



Andra  
AP-fonden

ANNUAL REPORT 2019

# Andra AP-fonden

**Andra AP-fonden** is one of five buffer funds within the Swedish pension system, and one of Northern Europe's **largest pension funds**. The Fund manages SEK 381.3 billion in virtually all asset classes all around the world. We are leading **specialists** in the Swedish **pension system** and seek to be a **world-class** asset manager. We are a global **leader** in **integrating sustainability** in our investments, for the **benefit of the pension system**. The Fund is a **long-term** and **responsible** asset manager.



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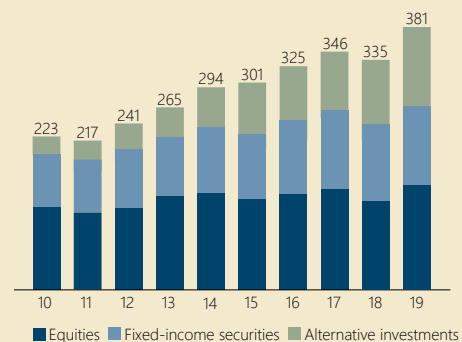




Andra AP-fonden  
developed its  
sustainability  
strategy during  
the year.

More information is  
available on page 42.

Andra AP-fonden's  
Fund capital  
2010–2019, SEK billion



The AP Funds  
shall manage their  
assets to provide  
the most benefit for  
the pension system.

More information is available  
on page 10.

*read more...*

Andra AP-fonden's Sustainability Report and GRI  
report are available at: [www.ap2.se](http://www.ap2.se)

You can also read the Council on Ethics of the  
AP Funds' yearly report at [www.etikradet.se](http://www.etikradet.se)

Unless otherwise stated, the portfolio assets referred to in this report are "allocated exposures". In addition to recognised fair values, these also refer to allocated (but not yet invested) liquidity for the specific class of asset, and the liquid funds held as collateral for positions already taken in derivative instruments. Classes of asset, derivative instruments and liquid funds are reported individually in the balance sheet at their fair values. All monetary amounts are expressed in Swedish kronor and abbreviated as SEK k (thousand), SEK million or SEK m (million) and SEK bn (thousand million). Figures in parentheses refer to the preceding year. In the body text, AP2 can be used instead of Andra AP-fonden.

Andra AP-fonden's Annual Report covers the period January–December 2019 and was published on 10 February 2020.

# The year in brief

The result for 2019 was the highest ever for the Fund, and amounted to SEK 53.0 billion. The Fund exceeded its long-term return assumption, which is 4.5 per cent. In the last five years, the Fund's annual average real return has amounted to 5.9 per cent, and over the past ten years the return has been 7.2 per cent.

## Fund capital

The Fund capital reached **SEK 381.3 (334.8) billion** on 31 December 2019.

381.3

## Result

The Fund posted a net result for the year of **SEK 53.0 (–4.3) billion**.

53.0

## Operating expenses

Operating expenses, expressed as expense ratio, remained low and amounted to **0.07 (0.06) per cent**.

0.07

## Net outflows to the national pension system

Net outflows to the national pension system of **SEK –6.5 (–6.8) billion**.

–6.5

## Relative return

The relative return on the Fund's total portfolio, excluding alternative investments and operating expenses, amounted to **–0.9 (–0.2) per cent**.

–0.9

## Total return

The return on the total portfolio amounted to **15.9 (–1.3) per cent**, including commission and operating expenses. Excluding these costs, the portfolio returned **16.1 (–1.2) per cent**.

15.9

## Five-year overview, financial key ratios

	2019	2018	2017	2016	2015
<b>Fund capital, flows and results, SEK million</b>					
Fund capital	381 350	334 828	345 931	324 522	300 624
Net outflows to national pension system	-6 520	-6 773	-7 375	-6 637	-4 944
Net result for the year	53 042	-4 330	28 784	30 535	11 661
<b>Return, %</b>					
Return on total portfolio before commission expenses and operating expenses	16.1	-1.2	9.1	10.5	4.1
Return on total portfolio after commission expenses and operating expenses	15.9	-1.3	9.0	10.3	4.0
Annualised return after commission expenses and operating expenses, 5.0 years	7.4	6.9	9.8	10.6	8.0
Annualised return after commission expenses and operating expenses, 10.0 years	8.4	8.8	6.0	5.5	5.7
<b>Risk, %</b>					
Standard deviation ex-post, total portfolio <sup>1</sup>	6.4	7.2	8.9	8.7	8.7
Sharpe ratio ex-post, total portfolio	4.0	neg	2.9	1.9	0.5
<b>Expense ratio as a % of managed capital</b>					
Expense ratio, including commission expenses	0.15	0.14	0.15	0.15	0.18
Expense ratio, excluding commission expenses	0.07	0.06	0.06	0.07	0.07
<b>Currency exposure, %</b>	34	32	33	31	30

<sup>1</sup> Calculated on ten years' quarterly return.

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## Key figures for sustainability

	2019	2018
<b>Andra AP-fonden's listed equity portfolio</b>		
The equity portfolio's absolute emissions of greenhouse gases (Scope 1 and 2) (tCO <sub>2</sub> e million)	1.6	1.7
Carbon dioxide intensity relative to ownership share of the companies' market value (tCO <sub>2</sub> e/SEK million)	11	13
Carbon dioxide intensity relative to ownership share of the companies' turnover (tCO <sub>2</sub> e/SEK million)	14	15
Carbon dioxide intensity, weighted average (tCO <sub>2</sub> e/SEK million)	14	16
Market value of the Fund's portfolio covered by CO <sub>2</sub> e data (SEK billion)	144	130.5
<b>Business travel</b>		
Proportion of train journeys between Gothenburg and Stockholm, %	97	88
Carbon emissions from:		
Rail, domestic, tonnes of CO <sub>2</sub> e	0	0
Air, domestic, tonnes of CO <sub>2</sub> e	1	5
Air, abroad, tonnes of CO <sub>2</sub> e	187	169
<b>Internal environmental indicators</b>		
Electricity, kWh	128 300	126 000
Renewable electricity, %	100	100
Copying paper, purchased (A4), kg	191	315
Number of printouts	70 900	107 000
<b>Other</b>		
Female staff, %	34	35
Proportion of women in senior positions, %	28	33
Proportion of employees who have undergone human rights training, %	99	N/A

# Strong year – highest result ever

2019 was a year that for us was characterised by new investment rules, sustainability issues and the global turbulence that we have come to view as the new normal. Despite the turbulence, many of the world's financial markets showed strong performance. The result for 2019 was the highest ever for the Fund, and amounted to SEK 53 billion. The return after operating expenses was 15.9 per cent, which significantly exceeds our expected long-term return. All asset classes gave positive returns. Unfortunately, the active element of our asset management made a negative contribution, mainly due to the development in our Swedish equities management and the tactical asset allocation.

We operate in the long term, and we therefore assess results over an extended period. Our average real return during the last five- and ten-year periods is 5.9 and 7.2 per cent, respectively, which far exceeds expectations.

## Exemplary management

The new investment rules began to apply in January 2019. As decided by the Swedish government, the AP Funds must conduct exemplary management with responsible investments and responsible ownership without compromising the overall objective of high returns. The concept of exemplary also denotes the way that we conduct our activities. This includes that our investments must promote sustainable development, with the best possible return and risk according to the pension system's requirements, and that we should take a scientific approach and practice active ownership. In brief, we consider 'exemplary' to denote legislators' clear expectation that the funds continue to lie at the forefront in their activities. This is in harmony with AP2's internal value to focus on continuous

improvement and our vision to conduct world-class management.

To be able to achieve this, as a knowledge organisation, we must continue to learn more. A key aspect of our strategic work in recent years has been to increase our expertise within sustainability issues, as well as new types of asset classes. In pursuit of this, all of our staff regularly meet leading academics and practitioners to gain new information and for dialogue concerning relevant areas. We also attend many different conferences and gatherings, both national and international, as presenters and attendees. The aim is to develop our ability to analyse and assess companies, sectors and countries, and their future development.

In 2019, we focused on adding sustainability aspects to our quantitative management of credit portfolios. Our internationally recognised multi-factor indices incorporating sustainability aspects for internally managed global equities were implemented in 2018. Creation of similar indices for credits is a bit complicated by the limited liquidity in certain credits, but

we hope to be able to launch new credit indices during 2020.

During the year we also divested from tobacco producers and companies involved in the maintenance and modernisation of nuclear weapons. These decisions were taken on the basis of the new legislation for the AP Funds, which sets a higher level of ambition for sustainability. This entails that we must adhere to the spirit and purpose, rather than the letter, of the conventions ratified by Sweden – the Framework Convention on Tobacco Control and the Treaty on the Non-Proliferation of Nuclear Weapons.

## Sustainability permanently on the agenda

The year 2019 was dominated by the development in sustainability issues. The general level of interest has increased, which to some extent is probably driven by the focus on climate change to which Greta Thunberg has contributed, but there is also an increasing number of climate research reports. Social issues such as equality and human rights are also more and more frequently discussed.

*“**Continuous development** of how we work with sustainability is something we have practised for a **long time**, and this clearly characterises our **organisation**”*





It is positive that these issues are permanently on the agenda. It is also good to note the increasing interest in how the AP Funds meet these challenges. The Funds operate on behalf of all of Sweden's current and future pensioners and for us a key aspect of maintaining a high level of confidence in our activities is that we can openly explain how we work and the positions that we take.

In view of the very public role of the AP Funds, it is natural that demands are made from various parties concerning what we should, or should not, invest in, and how we should work, where we should operate our activities, and so on. There is no fixed set of answers showing the composition of the best portfolio, or the best working methods. For us, the focus is on our long-term operations whereby, based on our mission from the Swedish parliament, we must do our utmost to be of the greatest benefit to the pension system. This requires that,

from a long-term perspective (30 years), we analyse various possible asset classes, various markets and different forms of capital exposure. According to this mission, our work must ensure that no generation is disadvantaged for the benefit of another generation, and we should take a knowledge-based approach, based on scientific grounds. We are also expected to be an active owner that, through our actions, takes responsibility for investments and drives change where it is needed. Sustainability issues are integrated into all of these aspects of our work.

Continuous development of how we work with sustainability is something we have practised for a long time, and this clearly characterises our organisation. We, and several other pension funds, also receive positive international acknowledgement of this work. I hope that the stakeholders who show a strong commitment to and hold views on how

we should conduct our activities are also prepared to take the time needed to properly understand our mission, the considerations it requires, and how our operations are actually conducted. For our part, we must continue to do what we can to provide information about this. This Annual Report and our separate Sustainability Report are examples of this information.

With regard to the global handling of climate change, it is obvious that all parties need to make a contribution. The financial sector, together with companies and other business operators, naturally holds a great responsibility and has a lot to contribute. Our specific actions at AP2 are described in further detail on pages 36–47 of this Annual Report, and in our separate Sustainability Report. What is needed most of all right now, however, in order to achieve significant and lasting transition to a fossil-fuel free society, is that governments all over the world

## Leaders Group 2019

The UN's Principles for Responsible Investment (PRI) included AP2 in "Leaders' Group 2019". This group comprises asset owners identified by PRI as leaders concerning choice of external managers of listed equities and/or private equity. AP2 was qualified in both categories. Through "Leaders' Group" PRI will highlight good leadership and raise the high standards for responsible investment among all of its signatories.

# 97%

Travelling is an inevitable aspect of the work of managing a global portfolio. In 2019, 97 per cent of all business journeys between Gothenburg and Stockholm were made by train.



adopt various types of policy measures. The measures adopted so far are barely sufficient to fulfil the commitments set out in the Paris Agreement. As time passes, and the realities of climate change become more and more apparent, it is inevitable that policymakers will have to take more direct action than hitherto. The issue for us as investors is not whether governments will act, but when, which measures they will adopt, and the effects of these decisions. This is something that is difficult to forecast. We are also continuing our own integration of sustainability issues with full force.

### **Social issues are increasingly important**

Even though the environment, and climate change in particular, are the sustainability issues that draw the most interest, social issues are also receiving more and more attention. Since many of the UN's 17 Global Sustainable Develop-

ment Goals concern social justice, and inequality is increasing in many parts of the world, this is a natural development. Social issues are closely interlinked with environmental issues, in particular since climate change is expected to have the greatest impact on those who are already the most vulnerable.

Within the area of social issues, in 2019 AP2 published its first report on human rights in accordance with the UN's Guiding Principles Reporting Framework. Since 2016, we have had a special project for greater integration of human rights issues in our investment decisions, and we view the report as a means to increase the transparency of our work on these issues. We hope that this will inspire others in the industry to do the same.

We can also see a trend for more and more state organisations to issue social bonds. The market for green bonds has grown strongly during the more than ten years since we invested in the first bond of this type issued in the market. As one of the first Swedish institutions to invest in social bonds, we would like this market to grow in the same way.

### **Experts in the pension system**

Based on our mission, during the years we developed unique expertise in analysing the pension system's development and needs going forward, in order to design the portfolio that best achieves our goal to be of the greatest possible benefit for the pension system. During

2019, we further supplemented the analysis by including the risks which climate change entails for economic growth.

In May 2020, supplementary new investment rules for the AP Funds will hopefully enter into force. Together with the major change that entered into force in January 2019, this gives us better opportunities to continue to develop our portfolio. Our ambition going forward is to increase the proportion of non-listed assets and our exposure to emerging markets.

In order to continue to develop and improve our portfolio management, it is vital that we can recruit and retain the best expertise for the Fund. Our strong culture, with a high sustainability commitment, together with our ambitious vision and our flat organisation, in which creative ideas are welcomed from all employees, are vital to achieving this, and something that we must continue to value highly.

I would like to conclude by thanking all my colleagues at AP2 for their dedicated and successful work in 2019. I look forward to working together in 2020 to continue our efforts to do the very best for Sweden's current and future pensioners.



Eva Halvarsson, CEO

# 15.9%

The return on the total portfolio was 15.9 (-1.3) per cent, including commission expenses and operating expenses.

# Economic slowdown and geopolitics

The global economy slowed down in 2019, driven by weaker manufacturing activity. With support from strong labour markets, the service sector showed more resistance, but then also began to lose ground during the autumn. The trade conflict between the USA and China escalated during the year and also had a negative impact on the economy. The slowdown led several central banks to change strategy and lower their policy rates. It is assessed that the economic cycle will stabilise around the turn of the year, before making a recovery later in 2020.

## Impact of geopolitics on the economy

The trade war between the USA and China made a clear contribution to the cyclical downturn in 2019. President Trump chose to escalate the conflict by increasing the tariffs introduced in 2018 and by imposing new tariffs on Chinese imports. A clear consequence was a drop in global trading volumes, with the USA and China accounting for close to half of the decline.

Besides the lower trade growth, the relatively large fall in business confidence during the year can also be linked to the trade conflict. Another consequence was a significant decline in the propensity to invest, with declining investment as a consequence. This was driven by uncertainty concerning the terms under which companies are to operate, leading many of them to defer their investments. Besides the aforementioned effects, corporate profits declined considerably at global level. The uncertainty concerning Brexit also reduced the propensity to invest.

## Industry has picked the shortest straw

The industrial sector contracted significantly during 2019 and accounted for a large share of the global slowdown. Towards the end of the year, the industrial sector in around one fourth of the largest economies was in recession. The

purchasing managers' index is used to gauge business confidence in industry. At the global level, industry's purchasing managers' index already began to decline from very high levels at the beginning of 2018. Just before the summer of 2019, the index fell below 50. After the summer, the lowest level since the euro crisis in 2012 could be seen.

The manufacturing sector was particularly weak in Germany, which, in view of its strong dependence on exports, was severely affected by the reduced global trade. One of the weightiest elements of Germany industry is the automotive industry, which faced major challenges and a general decline in global demand during the year. Some of the challenges were of a structural nature, such as the conversion to electrical vehicles. Others were partly temporary in nature, such as the new emission regulations introduced after the summer of 2018, which interrupted production and created bottlenecks. A diesel ban was also introduced in some German cities, which reduced sales. In addition, China reverted to its previous car taxes in two stages, in 2017 and 2018. As the largest car market in the world, changes of this type play a significant role and are estimated to have contributed to around 20 per cent of global production and purchasing being sent back to 2016-17 levels, thereby affecting demand in 2018-19. Analyses

performed indicate that up to half of the decline in global manufacturing output, since the peak in 2017, is driven by the automotive sector. The industry does not normally affect other sectors, however, which indicates that a recession in the global economy is not around the corner, despite the increased risks.

## Strong labour markets have supported the service sector

One reason that global recession is currently considered to be less likely is that, in contrast to industry, the service sector has performed relatively well. This has allowed the labour markets to continue to improve, with increased employment levels. Global unemployment fell to the lowest level in 40 years, while wage development continued to increase at relatively good rates, primarily in developed countries. In turn, this meant that private consumption continued to increase. Private consumption is one of the elements in the economy that contributes most to global growth.

The labour market, on the other hand, is not the first sector to yield ground during an economic cycle, but rather one of the last. Closer review of the labour market data gives indications of a downturn after the summer. The global rate of new job creation declined in the second half-year, and in certain regions unemployment has already begun to rise.

### The central banks have changed strategy

At the end of 2018, the Federal Reserve was expected to raise the policy rate three times during 2019, but instead the rate was lowered. Many central banks in both developed and emerging economies followed the Federal Reserve's lead. In this respect, Sveriges Riksbank is one of few exceptions. On the other hand, the Swedish policy rate is still extremely low, despite being raised to zero by the bank in December. The change of course by most of the central banks is mainly related to the cyclical downturn following in the wake of the trade conflict. This was possible since there is very little remaining inflationary pressure. The stimulus effects contributed by the lowering of interest rates reduced the effects of the trade conflict, among other things because financial

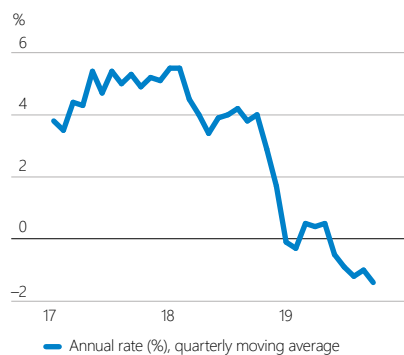
assets could continue to appreciate. At the turn of the year, many stock exchanges around the world were close to record-high levels. Fiscal stimulus measures in both China and, to some extent, the USA contributed to reducing the effects of the high tariff rates.

### Geopolitical solutions

Geopolitical risks will continue to be apparent in 2020. Even though China and the USA reached a "phase 1 agreement", further moves by President Trump can be expected. He is also entering an election year, and will do everything he can to get re-elected. Even if the UK leaves the EU on an orderly basis at the end of January 2020, the future relationship must still be negotiated during a transition period. Normally, it takes many years to negotiate new trade agreements.

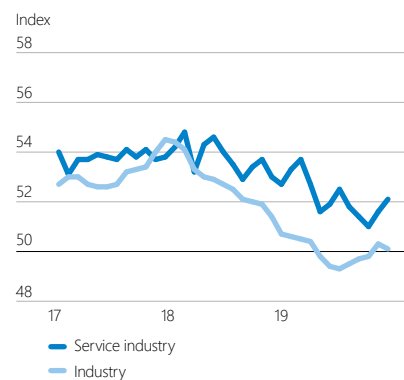
As stated, there are indications that the rate of employment increases is declining. Unemployment can therefore be expected to gradually begin to rise, but since this is from very low levels, this is not likely to have dramatic consequences. It will probably be manifested in lower private consumption going forward. On the other hand, there are signs that the slowdown in manufacturing is stabilising, which to some extent can be seen from the graph for the industrial purchasing managers' index. Among other things, the decline in the automotive industry is expected to contract, and China's demand is expected to become positive during the year. In overall terms, it is assessed that the economic cycle will stabilise around the turn of the year, before making a gradual recovery later in 2020.

Global trade volumes (% annual rate)



Source: CPB Netherlands Bureau for Economic Policy Analysis

Global purchasing managers' index (growth over 50)



Source: JP Morgan/Markit Economics

# The Swedish income-based pension system

In the Swedish national pension system, future pensions are determined by the level of each and every person's individual income, based on income received over an entire working life. A key element of the pension system is the automatic balancing mechanism, or 'brake'. This ensures that pensions are adjusted upwards more gradually at times when liabilities exceed assets.

The public pension system in its current form was introduced in 2001. It then replaced the earlier ATP system that was not viewed as being sustainable in the long term. One difference from the previous system is that the entire life income forms the basis for the pension. Another difference is that pensions are linked to the socio-economic development and the system's financial balance.

The general pension system consists of two parts: the income-based pension, where the First, Second, Third, Fourth and Sixth AP Funds are included, and the premium pension system, which includes the Seventh AP Fund. Of the 'pensionable income', 16 per cent is paid into the income-based pension system and 2.5 per cent to the premium pension system.

The financial position of the income-based pension system is provided by its balance sheet. The assets in the system consist of the contribution assets, which represent the value of future pension contributions, and the capital of the First, Second, Third, Fourth and Sixth AP Funds. The AP Funds account for a relatively small proportion of the assets, at around 15 per cent. The liabilities are made up of the pension liability, which represents the value of accrued pension rights. The financial position of the system is summarised by the ratio between assets and liabilities, called the balance ratio.

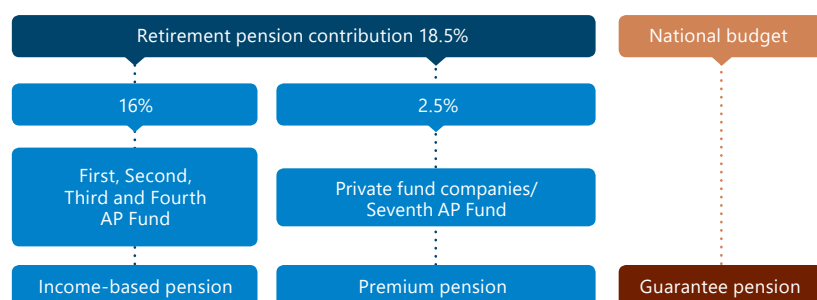
## System in balance

When the balance ratio exceeds 1.0, the system is in balance. When this is the

case, pensions are calculated up, as expected, in line with the income index. If the system is not in balance, however, i.e. when the balance number is less than 1.0, a mechanism called automatic balancing is activated. This mechanism slows down (hence the usual term 'brake') the upward adjustment of the pension debt. This means that pensions are listed with a lower growth rate than the income index.

The automatic balancing mechanism means that the system is autonomous (self-regulating). This is one of the cornerstones of the system. This entails that the system does not depend on the state injecting capital in the event of a deficit. The consequence is, however, that pensioners are relatively worse off during a

## The Swedish pension system



The income-based pension system is a distribution pension system. This means that the payments to the pension system (the contributions) from the gainfully employed fund the payments to the pensioners. The contributions are therefore not funded, unlike, for example, the premium pension system, but instead give rise to pension rights. These pension rights are normally written up each year in line with the average income trend in Sweden, called the income index.



*“The return on **the AP Funds’** capital has contributed to the automatic balancing being **avoided** for several years”*



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period than if the system had been in balance. This is because the growth in pensions is lower than it otherwise would have been, or even negative. However, when the system is in balance again and stops ‘slowing down’ it can be said that the system ‘hits the ignition’ to catch up with the income index again.

This means that the pension rights of those who have not taken out a pension during a balancing period will not necessarily be affected. For pensioners, however, i.e. those who received payments during the balancing period, a balancing period inevitably leads to a loss. This is because

pension payments during the balancing period have been lower than they would have been without the balancing.

#### **The brake has been avoided**

The return on the AP Funds’ capital has contributed to avoiding automatic balancing for several years, even though the AP Funds constitute a relatively small part of the pension system.

In 2008, however, the brake was activated as a consequence of large upward adjustments of pensions and pension rights the year before, as well as the sharp decline in world stock markets. Once this

happened, pensions were affected in 2010. The brake was applied yet again in 2009, in response to the sharp downturn in the economy and a rise in unemployment in the wake of the global financial crisis. As the financial markets recovered and the economy began to grow again, at the turn of the year 2017/2018, the system went out of the balancing period that began at the turn of 2009/2010.

*read more...*

More information is available at  
[www.pensionsmyndigheten.se](http://www.pensionsmyndigheten.se)

# The Fund's mission, goal and vision

**Andra AP-fonden is an independent government agency that autonomously manages funds within insurance for income-based old-age pensions. Together with the other buffer funds, Andra AP-fonden is part of the public pension system. The Fund's activities are ultimately regulated by law.**

The assignment as a buffer fund means that AP2, with its return, will, in the long term, contribute to the balance of the pension system and thereby good pension development, even in times of economic and demographic fluctuations. On January 1, 2019, a revised law came into force that regulates the operations of the AP Funds and which entails changes, among other things, regarding assignments and investment rules.

The AP Funds shall manage the capital so that it will be of the greatest benefit to the pension system. They must also have the liquidity levels that the outflows from the funds require.

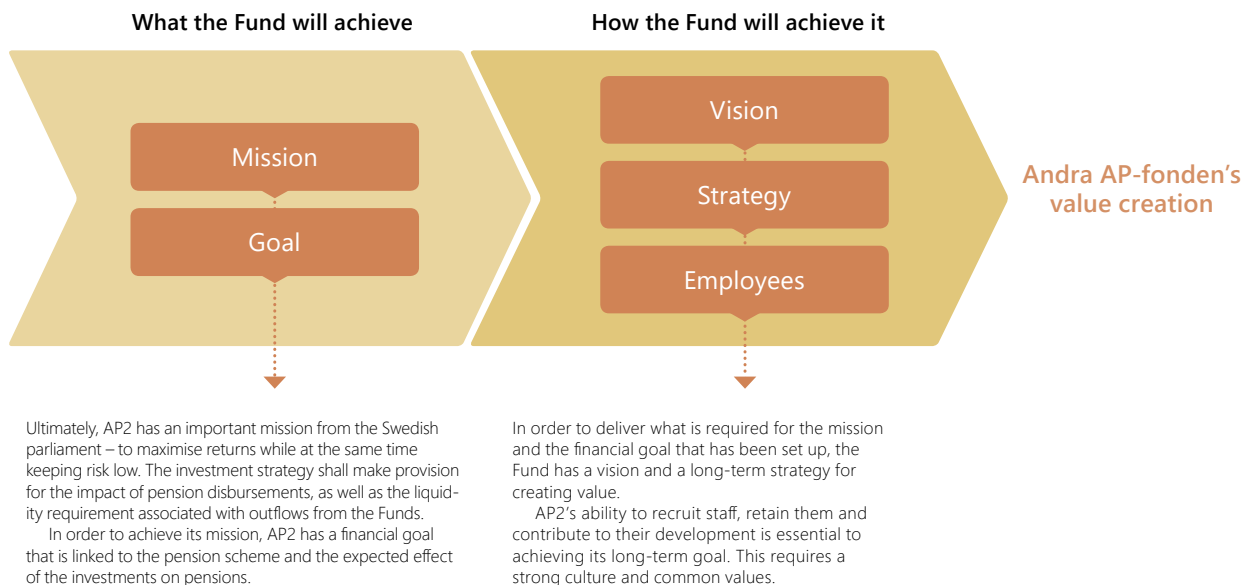
## Mission and goal

By law, the goal of the AP Funds is to manage the funds' assets in such a way that they are of the greatest possible benefit for the insurance of income-based old-age pension. The total risk level must be low, measured in pension disbursements.

The AP Funds' mission includes the management of their assets in an exemplary manner through responsible investments and responsible ownership. Special weight must be given to how sustainable development can be promoted without compromising the overall goal to be of the greatest possible benefit to the pension system.

Exemplary entails that the investments have the best risk and return, from the perspective of the pension system's requirements, and that sustainability is an integrated element of asset management. The goal of exemplary management must be achieved without the AP Funds compromising the overall objective of high long-term returns.

The AP Funds' management mission entails that the effects of the automatic balancing on pensions must be limited, as it is only through this that the AP Funds' returns are linked to pension disbursements.



*“**The mission** requires equal **treatment** of all generations, in compliance with the principle of **generational neutrality**”*





The mission requires equal treatment of all generations, in compliance with the principle of 'generational neutrality'. Strong development in the national economy and the population demographic makes less stringent demands for a high return in the AP Funds, and vice versa. In all, the buffer funds account for approximately 15 per cent of total pension assets. The remaining 85 per cent derives from the value of the contribution assets, which reflect the future value of the current pension payments.

#### New legislation

According to the revised Act for the AP Funds, which came into effect on 1 January 2019, new investment rules came

into force, which, among other things, provide greater opportunities for investing in illiquid assets. The AP Funds must also collaborate on the development of a shared set of values for the management of the funds' assets, shared guidelines for reporting how this goal has been achieved, and shared guidelines for which assets the funds should not invest in. These shared guidelines can be viewed in their entirety at [www.ap2.se](http://www.ap2.se)

#### Purpose linked to the pension system

The purpose of AP2's investment activities, as determined by its Board of Directors, is to minimise the consequences of the automatic balancing for a 30-year

time frame by conducting exemplary management of the capital.

Based on an analysis of the pension system, the Fund chooses a strategic portfolio that represents the asset composition assessed to have the best conditions to achieve the goal during the selected time frame. Long-term assumptions concerning return and risk for the various assets, and how these returns relate to the development in the economy and society's demography, are central aspects of the analysis. The strategic portfolio that AP2 has established is expected to generate a long-term average annual real return of 4.5 per cent, including costs. The return may vary significantly over time.

## Investment rules

By law, the AP Funds must comply with the investment rules, which can be summarised as:

- Primarily acquire or hold such assets as are liquid. Liquid assets refers to money market instruments or transferable securities that are, or will be within one year from the issue, intended to be traded on a trading venue or a corresponding marketplace outside the European Economic Area (EEA), etc.
- At least 20 per cent of the Fund's assets must be invested in receivables with low credit and liquidity risk.
- A maximum of 40 per cent of the assets may be exposed to currency risk.
- A maximum of 10 per cent of the Fund's assets may be exposed to an issuer or group of issuers of interrelated parties.
- Equities in listed Swedish companies may not exceed 2 per cent of the total market stock exchange value.
- The Fund may own at most 10 per cent of the votes in a single listed company.
- At the time of the investment, a maximum of 40 per cent of the real value of the assets held by the Fund may be placed in illiquid assets.
- Industrial policy or economic policy considerations may not be applied to investment decisions.
- The AP Funds must conduct exemplary management with responsible investments and responsible ownership without compromising the overall objective of high returns.



In the past ten years, AP2 has generated a return of 124.4 per cent, corresponding to an average annual return of 8.4 per cent. Adjusted for inflation, this corresponds to an annual real return of 7.2 per cent. For 2019, the real return amounted to 13.9 per cent.

### Long-term strategic plan

The Fund's current strategic roadmap was implemented in 2018. The Fund's objective to 2020 is to have achieved a new and sustainable strategic target portfolio, and introduced an operations-based and value-creating digital platform and modern working methods. To achieve this plan, the Fund has linked in a number of strategies, which are then

broken down into several target outcomes that are continuously followed up by the Fund. The work on the coming plan will start during 2020.

#### *A sustainable strategic portfolio*

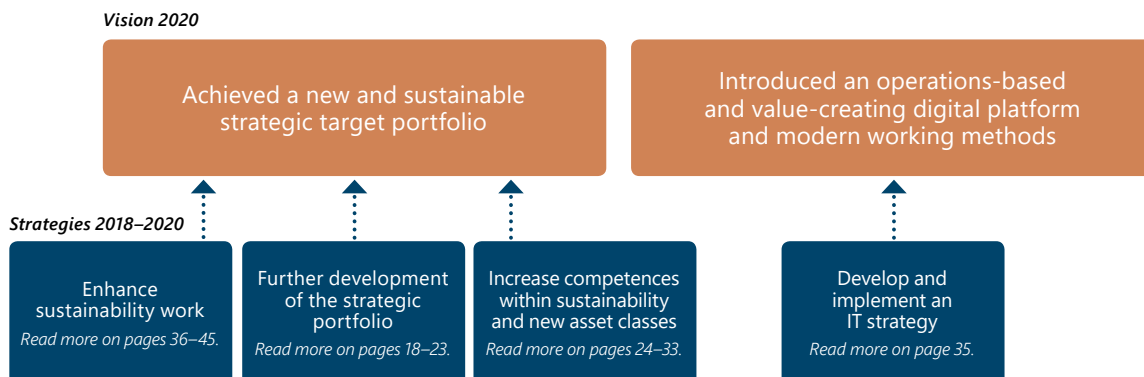
A sustainable strategic portfolio is a strategic portfolio that, by integrating sustainability in underlying sub-decisions, can better achieve the overall goal to be of the greatest possible benefit to the pension system in the long term. Integration of sustainability is necessary to achieve this goal. A sustainable strategic portfolio, without compromising the overall objective, is also aimed to promote sustainable development.

Read more about the Fund's investment strategy on page 20.

#### *Digital platform and modern working methods*

For some years, AP2 has had a long-term IT strategy, which entails that IT has been a focus area of vision 2020. The ambition has been to develop and implement an IT strategy that is adapted to AP2's asset management strategy. Within the framework of the strategic plan, the Fund is therefore working to introduce an operations-based and value-creating digital platform, as well as modern working methods. During 2019 the Fund adopted a new IT strategy of which the overall purpose and goal is to

### AP2's long-term strategic plan



# 4.5%

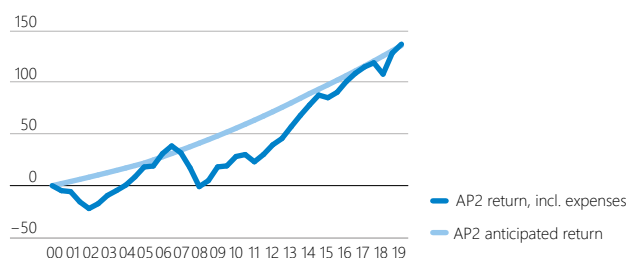
A portfolio structure that is expected to generate an average annual real return of 4.5 per cent over the long term.

strengthen the Fund's IT infrastructure and competence, and to ensure that the Fund's activities continue to be secure and effective. This is incorporated in a new digital platform on the basis of AP2's needs and the requirements made on financial operators. The new digital platform supports and encourages the Fund's employees to introduce modern new working methods more easily and faster, thereby streamlining the activities. More information is available on page 35.

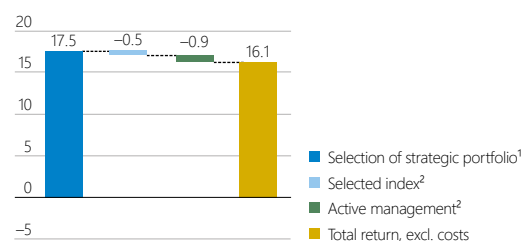
## The Fund's vision

AP2's vision, World-class asset management, serves as both motivation and a guide for the Fund's employees. It helps the Fund to motivate and attract employees, and to prioritise and make the right decisions, and covers all aspects of the Fund's activities. AP2 has adopted a portfolio structure that is expected to generate an average annual real return of 4.5 per cent over the long term.

Accumulated real return, since start, %



Andra AP-fonden's value creation, %



<sup>1</sup> Contribution from alternative investments -1,1 per cent and from market-listed portfolio 18,6 per cent.

<sup>2</sup> Market-listed assets.

*“The AP Funds must conduct **exemplary** management with **responsible investments** and responsible **ownership** without compromising the overall objective of **high returns**”*



# Experts in the pension system

**In order to achieve its mission to be of the greatest possible benefit to the pension system, Andra AP-fonden's investment decisions must be based on the system's future requirements. The Fund has therefore become an expert in how the income-based pension system works.**

There are several stages between the mandate and actual investment decisions. In the first stage, AP2 has specified the mandate as the objective to minimise the consequences of the automatic balancing, the "brake", over 30 years. It is only through the brake that there is a link between the return on the Fund's capital and pension disbursements. 30 years is also assessed to be an appropriate period to fulfil the requirement of generational neutrality.

## Proprietary ALM model

The next stage is to find a method to assess which long-term portfolio best achieves the goal. Since risk and return are interrelated, they must be weighed against each other. The expected return on the portfolio must be high enough to contribute an adequate rate of growth in

the system's assets. Yet the investment risk may not be so high that the probability of the brake being activated is too great.

For this purpose, the Fund has developed an ALM (Asset and Liability Management) model. The model simulates a large number of outcomes for the income-based pension system for each year during the 30-year forecast period. Based on the simulations, the long-term portfolio structure is created that is expected to entail the lowest future pension losses, due to the brake.

## Demographics play a major role

The income-based pension system is a distribution pension system. This means that the payments to the pension system (the contributions) from the gainfully employed directly fund the payments to

the pensioners. If the contributions exceed the disbursements, the surplus is transferred to the buffer funds, for investment. In the same way, if the disbursements exceed the contributions, the shortfall is transferred from the buffer funds. When the system was set up in 2001, contributions exceeded pension disbursements. Since 2009 the opposite has applied, however, since the large cohorts born in the 1940s began to take retirement. In total, up to and including 2019, AP2 has had a net outflow of around SEK 43 billion to the pension system, and the net outflow from the buffer funds is expected to continue for many years to come.

Demographic factors, and their future development, are thus vital when determining the long-term portfolio. Concerning the pension system, the Fund's simulations apply a pessimistic scenario concerning population growth. This entails a lower birth rate, longer life expectancy, low net immigration and a future in which pension contributions from a relatively smaller working population have to finance pension disbursements to a greater number of pensioners. This scenario justifies a long-term portfolio with relatively high expected returns and risks.

The pessimistic scenario is chosen because, in the first instance, a good return on the buffer capital is required, to reduce the risk of the brake being activated. If a more optimistic scenario

## Climate change is considered in the ALM analysis

The significance of climate change to global economic development will only continue to increase. Climate change affects the conditions for all types of human activity, from forestry and farming to industry and how cities function. Moreover, countries and industries differ in terms of how well they can manage the changes. Due to their geographical location, some countries are extra exposed, while others have economies that are dominated by industries which in some cases need to be phased out or strongly restricted.

For AP2, which has a long-term investment strategy, it is vital to include this important factor in investment decisions. This must take place all the way from the highest strategic level down to the individual investment. During the year, the risks presented by climate change were added to the ALM analysis, the Fund's tool to devise the right strategic portfolio.



## *“The latest **simulations** now show a much-improved **financial position** up to 2049”*

emerges, and contributions from a relatively higher working population finance pension disbursements to fewer pensioners, the negative consequences of choosing a portfolio adapted to the pessimistic scenario are assessed to be small. On the other hand, the negative consequences related to the opposite choice can be considerable.

Besides demographic aspects, macro-economic variables such as employment rates, economic growth and income development are key elements of the ALM analysis. Assessments of expected future returns and risk, and the mutual correlation between asset classes and economic aspects, are also taken into consideration.

The Fund annually reviews the assumptions on which the ALM analysis is based. The assessment is based on the academic research in the area. During the last years, the risks which climate change entails for economic growth, for example, have been included. The ALM analysis is then updated before adopting a long-term strategic portfolio, a decision made by the Fund's Board of Directors in December each year.

### **Brighter future**

Since the introduction of the ALM model in 2004, the picture of the pension system's future development has changed significantly. Just a few years ago, the Fund's simulations showed that the brake could be expected to be applied regu-

larly during the next 30 years. The latest simulations now show a much-improved financial position up to 2049.

There are several reasons for this. Among other things, high realised returns for AP2 and the other buffer funds in recent years have contributed to a generally sound financial position for the system. Today, the asset value is around 5 per cent higher than the pension debt. The population increase as a consequence of recent years' immigration has also contributed, as will the higher retirement age. The is based on the Swedish parliament's decision from October 2019 to raise the lowest income-based pension age from 61 to 62 years, as a first step. This change applies as from 2020. Parliament also decided to introduce a target age linked to average life expectancy, which in the long term determines the lowest income-based pension age.

Towards the end of the Fund's 30-year time frame, the lowest pension age is expected to have increased to 66 years, which can be compared with today's average pension age of 64.5 years. All other things being equal, a deferred pension age means that more contributions are paid into the system, and that the financial position improves. Last year the Fund already began to include the effects of a higher pension age in its choice of long-term portfolio. The effects are difficult to assess, but potentially considerable.

### **Ongoing analysis**

Looking ahead, large cohorts of pensioners will continue to present a challenge, even though recent years' strong population increase and good returns for the buffer funds have given a more positive outlook. The Fund will continue to analyse the implications of the changed future scenario, in particular a higher pension age, for the choice of long-term portfolio. A stronger position for the pension system entails that the Fund can choose a portfolio with lower expected returns and risk, and still contribute to good pension development for current and future pensioners. The significance of climate change to the ALM analysis will also continue to be a key issue. AP2's method of integrating the consequences of climate risk in the ALM analysis must be developed over time, not least as new research in this area emerges, and new knowledge is gained.



In total, up to and including 2019, AP2 has had a net outflow of around SEK 43 billion to the pension system.

# A sustainable investment strategy

**The Fund's pension system expertise is the basis for asset management where sustainability permeates the work.**

AP2's view of the most important success factors for the investment strategy is summarised in the Fund's investment beliefs (see below).

The starting point for AP2's investment strategy is a thorough analysis of the pension system and its needs in the coming 30 years. Supported by the proprietary ALM model, the long-term strategic portfolio for which the expected return and risk are of the greatest benefit is selected. This means the portfolio that minimises any future pension shortfall due to the activation of the automatic balancing mechanism (see pages 18–19).

Sustainability is important for the Fund's return and therefore plays a key role in the strategy and for investment decisions at all levels. In AP2's investment beliefs, sustainability also has a dominant role in two of the overall convictions. This entails that it is worthwhile to consider sustainability in asset management, and that climate change holds a special position within the sustainability framework, and constitutes systemic risk. Since climate change has a significant long-term impact on economic growth and the financial markets, the ALM analysis was further developed in 2019, so that climate risks are now considered in the forward-looking assumptions.

## Systematic risk-taking and diversification create value

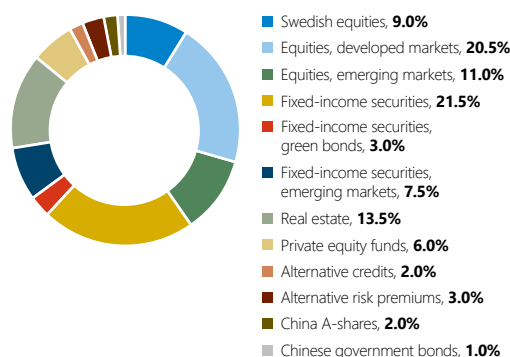
The high expected return required to fulfil the Fund's mission is achieved, in the first instance, by exposing the Fund's capital to various systemic financial risks, called systemic risk premiums. This can be achieved through allocations to broad asset classes, such as equities and bonds, and through how individual securities in the respective asset classes are selected.

The long-term mission is the basis for sustainable risk-taking. The Fund also has a strong focus on diversification, to ensure that risk-taking is as effective as possible. A well-diversified portfolio, with many different asset classes, in both

## Investment beliefs

1. Thorough analysis of the pension system is key to the choice of strategy.
2. Systematic risk-taking is required.
3. Diversification reduces risk.
4. Active management creates added value.
5. Sustainability pays off.
6. Climate change is a systemic risk.
7. A long-term mandate presents special opportunities.
8. People and cultures are critical success factors.
9. Stable processes are an important prerequisite for good results.
10. High cost effectiveness gives a better result.

**Andra AP-fonden's strategic portfolio 2019**  
(% of Fund capital)



developed and emerging countries, enables the Fund to spread its risk. Exposure to foreign currencies is also selected to ensure that the total risk in the portfolio is as low as possible.

An important element of the Fund's mission is to promote sustainable development, but without compromising the overall goal. The strategic portfolio comprises investments that contribute directly to sustainable development. Among other things, for quite some time the Fund has had a strategic allocation to green bonds and in 2019 decided that it should be increased from 1.0 to 3.0 per cent, which is equivalent to more than SEK 11 billion. The Fund also adopted an

allocation to a sustainable infrastructure, which is assets that contribute to sustainable development in line with the Paris Agreement.

The strategic portfolio selected is expected to give an average real rate of return of 4.0 per cent per year during the coming 30-year period. In the shorter term, in view the current low interest rate levels, a lower return may be expected, however.

#### Sustainable benchmark indices

After the strategic allocation between the asset classes, the next stage of the process is, with the help of research and significant internal analysis, to decide on

the strategic allocation within the asset classes. For example, which individual equities should be included in the Fund's equities portfolios? For the listed assets in particular, this takes place by selecting the composition of the benchmark indices. In this way, the exposure to different risk premiums can be improved, compared to selecting a traditional index based solely on the company's market value.

In recent years, the Fund has put a lot of focus on integrating sustainability factors, together with more traditional risk factors such as valuation in the internally developed indices. This work makes high demands of internal analysis activities,

#### Benchmark index for the listed strategic portfolio, 31 december 2019

		Index
Equities	Sweden	SEW: "Equal Weighted Sweden Index" CSRX: "Carnegie Small Cap Return Index"
	Foreign equities	MSCI World <sup>1</sup> , MSCI World Multifactor <sup>1</sup>
	Emerging markets	MSCI Emerging Markets <sup>1</sup> , MSCI Emerging Markets Multifactor <sup>1</sup>
Fixed-income securities	Swedish nominal fixed-income	SHB Swedish All Bond <sup>4</sup>
	Foreign government bonds	Bloomberg Barclays Global Government Index <sup>2</sup>
	Global credit bonds	Bloomberg Barclays Global Credit Index <sup>5</sup>
	Global green bonds	Bloomberg Barclays MSCI Custom Green Bond Index
	Government bonds in emerging markets	JP Morgan ESG EMBIGD <sup>6,7</sup> , JP Morgan GBI-EM Global Div <sup>3,7</sup>

<sup>1</sup> Adjusted index, adjusted after excluded companies and tax levels.

<sup>2</sup> Adjusted index, excluding Japan and emerging countries according to MSCI.

<sup>3</sup> Adjusted index, excluding Russia, individual country may not weigh more than 15 per cent and may not have a lower credit rating than BBB.

<sup>4</sup> Adjusted index, excluding bonds with a maturity longer than 20 years and Kommuninvest.

<sup>5</sup> Adjusted index, excluding Japan and emerging countries according to MSCI, and where issued volume is below USD 500 million.

<sup>6</sup> Adjusted index, excluding Venezuela.

<sup>7</sup> Information has been obtained from sources believed to be reliable but J.P. Morgan does not warrant its completeness or accuracy. The Index is used with permission. The Index may not be copied, used, or distributed without J.P. Morgan's prior written approval. Copyright 2017, J.P. Morgan Chase & Co. All rights reserved.

*“Sustainability factors have long been part of the model-based **active management** of global equities”*



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since sustainability in the area of financial economics is still a relatively new academic research area. Besides its own indices, the Fund in some cases also uses externally developed indices that integrate sustainability.

For alternative, non-listed, asset classes, indexes are not the starting point for the portfolio composition. Instead, strategies are designed that are intended to achieve designated allocation targets,

including the requirement of sustainable investments and the sustainability of the external asset managers who are engaged.

#### **Active management**

Besides the return from long-term exposure to systemic risk premiums, additional added value is created through active management, i.e. investment decisions that deviate from the benchmark indices. Through active management,

the Fund's objective is to add 0.5 percentage points to the annual return.

For active management, sustainability is also an integrated element of the investment process. For example, sustainability factors have long been part of the model-based active management of global equities. In the last five years, the average active management has generated –0.04 per cent, which is equivalent to SEK –0.1 billion.



### **In-house asset management**

AP2 has several asset classes under in-house management, concentrating resources on areas that it believes offer the greatest chance of success, based on the market, available experience, and competence and processes. Of the Fund's assets, 81 per cent are managed in-house.

### **External asset management**

The Fund uses external managers for asset classes and mandates for which the Fund does not have the internal resources required or for which the external managers add value to the Fund's own management. The majority of AP2's external management is active.

The procurement of external fund managers is based on criteria such as investment style, quality and analytical approach, organisational structure, staffing, ESG, costs and historical performance.

### **Ongoing assessment**

The investment strategy is subject to ongoing assessment, to ensure that the asset management work adds value. The strategic portfolio's realised return and risk are compared with a far simpler basic portfolio created using the same ALM analysis. With considerably fewer asset classes to choose between, the basic portfolio comprises 65 per cent global equities and 35 per cent Swedish bonds. In 2019, the assessment performed in October each year showed that in the last 11 years the strategic portfolio has achieved an excess return of 0.58 percentage points per annum, while the risk has been lower, which in total corresponds to 14.4 per cent during the period.

## **In-house asset management**

The following asset classes are managed in-house:

- Swedish equities
- Equities, developed markets
- Equities, emerging markets
- Fixed-income, emerging markets
- Swedish fixed-income
- Foreign government and credit bonds in developed markets
- Global green bonds
- Tactical asset allocation
- Real estate (via directly-owned companies)
- Parts of the portfolio of alternative risk premiums.
- Chinese government bonds.

## **External asset management**

During 2019, AP2 employed external management for the following areas:

- Equities, developed markets
- Equities, emerging markets
- Alternative investments (private equity funds, traditional real estate, timberland and farmland, Chinese A-shares, alternative credits and parts of the portfolio of alternative risk premiums).

# Active management of Swedish equities

**In 2019, Andra AP-fonden continued to integrate sustainability in the active management of Swedish equities. This requires a dynamic process and multi-faceted decisions.**

The Fund's management of Swedish equities is based on two mandates: one for large companies that has an investment universe of around 60 companies, and one for small companies that has around 270 companies. Since there is a certain overlap, there are around 300 companies in total to monitor.

"We're stockpickers and base our selection on our separate fundamental analysis. We cannot monitor all 300 companies closely all the time, but we seek to have and maintain a dynamic dialogue with as many as possible," says Jonas Eixmann, Head of Equities at AP2.

Fundamental analysis entails a close analysis of a company's accounts, business model, markets and future outlook. When the Fund takes the view that an equity deviates from the market, this is expressed by overweighting or underweighting the equity in relation to the benchmark index. To a great extent, the size of the deviation will depend on the degree of conviction, and if the Fund has a strong conviction, the deviation may be high.

The benchmark index for the large-company portfolio is an internally created "equal-weighted Swedish index", which has achieved significantly better historical returns than the customary market-value-weighted indices. For the small-company portfolio, the benchmark index is the Carnegie Small Cap Return Index.

## Higher active share

The portfolio's active element, which is the deviation compared to the benchmark index, has increased in recent years. This has generally gone well, and the small-company portfolio, for example, achieved a positive excess return for eight of the last ten years, with a excess return of 118 percentage points, although performance was poorer in 2019.

"We've had some positions that went against us, and this stung us. One challenge of being an active manager is to stay cool in such situations, while still being able to change course quickly if necessary. We have the advantage of being able to operate in the long term, but this should not be used as an excuse," says Jonas Eixmann.

Sustainability has become an increasingly important issue for society and, just like other social trends, it affects some companies positively and others negatively. The asset management team therefore work with the Fund's sustainability analysts to map the companies risks and opportunities in a way that makes this a dynamic part of the investment process.

"We don't want this to be a one-off event. Just like other investment risks, sustainability must be monitored and assessed continuously," says Jonas Eixmann.

## Sustainability is an important part of the analysis

The question of how an active asset manager should relate to sustainability is multi-faceted, however, and the Fund has never practised the method of disregarding entire sectors. Jonas Eixmann cites the example of SSAB. This steel company accounts for around 85 per cent of carbon emissions in the small-company portfolio.

"If we were to sell all SSAB shares we would drastically reduce our carbon footprint, but SSAB is also one of the better steel producers in the world and is very focused on significantly reducing its carbon emissions in the future. If the company is successful with this, the share should perform well, so it's not always as simple as just selling the shares with the greatest impact," says Jonas Eixmann.

# 118%

A excess return of 118 percentage points in the small-company portfolio in the last ten years.

# New tool to measure sustainability in quantitative management

**Due to the increasing data volumes, quantitative management opportunities are growing. In 2019, Andra AP-fonden used new tools to further integrate sustainability factors in asset management.**

Quantitative management entails using statistical analysis to identify characteristics of companies, called factors, that either individually, or together with others, can indicate future returns. This is part of the Fund's active management and takes place in the areas of foreign equities, global credits and Swedish fixed-income securities.

## Rapid development

There is currently a lot going on in the quantitative investment world. The exponential increase in processor power has made it possible to analyse and process data in new ways, while the volumes and types of available data have increased strongly.

"We're on the way into a new world. I get enquiries several times a week about buying more or less unusual data. This might, for example, be the number of in-store visits, or how often a brand is mentioned on the Internet," says Tomas Morsing, Head of Quantitative Strategies.

There has been a rapid pace of development "Texts, for example, that were not perceived as data ten years ago, can now be easily analysed. Images and sound recordings can also now be analysed," says Tomas Morsing. But concurrently with the increase in data volumes, an old saying still holds true: data that is used by everyone is reflected in the market's pricing.

## Own data

AP2 is therefore working independently to pull its own factors from others' raw data, and to gather its own data. In a project run during the year, the Fund used text analysis tools to find companies with what can be described as "green" activities, for example in such obvious areas as renewable energy.

"We can also dig very deeply and look for companies that, for example, make sub-components for lithium-ion batteries. We want to find all these companies, sort them by type of 'green' activities, and then continue with our customary analysis," says Tomas Morsing.

## Sustainable credit indices

In its equities management, AP2 has worked actively for many years on applying sustainability factors in its management. In 2018, new, internally created, multi-factor indices with sustainability aspects were implemented for the foreign shareholdings. The Fund worked on further development of the indices in 2019, and also on creating similar indices for the credit portfolios.

"This is easy to do in theory, since the factors are generally the same as for equities. In practice, however, it is much more difficult, for the reason that there may be poor liquidity in the market. There may quite simply not be any sellers of the corporate bonds you want to buy," says Tomas Morsing.

Precisely as for the equities indices, the objective was to devise multi-factor indices with clear sustainability characteristics and at least the same risk-adjusted return as the current portfolio.

"This has been an enormous project, but it has gone well. We hope to be able to launch the indices in 2020," says Tomas Morsing.

# Alternative investments

**The Fund's external asset management mandates are gathered in the Alternative investments group. These are asset classes that differ from each other, but which still present certain common challenges.**

Several of the Alternative investment mandates manage illiquid assets. Illiquidity is one of several systematic risk premiums that give a return, and one to which AP2, as a long-term investor with predictable flows, would like to be exposed.

The change in the investment rules for the buffer funds that entered into force in 2019 increased the Fund's opportunities to invest in illiquid assets. The rules that may enter into force in 2020 are expected to further increase these opportunities.

"We may not see the results of the investments we make today before five to seven years have elapsed. So we need to think ahead a great deal, to make wise investment choices. You need to be on your toes all the time, and ask whether we are missing anything? What is the best long-term strategy for our portfolios? Do the asset managers have a clear sustainability focus?" says Anders Strömblad, Head of Alternative Investments.

## Shared challenges

The Fund's external management mainly takes place via funds, but sometimes also via companies that the Fund owns together with like-minded institutional investors that share the Fund's long-term strategy and sustainability values. One example is Vasakronan within real estate. Even though the characteristics of a good asset manager vary for the differ-

ent asset classes, the group's members face the same challenge – to have skilled managers that suit AP2.

"It's not just a question of delivering a good return at low cost, but also of having asset managers with whom we can share knowledge. For us it's important to understand our managers' process, not least when it comes to sustainability," says Patrik Jonsson, who is responsible for the Fund's external managers of listed assets.

## Developing the sector

Sustainability is an area that has increased in significance for society and the investment world in recent years, and this trend is expected to continue to rise in the future. The Fund's sustainability work is expressed in different ways. For the Alternative Investments group, this partly concerns being involved in and developing the sector.

AP2's CEO Eva Halvarsson is a member of the Board of Principles for Responsible Investment (PRI), a UN-supported body that works to promote sustainable investments. Anders Strömblad is a member of PRI's Committee for Private Equity, and the Board of ILPA (Institutional Limited Partners Association), the trade organisation for investors in private equity funds, which are both involving in setting guidelines for the sector. Furthermore, Helena Olin, who is responsible for the Fund's real estate

investments, is a member of the committee that supports GRESB (the ESG Benchmark for Real Assets) in its work.

## Ongoing assessment

The day-to-day work concerns assessment of the asset managers' processes and follow-up on their reporting. This takes place in different ways, depending on the asset class involved. Within real estate, the GRESB sustainability assessment is an important tool.

"All of our funds and companies must be members of GRESB and we annually follow up on their results in the assessment. The aim is year-on-year improvement. For our companies, we also have an annual sustainability day, when we review the past year and assess how we can become better," says Helena Olin.

The Fund's real estate investments now have a GRESB score that averages 95 out of 100, which is one of the best in the sector.

For the assets for which the department holds the asset management responsibility, the sustainability work is an important element of both the due diligence process for new asset managers, and of the ongoing development.

"There's a multi-faceted scale of questions regarding sustainability, with both risks and opportunities, which makes this an important focus area for us," says Anders Strömblad.

*"So we need to **think ahead** a great deal, to make wise **investment choices**"*

## Listed external mandates

**Patrik Jonsson, responsible for external managers of listed assets**

Over the years, AP2 increased its internal management of equities and thereby took home several mandates from external managers. Some are still left, however, including for Chinese A-shares listed on Chinese mainland exchanges.

"The challenge is to find managers with whom we can cooperate. We want to learn how this works in China and also raise their level within sustainability, for example," says Patrik Jonsson.

The focus during the year included assessment of a new asset class – non-listed credits.

"This is a continuation of a theme we saw after the financial crisis in 2008. When banks' lending opportunities are reduced, the demand for alternative credits increases," says Patrik Jonsson.

## Real estate

**Helena Olin, responsible for traditional real estate**

Within real estate, AP2 requires long-term investments in expanding regions, with focus on offices. In developed countries, investments are made via companies, such as Vasakronan in Sweden, together with like-minded investors.

"The biggest challenge is to conduct good board work and stay updated on developments concerning markets, technical development and changed customer behaviour. The challenge now is also to identify good investments, since valuations are at a historically high level," says Helena Olin.

During the year, the Fund focused on increasing investments in Asia, which are made via funds and affiliated investments to these, and on individual large projects in the European and American companies.

"US Office Holdings has almost 30 per cent of the portfolio in projects, so this has taken up a lot of time during the year," says Helena Olin.

## Private equity investments

**Camilla Axvi, responsible for private equity investments**

Within private equity, the Fund adheres to a target allocation between different geographies and investment styles, such as venture, growth and buy-out. The challenge is to stay updated on the market's development and to find high-quality asset managers who are assessed to have the capability to deliver good future returns.

"We have a global portfolio in which we are now increasing our allocation, after changed investment rules and a new strategic target allocation, which entails that we will be making more and, in specific cases, larger investments. As part of the portfolio structure, existing managers and strategies are assessed actively against new alternatives. We can see that the range of strategies and the number of managers in the private equity markets have increased, which has increased our own opportunities. For example, there are now funds with a more pronounced focus on sustainability, which is interesting," says Camilla Axvi.

"More opportunities require discipline, however, in terms of having a stringent selection process for our choice of strategy, and also that the overall assessment to a great extent concerns safeguarding processes, and assessing people and organisation cultures. This requires frequent meetings and that we also meet the investment team and their on-site organisation," says Camilla Axvi.

## Timberland and farmland investments

**Jessika Ingvarsson, responsible for timberland and farmland investments**

A challenge within timberland and farmland investments is to find formats that match the Fund's investment horizon, which for these investments extends to at least 20 years. Customary fund structures often have an investment horizon of ten years, which is too short.

"Our farmland investments are therefore via companies together with other investors, who share our values concerning long-term strategies and sustainability. Due to the nature of these investments, we have a very strong focus on sustainability. Via board work in the companies, we can be involved in influencing the asset managers' sustainability work, and we can gain new knowledge and make proposals for further development and improvement within the area," says Jessika Ingvarsson.

The trade war between China and the USA strongly affected both the timberland and farmland markets during the year.

"We're monitoring the conflict closely, but since we're fully invested, there's not so much we can do. We can nonetheless see the value of our geographical diversification. When exports and commodities prices in the USA are declining, for example, this benefits other regions in which we have invested," says Jessika Ingvarsson.



# Low interest rates present a challenge

During 2019, Andra AP-fonden increased its strategic allocation to the rapidly growing market for green bonds. While contending with low interest rates, the Fund is also endeavouring to increase the exposure to sustainability within its other mandates.

*“The central banks’ bond purchases have reduced certain risk premiums”*

The department for markets, exposure, currencies and fixed-income management handles the Fund’s trading, hedges currency transactions and ensures that the actual allocations reflect the strategic portfolio adopted by the Board of Directors.

“Different assets give different returns at various times. To balance the effects of this in the portfolio, we adjust the net exposures with derivatives, such as different index futures for equities. This is far more cost effective than trading the underlying securities,” says Ole-Petter Langeland, Head of MEFIX.

The department also has three bond management mandates: one Swedish, one global and one green. In the Swedish and global mandates, there is focus on government bonds and organisations with high credit ratings, such as the European Investment Bank (EIB).

## Flat yield curves

The economic development in developed countries, not least in Europe, with a succession of crises over several years – first the financial crisis and then the euro crisis – has resulted in a challenging position with a highly stimulative monetary policy.

“The central banks’ bond purchases have reduced certain risk premiums and made yield curves much flatter than usual for low interest rates. This makes it more difficult to achieve returns, even by buying long maturities,” says Ole-Petter Langeland.

## New sustainable bonds

While handling the low level of interest rates, the department is strongly focused on sustainability. Besides the increase in the Fund’s strategic allocation to green bonds, there is also an ambition to increase the sustainable elements of the other mandates. The number of borrowers using the bond markets to finance sustainable projects outside the environmental sector is also increasing.

“There are now, for example, social bonds, equality bonds, and blue bonds to finance water projects. The bonds are often linked to the UN’s Global Sustainable Development Goals. If the World Bank, for example, is borrowing, and we can choose between an ordinary bond and a sustainability bond, we will try to choose the sustainable bond,” says Ole-Petter Langeland.

## Difficult valuation

For green bonds, there are reporting regulations that make it possible to quantify the positive environmental impact. For social bonds, this is more difficult. If the Spanish development bank ICO borrows funds to promote development in Andalusia, it will report on which projects were financed, with macroeconomic data for the region.

“But it’s difficult to distinguish the projects effect from the general economic development in Spain. Follow-up is therefore not as profound and quantitative as for green bonds, but we still think that this is a better way of using the funds, provided that we get the same return,” says Ole-Petter Langeland.

# Sustainability risks are increasingly important for emerging markets

**Successful management of emerging market bonds concerns understanding the risks. To an increasing extent this concerns sustainability.**

8.5 per cent of AP2's strategic portfolio is allocated to government bonds in emerging markets. In total, the Fund invests in more than 60 different emerging countries, with China and Brazil as some of the largest exposures. Return and risk are related and in the case of government bonds, risks can be expressed in many ways.

"The challenge is that many of the markets may be quite volatile and sometimes illiquid. This is a matter of following up and understanding the risks in the positions taken. Because it can go wrong. Venezuela is a case in point, as a country that is unable to pay its debt," says Kristian Hartelius, Head of Emerging Markets.

## Assessing political risks

The Fund is strongly focused on integrating sustainability in its asset management. For government bonds in emerging markets, as a first step this takes place by integrating sustainability factors in the benchmark index. But sustainability is also considered in the next step, which is active asset management.

"Among other things, we use assessments of political risks, the degree of internal conflict, and the strength of the legal system to understand and be able to act proactively," says Kristian Hartelius.

As a consequence, during the year the Fund managed to avoid both Venezuela and Lebanon, two countries whose bonds have performed weakly.

## Internally developed model

As an element of the analysis work, there are regular study visits of the most important markets, but in order to maintain the required breadth, the Fund relies on external sources.

"This is a strength of our modelling method, which means that we can maintain breadth and weigh up Ghana and Gambia as easily as Brazil. But this requires good data sources," says Kristian Hartelius.

The internally developed model has classical macroeconomic projections, and also elements known from quantitative investment methods. The asset management team is now working for greater integration of environmental factors and climate risks.

"It has traditionally not been so easy to relate climate and environmental factors to prices for government bonds, but this will become ever more important. Coun-

tries with high transition costs ahead of them will see an impact on government budgets, among other things. Understanding these links and incorporating them in asset management is something we're doing a lot of work on," says Kristian Hartelius.

## Well-calculated risks

Besides picking the right countries, the Fund can manage its risk and return by choosing where on the yield curve to place the exposure. Bonds with longer maturities are more sensitive to changes in the level of interest rates and usually yield higher returns. The Fund's model has tools to time changes in the yield curve, but as a rule, and over time, the Fund must take on risk across the entire yield curve.

"We need to do this, to be able to deliver the right risk-adjusted return to the pension system. Our task is to take risks, but these must be the well-calculated risks in which we have the greatest faith," says Kristian Hartelius.

*"It has traditionally not been so easy to relate **climate and environmental factors** to prices for government bonds, but this will become ever **more important**"*

# Employees with high expertise and strong commitment

**Andra AP-fonden's ability to recruit staff, retain them and contribute to their development is essential to achieving the Fund's long-term objective. It is part of the Fund's long-term strategy to use its own resources to continuously build up ever more professional and cost-effective asset management.**

AP2 is a distinctively knowledge-driven organisation, where the specialist competencies, creativity and commitment of its staff are critical to achieving successful results. As a manager of buffer capital, the Fund is tasked with an important mission. This makes considerable demands of the Fund's ability to exercise good judgement in its day-to-day operations, and to ensure transparency in carrying out its duties. These issues are often the subject of internal discussion within AP2. The Fund subscribes to a joint code of values and has clearly established internal policies that govern its professional behaviour.

## Culture and values

During the year, all AP2 employees worked with self-leadership and personal values, and their connection to the Fund's shared values: long-term value creation, responsible, respect and continuous improvement. The purpose of

this focus on values is to further develop AP2's strong culture and to create consensus concerning the Fund's values, and furthermore to establish the principle that these values provide guidance in the Fund's day-to-day operations. The culture is characterised by personal responsibility and individuality within the broader framework of a strong team spirit. Ethical conduct is an important aspect of this culture and forms a natural part of the Fund's values.

## Working environment and health

AP2 strives to ensure a working environment in which every employee thrives and can develop in their work. This must also be an environment that minimises risks to health. This makes it important that all employees can influence their own work situation. A good and pleasant working environment is a precondition for the Fund to be able to achieve its goals and be an attractive employer. AP2

conducts systematic working environment initiatives by investigating, correcting and following up the physical and psychosocial working environment. Exercise and good health are a crucial aspect of the Fund's corporate culture, and all employees are therefore offered a fitness activity subsidy and regular medical check-ups. Each employee's health is also monitored in conjunction with the annual employee appraisal. AP2 encourages a healthy and sustainable lifestyle and works actively to create a high level of well-being.

In 2019, there was continued development of the Fund's more variation-based working methods, which have made the office environment more inspiring and sustainable. This entails greater flexibility to choose workstation according to the current tasks for the day. Other advantages are that employees gain an increased understanding of each other's work, and find it easier to meet and com-

## Working environment and health

AP2 encourages a healthy and sustainable lifestyle and works actively to create a high level of well-being. As an element of the Fund's health and safety work, two employees have been trained as health inspirers.

## Values

- Long-term value creation
- Responsible
- Respect
- Continuous improvement

## *“AP2 recognises the strength in **diversity** and an **inclusive** approach”*

municate, which strengthens the culture and the Fund’s values, such as continuous improvement.

AP2 works actively on such issues as gender equality, diversity, the working environment and non-discrimination. The work is based on the Fund’s equality and diversity plan, working environment policy and discrimination policy. On their appointment, all employees are informed of the Fund’s policies and guidelines. The Fund also maintains ongoing dialogue on these issues.

### **Leadership training**

A clear leadership that complies with AP2’s values and management practices is an important competitive tool. Being a manager at AP2 entails living up to requirements and expectations from both management and employees. The manager’s tasks include setting an example and showing personal consideration, and also creating the right conditions for inspiration and motivation, which helps to develop both the business and the employees. The Fund’s managers meet regularly each year with the purpose of improving the quality of leadership throughout the operations.

### **Skills development**

All employees are offered ongoing skills development within their individual areas of work. All employees receive continuous training in sustainability issues. All

members of the Board have also received this training. The training has included global trends within the sustainability field, the UN’s Global Sustainable Development Goals, current global trends in the financial sector, AP2’s sustainability work and the work of the Council on Ethics. During the year, all employees completed training in human rights. As an element of the Fund’s succession planning, a training course – leading without being a manager – was held during the year.

### **Exchanging expertise**

Besides extensive exchange of internal expertise, AP2 gives great weight to collaboration with other investors, internationally as well as in Sweden. During the year, the Fund engaged in sharing expertise with a number of other investors, primarily members of the Fund’s business network. This includes AP2’s close collaboration with the New Zealand Superannuation Fund, Generation Investment Management, ABN Amro Pension Fund, Publica Pension Fund and Nuveen. Active participation in current research in the financial area is natural for AP2. Besides conducting their own research, Fund employees also attend conferences at which research results are presented. Read more on the Fund’s website about research in which the Fund’s employees have participated.

### **Diversity**

AP2 recognises the strength in diversity and an inclusive approach. AP2 evaluates and develops employees’ work and skills regardless of age or ethnicity and wants to be an attractive employer for both men and women. The Fund offers flexible working hours, work under own responsibility, and parental pay to enable both men and women to combine work with their family responsibilities. Three of the Fund’s employees took parental leave during parts of 2019.

As part of its diversity work, AP2 supports the organisation, Mitt Liv. This organisation is dedicated to increasing diversity and integration in the Swedish labour market. Each year, through the organisation’s mentoring programme, five Fund employees have the opportunity to be mentors for academics with foreign backgrounds who are seeking employment that matches their professional qualifications. Through Mitt Liv, all of the Fund’s employees received training in diversity issues. In addition, the Fund’s managers received separate training in these issues.

### **Remuneration**

To be able to recruit and retain the right staff, AP2 strives to remunerate its employees at a level that is motivating and consistent with the industry at large.

The Board of Directors of AP2 determines the guidelines for remuneration to senior executives. The guidelines are

*“As a **global asset manager** operating across a broad range of asset classes, AP2 **fosters** many specialist roles and creates many **career opportunities**”*





reviewed annually by the Board and must be compatible with Swedish Government guidelines for terms of employment by the AP Funds. This concerns the decision-making process, as well as the structure and appraisal of appropriate and reasonable remuneration within the Fund. The Board ensures that the remuneration paid to the CEO and other senior executives is consistent with the Board's guidelines. Read more about remuneration on page 78.

All employees are subject to the terms of the collective agreement between The Employers' Organisation of the Swedish Banking Institutions (BAO) and The Swedish Confederation of Professional Associations, JUSEK/CR/CF (SACO).

### **Recruitment**

As a global asset manager operating across a broad range of asset classes, AP2 fosters many specialist roles and creates many career opportunities.

AP2 strives first and foremost to recruit from within the organisation and to encourage internal mobility. This facilitates better use of specialist skills and experience. For a number of years, the Fund has cooperated with the School of Business, Economics and Law at the University of Gothenburg and Chalmers Institute of Technology, enabling them to

offer students opportunities for temporary employment on specific projects, trainee positions and temporary employment during summer vacations. This has created a solid recruitment base for future employees.

### **Identification of employee-related risks**

AP2 will create the conditions to attract and retain employees with the expertise and experience required for the activities to be conducted in the best possible way. The Fund's ability to retain competent and committed employees is crucial to driving development in accordance with the strategic plan and achieving the goals set. If the Fund does not have access to the right skills at the right time, operations and results can be adversely affected.

The Fund is therefore continuously working on competence development, with the aim of developing the operations and achieving the goals set. In connection with the annual performance appraisals, the employees' performance and potential are identified. In order to identify focus areas that are expected to increase employee satisfaction and commitment, the Fund conducts regular employee surveys.

### **Anti-corruption work**

AP2 has zero tolerance of corruption and works continuously on preventive work. The Fund has, among other things, an ethics policy, a compliance policy and a hospitality policy that prescribe how the Fund's employees should act concerning these issues.

The preventive work is driven by the Fund's compliance function and is based on such activities as training and the development of internal documents. AP2's managers are responsible for ensuring that their employees understand and act in accordance with the policies. This takes place continuously through information, discussions and conversations.

At the same time, all employees are responsible for applying the policies. AP2 has a whistleblower function whereby employees can file anonymous reports on, for example, unethical behaviour. The Fund's general counsel holds overall responsibility for follow-up on compliance with the guidelines, and reports to the Board of Directors on important ethical issues concerning the business and the employees' conduct.

# Cost effectiveness is part of exemplary management

**For Andra AP-fonden, high cost effectiveness is important. It is actually so important that it is one of the Fund's investment beliefs, denoting that high cost effectiveness gives a better result.**

To achieve high cost effectiveness, all costs must be taken into account; not just visible costs such as personnel costs, brokerage commission and fees of different kinds, but also costs not shown in the income statement, such as market impacts, taxes and performance-related fees.

## **Cost effectiveness from a global perspective**

An established method of measuring and comparing the cost effectiveness of pension funds from an international perspective has been developed by CEM (Cost Effectiveness Measurement Inc.). The method facilitates comparison that takes account of several factors that have a strong impact on the overall cost of managing a fund: the volume of assets under management, the ratio of assets under active management and external mandates, and the relative allocations for each class of asset. Pension funds' costs are compared with those of a global group of fund managers of an equivalent size and with similar portfolio structures.

AP2 has participated in CEM's annual benchmark study since 2004 and, according to the latest analysis, which covers 2018, AP2's portfolio management continues to be successful and cost effective. With a good margin, the Fund's cost level is still lower than the benchmark group's, at around 26 per cent, which is primarily due to a significantly lower external management

ratio and cost-effective internal management. More information is available on page 69.

## **VAT**

As from and including 2012, the AP Funds became registered for VAT. As a consequence, VAT is VAT-liable for services charged from outside Sweden. Since the Funds, unlike other authorities, are not entitled to claim reimbursement of VAT paid, this VAT registration entails a direct increase in the Fund's costs for services of this type. In 2019, the costs related to Swedish VAT on services charged from outside Sweden amounted to SEK 30 (33) million.

## **Important cooperation with the right partner**

Besides expertise within its own organisation, the Fund also has access to expertise through the cooperation with the First, Third, Fourth and Seventh AP Funds. In areas that do not jeopardise the independence of the individual funds, the AP Funds work together to achieve cost savings, synergies and efficient resource utilisation. It is also important to ensure relevant exchange of experience, knowledge and working methods between the organisations.

During 2016, the respective CEOs of the First, Second, Third and Fourth AP Funds initiated even sharper focus on the cooperation between the Funds. Collaboration is already taking place in various

established forums in the form of nine coordination groups with varying representation of the different AP Funds. These cooperation measures share in common that they are based on the added value that the collaboration creates for each individual fund and jointly for all funds. During the year, a new coordination group was formed to focus jointly on issues that can be resolved with the help of modern technological platforms.

## **Illiquid assets**

According to the new AP Funds Act, the share of illiquid assets in the respective AP Fund's total portfolio may not exceed 40 per cent. This is a change that allows for an increased investment rate and volume within these types of assets. A natural consequence is increased focus on reporting by the Funds' managers in terms of quality, transparency and reporting format.

During 2019, the AP Funds jointly identified the sector-specific challenges shared by the Funds with most other global institutional investors. The Funds can note a strong shared interest in achieving sustainable solutions in the long term, and that the AP Funds play a key role by actively driving issues related to standards, transparency and degree of digitalisation, together with other operators.

# Continued focus on IT and new digital platform

**Within the framework of Andra AP-fonden's strategic work, one of the visions has been to introduce an operations-based and value-creating digital platform, and modern working methods. The ambition is to develop and implement an IT strategy that is adapted to AP2's asset management strategy.**

During 2019, the Fund adopted a new IT strategy of which the overall purpose and goal is to strengthen the Fund's IT infrastructure and competence, and to ensure that the Fund's activities continue to be effective. A new digital platform is being built up using modern architecture and technology, giving the Fund an infrastructure that is scalable, accessible and cost-effective, in accordance with the requirements made on financial operators.

## Security aspects

AP2 monitors the cyber threats and actual IT attacks that take place around the world. The Fund continues to focus on security aspects of the IT infrastructure and continuously reviews networks, applications and information systems, besides training and informing staff of how to prevent cyber threats. Besides the Fund's ongoing security work, in 2019 external specialist companies undertook thorough scrutiny of, as well as simulated attacks on, both the exterior and interior of the Fund's infrastructure, in order to gain better insights into any vulnerabilities, and to achieve an action list for further prevention of possible attacks. Even though the scrutiny and the simulated attacks proved that AP2 is well-protected, cyber security continues to be one of the Fund's prioritised areas, in order to be well-prepared for the rapidly increasing cyber threats in the surrounding world.

## Global and national collaboration

As a consequence of AP2's IT focus, in 2019 the Fund was invited to take part in and be a member of GITOS (Global Investment Technology and Operations Symposium). GITOS' purpose is to serve as a forum for leading institutional investors to share experience and information in such areas as data, technology, information systems, shared suppliers, innovation and operational models within the financial markets. In 2020, AP2 will be the driving force for a GITOS initiative of which the purpose is to become more innovative and cost effective in handling market data.

At the national level, AP2 works closely with the other AP Funds. Together with joint coordination of procurement processes, information and experience are shared in order to be more resource- and cost-effective. In 2019, together with the other Funds, AP2 initiated further collaboration in the form of a joint innovation forum. The purpose of the forum is to help each other to "spot trends" and jointly investigate and understand future technology that might affect the AP Funds' activities. In contrast to other coordination groups under the AP Funds, the innovation forum will have representatives from all departments of the AP Funds, and not just IT. The forum's long-term objective is to be more innovative and proactive, with better consensus on an introduction strategy for the Funds' technical platforms, which in time is estimated to give synergy effects.

## Using the cloud

The Fund's ambition is to be even more effective in its activities and to utilise cloud services. The flexibility of being able to dynamically scale up parts of the infrastructure, and the increased accessibility offered by cloud providers, are a good match for the Fund's requirements. The Fund will, however, need to await the outcome of the state's cloud report before a full cloud strategy can be drawn up. The investigation is estimated to be completed by 31 May 2021 and until then, the Fund will have a continued need to maintain and further develop infrastructure in external data halls.

## Work in 2020

The implementation of the adopted IT strategy will continue in 2020. The work on the module-based digital platform is continuing and there is strong focus on modernising and streamlining the Fund's interconnections with external systems. Selected systems will be outsourced, in order to achieve cost savings, minimise operative risk and release time for the Fund's operations and support personnel to focus on other systems prioritised by the Fund. The Fund will also continue its ongoing work on the sustainability and integration of sustainable solutions by changing to a newly-built, modern data hall with focus on sustainability. The new data hall will run on renewable electricity and will reuse the heat generated in the City of Gothenburg's district heating network.

# Contributing to the transition to sustainable development

For some time, Andra AP-fonden has worked to integrate sustainability in its asset management, among other things, with focus on climate change which plays a central role in sustainable development and also for future economic development and returns on financial assets. Under the new AP Funds Act introduced in 2019, asset management must give special weight to how sustainable development can be promoted, but without compromising the overall mission to be of the greatest possible benefit to the pension system.

The bottom line is that political measures are required to keep the global temperature in check, in line with the Paris Agreement. This does not mean, however, that institutional investors such as AP2 do not have an important role to play.

Limiting global warming to two degrees Celsius, or preferably 1.5 degrees Celsius, on which the countries of the world agreed at the Climate Conference (COP21) in Paris in 2015, entails a clear direction towards a society without net greenhouse gas emissions. The special report published by the UN's Intergovernmental Panel on Climate Change (IPCC) in October 2018 shows that it is possible to limit global warming to 1.5 degrees Celsius. This requires, however, that carbon emissions have decreased by 40 to 60 per cent by 2030, compared with 2010, and that net zero emissions are achieved by 2050, if major negative emissions are not permitted.

AP2 is working on various metrics to describe the portfolio's development in relation to the Paris Agreement. As a first step, the Fund is introducing a metric to show the proportion of the change in the carbon footprint that is due to portfolio companies changing their emissions, and the proportion due to changes in holdings in the company. AP2 has chosen to solely include companies' direct emissions (Scope 1), since companies have full control of these emissions. It is only when companies reduce their actual emissions that emissions to the atmosphere are reduced, and the climate improves. In AP2's efforts to contribute to the transition, the Fund uses various means to encourage the portfolio companies to change course and reduce their carbon emissions.

The chart below shows the development in the listed equity portfolio's total

carbon footprint in 2017-2019 for Scope 1.

The Fund's total carbon emissions were reduced by around 40 per cent in the course of two years. The reduction is mainly related to how the Fund introduced new ESG indices for global equities in 2018. These indices take account of the companies' carbon intensity. During this period, the portfolio companies' emissions increased, with the exception of Swedish companies, whose emissions declined somewhat from 2017 to 2018.

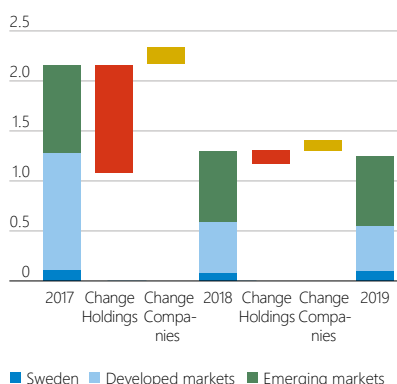
Now that AP2 reports the change for the portfolio and for the companies, respectively, the Fund can better follow up on the companies' transition to a low-carbon society. More data concerning the Fund's other metrics for its carbon footprint can be found on page 46.

## Contributing to the transition

AP2 aims to contribute to the transition towards a society in line with the Paris Agreement. The Fund will do this by:

- Investing in sustainable strategies
- Dialogue with companies
- Dialogue with decision-makers.

The listed equity portfolio's total carbon footprint (million tonnes of CO<sub>2</sub>)



## Investments in sustainable strategies

Creating a low-carbon society requires, among other things, the transformation of energy and transport systems. Several of the private equity funds in which AP2 invests focus on companies whose products and services facilitate resource-efficient solutions. AP2's investments in green bonds and timberland areas are two more examples of investments with sustainable strategies that have a positive climate impact. The Fund is also working to develop the internal ESG indices to facilitate more investment in companies with "green" activities. There is also assessed to be a considerable need for investment in

*“There is also **assessed** to be a **considerable need** for investment in sustainable infrastructure”*



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sustainable infrastructure and during the year, the Fund therefore decided to make an allocation for this purpose. Such investments are well in line with AP2's overall mission to promote sustainable development without compromising the overall goal.

#### **Dialogue with companies**

AP2 participates actively in Climate Action 100+, an international dialogue initiative launched in December 2017. Over a five-year period, the investors involved in the initiative will collaborate on dialogues with around one hundred companies that account for the world's largest greenhouse gas emissions. The aim is to make them reduce their emissions, to bring them in line with the Paris Agreement, that they report in accordance with the Task Force on Climate-related Financial Disclosures

(TCFD), and that the companies' Boards take clear responsibility for the work on climate issues. Together, AP2 and Öhmans are conducting a dialogue with AB Volvo, which is one of the companies in the initiative. A report showing the development in the dialogues under this initiative was published in September 2019 and is available on the Climate Action 100+ website.

In December 2019, more than 370 investors had signed the initiative. Read more at [www.climateaction100.org](http://www.climateaction100.org)

AP2 also contributes by spreading knowledge and influencing financial operators concerning TCFD, emphasising the importance of reporting climate risks and opportunities.

#### **Dialogue with decision-makers**

AP2 has been a member of the Institutional Investor Group on Climate Change

(IIGCC) for several years. The organisation is working to make investor engagement in climate issues clear to decision-makers and to promote investors' demands for policy measures that enable increased investments in climate-smart solutions. Among other things, the IIGCC, together with a number of other investor organisations, has published a document, Global Investor Statement on Climate Change, which describes how investors can contribute, as well as investors' expectations of governments. More than 470 investors have signed this document. Together with around 200 global investors, AP2 has urged the governments of the G7 and G20 countries to live up to the Paris Agreement, push for rapid implementation and express their continued support for this work.



# The UN's Sustainable Development Goals

**In September 2015, the 193 member states of the UN unanimously adopted 17 Global Sustainable Development Goals. The goals, to be achieved by 2030, aim to end poverty and create a sustainable world. The 17 global goals have been divided into 169 targets that are measured by various indicators.**

Each country is responsible for implementation and follow-up on the Sustainable Development Goals. To achieve the goals, governments, civil society and business and industry are required to work together.

The 17 Sustainable Development Goals are integrated and indivisible, which means that no goal may be achieved at the expense of any other one and that progress is required in all areas in order to achieve the goals. The Paris Agreement is an integral element of the UN's Sustainable Development Goals.

As a global investor, AP2 can contribute to achieving the goals in various ways; through the Fund's sustainability work and through the investments it makes.

## Examples of investments

AP2 has invested in The Rise Fund, a private equity fund that is managed by TPG Growth. The Rise Fund manages USD 2.1 billion of assets, primarily for global institutions, which makes it the largest impact fund that has ever been set up. The objective of the Fund is to achieve measurable, positive social and environmental results, as well as financial returns comparable with the market. All investments must have a positive impact on at least one of the UN's Sustainable Development Goals. The Rise Fund measures the specific size of the impact a potential investment is expected to have during its investment life cycle, with focus on the impact result as defined by the UN's Sustainable Development Goals.

## Green and social bonds

AP2 works actively to implement and develop sustainability aspects within asset management. For quite some time, the Fund has invested actively in green and social bonds. These bonds are transparent concerning how liquid funds are invested in projects to promote climate change and address social challenges. As a general rule, these projects are directly connected to at least one of the UN's Sustainable Development Goals.

Investing in green and social bonds has been an effective and successful way of implementing sustainability aspects in the Fund's fixed-income management and thereby achieving greater transparency and understanding of sustainability issues in the fixed-income portfolio. AP2 has invested in green bonds since 2008 and made its first investment in a social bond in 2014.

The Fund's ambition is to aggregate reporting for these bonds in order to give an overall picture of the sustainability aspects of fixed-income management. Today, there is no defined reporting standard and this reporting varies considerably depending on such factors as the issuers' areas of activity, where they operate, etc. During the year, AP2 analysed and compiled reporting for all of the Fund's green and social bonds. The reporting clearly shows that more and more issuers are linking their projects to the UN's 17 Sustainable Development Goals. Half of the projects reported on during the year account for their contributions to the UN's goals. For issuers

that do not report according to the goals, the Fund applied the framework created by the International Capital Market Associations (ICMA). More information is available at [www.icmagroup.org](http://www.icmagroup.org)

The aim of the analysis was to illustrate the practical implementation and diversification of sustainability within AP2's fixed-income management.

In total, the Fund has currently invested in 74 different issuers of green and social bonds. These finance around 3,000 projects, of which around half are green and half are social.

## Active involvement

AP2 is also committed to the goals in other ways. On many occasions, the Fund's CEO, Eva Halvarsson, has reported on how the Fund's investments contribute to achieving the goals. Eva Halvarsson has also given a number of interviews, primarily in international media, about the work of the Fund.

The Fund's sustainability analyst is also a member of the PRI Advisory Committee concerning the UN's Sustainable Development Goals.

AP2 participated in the financial service sector's commission "Finance Against Slavery and Trafficking (FAST)", which presented its final report – Unlocking Potential: A Blueprint for Mobilizing Finance Against Slavery and Trafficking – at the UN General Assembly in New York in September 2019.

FAST aims to eliminate modern slavery, human trafficking, forced labour and child labour, in accordance with target 8.7 of the

## Contributing to the UN's Sustainable Development Goals

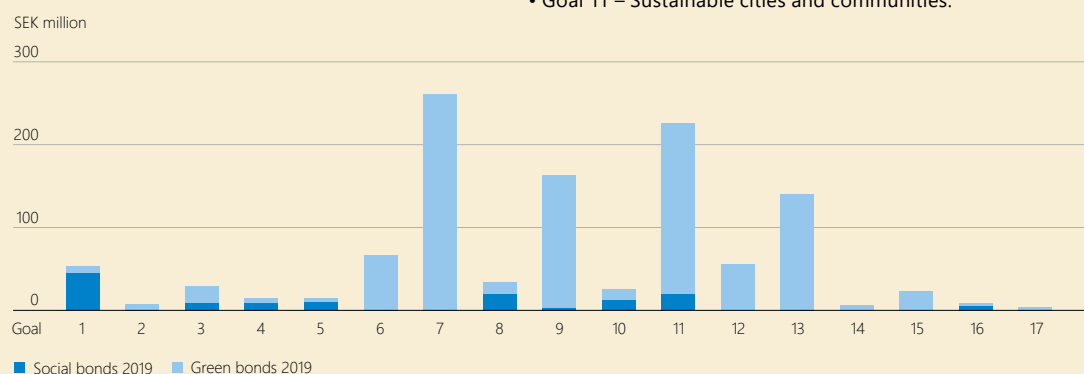
AP2's analysis shows that the Fund has a total of SEK 14.5 billion invested in green and social bonds that are directly linked to some of the UN's Sustainable Development Goals.

*AP2's analysis shows that the green bonds in the Fund's portfolio primarily contribute to*

- Goal 7 – Affordable and clean energy
- Goal 11 – Sustainable cities and communities
- Goal 9 – Industry, innovation and infrastructure

*The social bonds primarily contribute to*

- Goal 1 – No poverty
- Goal 5 – Gender equality
- Goal 11 – Sustainable cities and communities.



### Mapping the portfolio

Investing in both green and social bonds gives a wider range of sustainability aspects in the fixed-income portfolio. Review of the reporting of all holdings of social and green bonds at project level, whereby each project is connected to the UN's Sustainable Development Goals, gives a clear picture of a sustainable and diversified fixed-income portfolio. Green bonds focus primarily on Sustainable Development Goals related to the environment and climate, while social bonds focus on such areas as poverty and equality. The chart shows the market value of the Fund's total holdings of SEK 14.5 billion in relation to the UN's Sustainable Development Goals.



UN's Sustainable Development Goals. AP2 was one of only two institutional investors to take part in the commission's work.

Together with some of Europe's largest pension managers, AP2 has signed a position on the importance of international investors investing in solutions that

contribute to achieving the UN's Sustainable Development Goals. Since the Fund considers it important to have a common definition of "Sustainable Development Investments", in the position paper it encouraged other major institutional investors to take similar initiatives.

The Fund has also signed the "Stockholm Declaration" initiative. Through the initiative, both Swedish and international investors acknowledged that the UN's Sustainable Development Goals will constitute a central framework for investments up to 2030.

# Sustainability reporting

**Andra AP-fonden's sustainability work comprises the environment, ethics, social issues and corporate governance. The aim of the Fund's sustainability work is to create and protect values and to contribute to sustainable development.**

Including sustainability aspects in analyses and investment processes gives the Fund a broader and better decision-making basis. The Fund is also committed to maintaining a high level of confidence by striving to take the lead on sustainability issues, while also contributing to the development of sound practice in asset management issues.

## Significant events during the year

- During the year, the Fund created a new sustainability strategy and revised its investment convictions in order to emphasise sustainability. The Fund also drew up a new corporate governance strategy.
- Supported by the revised statutory regulations for the AP Funds concerning exemplary management, in 2019 the Fund divested from a total of about 60 tobacco companies and companies involved in the maintenance and modernisation of nuclear weapon systems.
- For the second consecutive year, in February AP2 published a report in accordance with the TCFD (Task Force on Climate-related Financial Disclosures) framework.

- During the year, AP2 was one of the first investors in the world to publish a report on its work on human rights in accordance with the framework for the UN's guiding principles.
- The UN's Principles for Responsible Investment (PRI) included AP2 in "Leaders' Group 2019". This group comprises asset owners identified by PRI as leaders concerning the choice of external managers of listed equities and/or private equity. AP2 was qualified in both categories.
- The carbon footprint of the Fund's listed equity portfolio has been reduced by half in two years.

## AP2's framework

AP2 is a government agency whose activities are governed by the Act (2000:192) on Swedish National Pension Funds. The Act has been amended as of 1 January 2019. The AP Funds' mandate includes generating a high rate of return while maintaining a low level of risk. The investment strategy shall make provision for the impact of pension disbursements, as well as the liquidity requirement associated

with outflows from the Funds. It is important that AP2 has the trust and confidence of the general public and acts in a responsible manner. The revised Act states that the AP Funds must manage their assets in an exemplary manner through responsible investments and responsible ownership.

The Fund gives high priority to both sustainability and responsible conduct. A proactive approach to the environment, ethics, social issues and corporate governance are the means to attain the objective of a high, risk-adjusted return.

## Governing documents for sustainability work

AP2 has a number of policies and guidelines as the basis for its sustainability work (see the description on page 41). There is continuous information and training on these policies and guidelines. The Fund undertakes an annual review of policies and guidelines, with follow-up via controls and procedures in its activities.

Regulations and conventions such as the OECD Guidelines for Multinational Enterprises and corporate governance,

## About the Sustainability Report

Andra AP-fonden presents a separate detailed sustainability report, including a GRI index, that is published on the Fund's website. The sustainability information in the Annual Report is solely a summary. The Fund also has the ambition to adhere to the content of Part 6, Sections 11-12, of the Swedish Annual Accounts Act. This section includes information about the climate, as well as respect for human rights. Information concerning anti-corruption can be found on page 33, and on social conditions and employment on page 30.

## The Fund's definition of sustainability

AP2's sustainability work emanates from the Fund's mission and entails a long-term initiative to protect and build value in investments – from an economic, environmental and social perspective.

## Andra AP-fonden's management of sustainability-related issues

Decision level	Category	Governing documents	Follow-up	Goals and outcomes 2019	
THE BOARD OF DIRECTORS	Strategy	Operating plan, including corporate governance policy and sustainability policy	Followed up by the Board and Executive Management.	Goal: Long-term expected annual real return of 4.5%.	Outcome: In five years 5.9%; in ten years, 7.2%.
	Return		Followed up by the Board and Executive Management and reported in the Annual Report and Half-year Report.		
	Code of conduct	Ethics policy	The General Counsel has overall responsibility for following up on how the guidelines are complied with and reports to the Board of Directors on important ethical issues concerning the activities and the employees' actions.	Goal: No form of corruption, or giving or taking of bribes.	Outcome: 0 cases.
		Compliance policy			
		Principles for hospitality and gifts			
	CEO/EXECUTIVE MANAGEMENT	Sustainability	Policy for human rights	The work is followed up by the Board of Directors, Executive Management and steering groups.	Goal: See the separate Sustainability Report.
Financial sustainability areas					
Environmental policy			Goal: Increase the number of Gothenburg-Stockholm train journeys. Reduce the number of printouts.		Outcome: See page 46.
Sustainability strategy					
Staff manual		HR policy	The CEO is responsible for ensuring that policies and plans are drawn up. The overall work is planned and followed up by the Fund's HR manager.	Goal: Increase the proportion of female managers at AP2.	Outcome: 28 (33)%.
		Equality and diversity plan			
		Discrimination policy		Goal: No employee may be exposed to discrimination.	Outcome: 0 cases.
	Working environment policy				
	Hospitality policy				
	Travel policy				

the UN's Global Compact, the UN's Principles for Responsible Investment, the UN's Guiding Principles on Business and Human Rights, the Swedish Companies Act, the Swedish Code of Corporate Governance, and other specific codes of corporate governance such as the ICGN Global Stewardship Principles and the UK Stewardship Code, together with the EU's work on Sustainable Finance, also form the basis for AP2's sustainability work.

AP2 supports and works to implement the UN-supported Principles for Responsible Investment (PRI). The Fund signed these principles as early as 2006, when they were launched. AP2 also complies with PRI's Guidance for Responsible Investment in Farmland. These were drawn up in 2011 by AP2 and a group of international investors. AP2's reporting on the implementation of these principles can be found on the Fund's website.

### Organisation and allocation of responsibility

AP2's Board determines guidelines and policies in governance issues and has mandated the CEO of the Fund to manage these in the ongoing operations of the Fund. The Fund's Executive Management, together with the Head of the Strategy Department and the Fund's senior sustainability analyst, is responsible for the strategic sustainability work, as well as implementation and follow-up. The ongoing work is handled in all of the Fund's departments.

In order to continue to successfully integrate sustainability issues in asset management, during the spring of 2019 AP2 restructured the organisation so that the Fund's sustainability analysts are now part of asset management's strategy department.

The ongoing corporate governance work is carried out by the Fund's Corpo-

rate Governance Group, which comprises members of the Fund's Executive Management and the Head of Swedish Equities. Based on the Fund's corporate governance strategy, the Corporate Governance Group draws up action plans and continuously follows up the work.

At each Board meeting, AP2's Board receives a report on the Fund's sustainability and corporate governance work.

### Council on Ethics of the AP Funds

Dialogue with foreign companies is coordinated through the AP Funds' joint Council on Ethics. The Council on Ethics is a collaboration between the First, Second, Third and Fourth AP Funds, and was launched in 2007. The Council on Ethics conducts preventive and reactive investor dialogue with companies all over the world.

The companies with which the Council on Ethics conducts dialogue are identified

**Sustainability strategy based on the Fund's mission**

primarily in conjunction with the biannual screening of the AP Funds total shareholdings, in order to determine whether any portfolio company is in contravention of an international convention. This screening is conducted by an external consultant. This work is based on the principles of commitment, action and change, with the intention of making a difference. The Council on Ethics identifies companies that can be linked to breach of conventions and focuses on persuading such companies to deal with confirmed breaches and to implement systems and measures to preclude future violations. Dialogue is a vital tool in enabling the Council on Ethics to influence corporate behaviour. More information is available at [www.etikradet.se](http://www.etikradet.se)

**Stakeholder dialogue and materiality analysis**

Through their operations and investments, the AP Funds have an impact on people, the environment and society. In order to identify the most important sustainability issues, during 2017 the First, Second, Third and Fourth AP Funds undertook a materiality analysis.

A key aspect of the analysis was dialogue with representatives of the Funds' most important stakeholder groups who to a great extent are impacted by or who

themselves impact the Fund's operations. The stakeholder dialogue took the form of a workshop. The Funds' objective with the workshop was to identify stakeholder expectations and prioritised issues, receive feedback on the Funds' current sustainability work, and learn the views of stakeholders with regard to the ongoing sustainability work.

All stakeholder groups held the view that the most important aspect is the AP Funds' actions in investment and asset management operations, since the most significant impact is in these areas. Long-term returns were seen as an overall goal and not as a specific sustainability goal.

It was found that the choice of prioritised sustainability issues varies between the different companies and funds in which the AP Funds invest. However, three issues were highlighted as being particularly important and to be given highest priority: indirect environmental impact, indirect climate impact and human rights.

Each AP Fund then undertook its own prioritisation of the sustainability issues according to its own specific circumstances.

**Sustainability strategy**

AP2 worked on a sustainability strategy during the year. The strategy is based on

the Fund's statutory mission, as well as its investment beliefs. The strategy also reflects the Fund's vision and values. The investment beliefs set the outer framework for the Fund's approach to sustainable asset management. In addition, based on the beliefs, a number of more specific sustainability principles were defined. The sustainability strategy is based on these principles with the aim of specifying the activities to be undertaken in order to achieve the overall goal of a sustainable strategic target portfolio, which includes a portfolio in line with the Paris Agreement. More information is available on page 20.

AP2's six sustainability principles are:

1. AP2 integrates sustainability in all investment processes.
2. AP2 actively seeks investments that contribute to sustainable development.
3. AP2 works on the basis of the focus areas.
4. AP2 uses dialogue as a tool.
5. AP2 takes a scientific approach.
6. AP2 seeks to be a leader within sustainability.

The sustainability strategy also includes metrics for analysis of how the Fund's sustainability work impacts returns and risk.

**Climate**

Climate issues are integrated in the Fund's analysis and decision-making processes for all asset classes for which this is relevant. The ambition is to develop the portfolio in line with the Paris Agreement. The basis for the Fund's climate initiatives is to reduce the financial climate risks while also contributing to the transition. In a document published on the Fund's website, AP2 has described its approach to the climate transition and described why and how the Fund works with climate issues.

Climate change is deemed to have the potential to impact long-term returns considerably. Integrating climate aspects



## AP2's focus areas

AP2's sustainability work is concentrated primarily on the prioritised focus areas that the Fund considers to be important to achieving better long-term returns. The aim of focusing the Fund's resources on a number of areas is to achieve results within areas that are financially significant. AP2 possesses extensive expertise and experience in these selected focus areas, since the Fund has worked on these issues for a considerable period. The Fund also expects to work with these areas long into the future.

During the year, the Fund reviewed its focus areas and decided to add one, human rights, since this is also an area of great importance within which the Fund has undertaken structured initiatives for a few years.

The Fund's focus areas within sustainability are:

- Climate
- Corporate governance
- Diversity
- Human rights.

The work within these focus areas are targeting companies in which AP2 has invested most substantially and/or those in which the Fund controls a significant interest, and in sectors deemed to pose considerable risks in terms of financial sustainability. The reason is that the Fund must focus on areas and companies which are the most financially important for the Fund. The work on human rights issues is primarily undertaken on the basis of a severity perspective, in accordance with the UN's guiding principles. This can take place in cooperation with other investors, in order to achieve improvements in an individual company and/or within a sector. The work on the focus areas is also conducted internally.

Targets broken down in the long and short term for the respective focus areas and activities for achieving the goals are specified in the Fund's annual business plan for sustainability and in the action plans for each asset class. Detailed reports for the respective focus areas can be found in the Fund's Sustainability Report, <https://www.ap2.se/en/news-reports/reports/sustainability-and-corporate-governance-reports/>

*read more...*

More information is available at [www.ap2.se](http://www.ap2.se)

## World-class management



**THE GLOBAL GOALS**  
For Sustainable Development



***“Climate issues are integrated in the Fund's analysis and decision-making processes for all asset classes for which this is relevant. The ambition is to develop the portfolio in line with the Paris Agreement”***

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into risk assessments and investment decisions is therefore becoming increasingly important. Financial climate risks can be divided into two groups: transition risks and physical risks. Transition risks are divided into regulatory risks, technological risks, market risks and reputation risks. Physical risks are divided into acute and systematic risks.

Since 2013, work has been ongoing to analyse financial climate risks for fossil-fuel based energy companies and coal-based electric power companies. An important part of this work is to assess whether the climate risks faced by the companies are priced by the market. AP2's analysis of financial climate risks focuses on regulatory risks for companies within fossil-fuel

based energy and the electric power sector. The Fund's work also includes analyses of technologies and markets for fossil-fuel based energy. In total, AP2 has divested equities and corporate bonds in 80 companies due to financial climate risks.

On page 46, the Fund reports the carbon footprint of listed equities in line with the AP Funds' new common guidelines. During the year, the Fund reduced its carbon intensity by 7 per cent compared to the previous year. The portfolio-weighted carbon intensity decreased by 12 per cent.

For the second consecutive year, AP2 published a report in accordance with the TCFD (Task Force on Climate-related Financial Disclosures) framework.

Together with the First, Third and Fourth AP Funds, AP2 has written a letter to around 80 global companies encouraging them to report in accordance with TCFD. The AP Funds support the recommendations in the TCFD framework, since this framework increases companies' transparency and gives investors the information needed to assess a company's climate risks and opportunities.

The Fund's own direct environmental impacts are relatively limited. The in-house environmental inventory shows that the greatest environmental impact from AP2's offices comes from the use of electrical energy and the carbon emissions associated with business travel. Internal targets have been set on the basis

of the internal environmental policy. Among other things, 97 per cent of all business journeys between Gothenburg and Stockholm are made by train. During the year, the Fund also held a workshop for all employees in order to reduce business travel, so as to lower the carbon footprint, reduce costs and change working methods by, for example, making greater use of video conferencing.

### **Respect for human rights**

AP2 is working actively to take human rights into consideration in all of its activities, and to further develop the Fund's integration of these issues into the investment process. In 2017, the Fund's Board of Directors adopted a human rights policy, and during the year, compulsory internal basic training in human rights was held for all employees.

During the year, AP2 was one of the first investors in the world to publish a report on its work on human rights in accordance with the framework for the UN's guiding principles. The report describes how the Fund views its responsibility to respect human rights and the processes which the Fund has in place to integrate human rights in its activities. The report describes areas in which the Fund has taken important steps to develop its work, but also reports on some of the challenges identified. More information is available at [www.ap2.se](http://www.ap2.se)

Since 2016, AP2 has structured the work of increasing the integration of human rights issues in its investment decisions. AP2 works both reactively and proactively and, as an important step in the proactive work, the Fund has developed its risk identification. The Fund has previously assessed the risks of potential negative impacts caused by the Fund itself or that could be present among the Fund's suppliers. To identify risks associated with the Fund's holdings, the Fund is currently working on developing a quantitative

model that can identify human rights risks in different sectors, countries and portfolio companies. The purpose of the model is to help the Fund prioritise what its preventive efforts should address, based on the severity of the risks.

### **Cooperation with other investors**

In addition to the cooperation between the AP Funds in the Council on Ethics, AP2 works with other Swedish and international investors. AP2 is also a member of and supports various Swedish and international initiatives in issues relating to the environment, ethics and corporate governance. The Fund works with other investors to influence new legislation, primarily within corporate governance. This cooperation is becoming increasingly important in order to influence and bring about change, and thereby to improve shareholder value in the long term.

### **Collaboration on climate issues**

AP2 works with other European investors on climate issues through membership of the IIGCC (Institutional Investors Group on Climate Change). The aim is to promote investors' views on climate issues and to engage with companies, authorities and other investors in order to highlight long-term risks and opportunities that arise in connection with climate change.

IIGCC is an effective platform to promote investors' requests in the climate area. It is also a good way for the Fund to obtain the latest information about various climate-related investments. More information is available at [www.iigcc.org](http://www.iigcc.org)

A full Sustainability Report for 2019 is available at [www.ap2.se/en/news-reports/reports/sustainability-and-corporate-governance-reports](http://www.ap2.se/en/news-reports/reports/sustainability-and-corporate-governance-reports)

## Auditors statement concerning Andra AP-fonden's Sustainability Report

For Andra AP-fonden, org.no. 857209-0606

### **Engagement and responsibility**

The Board of Directors is responsible for the Sustainability Report for 2019 and for its presentation in accordance with Andra AP-fonden's principles for sustainability reporting in accordance with the provisions of the Swedish Annual Accounts Act.

### **Purpose and scope of the audit**

Our examination was conducted with guidance from FAR's standard RevR 12 The auditor's opinion regarding the statutory sustainability report. This means that our examination of the sustainability report is substantially different and less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinion.

### **Opinion**

A statutory sustainability report has been prepared.

Gothenburg, 6 February 2020

Helena Kaiser de Carolis  
Authorised Public Accountant

Peter Nilsson  
Authorised Public Accountant

# Sustainability data

## Climate/Environment

### Carbon footprint of the listed equity portfolio, Scope 1 and 2

Metrics	2019	2018	2017
<b>1. Total carbon emissions (mn tCO<sub>2</sub>e)</b>	1.6	1.7	2.6
Sweden	0.1	0.1	0.2
Developed markets	0.6	0.7	1.4
Emerging markets	0.9	0.9	1.1
Change in the portfolio's total carbon emissions from the preceding year (%)	–3		
– of which the change related to changes in the portfolio holdings (% units)	–10		
– of which the change related to changes in the companies' emissions (% units)	7		
<b>2. Relative carbon emissions (tCO<sub>2</sub>e/SEK m)</b>	11	13	18
Sweden	4	4	5
Developed markets	9	11	19
Emerging markets	19	22	32
<b>3. Carbon intensity (tCO<sub>2</sub>e/SEK m)</b>	14	15	28
Sweden	7	7	10
Developed markets	11	12	31
Emerging markets	20	24	37
<b>4. Weighted average carbon intensity (TCFD) (tCO<sub>2</sub>e/SEK m)</b>	14	16	24
Sweden	5	5	6
Developed markets	15	16	27
Emerging markets	21	23	23
Change in the portfolio's carbon intensity (TCFD) from the preceding year (%)	–7		
– of which the change related to changes in the portfolio holdings (% units)	–8		
– of which the change related to changes in the companies' emissions (% units)	1		
Market value of the Fund's portfolio covered by CO <sub>2</sub> e data (SEK billion)	144.1	130.5	142.4
Proportion of share capital for which data is available (%)	96	97	92

1. Total carbon emissions. Total of owned share of portfolio companies' individual carbon emissions.

2. Relative carbon emissions. Total of owned share of portfolio companies' individual carbon emissions in relation to the portfolio's market value.

3. Carbon intensity. Total of owned share of portfolio companies' individual carbon emissions in relation to the total of owned share of the portfolio companies' turnover.

4. Weighted average carbon intensity (TCFD). The metric adds together each portfolio company's individual carbon intensity, i.e. a company's carbon emissions in relation to turnover, weighted according to each individual company's share of the portfolio.

The formulae for the above indicators are available on the Fund's website.

CO<sub>2</sub>e (carbon dioxide equivalent) is a unit of measurement that makes it possible to compare the climate impact of different greenhouse gases.

Source: MSCI ESG Research/Andra AP-fonden.

### Certification of timberland

	Number of hectares	Proportion, %
Certified timberland in accordance with the FSC and/or PEFC	106 455	93
Timberland in the process of certification in accordance with the FSC and/or PEFC	4 096	4
Land that is sustainably managed in accordance with the FSC and/or PEFC, but that cannot be certified	910	1
Other: Land taken up by e.g. roads, buildings and other non-productive areas, or land that has not yet been planted	2 474	2

The figures in this table are correct as at 31 December 2018.

## Environmental data

	2019	2018	2017
<b>Internal environmental indicators</b>			
Electricity, kWh	128 300	126 000	135 000
Renewable electricity, %	100	100	100
Copying paper, purchased (A4), kg	191	315	350
Number of printouts	70 900	107 000	159 000
<b>Business travel</b>			
Proportion of train journeys between Gothenburg and Stockholm, %	97	88	91
Carbon emissions from:			
Rail, domestic, tonnes of CO <sub>2</sub> e	0	0	0
Air, domestic, tonnes of CO <sub>2</sub> e	1	5	5
Air, abroad, tonnes of CO <sub>2</sub> e	187	169	172

## Corporate governance

### Nomination committees in which Andra AP-fonden participated prior to the 2019 annual general meetings

Company	Proportion of women on the Board, %	Number of newly elected women	Total change compared to previous year
Better Collective	20	0	–
Coor Service Management	43	0	0
Immunicum	40	0	0
IAR Systems	20	0	–2
Kindred	29	0	0
Kungsleden	50	0	–1
Midsona	33	0	0
Opus Group	43	0	0
Resurs Holding	38	1	1

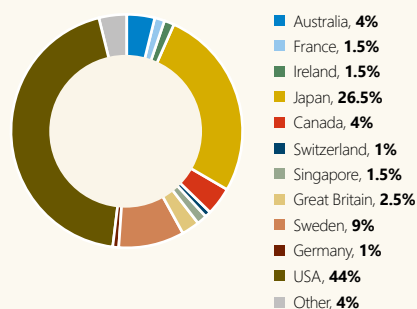
### Board or shareholder proposals on which Andra AP-fonden voted in foreign companies in 2019, number

Area	Board proposals	Shareholder proposals
Auditors, financial reporting, formalities, etc.	1 033	0
Board of Directors	7 955	18
Remuneration issues	984	40
Capital structure	317	1
Group structure, agreements, acquisitions, etc.	81	0
Shareholders' rights/governance	85	191
Sustainability	0	57
Other	2	2
<b>Total</b>	<b>10 457</b>	<b>309</b>

### Voting at annual general meetings in 2019

	Number
Number of AGMs, Sweden	85
Number of AGMs, foreign	865
Agenda items, foreign	10 766

### Voting per market in 2019, %



## Employees

### Employee statistics

	2019	2018
No. of permanent employees	71	70
Female staff, %	34	35
Female staff in executive management, %	33	33
Proportion of women on the Board, %	44	44
Average age, years	45	44
Median age, years	45	44
Personnel turnover, %	7.1	1.5
Absence due to illness, %	1.2	2.1



*“Andra AP-fonden has thus **paid out approximately SEK 57 billion** over the past **eleven** years to cover the ongoing **shortfall** in the **pension system**”*



# Result and performance 2019

At 31 December 2019, the Fund's capital totalled SEK 381.3 billion. The year's result, SEK 53.0 billion, is a consequence of developments in global financial markets, and also reflects good returns from the fixed-income portfolio and the Fund's investments in private equity funds and real estate. Andra AP-fonden's net outflow for the year to the national pension system was SEK 6.5 billion.

The Fund's capital is impacted by two factors; profit/loss for the year and net flows within the pension system. In 2019, the Fund's net capital grew by SEK 46 522 (–11 103) million, boosted by the profit of SEK 53 042 (–4 330) million, but also offset by net outflows of SEK –6 520 (–6 773) million to the pension system. The flows consisted of contributions paid into the system and pension disbursements from it, amounting to a net of SEK

–6 335 (–6 557) million plus costs for administration of the pension system which reduced the Fund's capital by SEK –185 (–216) million. For the eleventh successive year, the net flow from the AP Funds to the pension system was negative. Andra AP-fonden has thus paid out approximately SEK 57 billion over the past eleven years to cover the ongoing shortfall in the pension system.

## The Fund capital performance 2019, SEK million

	2019	2018
Fund capital at beginning of year	334 828	345 931
Pension contributions received	72 346	69 554
Pension disbursements	–78 681	–76 111
Administration contribution	–185	–216
Net result for the year	53 042	–4 330
<b>Fund capital at year-end</b>	<b>381 350</b>	<b>334 828</b>

## Development of the asset classes in the strategic portfolio, exposure and return at 31 Dec 2019 and 31 Dec 2018

Asset class	Strategic portfolio, %		Exposure, %		Exposed value, SEK billion		Absolute return, %		Relative return, %		Active risk ex-post*, %	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Swedish equities	9.0	9.5	9.0	8.8	34.4	29.5	30.2	–4.6	–4.4	–0.8	1.9	2.3
Developed market equities	20.5	21.5	19.9	19.3	75.8	64.5	31.7	–3.3	–0.8	0.5	0.4	0.5
Emerging market equities	11.0	11.0	10.9	10.4	41.4	34.8	19.9	–7.3	1.0	0.4	0.6	0.6
Swedish fixed-income securities	8.0	12.0	7.8	11.9	29.9	40.1	0.5	0.8	–0.6	–0.2	0.5	0.3
Foreign government bonds	4.0	4.0	3.7	4.0	14.1	13.2	11.9	5.9	–0.4	0.1	0.6	0.5
Foreign credits	9.5	10.5	9.0	10.3	34.3	34.4	18.0	3.7	0.2	–0.4	0.3	0.3
Global green bonds	3.0	1.0	2.8	1.0	10.7	3.4	11.1	4.7	–0.9	0.3	0.3	0.4
Emerging market fixed-income securities	7.5	6.5	7.2	6.3	27.6	21.1	19.3	3.3	0.3	0.7	0.4	0.5
<b>Total listed assets, excl. alternative investments, commission and operating expenses</b>	<b>72.5</b>	<b>76.0</b>	<b>70.3</b>	<b>72.0</b>	<b>268.3</b>	<b>241.0</b>	<b>17.2</b>	<b>–4.1</b>	<b>–0.9</b>	<b>–0.2</b>	<b>0.5</b>	<b>0.4</b>
Alternative investments	27.5	24.0	29.7	28.0	113.1	93.8	13.2	7.4				
<b>Total Fund capital, excl. commission and operating expenses</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>381.4</b>	<b>334.8</b>	<b>16.1</b>	<b>–1.2</b>				

\* Historical outcome, 12 months rolling.

# Net result for the year

**A strong performance in 2019 resulted in a profit of SEK 53.0 billion, which primarily reflects positive developments in world stock markets and also good returns from fixed-income assets and non-listed assets. The Fund's investments have a total return of 16.1 per cent (excluding costs).**

## Operating income

Operating income comprises both direct return and net income per asset class as well as foreign-exchange gains/losses less commission expenses. The breakdown of the profit/loss figures in the income statement means that each net income item shows profit/loss excluding the impact of foreign currency exchange rate movements, the translation of profit/loss into Swedish kronor, and the impact of the Fund's currency hedging on profit/loss. Both impacts are instead recognised net in the item Net Income, exchange movements. Overall, the weakening of the Swedish krona in 2019 has had a significant positive impact on reported earnings in assets in foreign currencies. This impact has been partly offset by the negative effect of the Fund's currency hedging of parts of the portfolio.

The direct return in the form of net interest income and dividends received totalled at SEK 9 590 (9 467) million for the year.

The net income for listed equities comprising both unrealised and realised gains/losses stood at SEK 27 129 (–17 029) million including expenses for performance-based fees, but excluding impacts of exchange rate movements. The result is a consequence of a strong return on all equity markets in which the Fund invests. The Fund's Swedish equity portfolio returned a total of 30.2 per cent, compared with a return of 31.7 per cent for the foreign equity portfolio in developed markets and 19.9 per cent for emerging markets.

Net income for non-listed equities totalled SEK 6 278 (5 637) million, and is primarily attributable to the return of 14 per cent on the Fund's portfolio of traditional real estate and the return of 12.5 per cent on private equity funds, including currency hedging.

Net income for fixed-income securities stood at SEK 6 108 (–2 532) million, which reflects a significantly higher return in 2019 than in the previous year, excluding the effect of the weakening of the Swedish krona. The positive return was primarily attributable to the Fund's portfolios with foreign loans of credit and fixed income assets in emerging markets.

The Fund's trading in derivatives reported negative net income, SEK –932 (–3 722) million, primarily affected, this year too, by the forward exchange contracts used for hedging that are accounted for as derivatives.

As a consequence of the weakening of the Swedish krona in 2019, the Fund's currency exposure had a positive impact on reported earnings from foreign currency assets. The Fund's cur-

rent hedging of parts of the portfolio of foreign currency assets has had an adverse impact on earnings during the year. Recognised net income from movements in foreign currency exchange rates, where the year's positive impacts of exchange rate movements on foreign holdings, SEK 13 025 (13 008) million and the negative impacts of currency hedging, SEK –7 624 (–8 660) million are reported together, stood at SEK 5 401 (4 348) million. More details of the Fund's currency exposure are given on page 68.

Management expenses in the form of performance-based fees, totalling SEK 148 (80) million, were charged to net income for externally managed assets in 2019. This cost arises when an external portfolio manager generates a return over and above a certain target, which directly affects the Fund's net income in each asset class in accordance with current accounting principles. Commission expenses pertaining to fixed external management fees of SEK 249 (236) million and custodial expenses of SEK 43 (44) million were charged to operating income.

## Fund's total expenses

The Fund's total expenses include in-house costs in the form of operating expenses, fixed external portfolio management expenses and custodial expenses. Variable expenses relating to performance-based contracts and asset management fee payments are charged to net income for each asset class, as presented in Notes 3 and 4 on page 76. The Fund's operating expenses and commission expenses, expressed as an expense ratio, were 0.15 (0.14) per cent for 2019. The level of costs is a direct effect of the Fund's investment strategy, according to which external managers are hired for asset classes and markets that are believed to offer the prospect of solid returns and for which the Fund lacks the necessary in-house resources. Despite the fact that, over the years, the portfolio has become increasingly complex with different asset classes in a growing number of markets throughout the world, the expense ratio has remained relatively constant. The internalisation process implemented between 2012 and 2015 has enabled greater diversification in today's strategic portfolio. A global cost-efficiency comparison with other pension funds shows that Andra AP-fonden is highly cost-efficient, which is commented on in greater detail on page 69.



### Operating expenses

Operating expenses totalled SEK 240 (219) million. Reported in relation to average Fund capital over the twelve months, this corresponds to a slightly higher cost level (expense ratio excluding commission expenses) of 0.07 (0.06) per cent.

### External management costs

Asset management costs are largely dictated by the size of the Fund's capital, percentage of assets under external management, level of active risk taking and choice of asset class. During 2019, the approach for Fund capital under external management was mainly active and, by year-end, SEK 72 (58) billion was being managed under external mandates, including non-listed assets. This is equivalent to 19 (17) per cent of the Fund's total asset value. The cost for external management of market-listed assets partly comprises a fixed element and, for certain services, a performance-based element. In 2019, the fixed cost was SEK 249 (232) million and the variable performance-based element was SEK 148 (80) million. External fixed management fees for the year were impacted adversely by the weakening of the Swedish krona, and have also increased commensurately with the growing asset base. In relation to assets under management, however, commission expenses are relatively unchanged compared with the level achieved through the internalisation process in 2012–2015. Furthermore, the fact that the AP Funds have been liable to pay VAT on foreign acquisitions since 2012 has also increased costs. As the AP Funds are not entitled to reclaim VAT payments, this VAT registration requirement constitutes an increase in the Fund's overall costs.

### Custodial expenses

The internalisation process implemented over the past few years has had an impact on the volume of custodial assets. Andra AP-fonden has partly transferred assets previously managed via external funds or derivatives, where custodial expenses have been included in fund fees, to in-house management. This transfer, combined with the rise in value of all assets, has led to higher custodial expenses after the internalisation process. The expenses are also affected by the type of asset deposited with the custodial bank. Assets exposed to emerging markets, for example, are relatively expensive to place on deposit. Custodial expenses were SEK 43 (44) million in 2019.

### Brokerage commission

A brokerage commission is paid on the purchase and sale of equities and participations. When buying and selling other asset classes, the transaction cost is limited strictly to the difference between the buy and sell rates, known as the 'spread'. To allow comparison of the asset classes, brokerage commission is reported as a deductible item in Net Income for listed equities and participations. See Note 2 on page 76. Brokerage commission paid in 2019 totalled SEK 68 (89) million. Of these costs, 12 (8) per cent derived from commission paid to the Fund's external managers and the remainder to the Fund's in-house portfolio management organisation. Costs amounted to 0.06 (0.04) per cent of the total trading volume. The following five counterparts (listed in alphabetical order) received commissions equivalent to 60 per cent of total commission payments: Goldman Sachs, JP Morgan, Merrill Lynch, Morgan Stanley and UBS AG.

### Contribution to relative return, %

Asset class	2019	2018
Swedish equities	-0.47	-0.11
Developed market equities	-0.20	0.13
Emerging market equities	0.12	0.05
Swedish fixed-income securities	-0.09	-0.02
Foreign government bonds	-0.02	0.00
Foreign credits	0.03	-0.05
Global green bonds	-0.01	0.00
Emerging market fixed-income securities	0.03	0.05
Absolute return	-0.24	-0.18
<b>Total market-listed assets excl. alternative investments and implementation effects</b>	<b>-0.85</b>	<b>-0.13</b>
Implementation effects*	-0.05	-0.05
<b>Total market-listed assets excl. alternative investments and incl. implementation effects</b>	<b>-0.90</b>	<b>-0.18</b>

\* Result effects to maintain exposure to strategic portfolio.

### Contribution to absolute return, %

Asset class	2019	2018
Swedish equities	2.6	-0.4
Developed market equities	6.0	-0.6
Emerging market equities	2.1	-0.8
Swedish fixed-income securities	0.1	0.1
Foreign government bonds	0.5	0.2
Foreign credits	1.9	0.4
Global green bonds	0.0	0.1
Emerging market fixed-income securities	1.4	0.2
Absolute return	-0.2	-0.2
Overlay	-0.1	-0.1
Currency hedging listed portfolio	-2.0	-2.1
Alternative investments	5.0	3.1
Currency hedging alternative investments	-1.1	-1.1
<b>Total assets, excl. commission expenses and operating expenses*</b>	<b>16.1</b>	<b>-1.2</b>

\* Including currency hedging.

# Portfolio return

The total portfolio return in 2019 was 16.1 per cent, excluding commission expenses and operating expenses but including performance-based fees.

The listed portfolio return was 17.2 per cent, including currency hedging. Listed equities recovered sharply after negative growth in the previous year. Foreign equities in developed markets noted a return of 31.7 per cent in Swedish kronor, excluding currency hedging effects. Swedish equities reported a return of 30.2 per cent and emerging market equities, excluding Chinese equities, which are reported under alternative investments, rose 19.9 per cent.

The return on Swedish bonds was 0.5 per cent, making it the asset class with the lowest return in 2019. The returns on foreign government bonds and credits were 11.9 per cent and 18.0 per cent respectively, in Swedish kronor and excluding currency hedging. Global green bonds rose 11.1 per cent, also in Swedish kronor and excluding currency hedging effects. Bonds in emerging markets increased in value by 19.3 per cent in Swedish kronor. The asset type is partly currency hedged.

Alternative investments, i.e. real estate, private equity funds, alternative credits, alternative risk premiums, Chinese government bonds and Chinese A-shares, generated a return of 13.2 per cent, including currency hedging. The contribution made by the various asset classes to the total return depends on their return and on the relative percentage of portfolio value they represented during the year. Accounting for a large share of the portfolio, developed market equities contributed 6.0 per cent to the return. Swedish equities contributed 2.6 per cent and emerging market equities 2.1 per cent. Return contributions from Swedish bonds and foreign government bonds were 0.1 and 0.5 per cent respectively. Global green bonds contributed marginally to the total return. Foreign credit bonds contributed 1.9 per cent, while emerging market bonds boosted the return by 1.4 per cent. These contributions are recognised exclusive of the effects of currency hedging. Alternative investments contributed 3.9 per cent, including currency hedging.

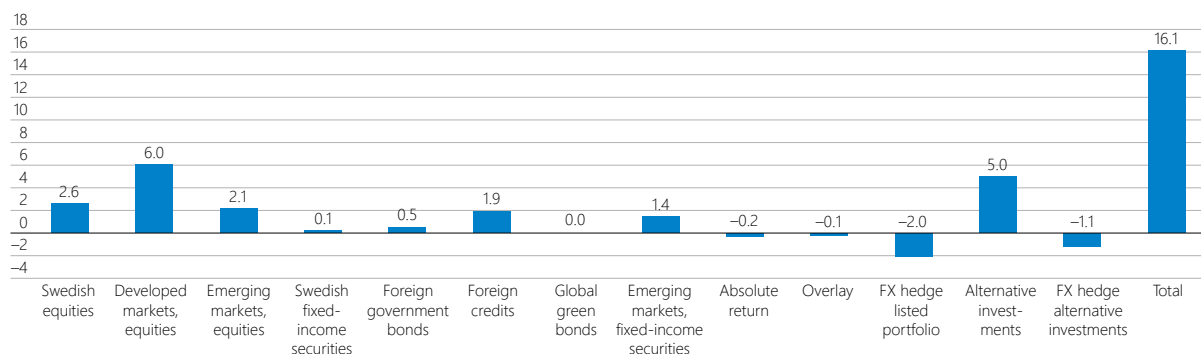
The AP Funds have a 40 per cent statutory limit for currency exposure. Andra AP-fonden's currency hedging policy aims to reduce the risk in the portfolio. The Fund therefore implements a systematic hedging programme for the currencies of developed countries, with a view to reducing variation in the value of the portfolio in the long term. Due to the Swedish krona once again weakening during the year, the effect of currency hedging for the listed portfolio was -2.0 per cent. Since the Fund does not hedge its entire exposure to the currencies of developed countries, this negative effect on return was offset by the rise in value of assets in foreign currencies. The Fund does not hedge emerging market currencies.

The Fund's real-estate portfolio, excluding timberland and farmland real estate, returned 14 per cent. The portfolio of timberland and farmland real estate returned 2.9 per cent. The return on private equity investments was 12.5 per cent, while the portfolio of alternative risk premiums generated 7.6 per cent. The alternative credit portfolio returned 7.3 per cent. These returns are recognised inclusive of currency hedging.

The Fund invests in equities on the domestic Chinese market, in Chinese A-shares. Since opportunities to add or withdraw assets from this portfolio are subject to certain administrative constraints, it has been classified under alternative investments. The return on these was the Fund's best asset class, with an annual return of 52.6 per cent, compared with the previous year's negative return of -20.8 per cent. As they did last year, the Fund's active portfolio managers helped to improve the return considerably. Chinese government bonds, which like the equities are classified as alternative investments, returned 8.3 per cent. The Chinese assets are not currency hedged.

Andra AP-fonden has generated an annual average return of 7.4 and 8.4 per cent over the past five and ten years respectively. Minus inflation, this is equivalent to an annual real return of 5.9 per cent over five years and 7.2 per cent over ten years. The portfolio has thus exceeded Andra AP-fonden's expected return of 4.5 per cent (including costs) per year over both time periods.

## Contribution to total portfolio, absolute return in 2019, excluding costs, %





# Relative growth of the listed portfolio

The Fund's portfolio of market-listed securities comprises Swedish and foreign equities, Swedish and foreign fixed-income assets, tactical allocation and currency management. In 2019, the listed portfolio reported a return of 17.2 per cent, in Swedish kronor including currency hedging. Total relative return, i.e. active return including implementation effects (costs arising in connection with rebalancing and transactions that are not attributable to active management) was –0.9 per cent. The effects of implementation reduced the relative return by 5 basis points.

Over the past five years, the Fund's active return has averaged –0.04 per cent per year. Over the same period, the implementation effects have averaged –0.06 per cent. The average relative return has thus been –0.10 per cent. For administrative reasons, this calculation does not take into account active return from the Chinese equity mandates. If these had been included in the calculation, the relative return for the year would have been 20 basis points higher. If the Fund's investments in Chinese equities are included, the average relative return in the past five years is 0.19 per cent and equivalent active return is 0.25 per cent.

## Swedish equities

The Swedish equity portfolio underperformed its benchmark index by –4.4 per cent. The portfolio of fundamentally managed equities underperformed against its weighted index by –3.3 per cent. The small-company portfolio underperformed its benchmark index by –8.1 per cent. The Fund manages all Swedish equities in-house.

## Foreign equities

The Fund's management of foreign equities in developed markets delivered a negative active result of –0.8 per cent. The active result for emerging market equities was 1.0 per cent. Chinese A-shares are managed under large-deviation mandates, and the active return for the year was 6.5 per cent.

## Swedish and foreign fixed-income assets

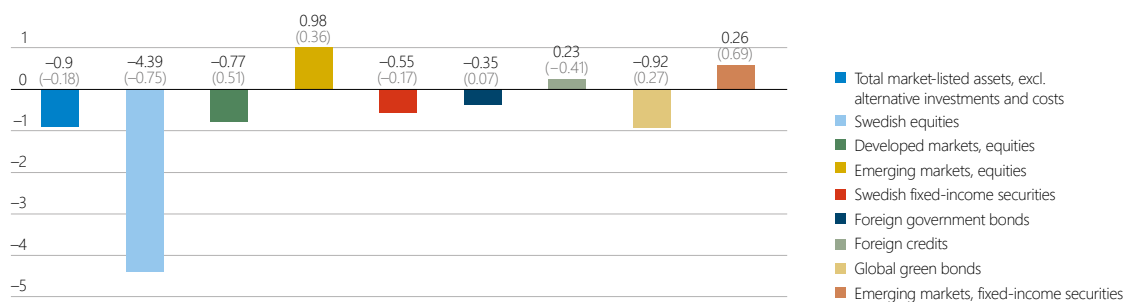
The Swedish fixed-income management's active return was –0.6 per cent. The portfolio of foreign government securities, managed in-house, had an active return of –0.4 per cent. The in-house management of credit bonds outperformed the benchmark index by 0.2 per cent.

The management of emerging-market bonds, issued in US dollars, achieved an active return of 0.9 per cent during the year. The management of emerging-market bonds in local currencies had a return in line with its benchmark index for the year.

## Tactical allocation and currency management

The Fund's in-house tactical allocation activities delivered a negative result of SEK –550 million. The under-performance of the tactical positions is justified by the decision to hedge the Fund's exposure against movements in the Swedish krona and Swedish interest rates. As the Swedish krona weakened and the interest rates fell, the tactical positions developed negatively, while the corresponding result in the portfolio as a whole was positive.

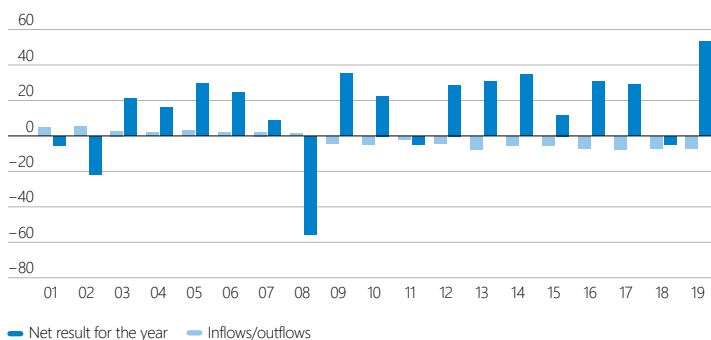
Relative return per asset class in 2019 (2018), %



**Overview 10 years**

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Fund capital, SEK billion	381.3	334.8	345.9	324.5	300.6	293.9	264.7	241.5	216.6	222.5
Net outflows to national pension system, SEK billion	-6.5	-6.8	-7.4	-6.6	-4.9	-5.1	-6.9	-3.8	-1.2	-4.0
Net result for the year, SEK billion	53.0	-4.3	28.8	30.5	11.7	34.3	30.1	28.6	-4.6	22.2
Return on total portfolio before commission expenses and operating expenses, %	16.1	-1.2	9.1	10.5	4.1	13.3	12.8	13.5	-1.9	11.2
Return on total portfolio after operating expenses, %	15.9	-1.3	9.0	10.3	4.0	13.1	12.7	13.3	-2.1	11.0
Relative return on listed assets, excluding alternative investments, commission and operating expenses, % <sup>1</sup>	-0.9	-0.2	0.1	-0.4	0.9	0.5	0.4	1.1	-0.3	0.8
Active risk ex-post, %	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Currency exposure, %	34	32	33	31	30	24	23	20	16	12
External management, %	19	17	17	17	17	28	25	29	29	23
Expense ratio excl. commission expenses, %	0.07	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.08
Expense ratio incl. commission expenses, %	0.15	0.14	0.15	0.15	0.18	0.17	0.17	0.16	0.17	0.17
Annualised return after operating expenses 5.0 years, %	7.4	6.9	9.8	10.6	8.0	9.4	10.8	2.4	0.6	3.5
Annualised return after operating expenses 10.0 years, %	8.4	8.8	6.0	5.5	5.7	7.1	7.0	7.4	4.3	4.2

<sup>1</sup> Relative return refers to the difference in return between a portfolio and its benchmark or reference index.

**Fund's performance and flows 2001–2019, SEK billion**

Since the Fund was established, the market has experienced two major crises. First came the 'IT bubble', coinciding with the launch of the Fund, followed by the financial crisis, culminating in 2008. During 2011, the financial markets were sharply affected by debt crises in different parts of the world. Since then, the stock markets have sustained a healthy growth rate for several years, except for 2018. All asset classes experienced positive growth in 2019.

# Alternative investments

Within the alternative investments asset class, Andra AP-fonden has gathered investments in non-listed real estate (including timberland and farmland real estate), private equity funds, alternative risk premiums, alternative credits, investments in Chinese government bonds and equity investments in the domestic Chinese stock market.

The return on alternative investments as a whole amounted to 17.7 per cent during the year (including currency hedging earnings, the return was 13.2 per cent).

Alternative investments, with the exception of private equity funds whose holdings are hedged in the same way as the listed equity portfolio, are hedged 100 per cent in developed markets while assets in emerging countries are not hedged.

## Private equity funds

The private equity portfolio consists of 45 managers and 120 active funds, which provide exposure to over 2,000 companies. In connection with the revised investment regulations with effect from 1 January 2019, Andra AP-fonden decided to raise the target allocation for private equity funds from 5 to 10 per cent.

Andra AP-fonden carried out 12 investments during the year. The total commitment for these was equivalent to SEK 6.1 billion. New investment commitments are allocations to Andreessen Horowitz, DCP, DCVC, Generation, Genui, Hellman & Friedman, Investindustrial, NEA, Primavera, Searchlight, Sequoia and TPG.

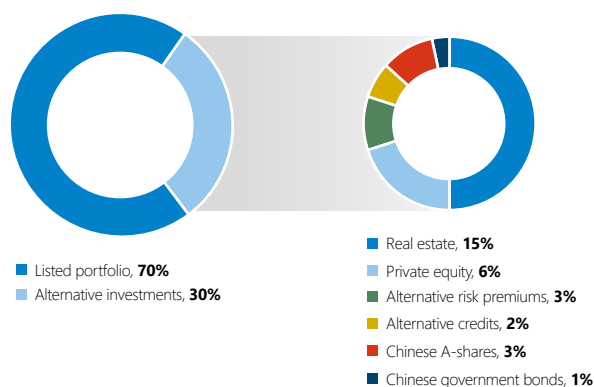
The total investment commitments of the private equity portfolio for 2019 amounted to SEK 45.0 billion. Since the start in 2001, SEK 34.5 billion (including management fees) has been invested, of which SEK 32.0 billion has been repaid. During 2019, SEK 4.9 billion has been invested and SEK 4.4 billion has been repaid, resulting in a net outflow of SEK 0.5 billion. As in previous years, the portfolio was marked throughout by a high level of activity, with the funds carrying out multiple investments and disposals, while the number of IPOs fell slightly.

The exposure to North America was 55 per cent, Europe 20 per cent, Asia 23 per cent and the rest of the world 2 per cent. The portfolio is also diversified per sector, with information technology accounting for 31 per cent, consumer discretionary for 16 per cent and healthcare for 14 per cent. Per investment style, buyout and growth funds have the highest share with 59 per cent followed by venture funds with 25 per cent.

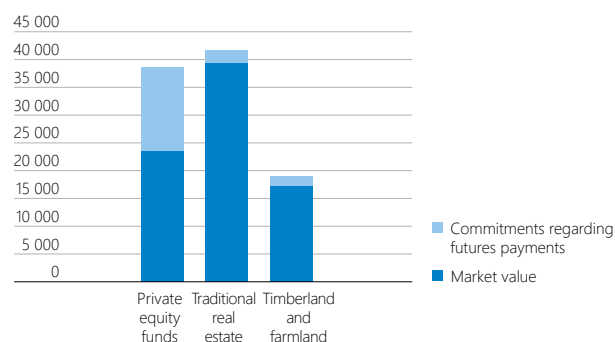
In 2019, the return on private equity funds was 15.9 per cent (12.5 per cent including currency hedging). The portfolio's market value was SEK 23.3 billion at the end of the year. The portfolio

55

**Alternative investments' share of the total portfolio and its elements, %**



**Non-listed investments broken down into market value and continuing commitments, SEK million**



lio of private equity investments has continued to generate a better return than the listed market. Management fees received for non-listed assets are recognised as a part of the acquisition cost of the assets. For more details, see the Fund's accounting and valuation principles on pages 74–75.

### **Traditional real estate**

The Fund's non-listed real-estate holdings today consist mainly of a 25 per cent stake in Vasakronan Holding AB, a 41 per cent stake in US Office Holdings and a 25 per cent stake in Cityhold Office Partnership (via Chaptwo S.à.r.l.). All investments focus on high-quality, traditional real estate, centrally located in real-estate markets with good liquidity. In addition, the portfolio has been expanded to include investments in real-estate funds, four in Asia, one in Latin America and one in Poland. In 2018, Andra AP-fonden decided on a framework for side investments for Gaw Capital. The side investments provide opportunities for an increased stake in investments that are carried out in the Asian markets and are considered to be interesting from both return and diversification points of view.

By investing in real estate, the Fund creates a solid long-term direct return on investment and risk spread in the total portfolio. Vasakronan is owned jointly by the First, Second, Third and Fourth AP Funds. It is Sweden's largest real-estate company, with a concentrated and attractively located portfolio of real-estate holdings in the Stockholm, Gothenburg, Öresund and Uppsala areas.

Cityhold Office Partnership was formed together with Första AP-fonden and the US pension fund TIAA in 2015. The company was created to become a leading platform for investments in Europe. The real-estate portfolio is valued at approximately EUR 2.5 billion and comprises high-quality office buildings in attractive locations in London, Paris, Munich, Amsterdam and Hamburg. Nuveen Real Estate handles the administration of the company, as well as investment and management services.

The US real-estate companies US Office Holdings and US Core Office I and II are owned jointly by Andra AP-fonden, the national South Korean pension fund NPS and the Tishman

Speyer real-estate company. The companies own centrally-located office buildings both directly and via joint ownership. The market value of Andra AP-fonden's real estate holdings is approximately USD 2.1 billion.

Since 2013, Andra AP-fonden has also decided to invest in six real-estate funds in emerging markets:

- Gateway Real Estate Fund IV, V and VI, which invest in real estate in East Asia, particularly China.
- Hines Poland Sustainability Income Fund, which invests in office and logistics real estate in Warsaw and Krakow.
- GTIS Brazil Real Estate Fund III, which invests in real estate in Brazil with a focus on São Paulo and Rio de Janeiro.
- Centurion II, which invests in new construction of logistics real estate in China, mainly in Shanghai and Beijing.

The return on Andra AP-fonden's investments in traditional real estate during the year was 17.8 per cent (14.0 per cent including currency hedging). Annualised since the start in 2001, the return has been 14.5 per cent (13.6 per cent including currency hedging).

### **Timberland and farmland**

In 2010, Andra AP-fonden made its first investments in timberland and farmland real estate as part of its strategy to diversify the overall portfolio. With growing demand for forest and agricultural products driven by increasing urbanisation, improvements in welfare and an expanding global population, these investments are considered to generate a stable return. Both asset classes are also deemed to be relatively insensitive to cyclical fluctuations, added to the fact that covariance with other asset classes – such as equities – is considered to be low.

The timberland and farmland real estate portfolio currently consists of twelve different funds/companies. For Andra AP-fonden, it is important to choose fund managers that subscribe to the same values of long-term, responsible and sustainable investment. The Fund has decided to invest in farmland real estate through joint ventures with other investors, a form that suits Andra AP-fonden's long-term approach to these

investments. The farmland real estate is mainly located in Australia, Brazil, Poland and the USA, and relates primarily to grain production on large-scale, qualitative agricultural properties in countries with clear legal structures, where agricultural production is efficient and the countries are net exporters of agricultural products.

Andra AP-fonden's timberland real estate is located mainly in the USA and Australia. They focus on traditional forestry management for traditional pulpwood and saw timber, with a careful balance between softwood and hardwood. The majority of these investment commitments are structured as funds. As a complement to these investments, the Fund has also invested in a company for timberland real estate in Latin America and Europe, where some of the production is geared towards biomass.

Funds and companies in which Andra AP-fonden has invested are clearly focused on sustainability, responsible governance and management of the real estate and on certification of their operations (SFI, FSC and AFS). More details of the sustainability programmes within these areas are presented on pages 26 and 27 and in the Fund's Sustainability Report, [www.ap2.se](http://www.ap2.se)

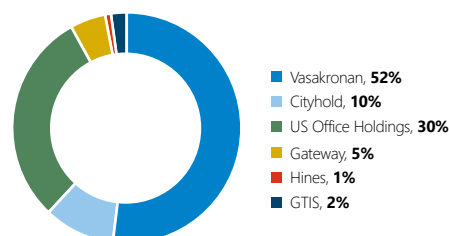
In 2019, the Fund's return on investments in farmland real estate was 9.5 per cent (3.2 per cent including currency hedging). The return on investments in timberland was 10.0 per cent (1.9 per cent including currency hedging).

The portfolio is still impacted by negative impacts of exchange rate movements, primarily from the long-term weakening of the Brazilian real.

### Alternative credits

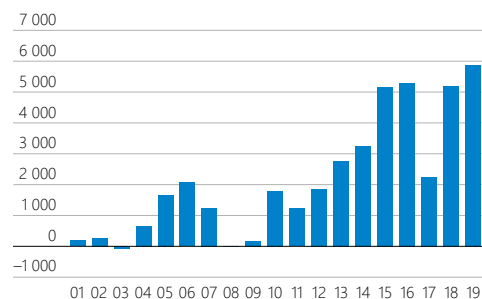
Andra AP-fonden has allocated two per cent of its strategic portfolio to investments in credit opportunities that have arisen as a result of the revised regulations and the restructuring of the financial markets, introduced in the wake of the global financial crisis. One example is that the banks have transferred their lending from small and medium enterprises to the very largest companies.

### Investments' share of the traditional real-estate portfolio, %

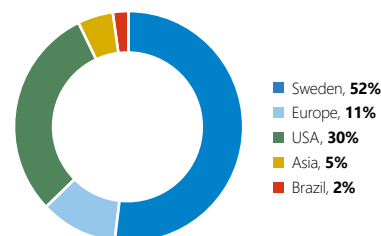


### Portfolio growth, real-estate

Annual earnings from the Fund's holdings in traditional real-estate companies since start (excl. currency hedging), SEK million



### Geographic markets' share of the traditional real-estate portfolio, %





Andra AP-fonden's investment mission is long-term, providing the stability needed to benefit from prevailing market conditions. The full value created can only be realised when securities and credits mature, requiring the investments to be retained for their full term.

The average term for the credits that dominate the investments selected in the credit market segment (loans to companies) is shorter than for the more common bonds that institutional investors these days have large exposure towards. Shorter terms and, not uncommonly, FRNs (floating rate notes), mean there is less sensitivity to potential hikes in interest rates from the currently extremely low levels.

The anticipated long-term return is in line with the Fund's long-term assumptions concerning the return on equities, seven to eight per cent. With an anticipated return at this level, the investment contributes to an increased return, both absolute and risk-adjusted, in the long term. Since the portfolio was established, Andra AP-fonden has conducted ongoing investment in corporate credits by utilising external fund managers that apply broad and in-depth credit analyses. The return for 2019 was 15.0 per cent (7.3 per cent including currency hedging).

#### **Alternative risk premiums**

Alternative risk premiums shall contribute to increased diversification and generate higher risk-adjusted return, since the portfolio is designed to be less dependent on traditional stock market risk. The strategies adopted by the portfolio are premiums for reinsuring insurance companies, premiums associated with the market for corporate acquisition and convertibles, and strategies focused on the foreign exchange market and the market for future dividends from corporate profits. The return for 2019 was 14.8 per cent (7.6 per cent including currency hedging).

#### **Chinese A-shares**

Andra AP-fonden has been investing in the market for Chinese A-shares since 2013. In the strategic portfolio, two per cent of the capital has been allocated to Chinese A-shares. The three external investment managers for the portfolio are: APS, Cephei and UBS.

An exposure to the structural trends affecting the market is sought and the management is conducted with relatively high deviation from the Chinese benchmark index, MSCI China A<sup>1</sup>. The index is considered ineffective and is marked by high volatility, which is why a high deviation in relative terms can be expected. In 2019, the benchmark index rose by 46.1 percent in Swedish kronor. The Fund's managers continued to show positive relative returns against the benchmark index. The absolute return for Andra AP-fonden's managers was 52.6 per cent for 2019.

#### **Chinese bonds**

Since the autumn of 2017, the Fund has had an allocation for Chinese government bonds. At an initial stage, the portfolio is managed passively.

The investment strategy for Chinese government bonds aims to replicate the return on the benchmark index, JP Morgan GBI-EM Broad China<sup>2</sup>. This is done by matching the interest rate exposure through quantitative methods for portfolio optimisation. The relative return on Chinese government bonds was in line with the benchmark index, while the absolute return was 8.3 per cent.

<sup>1</sup> Adjusted index, adjusted after excluded companies.

<sup>2</sup> Information has been obtained from sources believed to be reliable but J.P. Morgan does not warrant its completeness or accuracy. The Index is used with permission. The Index may not be copied, used, or distributed without J.P. Morgan's prior written approval. Copyright 2017, J.P. Morgan Chase & Co. All rights reserved.

*“Alternative risk premiums shall contribute to **increased diversification** and generate **higher** risk-adjusted **return**”*



# Internal management and control

**Internal control can be defined as the process whereby the Fund's Board of Directors, management and other personnel work together and, with a reasonable degree of assurance, make certain that the goals of the business are achieved.**

Andra AP-fonden's overall business objective is to minimise the negative effect on pensions that would derive from applying the "brake". A good internal control system should support the achievement of this overall objective, as well as reliable financial reporting and regulatory compliance.

In a business that conducts asset management activities, it is essential to focus on financial risks, and risk-taking is a natural and necessary way to achieve the target return. A well-structured internal control system for an asset management organisation helps it achieve its objectives by taking expected financial risks, dealing with unwanted risks and preventing loss of resources.

As a government pension fund, Andra AP-fonden sets high standards for its internal control practices, a fact that has laid the foundation for a strong control and risk mindset right across the organisation. In the absence of a mandatory set of external regulations, the Fund has chosen to base the structure of its internal

control on the components set out in Regulation (2007:603) on internal governance and control, which in turn is based on the framework COSO (Committee of Sponsoring Organizations of the Treadway Commission).

The structure for Andra AP-fonden's internal control is built around five components with underlying principles, as illustrated below.

## Responsibility for internal control

The Board of Directors has the ultimate responsibility for the Fund's internal control activities and its control environment. Its role is to guide and give the control environment the required attention. In 2016, the Board thus decided to introduce an external independent audit function with annual internal audit services decided by the Board.

The CEO has the overall operating responsibility for the Fund's internal control and, in that role, determines the decisive internal culture of risk awareness, integrity, ethics and morality that provide the foundation for a strong and positive control environment. The responsibility for the Fund's internal control in its day-to-day activities lies to a great extent with all of the organisation's employees.

The Fund has a separate internal committee (ISK Committee) that coordinates, monitors and develops internal control practices. The Committee is made up of representatives from Compliance, Risk and Finance and produces an annual written assessment of the status of the Fund's internal control.

## Some key factors in the control environment

### Culture

An organisation's culture aims to create structure and is built up by expertise, organisational structure with a clear division of responsibilities and authority, and integrity, ethics and morals. Andra AP-fonden's culture is notable for encouraging personal responsibility and individuality within the framework of a strong team spirit. The values on which the Fund's culture is built are long-term value creation, responsible, respect and continuous improvement. The values are supported by continuous training in regulatory compliance and various ethical issues.

Control environment	<ul style="list-style-type: none"> <li>• Integrity and culture</li> <li>• Independent and monitoring</li> <li>• Responsibilities and authority</li> <li>• Duality</li> <li>• Leadership and values</li> </ul>
Risk assessment	<ul style="list-style-type: none"> <li>• Set relevant operational and return targets</li> <li>• Define risk framework</li> <li>• Identify, analyse and manage risks</li> <li>• Identify and manage change</li> </ul>
Control activities	<ul style="list-style-type: none"> <li>• Identify and create control activities</li> <li>• Identify and create general IT controls</li> <li>• Spread through policies and guidelines</li> </ul>
Information and communication	<ul style="list-style-type: none"> <li>• Use relevant information</li> <li>• Structures and procedures for internal and external communication</li> </ul>
Monitoring activities	<ul style="list-style-type: none"> <li>• Conduct regular and separate evaluations</li> <li>• Identify, evaluate and communicate non-conformances</li> </ul>

## Organisation

Both the Fund's organisation and systems support the "four eyes principle" for all transactions and there is a high degree of automation in the daily recurring processes. The CRO (Chief Risk Officer) and the Head of Compliance report directly to the Board which guarantees objectivity and allows for a healthy questioning.

To ensure that the Fund's risk management and control environment are secured in a structured manner, the Fund works according to the principle of the "Three lines of defence". The "Three lines of defence" principle aims to create an appropriate segregation of duties between asset management (first line), risk and regulatory compliance (second line) and internal audit (third line). Other organisational entities' controls are conducted in the first and second lines of defence.

The Fund's three lines of defence are illustrated below.

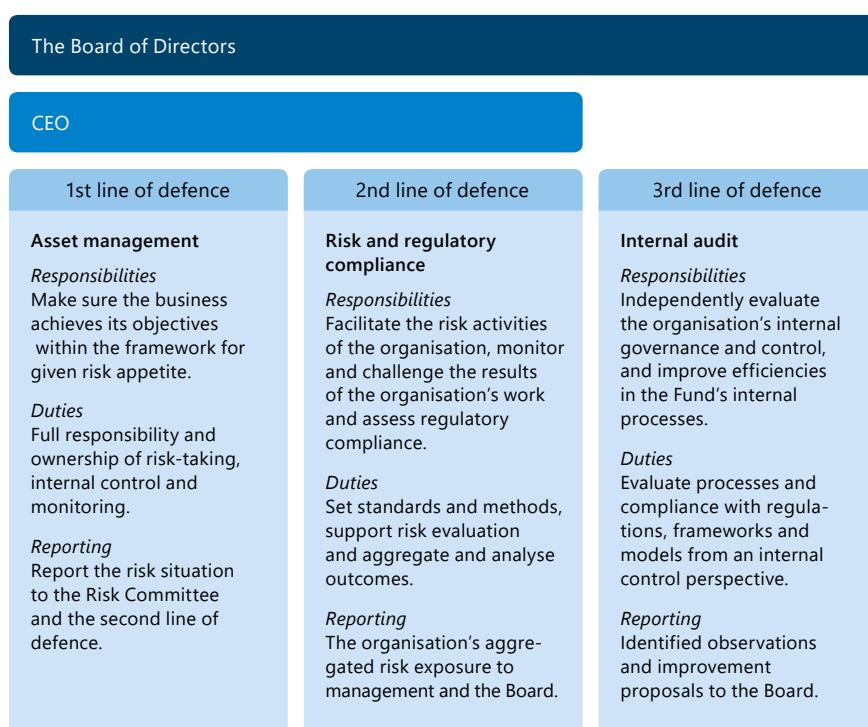
## Monitoring and reporting

The organisation's structured monitoring and reporting system, with regular monitoring measures and separate evaluations, provides the Board and management with tools to assure the quality of the Fund's internal control.

In particular, regular monitoring measures include the Fund's internal incident log, risk log and operational risk programme. The Fund's internal control are also evaluated within the framework for the Fund's process development activities. More details on page 64.

Separate evaluations are conducted by internal and external parties. The Government's annual appraisal examines the value of the Fund's strategic decisions and active management.

The Fund's internal control in a number of processes are also subject to annual scrutiny as part of the external audit. In addition, the Fund's Compliance Department presents the Board annually with a report on identified areas of regulation with associated risks, and any regulatory violations. The reviews carried out by the internal auditors, which are reported to the Board, have different focus areas from year to year and these may have a bearing on the evaluation of the Fund's internal control. More details of this year's internal audit are presented in the Fund governance report.



# Portfolio risk 2019

**The Swedish Parliament has formulated clear guiding principles as to how the AP Funds shall interpret their mandate as fund managers. The AP Funds shall adopt financial risk in an effective manner with a focus on future pensions. Apart from a few constraints, the funds have been awarded considerable freedom in selecting appropriate risk and investment strategies, independent of one another. The chosen strategy should be neutral with regard to different generations, and a readiness to pay ongoing pensions should be taken into account.**

The basis for Andra AP-fonden's investment strategy and financial risk-taking is that AP Funds are only able to influence future pensions through the impact that their portfolio management activities have on the pension system's automatic balancing mechanism. The Board of Directors has therefore concretised the Fund's goal for its asset management activities so that the consequences for future pensions of activating the automatic balancing mechanism are minimised. It is the primary risk that affects the shaping of the investment strategy rather than the selected portfolio's risk profile. By far the greatest financial risk that Andra AP-fonden chooses to take in its portfolio management operations comes from its long-term exposure to financially motivated risk premiums, as expressed by the strategic portfolio.

The financial level of risk is thus directly linked to the Fund's assessment of the growth of the total pension system over the coming decades. This is determined largely by demography, immigration, employment levels, economic growth and other factors outside the Fund's control. The financial risk-taking is also governed by the Fund's assessment of the financial markets' long-term prospects for generating returns. A key starting point for the choice of strategy is that the AP Funds are relatively limited in size compared with the entire Swedish national pension system. This means that the Funds need to take a considerable financial risk.

The long-term allocation of assets and spread of risk that Andra AP-fonden believes will minimise the negative effects on future pensions has a relatively high percentage of higher-risk assets. This means that the value of the portfolio, from one time to another, is expected to show a higher variation than if the allocation of assets had been more defensive. A guiding principle for the development of Andra AP-fonden's long-term investment strategy is to diversify the risk-taking in the portfolios to the greatest extent possible, without compromising on the requirement for a high return. The Fund thus aims to mitigate the risk of negative pension growth over the long term and limit the short-term risk in the portfolio as far as possible.

The long-term orientation the Fund chooses for its portfolio can be described in various ways. It can be described as allocation of equity across various asset classes and investment strategies. It can also be described in terms of anticipated future returns. A third description is the portfolio's expected risk profile, which is key to achieving the overall objective – to mitigate the risk of lower pensions in the future – which is the mission the AP Funds have been tasked with.

## Risk control

The Fund's risk-taking is controlled through three framework levels. Andra AP-fonden's risk policy, which is approved by the Board of Directors, sets the parameters for the Fund's overall exposure to risk. The CEO's document 'Guidelines for Investment' contains more detailed instructions for managing and monitoring risks. For the individual management mandates, the parameters for risk-taking are defined in an Investment Guideline.

The starting point for Andra AP-fonden's risk-taking is the annual ALM study. This is based on a number of assumptions about long-term market growth and risk levels for various asset classes, and is a key tool in designing the strategic portfolio.

## The Fund's risk function

Day-to-day risk management comprises three independent yet interrelated parts.

### Risk budgeting

The Fund's Board of Directors has set the target of a 0.5 per cent relative return, over and above the return of the strategic portfolio. The Board has stated that no more than 3 per cent active risk (tracking error) may be used to generate this return. The purpose of the risk budget is to allocate excess return targets and limits for the active risk-taking between the Fund's portfolio management teams, to achieve the most effective risk utilisation possible. In other words, the Fund's information ratio should be maximised. The idea of the risk budget is an allocation of targets and resources to the respective management



mandates. The target and risk framework for each mandate is defined in the mandate's Investment Guideline. The risk budget is drawn up on an annual basis. Senior portfolio managers present their proposal to the Fund's executive management for approval.

### **Compliance**

Compliance is responsible for ensuring that legal and ethical aspects are managed correctly, in compliance with current rules and regulations. The main duty of the compliance function is to communicate information throughout the organisation about the regulations that, in the broadest sense, are important to Andra AP-fonden. This can be done in a number of different ways, not least by ensuring that in-house rules, policies and guidelines are established and firmly rooted in the organisation. External rules include laws and regulations that concern the AP Funds, as well as other regulations for the capital market, for example flagging. Internal rules govern the employees' private securities transactions and how external fund managers observe the terms of their contracts.

### **Risk Management**

Risk Management is responsible for monitoring and analysing the Fund's financial and operational risks. This function is operationally separate from the asset management organisation, ensuring complete independence. The department is also responsible for developing guidelines and risk models, as well as providing advice and support to the Fund's executive management and portfolio management teams.

### **The Fund's risks**

The most significant risks to which the Fund may be exposed can be divided into financial and operational risks. The financial risks primarily comprise market risk, credit risk and liquidity risk.

#### **Market risk**

Market risk refers to the risk that fair value or future cash flows from a financial instrument will vary due to changes in market rates. In the day-to-day portfolio management process, market risk is measured in absolute terms and relative to the benchmark portfolio. The market risks most relevant to Andra AP-fonden are share price risk, interest risk and exchange rate risk. The Fund analyses and monitors market risk at total fund level, by asset class and by mandate. In this process, the Fund

relies on a number of tools and methods, such as risk attribution, stress tests and scenario analyses. It also conducts ongoing ad hoc analyses to illuminate the risk-taking in different parts of the portfolio. Furthermore, the Fund conducts back testing of risk models, as well as assessments and reviews of the limit structure.

#### **Credit risk**

Credit risk refers to the risk of loss arising from a creditor's failure to fulfil a credit commitment. The credit risk comprises:

- Counterparty risk – the risk that a counterpart in an OTC transaction may become insolvent and unable to fulfil its commitments.
- Issuer risk – the risk that an issuer may become insolvent and unable to fulfil its commitments.
- Liquidation risk – the risk that the counterpart may be unable to fulfil the contract when payment is due.
- Concentration risk – the risk posed when large, important or substantial volumes and/or commitments are concentrated among a limited number of issuers or to a specific sector or geographic region.

Ways in which Andra AP-fonden limits credit risk in the fixed-income portfolio include statutory credit checks and exposure limits. The starting point is an agreed interest-rate index for the strategic portfolio. This index is then used to define the parameters determining permitted deviations in terms of credit risk limits as per credit rating. The Fund uses median ratings from the credit rating agencies Standard & Poor's, Moody's and Fitch Ratings to determine the credit risk. If only two agencies publish a rating, the lowest rating is selected. If a rating is available from just one agency, the credit risk is based on this. In addition, the Fund has credit risks in fixed-income funds and non-listed assets (alternative credit funds).

The Fund's counterparty risk is monitored and analysed on a daily basis. A credit check is done on each new counterparty. This is followed by continual evaluation of all current relationships. The purpose and nature of the specific business relationship is always the starting point. As well as the counterparty risk associated with deposits and over-the-counter (OTC) derivatives, there is a risk concerning cleared transactions against clearing institutes, although this is minimal. Counterparty risk is limited by means of a Credit Support Annex (CSA) agreement with the counterparty.

Issuer risk is not limited to the risk that the issuer may become insolvent. Losses often arise long before a declaration of bankruptcy. Andra AP-fonden mitigates issuer risk by setting credit risk limits for both individual issuers and groups of issuers. This is achieved, for example, by limiting the total credit risk posed by different groups of issuers based on credit ratings per security.

Liquidation risk is mitigated by automatically checking purchases and sales of equities and bonds with reference to the broker/counterparty. Special attention is paid to possible deviations, which can quickly be corrected. Payment and execution of the transaction is executed simultaneously.

Andra AP-fonden manages concentration risk by analysing the allocation, in terms of both geographic region and industry, as well as between issuers/issuer groups. The most influential factor in managing concentration risk is the choice of benchmark index.

#### Liquidity risk

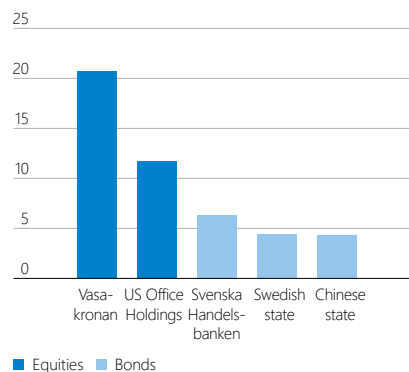
Liquidity risk is the risk that a security cannot be converted into cash in a timely manner without incurring a substantial loss or considerable cost. The AP Funds must also be prepared to transfer funds to the Swedish Pensions Agency. The Fund's liquidity risk is restricted by the Swedish National Pension Funds

Act which requires that at least 20 per cent of the Fund's assets be placed in rights to claim at low credit and liquidity risk, and that a maximum of 40 per cent of the fair value of the assets that the Fund holds may be invested in illiquid assets. The liquidity risk on the liability side is very small and consists of derivative liabilities.

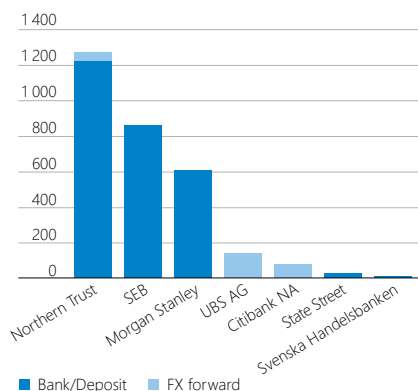
#### Operational risk

Operational risk is the risk of losses arising from deficiencies or failures in internal processes, human error, faulty systems or external events. Andra AP-fonden identifies operational risks using a variety of analytical methods and tools – including self-assessment, incident log, process analysis, risk indicators and workshops. The operational risks are analysed to consider their likelihood and impact. This analysis forms a basis for prioritising the risks and an action plan is formulated. An analysis of the Fund's processes has been used as a tool to identify operational risks since 2014. A process organisation with a process sponsor, sub-process owner, process manager, process team and process support has been appointed and there is a structure for follow-up with a joint meeting once a year. Procedures are in place for the continuous development of the processes and monitoring of their risks/controls and to ensure that busi-

#### Exposure to issuers, SEK billion



#### Counterparty risk, SEK million



ness is conducted in compliance with the identified processes. Process development requires both a formalised and flexible working approach. To date, the Fund has mapped two of its three main processes.

### Portfolio risk

The ex-post volatility of the listed portfolio, calculated over the twelve months, fell during the year and at year-end stood at 4.9 per cent.

Andra AP-fonden reports a slight increase in active risk ex-post for the total listed portfolio in 2019. At 31 December, the active ex-post risk for 2019 amounted to 0.45 (0.43) per cent. Active risk for the Swedish equities asset class fell from 2.3 per cent to 1.9 per cent and other asset classes had only minor changes during the year. Covariance between the relative returns on asset classes in the listed portfolio remained low over the year, indicating a good diversification of active risks in the Fund's portfolio.

At year-end, the information ratio for the listed portfolio was negative, calculated for the 12 months. The Sharpe ratio for the Fund's listed portfolio increased during the year following strong growth in absolute return amounted to 3.6 at year-end.

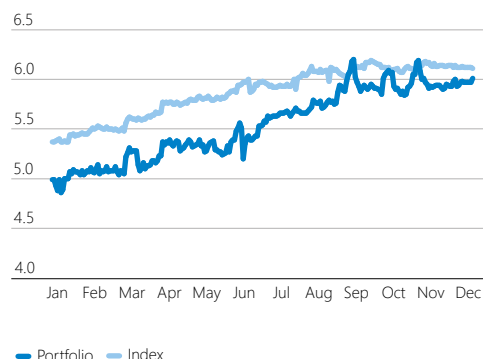
The duration in the fixed-income portfolio was 6.0 (5.0) years at 31 December, representing an increase of about 1.0 year over

the previous year. The asset classes green bonds and emerging market fixed-income securities are primarily responsible for the increase. The remaining asset classes noted smaller contributions to the total fixed-income portfolio.

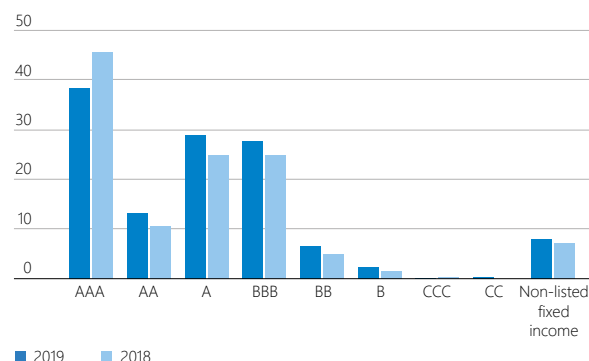
The credit quality of the fixed-income portfolio changed somewhat during the year. The Fund had 31 (38) per cent AAA, 10 (9) per cent AA, 23 (21) per cent A, and 22 (21) per cent BBB rated investments.

For the currency-hedged asset classes, alternative asset classes are estimated to have the highest absolute ex-ante volatility (see graph on page 67, Ex-ante volatility and correlation with total portfolio per currency-hedged asset class). Chinese equities in particular have a high estimated absolute volatility. Private equity and traditional real estate also have high absolute risk. Fixed-income asset classes are expected to have low absolute risk and the equity risk is expected to be around 10–13 per cent a year. In order to calculate weighted risk contribution, correlation with the Fund's total risk also has to be estimated. Equity asset classes are expected to have a high correlation with the Fund's total risk, fixed-income asset classes are estimated to have very low or negative correlation and alternative asset classes are roughly midway between.

### Duration 2019, year



### Credit risk, SEK billion



The Fund's total ex-ante volatility is estimated to be 6.7 per cent a year, and it is mainly equity asset classes that contribute most risk. The volatility is high, the allocations are large, and the correlation to the Fund's total risk is therefore high (see graph on page 67, Contributions to ex-ante volatility per asset class and change). Although alternative asset classes have high absolute risk, they contribute proportionately with less risk than equities due to better diversification of the Fund's total risk. Traditional real estate and private equity funds are the asset classes that contribute the most risk after listed equities. The risk contributions from all fixed-income mandates are very low. The Fund's currency risk is driven by emerging markets.

The estimated volatility increased by approximately 0.5 per cent during the year due to an increased risk contribution from developed markets equities, private equity, emerging markets equities and Chinese equities. The contribution from Tactical Allocation (TAA) decreased during the year.

The listed portfolio's active ex-ante risk is estimated to be 0.33 per cent (see graph on page 67, Contributions to listed portfolio ex-ante active risk). Contributions to active risk are dominated by absolute return mandates and Swedish equities. Absolute return mandates contributed to the risk primarily through foreign currency positions. Swedish equities contributed mostly with idiosyncratic risk.

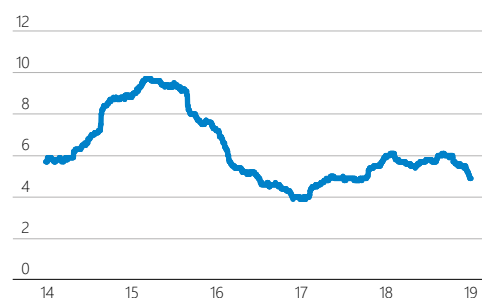
The Fund's one-day 95 per cent VaR (Value at Risk) is estimated to be approximately SEK 2.6 billion (see table below). In other words, with an assumed probability, the Fund is expected to lose a maximum of SEK 2.6 billion a day per month. The Fund's one-year volatility is estimated to be approximately SEK 25.4 billion. This means that the Fund, with a standard deviation probability, estimates that next year's results will be between plus and minus SEK 25.4 billion, provided that the positions from year-end do not change.

#### Risk calculated as Value-at-Risk (VaR) for Andra AP-fonden's total portfolio, 2019

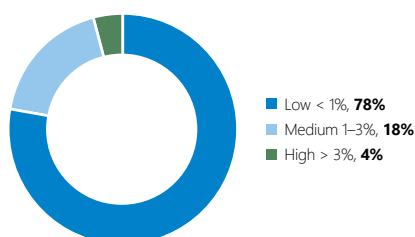
SEK million	Contribution to ex-ante VaR (95%, 1 day)	Contribution to ex-ante volatility (1 year)	Percentage risk, %	Percentage market value (%)
Equity risk	1 548	14 910	59	39
Interest rate risk	46	441	2	33
Currency risk	221	2 124	8	0
Alternative investments	828	7 976	31	28
<b>Total Andra AP-fonden</b>	<b>2 643</b>	<b>25 451</b>	<b>100</b>	<b>100</b>

VaR and volatility are calculated according to MSCI BarraOne's parametric factor model, which uses a one-year half-life for factor volatility and a three-year half-life for correlations.

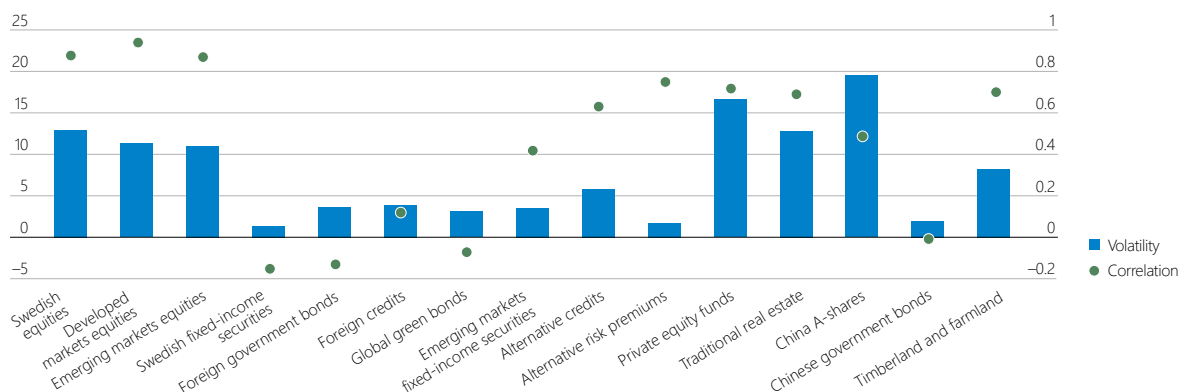
#### Volatility in the listed portfolio the last five years, %



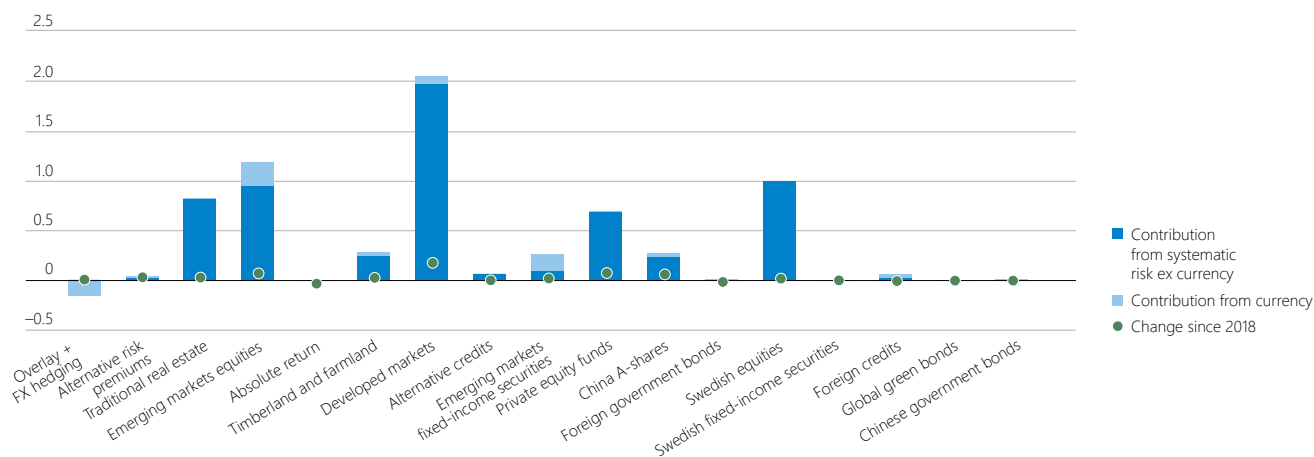
#### Allocation of active risk, %



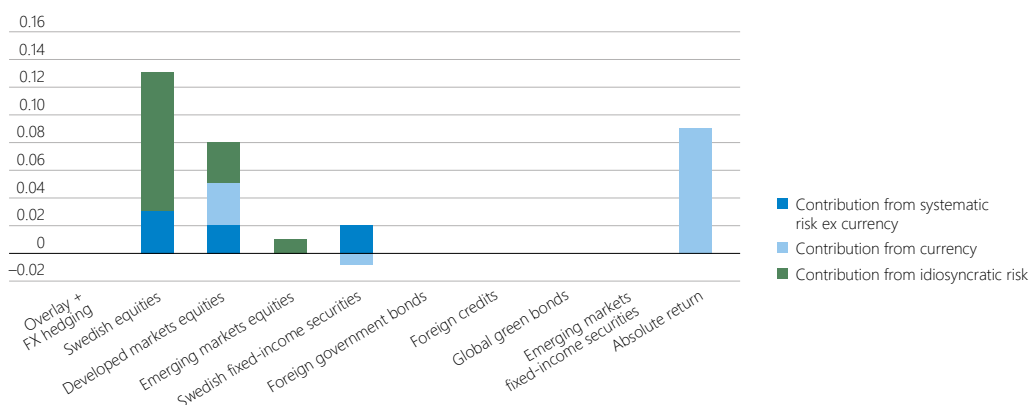
## Ex-ante volatility and correlation to total portfolio per currency-hedged asset class



## Contributions to ex-ante volatility per asset class and change, %



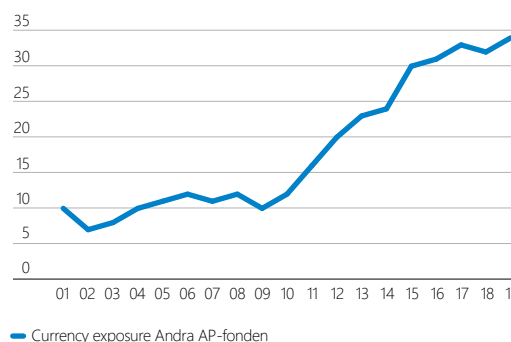
## Contributions to listed portfolio ex-ante active risk, %



# Currency exposure

The degree of currency exposure is a risk factor that may impact the value of all asset classes traded in currencies other than Swedish kronor. At year-end, 34 (32) per cent of the Fund's portfolio was exposed to foreign currency risks. The largest part was the Fund's exposure to USD, CNY and HKD. The Fund's currency hedging policy is set by the Board of Directors and is part of the Fund's portfolio optimisation process. The policy aims to mitigate risks in the portfolio and a systematic currency hedging programme is actively implemented. The portfolio's total currency exposure in 2019 had a positive impact on the result due to the net weakening of the Swedish krona against other currencies. The currency hedging programme had a negative impact on the result. A total of SEK 5.4 (4.3) billion in foreign-exchange gains was recognised for the Fund's total portfolio exposed to foreign currency risks, including currency hedging.

Currency exposure, growth since start, %



Statutory limit for currency exposure is 40 per cent.

## Currency exposure 2019 and 2018, equivalents in SEK million

31 Dec 2019	USD	CNY	HKD	EUR	IDR	INR	Other	Total
Equities and participations	96 037	9 907	8 491	20 537	659	2 905	43 759	182 295
Bonds and other fixed-income securities	49 658	4 076	—	25 045	2 338	—	24 228	105 345
Other assets and liabilities, net	190	480	23	490	2 708	1 733	-2 815	2 809
Derivatives excl. foreign exchange derivatives	—	—	—	—	—	—	—	0
Foreign exchange derivatives	-97 139	-40	-71	-39 152	569	498	-25 702	-161 037
<b>Currency exposure, net</b>	<b>48 746</b>	<b>14 423</b>	<b>8 443</b>	<b>6 920</b>	<b>6 274</b>	<b>5 136</b>	<b>39 470</b>	<b>129 412</b>

31 Dec 2018	USD	CNY	HKD	IDR	EUR	INR	Other	Total
Equities and participations	79 330	6 358	7 248	734	17 136	2 354	39 402	152 562
Bonds and other fixed-income securities	43 317	3 762	—	2 003	19 408	—	20 734	89 224
Other assets and liabilities, net	600	518	191	2 697	649	1 735	-3 076	3 314
Derivatives excl. foreign exchange derivatives	4	—	—	—	—	—	—	4
Foreign exchange derivatives	-84 600	—	-341	542	-32 540	468	-22 855	-139 326
<b>Currency exposure, net</b>	<b>38 651</b>	<b>10 638</b>	<b>7 098</b>	<b>5 976</b>	<b>4 653</b>	<b>4 557</b>	<b>34 205</b>	<b>105 778</b>

Currency exposure is reported in accordance with the Fund's actual management of the currency risk, which means that it is based on the currency of the trading location and not on the currency of each company's registered office.



# Cost-effective asset management

Andra AP-fonden works to ensure all asset management processes are run in a cost-effective way. During the budget process, the responsibility for efficient management of the resources is controlled in a highly decentralised manner, in which each individual with budget responsibility is involved in their own budget as well as the Fund's total budget. The Fund also maintains a continuous focus on costs that impact net income for each asset class, such as transaction costs.

Transaction costs represent the cost associated with the implementation of each individual transaction, whether it is listed or non-listed assets. In asset classes with a high volume of transactions, the challenge is to trade in a cost-effective manner. The Fund's design of its own benchmark indices and choice of implementation methods for these are examples of an active, overall approach.

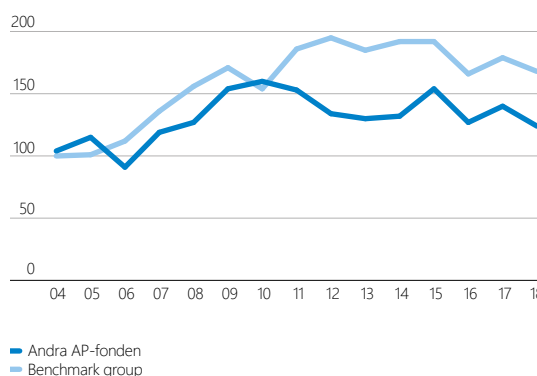
Starting at the construction stage of the strategic portfolio, consideration is given to transaction costs and various other cost aspects associated with choice of asset class and implementation methods. Fund management is conducted internally where possible and where it is considered to be cost-effective.

Particular focus has been given to travel expenses in the 2020 budget process and the goal is to continue to use digital forms of meetings wherever possible.

## Implementation effects and rebalancing

The fact that the capital market is occasionally subject to a high degree of volatility places particular demands on flexibility, to enable adjustments in mandate and investment focus. The Fund's capital must be exposed to the markets in an efficient manner, as per the strategic portfolio, and rebalanced during major market fluctuations. This requires a well-developed methodology and great expertise. Andra AP-fonden employs a floating strategic benchmark index and the actual portfolio is adjusted daily to replicate this. The costs and revenues attrib-

**Cost-efficiency comparison with international pension funds 2004-2018, indexing**



The CEM study shows Andra AP-fonden's cost development in relation to its benchmark group, 2004-2018.

Source: CEM

utable to strategic changes in the benchmark index, known as 'transitions', and the ongoing rebalancing of the strategic portfolio, are referred to as implementation effects. The implementation effects in 2019 were –0.05 per cent.

#### **Cost comparison from a global perspective**

An established method for measuring and comparing the cost efficiency of pension funds from an international perspective has been developed by CEM (Cost Effectiveness Measurement Inc.). The method enables a comparison that takes into account several factors that have a strong impact on the overall cost of managing a fund: the volume of assets under management, the degree of assets under active management and external mandate, and the relative allocations for each class of asset. In the study, pension funds' costs are compared with those of an international group of fund managers of approximately the same size and with a portfolio of similar composition. Andra AP-fonden has been taking part in CEM's annual comparison study since 2004. According to the latest analysis (2018), Andra

AP-fonden continues to carry out its asset management duties in a successful and cost-effective way. The Fund's cost level is still lower than the benchmark group by a wide margin. This can mainly be attributed to cost-effective internal management and significantly less use of external management.

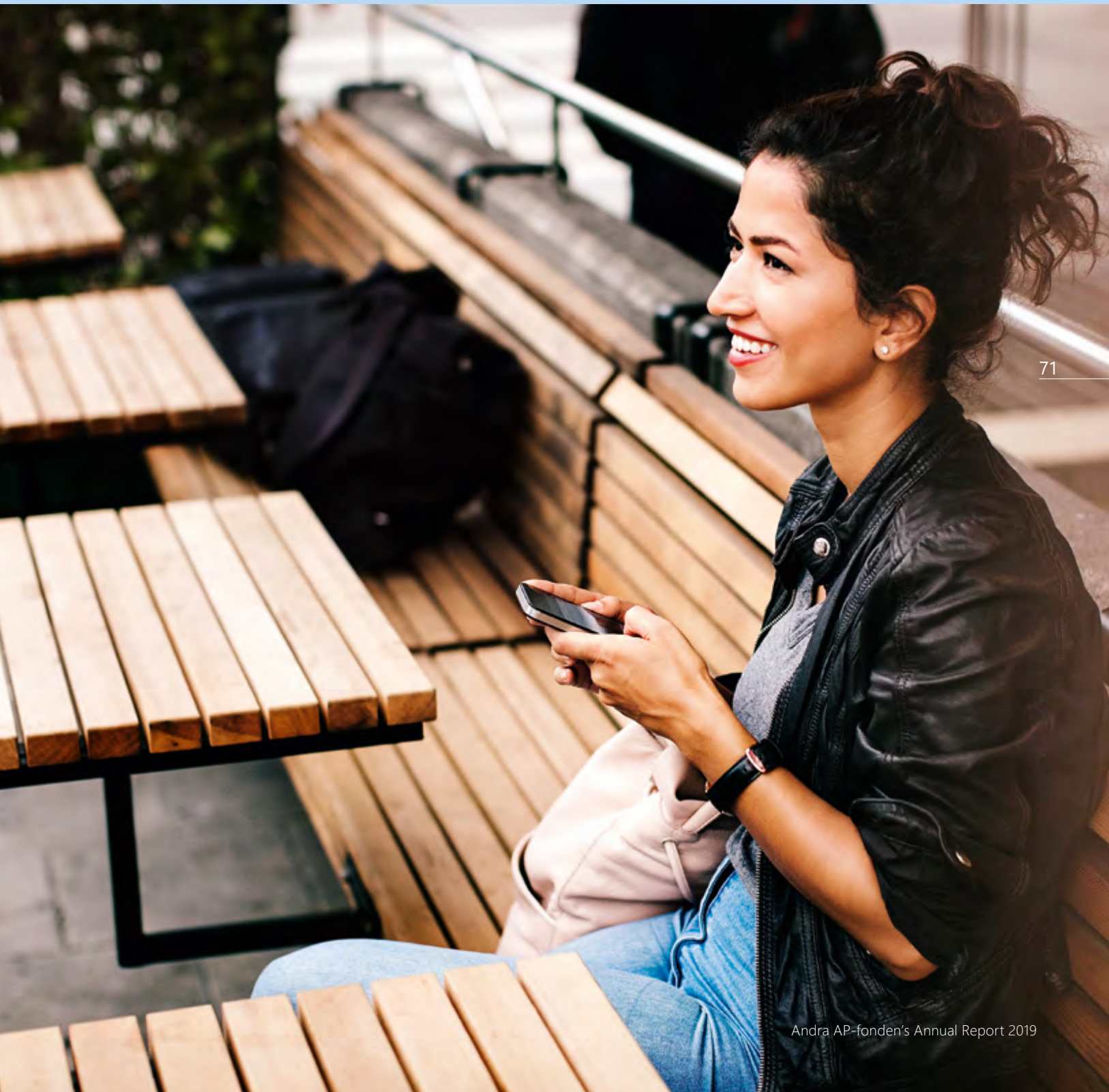
#### **VAT**

The AP Funds have been registered for VAT since 2012 and are thus liable to pay VAT on acquisitions from outside Sweden. Since the Funds do not have the right to reclaim the VAT paid, the VAT registration has resulted in a direct increase in the Fund's costs for such services. In 2019, the costs for Swedish VAT on services acquired from outside Sweden totalled SEK 30 (33) million.

#### **Cost-effective collaboration with other AP Funds**

In 2019, as in previous years, the AP Funds have worked collaboratively in various areas to achieve greater cost efficiency collectively than would be possible individually. A trend analysis of portfolio systems was conducted as a joint project in 2019.

*“According to CEM's annual **comparison study**, Andra AP-fonden continues to carry out its asset management duties in a **successful** and **cost-effective** way”*



# Income statement

Amounts in SEK million	Note	Jan–Dec 2019	Jan–Dec 2018
<b>Operating income</b>			
Net interest income	1	3 836	3 536
Dividends received		5 754	5 931
Net income, listed equities and participations	2	27 129	–17 029
Net income, non-listed equities and participations	3	6 278	5 637
Net income, fixed income securities		6 108	–2 532
Net income, derivative instruments		–932	–3 722
Net income, foreign exchange gains/losses		5 401	4 348
Commission expenses, net	4	–292	–280
<b>Total operating income</b>		<b>53 282</b>	<b>–4 111</b>
<b>Operating expenses</b>			
Personnel expenses	5	–147	–127
Other administrative expenses	6	–93	–92
<b>Total operating expenses</b>		<b>–240</b>	<b>–219</b>
<b>NET RESULT FOR THE YEAR</b>		<b>53 042</b>	<b>–4 330</b>

# Balance sheet

Amounts in SEK million	Note	31 Dec 2019	31 Dec 2018
<b>ASSETS</b>			
Equities and participations			
Listed	7	161 554	135 984
Non-listed	8	78 168	65 000
Bonds and other fixed income securities	9	133 875	127 416
Derivative instruments	10	5 734	2 891
Cash and bank balances		3 908	3 070
Other assets	11	206	373
Prepaid expenses and accrued income	12	1 721	1 764
<b>TOTAL ASSETS</b>		<b>385 166</b>	<b>336 498</b>
<b>FUND CAPITAL AND LIABILITIES</b>			
<b>Liabilities</b>			
Derivative instruments	10	1 537	599
Other liabilities	13	1 589	341
Deferred income and accrued expenses	14	690	730
<b>Total liabilities</b>		<b>3 816</b>	<b>1 670</b>
<b>Fund capital</b>			
	15		
Fund capital at beginning of year		334 828	345 931
Net payments to the national pension system		–6 520	–6 773
Net result for the year		53 042	–4 330
<b>Total fund capital</b>		<b>381 350</b>	<b>334 828</b>
<b>TOTAL FUND CAPITAL AND LIABILITIES</b>		<b>385 166</b>	<b>336 498</b>
<b>Pledged assets and contingent liabilities</b>			
	16		
Other pledged assets and contingent liabilities		969	2 421
Commitments		26 459	25 831

# Accounting and valuation principles

The annual report shall be prepared in accordance with the "Swedish National Pension Funds Act (2000:192)" and implemented in line with generally accepted accounting principles, on the understanding that the assets in which the Fund's capital is invested shall be booked at market value. On this basis, the First to Fourth AP Funds have drafted and implemented joint accounting and valuation principles, as applied and summarised below.

The AP Funds' accounting and valuation principles are being gradually adjusted to comply with the international IFRS accounting standard. Full compliance with the IFRS standard would not essentially affect the reported net result and capital assets. Andra AP-fonden meets the requirements for definition as an investment company as per IFRS 10. The only significant differences to IFRS requirements are that no cash flow statement is prepared and that IFRS 16 is not applied.

## Trade date accounting

Transactions in securities and derivatives in the money and bond market, equities market and currency market are reported in the balance sheet on the trade date, i.e. the date when the significant rights and thus the risks are transferred between the parties. Any amounts receivable from or payable to the other party between the trade date and settlement date are recorded under Other assets and Other liabilities respectively. Other transactions, especially those involving non-listed equities, are shown in the balance sheet as per the settlement date, in line with generally accepted market practice.

## Net accounting

Financial assets and liabilities are net accounted in the balance sheet when there is a legal right of set-off and an intention to effect a net payment or to liquidate the asset and pay the liability simultaneously.

## Foreign currency conversion

Transactions in foreign exchange are converted into Swedish kronor at the rate applied on the transaction date. On the balance sheet date, assets and liabilities in foreign currency are converted into Swedish kronor at closing day rates. Changes in the value of assets and liabilities in foreign currency are separated into that part attributable to the change in value of the asset or liability, and that part attributable to the change in the exchange rate. The exchange rate differential arising due to the change in the exchange rate is reported in the income statement under Net result, exchange gains/losses.

## Equities in subsidiaries/associated companies

In compliance with the Swedish National Pension Funds Act, both equities in and loans to subsidiaries/associated companies are

recorded at their fair value. Fair value is determined by the same methods applied to non-listed equities and participations. There is no requirement to draw up consolidated financial statements. Loans to subsidiaries and associated companies that are intended to be held to maturity are valued at fair value through the Fair value option in IFRS 9. However, the entire change in value is reported as part of the shareholding on the line Net result, non-listed equities and participations.

## Valuation of financial instruments

All Fund investments are calculated at their fair value, whereby realised and unrealised changes in value are reported in the income statement. Consequently, realised and unrealised profit/loss per asset class are included under Net result. Equity instruments are held for trading and are therefore valued at fair value in the income statement. Debt instruments are held for trading and are therefore valued at fair value in the income statement. Loans to subsidiaries and associated companies are intended to be held to maturity, but here the fair value option is utilised in order for the law on public pension funds requirements for fair value measurement to be fulfilled. In cases where reference is made below to the selected index provider, see page 21 for information on the current index. The AP Funds follow all their assets based on fair value. For a description of how fair value is determined for the Fund's numerous investments, see below.

## Listed equities and participations

In the case of equities and participations traded on a regulated market or trading platform, fair value is based on the official market rate applied at the balance sheet date, according to the Fund's selected index supplier, often the average market rate. Holdings not included in the index are valued at the listed rates observable on an active market. Commissions paid are taken up as income under Net result, listed equities.

## Non-listed equities and participations

As regards equities and participations not traded on a regulated market or trading platform, fair value is based on the valuation made by the counterparty or other external party. This valuation is updated once the new valuation has been received and adjusted for eventual cash flows up to the end of the accounting period. In cases where the Fund has good reason to believe that the value assigned by the fund administrator is incorrect, the received value is adjusted. The valuation of non-listed participations shall follow IPEV (International Private Equity and Venture Capital Valuation) Guidelines or similar valuation principles, first and foremost being based on transactions with third parties, although other valuation techniques may also be employed. The valuation of non-listed real-estate equities is based on the material value method, in as far as the equity



has not been the subject of transactions on a resale market.

Deferred tax liabilities relating to holdings in non-listed real-estate companies have been determined at the value applied to the actual property transactions, as distinct from the value reported in the accounts of the real-estate companies.

#### ***Bonds and other fixed-income securities***

For bonds and other fixed-income securities, fair value is based on the official market rate (usually the bid rate) applied on the balance sheet date, according to the Fund's selected index supplier. Holdings not included in the index are valued at the listed rates observable on an active market. In cases where such instruments are not traded on an active market, and where no reliable listed market rates are available, the instrument shall be valued with the support of generally accepted theoretical models, whereby cash flows are discounted according to an appropriate valuation scale. Interest calculated according to the effective interest method, based on accrued acquisition value, is reported as interest income. The accrued acquisition value is the net present value of future payments, where the discount rate is the compound interest at the time of acquisition. This means that premiums or discounts acquired are accrual accounted over the security's remaining term or until the next adjustment in the interest rate, and are reported as interest income. Changes in value arising from adjustments to interest rates are reported under Net result, fixed-income securities, while changes in value arising from FX gains/losses are reported under Net result, exchange gains/losses.

#### ***Derivative instruments***

Where derivative instruments are concerned, fair value is based on their listed rates at year-end. In cases where such instruments are not traded on an active market, and where no reliable listed market rates are available, the instrument shall be valued with the support of generally accepted theoretical models, where input data consists exclusively of observable market data. Derivative contracts with a positive market value on the balance sheet date are reported as investment assets, while transactions with a negative market value are reported as liabilities. Changes in value arising from FX gains/losses are reported in the income statement under Net result, exchange gains/losses, while other changes in value are reported under Net result, derivative instruments.

#### ***Buy-backs***

In a true buy-back transaction, also known as a repurchase agreement, the asset sold is still reported in the balance sheet and the payment received is reported as a liability. The sold security is reported as a pledged asset among memorandum items in the balance sheet. The difference between spot payment and forward rate is accrual accounted over the term and reported as interest.

#### **Securities lending**

Securities on loan are reported in the balance sheet at their fair value, while premiums received are reported as interest income in the income statement. Collateral received for securities lent consists of securities and/or cash. In cases where Andra AP-fonden has rights of disposal over the cash received as collateral, this is reported in the balance sheet as an asset and a corresponding liability. In cases where the Fund lacks these rights of disposal, collateral received is reported not in the balance sheet, but in a separate note, under 'Pledged assets and contingent liabilities'. The net worth of securities on loan and their collateral is also reported under this heading.

#### **Items entered directly against Fund capital**

Contributions to and disbursements from the pension system are entered directly against Fund capital.

#### **Commission expenses**

Commission expenses are reported in the income statement as a deduction under Operating income. These comprise direct transaction costs such as custodial expenses and fixed fees to external portfolio managers, as well as fixed fees for listed funds. The performance-based fee, which is paid out if the portfolio manager attains a return on investment in excess of the agreed level, where profit-sharing is applied, is reported as a deductible item under net result per asset class in the income statement.

Management fees for non-listed equities and participations are recognised as acquisition expenses and will thus be included in the unrealised result.

#### **Operating expenses**

All expenses incurred, excluding brokerage commissions, performance-based fees to external portfolio managers and custodial expenses, are reported under Operating expenses. Investments in equipment and in-house developed and externally purchased software are booked on current account.

#### **Tax**

Andra AP-fonden is exempt from all income tax on investments in Sweden. The tax some countries levy on dividends, as well as withholding tax, is net accounted in the income statement under respective income classes. As of 2012, Andra AP-fonden became VAT registered. Consequently, VAT is now liable on services charged outside Sweden. The Fund is therefore not entitled to recover invoiced VAT. The cost of VAT is included with the respective cost item.

Amounts cited are in millions of kronor (SEK m), unless otherwise stated.

# Notes to the income statement and balance sheet

## 1 Net interest income

Amounts in SEK million	Jan-Dec 2019	Jan-Dec 2018
<b>Interest income</b>		
Bonds and other fixed-income securities	3 814	3 511
Other interest income	55	55
<b>Total interest income</b>	<b>3 869</b>	<b>3 566</b>
<b>Interest expense</b>		
Other interest expense	-33	-30
<b>Total interest expense</b>	<b>-33</b>	<b>-30</b>
<b>Net interest income</b>	<b>3 836</b>	<b>3 536</b>

## 3 Net result, non-listed equities and participations

Amounts in SEK million	Jan-Dec 2019	Jan-Dec 2018
Capital gains, net	2 280	1 882
Unrealised changes in value	3 998	3 755
<b>Net income, non-listed equities and participations</b>	<b>6 278</b>	<b>5 637</b>

Reporting of management fees for non-listed assets has changed during the year. The comparison figures in the Note have not been changed correspondingly but follow previous principles. The items impacting comparability in the comparison figure for Unrealised changes in value amount to SEK 4 million.

External management fees are reported as part of the acquisition value of the asset and are charged to the unrealised net results for non-listed assets. Repaid management fees therefore have a positive effect on unrealised results.

During the year, a total of SEK 307 (260) million was paid in management fees relating to non-listed assets. Also during the year, SEK 225 (320) million was repaid and the unrealised result for non-listed equities and participations was thus negatively impacted by SEK -82 (64) million.

## 2 Net result, listed equities and participations

Amounts in SEK million	Jan-Dec 2019	Jan-Dec 2018
Net result, listed equities and participations	27 197	-16 940
less brokerage commission	-68	-89
<b>Net income, listed equities and participations</b>	<b>27 129</b>	<b>-17 029</b>

## 4 Commission expenses, net

Amounts in SEK million	Jan-Dec 2019	Jan-Dec 2018
External asset management fees, listed assets	249	232
External asset management fees, non-listed assets	-	4
Other commission expenses including custodial expenses	43	44
<b>Total commission expenses</b>	<b>292</b>	<b>280</b>

Commission expenses do not include performance-based expenses. Performance-based expenses for the year totalled SEK 148 (80) million and reduced net income for the respective asset classes.

Reporting of management fees for non-listed assets has changed during the year. The comparison figures in the Note have not been changed correspondingly but follow previous principles. The items impacting comparability in the comparison figure for External management fees non-listed assets amount to SEK 4 million.

Note 4 contd.

External management mandates at 31 December 2019, SEK million

Mandate	Average assets under management 2019	Market value 31 Dec 2019*	% of Fund capital	External management expense
<b>External discretionary mandates</b>				
Equity mandates				
Active management				
MFS Global equities	5 881	6 055		
APS Chinese A-shares	3 113	3 252		
Cephei Chinese A-shares	2 958	3 284		
UBS Chinese A-shares	3 246	3 609		
<b>Total external discretionary mandates</b>	<b>15 198</b>	<b>16 200</b>	<b>4</b>	<b>90</b>
<b>Investments in listed external funds</b>				
Equity funds	11 147	11 532		
Fixed-income funds	14 707	14 829		
<b>Total investments in listed external funds</b>	<b>25 854</b>	<b>26 361</b>	<b>7</b>	<b>159</b>
<b>Investments in non-listed private equity funds and real-estate funds</b>				
	<b>27 393</b>	<b>29 824</b>	<b>8</b>	
<b>TOTAL CAPITAL ASSETS UNDER EXTERNAL MANAGEMENT AND MANAGEMENT EXPENSES</b>	<b>68 004</b>	<b>72 385</b>	<b>19</b>	<b>249</b>

\* Market value including allocated liquidity, derivative instruments and accrued interest.

## 5 Personnel expenses

Number of employees	2019			2018		
	Total	Men	Women	Total	Men	Women
Average number of employees	70	46	24	65	42	23
Number of employees, 31 Dec	71	47	24	70	45	25
Number of persons in Executive Management, 31 Dec	6	4	2	6	4	2

Personnel costs in SEK thousands, 2019	Salaries and fees	Variable remuneration	Pension costs	Of which salary swap	Social costs incl. special employer's contribution	Total
Chair of the Board	115	–	–	–	37	152
CEO	4 086	–	1 522	254	1 674	7 282
Board of Directors, excluding Chair	503	–	–	–	110	613
<b>Executive Management, excl. CEO</b>						
Chief Investment Officer (CIO)	3 019	–	1 068	481	1 230	5 317
Head of Business Support	1 829	–	929	–	802	3 560
General Counsel	2 374	–	711	110	823	3 908
Head of Communications and Governance	1 844	–	710	138	634	3 188
Head of Performance and Risk Management	1 900	–	656	55	758	3 314
Other employees	58 823	5 969	24 569	–	26 651	116 012
<b>Total</b>	<b>74 493</b>	<b>5 969</b>	<b>30 165</b>	<b>–</b>	<b>32 719</b>	<b>143 346</b>
Other personnel costs						4 095
<b>Total personnel costs</b>						<b>147 441</b>

Personnel costs in SEK thousands, 2018	Salaries and fees	Variable remuneration	Pension costs	Of which salary swap	Social costs incl. special employer's contribution	Total
Chair of the Board	115	–	–	–	37	152
CEO	3 899	–	1 490	254	1 605	6 994
Board of Directors, excluding Chair	504	–	–	–	146	650
<b>Executive Management, excl. CEO</b>						
Chief Investment Officer (CIO)	2 797	–	1 029	444	1 136	4 962
Head of Business Support	1 750	–	859	–	759	3 368
General Counsel	2 291	–	687	102	932	3 910
Head of Communication & HR	1 837	–	689	127	763	3 289
Head of Performance and Risk Management	1 795	–	646	51	721	3 162
Other employees	53 240	–	22 158	–	21 673	97 071
<b>Total</b>	<b>68 228</b>	<b>–</b>	<b>27 558</b>	<b>–</b>	<b>27 772</b>	<b>123 558</b>
Other personnel costs						3 642
<b>Total personnel costs</b>						<b>127 200</b>

### Board of Directors

Fees and other remuneration paid to the Board Members are determined by the Swedish Government. Annual remuneration is SEK 100,000 to the Chair, SEK 75 000 to the Vice Chair and SEK 50,000 to the other Members of the Board. The Swedish Government has determined that a total of SEK 100 000 may be paid for committee work. Board Members have not received remuneration for their work in the Remuneration Committee. The Chair has received SEK 30 000 and Members have received SEK 25 000 for work in the Risk Committee. The Chair has received SEK 20 000 and a Member has received SEK 15 000 for work in the Audit Committee.

### Other directorships held by Members of the Board

See page 98.

### CEO

In the CEO's contract of employment, the Fund undertakes to pay pension benefits and health insurance up to a pensionable age of 65 years, in the form of an annual premium corresponding to 30 per cent of the gross salary. Where the contract of employment is terminated by the Fund, the CEO is entitled to a severance payment equivalent to 18 months' salary, in addition to salary paid during the 6-month period of notice, less income

from a new appointment. Calculation of severance payment is based on the cash monthly salary at the end of the notice period. Benefits received by the CEO amount to SEK 13 (8) thousand.

#### Executive Management Team

In addition to salaries, other remuneration and pension contributions, the Executive Management Team has received benefits as per the following disclosure: Chief Investment Officer SEK 73 (24) thousand, Head of Business Support SEK 5 (1) thousand, General Counsel SEK 5 (1) thousand, Head of Communications and Governance SEK 6 (0) thousand, Head of Performance and Risk Management SEK 6 (3) thousand. The scheme for performance-based variable remuneration is not applicable to the Executive Team members. Senior executives come under the terms of the retirement benefit agreement between BAO (The Employers' Organisation of the Swedish Banking Institutions) and JU SEK/CR/CF (SACO), The Swedish Confederation of Professional Associations. Swedish Government guidelines specify 6 months' notice and 18 months' severance pay for senior executives. A senior executive of Andra AP-fonden appointed before the Government guidelines came into force has a 12-month notice period without severance pay. These terms have not been renegotiated, as this would incur higher costs for the Fund.

#### Salary swap

All employees are offered the opportunity to exchange part of their salary to get additional pension contributions.

#### Variable remuneration

The Board of Directors has approved a programme for variable remuneration in line with Swedish Government guidelines. Andra AP-fonden's incentive scheme is available to all staff except for the CEO and other members of the Fund's Executive Management Team and the Compliance function. All participants in the scheme may receive a maximum of two months' salary in variable remuneration. The scheme is linked to long-term goals. The variable remuneration may only be paid out when the Fund reports a positive return. The scope of the scheme is described on the Fund's website.

#### Preparation and decision process

The remuneration paid to the Board of Directors is determined by the Swedish Government. The Board determines the CEO's salary and guidelines for remuneration of senior executives.

#### Government guidelines

Andra AP-fonden has been taking part in the Willis Towers Watson salary and benefits survey for several years. The purpose of the survey is to report on the market rate for salaries and benefits paid to different staff categories, based on data supplied by the participating companies. Andra AP-fonden uses the statistics to compare remuneration levels for all its employees. For 2019, the Fund's remuneration levels were compared with 20 or so private and state players in the financial sector, including Swedish pension fund AMF and other AP Funds. The Fund's remuneration policy is based on the idea that the level of remuneration should be close to the median for the reference group employed in the Willis Towers Watson salary and benefits survey.

In the opinion of the Board, the levels of remuneration paid to senior executives and other Fund employees are reasonable, well balanced, competitive, capped and adequate, and promote high ethical standards and a good organisational culture. They are not market-leading salaries when benchmarked against similar institutions, but are moderate and fall

within the employee remuneration parameters set by the Board. The Board is satisfied that the Fund complies with Swedish Government guidelines on remuneration, apart from the above mentioned exception concerning period of notice. The combined costs incurred in connection with termination of employment are well within the limits defined in the Swedish Government guidelines. More information is available on the Fund's website.

#### Other

In accordance with Swedish law, trade unions are free to operate at Andra AP-fonden. The Fund has no employees under the age of 18.

## 6 Other administrative expenses

Amounts in SEK million	Jan–Dec 2019	Jan–Dec 2018
Cost of premises	6	6
Information and IT expenses	66	61
Purchased services	11	12
Other expenses	10	13
<b>Total other administrative expenses</b>	<b>93</b>	<b>92</b>
<b>Fees to auditors</b>		
Audit services		
PwC	0.75	0.78
Non-audit services		
PwC	0.10	0.03
<b>Total paid to PwC</b>	<b>0.85</b>	<b>0.81</b>

## 7 Equities and participations, listed

Amounts in SEK million	31 Dec 2019	31 Dec 2018
Swedish equities	35 811	30 693
Foreign equities	114 211	96 071
Participation in foreign funds*	11 532	9 220
<b>Total listed equities and participations</b>	<b>161 554</b>	<b>135 984</b>
* of which participation in mixed funds	–	–

Like others engaged in long-term asset management, Andra AP-fonden is also active in securities lending. The lending takes place to counterparties that have high credit ratings and provide collateral equivalent to about 105 per cent of the market value of loaned securities.

In 2019, income from securities lending totalled SEK 25 million. This made a positive contribution to the Fund's relative return and is recognised as interest income in the income statement. Guarantees secured for loaned securities is reported in Note 16.

The 20 largest Swedish and foreign holdings in terms of value are listed on pages 90–92.

A complete list of Swedish and foreign holdings is available on the Fund's website.

## 8

## Equities and participations, non-listed

Amounts in SEK million	31 Dec 2019	31 Dec 2018
Swedish equities in associated companies	20 590	17 704
Foreign equities in subsidiaries and associated companies	25 955	21 749
Other non-listed Swedish equities and participations	–	0
Other non-listed foreign equities and participations	31 623	25 547
<b>Total non-listed equities and participations</b>	<b>78 168</b>	<b>65 000</b>

Amounts in SEK million	Corp. Reg.	Registered office	No. of equities	Holding, %	31 Dec 2019 Fair value	31 Dec 2018 Fair value	Own capital	Result
<b>Swedish equities in associated companies</b>								
Vasakronan Holding AB	556650-4196	Stockholm	1 000 000	25	20 590	17 704	70 156*	13 911*
<b>Foreign equities in subsidiaries and associated companies</b>								
Chaptwo S.à.r.l.		Luxemburg		100	2 472	2 051		
Lewis & Clark Timberlands LLC		USA		24	1 415	1 318		
Molpus Nordic Woodlands L.P.		USA		99	1 418	618		
TIAA-CREF Global Agriculture LLC		USA		22	3 096	3 105		
TIAA-CREF Global Agriculture II LLC		USA		25	5 868	4 860		
U.S. Office Holdings L.P.		USA		41	5 034	4 817		
U.S. Core Office APTWO L.P.**		USA		99	5 365	4 435		
U.S. Office APTWO JV II L.P.***		USA		99	1 287	545		
<b>Sum of foreign shares in subsidiaries and associated companies</b>					<b>25 955</b>	<b>21 749</b>		

\* Refers to figures published 31 December 2019.

\*\* Holding company with a 41 per cent stake in US Core Office Holding L.P. and minority stakes in other real estate, together with NPS and Tishman Speyer.

\*\*\* Holding company with minority stakes in other real estate, together with NPS and Tishman Speyer.

Amounts in SEK million	Registered office	Holding, %	31 Dec 2019 Acquisition value	31 Dec 2018 Acquisition value
<b>Other non-listed Swedish equities and participations</b>				
Swedstart Tech KB	Stockholm	3	–	3
<b>Five largest holdings in other non-listed foreign equities and participations</b>				
Pathway Private Equity Fund IXC	USA	99	774	842
GTIS Brazil Real Estate Fund II	Canada	15	702	334
Pathway Private Equity Fund IXB	USA	99	700	745
TIAA European Farmland Fund	Cayman Islands	20	696	592
Gateway VI Co-Investment Account (AP2) L.P.	Cayman Islands	10	686	–

A complete list of Swedish and foreign non-listed holdings may be found on the Fund's website.



Amounts in SEK million	31 Dec 2019	31 Dec 2018
	Fair value	Fair value
<b>Breakdown by issuer category</b>		
Swedish Government	4 302	7 379
Swedish municipalities	909	429
Swedish mortgage institutions	13 428	16 757
Other Swedish issuers		
Financial companies	7 067	11 696
Non-financial companies	1 819	1 217
Foreign governments	39 039	29 886
Other foreign issuers	67 004	59 964
Deposits	307	88
<b>Total</b>	<b>133 875</b>	<b>127 416</b>
<b>Breakdown by type of instrument</b>		
Other bonds	117 342	112 897
Non-listed loans	1 397	1 024
Participation in foreign fixed-income funds	14 829	13 407
Deposits	307	88
<b>Total</b>	<b>133 875</b>	<b>127 416</b>

## 10 Derivative instruments

Amounts in SEK million	31 Dec 2019		31 Dec 2018	
	Fair value Positive	Fair value Negative	Fair value Positive	Fair value Negative
<b>Equity-related instruments</b>				
Forward contracts	–	–	4	–
<b>Total</b>	–	–	<b>4</b>	–
of which cleared	–	–	4	–
<b>Interest-related instruments</b>				
FRAs/Futures	–	6	–	1
Swaps	0	157	–	75
<b>Total</b>	0	<b>163</b>	–	<b>76</b>
of which cleared	–	–	–	–
<b>Currency-related instruments</b>				
Options, held	23	–	4	–
Options, pledged	–	15	–	4
Forward contracts	5 711	1 359	2 883	519
<b>Total</b>	<b>5 734</b>	<b>1 374</b>	<b>2 887</b>	<b>523</b>
of which cleared	–	–	–	–
<b>Total derivative instruments</b>	<b>5 734</b>	<b>1 537</b>	<b>2 891</b>	<b>599</b>

Derivative positions with a negative value of SEK 157 million have a longer maturity than 12 months. The positions relate to swap agreements that mature in 2031 or 2032.

Pledged put options are part of the Fund's strategy to reduce total risk. The net position of put options has a limit on maximum loss. In the case of currency options sold, Andra AP-fonden is always required to fulfil the commitments of the options contract, i.e. once the Fund has sold a currency option, the buyer is entitled to exercise it whether or not this is advantageous at the current rate. Where other put options are concerned, the Fund is not subject to any special delivery requirements.

### Use of derivative instruments

Derivative instruments are the primary means of hedging the Fund's portfolios. They also contribute to more efficient portfolio management, create added value and reduce risk. Andra AP-fonden's use of derivatives is regulated by the Fund's business plan. Call options and forward contracts may only be issued if adequate collateral is available in the form of holdings in underlying assets. In 2019, derivatives were used particularly in the following areas:

- Foreign exchange derivatives – forward contracts and options – for managing the Fund's currency exposure.
- Equity derivatives – mainly standardised equity-index forward contracts – for efficient rebalancing of the portfolio and when adopting positions in tactical asset allocation.

- Interest derivatives – mainly standardised interest forwards and interest rate swaps – for rebalancing, tactical asset allocation and managing the Fund's interest risk. Limited utilisation of interest options to position the Fund in respect of interest risk.
- Structured derivatives – used to create exposure to market fluctuations that are not available in traditional equity, interest or foreign exchange derivatives.
- Positions are taken through derivatives within the framework of the Fund's tactical allocation mandates and alternative risk premium mandates. The mandates are allowed to act with the help of short and long positions in the permitted asset classes.

Derivative exposures are continuously monitored and analysed. Equity and interest derivatives are traded mainly on standardised markets in cleared products, which is why counterparty risks are limited to the clearing institute. Trading with currency and credit market derivatives is not standardised, both counterparty and delivery risks exist with respect to the Fund's counterparties.

The CEO approves and sets limits for the counterparties that the Fund uses for non-standardised products and the exposure is continuously monitored. For OTC trading, the Fund requires standardised contracts, such as ISDA and to an increasing extent CSA, which regulate the collateral held by the counterparties.

## 11 Other assets

Amounts in SEK million	31 Dec 2019	31 Dec 2018
Incoming payments, unsettled transactions	200	367
Other receivables	6	6
<b>Total</b>	<b>206</b>	<b>373</b>

## 12 Prepaid expenses and accrued income

Amounts in SEK million	31 Dec 2019	31 Dec 2018
Accrued interest income	1 309	1 393
Accrued dividends	240	223
Restitutions	150	130
Other prepaid expenses and accrued income	22	18
<b>Total</b>	<b>1 721</b>	<b>1 764</b>

## 13 Other liabilities

Amounts in SEK million	31 Dec 2019	31 Dec 2018
Outgoing payments, unsettled transactions	79	35
Accounts payable	20	12
Other liabilities	1 490	294
<b>Total</b>	<b>1 589</b>	<b>341</b>

## 14 Deferred income and accrued expenses

Amounts in SEK million	31 Dec 2019	31 Dec 2018
Accrued external management fees	36	19
Accrued interest expenses on currency forwards	621	686
Other accrued expenses	33	25
<b>Total</b>	<b>690</b>	<b>730</b>

## 15 Fund capital

Amounts in SEK million	31 Dec 2019	31 Dec 2018
<b>Fund capital at beginning of year</b>	<b>334 828</b>	<b>345 931</b>
<b>Net payments to the national pension system</b>		
Pension contributions received	72 343	69 552
Pension disbursements to the Swedish Pensions Agency	-78 681	-76 110
Transfer of pension entitlements to EC	-	-1
Adjustment of pension entitlements regarding previous years	3	2
Administration contribution to the Swedish Pensions Agency	-185	-216
<b>Total net payments to the pension system</b>	<b>-6 520</b>	<b>-6 773</b>
<b>Net result for the year</b>	<b>53 042</b>	<b>-4 330</b>
<b>Fund capital at year-end</b>	<b>381 350</b>	<b>334 828</b>

## 16 Pledged assets and contingent liabilities

Amounts in SEK million	31 Dec 2019	31 Dec 2018
<b>Other pledged assets and contingent liabilities</b>		
Securities on loan for which guarantees have been secured in the form of securities and cash*	655	995
Securities pledged in connection with exchange-cleared derivatives	237	480
Securities pledged in connection with OTC-derivatives (CSA agreement)**	77	946
	<b>969</b>	<b>2 421</b>
<b>Commitments</b>		
Commitments regarding future payments, non-listed holdings	21 949	21 331
Subscription commitments, certificates	4 500	4 500
New issue guarantee	10	-
	<b>26 459</b>	<b>25 831</b>

\* Guarantees secured for securities on loan amount to SEK 695 (1,087) million.

\*\* Book value for liabilities relating to cash received as collateral for OTC derivatives is SEK 1 479 (283) million. Collateral received in the form of securities for OTC derivatives is SEK 2 401 (42) million.

## 17 Financial instruments, price and valuation hierarchy

### Valuation of Fund capital – Market-listed assets

The great majority of the Fund's assets are market-listed, which means they are traded in an active market at rates that represent actual and regularly occurring market transactions. The Fund's market-listed assets are valued on a daily basis at listed market rates and comprise equities, bonds, derivatives, funds and currencies.

Values of OTC derivatives are measured on the basis of either theoretical models or valuations from external parties. Values of the Fund's holdings in forward exchange contracts, interest rate swaps and currency options are measured on the basis of theoretical models, where the model's subjective parameters are currently solely the choice of interest rate curves, volatility curves and method to calculate and estimate future values (interpolation and extrapolation). The same method is applied for deposits, short-term certificates and similar instruments.

For other OTC derivatives, valuations from external parties are used exclusively without subjective parameters from the Fund. At year-end 2019, the Fund's portfolios contained only a few outstanding structured OTC derivatives.

During periods when the market lacks liquidity for market-listed securities, a higher degree of subjectivity is required for valuation. At such times, the market exhibits sharp differences in bid and offer rates, leading even to significant differences between market participants. At times like these, Andra AP-fonden takes a conservative valuation approach. If an asset is deregistered, market listings in alternative trading venues are taken into consideration. In such instances, each individual security is appraised separately.

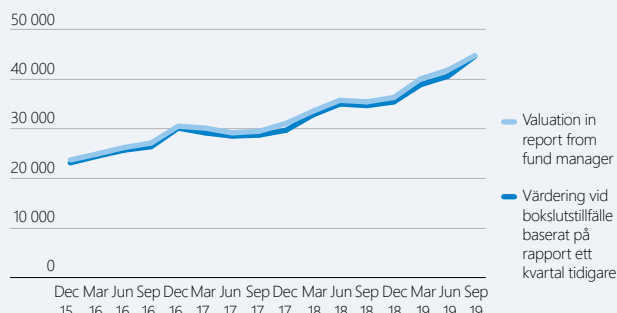
### Valuation of Fund capital – Non-listed assets

For assets not valued on an active market, different measurement methods are used to calculate fair value on the measurement date.

The fair value is considered to be equal to the price at which a transaction between informed and mutually independent parties can be com-

## Note 17 contd.

## Validation of valuations with time-lagged reporting, SEK million



An analysis of the impact on the result arising from the time-lag reveals that Andra AP-fondens valuations in its official annual accounts are lower than the values cited in the final reports submitted by fund managers.

pleted. In Andra AP-fondens case, assets not listed on markets are non-listed real estate (15 per cent of the total portfolio) and private equity funds (6 per cent of the total portfolio).

The value of investments in non-listed private equity funds and real-estate funds is valued by reference to the International Private Equity and Venture Capital Valuation (IPEV) Guidelines or an equivalent set of principles and shall primarily be based on transactions with third parties, but other valuation methods may also be used.

To calculate fair market values, the asset managers mainly use discounted cash flows, the net asset value method and multiple valuation methods. Valuation of holdings is based on the most recent interim reports received from the respective managers. The interim reports are normally available within 90 days of the last quarterly financial statement. This means that when the value of Andra AP-fondens holdings was valued at year-end 2019, the valuation made on 30 September 2019 was mainly used, adjusted for inflows and outflows during the fourth quarter. The Fund has used this valuation method consistently since the start.

An analysis of what impact this time-lag has had since December 2015 shows that Andra AP-fondens valuation in the official annual accounts has been lower than that in the final reports from the fund managers.

## Fair value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants.

The Fund's holdings are therefore divided into three different levels and classified on the basis of which input data are used for the valuation. Andra AP-fonden classifies its assets at fair value according to the following hierarchy.

## Fair value hierarchy, SEK million

	31 Dec 2019			Total fair value
	Level 1	Level 2	Level 3	
Equities and participations, listed	150 021	11 533	–	161 554
Equities and participations, non-listed	–	–	78 168	78 168
Bonds and other fixed income securities	115 863	16 616	1 397	133 876
Derivative assets	–	5 734	–	5 734
Derivative liabilities	–	–1 537	–	–1 537
<b>Financial assets and liabilities, valued at fair value</b>	<b>265 884</b>	<b>32 346</b>	<b>79 565</b>	<b>377 795*</b>

	31 Dec 2018			Total fair value
	Level 1	Level 2	Level 3	
Equities and participations, listed	126 764	9 220	–	135 984
Equities and participations, non-listed	–	–	65 000	65 000
Bonds and other fixed-income securities	110 997	15 395	1 024	127 416
Derivative assets	4	2 887	–	2 891
Derivative liabilities	–	–599	–	–599
<b>Financial assets and liabilities, valued at fair value</b>	<b>237 765</b>	<b>26 903</b>	<b>66 024</b>	<b>330 692*</b>

\* The difference compared to reported Fund capital refers to items unrelated to financial investments, such as interim items and other assets/liabilities.

**Level 1:** Financial instruments traded in an active market. The market is considered active if quoted prices are regularly updated more frequently than once a week and if these prices are used without adjustment for closing market prices.

**Level 2:** Financial instruments that are traded in a market that is not considered active but where there are quoted prices that are used without adjustment for closing or observable input data that are regularly updated for indirect valuation based on generally accepted models.

**Level 3:** Financial instruments where significant unobservable inputs are used in valuation, or that cannot otherwise be classified as Level 1 or Level 2.

Level 3 primarily contains the Fund's holdings in private equity funds and non-listed real estate, where the valuation is not based on observable market data. Changes in value in the income statement are recognised primarily under Net result, non-listed equities and participations.

## Change during 2019 in level 3, SEK million

	Equities and participations, listed	Equities and participations non-listed	Bonds and other fixed-income securities	Total
Value brought forward January 2019	–	65 000	1 024	66 024
Purchases	–	7 312	302	7 614
Divestments	–	–118	–	–118
Changes in value	–	5 974	71	6 045
Reclassifications	–	–	–	–
<b>Total</b>	<b>–</b>	<b>78 168</b>	<b>1 397</b>	<b>79 565</b>

100 per cent of the changes in value are unrealised at year-end.

**Change during 2018 in level 3, SEK million**

	Equities and participations, listed	Equities and participations non-listed	Bonds and other fixed income securities	Total
Value brought forward January 2018	–	55 483	1 066	56 549
Purchases	–	4 910	243	5 153
Divestments	–	–1 642	–301	–1 943
Changes in value	–	6 249	16	6 265
Reclassifications	–	–	–	–
<b>Total</b>	<b>–</b>	<b>65 000</b>	<b>1 024</b>	<b>66 024</b>

100 per cent of the changes in value are unrealised at year-end.

**Sensitivity analysis, non-listed assets*****Timberland and farmland***

Growth in the value of timberland and farmland real estate is largely determined by the demand for forest and agricultural raw materials. However, the value of forest and agricultural land can vary considerably within the same region and can be correlated to a large extent with the commodity prices. The farmland real estate's operational focus, quality of the land, size of the forest asset, long-term felling plan, infrastructure, topography and various macroeconomic factors are parameters that significantly affect the value of the individual asset.

In the long term, the value of forest and agricultural land is mainly determined by the expected income from forestry and agriculture, combined with interest rate levels. The value of forest and agricultural land tends to rise when interest rates are low and commodity prices are high. Conversely, the value of the land tends to fall as interest rates rise, as the discounting of future income from the use of the land then increases. Higher interest rates reduce the price of forest and agricultural commodities and bring lower income for the operators and, finally, lower the value of the land. However, the grain price needs to fall fairly dramatically over an extended period to have any significant effect on land values.

***Private equity funds***

The valuations of the individual companies in a private equity fund are determined largely by the following factors:

- Profit growth through increased sales and improved margins. This is achieved, for example, through increased market share, development or innovation of products and services, geographic expansion, operational improvements, acquisitions, consolidation, etc.
- Multiple expansion achieved by the company attaining a higher quality or through the listed market's growth.
- Reduced debt.

Guidelines for valuation of fair value of this type of investment include measurement models which in many cases include valuations in market-listed companies in relevant benchmark groups. Consequently, the companies' valuations are affected by a listed market, but not to the same extent and always with a three-month delay as valuations are performed quarterly. Andra AP-fonden's experience is that most fund managers generally adopt a conservative approach in their valuations, something that is especially apparent in markets that feature rapid and sharp rises in share prices.

***Traditional real estate***

Although many different factors affect the performance and financial position of real-estate companies, the growth in value of the companies' real estate is the area of risk that has the greatest impact on their profit. The market value of the real estate is affected by changed assumptions about rental and vacancy levels, as well as running costs and dividend yield requirements. These assumptions are based on the economic growth of the markets where the real estate is located. Economic growth is assumed to generate an increase in demand for commercial premises and thus a decrease in vacant leases, with potential for higher market rental rates. The single most important factor is the dividend yield requirement.

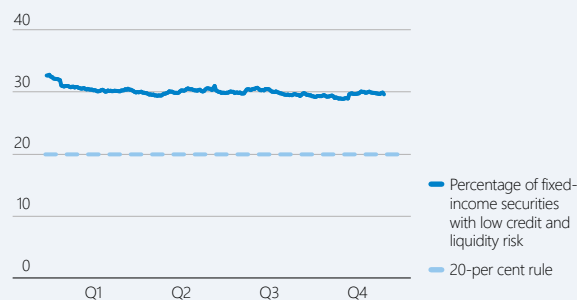
For Andra AP-fonden's holdings in traditional real-estate companies, the combined effect on the Fund's share in profits of a planned change in direct yield requirement of  $\pm 0.25$  per cent of the companies' reported pre-tax profit/loss is estimated at SEK –3.1 billion and SEK 3.4 billion respectively.

## 18 Financial risks

The liquidity risk is mitigated by the 20-per cent rule (external investment regulations for the AP1-AP4 Funds, which states that at least 20 per cent of the Funds' total capital must be invested in securities with a low credit and liquidity risk). Plus, no more than 40 per cent of the fair value of the assets held by the Fund may be invested in illiquid assets. In 2019, the Fund's investment in securities with a low credit and liquidity risk was around 30 per cent and its investment in illiquid assets was about 20 per cent. The liquidity risk on the liability side is very small and consists of derivative liabilities.

For further risk disclosures, see the section on risk management on pages 62 to 67.

Liquidity risk, %



### Financial assets and liabilities presented net in the balance sheet or subject to offsetting agreements

31 Dec 2019	Gross amount	Presented net in the balance sheet	Net amount in the balance sheet	Amounts not presented net in the balance sheet		Net amount after set-off	Other*	Total in balance sheet
				Set-off of financial instruments per agreement	Collateral received/ given			
ASSETS								
Derivative	5 734	–	5 734	–253	–3 880	1 601	–	5 734
Total	5 734	–	5 734	–253	–3 880	1 601	–	5 734
LIABILITIES								
Derivative	1 531	–	1 531	–253	–77	1 201	6	1 537
Total	1 531	–	1 531	–253	–77	1 201	6	1 537

31 Dec 2018	Gross amount	Presented net in the balance sheet	Net amount in the balance sheet	Amounts not presented net in the balance sheet		Net amount after set-off	Other*	Total in balance sheet
				Set-off of financial instruments per agreement	Collateral received/ given			
ASSETS								
Derivative	2 887	–	2 887	–169	–326	2 392	4	2 891
Total	2 887	–	2 887	–169	–326	2 392	4	2 891
LIABILITIES								
Derivative	599	–	599	–169	–946	–516	–	599
Total	599	–	599	–169	–946	–516	–	599

\* Other instruments in the balance sheet that are not subject to agreements that allow set-off.



## 19 Related parties

This note is intended to clarify how Andra AP-fonden's financial performance and position have been affected by transactions and accounts outstanding, including commitments, with related parties in compliance with the definitions given in IAS 24.

Those defined as related parties to Andra AP-fonden are companies in which the Fund controls at least 20 per cent of the voting rights (see associated companies, Note 8), as well as the Fund's Board members and executive management team. See Note 5 for information on salaries and remuneration to Andra AP-fonden's Board members and executive management team.

Amounts in SEK million	31 Dec 2019	31 Dec 2018
<b>Related parties, voting rights</b>		
<b>Vasakronan Holding AB, 25 per cent</b>		
Interest income	9	9
Commitment on Vasakronan's behalf to purchase commercial papers in the company up to, on each occasion, a maximum combined cash amount of	4 500	4 500
<b>Chaptwo S.à.r.l., 100 per cent</b>		
Interest income	50	46
Shareholder loans including accrued interest	1 408	1 033
Shareholder contribution/repayment during the year	–	–128
Investment commitment	2 521	2 771

The Directors' Report, income statement, balance sheet and notes for 2019 have been approved by the Board of Directors

Gothenburg, 6 February 2020

Jan Roxendal <i>Chair</i>	Lin Lerpold <i>Vice Chair</i>	Martina Björkman Nyqvist
Hanse Ringström	Ole Settergren	Johnny Capor
Kristina Mårtensson	Ulrika Boëthius	Christer Käck

Our Auditor's Report was submitted on 6 February 2020

Helena Kaiser de Carolis  
*Authorised Public Accountant*  
*Appointed by the Swedish Government*

Peter Nilsson  
*Authorised Public Accountant*  
*Appointed by the Swedish Government*

# Auditor's report

For Andra AP-fonden, Corporate Identity Number 857209-0606

## Report on the audit of the annual report

### Opinion

We have audited the annual account of the Andra AP-fonden for 2019. The Fund's annual accounts are included in the printed version of this document on pages 49-87.

In our opinion, the annual accounts have been prepared in accordance with the Swedish National Pension Funds Act (2000:192) and present fairly, in all material respects, the financial position of Andra AP-fonden as at 31 December 2019 and of its financial performance for the year then ending according to the Swedish National Pension Funds Act.

The statutory administration report is consistent with the other parts of the annual accounts.

We, therefore, recommend that the income statement and balance sheet be adopted.

### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities according to these standards are described in more detail in the section Auditor's responsibilities below. We are independent in relation to Andra AP-fonden according to generally accepted auditing standards in Sweden and have fulfilled, in general, within the meaning of professional ethical requirements according to these standards.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Other information than the annual accounts

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises pages 1-48 and 88-100 (but does not include the annual accounts and our auditor's report thereon).

Our opinion on the annual accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

### Responsibilities of the Board of Directors and the Managing Director

It is the Board of Directors and Managing Director who are responsible for the preparation and fair presentation of the annual accounts in accordance with the Law on Pension Funds. The Board of Directors and Managing Director are also responsible for the internal control they deem necessary to enable the preparation of annual accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts, the Board of Directors and Managing Director are required to assess the Fund's capacity to continue its operations. They are also to provide disclosures, as appropriate, of the circumstances regarding such assessments and as regards the application of the going concern basis of accounting, provided the Board of Directors and Managing Director do not intend to liquidate the Fund or cease operations, or has no realistic alternative but to do so.

### Auditor's responsibilities

Our responsibility is to obtain reasonable assurance as to whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an Auditor's Report that includes our opinion. Reasonable assurance is a high level of assurance, but does not comprise a guarantee that an audit conducted in accordance with ISA and generally accepted auditing standards in Sweden will always identify material misstatements should they exist. Misstatements can arise from fraud or error and are considered to be material if, individually or taken together, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts.

As a part of the audit in accordance with ISA, we undertake professional judgment and maintain professional scepticism throughout the entire audit. In addition, we execute the following activities:

- We identify and assess the risks of material misstatement in the annual accounts, whether due to fraud or error, design and execute audit procedures based on, amongst other things, these risks, and obtain audit evidence which is sufficient and appropriate to provide a basis for our opinion. The risk of not identifying a material misstatement resulting from fraud is higher than one resulting from error, as fraud can include collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- We obtain understanding of the internal control of the company relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal controls.
- We evaluate the appropriateness of the accounting principles applied and the reasonability of the accounting estimates and related disclosures made by the Board of Directors and Managing Director.

- We reach a conclusion on the appropriateness of the Board of Directors' and Managing Director's application of the going concern basis of accounting in the preparation of the annual accounts. We are also to reach a conclusion, based on the audit evidence obtained, whether any material uncertainty exists related to such events or circumstances which can result in significant doubt as regards the Fund's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our Auditor's Report to the related disclosures in the annual accounts, or if such disclosures are inadequate, we are required to modify our opinion on the annual accounts. Our conclusions are based on the audit evidence obtained up to the date of our Auditor's Report. However, future events or circumstances may cause the Fund to cease to continue as a going concern.
- We evaluate the overall presentation, structure and content of the annual accounts and consolidated accounts, including the disclosures, and whether the financial reports represent the underlying transactions and events in a manner providing a true and fair presentation.

We are required to inform the Board of Directors regarding, amongst other matters, the planned scope of the audit and its focus and time schedule, as well as regards any significant observations made during the audit, including potential significant deficiencies in the internal control which we identify during our audit.

## **Report on other legal and regulatory requirements**

### ***Opinion***

In addition to our audit of the annual accounts, we have also audited the inventory of the assets managed by Andra AP-fonden. We have also audited to determine if there are any criticisms, in general, as regards the Board of Directors' and Managing Director's management of Andra AP-fonden for 2019.

The audit has shown no reason to criticise the inventory of the assets or, in general, the administration.

### ***Basis for opinion***

We conducted our audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities according to those standards are described in more detail in the Auditor's responsibilities section below. We are independent in relation to Andra AP-fonden according to generally accepted auditing standards in Sweden and have fulfilled, in general, within the meaning of professional ethical requirements according to these standards.

We believe that the audit evidence we have obtained is sufficient and appropriate as a basis for our opinion.

### ***Responsibilities of the Board of Directors and the Managing Director***

It is the Board of Directors and Managing Director who has the responsibility for the accounts and for the administration of the Fund's assets according to the Law on Pension Funds.

The Board of Directors is responsible for the organisation of Andra AP-fonden and for the administration of the Fund's activities of Andra AP-fonden. This includes, amongst other things, the on-going assessment of Andra AP-fonden's financial situation and ensuring that the organisation of Andra AP-fonden is designed in such a manner that the accounts, funds management and the Fund's activities are, in general, subject to satisfactory controls. The Managing Director is responsible for the day-to-day administration according to the Board of Directors' guidelines and instructions and for, amongst other things, the implementation of measures necessary to ensure that the Fund's accounting is executed in compliance with the applicable legislation and that the funds of Andra AP-fonden are managed in a satisfactory manner.

### ***Auditor's responsibilities***

Our responsibility regarding the audit of the administration and, thereby, our opinion on discharge from liability, is to evaluate audit evidence in order to, with a reasonable degree of assurance on the basis of reasonable assurance, if there is any criticism of the Board of Directors' and Managing Directors' administration of Andra AP-fonden for financial year 2019.

Reasonable assurance is a high level of assurance but does not comprise a guarantee that an audit executed in accordance with generally accepted auditing standards in Sweden will always identify actions or negligence which can result in criticism.

As a part of an audit according to generally accepted auditing practice in Sweden, we exercise professional judgment and maintain a professional scepticism through the entire audit. The audit of the administration is based primarily on the audit of the accounts. Any additional audit procedures selected to be executed are based on our professional judgment with the starting point being the risks in the operations and the determined level of materiality. This implies that we focus the audit on such measures, areas and circumstances that are significant to the operations, and where non-compliance in such contexts would be of particular importance to Andra AP-fonden's situation. We review and test decisions taken, decision-making documentation, measures taken and other circumstances relevant to our opinion on the administration.

Gothenburg, 6 February 2020

Helena Kaiser de Carolis  
*Authorised Public Accountant*  
*Appointed by the Swedish Government*

Peter Nilsson  
*Authorised Public Accountant*  
*Appointed by the Swedish Government*

# Equities, participations and fixed-income securities

## Andra AP-fonden's 20 largest Swedish shareholdings\*

Company name	Share of capital, %	No. of equities	Market value, SEK million	Share of voting rights	Sector
Volvo B	0.50	10 686 901	1 677	0.17	Industry
Swedbank A	0.89	10 055 484	1 402	0.89	Finance
Essity	0.65	4 571 463	1 380	0.36	Consumer goods
Fastighets AB Balder B	1.62	2 916 325	1 263	1.04	Real Estate
Hexagon B	0.62	2 261 120	1 187	0.44	IT
Sandvik	0.48	6 030 947	1 102	0.48	Industry
Trelleborg B	2.24	6 083 872	1 025	1.15	Industry
Husqvarna B	2.36	13 610 631	1 021	0.86	Consumer goods
Skanska B	1.12	4 720 589	999	0.79	Industry
SKF B	1.15	5 254 476	995	0.70	Industry
Atlas Copco A	0.22	2 659 918	994	0.30	Industry
SEB A	0.51	11 167 427	984	0.51	Finance
Investor B	0.25	1 885 091	964	0.05	Finance
Elekta B	1.90	7 289 789	899	1.41	Healthcare
Hennes & Mauritz B	0.28	4 590 431	874	0.13	Consumer goods
Tele2 B	0.84	5 817 417	790	0.65	Telecom
Epiroc	0.54	6 528 370	747	0.76	Industry
Sagax B Shares	0.87	3 869 050	527	0.56	Real Estate
Sagax D Shares Stamaktie	0.00	645	0	0.00	Real Estate
Coor Service Management Holding	6.14	5 884 628	485	6.14	Industry
Securitas B	0.79	2 896 316	468	0.56	Industry

\* The table lists the Fund's 20 largest holdings in Swedish equities in terms of value.

A complete list of the Fund's equity portfolio can be found on the Fund's website.

## Andra AP-fonden's holdings in listed funds

Name	Holding, participations	Fair value, SEK million
Genesis Emerging Markets Class A	5 475 561	3 918
GAM FCM Cat Bond Inst Initial Series	2 425 480	3 765
Generation IM Global Equity Fund Class I 20071201	536 200	2 837
Barings Global Multi Credit Strategy Fund 2	3 026 617	2 763
Ares Strategic Investment Partners IV	250 000 000	2 510
Generation Im Global Equity A Shares LTA20 090401	271 698	1 454
Elementum Zephyrus Total Return Cat Bond	123 354	1 418
Generation IM Global Equity Fund Class I 20090401	250 659	1 296
AQR Merger Arbitrage Fund	1 021 369	1 219
CS Iris S Fund Ltd.	115 143	1 214
CVC Credit Partners	1 000 000	1 194
GSO Global Dynamic Credit Feeder Fund Ireland A	757 354	888
Generation IM Asia Fund	475 105	808
AQR Opportunis Convertible Arbitrage Offshore Fund	525 937	608
MG Lion Credt Opp Fund XIV - Series 1 Share Class	39 000	458
Elementum Zephyrus Total Return Cat Bond Class S Dec 2018	323	4
Gam FCM Cat Bond 2019 Series 1	1 654	2
Gam FCM Cat Bond 2018 Series 10	1 640	2
Gam FCM Cat Bond 2019 Series 7	1 652	2
Gam FCM Cat Bond 2019 Series 4	1 625	2
Gam FCM Cat Bond 2019 Series 10	1 693	2
Elementum Zephyrus Total Return Cat Bond Class S Apr 2018	32	0

**Andra AP-fonden's 20 largest foreign shareholdings\***

Company name	No. of equities	Market value, SEK million	Sector
ABB Ltd	4 505 052	1 014	Industry
Kweichow Moutai	637 661	1 014	Consumer goods
Nordea Bank	12 895 263	975	Finance
AstraZeneca	1 024 628	963	Healthcare
Gree Electric Appliances	7 232 155	637	Consumer goods
Jiangsu Hengrui Medicine	4 837 971	569	Healthcare
Ping An Insurance Group Co	4 326 432	497	Finance
China Merchants Bank	9 579 675	484	Finance
Wuliangye Yibin	2 181 295	390	Consumer goods
Autoliv	458 846	363	Consumer goods
Hangzhou Hikvision Digital Technology	8 237 333	362	IT
Millicom International Cellular	691 221	310	Telecom
Nestlé	304 371	308	Consumer goods
Roche Holding	99 834	303	Healthcare
Schneider Electric	288 695	278	Industry
China Vanke	6 347 747	275	Real estate
Inner Mongolia Yili Industrial Group	6 529 797	272	Consumer goods
Beijing Venustech	5 847 992	266	IT
Thermo Fisher Scientific	87 121	265	Healthcare
Medtronic	241 933	257	Healthcare

\* The table lists the Fund's 20 largest holdings in foreign shares in terms of value.

A complete list of the Fund's equity portfolio can be found on the Fund's website.

**Andra AP-fonden's holdings in bonds and other fixed-income securities***Swedish nominal bonds, five largest holdings*

Bond	Fair value, SEK million
Stadshypotek AB #1586	2 354
Swedish Government #1057	1 338
SEB #574	1 313
Nordea Hypotek #5531	1 198
Stadshypotek AB #1584	1 162

*Global government bonds, five largest holdings*

Bond	Fair value, SEK million
FRANCE O.A.T.	922
Intl Devel Assoc	292
Irish Government	208
Intl Devel Bank	202
Kingdom of Belgium	196

*Global credits, five largest holdings*

Bond	Fair value, SEK million
Deutsche Bank AG	350
Deutsche Telekom	343
AmerisourceBergen	330
Credit Suisse	327
Deutsche Bank AG	314

Detailed information about Andra AP-fonden's holdings in fixed-income securities is available on the Fund's website.



*“Andra AP-fonden’s Board of Directors  
is appointed by the Swedish Government  
and shall comprise **nine members**”*



# Fund governance report

To comply with the Annual Accounts Act and the Swedish Code of Corporate Governance, Swedish listed companies are required to submit a corporate governance report.

The Code provides guidance on good practice for corporate governance for listed Swedish companies. This Fund governance report has derived inspiration from the Code of Corporate Governance, while also taking into account the special characteristics that apply to the AP Funds.

Like the other AP Funds, Andra AP-fonden is a government agency. However, there is a difference between the AP Funds and other government agencies. The main difference is that the AP Funds are independent of the Swedish Government as their operations are almost exclusively governed by law and the Government thus has no provision in law to exercise control over them.

## The Board of Directors

Andra AP-fonden's Board of Directors is appointed by the Swedish Government and shall comprise nine members. Two Members are appointed following proposals from organisations that represent employees' interests, and two following proposals from organisations that represent employers' interests.

The Chair and Vice Chair are appointed by the Government, selected from the Members of the Board not put forward by employer or employee organisations.

Each Member shall be appointed on the basis of his/her ability to promote the management of the Fund.

On 23 May 2019, the Government decided on a new Board of Directors, appointing Lin Lerpold as a new Member and Vice Chair after Jeanette Hauff. To date, the Government has chosen to implement twelve-month mandate periods for Board Members, whereby current appointments remain in effect until the Fund's income statement and balance sheet for 2019 have been adopted.

The Board has full and undivided responsibility for the operations within the parameters established by the Swedish Parliament for the organisation of the Fund and the management of its assets. In instances where the work of the Board falls outside the terms of the Swedish National Pension Funds' Act, it is governed by the rules of procedure annually adopted by the Board.

Fees and other remuneration paid to the Board Members are determined by the Swedish Government. Annual remuneration is SEK 100 000 to the Chair, SEK 75 000 to the Vice Chair and SEK 50 000 to the other Members of the Board. The Swedish Government has determined that a total of SEK 100 000 may be paid for committee work. Board Members have not received remuneration for their work in the Remuneration Committee. The Chair has received SEK 30 000 and Members have received SEK 25 000 for work in the Risk Committee. The Chair has received SEK 20 000 and a Member has received SEK 15 000 for work in the Audit Committee.

Member of the Board	Remuneration Committee	Risk Committee	Audit Committee	Attendance/ total no. of meetings	Comments
Jan Roxendal	X		X	6/6	
Lin Lerpold	X			4/4	Appointed in May 2019
Jeanette Hauff	X	X		2/2	Left the Board in May 2019
Ole Settergren				6/6	
Ulrika Boëthius				6/6	
Christer Käck		X		6/6	
Johnny Capor			X	6/6	
Kristina Mårtensson				5/6	
Martina Björkman Nyqvist				4/6	
Hanse Ringström		X		5/6	

### **Work of the Board**

The key duties of the Board of Andra AP-fonden are to establish business goals, recruit and assess the CEO and take decisions concerning organisation-wide strategic issues, including the construction of the Fund's strategic portfolio. Effective control and follow-up procedures are essential to ensure that the Board's decisions are implemented, that the risks in the organisation are managed and that operations are in all other respects conducted in an appropriate manner. The Board held six regular meetings during the year. A longer meeting was held in October to discuss, among other things, the Fund's further strengthened sustainability agenda through integration of climate analysis in investment processes, investment opportunities in climate change, growth in investment opportunities and sustainability principles, and a review of the Fund's IT strategy. It also discussed strategic issues with a focus on the changes in the strategic portfolio that might be proposed at the Board meeting in December. As well as Board Members, Board meetings are attended by the Fund's CEO and the Secretary to the Board. Other Fund employees may also attend in an advisory role as experts or to present a report and provide information. The CEO's performance is evaluated once a year. The CEO does not attend this meeting.

### ***Fund targets***

The Fund is committed to generating a solid return on invested capital to minimise the consequences arising out of activation of the automatic balancing mechanism. Andra AP-fonden has therefore designed a portfolio that is expected to generate a long-term average annual real return of 4.5 per cent.

### ***Strategic portfolio***

A new strategic portfolio has been approved for 2020.

### ***Discussion about performance, governance issues and costs***

The Fund's management performance is reviewed at every Board meeting. The Board discusses fundamental sustainability and governance issues at every meeting and also regularly discusses private equity allocations and trends. The Board reviews

cost trends on a quarterly basis and regularly assesses the cost efficiency of the Fund. Its annual responsibilities include decisions concerning the adoption of the year-end accounts, the budget, business plan and strategic portfolio.

### **Board committees**

The Board has set up a Remuneration Committee. The Remuneration Committee consists of the Fund's Chair and Vice Chair. The CEO is normally co-opted to meetings of the Remuneration Committee. The CEO is not present when the Committee determines his/her remuneration.

The Remuneration Committee is a drafting committee for the Board, tasked with considering the level of remuneration for the CEO, establishing guidelines for the remuneration of the Fund's executive management and determining issues related to incentive programmes for Fund employees. Swedish Government guidelines on terms of employment for AP Fund employees are monitored and checked against the Fund's own guidelines and to ensure their correct implementation. Decisions reached by the Remuneration Committee are submitted for consideration by the Board at the next Board meeting.

The Board has set up a Risk Committee. The role of the Risk Committee is to act as an advisory, supervisory and preparatory body for the Board concerning the Fund's risk control and risk management activities. The Risk Committee comprises two Members of the Board. The Fund's CEO and the Head of Performance and Risk Management attend the Risk Committee to present reports or provide information.

The Risk Committee is not authorised to make decisions on behalf of the Board or the Fund, except in those cases where such authority has been delegated by the Board. The responsibility of the Board and its individual directors is in no way limited by the establishment of the Risk Committee or its duties. The Committee meets at least six times a year and performs its duties according to rules of procedure set by the Board on an annual basis. In 2019, the Risk Committee has, among other things, examined trends in relation to financial and operational risks and has reviewed the Fund's benchmark indices and alternative investments. The current risk situation and the Fund's

return growth were also presented and discussed at each meeting.

The Board has set up an Audit Committee. The role of the Audit Committee is to act as an advisory, supervisory and preparatory body for the Board concerning financial reporting, accounting, internal control, and external and internal auditing. The Audit Committee comprises two Members of the Board. The Fund's CEO, the Head of Business Support and the CFO attend the Committee to present reports or provide information together with the Fund's external and internal auditors.

The Audit Committee is not authorised to make decisions on behalf of the Board or Fund, except in those cases where such authority has been delegated by the Board. The responsibility of the Board and its individual directors is in no way limited by the establishment of the Audit Committee or its duties. The Audit Committee met six times in 2019, once together with the Board's Risk Committee for an annual review of the Fund's work on operational risks, compliance reporting and internal audit assignments. During the year, the Committee's main focus has been on monitoring the internal audit work decided by the Board and the procurement of internal audit services, carried out jointly with Första, Tredje and Fjärde AP-fonden. Its work has also entailed discussions with the Fund's external auditors.

### **Evaluation of Board performance**

The performance of the Board is subject to annual evaluation. The evaluation was carried out by an external consultant through a survey in early 2019. The result of the evaluation was

presented to the Board and discussed at the meeting in April and at the Board meeting in October. Considerable emphasis is placed on continually developing the work that already functions well, also regarding collaboration with the Fund's executive management.

### **Audit**

Andra AP-fonden's auditors are appointed by the Swedish Government. On 23 May 2019, the Government decided to appoint Peter Nilsson and Helena Kaiser de Carolis from PwC as auditors of Andra AP-fonden. PwC is also responsible for the audit of other AP Funds, and Peter Nilsson has been appointed as coordinating auditor for the AP funds. The Government mandate shall be effective until adoption of the Fund's income statement and balance sheet for 2019.

The auditors present an auditor's report on the findings of their work and deliver a direct verbal report to the Board at least once a year. They also present written reports on the findings of their audits of the annual accounts and the management of the Fund. The auditors also submit a report to the Ministry of Finance once a year.

The services of the auditors include a review of operating activities, the management of the Fund, the annual accounts and the annual report. The auditors express their opinion of the annual accounts and the management of the Fund based on the findings of their audit. The services also involve ascertaining that Andra AP-fonden complies with the generally accepted accounting policies and measurement bases jointly determined

by the AP Funds, and that the annual accounts presented provide a true and fair picture of the organisation.

The work also involved reviewing the Fund's guidelines on remuneration in accordance with Swedish Government guidelines on remuneration to senior executives and employees, and compliance with these. A separate statement has been submitted, see the Fund's website.

### **Internal control**

The Board has ultimate responsibility for the Fund's internal control. In the Fund's risk policy, the Board has established frameworks and guidelines for the overall division of responsibilities, risks, risk limits and procedures for monitoring and controlling compliance with these guidelines. The CEO is responsible for ensuring that business is conducted within defined frameworks and investment provisions and that control and monitoring activities are carried out daily. Andra AP-fonden uses the "Three lines of defence" model as a structured process to ensure that its risk management and control environment are effective. Asset Management which, according to the model, is primarily considered to be the first line of defence, has ownership of the risk. It has the delegated responsibility to implement the Fund's decided risk strategy and ensure that the Fund adheres to the defined limits as required by law, determined by the Board or that apply to the Fund's activities through other decisions.

The second line of defence is performed primarily by the Risk Management and Compliance functions. Among other things,

they monitor, control and report the Fund's risks and how the Fund complies with internal and external regulations. The Risk Management Department is organisationally independent of the functions that take active business decisions. The risk control is based on an effective and transparent risk reporting and analysis process. Daily reports are presented to the Fund's executive management, regularly to the Board via reports and at meetings of the Risk Committee and at Board meetings. The Compliance function is responsible for ensuring that the Fund complies with the regulations governing its activities. This includes monitoring changes to applicable regulations and communicates information about these internally, through training, policy statements and other means. During the year, new policies have been developed with respect to new or changed regulations and several training courses have been completed.

The third line of defence is performed by an external independent internal audit function which evaluates and improves efficiency in a systematic and structured way in the Fund's risk management, internal controls and management processes. Decisions on annual internal audit services are taken by the Board. The findings of the internal audit are reported to the Audit Committee, and to the Board at the intervals set by the Committee. The 2019 internal audit services entailed a review of the Fund's IT security. The services also included an annual regular compliance review within selected, identified internal processes. Reporting of completed audits takes place in February 2020.



# Board of Directors


**Jan Roxendal**

Chair since 2018, Member since 2017. Member of the Boards of Catella AB and Magnolia Bostad AB and member of the Sarafimer Clinic. Born 1953.


**Lin Lerpold**

Vice Chair since 2019. Ph.D. in Economics. Associate Professor in Business Administration at Stockholm School of Economics. Board Member of Stockholm School of Economics Institute for Research and Alliance for Research on Corporate Sustainability. Born 1964.


**Christer Käck**

Member of the Board since 2014. M.Sc. (Econ). Self-employed. Member of the Boards of Aktie-Ansvar AB and Garantum. Member of the placement council for the Journalist Association. Born 1953.


**Johnny Capor**

Member of the Board since 2014. Self-employed. Chair of Örbý Housing Development AB. Member of the Boards of APP Properties AB and Smålands fastighetsutveckling AB, etc. Born 1966.


**Kristina Mårtensson**

Member of the Board since 2015. M.Sc. (Econ). Administrative Director for the Kommunal trade union. Born 1966.


**Ole Settergren**

Member of the Board since 2013. Head of the Swedish Pensions Agency's analysis department. Born 1964.


**Ulrika Boëthius**

Member of the Board since 2012. Chair of the Financial Association. Member of the Boards of TCO (Confederation of Professional Employees), NFU (Nordic Financial Unions) and CEFIN (Centre for Banking and Finance) at KTH. Born 1961.


**Martina Björkman Nyqvist**

Member of the Board since 2018. Ph.D. in Economics. Associate Professor in national economics at Stockholm School of Economics. Born 1974.


**Hanse Ringström**

Member of the Board since 2018. MBA and BA. Self-employed. Chair of Katalysen & Partners AB. Member of the Boards of Payer Tec AB, SEB Ukraina and Sweden China Trade Council, etc. Born 1948.



# Executive Management



**Eva Halvarsson**

CEO. Employed since 2006. Other assignments: Board Member of Vasakronan AB, Kungliga Operan AB, UN-PRI, WIN WIN Gothenburg Sustainability Award, Engineering Science Academy (IVA) and Finans-KompetensCentrum. Born 1962.



**Ulrika Danielson**

Head of Communications and Governance. Employed since 2009. Born 1965.



**Ola Eriksson**

Head of Business Support. Employed since 2001. Born 1965.



**Hans Fahlin**

Chief Investment Officer. Employed since 2010. Other assignments: Chair of the Centre for Finance (CFF) at Gothenburg School of Business, Economics and Law, Board Member of STIM and Chair of The Institute of Quantitative Research Europe (INQUIRE). Born 1957.



**Martin Jonasson**

General Counsel. Secretary to the Board. Employed since 2001. Other assignments: Member of the Foundation Friends of the Blind. Born 1964.



**Henrik Westergård**

Head of Performance and Risk Management. Employed since 2012. Other assignments: Board Member of Varbergs Sparbank. Born 1973.

## Auditors

**Helena Kaiser de Carolis**

Authorised Public Accountant, PwC.

**Peter Nilsson**

Authorised Public Accountant, PwC.

# Financial definitions

## Absolute return on investment

The return generated on a portfolio or portfolios of assets, measured in kronor or per cent, of the original invested amount.

## Active management

Asset management actively deviates from the benchmark index in order to create added value.

## Active risk/Tracking error

The variation in relative return. Often measured as standard deviation on the relative return. Active risk is calculated using daily data to determine relative return.

## ALM study

Asset Liability Modelling. An analytical model used to determine the Fund's strategic portfolio. The study, which is revised on a continual basis, is designed to determine the optimal composition for the different classes of asset under Fund management, to ensure that it satisfies the Fund's long term commitment to the collective requirements of the Swedish national pension system. The judgements based on this analysis shall take into account demographic change as well general economic trends.

## Benchmark index

Index based on Andra AP-fonden's strategic portfolio, against which the Fund's management performance is measured.

## Brokerage commission

Brokerage commission is the fee paid to the bank when trading in shares.

## Credit risk/counterparty risk

*Credit risk:* Credit risk refers to the risk that an issuer may become insolvent or be given a lower credit rating.

*Counterparty risk:* Refers to the risk that the other party may be unable to meet its business obligations.

## CSA agreement

An annex to the ISDA agreement that regulates how the party with an outstanding debt (unrealised loss) must provide collateral for the debt in the form of liquid funds or securities.

## Currency exposure

Currency hedging allows an uncertain future exchange rate between two currencies to be locked in through the use of derivatives. It protects against foreign-exchange risks.

## Derivative

A collective name for a form of securities. The most common derivatives are options, futures, warrants and swaps. A characteristic of financial derivatives is that they are linked to events or conditions at one specific point in time in the future.

## Duration

A measure of interest risk that yields an asset-relative change in value with an interest adjustment of one percentage unit.

## Ex-ante

Projected calculations that look ahead in time.

## Ex-post

Calculations from realised data that look back in time.

## Fair value

Fair value is defined as the amount for which an asset may be transferred or a debt settled, between parties who are mutually independent and who have a vested interest in completing the transaction. Normally speaking, this means that listed assets are valued at the buying-rate (market value) and that the fair value of non-listed assets is estimated with the help of generally accepted valuation models.

## FX forward

A derivative instrument involving a contract to purchase foreign currency at some future date at a predetermined rate of exchange.

## Idiosyncratic risk

Risk in individual positions that can be diversified if the number of positions are increased.

## Implementation effects

Return contributions that derived from implementation of the strategic portfolio and index switches.

## Information ratio

A gauge of risk-adjusted relative return. Measured as relative return, divided by tracking error.

## Interest rate swap

A contract between two counterparties, in which one interest flow is exchanged for another. Normally, the undertaking given by one party to pay a fixed rate of interest is exchanged for the other party's undertaking to pay a floating rate of interest.

## IPEV

International Private Equity and Venture Capital Valuation Guidelines.

## ISDA contract

International Swaps and Derivatives Association. An ISDA contract is a standard contract for the regulation of trading in derivatives between two counterparties.

## Liquidity risk

Refers to the risk that securities cannot be converted into cash, because of reduced access to or demand from the market, which either precludes the purchase or sale of such securities, or would require their sale at a lower price.

## Market risk

The market risks most relevant to Andra AP-fonden are share-price risk, interest-rate risk and currency risk.

## MSCI index

International equity indices managed by Morgan Stanley Capital International.

## Operational risk

Refers to the risk that an error or stoppage in operations could lead to economic loss or reduced credibility.

## Quantitative management

Asset management that focuses on exposing incorrect market pricing with the help of a mathematical model.

## Relative return

Portfolio return compared to return on Fund's strategic portfolio. The return is cleared of commission and operating expenses.

## S&P/Standard & Poor's

Standard & Poor's composite index. A cap-weighted share index with over 500 US companies. Selection is based on size, liquidity and industrial sector, among other factors.

## Sharpe ratio

A gauge of risk-adjusted return. Measured as the portfolio's absolute return less risk-free interest (SSVX 12 months), divided by the standard deviation on absolute return.

## Strategic portfolio

Andra AP-fonden's strategic portfolio is determined annually by the Board of Directors and confirms the Fund's decision on strategic asset allocation.

## Systematic risk

Market risk segment that cannot be diversified by increasing the number of positions.

## TAA

Tactical Asset Allocation. An active investment strategy that centres on taking advantage of differences in expected performance of various asset classes.

## Value-at-Risk, VaR

A measure of risk that indicates the maximum loss, based on a given confidence level, that a portfolio may incur over a given period. VaR is normally calculated at a confidence level of 95 per cent.

## Volatility

Volatility refers to the amount the price of a financial asset varies over time. This is normally expressed as a percentage, in terms of the standard deviation.





*“Based on our **mission**, we have unique **expertise** in analysing **the pension system’s** development and needs going forward”*



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