR 50 will lead to an increase in the provision of €1.6 billion as of January 1, 2023.

Sale of buildings

At the beginning of 2023, ABP completed the sale of part of its buildings in Heerlen. The buildings were sold on March 27, 2023 for an amount of €45.5 million. As the carrying amount as at December 31, 2022 was €31.7 million, a capital gain of €13.8 million was realized on the sale.

Notes to the consolidated cash flow statement

Amounts are in millions of euros unless otherwise stated.

The breakdown of the 'cash' item is as follows:

	31-12-2022	31-12-2021
Investments	2,494	1,253
Other assets	962	841
Total cash	3,456	2,094

Cash flow from pension activities

The contributions received presented in the cash flow statement comprise contributions totaling €11,810 million, the contributions received in respect of the payable for the purchase of conditional pension rights totaling €1,183 million, and the coverage from the cost mark-up on contributions totaling €95 million. The difference with the net contributions according to the statement of income and expenses is the purchased VPL in the amount of €4,115 million.

The increase in the contributions received in 2022 is largely due to the growth in the number of participants, as well as due to the 2 percentage point increase in the retirement pension (OP) / surviving dependents' pension (NP) contributions compared with 2021.

The increase in the pension payments is mainly due to a higher average amount per beneficiary (due to early indexation).

Cash flow from investment activities

The cash flow statement presents cash flows from direct investment revenue and exchange rate gains/losses on bank accounts.

The 'other movements' item arises from a number of effects, including movements in the 'negative bank balances' item, movements in the short-term money market products, effects of exchange rate differences, internal recharges, and the look-through methodology used in the investment pools.

Other notes

Amounts are in millions of euros unless otherwise stated.

List of significant capital interests included in the consolidation

The following list has been prepared based on the provisions of Sections 2:379 and 2:414 in Book 2, Title 9 of the Dutch Civil Code.

Entities	Domicile	Interest	Main activity	Processed in financial statements
Elkhorn Barges, Inc.	Wilmington, Delaware	60	Investment in private equity	Investment
Externe Hypothecaire Beleggingen Heerlen B.V.	Heerlen	100	Holding	Investment
Fagori Investments Holding B.V.	Heerlen	100	Investment in fixed income	Investment
Kaena Capital Opportunities Corp	Wilmington, Delaware	60	Investment in private equity	Investment
Klavier Investments Holding B.V.	Heerlen	100	Investment in real estate	Investment
Malapolski Investments Holding B.V.	Heerlen	100	Investment in real estate	Investment
Oiltree Investment Holding B.V.	Amsterdam	100	Investment in real estate	Investment
Olygia Investments Holding B.V.	Heerlen	100	Investment in fixed income	Investment
Palipa Investments Holding B.V.	Heerlen	100	Investment in fixed income	Investment
Parijs Kantoren Fonds B.V.	Amsterdam	100	Investment in real estate	Investment
Physalis Investments Holding B.V.	Heerlen	100	Investment in commodities	Investment
Ponticello Investments Holding B.V.	Heerlen	100	Investment in real estate	Investment
Porlezza Investments Holding B.V.	Amsterdam	100	Investment in real estate	Investment
Portfolio AC GP B.V.	Heerlen	100	Investment in hedge funds	Investment
Ravenna Investments Holding B.V.	Amsterdam	100	Investment in infrastructure	Investment
Restalux B.V.	Amsterdam	100	Investment in real estate	Investment
Solusta Investments Holding B.V.	Heerlen	100	Investment in real estate	Investment
Spoleta Investments Holding B.V.	Amsterdam	100	Investment in real estate	Investment
Tamburello Investments Holding B.V.	Heerlen	100	Investment in real estate	Investment
Timpani Investments Holding B.V.	Heerlen	100	Investment in real estate	Investment
Tolanu Investments Holding B.V.	Amsterdam	100	Investment in infrastructure	Investment
Zegita Investments Holding B.V.	Amsterdam	100	Investment in infrastructure	Investment
ABP Life Cycle Holding B.V.	Heerlen	100	Holding	Investment

Entities	Domicile	Interest	Main activity	Processed in financial statements
AlpInvest Partners CSI 2006 B.V.	Amsterdam	60	Investment in private equity	Investment
AlpInvest Partners Primary Fund Inv. 2006 B.V.	Amsterdam	60	Investment in private equity	Investment
AlpInvest Partners Primary Fund Inv. 2007 B.V.	Amsterdam	65	Investment in private equity	Investment
AlpInvest Partners Primary Fund Inv. 2008 I B.V. (ABP)	Amsterdam	100	Investment in private equity	Investment
AlpInvest Partners SL B.V.	Amsterdam	60	Investment in private equity	Investment
APG Groep N.V.	Heerlen	92	Pension administration organization	consolidation
- APG DWS en Fondsenbedrijf N.V.	Heerlen	100	Administrative organization	consolidation
- APG Asset Management N.V.	Amsterdam	100	Administrative organization	consolidation
- APG Asset Management US Inc.	State of Delaware	100	Administrative organization	consolidation
- APG Asset Management (Singapore) Pte. Ltd.	Singapore	100	Administrative organization	consolidation
- APG Infrastructure Asset Owner I GP B.V.	Amsterdam	100	Administrative organization	consolidation
- APG Investments Asia Ltd.	Hong Kong	100	Administrative organization	consolidation
- APG Business Information Consultancy (Shanghai) Co. Ltd.	Shanghai	100	Administrative organization	consolidation
- APG Trading B.V.	Amsterdam	100	Administrative organization	consolidation
- Entis Holding B.V.	Amsterdam	70	Investment in participating interest	consolidation
- Entis B.V.	Utrecht	100	Consultancy on information technology	consolidation
APG Liquiditeitenbeheer B.V.	Amsterdam	- ¹	Cash management services	consolidation
Aspendos Investments Holding B.V.	Heerlen	100	Investment in real estate	Investment
Augosti Investments Holding B.V.	Amsterdam	100	Investment in real estate	Investment
Azurti Investments Holding B.V.	Heerlen	100	Investment in real estate	Investment
Bolanta Investments Holding B.V.	Heerlen	100	Investment in commodities	Investment
Busanto Investments Holding B.V.	Heerlen	100	Investment in real estate	Investment
Cueno Investments Holding B.V.	Amsterdam	100	Investment in real estate	Investment
Decundo Investments Holding B.V.	Heerlen	100	Investment in real estate	Investment
Drooge Vaate 1 N.V.	Amsterdam	100	Investment in infrastructure	Investment

¹ The shares are owned by the mutual funds where ABP owns a significant share

A full list of the capital interests has been filed with the Chamber of Commerce.

Disclosure of auditor's fees

The fees of the network of ABP's external independent auditor are listed in the following table:

2022 auditor's fees

	KPMG Accountants NV	Other parts of KPMG network	Total KPMG network	Total KPMG network 2021
Audit of the financial statements	1.3	-	1.3	1.2
Other audit and assurance or engagements	3.0	1.1	4.1	3.9
Tax consultancy	-	-	-	-
Other non-audit services	-	-	-	-
Total	4.4	1.1	5.4	5.1

The fees of the network of ABP's external independent auditor for the audit of the financial statements 2022 totaled €0.5 million (2021: €0.4 million). The fees of the network of APG Groep NV's external independent auditor for audit services for the client reports for ABP and the mutual funds for 2022 totaled €3.9 million (2021: €3.7 million). These amounts are included in the above table.

In addition, the fees of the network of APG Groep NV's external independent auditor for audit services for other APG Groep NV clients for 2022 totaled €0.7 million (2021: €0.7 million). These amounts are not included in the above table.

The amounts presented include VAT and are based on the sum total of the fees for the fiscal year to which the financial statements relate, irrespective of whether the activities were carried out during the fiscal year.

Signatories to the financial statements

Heerlen, April 26, 2023

The Board:

Mr. A. Boonen

Mr. P. Rosenmöller

Ms. D. Dijkhuis

Mr. A.J.M. Sibbing

Mr. P.J.H. Fey

Mr. A.M.H. Slager

Ms. A. Gram

Mr. X.J. den Uyl

Ms. M.P.I. Ten Kroode

Ms. Y.E.M. Verdonk - van Lokven

Ms. V.S. van der Meer-Gangapersadsing

Mr. A. van Vliet

Ms. C.M. Mulder-Volkers

Mr. H.J. van Wijnen

Ms. K. Nauta

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Other information

Provisions in the articles concerning profit appropriation

The articles do not include a provision governing the profit appropriation.

Actuarial certificate

Engagement

Stichting Pensioenfondsen ABP in Heerlen, the Netherlands, engaged Towers Watson Netherlands B.V. to issue an actuarial certificate as referred to in the Pensions Act (*Pensioenwet*) on the fiscal year 2022.

Independence

As a certifying actuary, I am independent of Stichting Pensioenfondsen ABP (hereinafter also referred to as the 'pension fund'), as required under Section 148 of the Pensions Act. I do not perform any other activities for the pension fund other than those in respect of the actuarial function.

Data

The data on which I have based this audit were provided and compiled under the responsibility of the Board of the pension fund.

I have based the assessment of the pension fund's technical provisions and the review of the pension fund's financial position on the financial data that form the basis for the pension fund's financial statements.

Consultation with external auditor

Based on the Royal Netherlands Institute of Chartered Accountants' Guidance (*NBA-handreiking*) applied by me and the pension fund's external auditor, I have consulted with this external auditor on the procedures and expectations for the audit for the fiscal year.

For the assessment of the pension fund's technical provisions and for the review of its financial position as a whole, I have set the materiality at €2,500,000,000. The external auditor and I have agreed to report identified differences in excess of €125,000,000. These agreements have been documented and the findings of the procedures I performed have been discussed with the external auditor.

In addition, I have used the basic data audited by the external auditor in the context of the audit of the pension fund's financial statements. The pension fund's external auditor has informed me of their findings regarding the reliability (material correctness and completeness) of the basic data and the other assumptions that are relevant to my review.

Procedures

In the context of the engagement, in accordance with my statutory responsibility as described in Section 147 of the Pensions Act, I have ascertained whether the pension fund has complied with Sections 126 through 140 of the Pensions Act.

The basic data provided by the pension fund are such that I have accepted these data as the basis for the calculations I have reviewed.

As part of the procedures performed in the context of the engagement, I have, among other things, ascertained whether:

- adequate technical provisions have been established in relation to the pension liabilities as a whole;

- the minimum capital requirement and the capital requirement have been established in accordance with the statutory provisions;
- the cost-covering contribution meets the statutory requirements;
- the investment policy is in accordance with the Prudent Person Rule.

In addition, I have reviewed the pension fund's financial position. I have based this review on the liabilities entered into through to the balance sheet date and the assets stated on the balance sheet as at balance sheet date, and for this review I have also considered the pension fund's financial policy.

I have performed my audit such that reasonable assurance is obtained that the financial statements are free of material misstatements.

The procedures described and the manner in which these have been performed are in accordance with the applicable standards and practices of the Royal Dutch Actuarial Association and I believe these procedures form an appropriate basis for my opinion.

Opinion

Considered in the aggregate, the technical provisions established by the pension fund are adequate in accordance with the aforementioned calculation rules and assumptions.

The amount of the pension fund's equity as at balance sheet date is lower than the statutory capital requirement, but higher than the statutory minimum capital requirement.

Taking the above into consideration, I am satisfied that the pension fund has complied with Sections 126 through 140 of the Pensions Act, with the exception of Section 132 (capital requirement).

With regard to Section 137 (conditional indexation), I note that in 2022, the pension fund made use of the eased indexation rules (for indexation due to a planned transition) as laid down in the temporary Section 15c of the Financial Assessment Framework (Pension Funds) Decree (*Besluit financieel toetsingskader pensioenfondsen*). In doing so, the pension fund has substantiated that it has complied with the conditions set in this Section.

The pension fund's policy funding ratio as at balance sheet date is lower than the funding ratio that applies for the capital requirement, but higher than the funding ratio that applies for the minimum capital requirement.

My opinion on the financial position of Stichting Pensioenfonds ABP is based on the liabilities entered into through to the balance sheet date and the assets stated on the balance sheet as at balance sheet date.

In my opinion, the pension fund's financial position is inadequate, because the equity stated on the balance sheet is lower than the capital requirement. For the record, I note that if the UFR method as it will be applied by the Dutch central bank (DNB) in 2023 had been taken into account in the interest-rate term structure as at balance sheet date, this would not have changed my opinion on the pension fund's financial position.

Amsterdam, April 26, 2023

Drs. R.T. Schilder AAG

Affiliated with Towers Watson Netherlands B.V.



Independent auditor's report

To: the General Board of Stichting Pensioenfonds ABP

Report on the audit of the financial statements 2022 included in the annual report

Our opinion

In our opinion, the accompanying financial statements give a true and fair view of the financial position of Stichting Pensioenfonds ABP as at 31 December 2022 and of its results for the year then ended, in accordance with Part 9 of Book 2 of the Dutch Civil Code.

What we have audited

We have audited the financial statements 2022 of Stichting Pensioenfonds ABP ('the Pension Fund'), based in Heerlen.

The financial statements comprise:

- 1 the company balance sheet and the consolidated balance sheet as at 31 December 2022;
- 2 the company statement of income and expenses and the consolidated statement of income and expenses for 2022;
- 3 the company cash flow statement and the consolidated cash flow statement for 2022; and
- 4 the notes comprising a summary of the accounting policies and other explanatory information.

Basis for our opinion



We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the financial statements' section of our report.

We are independent of the Pension Fund in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

We designed our audit procedures in the context of our audit of the financial statements as a whole and in forming our opinion thereon. The information and our observations in respect of fraud and non-compliance with laws and regulations, going concern, climate-related risks, and the key audit matters, were addressed in this context, and we do not provide a separate opinion or conclusion on these matters.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Information in support of our opinion

Summary

Materiality

- Materiality of EUR 2.5 billion
- Approximately 0.5% of the available assets

Fraud & Noclar, Going concern and Climate related risks

- Fraud & Non-compliance with laws and regulations (Noclar) related risks: we have identified the risk of override of controls by the General Board as a presumed fraud risk
- Going concern related risks: no going concern risks identified
- Climate related risks: We have considered the impact of climate-related risks on the financial statements and described our approach and observations in the section 'Audit response to climate-related risks'.



Key audit matters

- Valuation of investments
- Valuation of the provision for pension liabilities

Opinion

Unqualified

Materiality

Based on our professional judgment we determined the materiality for the financial statements as a whole at EUR 2.5 billion (2021: EUR 2.5 billion). The materiality is determined with reference to the available assets as at 31 December 2022 (approximately 0.5%). We consider the available assets to be the most appropriate benchmark, as it is a determining factor in calculating the policy funding ratio, which reflects the Pension Fund's financial position. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the General Board that misstatements identified during our audit in excess of EUR 125 million would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

Scope of the audit

Group audit, including outsourcing of business processes to service organizations

The Pension Fund has outsourced the management of investments and the administration of pensions to APG Asset Management N.V. and APG DWS en Fondsenbedrijf N.V., respectively (hereinafter jointly referred to as the 'service organization').

The financial statements are prepared on the basis of information regarding the investments and returns on investments provided by APG Asset Management N.V. and on information regarding the provision for pension liabilities, pension contributions, pension benefits and other financial items provided by APG DWS en Fondsenbedrijf N.V.



Given our ultimate responsibility for the opinion, we are responsible for obtaining insights into the nature and significance of the services provided by the service organization and the effect they have on the internal control of the Pension Fund that is relevant to the audit. This is the basis on which we identify the risks of material misstatement and design and perform audit procedures to address these risks.

In conducting our audit we make use of the procedures and findings of other independent auditors relating to the internal controls of the service organization that are relevant to the Pension Fund, as included in the (Standard 3000A and 3402 type II) service level reports specifically prepared for that purpose.

Our audit procedures consist of determining which internal controls can be expected as a minimum and discussing the control environment of the service organization with the service organization's representatives. Based on that we evaluate the internal controls described in the Standard 3000A and 3402 type II reports, the procedures to test their operating effectiveness during 2022, and the findings resulting from those procedures and we discuss these with the other independent auditor. We also assess the General Board's evaluation of the quality of the outsourced business processes performed by the service organization.

In conducting our audit we make use of the procedures and findings of other independent auditors. Under the agreement with the Pension Fund the service organization engaged an independent auditor to audit the client reporting, which includes information regarding the investments and returns on investments, provision for pension liabilities, pension contributions, pension benefits and other financial items to be accounted for in the Pension Fund's financial statements.

Given our ultimate responsibility for the audit opinion on the financial statements, we are responsible for directing and supervising the audit procedures to be performed by the auditor of the service organization. Accordingly, we gave the auditor written instructions concerning the nature and scope of the procedures to be performed. In accordance with our instructions the auditor conducted the audit with a materiality of EUR 2.5 billion and paid particular attention to the key audit matters mentioned below.

The service organization's auditor reported his findings to us. We evaluated the report, discussed the findings with the auditor, reviewed the auditor's audit file, and carried out further audit procedures ourselves, including procedures regarding the control measures in place at the level of the Pension Fund.

Based on the procedures mentioned above relating to the outsourced business processes and the additional procedures performed by us, we have obtained sufficient and appropriate audit evidence regarding the



investments, investment flows and returns, (changes in) participants' data and entitlements resulting in (changes in) the provision for pension liabilities, pension contributions and pension benefits.

Audit response to the risk of fraud and non-compliance with laws and regulations

Within the paragraph 'Fraud prevention' of the 'Risk management' section of the Board Report, the General Board describes the procedures relating to fraud risks. Within the paragraph 'Compliance with statutory guidelines and codes' of the 'Governance' section of the Board Report, the General Board describes the procedures relating to the risks of non-compliance with laws and regulations.

As part of our audit, we have gained insights into the Pension Fund and its business environment, and assessed the design and implementation and, where considered appropriate, tested the operating effectiveness of the Pension Fund's risk management in relation to fraud and non-compliance with laws and regulations. This also includes the internal control measures in place at the external service providers of the Pension Fund (see the 'Scope of the audit' section).

Our procedures included, among other things, assessing the code of conduct, the whistleblowing procedures, the periodic incident and compliance reporting, reading the minutes of relevant meetings and the procedures at the Pension Fund to investigate indications of possible fraud or non-compliance with laws and regulations. Furthermore, we performed relevant inquiries with the General Board and key officers. Our audit procedures included, among others:

- obtaining an understanding of how the Pension Fund manages the use of information technology (IT) and the impact of IT on the financial statements, including the risk of cybersecurity incidents that could have a material effect on the financial statements;
- evaluation of ancillary positions held by members of the General Board, with special attention to procedures and governance in view of possible conflicts of interest;
- evaluation of correspondence with regulators and supervisory authorities (including the Dutch central bank (DNB) and the Dutch Authority for the Financial Markets (AFM)).



In addition, we performed procedures to obtain an understanding of the laws and regulations that are applicable to the Pension Fund and we identified the following areas as those most likely to have a material effect on the financial statements:

- 'Pensioenwet' (Pensions Act);
- Wet verplichte deelneming in een bedrijfstakpensioenfonds', or 'Wet Bpf 2000' (law on obligatory participation in a sectoral pension fund);
- Besluit Financieel toetsingskader pensioenfondsen', or 'Bftp' (decree on the financial assessment framework for pension funds);
- 'Algemene verordening gegevensbescherming' (AVG, or General Data Protection Regulation, GDPR);
- Sanctions legislation.

We, together with our forensics specialists, evaluated the fraud and non-compliance risk factors to consider whether those factors indicate a risk of material misstatement in the financial statements.

We assessed the presumed fraud risk on revenue recognition as not relevant, given the nature of the revenue and due to the limited possibilities of material influence on revenue recognition.

Based on the above and on the auditing standards, we identified the following risk related to fraud and non-compliance with laws and regulations that is relevant to our audit, including the relevant presumed risks defined in the auditing standards, and we have responded as follows:

Management override of internal controls (a presumed risk)

Risk:

- The General Board is in a unique position to prepare fraudulent financial statements and manipulate accounting records by overriding internal controls that otherwise appear to be operating effectively, such as estimates relating to the valuation of the provision for pension liabilities and the valuation of the investments.



Audit response:

- We have evaluated the design and implementation and, where considered appropriate, tested the operating effectiveness of the internal controls that mitigate the fraud risk, including the internal controls in place at the service providers to which the Pension Fund has outsourced business processes.
- We performed an analysis to identify (administrative) journal entries with an increased risk of fraud. In case journal entries with an increased risk of fraud were identified, we performed additional audit procedures to address the identified risks. These procedures also include validating transactions with source information.
- We have evaluated significant estimates and also judgments and assumptions by the General Board with respect to the valuation of the provision for pension liabilities and the valuation of the investments. For a description of our procedures in this regard, we refer to the key audit matters related to the valuation of the provision for pension liabilities and the valuation of the investments.
- We have included elements of unpredictability in our audit approach, including additional tests of detail of Board members' remuneration based on source information.

Our evaluation of the procedures performed related to fraud and non-compliance with laws and regulations did not result in a key audit matter.

We communicated our risk assessment, audit responses and results to the General Board.

Our audit procedures did not reveal indications and/or other reasonable suspicion of fraud and non-compliance with laws and regulations that are considered material for our audit

Audit response to going concern - no significant going concern risks identified

As explained on pages 34 and 133 of the financial statements, the General Board submitted a recovery plan to De Nederlandsche Bank (the Dutch Central Bank) in March 2023, in which it has outlined how it expects to restore the Pension Fund's policy funding ratio to the required level within the regulatory recovery period. This is part of the Board of Trustees' going concern risk analysis. Since the Pension Fund has – as a last resort – the option to curtail the pension entitlements and pension rights, and the Pension Fund's ability to continue as a



going concern is therefore guaranteed at all times, the General Board did not identify any risks related to the Pension Fund's ability to continue as a going concern. Our procedures included:

- considering whether the General Board's assessment of the going concern risks and the recovery plan submitted to DNB includes all relevant information and is consistent with our knowledge and understanding obtained as a result of our audit of the financial statements;
- considering whether actuarial developments (including the foreseeable trend in life expectancy) and developments in the financial markets (including developments in the yield curve (rentetermijnstructuur)) indicate going concern risks;
- analyzing the development of the financial position of the Pension Fund during the financial year with respect to regulatory solvency requirements to identify indicators that could give rise to significant going concern risks, and determining that the relevant disclosures in the financial statements and the disclosures with respect to the realization of the recovery plan as included on pages 34 and 133 of the financial statements are adequate.

The outcome of our risk assessment procedures did not give reason to perform additional audit procedures on the going concern assessment

Audit response to climate-related risks

The General Board of the Pension Fund is responsible for the preparation and the fair presentation of the financial statements in accordance with Part 9 of Book 2 of the Dutch Civil Code, including ensuring that the impact of climate risks and climate commitments are appropriately accounted for and disclosed in the financial statements.

The Pension Fund has outlined its climate policy in the 'Sustainable and responsible investments' section of the annual report. As explained, this policy includes the goal of reducing the carbon footprint of the entire investment



portfolio by 50% by 2030 compared with the reference year of 2019, and the ambition to achieve an investment portfolio with net-zero carbon emissions by 2050.

In the 'Sustainable and responsible investments – Mapping climate risks, investing in solutions' section of the annual report, as well as in the 'Climate risks' section of the financial statements, the Pension Fund provided a high-level description of how the risks of climate change are identified, and the measures that will be taken to manage these risks. The 'Climate risks' section of the financial statements also contains a description of the impact of climate risks on the financial position of the Pension Fund. The Pension Fund concludes that, based on



the information currently known about climate risks, there is no material impact on the valuations and financial position reported in the financial statements 2022.

We have performed a risk assessment aimed at identifying the risks of material misstatements resulting from the potential impact of climate risks on the accounts and disclosures in the financial statements. In our assessment we included significant estimates, judgments and assumptions made by the General Board.

To this end, we performed the following procedures:

- We conducted inquiries with the General Board and staff of the Pension Fund and its service organization to gain an understanding of how climate risks are identified and managed.
- We evaluated climate-related fraud risk factors and recognized that the societal pressure on accountability and disclosures regarding responsible investment qualify as a fraud risk factor, but not as a fraud risk.
- We have inspected policy documentation related to climate risks, including the Sustainable and Responsible Investment Policy, the Climate Plan, the climate risk dashboard, and the Pension Fund's own risk assessment.
- In performing our risk assessment procedures, we were assisted by our own climate experts.

Based on the procedures performed, we consider that climate risks do not have a material impact on the financial statements 2022 based on Part 9 of Book 2 of the Dutch Civil Code, and they also do not affect our key audit matters.

We have audited the disclosure in the 'Climate risks' section of the financial statements and consider this disclosure to be adequate.

We have read the information in the 'Sustainable and responsible investments' section of the annual report and considered material consistency with the financial statements based on our knowledge obtained through our audit of the financial statements or otherwise.

Our key audit matters



Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the General Board. However, the key audit matters are not a comprehensive reflection of all matters discussed.

Valuation of investments

Description

The investments of the Pension Fund constitute a significant item on its balance sheet. The investments of the Pension Fund amount to approximately 99.6% of the balance sheet total. Under the Pensions Act, all investments must be measured at fair value (market value). Note 1 to the financial statements states that 69% of the Pension Fund's investments are valued directly at quoted market prices, 6% of the Pension Fund's investments are valued at derived market prices, and 25% of the investments are valued on the basis of valuation models and techniques. Determining the fair value for this last category of investments involves greater complexity and elements of management judgement.

Making these estimates requires significant judgement by the General Board, for which it makes use of models. Given the influence this has on the valuation of the Pension Fund's investments, the balance of income and expense, its equity and its policy funding ratio, we consider the valuation of investments to be a key audit matter.

The Pension Fund describes the accounting policies applied in the disclosures on pages 124 through 126. Note 1 states the valuation methods used and key assumptions made for the valuation of these investment categories.

Evaluating the accounting policies and determining the accuracy and adequacy of the disclosures was part of our procedures

Our response

We performed the following procedures:

- We evaluated the accounting policies used for the valuation of these investments and the more detailed description of the accounting policies included in the 'Handboek Waarderingen' (Valuations Manual of ABP) for compliance with law as well with the 'Richtlijnen voor de Jaarverslaggeving' (RJ, the Dutch Accounting Standards Board guidelines).



- We tested the internal controls that are in place to ensure the reliability of the valuation of these investments.
- We determined that the notes to the financial statements contain adequate disclosures concerning the accounting policies and the degree of estimation uncertainty with regard to the valuation of these investments.

The service organization’s auditor reported to us his findings relating to his audit of these investments. We evaluated the report, discussed the findings with the service organization’s auditor, and reviewed the auditor’s audit file.

We:

- used Standard 3402 type II reports and analysed these for the adequacy of the scoping, the findings, and the impact of these findings on the audit procedures;
- reconciled the audited report covering the investments with the financial administration and the financial statements;
- established that the investments valued based on quoted or derived market prices had been investigated with the help of a valuation specialist. The valuation specialist compared the reported valuations with independently determined valuations based on published market information obtained from independent sources;
- established that, for investments of which the valuation is based on net present value calculations and other appropriate valuation models and techniques, a selection of individually significant investments had been investigated with the help of a valuation specialist. In doing so, we evaluated the appropriateness of the calculation models used, reconciled input data with data from objective sources, and assessed the mathematical accuracy of the figures. The source data, including market data, has been critically assessed; and
- established that the valuation of investments based on estimated valuations periodically provided by external parties, where possible, had been tested against recent financial statements audited by other independent auditors. In cases where the financial statements for which an unqualified auditor’s report had been issued were not available in time, the reliability of the valuation as provided by the external parties was established by testing the estimates provided by these external parties in previous years against the audited financial statements that became available at a later date.



Our observation

We determined that the accounting policies and valuation methods used for the investments comply with the applicable reporting standards and are appropriate for determining a fair value for these investments.

We believe that the valuation of the investments in the financial statements has been determined in an acceptable manner. The disclosure on the composition of and the movements in the investments in the financial statements is adequate.

Valuation of the provision for pension liabilities

Description

The provision for pension liabilities constitutes a significant item in the Pension Fund's balance sheet and is measured at fair value (market value). Determining the fair value of the provision for pension liabilities involves a calculation in which the pension rights of participants are translated into expected future cash flows (benefit payments) using important estimates of life expectancy, cost levels, and disability. The cash flows are then discounted to net present value at the market interest rate (derived from the yield curve (rentetermijnstructuur) published by De Nederlandsche Bank (the Dutch Central Bank)).

Making estimates requires extensive judgement by the General Board, using actuarial models, and the General Board also draws on the assistance of actuarial experts. Given its complexity and its influence on the size of the Pension Fund's provision for pension liabilities, the balance of income and expenses, the equity and the (policy) funding ratio, we regard the valuation of the provision for pension liabilities as a key audit matter.

The General Board has included the accounting policies and assumptions related to the provision for pension liabilities in the notes to the financial statements on pages 126 through 128. The note on page 123 indicates that there have been changes in accounting estimates. The sensitivity of the calculation of the provision for pension liabilities to the estimates used is discussed in the risk paragraph.

Our response

In our audit, we make use of the procedures of the certifying actuary appointed by the Pension Fund. At the start of the audit and on its conclusion, we agreed with the certifying actuary on the approach, the points of attention (including the accounting of the indexation decisions, changes in accounting estimates, and funding of the VPL scheme) and the outcomes.



The service organization's auditor reported his findings to us concerning his audit of the provision for pension liabilities. We evaluated the report, discussed the findings with the auditor, and performed a review of the auditor's audit file.

We evaluated the methods of estimation and the assumptions used by the General Board. In doing so, we evaluated whether the method of estimation and the assumptions used are consistent, prudent, and up to date. We evaluated the way in which the General Board supported the assumptions used by assessing their historical reliability and generally updated assumptions, such as life expectancy. We discussed the estimation methods and assumptions used with the certifying actuary. We evaluated the actuarial statement as included in the other information, as well as the procedures performed as documented in the file of the certifying actuary.

Our procedures also involve evaluating the outcome of the actuarial analysis of the balance of income and expenses in relation to previously made estimates and cash flow projections. In performing these procedures, we were assisted by our own actuarial specialist. We also evaluated the accounting policies and the accuracy and adequacy of the notes to the financial statements

Our observation

We believe that the valuation of the provision for pension liabilities in the financial statements has been determined in an acceptable manner. The disclosure on the composition of and movements in the provision for pension liabilities is adequate, as is the disclosure on the applied changes in accounting estimates.

Report on the other information included in the annual report

In addition to the financial statements and our auditor's report thereon, the annual report contains other information.

Based on the following procedures performed, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements; and
- contains the information as required by Part 9 of Book 2 of the Dutch Civil Code for the Board report and the other information.



We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and Dutch Standard 720. The scope of the procedures performed is less than the scope of those performed in our audit of the financial statements.

In addition, we devoted specific attention to transparency with respect to the administrative expenses. In the section of the Board report headed 'Adding value for participants and employers', the Pension Fund provides insight into the costs of pension administration, costs of asset management and transaction costs, including an explanation of the assumptions and estimates made, as well as a disclosure for the composition of these costs.

Acting on our instructions, the service organization's auditor performed specific agreed-upon procedures relating to the administrative expenses and reported his findings to us. We evaluated the report, discussed the findings with the auditor and performed a file review on the auditor's audit file.

Furthermore, we assessed the reasonableness of the assumptions and estimates made by the General Board with respect to the administration costs on the basis of the principles and calculation methods approved by the 'Pensioenfederatie' (Federation of Dutch Pension Funds).

The General Board is responsible for the preparation of the other information, including the information as required by Part 9 of Book 2 of the Dutch Civil Code.

Report on other legal and regulatory requirements

Engagement

We were engaged by the General Board on 18 June 2015 as the auditor of the Pension Fund for the audit of the financial year 2016, and have operated as statutory auditor ever since that financial year.

No prohibited non-audit services

We have not provided prohibited services as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audits of public-interest entities.

Services rendered



For the period to which our statutory audit relates, in addition to this audit, we have provided the following services to the Pension Fund and its controlled undertakings:

— other audit and assurance engagements.

These services also include those carried out by the independent auditor of APG Groep N.V.

Description of responsibilities regarding the financial statements

Responsibilities of the General Board for the financial statements

The General Board is responsible for the preparation and fair presentation of the financial statements in accordance with Part 9 of Book 2 of the Dutch Civil Code. Furthermore, the General Board is responsible for such internal control as it determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. In that respect, the General Board is responsible for the prevention and detection of fraud and non-compliance with laws and regulations, including determining measures to resolve the consequences thereof and prevent recurrence.

As part of the preparation of the financial statements, the General Board is responsible for assessing the Pension Fund's ability to continue as a going concern. Based on the financial frameworks mentioned, the General Board should prepare the financial statements using the going concern basis of accounting unless the General Board intends to liquidate the Pension Fund or cease operations, or has no realistic alternative but to do so. The General Board should disclose events and circumstances that may cast significant doubt on the Pension Fund's ability to continue as a going concern in the financial statements.

Our responsibilities for the audit of the financial statements

Our objective is to plan and perform an audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material errors and fraud during our audit.



Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A further description of our responsibilities for the audit of the financial statements is located at the website of the 'Koninklijke Nederlandse Beroepsorganisatie van Accountants (NBA, Royal Netherlands Institute of Chartered Accountants) at [eng_oob_01.pdf \(nba.nl\)](#).

This description forms part of our auditor's report.

Utrecht, 26 April 2023

KPMG Accountants N.V.

P. Smit RA



Assurance report of the independent auditor

To: the General Board of Stichting Pensioenfonds ABP

Our conclusion

We have reviewed the information in the section 'Results in 2022: a livable world' (hereinafter 'the information on Sustainable and Responsible Investments') on pages 56 through 67 of the annual report 2022 (hereinafter 'the Report') of Stichting Pensioenfonds ABP (hereinafter 'the Pension Fund') for the year ended 31 December 2022. A review is aimed at obtaining a limited level of assurance.

Based on the procedures performed nothing has come to our attention that causes us to believe that the information on Sustainable and Responsible Investments is not prepared, in all material respects, in accordance with the reporting criteria as described below in the 'Reporting criteria' section of our report.

Basis for our conclusion

We performed our review in accordance with Dutch law, including Dutch Standard 3000A 'Assurance-opdrachten anders dan opdrachten tot controle of beoordeling van historische financiële informatie (attest-opdrachten) (assurance engagements other than audits or reviews of historical financial information (attestation engagements)). This engagement is aimed to obtain limited assurance. Our responsibilities in this regard are further described in the 'Responsibilities of the auditor' section of our report.

We are independent of the Pension Fund in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch code of ethics).



We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Reporting criteria

The information on Sustainable and Responsible Investments needs to be read and understood together with the reporting criteria. The Pension Fund is solely responsible for selecting and applying these reporting criteria, taking into account the applicable laws and regulations related to reporting.

The reporting criteria used for the preparation of the Report are described in the ‘About this report’ section of the Report.

Limitation to the scope of our review

The Report includes prospective information such as ambitions, strategy, plans, expectations, estimates and risk assessments. Inherently the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information included in the Report.

References to external sources or websites in the Report are not part of the information itself as reviewed by us. Therefore, we do not provide assurance on this information.

Responsibilities of the General Board of the Pension Fund

The General Board of the Pension Fund is responsible for the preparation of the information on Sustainable and Responsible Investments in accordance with the applicable reporting criteria, including the identification of the intended users and the applicability of the applied criteria for the aims of the intended users.

The General Board is also responsible for such internal control as it deems necessary to enable the preparation, measurement or evaluation of the Report that is free from material misstatement, whether due to fraud or error.

The General Board is responsible for overseeing the Pension Fund’s financial and non-financial reporting process.

Responsibility of the auditor



Our responsibility is to plan and perform our review in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion.

The procedures performed to obtain a limited level of assurance are aimed to determine the plausibility of information and vary in nature and timing, and are less in extent, compared to a reasonable assurance engagement. The level of assurance obtained in a review is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

We apply the ‘Nadere Voorschriften Kwaliteitssystemen’ (NVKS, Regulations for Quality management systems) and accordingly maintain a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our review included, among other things:

- performing an analysis of the external environment and obtaining an understanding of relevant social themes and issues and the characteristics of the Pension Fund;
- evaluating the appropriateness of the reporting criteria used, their consistent application and the related disclosures included in the Report. This includes evaluating the outcomes of the dialogue with stakeholders and the reasonableness of estimates made by the General Board;
- obtaining an understanding of the reporting processes underlying the reported information, including obtaining a general understanding of internal control relevant to our review;
- identifying areas in the information on Sustainable and Responsible Investments where misleading or unbalanced information or material misstatements, whether due to fraud or error, are most likely to occur. Based on this risk assessment designing and performing further assurance procedures responsive to these areas to establish the plausibility of the information on Sustainable and Responsible Investments. These procedures included, among other things:
 - interviewing relevant staff of the Pension Fund and its service organization APG responsible for the strategy, policy and results;
 - interviewing relevant staff responsible for providing the information for, performing internal control procedures in respect of, and consolidating data in the information on Sustainable and Responsible Investments;



- obtaining assurance information that the information on Sustainable and Responsible Investments reconciles with the underlying administrative records of the Pension Fund and its service organization APG; and
- reviewing, on a limited test basis, relevant internal and external documentation.
- evaluating the consistency of the information on Sustainable and Responsible Investments with the information in the Annual Report which is not included in the scope of our review;
- evaluating the general presentation, structure and content of the information on Sustainable and Responsible Investments;
- considering whether the information on Sustainable and Responsible Investments as a whole, including the disclosures therein, reflects the purpose of the reporting criteria used.

We have communicated with the General Board of the Pension Fund regarding, among other matters, the planned scope and timing of the review and significant findings identified during our review.

Utrecht, 26 April 2023

KPMG Accountants N.V.

P. Smit RA

SFDR Annex IV Pension Scheme

Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector.

ANNEX IV

Template periodic disclosure for the financial products referred to in Article 8, paragraphs 1, 2 and 2a, of Regulation (EU) 2019/2088 and Article 6, first paragraph, of Regulation (EU) 2020/852

Product name: ABP Pension Scheme

Legal entity identifier: 549300CT8FEJ1I-UK9C94

Environmental and/or social characteristics

Did this financial product have a sustainable investment objective?

Yes

- It made **sustainable investments with an environmental objective:** ___%
 - in economic activities that qualify as environmentally sustainable under the EU Taxonomy
 - in economic activities that do not qualify as environmentally sustainable under the EU Taxonomy
- It made **sustainable investments with a social objective:** ___%

No

- It **promoted Environmental/Social (E/S) characteristics**, and while it did not have as its objective a sustainable investment, it had a proportion of ___% of sustainable investments
 - with an environmental objective in economic activities that qualify as environmentally sustainable under the EU Taxonomy
 - with an environmental objective in economic activities that do not qualify as environmentally sustainable under the EU Taxonomy
 - with a social objective
- It promoted E/S characteristics, but **did not make any sustainable investments**

Sustainable investment

means an investment in an economic activity that contributes to an environmental or social objective, provided that the investment does not significantly harm any environmental or social objective and that the investee companies follow good governance practices.

The **EU Taxonomy** is a classification system laid down in Regulation (EU) 2020/852, establishing a list of **environmentally sustainable economic activities**. That Regulation does not lay down a list of socially sustainable economic activities. Sustainable investments with an environmental objective might be aligned with the Taxonomy or not.



To what extent were the environmental and/or social characteristics promoted by this financial product met?

In the past calendar year, 2022 (the reference period), ABP promoted various environmental and social (E/S) characteristics in the pension scheme, in accordance with its Sustainable and Responsible Investment Policy¹ During the reference period, no sustainable investments were made in the pension scheme with an environmental or social objective as described in the Taxonomy Regulation.

Below is a description of how the pension scheme has complied with the promotion of E/S characteristics. Any measures taken during the reference period that could have an impact on the promotion of E/S characteristics in future reference periods are explained under the question: What measures were taken in the reference period to comply with the environmental and/or social characteristics? This includes policy amendments and engagement activities. For example, the goals of the ABP climate policy were updated in late 2022 as follows:

- Portfolio in line with the goals of the Paris Agreement
- Net zero greenhouse gas emissions by 2050
- 50% reduction in greenhouse gas emissions by 2030 compared with 2019:
 - Across the entire investment portfolio
 - Absolute footprint
 - Across the entire value chain, so including emissions from the purchase and use of products
- By 2030, €30 billion invested in the climate transition, including €10 billion in impact investments:
 - Investments that demonstrably make a difference
 - Actively seeking opportunities in the Netherlands

Exclusion of controversial activities

ABP's exclusion policy ensures that the portfolio does not include companies or government bonds from countries involved in controversial activities. These activities include:

- involvement in the production of anti-personnel mines, nuclear weapons, cluster bombs, landmines, or chemical or biological weapons;
- involvement in the production of tobacco;
- investments in bonds from countries subject to a UN/EU arms embargo; and
- companies that earn revenue from coal or lignite for electricity production.

In 2022, investments in the above activities were present to a limited extent throughout ABP's portfolio. ABP has not had any violations of its exclusion policy. ABP has therefore complied with the promotion of this characteristic.

¹ This policy does not focus on "sustainable investments" as described in the SFDR. It is simply the name of the policy implemented by ABP in relation to sustainability.

Limiting climate change

For equity investments, ABP applies a carbon footprint reduction target. This target is based on the score from a baseline measurement conducted in 2015. ABP aims for a 40% reduction relative to this baseline score by 2025. The total reduction achieved relative to the baseline is **-57.6%**.

The services of data provider Trucost were used to obtain information about company emissions. The current method involves reporting on ABP's position in the share capital of each company, multiplied by the company's carbon emissions in metric tons. To determine the carbon footprint, the total carbon emissions are divided by the millions of euros invested in the companies concerned.

For the real estate portfolio, the carbon footprint is managed with reference to the CRREM reduction pathway. In doing so, ABP attempts to ensure its portfolio is better positioned than the specified CRREM reduction pathway. The goal is to have a complete picture of the portfolio's energy consumption and carbon emissions by 2030. This will enable us to take action to reduce energy consumption and to ensure that the portfolio's annual average greenhouse gas emissions intensity (in kg CO₂/m²) stays within the Paris pathway of less than 1.5 degrees Celsius global warming and that all asset managers are committed to a science-based target in line with the Paris Climate Agreement (1.5 degrees). In the meantime, ABP is actively pursuing these targets through engagement.

In addition to the carbon footprint reduction objective, ABP excludes companies that derive more than 1% of their revenue from fossil fuel production or exploration, and companies that derive 20% or more of their income from fossil energy activities. The developed market equity and credit investments in companies concerned were sold before year-end 2022.

Contributions to the UN SDGs

Across the entire investment portfolio, the target percentage of Sustainable Development Investments (SDIs)² is 20%. This percentage is measured in relation to the total net asset value (NAV). The percentage of SDIs in relation to the total NAV of the portfolio at year-end 2022 was **20.0%**.

When investing in an SDI, risk/return expectations are always considered. If an SDI has the same risk/return ratio as a company without the relevant SDI classification, the SDI is preferred over the non-SDI investment. By considering these factors for every investment decision, ABP tries to ensure the highest possible percentage of SDIs within the portfolio as a whole.

² Sustainable Development Investments (SDI) does not mean the same as 'sustainable investments' as defined by the SFDR.

Sustainability indicators

measure how the environmental or social characteristics promoted by the financial product are attained.

Inclusion policy

The inclusion policy is based on the themes of the UN Global Compact (human rights, labor, the environment, and anti-bribery and anti-corruption) and requirements for investors and companies under the OECD Guidelines. Investments are evaluated against the inclusion policy, which involves assessing the sustainability characteristics of listed investments. If these characteristics are not at the desired level, we engage in a dialogue with the company concerned. Through this engagement, we aim to point the company in the right direction. Engagement continues until the company changes course and meets the desired sustainability characteristics. If the company is still not operating in line with the sustainability characteristics, after engagement has been pursued for a certain period of time, ABP will divest.

Under the inclusion policy, companies are classified as:

- companies that meet our criteria and have an above-average score in the industry concerned;
- companies that do not meet our criteria but which we believe we can encourage to make improvements;
- companies that do not meet our criteria and which we do not believe will show improvement.

How did the sustainability indicators perform?

This section should be read in conjunction with the previous question, which provides a qualitative description of the E/S characteristics. The following table sets out the results for each of the E/S characteristics promoted by the pension scheme.

#	Indicator	Result in reporting period
	<i>Exclusion of controversial activities</i>	
1	No investments in sovereign bonds from countries subject to a UN/EU arms embargo Reference value: 0	No investments that match the listed characteristics. Value for 2022: 0. For more information on the selection and exclusion of the relevant companies, please refer to the exclusion policy. ABP has not had any violations of its exclusion policy.
2	No investments in sovereign bonds from countries subject to a UN/EU arms embargo Reference value: 0	No investments in the portfolio that match the listed characteristics. Value for 2022: 0. For more information on the selection and exclusion of the relevant companies, please refer to the exclusion policy. ABP has not had any violations of its exclusion policy.
3	No investments in companies that earn revenue from coal or lignite for electricity production Reference value: 0	No investments in the portfolio that match the listed characteristics. Value for 2022: 0. For more information on the selection and exclusion of the relevant companies, please refer to the exclusion policy. ABP has not had any violations of its exclusion policy.
4	No investments in companies that earn revenue from tobacco Reference value: 0	No investments in the portfolio that match the listed characteristics. Value for 2022: 0. For more information on the selection and exclusion of the relevant companies, please refer to the exclusion policy. ABP has not had any violations of its exclusion policy.
	<i>Limiting climate change</i>	

#	Indicator	Result in reporting period
5	CO ₂ reduction in the equities portfolio by 2025 (reference year: 2015)	The total reduction relative to the reference year is -57.6% . This results in the following carbon footprints for the different products: <ul style="list-style-type: none"> • DME: 100.18 tCO₂e / EUR million • EME: 117.02 tCO₂e / EUR million This concerns the metric tons of CO ₂ emission per million euros invested. For equities, this is measured in relation to the stake in the company concerned. ³
6	CO ₂ reduction in the real estate portfolio (CRREM reduction pathway) Reference value: Outperform the CRREM reduction pathway as included in the benchmark for the product.	The portfolio complied with the CRREM reduction pathway, which is included in the benchmark for the product.
	<i>Contributions to the UN SDGs</i>	
7	Investments in companies that contribute to the UN SDGs Reference value: > 20% of the value of investments / portfolio of assets under management (reference year: 2025)	At year-end, the percentage of SDIs in relation to the total NAV was 20.0% .
	<i>Inclusion policy – Corporate responsibility with respect to the environment, human rights and good governance</i>	
8	Leaders in the equities and credits portfolio. Reference value: 100% of the investments	Our target is that 100% of the companies in our equities and credits portfolio are Leaders, which we aim to achieve through engagement activities and portfolio management. At year-end, the percentage was 83.5% . We engage with the companies in the portfolio not classified as Leaders.

³ As an example: if we have a 5% stake in Company X, then 5% of Company X's total emissions will be included in the calculation.

● ***...and compared to previous periods?***

2022 is the first year on which we have reported in this way. Consequently, this question does not apply for this reference period.

● ***What were the objectives of the sustainable investments that the financial product partially made and how did the sustainable investment contribute to such objectives?***

At present, the pension scheme only promotes E/S characteristics. It has set no minimum proportion of sustainable investments as defined in the SFDR, and it also has no environmentally sustainable investments. To determine whether an investment qualifies as a “sustainable investment” under the SFDR, a comprehensive framework must be created to examine each investment and ascertain whether it is sustainable. This involves establishing the extent to which each individual investment contributes to an environmental or social objective. In addition, the investment must be in a company that follows good governance practices, and it may not significantly harm any environmental or social objectives. In 2022, ABP did not yet have a framework to ascertain whether its investments are “sustainable” as defined by the SFDR, but it has taken steps to create such a framework.

● ***How did the sustainable investments that the financial product partially made not cause significant harm to any environmental or social sustainable investment objective?***

See the answer to the previous question.

How did this financial product consider principal adverse impacts on sustainability factors?

This product considered principal adverse impacts on sustainability factors, as defined in the EU regulation. This relates to environmental, social and employee matters, respect for human rights, and anti-corruption and anti-bribery matters.

We use the OECD Guidelines for institutional investors as a guide when selecting and monitoring our investments. ABP’s implementation document for the OECD Guidelines on Due Diligence⁴ describes how our asset manager performs these tasks. We expect our asset manager to screen the portfolio for any negative impacts of investments, and prioritize the most serious impacts (based on severity, scope, irreversibility and probability). Where appropriate, we consult external experts and other stakeholders for additional investigations and perspectives.



Principal adverse impacts are the most significant negative impacts of investment decisions on sustainability factors relating to environmental, social and employee matters, respect for human rights, anti-corruption and anti-bribery matters.

4 For the ABP implementation document for the OECD Guidelines on Due Diligence, see: [Implementation of the OECD Guidelines on Due Diligence](#).

Environmental indicators for adverse impacts on sustainability factors					
Indicator			Explanation	Asset class	Outcome
PAI 1	Greenhouse gas (GHG) emissions	Scope 1 GHG emissions	Scope 1 and 2 emissions of investments are measured and monitored. Scope 3 emissions are not measured.	Equities and Credits	In 2022, the average amount of GHG emissions for the equities/credits portfolio was 8,271,580 kilotons. This number was calculated based on the company's enterprise value.
		Scope 2 GHG emissions			
PAI 2	Carbon footprint	Carbon footprint	Based on our carbon footprint target ⁵ we measure how much carbon is emitted by the companies in which this product invests and how much of that carbon can be attributed to these companies.	Equities, real estate, private equity and credits	The average carbon footprint for 2022 was 49.6 kilotons / EUR million for the equities portfolio (developed and emerging markets) and credits portfolio combined. This number was calculated based on the company's enterprise value.
PAI 4	Exposure to companies active in the fossil fuel sector	Share of investments in companies active in the fossil fuel sector	Based on our inclusion policy, a number of companies active in the fossil fuel sector will be sold. These are energy companies and utility companies that we believe are lagging behind in the area of climate change action. These companies will be divested.	Equities and Credits	<p>On average (averaged over four quarters), our exposure for the year to companies active in the fossil fuel sector was EUR 7,170,961 million.</p> <p>The fossil fuel sector is defined as follows:</p> <ul style="list-style-type: none"> • companies that earn more than 1% of their revenue from fossil fuel production or exploration; • companies that earn 20% or more of their revenue from fossil energy activities. <p>Some companies are excluded from the above definition. This concerns the following companies:</p> <ul style="list-style-type: none"> • majority SDIs under SDGs 7 & 13; • utility companies; • companies with a 1.5 degrees SBTi short-term target; • companies with a 1.5 degrees TPI carbon results goal and a TPI Management Quality score of 3 or 4.

5 For more information on our footprint targets, see our Sustainable and Responsible Investment Policy.

Social indicators for adverse impacts on sustainability factors					
Indicator		Explanation		Asset class	Outcome
PAI 10	Violations of UN Global Compact principles and Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises	Share of investments in companies that have been involved in violations of the UN Global Compact principles or OECD Guidelines for Multinational Enterprises	Based on the inclusion policy, we can only invest in companies involved in violations of the UNGC principles or OECD Guidelines for Multinational Enterprises if we also start engagement with these companies.	Equities and Credits	In total, the operations of 77 companies are not in line with the UN Global Compact or the Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises.
PAI 13	Board gender diversity	Average ratio of female to male members of the boards of investee companies, expressed as a percentage of board all members	Gender diversity on boards is addressed under the voting policy. The average ratio of female to male board members of the companies in which this product invests is addressed in our voting policy, which is based on our expectations around the composition and diversity of boards.	Equities and Credits	For equity investments, a number of votes were cast to address gender diversity on company boards. The number of votes was linked to the following three equity products: DME pool: 530 ⁶ EME pool: 535 DME/MV SA: 82
PAI 14	Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)	Share of investments in companies involved in the manufacture or sale of controversial weapons	In accordance with our exclusion policy, we do not invest in controversial weapons.	All relevant asset classes	Based on our exclusion policy, 57 investments were excluded because they were involved in the manufacture or sale of controversial weapons.

6 Only the first nine months of votes cast are counted, since after that point ABP separated from the Developed Markets Equity Pool.



What were the top investments of this financial product?

The list includes the investments constituting **the greatest proportion of investments** of the financial product during the reference period.

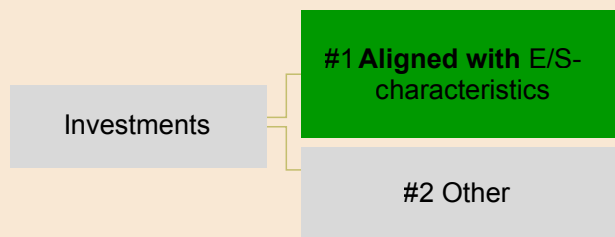
Nr.	Largest investments	Sector	% Assets	Country
1	French Republic	Government	2.66%	France
2	United States of America	Government	2.58%	U.S.
3	Federal Republic of Germany	Government	1.80%	Germany
4	United Kingdom of Great Britain and Northern Ireland	Government	0.97%	U.K.
5	Kingdom of Belgium	Government	0.77%	Belgium
6	Kingdom of the Netherlands	Government	0.68%	The Netherlands
7	Kingdom of Spain	Government	0.51%	Spain
8	Fannie Mae or Freddie Mac	Securitized	0.42%	U.S.
9	Federal National Mortgage Association	Government	0.40%	U.S.
10	Apple Inc	Information technology	0.38%	U.S.
11	Microsoft Corp.	Information technology	0.36%	U.S.
12	Republic of Austria	Government	0.32%	Austria
13	Prologis Inc	Logistics	0.30%	U.S.
14	Republic of Indonesia	Government	0.28%	Indonesia
15	Taiwan Semiconductor Manufacturing Co Ltd	Information technology	0.27%	Taiwan



Asset allocation describes the share of investments in specific assets.

What was the proportion of sustainability-related investments?

● *What was the asset allocation?*



#1 Aligned with E/S characteristics includes the investments of the financial product used to attain the environmental or social characteristics promoted by the financial product.

#2 Other includes the remaining investments of the financial product which are neither aligned with the environmental or social characteristics, nor are qualified as sustainable investments.

The category **#1 Aligned with E/S characteristics** covers:

- The sub-category **#1A Sustainable** covers environmentally and socially sustainable investments.
- The sub-category **#1B Other E/S characteristics** covers investments aligned with the environmental or social characteristics that do not qualify as sustainable investments.

ABP’s investments are allocated as follows:

- Investments that promote E/S characteristics: **82%**
- Other: **18%**

Building block	Building block name	E/S characteristic (average)	Weighted E/S characteristic
FIT	Treasuries	100%	22%
EQD	Equity Developed	99%	20%
RE	Real Estate	74%	8%
FIC	Credits	80%	10%
EMD	Emerging Market Debt	100%	7%
PEQ	Private Equity	36%	6%
EQE	Equity Emerging	100%	7%
INF	Infrastructure	64%	3%
ILD	Index Linked Debt	100%	0%
COM	Commodities	0%	0%
HEF	Hedge Funds	0%	0%
OVL	Overlay	0%	0%
TIF	Thematic Investment Funds	100%	0%
Total		66%	82%

In which economic sectors were the investments made?

Nr.	Sector	Weighting	GICS Sector
1	Government	27%	
2	Financial institutions	23%	40 Financials
3	Information technology	10%	4510 Software & Services
4	Real estate	9%	6010 Real Estate
5	Industrial companies	7%	20 Industrials
6	Consumer discretionary	5%	252030 Textiles, Apparel & Luxury goods
7	Healthcare	4%	35 Healthcare
8	Securitized	3%	402040 Mortgage Real Estate Investment Trusts
9	Energy	3%	551010 Electric Utilities
10	Consumer staples	3%	55 Utilities
11	Commodities	2%	55 Utilities
12	Telecommunications	2%	452010 Communications Equipment
13	Utility companies	2%	55 Utilities

The sectors indicated above are based on GICS, with additions for specific investments (such as Government).



To what extent were the sustainable investments with an environmental objective aligned with the EU Taxonomy?

During the reference period, 0% of ABP’s sustainable investments with an environmental objective were aligned with the EU Taxonomy.



What investments were included under “other”, what was their purpose and were there any minimum environmental or social safeguards?

For this pension scheme, the following investments are included under 2 Other:

- Money market instruments;
- Derivatives;
- ETFs; and
- Hedge Funds.

This also applies to certain investments in:

- Real Estate;
- Private Equity; and
- Credits.

No environmental and/or social safeguards apply to the investments included under 2 Other. These investments relate to other derivatives, and cash and cash equivalents, which are exclusively used for efficient portfolio management and to limit risks in accordance with the Pensions Act. No environmental or social minimum safeguards exist for the investments included under 2 Other.



What actions have been taken to meet the environmental and/or social characteristics during the reference period?

Exclusion: No changes were made to ABP’s exclusion policy in 2022. Based on the current exclusion policy, seven listed companies were added to the list of excluded companies⁷ due to their direct or indirect involvement with controversial weapons or tobacco. Two companies were removed from the exclusion list because they are no longer involved in these controversial activities. In 2022, Afghanistan was added to the list of excluded sovereign bonds.

In March 2022, we decided to sell our investments in Russia. This was in response to the Russian military strike on Ukraine. These investments made up less than 0.1% of invested assets. We had already significantly reduced our investments in Russia in the preceding years. In addition, due to a binding EU arms embargo, ABP had already chosen not to invest in Russian sovereign bonds. Because of the difficult market conditions and legal restrictions imposed by Russia, ABP has not yet managed to sell all of its investments.

⁷ The most recent list of exclusions can be found on our website.

Climate: In December 2022, ABP published its Climate Policy 2022-2030⁸. This is part of ABP's Sustainable and Responsible Investment Policy, and was updated at the same time as that policy. In our climate policy, we explain what we want to achieve:

- Portfolio in line with the goals of the Paris Agreement
- Net zero greenhouse gas emissions by 2050
- 50% reduction in greenhouse gas emissions by 2030 compared with 2019:
 - Across the entire investment portfolio
 - Absolute footprint
 - Across the entire value chain, so including emissions from the purchase and use of products
- By 2030, €30 billion invested in the climate transition, including €10 billion for impact investments:
 - Investments that demonstrably make a difference
 - Actively seeking opportunities in the Netherlands

The climate policy also sets out the actions we will take to achieve these goals:

- Only invest in companies that do not make products or provide services that are inextricably linked to climate damage
- Invest in sectors with long-term opportunities, in companies that are willing and able to make the climate transition
- Where companies have a major climate impact, we require them to have a climate plan in line with the Paris Agreement:
 - Targets in line with net zero by 2050
 - Emissions reporting obligation
- Intensive dialogue with utility companies, transport sector, steel industry, cement industry, chemical industry, financial sector
- Impact investments in green energy, smart networks, insulation, (green) hydrogen, clean mobility, energy storage, and climate adaptation.

Carbon footprint: In the context of the Climate Policy 2022-2030, in 2022 ABP published its carbon footprint methodology,⁹ explaining how ABP measures carbon footprints and aims to reduce the carbon footprint of listed equities.

⁸ <https://www.abp.nl/content/dam/abp/common/documents/klimaatbeleid-abp-15-december-2022.pdf>

⁹ <https://www.abp.nl/content/dam/abp/nl/documents/ABP-CO2-methodologie-2022.pdf>

Sustainable Development Goals: Through its investments and other activities, ABP aims to contribute to the Sustainable Development Goals (SDGs). In 2022, ABP made new investments that will contribute to the SDGs related to climate change and the energy transition, including the following:

- In May 2022, ABP took a 50% stake in a leading and innovative player in the market for sustainable energy for companies, public authorities, and institutions. Groendus is a Dutch company established in 2021 through a merger of six specialized companies active in solar projects, smart measurement services, and sustainable energy solutions. The company has already built more than 300 solar power plants in the Netherlands and aims to significantly increase this number. In addition, Groendus wants to offer customers an ever broader range of sustainability solutions, such as smart charging and battery storage.
- In March 2022, ABP invested in the Dutch solar energy company Enie.nl. Consumers can buy or lease solar panels from Enie.nl, or sign a contract for solar energy. Companies can lease or buy solar panels, charging stations, and batteries. We made this investment through the ABP Netherlands Energy Transition Fund (ANET), which was specially created to contribute to financing the energy transition in the Netherlands.
- In 2022, the real estate fund Vesteda assessed the sustainability of all 28,000 rented homes in its portfolio in the Netherlands. This baseline measurement provided Vesteda with insight into how the sustainability of these homes can be further improved, which is better for tenants and better for returns. ABP is a major investor in Vesteda.

Inclusion mandate: In 2022, we published an overview¹⁰ on our website of the results of completed engagement projects conducted in the context of our inclusion policy, as agreed in the covenant on international socially responsible investment (IVMB covenant).

In 2022, we implemented the decision we had made in October 2021 to sell investments in oil, gas, and coal producers. At year-end 2021, our investments in equities and credits of companies in the fossil fuel industry totaled €11.3 billion; by year-end 2022, that figure had decreased to €1.8 billion. The remainder are equities and credits in companies in emerging markets. We aim to sell these investments over the course of the year.

At year-end 2022, we still had €5.6 billion in illiquid investments in the fossil fuel industry. These investments cannot be sold as quickly as equities and credits. These illiquid investments in the fossil fuel industry will be sold in the years ahead, or, where that is not possible, will remain part of the portfolio.

Engagement: The ABP Stewardship policy sets out how our asset manager conducts dialogue and engagement on our behalf with the companies in the portfolio, and how it votes at shareholders' meetings for listed companies.

¹⁰ <https://www.abp.nl/content/dam/abp/common/documents/ABP-IVMB-Engagement-rapportage-2022.pdf>

Voting at shareholders' meetings: In 2022, we updated our voting policy with respect to the following matters:

- **Climate:** In 2022, our climate-related expectations were further addressed in the voting policy by enlarging the number of companies in scope, and refining the expectations around climate-related governance, disclosures, and objectives.
- **Diversity:** To take action on our expectations for diversity on companies' supervisory boards, we included stricter requirements in this respect in our voting policy in 2022. In 2022, ABP voted against members of the nomination committee in companies where the board was not sufficiently diverse.
- **Human rights:** To emphasize the need for effective due diligence with respect to human rights, in 2022 ABP voted against the chairs of the supervisory boards of companies that did not apply any due diligence in the area of human rights and did not shown any significant progress in drafting a human rights policy.
- **Digitalization:** In 2022, through its voting behavior, ABP called to account the boards of Big Tech companies and other digital companies for digital rights violations. This was mainly related to issues at Big Tech and other digital companies with regard to privacy, content moderation, or facial recognition. In addition, more attention was given to shareholders' proposals for better content moderation and privacy standards, as well as better alignment between companies' lobbying practices and their policy statements.
- **Monitoring of racial equality:** Shareholders' proposals on racial equality and/or guidelines for monitoring civil rights were carefully evaluated in 2022. These evaluations looked at how the companies in question deal with racial inequality and discrimination.

In 2022, ABP published a new voting platform on its website, to provide even more insight and transparency with respect to the votes cast by APG on behalf of ABP. On the voting platform, historical information can be found about the companies, sectors, countries, and specific agenda items on which votes have been cast.

SFDR Annex IV Net Pension Scheme

Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector.

ANNEX IV

Template periodic disclosure for the financial products referred to in Article 8, paragraphs 1, 2 and 2a, of Regulation (EU) 2019/2088 and Article 6, first paragraph, of Regulation (EU) 2020/852

Product name: ABP Net Pension Scheme

Legal entity identifier: 549300CT8FEJ1I-UK9C94

Environmental and/or social characteristics

Did this financial product have a sustainable investment objective? *[tick and fill in as relevant, the percentage figure represents the minimum commitment to sustainable investments]*

Yes

It made **sustainable investments with an environmental objective: ___%**

in economic activities that qualify as environmentally sustainable under the EU Taxonomy

in economic activities that do not qualify as environmentally sustainable under the EU Taxonomy

It made **sustainable investments with a social objective: ___%**

No

It **promoted Environmental/Social (E/S) characteristics** while it did not have as its objective a sustainable investment, it had a proportion of ___% of sustainable investments

with an environmental objective in economic activities that qualify as environmentally sustainable under the EU Taxonomy

with an environmental objective in economic activities that do not qualify as environmentally sustainable under the EU Taxonomy

with a social objective

It promoted E/S characteristics, but **did not make any sustainable investments**

Sustainable investment means an investment in an economic activity that contributes to an environmental or social objective, provided that the investment does not significantly harm any environmental or social objective and that the investee companies follow good governance practices.

The **EU Taxonomy** is a classification system laid down in Regulation (EU) 2020/852, establishing a list of **environmentally sustainable economic activities**. That Regulation does not lay down a list of socially sustainable economic activities. Sustainable investments with an environmental objective might be aligned with the Taxonomy or not.



To what extent were the environmental and/or social characteristics promoted by this financial product met?

In the past calendar year, 2022 (the reference period), ABP promoted various environmental and social (E/S) characteristics in the pension scheme, in accordance with its Sustainable and Responsible Investment Policy¹ (During the reference period, no sustainable investments were made in the pension scheme with an environmental or social objective as described in the Taxonomy Regulation.

Below is a description of how the pension scheme has complied with the promotion of E/S characteristics. Any measures taken during the reference period that could have an impact on the promotion of E/S characteristics in future reference periods are explained under the question: *What measures were taken in the reference period to comply with the environmental and/or social characteristics?* This includes policy amendments and engagement activities. For example, the goals of the ABP climate policy were updated in late 2022 as follows:

- Portfolio in line with the goals of the Paris Agreement
- Net zero greenhouse gas emissions by 2050
- 50% reduction in greenhouse gas emissions by 2030 compared with 2019:
 - Across the entire investment portfolio
 - Absolute footprint
 - Across the entire value chain, so including emissions from the purchase and use of products
- By 2030, €30 billion invested in the climate transition, including €10 billion in impact investments:
 - Investments that demonstrably make a difference
 - Actively seeking opportunities in the Netherlands

Exclusion of controversial activities

ABP's exclusion policy ensures that the portfolio does not include companies or government bonds from countries involved in controversial activities. These activities include:

- involvement in the production of anti-personnel mines, nuclear weapons, cluster bombs, land mines, or chemical or biological weapons;
- involvement in the production of tobacco;
- investments in countries subject to a UN/EU arms embargo; and
- companies that earn revenue from coal or lignite for electricity production.

In 2022, investments involved in the above activities were present to a limited extent throughout ABP's portfolio. ABP has not had any violations of its exclusion policy. ABP has therefore complied with the promotion of this characteristic.

¹ This policy does not focus on "sustainable investments" as defined by the SFDR. It is simply the name of the policy implemented by ABP in relation to sustainability.

Limiting climate change

For equity investments, ABP applies a carbon footprint reduction target. This target is based on the score from a baseline measurement conducted in 2015. ABP aims for a 40% reduction relative to this baseline score by 2025. The total reduction achieved relative to the baseline score is **-57.6**.

The services of data provider Trucost were used to obtain information about company emissions. The current method involves reporting on ABP's position in the share capital of each company, multiplied by the company's carbon emissions in metric tons. To determine the carbon footprint, the total carbon emissions are divided by the millions of euros invested in the companies concerned.

For the real estate portfolio, the carbon footprint is managed with reference to the CRREM reduction pathway. In doing so, ABP attempts to ensure its portfolio is better positioned than the specified CRREM reduction pathway. The goal is to have a complete picture of the portfolio's energy consumption and carbon emissions by 2030. This will enable us to take action to reduce energy consumption and to ensure that the portfolio's annual average greenhouse gas emissions intensity (in kg CO₂/m²) stays within the Paris pathway of less than 1.5 degrees Celsius global warming and that all asset managers are committed to a science-based target in line with the Paris Agreement (1.5 degrees). In the meantime, ABP is actively pursuing these targets through engagement.

In addition to the carbon footprint reduction objective, ABP excludes companies that derive more than 1% of their revenue from fossil fuel production or exploration, and companies that earn 20% or more of their income from fossil energy activities. The developed market equity and credit investments in companies concerned were sold before year-end 2022.

Contributions to the UN SDGs

Across the entire investment portfolio, the target percentage of Sustainable Development Investments (SDIs)² is 20%. This percentage is measured in relation to the total net asset value (NAV). At year-end 2022, the percentage of SDIs relative to the total NAV of the portfolio was **17.2%**.

When investing in an SDI, risk/return expectations are always considered. If an SDI has the same risk/return ratio as a company without the relevant SDI classification, the SDI is preferred over the non-SDI investment. By considering these factors for every investment decision, ABP tries to ensure the highest possible percentage of SDIs within the portfolio as a whole.

² Sustainable Development Investments (SDI) does not mean the same as 'sustainable investments' as defined by the SFDR.

Sustainability indicator measure how the environmental or social characteristics promoted by the financial product are attained.

Inclusion policy – Corporate responsibility with respect to the environment, human rights and good governance

The inclusion policy is based on the themes of the UN Global Compact (human rights, labor, the environment, and anti-bribery and anti-corruption) and requirements for investors and companies under the OECD Guidelines. Investments are evaluated against the inclusion policy, which involves assessing the sustainability characteristics of listed investments. If these characteristics are not at the desired level, we engage in a dialogue with the company concerned. Through this engagement, we aim to point the company in the right direction. Engagement continues until the company changes course and meets the desired sustainability characteristics. If the company is still not operating in line with the sustainability characteristics after engagement has been pursued for a certain period of time, ABP will divest.

Under the inclusion policy, companies are classified as:

- companies that meet our criteria and have an above-average score in the industry concerned;
- companies that do not meet our criteria but which we believe we can encourage to make improvements;
- companies that do not meet our criteria and which we do not believe will show improvement.

How did the sustainability indicators perform?

This section must be read in conjunction with the previous question, which provides a qualitative description of the E/S characteristics. The following table sets out the results for each of the E/S characteristics promoted by the pension scheme.

#	Indicator	Result in reporting period
	<i>Exclusion of controversial activities</i>	
1	No investment in companies involved in the production of controversial weapons (anti-personnel mines, nuclear weapons, cluster bombs, land mines, chemical and biological weapons) Reference value: 0	No investments that match the listed characteristics. Value for 2022: 0. For more information on the selection and exclusion of the relevant companies, please refer to the exclusion policy. ABP has not had any violations of its exclusion policy.
2	No investments in countries subject to a UN/EU arms embargo Reference value: 0	No investments in the portfolio that match the listed characteristics. Value for 2022: 0. For more information on the selection and exclusion of the relevant companies, please refer to the exclusion policy. ABP has not had any violations of its exclusion policy.
3	No investments in companies that earn revenue from coal or lignite for electricity production Reference value: 0	No investments in the portfolio that match the listed characteristics. Value for 2022: 0. For more information on the selection and exclusion of the relevant companies, please refer to the exclusion policy. ABP has not had any violations of its exclusion policy.
4	No investments in companies that earn revenue from tobacco Reference value: 0	No investments in the portfolio that match the listed characteristics. Value for 2022: 0. For more information on the selection and exclusion of the relevant companies, please refer to the exclusion policy. ABP has not had any violations of its exclusion policy.
	<i>Limiting climate change</i>	

#	Indicator	Result in reporting period
5	CO2 reduction in the equities portfolio by 2025 (reference year: 2015)	The total reduction relative to the reference year is -57.6% This results in the following carbon footprints for the different products: DME: 100.18 tCO₂e / EUR million EME: 117.02 tCO₂e / EUR million This concerns the metric tons of CO ₂ emission per million euros invested. For equities, this is measured in relation to the stake in the company concerned. ³
6	CO ₂ reduction in the real estate portfolio (CRREM reduction pathway) Reference value: Outperform the CRREM reduction pathway as included in the benchmark for the product.	The portfolio complied with the CRREM reduction pathway, which is included in the benchmark for the product.
	<i>Contributions to the UN SDGs</i>	
7	Investments in companies that contribute to the UN SDGs Reference value: > 20% of the value of investments / portfolio of assets under management (reference year: 2025)	At year-end, the percentage of SDIs relative to the total NAV was 17.2% .
	<i>Inclusion policy – Corporate responsibility with respect to the environment, human rights and good governance</i>	
8	Leaders in the equities and credits portfolio. Reference value: 100% of the investments	Our target is that 100% of the companies in our equities and bonds portfolio are Leaders, which we aim to achieve through engagement activities and portfolio management. At year-end, the percentage was 83.5% . We engage with the companies in the portfolio not classified as Leaders.

³ As an example: if we have a 5% stake in Company X, then 5% of Company X's total emissions will be included in the calculation.

● **... and compared to previous periods?**

2022 is the first year on which we have reported in this way. Consequently, this question does not apply to this reference period.

● **What were the objectives of the sustainable investments that the financial product partially made and how did the sustainable investment contribute to such objectives?**

At present, the pension scheme only promotes E/S characteristics. It has set no minimum stake in sustainable investments as defined in the SFDR, and it also has no environmentally sustainable investments. To determine whether an investment qualifies as a “sustainable investment” under the SFDR, a comprehensive framework must be created to examine each investment and ascertain whether it is sustainable. This involves establishing the extent to which each individual investment contributes to an environmental or social objective. In addition, the investment must be in a company that follows good governance practices, and it may not significantly harm any environmental or social objectives. In 2022, ABP did not yet have a framework to ascertain whether its investments are “sustainable” as defined by the SFDR, but it has taken steps to create such a framework.

● **How did the sustainable investments that the financial product partially made not cause significant harm to any environmental or social sustainable investment objective?**

See the answer to the previous question.

How did this financial product consider principal adverse impacts on sustainability factors?

This product considered the principal adverse impacts on sustainability factors, as defined in the EU regulation. This relates to environmental, social and employment matters, respect for human rights, and anti-corruption and anti-bribery.

We use the OECD Guidelines for institutional investors as a guide when selecting and monitoring our investments. ABP’s implementation document for the OECD Guidelines on Due Diligence⁴ describes how our asset manager performs these tasks. We expect our asset manager to screen the portfolio for any negative impacts of investments, then prioritize the most serious impacts (based on severity, scope, irreversibility and probability). Where appropriate, we consult external experts and other stakeholders for additional investigations and perspectives.



Principal adverse impacts are the most significant negative impacts of investment decisions on sustainability factors relating to environmental, social and employee matters, respect for human rights, anti-corruption and anti-bribery matters.

4 For the ABP implementation document for the OECD Guidelines on Due Diligence, see: [Implementation of the OECD Guidelines on Due Diligence](#).

Environmental indicators for adverse impacts on sustainability factors					
Indicator	Parameter		Explanation	Asset class	Outcome
PAI 1	Greenhouse gas (GHG) emissions	Scope 1 GHG emissions	Scope 1 and 2 emissions of investments are measured and monitored. Scope 3 emissions are not measured.	Equities and Credits	In 2022, the average amount of GHG emissions for the equities/credits portfolio was 303 kilotons. This number was calculated based on the company's enterprise value.
		Scope 2 GHG emissions			
PAI 2	Carbon footprint	Carbon footprint	Based on our carbon footprint target ⁵ , we measure how much carbon dioxide is emitted by the companies in which this product invests and how much of those emissions can be attributed to these companies.	Equities and Credits	The average carbon footprint for 2022 was 51.7 kilotons / EUR million for the equities portfolio (developed and emerging markets) and bonds portfolio combined. This number was calculated based on the company's enterprise value.
PAI 4	Exposure to companies active in the fossil fuel sector	Share of investments in companies active in the fossil fuel sector	Based on our inclusion policy, a number of companies active in the fossil fuel sector will be sold. These are energy companies and utility companies that we believe are lagging behind in the area of climate change action. These companies will be divested	Equities and Credits	<p>On average (averaged over four quarters), our exposure for the year to companies active in the fossil fuel sector was EUR 422.</p> <p>The fossil fuel sector is defined as follows:</p> <ul style="list-style-type: none"> • companies that earn more than 1% of their revenue from fossil fuel production or exploration; • companies that earn 20% or more of their revenue from fossil energy activities. <p>Some companies are excluded from the above definition. This concerns the following companies:</p> <ul style="list-style-type: none"> • majority SDIs under SDGs 7 & 13; • utility companies; • companies with a 1.5 degree SBTi short-term target; • companies with a 1.5 degrees TPI carbon results goal and a TPI Management Quality score of 3 or 4.

⁵ For more information on our footprint targets, see our Sustainable and Responsible Investment Policy.

Social indicators for adverse impacts on sustainability factors					
Indicator	Parameter		Explanation	Asset class	Outcome
PAI 10	Violations of UN Global Compact principles and Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises	Share of investments in companies that have been involved in violations of the UN Global Compact principles or OECD Guidelines for Multinational Enterprises	Based on the inclusion policy, we can only invest in companies involved in violations of the UNGC principles or OECD Guidelines for Multinational Enterprises if we also start engagement with these companies.	Equities and Credits	In total, the operations of 77 companies are not in line with the UN Global Compact or the Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises.
PAI 13	Board gender diversity	Average ratio of female to male board members of investee companies, expressed as a percentage of all board members	Gender diversity on boards is addressed under voting policy. The average ratio of female to male board members of the companies in which this product invests is addressed in our voting policy, which is based on our expectations around the composition and diversity of boards.	Equities and Credits	For equity investments, a number of votes were cast to improve gender diversity on company boards. The number of votes was linked to the following three equity products: DME pool: 608 EME pool: 535
PAI 14	Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)	Share of investments in companies involved in the production or sale of controversial weapons	In accordance with our exclusion policy, we do not invest in controversial weapons.	All relevant asset classes	Based on our exclusion policy, 57 investments were excluded because they were involved in the production or sale of controversial weapons.



What were the top investments of this financial product?

Asset allocation describes the share of investments in specific assets.

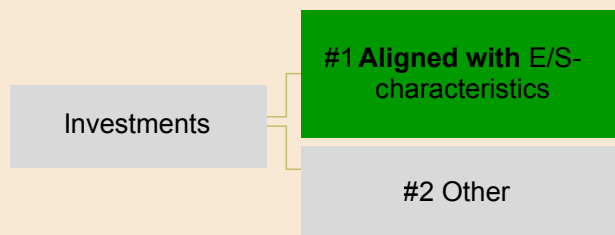
Nr.	Largest investments	Sector	% Assets	Country
1	French Republic	Government	3.16%	France
2	United States of America	Government	1.99%	U.S.
3	Italian Republic	Government	1.77%	Italy
4	Federal Republic of Germany	Government	1.58%	Germany
5	Kingdom of Spain	Government	1.00%	Spain
6	Apple Inc	Information technology	0.80%	U.S.
7	Microsoft Corp	Information technology	0.75%	U.S.
8	United Kingdom of Great Britain and Northern Ireland	Government	0.63%	U.K.
9	Taiwan Semiconductor Manufacturing Co Ltd	Information technology	0.52%	Taiwan
10	Fannie Mae or Freddie Mac	Securitized	0.51%	U.S.
11	Alphabet Inc.	Information technology	0.48%	U.S.
12	Kingdom of The Netherlands	Government	0.47%	The Netherlands
13	Kingdom of Belgium	Government	0.46%	Belgium
14	Federal National Mortgage Association	Securitized	0.43%	U.S.
15	Amazon.com Inc.	Information technology	0.38%	U.S.



Asset allocation describes the share of investments in specific assets.

What was the proportion of sustainability-related investments?

● *What was the asset allocation?*



#1 Aligned with E/S characteristics includes the investments of the financial product used to attain the environmental or social characteristics promoted by the financial product.

#2 Other includes the remaining investments of the financial product which are neither aligned with the environmental or social characteristics, nor are qualified as sustainable investments.

The category **#1 Aligned with E/S characteristics** covers:

- The sub-category **#1A Sustainable** covers environmentally and socially sustainable investments.
- The sub-category **#1B Other E/S characteristics** covers investments aligned with the environmental or social characteristics that do not qualify as sustainable investments.

ABP's investments are allocated as follows:

- Investments that promote E/S characteristics: **93%**
- Other: **7%**

Building block	Building block name	E/S characteristic (equally weighted average)	Weighted E/S characteristic
EQD	Equity Developed	99%	40%
FIT	Treasuries	100%	16%
EQE	Equity Emerging	100%	14%
FIC	Credits	100%	12%
RE	Real Estate	68%	6%
ILD	Index Linked Debt	100%	6%
COM	Commodities	0%	0%
OVL	Overlay	0%	0%
Totaal		71%	93%

● In which economic sectors were the investments made?

Nr.	Sector	Weighting	GICS code
1	Commodities	3%	55 Utilities
2	Securitized	3%	402040 Mortgage Real Estate Investment Trusts
3	Real estate	12%	6010 Real Estate
4	Utility companies	2%	55 Utilities
5	Telecommunications	2%	452010 Communications Equipment
6	Healthcare	9%	35 Healthcare
7	Consumer discretionary	8%	252030 Textiles, Apparel & Luxury goods
8	Energy	1%	551010 Electric Utilities
9	Industrial companies	6%	20 Industrials
10	Financial institutions	14%	40 Financials
11	Consumer staples	5%	55 Utilities
12	Information technology	13%	4510 Software & Services
13	Government	22%	

The sectors indicated above are based on GICS, with additions for specific investments (such as Government).



To what extent were the sustainable investments with an environmental objective aligned with the EU Taxonomy?

During the reference period, 0% of ABP’s sustainable investments with an environmental objective were aligned with the EU Taxonomy.



What investments were included under “other”, what was their purpose and were there any minimum environmental or social safeguards?

For this pension scheme, the following investments are included under 2 Other:

- Money market instruments;
- Derivatives; and
- ETFs.

This also applies to certain investments in:

- Real Estate;
- Credits.

No environmental and/or social safeguards are applied for the investments included under 2 Other. These investments relate to other derivatives, and cash and cash equivalents, which are exclusively used for efficient portfolio management and to limit risks in accordance with the Pensions Act. No environmental or social minimum safeguards exist for the investments included under 2 Other.



What actions have been taken to meet the environmental and/or social characteristics during the reference period?

Exclusion: No changes were made to ABP’s exclusion policy in 2022. Based on the current exclusion policy, seven listed companies were added to the list of excluded companies⁶ due to their direct or indirect involvement with controversial weapons or tobacco. Two companies were removed from the exclusion list because they are no longer involved in the production of these products. In 2022, Afghanistan was added to the list of excluded government bonds.

In March 2022, we decided to sell our investments in Russia. This was in response to the Russian military strike on Ukraine. These investments made up less than 0.1% of invested assets. We had already significantly reduced our investments in Russia in the preceding years. In addition, due to a binding EU arms embargo, ABP had already chosen not to invest in Russian government bonds. Owing to the difficult market conditions and legal restrictions imposed by Russia, ABP has not yet managed to sell all of its investments.

⁶ The most recent list of exclusions can be found on our website.

Climate: In December 2022, ABP published its Climate Policy 2022-2030.⁷ This is part of ABP’s Sustainable and Responsible Investment Policy, and was updated at the same time as that policy. In our climate policy, we explain what we want to achieve:

- Portfolio in line with the goals of the Paris Agreement
- Net zero greenhouse gas emissions by 2050
- 50% reduction in greenhouse gas emissions by 2030 compared with 2019:
 - Across the entire investment portfolio
 - Absolute footprint
 - Across the entire value chain, so including emissions from the purchase and use of products
- By 2030, €30 billion invested in the climate transition, including €10 billion in impact investments:
 - Investments that demonstrably make a difference
 - Actively seeking opportunities in the Netherlands

The climate policy also sets out the actions we will take to achieve these goals:

- Only invest in companies that do not make products or provide services that are inextricably linked to climate damage
- Invest in sectors with long-term opportunities, in companies that are willing and able to make the climate transition
- Where companies have a major climate impact, we require them to have a climate plan in line with the Paris Agreement:
 - Targets in line with net zero by 2050
 - Emissions reporting obligation
- Intensive dialogue with utility companies, transport sector, steel industry, cement industry, chemical industry, financial sector
- Impact investments in green energy, smart networks, insulation, (green) hydrogen, clean mobility, energy storage, and climate adaptation.

Carbon footprint: In the context of our Climate Policy 2022-2030, in 2022 we published our carbon footprint methodology⁸ which explains how ABP measures the carbon footprint of companies and what steps we take with respect to listed equities to help reduce this footprint.

⁷ <https://www.abp.nl/content/dam/abp/common/documents/klimaatbeleid-abp-15-december-2022.pdf>

⁸ <https://www.abp.nl/content/dam/abp/nl/documents/ABP-CO2-methodologie-2022.pdf>

Sustainable Development Goals: Through its investments and other activities, ABP aims to contribute to the Sustainable Development Goals (SDGs). In 2022, ABP made new investments that will contribute to the SDGs related to climate change and the energy transition, including the following:

- In May 2022, ABP took a 50% stake in a leading and innovative player in the market for sustainable energy for companies, public authorities, and institutions. Groendus is a Dutch company established in 2021 through a merger of six specialized companies active in solar projects, smart measurement services, and sustainable energy solutions. The company has already built more than 300 solar power plants in the Netherlands and aims to significantly increase this number. In addition, Groendus wants to offer customers an ever broader range of sustainability solutions, such as smart charging and battery storage.
- In March 2022, ABP invested in the Dutch solar energy company Enie.nl. Consumers can buy or lease solar panels from Enie.nl, or sign a contract for solar energy. Companies can lease or buy solar panels, charging stations, and batteries. We made this investment through the ABP Netherlands Energy Transition Fund (ANET), which was specially created to contribute to financing the energy transition in the Netherlands.
- In 2022, the real estate fund Vesteda assessed the sustainability of all 28,000 rented homes in its portfolio in the Netherlands. This baseline measurement provided Vesteda with insight into how the sustainability of these homes can be further improved, which is better for tenants and better for returns. ABP is a major investor in Vesteda.

Inclusion: In 2022, we published an overview⁹ on our website of the results of completed engagements conducted in the context of our inclusion policy, as agreed in the covenant on international socially responsible investment (IVMB covenant).

In 2022, we implemented the decision we had made in October 2021 to sell investments in oil, gas, and coal producers. At year-end 2021, our investments in equities and credits of companies in the fossil fuel industry totaled €11.3 billion; by year-end 2022, that figure had decreased to €1.8 billion. The remainder are equities and credits in companies in emerging markets. We aim to sell these investments over the course of the year.

At year-end 2022, we still had €5.6 billion in illiquid investments in the fossil fuel industry. These investments cannot be sold as quickly as equities and credits. These illiquid investments in the fossil fuel industry will be sold in the years ahead, or, where that is not possible, will remain part of the portfolio.

Engagement: The ABP Stewardship policy sets out how our asset manager conducts dialogue and engagement on our behalf with the companies in the portfolio, and how it votes at the shareholders' meetings of listed companies.

⁹ <https://www.abp.nl/content/dam/abp/common/documents/ABP-IVMB-Engagement-rapportage-2022.pdf>

Voting at shareholders' meetings: In 2022, we updated our voting policy with respect to the following matters:

- **Climate:** In 2022, our climate-related expectations were further addressed in the voting policy by increasing the number of companies in scope, and refining the expectations around climate-related governance, disclosures, and objectives.
- **Diversity:** To take action on our expectations for diversity on company boards, we included stricter requirements in this respect in our voting policy in 2022. In 2022, ABP voted against members of the nomination committee at companies where the board was not sufficiently diverse.
- **Human rights:** To emphasize the need for effective due diligence with respect to human rights, in 2022 ABP voted against the chairs of the supervisory boards of companies that did not apply any due diligence in the area of human rights and did not shown any significant progress in drafting a human rights policy.
- **Digitalization:** In 2022, through its voting behavior, ABP called to account the boards of Big Tech companies and other digital companies for digital rights violations. This was mainly related to issues at Big Tech and other digital companies with regard to privacy, content moderation, or facial recognition. In addition, more attention was given to shareholders' proposals for better content moderation and privacy standards, as well as better alignment between companies' lobbying practices and their policy statements.
- **Monitoring of racial equality:** Shareholder proposals on racial equality and/or guidelines for monitoring civil rights were carefully evaluated in 2022. These evaluations looked at how the companies in question deal with racial inequality and discrimination.

In 2022, ABP published a new voting platform on its website, to provide even more insight and transparency with respect to the votes cast by APG on behalf of ABP. On the voting platform, historical information can be found about the companies, sectors, countries, and specific agenda items on which votes have been cast.

Supplementary information

About this report

In this annual report, we have taken the following steps towards an integrated report. As the General Board, we report on the financial results and developments, as well as the results and developments in relation to sustainable and socially responsible business practices. We also show how ABP adds value, particularly for our participants and employers. As our primary stakeholders, they are at the center of all our operations.

The transition to integrated reporting is a progressive process for ABP. We intend to embed integrated reporting, integrated thinking, and the associated policy step by step throughout our organization. Our goal is to work toward a fully integrated annual report in the years ahead, following the widely used international integrated reporting framework of the International Integrated Reporting Council (IIRC) wherever possible.

Value creation model

This report presents a new version of our two-step value creation model. This model first shows how we deploy the various forms of capital and knowledge in realizing our goals and how we strive to generate added value through our core activities. This is followed by detailed information in relation to each element. These two steps jointly reflect ABP's impact on the stakeholders and on society. This value creation model is also based on the outlines of the IIRC framework. The online version of our annual report includes an interactive version of the value creation model with references to the relevant sections of the report by the Board.

We also state clearly where readers can find more information on sustainable and responsible investment on our website, for example.

Materiality

The Integrated Reporting (IR) framework and Global Reporting Initiative (GRI) Standards pivot on the materiality principle. This means that, on the basis of a structured dialogue with and/or survey of stakeholders, it can be determined which subjects they consider important to read about and which are important for reporting.

Scope and demarcations of the report

This report covers Stichting ABP's fiscal year 2022, which runs from January 1, 2022 through December 31, 2022. ABP presents the company financial statements before the consolidated financial statements because company financial statements provide a more accurate view of ABP's financial position and tie in best with the management policy information provided in the Board report and in other external publications.

The consolidated financial statements report on entities in which ABP holds a capital interest that results in control over management decisions and financial policy, such as APG.

The sustainable report relates exclusively to ABP.

Reporting guidelines

The annual report comprises the report of the Board, the report of the Non-Executive Board, the report and opinion of the Accountability Body, and the financial statements. The 2022 financial statements have been prepared on the basis of generally accepted financial reporting policies in the Netherlands and the statutory provisions governing financial statements set out in Book 2, Part 9, of the Dutch Civil Code and the Dutch Accounting Standards (Richtlijnen voor de Jaarverslaggeving).

This ABP report also provides information on topics of material and societal relevance, including governance, ABP's role in society, and ABP's approach to sustainable and responsible investment. We follow the statutory guidelines of the Code of the Dutch Pension Funds and the Pensions Act, and have also adopted the following reporting guidelines:

- the main IR principles of the IIRC¹: strategic focus and future orientation, creation of cohesion between the various sections of the report, stakeholders and stakeholder dialogue, materiality, conciseness, reliability and completeness, and consistency and comparison;
- GRI Standards: ABP strives for optimum transparency in the reporting on its activities and uses the Global Reporting Initiative (GRI) standards to do so. The 2022 annual report is the first report in which ABP references the GRI Standards. For this purpose, a GRI index has been provided as part of the additional information. Our aim is to expand the GRI references in our reporting in the years ahead.

Carbon footprint calculation

To calculate the relative footprint, we start by determining our share of the carbon footprints of the companies in which we invest. We take into account both the emissions of the companies themselves (scope 1) and the emissions released during production of the energy purchased by the companies (scope 2).

We refer to our share of the carbon footprints of all companies combined as the “absolute footprint”. The relative footprint is the absolute footprint divided by the total amount we have invested (in tons of CO₂ equivalent per one million euros of invested assets). We adjust the amount of the invested assets for fluctuations in stock prices, to remove the impact of price rises and falls. We perform this adjustment on the basis of the value of the relevant units for the reference year.

In addition, we keep the ratio between the various sub-investment categories (developed-market equities and emerging-market equities) the same as in the reference year, to avoid any impact from changes in this allocation. If new targets are set, the footprint in the reference year may be recalculated, depending on the methodological changes. This was not the case in 2022, but following the announcement of a new ambition, the reference year footprint will be recalculated in 2023. Major changes in the emissions data of individual companies resulting from changes in data quality can also require adjustments to the reference year footprint. We do so because these data allow us to make a better estimate of the reference year footprint. This did not occur in 2022.

To determine the carbon footprint reduction of the equities portfolio, we purchase data from external data suppliers, with the Trucost database being

¹ Around the middle of 2021, the IIRC and SASB merged to become the Value Reporting Foundation.

the primary source of emissions data. The data are updated annually, enabling us to validate the carbon footprint of the biggest emitters.¹ This methodology is not in line with the PCAF guidelines. We also publish a carbon footprint for several investment categories in line with the PCAF guidelines. These figures, including a detailed explanation of the methodology, are described in [this document](#).²

Assurance on non-financial information

The non-financial information that the General Board of ABP previously presented in the Sustainable and Responsible Investment report was subject to an assurance audit by the external auditor. The external auditor has issued a limited assurance (see page 228) report for the [‘Contributing to a livable world’ section](#) (see page 56). It is the General Board’s ambition to further expand the scope of the non-financial information assurance in the years ahead.

Additional information

Additional information on Sustainable and Responsible Investment is available on [our website](#).

The 2022 annual report was published on April 28, 2023.

Responses to the report

We welcome any questions or comments with regard to our report. Please email these to us at jaarverslag@abp.nl.

¹ Due to the new target set by ABP, the annual data validation did not take place in 2022. Consequently, we based the calculation of the carbon footprint reduction on companies’ carbon emissions data from 2019 (instead of 2020). This had no effect on the achievement of our targets.

² This publication is not within scope of the external auditor’s assurance activities.

GRI content index

GRI declaration of applicability

ABP provides the information listed in this GRI content index for the period January 1 through December 31, 2022, with references to the GRI Standards.

GRI 1: Foundation 2021

GRI Standard	Disclosure	Place in report
GRI 2: General disclosures 2021	2-1 Organizational details	Profile (see page 5) Legal structure (see page 84)
	2-2 Entities included in the organization's sustainability reporting	About this report (see page 265)
	2-3 Reporting period, frequency and contact point	About this report (see page 265) Back cover
	2-4 Re-statements of information	Not applicable
	2-5 External assurance	Assurance report of the independent auditor (see page 228) About this report (see page 265)
	2-6a/b/c Activities, value chain and other business relationships	Profile (see page 5) How ABP adds value (see page 9) Value creation model (see page 10) Working together to build a good pension in a livable world (see page 23) Important topics for stakeholders (see page 27)

GRI Standard	Disclosure	Place in report
GRI 2: General disclosures 2021	2-7a/b Employees	Investing in the development of our organization (see page 71) ABP organization (see page 87)
	2-9a Governance structure and composition	ABP's governance structure (see page 84) Personal details (see page 272)
	2-10 Nomination and selection of the highest governance body	ABP's governance structure (see page 84)
	2-11 Chair of the highest governance body	ABP's governance structure (see page 84)
	2-14 Role of the highest governance body in sustainability reporting	Involvement of the Board (see page 30)
	2-15 Conflicts of interest	Policy on ancillary positions updated (see page 89)
	2-16 Communication of critical concerns	Pension increases (see page 33) Sale of remaining investments in Russia (see page 36) Further reduction of positions in hedge funds (see page 36) Divesting from fossil fuel producers (see page 59)
	2-17 Collective knowledge of the highest governance body	Personal details of the members of the Board (see page 273)
	2-18 Evaluation of the performance of the highest governance body	Self-evaluation and development of the Board (see page 89)
	2-19 Remuneration policies	
	2-22 Statement on sustainable development strategy	Foreword (see page 15)
	2-23 Compliance with CSR guidelines	Developments in human rights and good governance (see page 62) SFDR and IMVB covenant (see page 65) Tax behavior policy (see page 65)

GRI Standard	Disclosure	Place in report
GRI 2: General disclosures 2021	2-25 Processes to remediate complaints and other negative impacts	Complaints and appeals (see page 53)
	2-27 Compliance with laws and regulations	Compliance with statutory guidelines and codes (see page 90)
	2-28 Membership associations	Memberships and commitments (see page 271)
	2-29 Approach to stakeholder engagement	Important topics for stakeholders (see page 27)
	2-30 Collective bargaining agreements	ABP organization (see page 87)

Memberships and commitments

Federation of Dutch Pension Funds	Membership
PPCA (Powering Past Coal Alliance - Finance Membership)	Commitment
Tobacco Free Portfolios - Finance Pledge	Commitment
Dutch Association of Investors for Sustainable Development (VBDO)	Membership
PAII - NZIF (Paris Aligned Investment Initiative - Net Zero Investment Framework)	Commitment
Cerrado Manifesto	Commitment
Climate Action 100+	Commitment
Eumedion	Membership
Financial sector commitment to the Dutch Climate agreement	Signed
IMVB agreement pension funds	Commitment

Investor Agenda	Commitment
MVO Nederland	Membership
PRI (general)	Membership
TCFD Supporter	Commitment
WBA (World Benchmarking Alliance)	Commitment
GREEN (Global Real Estate Engagement Network)	Membership
Montreal Pledge	Commitment
PDC (Portfolio Decarbonisation Coalition)	Commitment
ICPM	Membership
Statement from the private financial sector to COP 15 Biodiversity	Commitment



Personal details

This section lists the personal details of the members of the Stichting Pensioenfonds ABP Board alongside their ancillary positions. The section continues with lists of the members of the Board committees and the Accountability Body.

Non-executive Board

Ms. C.M. Wortmann-Kool, June 27, 1959

Independent Chair

- Appointed January 1, 2015
- Term ends January 1, 2023

Ancillary positions

Member of Aegon NV Supervisory Board, member of Supervisory Board of Royal DSM N.V., member of jury for Prix Veuve Cliquot Businesswoman of the Year Award,¹ member of AFM's Capital Markets Committee.

Mr. A. Boonen, January 30, 1982

Employees

- Appointed January 1, 2021
- Term ends January 1, 2025

Ancillary positions

Member of the FNV Board of Trustees, member of Board of Trustees of Stichting Akzo Pensioenfond, member of Parents' Council of Zuss kinderopvang (ceased in April 2022).

Mr. P.J.H. Fey, July 4, 1965

Employees

- Appointed May 1, 2017
- Term ends May 1, 2025

Ancillary positions

Vice-President of CESI (European Confederation of Independent Trade Unions),¹ Chair of CNV Overheid en Publieke Diensten, Chair of CNV Connectief, member of Board of Vereniging van Katholieke Maatschappelijke Organisaties (VKMO)

SI,¹ Vice Chair of CNV Vakcentrale, member of Social and Economic Council of the Netherlands, member of Board of Stichting van de Arbeid.

Ms. A. Gram, December 14, 1965

Employees

- Appointed June 1, 2021
- Term ends June 1, 2025

Ancillary positions

Member of Governing Board of Eumedion, Chair of Investment Committee of Pensioenfond IBM, Chair of the ASN Impact Investors Supervisory Board, Chair of Assessment Committee of Pensioenfond HAL, member of Investment Balance Sheet Management Committee of SPH Pensioenfond Huisartsen, balance sheet management advisor at Pensioenfond ING, member of Investment Committee of Fonds 1818.

Ms. M.P.I. ten Kroode, October 4, 1957

Retired employees

- Appointed November 14, 2022
- Terms ends November 14, 2026

Ancillary positions

Independent Chair of College Perinatale Zorg, member of Advisory Board of Dutch Healthcare Authority, Independent Chair of Architectuurboard Zorg, extraordinary member of Dutch Safety Board.

Ms. V.S. van der Meer-Gangapersadsing, January 28, 1979

Employers

- Appointed April 1, 2022
- Term ends April 1, 2026

¹ Non-remunerated.

Ancillary positions

Independent pensions adviser.

Ms. C.M. Mulder-Volkers, June 3, 1966

Retired employees

- Appointed April 1, 2015
- Term ends April 1, 2023

Ancillary positions

Chair of Supervisory Board of Pensioenfond's Rijn- en Binnenvaart, member of Board of Trustees of Pensioenfond's SPT, member of Supervisory Board of Parkinson NL.¹

Ms. K. Nauta, March 6, 1983

Employers

- Appointed March 1, 2019
- Term ends March 1, 2027

Ancillary positions

Director of Pensioenfond's Wolters Kluwer Nederland.

Mr. P. Rosenmüller, May 11, 1956

Employers

- Appointed December 1, 2021
- Term ends December 1, 2025

Ancillary positions

Chair of GroenLinks parliamentary group in the Dutch Senate, member of Supervisory Board of Holding Goede Doelen Loterijen N.V., member of Supervisory Board of Scholengemeenschap Bonaire, member of Advisory Board of Utrecht University, responsible for Professional Performance of

Professionalism in Transition (ceased in July 2022),¹ member of Board of Center for Parliamentary History,¹ member of various Recommendations Committees.¹

Mr. A.J.M. Sibbing, April 5, 1959

Employers

- Appointed March 7, 2019
- Term ends March 7, 2023

Independent Chair

- Appointed March 7, 2023
- Term ends March 1, 2027

Ancillary positions

Chair of Investment Committee of Institute GAK, Trustee/ Treasurer at Fond's Sluiterman van Loo.

Mr. A.M.H. Slager, September 1, 1967

Employers

- Appointed June 1, 2022
- Term ends June 1, 2026

Ancillary positions

External member of Investment Committee of PF SNS Reaal, Professor of Pension Fund Management at TIAS School for Business and Society, external member of Balance Sheet and Asset Management Committee of PME, member of Supervisory Board of Pensioenfond's PGB, member of Balance Sheet and Asset Management Committee of Pensioenfond's Rail & OV.

¹ Non-remunerated.

Mr. X.J. den Uyl, May 21, 1953

Retired employees

- Appointed April 1, 2015
- Term ends April 1, 2023

Ancillary positions

Vice Chair of Pensioenfonds PWRI.

Mr. A. van Vliet, February 16, 1967

Employees

- Appointed February 16, 2016
- Term ends February 16, 2024

Ancillary positions

Member of the Finance Committee of VTW, member of Board of Trustees of Van Ravesteyn Fonds,¹ member of Supervisory Board of Havenstede, member of Board of Trustees of Het Nederlandse Pensioenfonds, member of Executive Committee of Pensioenfederatie.

Executive Board

Mr. H.J. van Wijnen, November 23, 1967

Chair of the Executive Board

- Appointed January 1, 2022
- Term ends January 1, 2026

Ancillary positions

Member of the Supervisory Board and Chair of Audit Committee of Theater en Kunstencentrum De Kom Nieuwegein,¹ member of Supervisory Board of Maatschappij van Welstand,¹ Chair of Stichting Eleven Floowers Board.¹

¹ Non-remunerated.

Ms. Y.E.M. Verdonk-van Lokven, November 20, 1964

Executive director, pension policy

- Appointed February 1, 2022
- Term ends February 1, 2026

Ancillary positions

Member of Outer Circle Quist Executive Coaches (until June 1, 2022),¹ member of Membership Council of Royal Tropical Institute.¹

Ms. D. Dijkhuis, April 1, 1972

Executive Board member, responsible for investment policy

- Appointed January 1, 2022
- Term ends January 1, 2026

Ancillary positions

Member of Model Committee of Stichting Waarborgfonds Sociale Woningbouw, member of Board of Trustees of Stichting Tuchtrect Banken.

Audit Committee

Ms. C.M. Wortmann-Kool (Chair until January 1, 2023)

Ms. M. ten Kroode (as of November 14, 2022)

Ms. K. Nauta

Mr. A. van Vliet (acting Chair as of January 1, 2023)

Ms. S.G. van der Lecq (external member)

Ms. R. van Osch (external member)

Mr. L. Paape (external member)

Pensions Committee

Ms. C.M. Mulder-Volkers (Chair)
 Mr. A. Boonen
 Mr. P.J.H. Fey
 Mr. P. Rosenmöller
 Ms. Y.E.M. Verdonk-van Lokven (as of February 1, 2022)
 Ms. V.S. van der Meer-Gangapersadsing (as of April 1, 2022)

Investment Committee

Mr. A.J.M. Sibbing (Chair until January 1, 2023)
 Ms. A. Gram
 Mr. A.M.H. Slager (as of June 1, 2022) (acting Chair as of January 1, 2023)
 Mr. X.J. den Uyl

HR Committee

Ms. C.M. Wortmann-Kool (Chair until January 1, 2023)
 Mr. A.J.M. Sibbing (Chair as of January 1, 2023)
 Mr. A. Boonen
 Ms. C.M. Mulder-Volkers

Board of Appeal

Board members

Ms. C.M. Mulder-Volkers, June 3, 1966 (Chair) (until April 1, 2022)
 Mr. A. Boonen, January 30, 1982 (Chair) (as of April 1, 2022)

External members

Mr. R. Barnhoorn, August 6, 1964
 Mr. H.C.J.L. Borghouts, February 7, 1943
 Mr. M. van Seventer, July 15, 1953
 Ms. E.S.M. van Zadelhoff, March 2, 1960

Accountability Body

Employers' representatives

Mr. R. Blankemeijer, September 18, 1966
 Mr. J.E. van der Boon, May 10, 1960
 Mr. M. Damen, October 18, 1985
 Mr. A. Guijt, November 27, 1959
 Mr. P.B.J. Huisman, January 27, 1964
 Ms. A.A.A.M. van Iersel, March 19, 1971
 Ms. P.G.A. Janssen, September 12, 1967
 Mr. A. Jonkman, September 13, 1959 (Chair)
 Mr. R.H. van Luxemburg, October 31, 1974
 Ms. J.C.C. Oostdijk, November 12, 1960
 Mr. M. Rensen, August 5, 1963
 Mr. W.O. Schilperoort, October 13, 1975
 Mr. H. Tulner, June 28, 1957
 Mr. J.H.H. Verheij, June 23, 1961
 Ms. M.L.A. van der Wegen, June 22, 1963
 Mr. V.P. Wongsowinangoen, August 31, 1973

Active participants' representatives

Ms. G.M.M. Alofs, January 21, 1972
 Ms. S.A. Blackwell, March 16, 1958
 Mr. E.W.P. van Boven, May 6, 1957
 Mr. G. Camps, June 11, 1983

Ms. L. den Hartog, May 15, 1984
 Mr. J.J. Hoeijmakers, June 1, 1984
 Ms. L.M. Kos, February 21, 1991
 Mr. J.H.J. Kruuk, July 26, 1957
 Ms. J. de Mol van Otterloo, June 29, 1977
 Ms. S.E. Loeff, June 15, 1992
 Mr. J.M. Mennen, September 25, 1960
 Ms. I.M. Nauta, September 11, 1969
 Mr. F.F.C. Ouwehand, December 11, 1986
 Ms. R. van Putt, February 16, 1990
 Mr. C. Rausch, October 27, 1981
 Ms. F.C. van Rijn, August 25, 1985
 Ms. A.P. Tay, July 22, 1959
 Ms. J.W. te Velthuis, March 27, 1974
 Mr. S.X. de Vrije, July 6, 1976

Pensioners' representatives

Ms. J.A.R.M. van Egmond, April 17, 1951
 Mr. G.W.J. Driessen, November 26, 1955
 Ms. G. Gorter, November 15, 1953
 Mr. A. de Graaf, August 4, 1947
 Mr. A.R. van Kampen, November 18, 1954 (Vice Chair)
 Ms. A.M. Krol, October 4, 1941
 Ms. J.J. Ligthart, October 13, 1953
 Ms. J.C.M. Matheij, November 15, 1950
 Mr. A.M. Nijdam, July 26, 1947
 Mr. P.L.M. Pex, June 4, 1946
 Mr. M.J. van Rooijen, July 31, 1942
 Mr. J.D. Smit, February 11, 1951
 Mr. T.W.M. de Wit, February 17, 1954

Key function holders

Actuarial function

Mr. R. Schilder, September 11, 1976

Internal Audit function

Mr. T.E. Wolffenbuttel, October 6, 1977

Risk Management function

Ms. V. Achmad, September 1, 1984

Other positions

Compliance Officer

Mr. B.H.G. Damoiseaux, November 24, 1982

External parties

Certifying actuary

WillisTowersWatson

External auditor

KPMG Accountants NV

Abbreviations and definitions

Abbreviations

AAOP	<i>ABP ArbeidsOngeschiktheidsPensioen</i> - ABP incapacity
ABTN	Actuarial and Technical Business Report
AG	Royal Dutch Actuarial Association
AEP	ABP ExtraPensioen
ALM	Asset Liability Management
AOP	The AAOP, HPT, and IP disability/incapacity pensions
AOW	<i>Algemene Ouderdomswet</i> - General Old Age Pensions Act
APG	APG and subsidiaries
CBS	<i>Centraal Bureau voor de Statistiek</i> - Statistics Netherlands
CEM	Cost Effectiveness Measurement
CHRB	Corporate Human Rights Benchmark
DNB	<i>De Nederlandsche Bank</i> - Dutch Central Bank
ESG	Environmental, Social, and Governance
FGR	A collective Investment Scheme managed by the administrative organization
FPU	<i>Regeling Flexibel Pensioen en Uittreden</i> - Flexible and early-retirement benefits scheme
FTK	<i>Financieel ToetsingsKader</i> - Financial Assessment Framework
HPT	<i>HerPlaatsingsToelage</i> - Redeployment allowance
HRM	Human Resource Management
KPI	Key Performance Indicator
IMVB	<i>Internationaal Maatschappelijk Verantwoord Beleggen</i> - International socially responsible investment
IP	InvaliditeitsPensioen (disability pension)
IPCC	Intergovernmental Panel on Climate Change

NP	<i>NabestaandenPensioen</i> - dependents' benefits
NPC	New Pension Contract
NPS	Net Promoter Score
OECD	Organization for Economic Cooperation and Development
OGM	<i>Omgekeerd-Gemengd bestuursModel</i> - Reversed-mixed governance model
OOB	<i>Organisatie van Openbaar Belang</i> - Public Interest Entity
OP	OuderdomsPensioen - Retirement pension
OPA	<i>Overgangsrecht Privatisering ABP</i> - the ABP privatization transitional rights
OTC	Over-the-Counter Transaction
PP	<i>PartnerPensioen</i> - Partner pension
Repo	Repurchase order
SDG	Sustainable Development Goal
SDI	Sustainable Development Investments
SFDR	Sustainable Finance Disclosure Regulation
SLA	Service Level Agreement
TBA	To Be Announced
UNGP	United Nations Guiding Principles on Business and Human Rights
UPO	<i>Uniform PensioenOverzicht</i> - Uniform pension statement
VPL	<i>Wet aanpassing fiscale behandeling VUT-prepensioen- en introductie levensloopregeling</i> - Early retirement/ Pre-pension (Adjustment of Tax Treatment) and Life-Course Savings Scheme Act
VPV	<i>Voorziening PensioenVerplichtingen</i> - Provision for pension liabilities
VUT	<i>Regeling Vervroegd Uittreden</i> - Early retirement scheme

Definitions

ABP ExtraPensioen

ABP extra Pension: a pension product enabling tax-free saving at participants' own risk and expense within the tax scope for pension accrual to supplement their pension, with an investment guarantee and a return based on ABP's return.

ABP Net pension scheme

ABP net pension: voluntary pension scheme in which a pension can be accrued in respect of the part of the pensionable salary in excess of the maximum salary for tax facilitated pension accrual. Participants can opt to use the investment capital to purchase a retirement pension and surviving dependents' pension on retirement and/or to take out insurance for a surviving dependents' pension in the event of their death before retirement.

Absolute return strategies

Investment strategy with the goal of realizing a positive return irrespective of the market situation.

Active participant

Employee who accrues pension rights with a pension administrator pursuant to a pension agreement.

Active risk

The difference in composition between the actual investment portfolio and the benchmark portfolio.

Aggressive tax planning

Situations in which businesses make use of gaps between two different tax regimes for tax evasion.

Amortized cost

Amount at which a financial asset or financial liability held to maturity is carried in the balance sheet by taking account of the discount or premium.

Appendix K

Appendix K governs mark-ups and reductions in connection with the privatization of ABP. This Appendix applies to participants who accrued pension assets prior to January 1, 1996, and whose pensions or pension entitlements were converted in accordance with Section 18 of ABP's Pension Regulations, as worded on December 31, 2005. With the exception of Article 9, this Appendix does not apply to persons designated Syria volunteers for the purposes of the General Old Age Pensions Act or the Surviving Dependents Act.

Asset

Category of investments.

Asset Backed Securities (ABS)

Securitized debt instruments issued by financial institutions in the form of assets which have been converted into freely marketable bonds.

Asset Liability Management

Analysis of the relationship between movements in assets and liabilities to assess the pension contribution, indexation and investment policy.

Available assets

Balance of total assets less investment-related liabilities, other liabilities, and the earmarked reserves (which are part of the fund' equity).

Basis point

One-hundredth of a percent (0.01%).

Benchmark portfolio

Predefined composition of an investment portfolio, including related benchmarks, against which actual investment returns are assessed.

Benchmark return

Standard for comparing the costs and performance of institutions in the same sector.

Blocked reserve

Reserve that is not available for distribution.

Broker quotes

Valuations that are supplied by a professional intermediary trading in the securities concerned and which are based on available market information.

Commodities

Investments in goods and raw materials/consumables.

Compliance

Acting in accordance with internal and external legislation/regulations and ethics policy.

Concurrent service years

Individuals who are entitled to a state pension could be entitled to a supplement to their ABP pension if they accrued pension simultaneously with their partner prior to 1995. Over 250,000 individuals already received this supplement, but some ABP participants remained unaware of this. ABP improved its communication on this matter from 2020. Among other things, participants are now able to check their eligibility for this supplement quickly and easily via our website. On the website they can only find information on what steps they need to take and how ABP will deal with their notification.

Conditional pension

An increase of the ABP retirement pension and the ABP surviving dependents' pension as compensation for the discontinuation of the FPU pre-pension scheme.

Cost-covering contribution

Actuarially calculated contribution required for the purchase of unconditional liabilities, increased with mark-ups for pension management costs, for maintaining the required solvency ratio (where applicable) and for funding conditional indexation.

Counterparty risk

Risk that a counterparty will default on its contractual obligations to ABP.

Cross currency swap

Agreement to exchange interest payments in different currencies without exchanging the principals.

Current value

Fair value as referred to in the Dutch Accounting Standards (Richtlijnen voor de Jaarverslaggeving).

Derivatives

Financial instruments used to control the balance sheet and investment risks and to realize the strategic asset mix.

Discount rate

Interest rate used to calculate the net present value of future expenditure or revenue.

Duration

Weighted average maturity of an investment or liability, taking account of the timing of cash flows.

Equity

The remaining interest in the assets after deducting the provision for pension liabilities, investment-related liabilities and other liabilities.

Exposure

Current value of an asset or, in the case of derivatives, the value of the underlying asset.

Fixed-income investments

Investments with a fixed maturity and an agreed interest and repayment schedule, such as private loans, bonds, and mortgage loans.

Former participants

Employees or former employees who no longer accrue pension assets under a pension agreement and who retained pension entitlements with a pension administrator upon termination of their participation.

Forward currency contracts

A forward currency contract is a contract to buy or sell a given amount of a currency at an agreed exchange rate on an agreed future date. The agreed exchange rate comprises a the spot rate, which is this rate at the time of entering into the contract, and a mark-up. This mark-up is based on the interest spread between the two currencies.

Forward rate

Interest rate applicable to a money market derivative that is used to fix interest expenses or interest income by agreeing on a specific rate for a certain period.

Funding ratio

Degree to which pension liabilities are covered by the available assets.

Future

Forward contract traded on a stock exchange with mandatory delivery of the underlying securities at a future date for an agreed price.

Future-proof indexation

Granting indexation as a percentage of the indexation ambition in respect of the actual price inflation, such that it is expected that indexation equal to this percentage of inflation can continue to be granted in the future.

Future-proof indexation funding ratio

A policy funding ratio level that permits full future-proof indexation in line with the inflation ambition. This means that indexation can be granted for 100% of the actual price inflation.

Global Reporting Initiative (GRI)

International organization that formulates guidelines for sustainability reports. Organizations publish their economic, environmental, and social performance in sustainability reports and integrated reports.

Group equity

Equity plus third-party minority investments in the participating interests.

Hedge funds

Investment funds that pursue a predetermined strategy with aim of realizing a positive return irrespective of the market return. These are often private funds that operate with borrowed funds and use derivatives.

Index bond

Bond with coupon payment adjusted for inflation.

Indexation

Percentage increase in a pension that is partly or fully equal to inflation, such as price or wage inflation.

Index-linked bond

Index bond that yields an interest rate that is in part based on inflation.

Inflation

Increase in an economy's general level of prices.

Initial margin

Percentage of the purchase price of a security that must be covered by cash by way of collateral when opening a derivative position.

Integrated reporting

Reporting method that brings concise financial and non-financial information together in one report, in which organizations explain how they realize sustainable operations and how their strategy, governance, performance, and prospects provide short, medium, and long-term added value, including for society.

Integrity policy

Policy with the aim of embedding standards and values in the organization which ABP considers important.

International Integrated Reporting Council (IIRC)

Global non-profit organization that has developed a standard for companies wishing to render account for the value they add to the world. This is a reporting standard.

Intraday facility

Short-term assets settled within one day.

Inverted mixed governance model

The one-tier governance model of ABP with effect from January 1, 2022, with a General Board comprising an Executive Board and a Non-Executive Board.

ISAE 3402

International Standard for Assurance Engagements 3402.

Marketable securities

Investments in equity, private equity, commodities, and real estate.

Moderated cost-covering contribution

Cost-covering contribution calculated on the basis of an expected real investment return.

Mortgage-Backed Securities (MBS)

Securitized debt instruments issued by mortgage lenders in respect of granted mortgages that have been converted into freely marketable bonds.

Net Promoter Score

Method to measure customer loyalty.

Nominal

Expressed in terms of monetary value or as a percentage that does not take account of future wage or price inflation.

Overlay

Overarching management of positions across all portfolios (for example, currency positions).

Over-the-counter transaction (OTC)

Transaction not conducted via a stock exchange but arranged directly between two parties.

Participants

All active participants, former participants and pensioners taken together as a group.

Pension administrator

APG, the organization to which ABP has outsourced the administration of its pension scheme (pension management and asset management) and support services for its Board.

Pension beneficiary

Person whose pension has become payable pursuant to a pension agreement.

Policy funding ratio

The 12-month rolling average of the nominal funding ratios calculated on the basis of the discount rates published by DNB. The policy funding ratio serves as the basis for policy decisions to be taken by the Board, such as determining pension contributions and indexation.

Private equity

Investment in the risk-bearing capital of an unlisted company.

Provision for pension liabilities

'The amount of this provision is equal to the present value of all expected future pension payments arising from the pension entitlements of all active participants, inactive participants and pensioners. Also referred to as the 'technical provision' in a legal context.

Public Interest Entity

An organization that has an impact on the interests of wider groups due to its size or role in society, These entities are subject to special regulations.

Rating

Score awarded to the creditworthiness of a counterparty resulting from a credit assessment.

Real estate funds

Investment funds whose capital is invested in real estate.

Real funding ratio

The real funding ratio expresses the ratio of a pension fund's assets and to its pension liabilities, In the real coverage ratio, expected price increases are included as part of the pension liabilities.

Real return

Nominal return adjusted for price inflation.

Related party

Natural person or entity related to the entity that draws up their/its financial statements.

Repurchase order

Contract for the exchange of securities for a predetermined purchase or sale price at a specific time, with the retention of economic risk.

Short position

A short position is created upon entering into the obligation to deliver securities at a future date without having possession of them at the time of entering into the obligation; the counterparty risk on a short position is mitigated by means of collateral.

Short-term borrowing/lending

Short-term funds borrowed from or loaned to a financial institution.

Spread

Difference in return between two types of assets.

Sustainable and responsible investment

An investment approach that fully integrates sustainability aspects and responsible investment criteria in investment decisions.

Swap

A derivative where parties exchange cash flows or risks.

TBA

To Be Announced: a forward on a mortgage-backed security (MBS).

Tracking error

Difference in returns between a portfolio and the benchmark.

Uniform pension statement

Format to ensure the uniform presentation by all pension funds of information about pension payments provided upon retirement, upon death and in the event of incapacity for work.

Z score

Measure of the difference between the actual return and the return on the predefined benchmark portfolio, taking account of expenses.

Stichting Pensioenfonds ABP
P.O. Box 4806
6401 JL Heerlen
www.abp.nl

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Questions and comments

If you have any questions or comments about our annual report, you are welcome to contact us at jaarverslag@abp.nl.

Disclaimer

This document is an English translation of the original Annual Report, which was drafted in Dutch. In case of any discrepancies between the English and Dutch text, the latter will prevail.

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