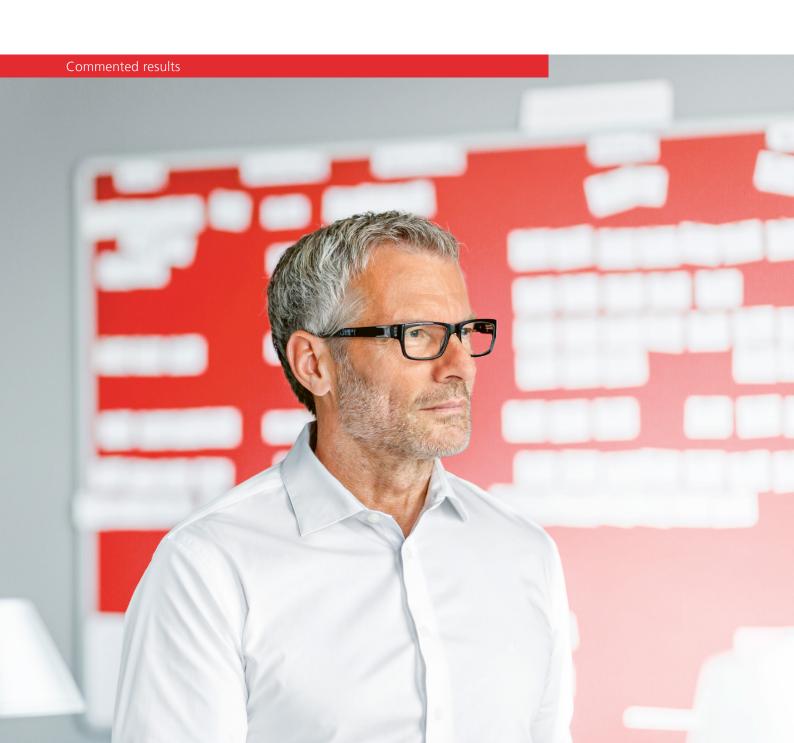


Swiss Pension Fund Study 2020



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Editorial



The Swisscanto Pension Fund Study was published for the first time 20 years ago. At that time, the conversion rate was over 7 per cent and the technical interest rate was 4 per cent. Today, the figures are around 5.5 per cent and below 2 per cent respectively.

This significant reduction is due to far-reaching structural changes – socio-demographic changes as well as changes in regulations and the investment markets. Consequently, efforts were needed by all social partners. A revision of the BVG was approved at the ballot box and further proposals were rejected. In both cases this was accompanied by heated debate. In addition to this, greater demands were placed on the managers of pension funds to use their room for manoeuvre. In this regard, the Swiss Pension Fund Study creates transparency within the industry and provides an impetus for discussion about the current situation on the changes in occupational pension provision.

In addition to the usual presentation of the previous year's figures, we have prepared selected data for you from the entire period of the study. In retrospect, this shows how adaptable pension funds have proven to be in the face of social change, and how resistant they have been to economic downturns. The latter was again confirmed during the coronavirus crisis which the pension funds absorbed well. This makes me confident that we will also find viable solutions for the structural challenges that lie ahead for the second pillar. The task is to lay the foundations that will put this successful part of the Swiss pension system on a sustainable course for future generations.

I would like to express my special thanks to participants in the survey who place their trust in us every year and allow us to take a look at their data with a great deal of commitment.

I hope you enjoy reading the study and find the information contained in it to be useful.

Martin Scholl CEO Zürcher Kantonalbank

At a glance

Ø10.85%

return on investment

The 3rd contributor is delivering better than ever. However, differences between pension funds are enormous (from 3.0 to 19.3%).

Pension funds are using more asset classes with higher potential returns than 20 years ago.

45% more real estate

480% more alternative investments



Higher interest return

for active insured members (2.64%) than for pensioners (2.04%) thanks to a good investment year.



30%

Pension funds take over social responsibility: 30% asset-weighted share according to ESG criteria.

Developments 2020



Exogenous shock of the coronavirus crisis well absorbed, funding ratios have recovered.

Pension schemes are safe.



Pensions

continue to fall

Conversion rate fell from 6.74% (2010) to 5.63%. Without reforms, pensions will fall even more.

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The crisis has been overcome – structural challenges remain



Heini Dändliker
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Management /
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Market Switzerland,
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The coronavirus crisis was a stress test for occupational pension plans, but pension funds survived the turbulent first half of 2020 largely unscathed. The outlook for the longer term is becoming increasingly acute, however: conversion rates continue to fall and the pressure on pensions is mounting.

The last few months have turned many things upside down. The coronavirus crisis has not left pension funds unscathed either. The exogenous shock made its presence felt with full force in the first quarter. Funding ratios collapsed following the stock market crash at the beginning of March. For private pension funds, the average drop was 10.6 percentage points, for public pension funds with full capitalisation, 10 percentage points, and for those with partial capitalisation, 7.7 percentage points.

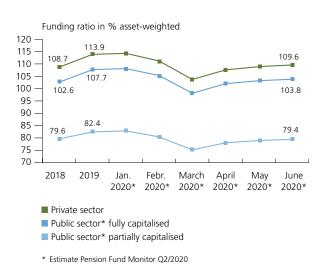
Funding ratios have since recovered, and at the end of June they were back above their levels of 2018, when volatile markets last caused a major downturn. Although the losses wiped out a part of the returns from the excellent investment year of 2019, the markets stabilised surprisingly quickly. The pension funds kept with their chosen investment strategy, and their portfolios were sufficiently diversified to withstand the market stress. So far, shortfalls have been the exception rather than the rule – not least because the reserves were large enough.

Value fluctuation reserves significantly increased

The funding principle passed the stress test. The challenging situation did not imbalance the second pillar. Even the recurring criticism of the supposedly exaggerated need for security on the part of pension funds does not seem justified in view of the turbulent last few months. Thanks to the good investment results of 2019, the pension funds were able to increase their value fluctuation reserves just in time to be armed for the crisis.

Compared with the previous year, the proportion of pension funds that formed at least 75 per cent of their target value fluctuation reserves more than doubled to 63 per cent. In view of the uncertain development of the pandemic and the still volatile markets, this also appears to be urgently necessary.

Figure 1: Development of funding ratio 2018 until June 2020



Safeguarding pensions remains the biggest challenge

However, the greatest challenge for pension funds is and remains the longer-term safeguarding of pensions. The negative trends in occupational pension provision have been continuing almost linearly for ten years now. This was also the case in 2019: technical interest rates were reduced again, and as a result, conversion rates fell even further, and are now well below the target value for the BVG revision, which is currently under way.

Technical interest rates today are at levels that were unthinkable just a few years ago. The proportion of pension funds with technical interest rates below 2 per cent increased significantly in 2019. This currently stands at 58 per cent for private pension schemes and 49 per cent for public-sector ones. In comparison: in 2016 only 4 per cent of public funds had reported a rate of less than 2 per cent.

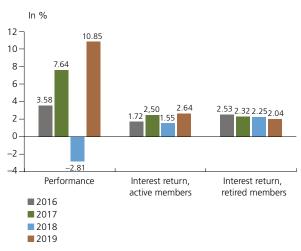
The ongoing decline of the technical interest rate and the continual rise in remaining life expectancy is leading to steadily decreasing conversion rates. The average conversion rate for men with a retirement age of 65 is currently 5.63 per cent, compared with 5.73 per cent in the previous year. If the compensation measures of the pension funds are disregarded, pensions have fallen by 16 per cent since 2010. By 2024, the survey participants expect a further decline in the conversion rate to 5.38 per cent, which corresponds to a 20 per cent reduction in pension benefits compared with 2010, if compensation measures are not taken into account. This increases the pressure for reform.

Large differences in interest return

The above-average investment year in 2019 has clearly shown how strongly the interest return for active insured persons now depends on performance. The average interest return was 2.64 per cent in 2019 – more than 1 percentage point more than in 2018. For pensioners on the other hand, the return fluctuates much less, but a downward trend can still be seen here too. Since 2016, the interest return has fallen by 49 basis points to 2.04 per cent.

When comparing the interest return of individual pension funds, the large differences are striking, the rates ranging from less than 1 per cent to more than 5 per cent. The differences by employer and legal form are also striking: the pension funds of private employers granted an average interest return of 2.88 per cent, whereas those belonging to public employers only granted 1.86 per cent. The collective and common pension schemes of private employers (CCPI) were in between at 2.22 per cent.

Figure 2: Interest return and performance 2016–2019



Cushioning measures take effect

Although the long-term trends are alarming, pension funds have so far been able to maintain pension benefits. This year, we examined the actual benefits as a percentage of insured salaries for the first time. The amount of average pension paid out was determined based on the average insured salary of active employees for 2014 and 2018. The median value of the actual performance calculated in this way remained constant at 43 per cent.

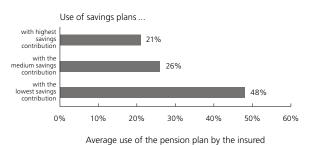
In their cushioning measures, the pension funds opted for a mix of long-term measures and measures for the transitional generation. The latter include deposits from the employer and welfare fund, the increase in savings capital from provisions, vested pensions and pension guarantees, and a recapitalisation contribution for pension losses. In the long term, there are three factors that pension funds can adjust: they can extend the contribution period, raise the savings contributions or increase the return.

Recipients face challenges too

A very effective approach is to increase the savings contributions. This is only possible if recipients can choose between different pension plans. 48 per cent of pension funds now offer this service, more than twice as many as in 2012. This year, for the first time, we asked which savings plans are most frequently used by insured members. It was found that 48 per cent of insured members chose the lowest savings amount, 26 per cent the medium amount and only 21 per cent the highest. One reason for this is undoubtedly that higher savings contributions result in a reduction in the available salary.

Higher individual savings contributions should be encouraged, particularly with a view to safeguarding long-term benefits without further measures. A higher savings contribution can mitigate a reduction in the pension level caused by a lower conversion rate. The educational work being done by pension funds and employers is helping to ensure that insured members make increasing use of this option.

Figure 3: Use of the savings plans



What weakens and strengthens the sustainability of the second pillar



Iwan Deplazes
Head of Asset
Management,
Swisscanto Invest by
Zürcher Kantonalbank

Doubts about the sustainability of the second pillar generally focus on the burden caused by demographic changes and the lack of flexibility regarding conversion rates. However, from the perspective of an asset manager of a substantial amount of Swiss pension fund investments, as Head of Asset Management at Zürcher Kantonalbank, I can add a great deal more to the subject of "sustainability of the second pillar". These findings can be substantiated by our Swisscanto Pension Fund Study, which is marking its 20th anniversary this year and provides us with fascinating data on how pension funds have performed over time.

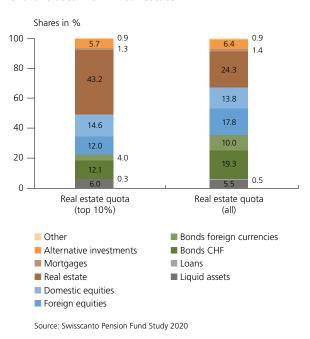
Once again, we have analysed the Swiss pension fund landscape for you in the usual fine detail. I would like to highlight three aspects of this year's study:

- The major differences between pension funds in the way asset classes are handled
- The third contributor, who makes major contributions to the second pillar and assumes social responsibility
- Capital gains that offer a way out of the political impasse

Major differences between pension funds in the way asset classes are handled

It is clear to see how the investment ratios of pension funds are predominantly shifting towards equities and real estate over time. This trend has continued at the expense of bonds for several years. This shift is generally happening slowly, but it can clearly be seen and is commonly believed to be a response to the low interest rate environment. Alternative investments are also benefiting from this shift, though on a comparatively small scale. The extent of this shift may be due to compliance with the statutory investment limits, the purpose of which is to avoid cluster risks. In view of the number of asset classes available while at the same time complying with the statutory investment limits, it is to be expected that the yield spread of pension fund portfolios will be rather small. Actually though, this is not the case. For 2019, we were able to determine a yield spread between 3.0 per cent and 19.3 per cent – with a high average value of 10.85 per cent. The yield spread appears to be increasing rather than decreasing over the years.

Chart: Cluster risk in real estate





Pension funds assume social responsibility

Investment returns offer a way out of the political impasse



Large differences in the pension funds in the handling of the asset classes

Source: Swisscanto Pension Fund Study 2020

As part of the current Swisscanto Pension Fund Study, we have set out to find the reasons behind this yield spread. We were able to identify strong differences in the allocation of assets. Allow me to use real estate as an example:

Within the framework of the average analysis, we discovered that real estate now accounts for a good 24 per cent of the allocation in the average pension fund portfolio. And we know from previous years that the share of real estate in the total assets of pension funds has gradually risen since the start of the millennium. We have already seen in previous years that the real estate share of smaller pension funds has risen much faster over time than that of larger ones. Though until now, we didn't know how high the real estate share of pension funds that have a particularly strong allocation to real estate actually was. The results are surprising, perhaps even shocking for seasoned multi asset managers. We found that the 10 per cent of pension funds (corresponding to 52 out of

a total of 520 funds analysed) that are particularly fond of "concrete gold" have an average real estate share of no less than 43.2 per cent (see chart).

It becomes clear that the real estate share has massively expanded at the expense of bonds. This may be profitable in the short term, given the yield advantage that Swiss real estate currently enjoys over Swiss bonds. In the long term however, this allocation decision ignores the influence that interest rates have on real estate through the calculation of the capitalised earnings value. Inflation, or even a rise in expected inflation, has a similar impact on bonds and real estate. Having such a pronounced cluster risk in real estate should definitely be reviewed.

Negative interest rates: more joy than pain so far for pension funds

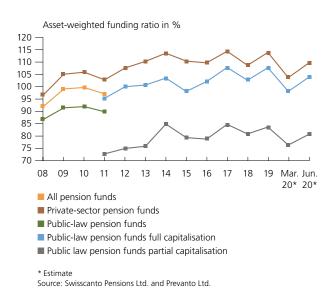
The prevailing view is that Swiss pension funds are suffering noticeable losses on the cash positions of their portfolios due to the negative interest rates of the Swiss National Bank. However, this view is short-sighted. Of course, it is easy to back this argument up by relating it to a bank account that incurs negative interest. But what is completely ignored here is that because of negative interest rates, the valuation method used to value bonds, equities and real estate has resulted in considerable gains in recent years; these have dwarfed the financial losses caused as a result of funds being parked with banks and the SNB many times over.

During the coronavirus crisis, we have again seen the US Federal Reserve increase its efforts to anchor inflation and interest rate expectations at the current extremely low levels. So far, these efforts have been successful. However, there is no guarantee that this will remain the case. Investment strategists from various investment houses, including our own multi-asset experts, are warning of inflation. And since gold is a classic inflation hedge, it has been the most successful asset class this year. I can't rule out that we will be shedding tears one day for the low interest rate environment of recent years that has persisted to this day. The minor drawback in the form of negative interest rates will then be nothing more than a footnote.

The third contributor makes a major contribution to the second pillar and assumes social responsibility

The figures published at the end of 2019 as part of the current pension fund study painted a very rosy picture of the second pillar. The funding ratio reported at the end of 2019 was 113.9 per cent. In 2019, pension funds posted an average return on their investments of 10.85 per cent. As a result of the coronavirus crisis, these pleasing figures had already faded away to nothing three months later (see graph). But we now know that the gloomy figures seen at the end of March have since given way to a much more positive outlook (see graph).

Chart: Change in the funding ratio from 2008 to 30 June 2020



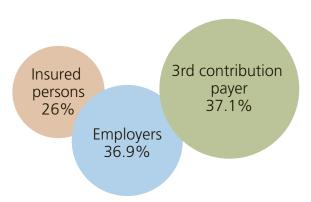
What we should learn from this is that the current funding ratios of pension funds are only ever a snapshot in time. The key thing though is that the third contributor reliably contributes to the pension fund assets over the long term via its investment performance. Active investment strategies play their part in ensuring this happens. During the course of the pension fund study, we were able to determine how many pension fund managers took advantage of the strong fluctuations on the market this year to carry out an active rebalancing.

In addition, sustainable investments proved to be much more robust than their traditional counterparts, especially during this period. This effect is benefiting many pension funds. We surveyed ESG investments in the current survey for the first time and established that pension funds are taking their social responsibility seriously. Thus, 30 per cent of assets are invested according to ESG criteria. In addition, pension funds have agreed to the postponement of rent payments due to the coronavirus crisis, even without legal requirements.

Capital gains offer a way out of the political impasse

Ultimately, what matters is the long-term sustainability of pension funds and the role they play for society as a whole. The third contributor makes a major contribution towards this sustainability. Few people realise that the financial contribution made to the second pillar by the third contributor is already greater than that made by employees and employers (see chart). The use of snapshots showing the ups and downs of equity and capital markets does not adversely affect the meaningfulness of the content. According to our calculations, an additional yield of 0.6 percentage points would be enough to safeguard pensions. The more returns are generated, the less need there is to adjust the benefits. It would therefore be expedient to improve the performance of the third contributor, not least in the context of the required pension reform.

Chart: Who finances the second pillar?



The right political decisions must be taken



Hanspeter Konrad lawyer, Director of the Swiss Pension Fund Association (ASIP)

In the current situation, revising the BVG has become even more urgent. Two models are available for this purpose: the proposal developed by ASIP, the Swiss Pension Fund Association, and the "social partner compromise". One particular difference between the two is how compensatory measures are financed to maintain the level of benefits. The author demonstrates the advantages of the ASIP model, and calls for it to be revised without placing an additional burden on the younger generation through new deductions from wages.

The Covid pandemic is currently having a massive impact on our lives and poses unprecedented challenges for our generation. The difficult balancing act of ensuring the health of the population while keeping the consequences for society and the economy as low as possible has largely been successfully overcome thus far. Not least thanks to our well-developed social system with its solid structures, many people and companies affected by the pandemic were able to receive help directly. Switzerland's social security system has proven to be a stabilising factor in this crisis.

Nevertheless, the medium-term consequences of the global Covid pandemic on people, the companies affected as well as the real economy in all its different aspects should not be underestimated, and are increas-ingly becoming tangible. The debate on reforming the BVG must also be

assessed against this background. The pandemic should serve as a reminder to us of the importance of thinking ahead and making appropriate provision. In addition to stubbornly low interest rates, the continuing increase in longevity and excessively high conversion rates, there is now also the challenge of a reduction in financial leeway due to the tense economic situation, the risks on the financial markets and the foreseeable increase in national debt.

Need for rapid BVG reform

On 29 May 2020, the consultation on the reform, which had been extended due to the Covid pandemic, was concluded. In the meantime, various parliamentary initiatives point to the urgency of revising the BVG.

It is now becoming increasingly apparent that our warning of caution was right with regard to the value propositions promised, despite the good investment results in the past. In addition, ASIP's proposal for an affordable reform, the only one without any unnecessary costs, will gain in importance for many companies and employees due to the difficult economic situation. The proposal presented as early as May 2019 fulfils all the requirements for effective BVG reform and, compared with the compromise reached by the Employers' Association, the Federation of Trade Unions and Travail Suisse, provides a much better basis for a viable solution. It covers the following points:

- Financing of compensatory measures for the transitional generation using existing reserves (no unnecessary costs for employees and employers)
- Bringing forward the start of saving for old age from 25 years to 20 years

- Standardising the reference retirement age for men and women at 65 years of age (to be discussed in the AHV 21 proposal)
- Slightly reducing the coordination deduction (60 per cent of AHV salary, up to a maximum of CHF 21,330)
- Flattening retirement credits (age 20–34:
 9 per cent, age 35–44: 12 per cent, age 45–54:
 16 per cent, age 55–65: 18 per cent)
- Immediately reducing the minimum BVG conversion rate from 6.8 per cent to 5.8 per cent
- Compensatory measures for insured members who will retire in the next ten years by means of a one-off increase in the BVG retirement savings capital with a linearly decreasing surcharge of between 15.5 per cent and 0 per cent. Each pension fund carries out this control calculation decentrally using the credit principle. Any costs are financed by existing provisions¹ which can be partially reversed as a result of the reduction in the statutory conversion rate.

Reducing the conversion rate and compensatory measures

The focus is on reducing the BVG conversion rate from 6.8 per cent to 5.8 per cent in one step. We are not alone in this. The Occupational Pension Supervisory Commission (OAK BV) is also in agreement: "The need to quickly adapt the technical parameters laid down by law, in particular the minimum conversion rate, to the economically and demographically changed realities, has become even more urgent as a result of the coronavirus crisis. It is now up to the legislator" (see OAK BV press release of 12 May 2020). With the proposed reduction in

the BVG conversion rate, the redistribution from active insured members to pensioners, who will receive CHF 7.2 billion in 2019 according to OAK BV (0.8 per cent of the pension capital of active insured members and pensioners), can be reduced by around 50 per cent. A conversion rate of max.

4.8 per cent would actually be technically correct.²

In order to maintain the current level of benefits in accordance with the Federal Council's objectives, compensatory measures are naturally required for a transitional generation. However, in ASIP's view, only insured members who are actually affected by a reduction in the BVG conversion rate should benefit from this compensation. In this respect, the provision envisaged in the consultation draft ("social partner compromise") overshoots the mark by far – with wide-ranging cost consequences. A lifelong, flat-rate increase in the retirement pensions pledged for all insured members of CHF 200 per month from age 60 when the reform comes into force (or CHF 150 for those aged 55 and CHF 100 for those aged 50), regardless of how affected they are by the reduction in the BVG conversion rate, financed by employees and employers, is not conducive to achieving the goal and is far too expensive.

The ASIP proposal is based on a pension fund-specific, decentralised solution that is fairer, cheaper and easier to implement. The pension funds have long since built up sufficient reserves to finance the compensatory measures we are proposing (in accordance with FRP 2). These can be used immediately. Any additional burden on the employees

¹ In accordance with Professional Guideline 2 (FRP 2) of the Swiss Chamber of Pension Fund Experts, each pension fund must set aside provisions for retirement losses if the conversion rate is too high in comparison with the technical basis used. This is the case with all BVG minimum funds or only marginally supplementary funds. These provisions must be set aside for the insured members no later than the earliest possible retirement date in accordance with the fund regulations.

² According to the BVG 2015 basis, 2 per cent 2020 (CY).

and employers of the pension funds concerned would be minimal, if any. Our solution is much more favourable than the social partner compromise, because strongly supplementary pension funds – which make up the majority – are completely unaffected by the reduction in the BVG minimum conversion rate, which means transitional measures are unnecessary. The situation of insured members on low wages and of part-time employees is also improved by the ASIP proposal.

Results of the consultation

One glance at the responses to the consultation from various parties (SVP, FDP, CVP, GLP) and from key associations (Swiss Trade Association, Swiss Insurance Association, Swiss Builders' Association, Swiss Retail Federation, the bank interests group "Arbeitgeber Banken" etc.) shows that the Federal Council's reform project based on the social partner compromise is unable to win a majority in its current form and is therefore doomed to failure. In view of the additional burden that the Covid pandemic will place on both employers and employees, any future reform will have to carefully examine the potential for any additional burdens.

A model that provides for unlimited additional costs of 0.5 per cent of wages for "transitional measures" cannot reasonably be expected of employers and employees. The present time is seen as extremely unfavourable for an unnecessary increase in benefits for everybody. In addition, a new, nonsystemic redistribution is due to be enshrined in the second pillar with the fixed pension supplement for all, which is financed by a contribution on the entire AHV salary (not the insured salary). This imports the AHV's redistribution mechanism into the second pillar. The necessary BVG reform should, however, aim to reduce redistribution. Instead, it is accentuated even further by the pay-as-you-go element of the unsuitable social partner compromise.

The ASIP proposal, on the other hand, results in a much better overall price/performance ratio and is applied with targeted compensation without any further solidarity and redistribution. The ASIP model strengthens the BVG system without forcing employers and employees in BVG (or similar) funds to make excessive additional contributions. Different age structures are balanced out in a system-compliant manner without introducing a new redistribution apparatus from young to old, which can barely be financed in view of the current economic environment.

Conclusion

With its proposal, ASIP, as a professional association, assumes responsibility for the entire system and strengthens the resilience of the BVG (or similar) funds without a massive expansion. Our aim is to propose a possible solution which is in the interest of active insured members as well as pensioners. The intergenerational contract must not be strained any further. We are convinced that young and older people alike will work together in this sense to create a pension system that is fair to all generations. The broad support for an alternative based on the ASIP proposal "for a reasonable middle course" makes it clear that the reform backlog could be resolved in the process.

It is now up to the politicians to find a solution based on this proposal that is capable of winning a majority but that is also fair. The necessary financial resources are already available in the pension funds and do not need to be raised again. In light of the above, the BVG reform must primarily contain redistribution/cross-financing out of consideration for those of working age. In view of the forthcoming socio-political discussions, we need a strong second pillar in our three-pillar concept of old-age, survivors' and disability provision.

³ In contrast to the ASIP proposal, this alternative would reduce the BVG conversion rate to only 6 per cent instead of 5.8 per cent, and the retirement credits from age 55 would be 16 per cent instead of 18 per cent. In contrast, the benefits target and the other measures are identical.



20 years of the Swiss Pension Fund Study

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Preamble

The year 2000 or Y2K was awaited with much excitement, anticipation and, from those responsible for IT, also with a great deal of scepticism and fear. The first pension fund study was also published in that same year and 20 years on, you can hold the latest edition in your hands (if you prefer print) or view it digitally on screen. A little anniversary.

It is very interesting to see what has been done and – one must also add – what has not been done during the course of two decades in the occupational pension sector. A whole series of major shocks has swept across the capital markets, there has been one successful revision of the BVG even if other attempts have failed, and last but not least, the whole structure and foundations of the second pillar have completely changed.

Since Swisscanto has a whole series of data sets for the period, it was an obvious choice to use this to gain a retrospective view. However, the changes to the structure of the survey and the questions included in it presented a stumbling block. For the purposes of evaluating the data, we also had to refer to supplementary documents, especially those held by the Federal Statistical Office.

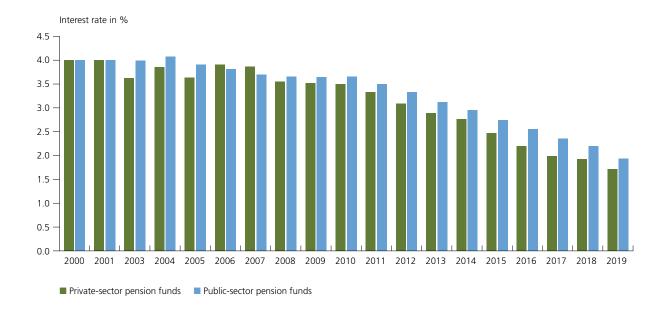
The information provided is not exhaustive. It is primarily intended to remind us how occupational pension provision has developed within the short period of two decades – in retrospect – and therefore also to provide us with an opportunity to take stock of the current situation.

Technical interest rate, conversion rate and benefits

Nowhere are the changes seen since 2000 more apparent than in the funding basis and the provision of benefits, as is shown by the technical interest rate, the conversion rate and the interest rate on retirement assets.

The figures from 2000 onwards impressively show the reduction in technical interest rates. Until the turn of the century, a rate of 4 per cent was typical. Things started to change a little later due to the dotcom crisis

and the resulting slump in prices on the US and other important stock exchanges. Since then, technical interest rates have declined almost without interruption. The interest rates of public-sector funds follow private-sector funds with a delay of about three or four years. For 2019, the rates are 1.71 per cent (private) and 1.93 per cent (public). Between 2000 and 2020, the technical interest rate more than halved.



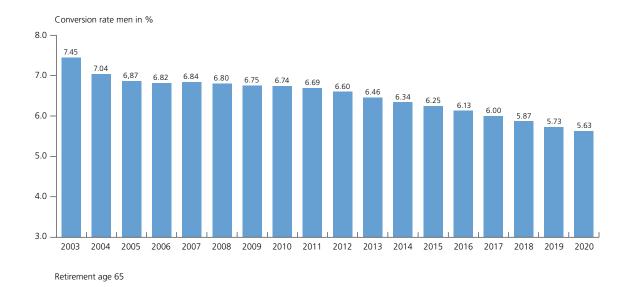
Conversion rate

The technical interest rate and conversion rate are closely linked and therefore develop in parallel to a large extent.

The minimum conversion rate was set at 7.2 per cent in 1985, and remained at that level until the second part of the first BVG revision came into force in 2006. The first, and so far the last reduction was implemented at that time to the 6.8 per cent that still applies today.

A further reduction to 6.4 per cent decided on by parliament had no chance in the referendum held on 8 March 2010, and was rejected by the voters with a 73 per cent "no" vote. Not a single canton agreed to the bill.

As a result of this, pension funds have become increasingly underfunded as a consequence of substantial retirement losses, which have to be covered by redistributing the funds from active to retired persons. Over the years, this has taken on enormous proportions. The OAK-BV estimates the figure to be over CHF 7 billion for 2019, and over the last decade it is likely to add up to around CHF 60 billion.



Minimum interest rate

Although it is less important for determining benefits than the technical interest rate and conversion rate, the BVG minimum interest rate has been the subject of the most heated debates. They have become part of the BVG's history under the title "Pension theft". This is a term that appears again and again, and with changing meanings in the headlines.

On 2 September 2002, a rally organised by trade unions and left-wing parties with over 10,000 participants was held in Bern against the reduction of the BVG minimum interest rate from 4 to 3.25 per cent which had been announced by the Federal Council. Originally it was even planned to reduce the rate to 3 per cent, but due to the fierce political and media reaction, the cut was then reduced by a quarter of 1 per cent. This did little to calm the tensions. This was the first cut in the minimum interest rate since the BVG entered into force on 1 January 1985.

The insurers in particular were caught in the crossfire, accused of having induced the Federal Council to reduce the rate using allegedly false figures about their funding situation.

Despite the political unrest, the reduction was inevitable and was eventually ordered by the Federal Council.

However, this was not the end of the matter. The dotcom crisis that hit the global economy in 2002 and triggered a slump on the stock markets left many pension companies underfunded. The situation brightened up again during the course of 2003, though the Federal Council nevertheless felt compelled to specify a further reduction to 2.25 per cent. This was likewise accompanied by a large degree of indignation. However, the financial constraints were too strong and political demands had to take a back seat.

By 2008, the rate was raised again in two steps to 2.75 per cent, but after the financial crisis in the same year, it was lowered again to 2 per cent. Since 2017 it has remained unchanged at 1 per cent, with annual disputes between the social partners and trade associations about the "right" level.

As dramatic as the decline from 4 to 1 per cent may seem, the respective rates of inflation must also be taken into account. In the 1990s, inflation was running at over 5 per cent, and after the turn of the century, the maximum rate was still 2.5 per cent in 2008. However, the rate has not exceeded 1 per cent in the last ten years.

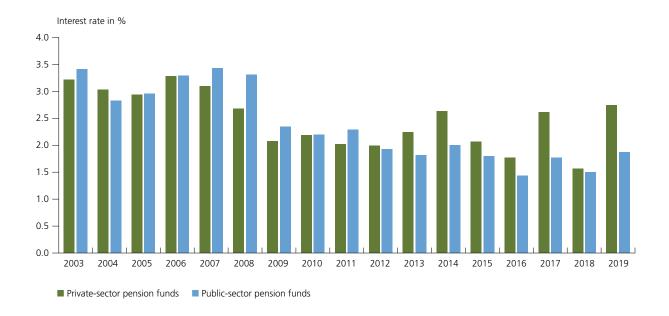
Development of the BVG minimum interest rate

From	Minimum interest rate
01.01.1985	4.00%
01.01.2003	3.25%
01.01.2004	2.25%
01.01.2005	2.50%
01.01.2008	2.75%
01.01.2009	2.00%
01.01.2012	1.50%
01.01.2014	1.75%
01.01.2016	1.25%
01.01.2017	1.00%
01.01.2018	1.00%
01.01.2019	1.00%
01.01.2020	1.00%

Interest return on retirement assets

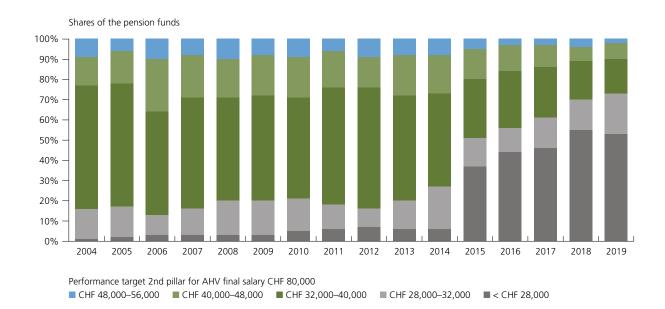
While technical interest rates have fallen very steadily, the interest return on retirement assets has moved erratically but is also trending downwards. In 2000, an average amount of 4.9 per cent was credited, and for 2007 the figure was still 3.15 per cent for private funds and 3.09 per cent for public funds. The financial crisis then caused a sharp drop to 2.07 per cent for the private-sector and 2.37 per cent for the public-sector by 2009. Last year, an average of 2.64 per cent was calculated for all pension funds.

What is striking is the faster and more decisive reaction of private pension funds to changes in market conditions.



Pension benefits target

Calculating the pension benefits target in a defined contribution plan system is fraught with fundamental problems. Although pension benefit targets can be specified, they can – as experience shows – differ greatly from the actual benefits. The Swisscanto survey asked for benefits for an AHV salary of CHF 80,000 in order to be able to at least show which way things were developing. This can be determined by taking into account the real interest rate or by using the golden rule (interest return on retirement assets equals wage growth). A change to the system was carried out for the survey from 2015 onwards using the golden rule, which led to a reduction in the stated benefits targets. The increase in the proportion of benefit targets of under CHF 28,000 of the corresponding salary can clearly be seen. The significance of the figures is to be understood by taking the complex interrelationships into consideration.



Capital market, performance, asset allocation and funding ratio

The decisive factors that determine the activities of pension funds are the legal basis, the state of the investment markets and the political and economic environment. The situation in all sectors has changed since 2000 to an extent that would have been hard to imagine at the time. It is remarkable how well the pension funds have overcome these challenges and largely managed to maintain the level of benefits, albeit with some losses. This required a major effort on the part of the social partners in the form of increased financing. The willingness to do so is demonstrated by the continuing popularity of the second pillar.

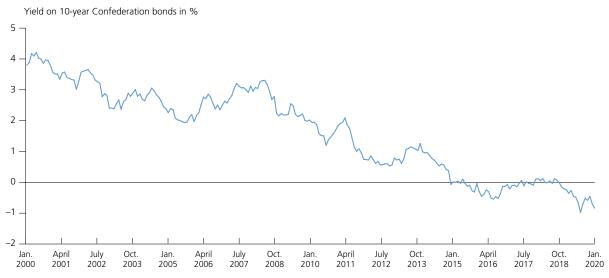
Interest rate level

It is difficult to weight the individual components. In practice, upheavals on the capital markets and the fall in interest rates into negative territory are likely to be the most serious ones.

Ten-year Swiss government bonds have fallen from a yield of around 4 per cent at the beginning of the observation period to 0 per cent and lower, and have mostly remained in the red for the past five years. This is a situation that the creators of the BVG could not have imagined. At the time when the BVG came into force, such a situation would probably have been understood as bringing about the end of occupational pensions.

It is primarily thanks to the generally very strong performance of equities from 2009 to the beginning of 2019 that pension funds were able to maintain their financial equilibrium. Real estate is another important source of income.

Price gains on bonds have also been continuously recorded over the years thanks to fair value measurement. This has likewise helped to stabilise the financing situation, albeit not sustainably.



Source: Swiss National Bank data portal

Performance

The first marked collapse in investment performance after 2000 was recorded in 2001/02 as a result of the dotcom crisis.

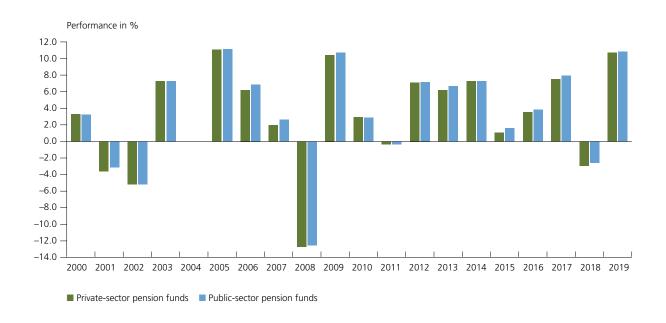
While a return of 3.3 per cent was recorded for the year 2000, the return for private-sector pension funds fell to an average of –3.7 per cent in 2001 and even to around –5.2 per cent in 2002. 2003 then brought the recovery that had been longed for, with values of over 7 per cent.

The sharpest slump in the history of the BVG was in 2008, when it fell by around 12.5 per cent for both private and public-sector funds.

The standout years in terms of growth were 2005 with 11 per cent, 2009 with 10.5 per cent and finally 2019 with 10.8 per cent.

Pension funds are currently being challenged by the coronavirus crisis and its consequences for the capital markets. Although contrary to expectations, share prices have fared well up to the time of going to print and overall have shown fewer losses than many feared, the consequences of the massive interventions in the economy to contain the virus are still difficult to assess, both nationally and internationally.

The second pillar system has proved to be remarkably resilient to economic downturns in its history to date. It can be assumed that this will also be the case in response to the current challenges.



Asset allocation

The development of asset allocation according to the Swisscanto study reflects developments on the capital markets and the reaction of the pension funds triggered as a result. In 2001, we were still seeing a traditional distribution, with fixed income securities dominant at a share of 38 per cent. Equities and real estate were clearly behind at 28 and 17 per cent respectively.

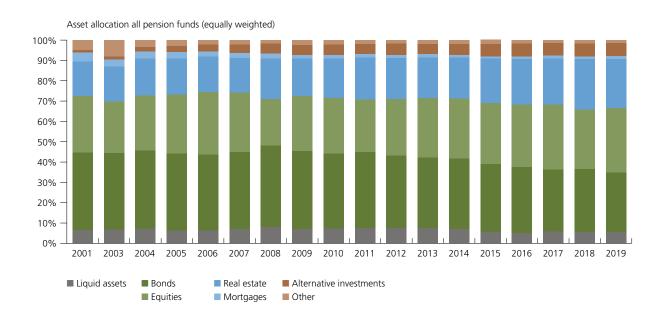
The shifts observed in the following ten years or so were relatively minor and largely attributable to developments on the stock market. The slump in 2002 led to a significant reduction in the proportion of equities, and the bullish stock markets up to 2007 triggered a corresponding increase with their price gains.

A genuine reversal of trends can be observed from around 2011 onwards, with the ongoing decline in bond investments and a simultaneous rise in real values. This was primarily due to the extremely low interest rate levels, which were further accentuated from 2015 onwards by the introduction of negative interest rates. For 2011, asset allocation was as

follows: bonds 37 per cent, equities 26 per cent and real estate 21 per cent. This is not far from the figures seen in 2001. In 2019, they were 30 per cent for bonds, 32 per cent for equities and 25 per cent for real estate. In other words, dividend stocks have overtaken bonds. The information on the asset allocation sought by survey participants shows that this often contradicts the targets that have been set.

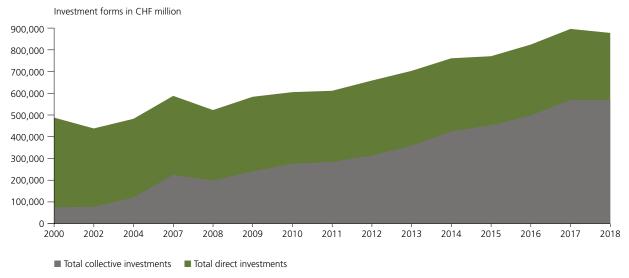
Despite fundamental changes in market conditions, the adjustments on behalf of the pension funds were made gradually in small steps. Strategies geared towards continuity and stability, combined with widespread rebalancing, are likely to have prevented an even greater increase in the equity component in recent years.

With regard to real estate, the lack of suitable properties stands in the way of further expansion. In addition, the investment regulations set a limit of 30 per cent, which must be justified if exceeded.



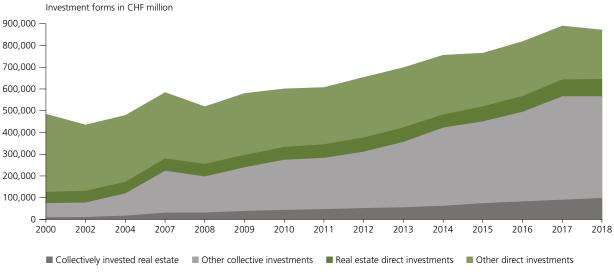
Collective investment schemes

The strong growth in collective investment schemes has received little attention so far, but indicates a fundamental change in the investment activities of pension funds. In 2000, they accounted for just 15 per cent of the total number of investments, whereas today they account for around two thirds. The absolute amount of direct investments has remained largely constant over this period.



Real estate - direct and indirect

As with the total investments, the collectively invested part of the real estate segment has grown much more strongly than direct investments. This is also responsible for most of the increase. This is due to the efficiency gains from collective investments, which are particularly important in this sector, as well as to the high professional standards required by this market.

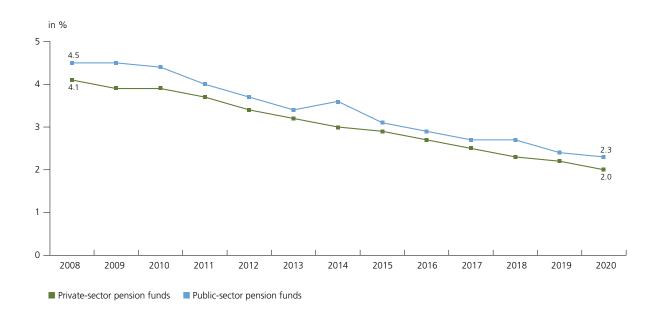


Source: Federal Statistical Office, Swiss Pension Fund Statistics 2000-2018

Reference return

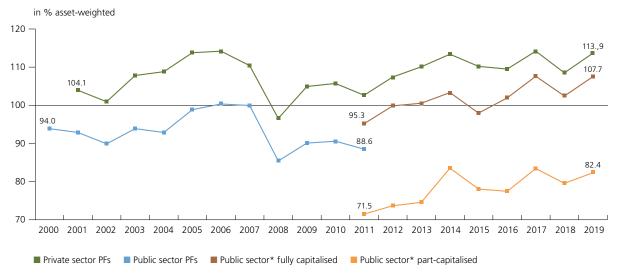
The change in reference return – the values have been calculated by Swisscanto since 2008 – shows how pension funds have adapted their principles regarding income and benefit requirements to the changes in capital market requirements. Whereas about ten years ago a return of more than 4 per cent was still required to secure the funding ratio, this figure has practically halved and is now only just over 2 per cent.

This represents far more than a gradual adjustment, since behind it are very wide-ranging adjustments, both in the actuarial bases as well as on the investment side. Pension fund managers, experts and those responsible for investments have had to make extensive interventions and changes to the respective fund systems over the years in order to maintain the balance.



Funding ratio

A review of the years since 2000 reveals the enormous volatility of the calculated funding ratios. For private pension funds, the funded ratios range from 97 and 114 per cent. Equivalent figures for public-sector funds after capitalisation have only been available since 2011, making comparisons difficult.



 $^{^{\}star}\,$ Legal form of pension scheme until 2013, sponsor of the pension scheme from 2014

Pension funds, types of plan and costs

The number of pension funds has steadily decreased since the BVG entered into force, while at the same time the proportion of people insured with collective and common pension schemes has increased significantly. This development is likely to continue, since it is associated with a fundamental change in the nature of occupational pension schemes. The traditionally close ties between companies and pension funds are beginning to dissolve, and the fund is losing its importance as part of a company's social policy.

Number of pension funds

The increased demands on the management of a pension fund – which has long since ceased to be a secondary concern and now requires professional attention – have led to a steady decline in the number of pension funds since the BVG entered into force. Other reasons are to be found in the cost benefits of larger funds and the consolidation process in the economy. It is rare for new company pension funds to be set up.

There were no fewer than 15,000 pension funds in Switzerland before 1985 when they operated on an entirely voluntary basis. However, these were hardly comparable with today's institutions which are subject to statutory standardisation. Around 4,000 pension funds were registered when the law came into force, but this number had already fallen to 2,600 by the year 2000. The decline has continued uninterrupted to the present day. According to FSO statistics, there were still 1,562 at the end of 2018, and the OAK-BV estimates that the number will be around 1,000 in the year 2026, although this is unlikely to be the end of the decline.

Collective pension foundations overtake individual pension funds

A far-reaching structural change in the second pillar can be seen from the increasing importance of collective and common pension foundations.

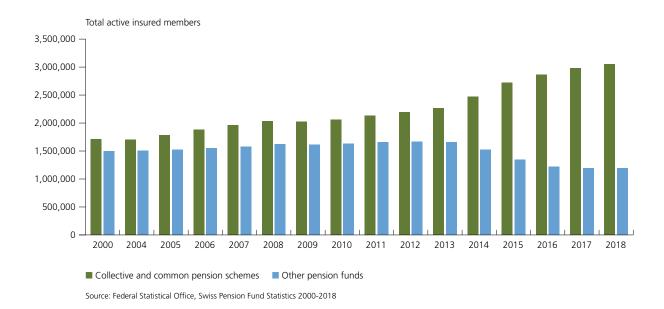
When the BVG took shape in the 1980s, occupational pension schemes were largely based on the autonomous pension funds of individual companies. The situation changed with the introduction of mandatory provision through the BVG in 1985. Insurance companies, banks and other companies in the financial sector set up collective pension foundations for providing pension schemes for SMEs. The collective and common pension schemes (CCPI) belonging to professional and employers' organisations were set up around the same time. By 2000, these schemes already insured more than half of employees.

Until around 2012, the number of insured members increased in parallel both in terms of company pension funds and CCPIs; the opposite trend can be seen from 2012 onwards. The number of employees insured with collective and common pension schemes rose sharply, while the number of individual pension funds declined. Today, collective and common pen-

sion schemes are clearly dominant in terms of the number of beneficiaries. However, the number of people insured with individual funds has stabilised since 2016.

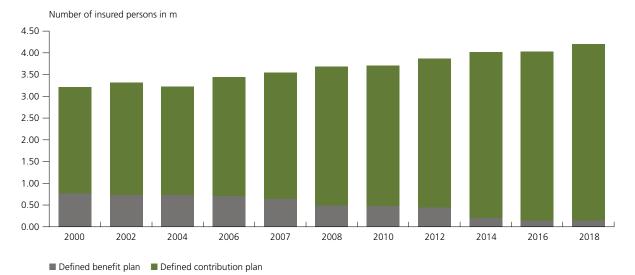
Nevertheless, it must be noted that structurally speaking, a substantially different second pillar exists today compared to when the BVG came into force, which was then essentially geared towards company pension funds. In the context of the second pillar, one thinks primarily of the classic individual pension fund, which only plays a secondary role compared to the number of insured members.

In view of the strong development of CCPIs, it must be taken into account, for example, that large public funds such as Publica or the cantonal funds of Basel-Stadt, Zurich or Aargau also act as collective pension foundations and also insure members of non-governmental institutions. A distinction must be made between these and the actual broker-supported collective pension schemes on the market. This distinction is not easy to make.



Types of plan

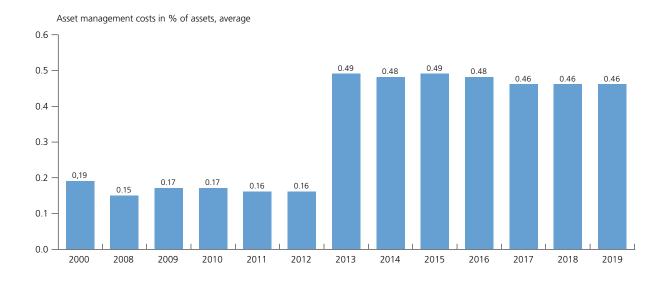
Defined benefit plans are a dying breed. There are a number of reasons for this mainly the financing risks for the employer and international accounting regulations. It is clear that this will lead to greater uncertainty for insured members regarding the future pension benefits they are entitled to. At the same time, the burden on the employer is reduced. Whereas in 2000, around a quarter of beneficiaries were still able to reap the rewards of a defined benefit plan, this figure is 2018 only 3 per cent.



Source: Federal Statistical Office, Swiss Pension Fund Statistics 2000–2018

Asset management costs

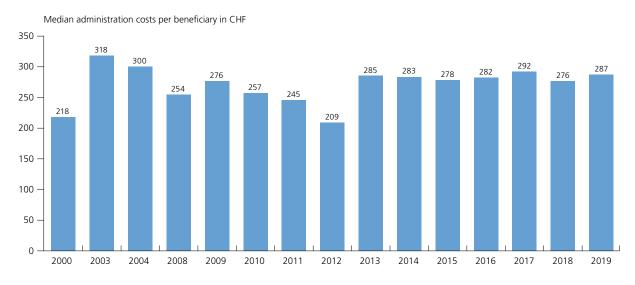
Standardised data on the change in asset management costs is not available for the entire observation period. Until 2012, averages were calculated based on the participating pension funds, while from 2013 onwards costs have been reported in accordance with the OAK directive – Reporting Asset Management Costs. The graph shows that costs rose quite consistently until 2012 without any discernible trend. From 2013 onwards, it appears that competition among financial services providers increased. The growing professionalism of pension funds could also lead to more pressure on providers and their prices.



Management costs

There was a turning point in 2013 in terms of the administrative costs per beneficiary since 2000 shown above. In 2013, the costs of marketing, brokers, experts, auditing and supervision were added, which naturally led to a significant increase.

Significant fluctuations were recorded in the years prior to that which are difficult to evaluate in retrospect. In 2013, however, the costs were largely stable and without any discernible trend.



Until 2013 only technical management, from 2013 incl. marketing, agent and broker activity, expert, audit, supervision

Conclusion and outlook

What is the latest news on occupational pension schemes, where do pension funds stand today?

The situation on the investment markets is, as always, plagued by uncertainty. Are we heading for a global recession? Are the economy and markets going to recover more quickly than expected after the coronavirus crisis? No one knows for sure.

The central banks have made it clear that they will maintain their low interest rate policy for the foreseeable future. The SNB is likely to continue with negative interest rates for some years to come.

At the same time, the revision of the BVG with the long-overdue adjustment to the minimum conversion rate is only proceeding slowly. It is uncertain whether the Federal Council's proposal based on the social partner compromise can be implemented as planned following the opinions expressed about it, some of which have been very negative.

Consequently, neither the markets nor the politicians can be expected to ease the burden on pension funds very quickly.

At the same time, structural changes are continuing even more quickly. The number of pension funds is steadily declining, but with the end of their autonomy and the change from what were previously independent funds to collective or common funds, the latter account for a growing share of insured members. As a consequence, the nature of occupational pension schemes is constantly changing. The traditional company pension fund is becoming the minority. There is a risk that occupational pension provision will become a less important part of a company's social policy, and that retirement benefits will decline.

At the same time, the economy and the nature of employment are undergoing an accelerated process of change. Occupational pension schemes are having a hard time finding the right way to respond to these trends.

The 1e pension plans based on the savings bank model, where the risk is largely borne by the insured person, are extremely flexible and are likely to become increasingly widespread. However, this is not a model that can be used to insure people on low incomes.

It is possible that the mandatory component will gain in importance and that it will be supplemented by the individualised pension plan as per 1e. The failures of all previous efforts at reform and the rather unambitious proposals for the current revision further increase the danger of such a development occurring. Against this backdrop, demands for a free choice of pension fund may become louder once again. That would lead to a second pillar which has little in common with the present one.

As impressive as the benefits of our second pillar may be, they are by no means secure. Looking back over the last two decades, it becomes clear that trends need to be closely monitored. If undesirable developments are to be prevented, countermeasures must be taken in good time. This is where social partners, politicians and professional associations are called upon to take concerted action.

Appendix

Laws, regulations, directives – A system in constant flux

The change in the second pillar over the last few decades must be seen against the background of numerous changes in legislation. Although it was only possible for parliament to pass and enact one actual "revision" during this period, new laws and ordinances were constantly being passed which have an impact on the work of the pension funds and their service mandate in a number of ways, as well as the situation of the beneficiaries.

Pension funds were first regulated by law following the 1972 referendum, which anchored the three-pillar pension system into the Swiss constitution. This lasted until 1 January 1985 when the BVG came into force. In 1995, this was followed by the Vested Benefits Act (FZG), which significantly improved the situation of insured members when changing jobs, especially in defined benefit funds. For the pension funds, it also meant an end to gains from the departure of insured members.

A new challenge for occupational pension schemes likewise emerged in 1995 with the introduction of the home ownership subsidy, which offered insured members the opportunity to use part of their retirement assets to purchase or amortise their own real estate.

The year 2000 saw the introduction of the pension compensation scheme, which stipulates that in the event of divorce, the retirement assets of both spouses are to be divided equally to each party.

It was only after the turn of the millennium that it became possible for the first time to adopt the revision that was supposed to take place within ten years of the BVG entering into force. This was carried out in two stages, and the first part in 2005 contained provisions on transparency with regard to the financial situation and management of pension funds as well as

the provision of information to insured members. The second part in 2006 brought a reduction in the entry threshold, the coordination amount and the min-imum conversion rate from 7.2 to 6.8 per cent as well as the introduction of the widower's pension. At that time, the minimum conversion rate was also laid down in law. After the negative experiences with the minimum interest rate and the related talk of pension theft, the Federal Council was happy to hand over responsibility for this to parliament. This was a disastrous step in terms of the further development of the law. No actuarial metric is found anywhere in the law.

In 2006, new regulations were enacted relating to restructuring, and the tax aspects in terms of pension provision and the insurable salary were redefined, as was making purchases into the pension fund.

In 2007, new regulations were added as regards the employer switching from one pension fund to another. The revision of BVV2 in 2009 was of major significance, with the amendment of the investment regulations with newly defined limits for the individual investment categories.

The much-discussed structural reforms followed in 2011 and 2012, in which a new supervisory structure and enhanced governance provisions were implemented.

2014 saw the implementation of the Minder initiative (Swiss executive pay initiative) which was intended to bring remuneration in listed companies under control, among other things by means of regulations on the participation of pension funds in the annual general meetings of the securities they hold. This measure had a limited impact. In the same year, regulations were enacted to safeguard the professionalism of external asset managers.

The revision of the pension compensation scheme in the event of divorce was a major event for insured members in 2017. The provisions were extended, and were made more flexible at the same time.

Something which could have a greater impact in the long run is the amendment to the law and the associated regulations on 1e pension plans which also came into force in 2017; under this amendment, insured members could choose a strategy where they assume risk of loss, something that has been included in the BVG since 2006.

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A stable system in exceptional times

The Swisscanto Pension Fund Study 2020 is based on the survey using data from 2019, i.e., the data from before the coronavirus crisis, which has had consequences for the economy and capital markets worldwide that it is impossible to assess. It is the latest version of the annual data collection exercise carried out by Swisscanto. The aim remains the same: to record and analyse the longer-term developments in pension funds and to place them in the context of the economy, politics and the capital markets.

The data is being published later than usual due to the current circumstances, for which we ask for your understanding.

From a longer-term perspective of the issues, there is an almost linear continuation of known trends in many areas. Technical interest rates were reduced again by a similar amount as in previous years and as a result, conversion rates fell even further, and are now well below the target value for the BVG revision which is currently being drafted.

What are the consequences for the benefits provided? In previous years, the study examined the change by means of the regulatory requirements, which resulted in significantly lower benefits targets. The 2020 survey is the first attempt to determine the actual benefits measured as a percentage of insured salary.

The results broken down by quartile show an unexpected picture. A comparison of the benefits provided in 2014 and 2018 reveals that the median value (2nd quartile) is unchanged while the figure for the 1st quartile increased slightly. The value from the 3rd quartile, which is the threshold for the top 25 per cent, shows a slight decline.

Although these results need further elaboration, they indicate that despite the enormous changes in the way benefits are financed and provided, the level of benefits was maintained well above expectations. It is not possible to differentiate by type of pension fund with the existing data, but the importance of the issue suggests that developments should be investigated in greater depth in the future.

This is just one of the many findings that the analysis of the survey data suggests. This includes further insights into the changes in investments, negative interest rates, technical interest rates and conversion rates, retirement data and pension fund administration costs.

At this point, thanks again must be expressed to the participating pension funds, which went to significant lengths to provide the data and thus made it possible to gain an insight into the numerous topics covered.

An overview of the participants in the survey

	Pension fund	ds	Collective comm	tive common pension schemes (CC		
Sponsor of the pension fund	Private-	Public-	Private-	Public-	Total*	
	sector	sector	sector	sector		
	company	institution	company	institution		
Number of pension funds	365	56	82	17	520	
Pension fund assets billions	347	146	176	103	772	
Active insured members in thousands	716	395	1,633	215	2,960	
Number of pensioners in thousands	347	182	235	118	882	
Total insured members in thousands	1,063	577	1,868	334	3,843	
Pension capital of active insured members	49%	47%	75%	47%	54%	
– of which retirement assets under BVG	45%	43%	53%	36%	45%	
Pension capital of pensioners	51%	53%	25%	53%	46%	

^{*} incl. pension funds without information about the sponsor

The 2020 survey, which is based on data from 2019, achieved the very gratifying number of 520 participating pension funds (previous year 531) despite the extraordinary situation due to the coronavirus crisis. In addition to the aggravating circumstances, the steadily decreasing number of pension funds must also be taken into account.

Recorded pension fund assets rose from CHF 660 billion to CHF 772 billion, partly due to gains made. The total number of beneficiaries of all participating funds is 3.84 (3.77) million, of which 3.0 (2.9) million are active insured members and 0.88 (0.86) million are pensioners. This corresponds to around 70 per cent of insured members and over 80 per cent of the retirement capital of active insured members and pensioners in occupational pension plans according to the 2018 pension fund statistics.

Collective and common pension schemes account for 57 per cent of all beneficiaries, or 2.2 million. 85 per cent of insured members belong to pension funds with assets of at least CHE 1 billion For the first time, we have reported separately the information from collective and common pension schemes (CCPI) that are active on the market or in competition with each other. The reported brokerage and marketing costs serve as the criteria for their inclusion.

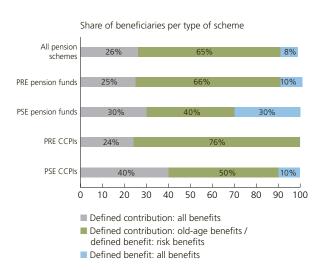
In the survey, these include 0.9 million active insured members and 0.1 million pensioners. They therefore account for 27 per cent of all recorded beneficiaries.

Collective and common pension schemes must be reported separately, not only because of their rapidly growing importance – the constantly decreasing number of pension funds is primarily due to the switch to collective pension foundations – but also because, as competitors, they provide their benefits under different conditions to a typical company pension fund or to pension funds belonging to cantons and municipalities.

A Pension funds and insured members

1 Defined benefit and defined contribution plans

Chart A-1: Type of pension fund by legal form and beneficiary

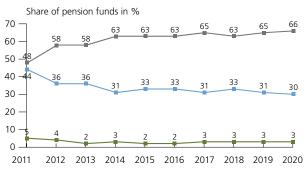


The decline in defined benefit plans observed for years has continued. In the private-sector, the share is still 10 per cent (previous year 11), and 30 (31) per cent for cantonal and municipal pension funds measured against the number of insured members.

The predominant form is a hybrid of the defined contribution plan for retirement benefits and the defined benefit plan for risk benefits; this is used for around two thirds of all insured members.

2 Flexible retirement

Chart A-2: Change in earliest possible retirement age for men

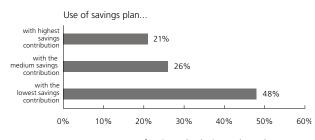


- Earliest possible retirement age: men aged 58Earliest possible retirement age: men aged 59
- Earliest possible retirement age: men aged 60

The determination of the earliest possible regulatory retirement age for men shows a slight shift during the reporting year. 66 per cent of participating pension funds reported that the relevant age was 58 compared to 65 per cent in the previous year, while at the same time the proportion reporting a regulatory retirement age of 60 decreased by 1 percentage point to 30 per cent. Over the past ten years, the number of pension funds with a regulatory retirement age of 58 has tended to increase, which is surprising because the Federal Council is moving towards an earliest retirement age of 60 or higher for the revision of the BVG, although this has met with criticism from professional associations.

3 Choice of options for savings plans

Chart A-3: Use of savings plans



Average use of savings plan by insured members

Note that the total of the percentages does not add up to 100 per cent, which can be explained by the fact that individual pension funds only offer a choice of two plans.

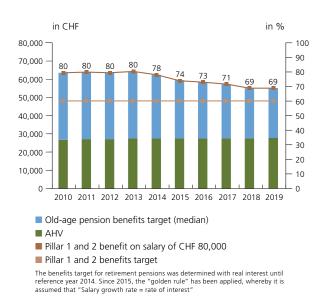
An ever-growing number of pension funds today offer insured members a range of different savings plans. 48 per cent (previous year 44) of pension funds taking part in the survey currently do so, whereas in 2012 it was only 19 per cent.

The answers regarding the use of the plans are revealing in relation to the amount of savings contribution. Almost half of insured members prefer the lowest amount, with corresponding consequences for benefits at a later stage. Conclusions can be drawn from this on the preferences of insured members with regard to reducing their current incomes and the level of future retirement benefits.

There are a number of motives behind this and it is not possible to make a blanket assessment.

4 Benefits

Chart A-4: Change in the benefits target for retirement pensions at a salary of CHF 80,000



For the first time since 2013, there was no further fall in the benefits target reported by the survey participants for an AHV salary of CHF 80,000 across pension funds as a whole in 2019. This therefore means that the reduction seen in previous years, which has been the subject of much discussion in the media, has ended. Based on the figures, it is unclear whether we will see a reversal of this trend or just a temporary stabilisation. This is the result of a slight increase among private employers and a decrease among public-sector employers.

It is important to note that they do not relate to actual benefits paid out, but benefits calculated on the basis of the regulations and applicable parameters, which do not always contain all elements of actual benefit provision. For example, they do not include certain compensation benefits or the staggered benefit adjustments where conversion rates have been reduced.

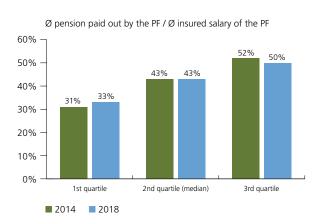
It should also be noted that with a calculated average replacement rate of 69 per cent for all participants (right scale) from Pillars 1 and 2, the informal guideline of 60 per cent for maintaining the accustomed lifestyle has been significantly exceeded.

The median of the BVG benefits target for public-sector pension funds was 38 per cent (previous year 40) for 2019; if AHV is included, this comes to an average replacement rate of 73 (74) per cent. The median for private-sector pension funds is 34 (33) per cent, or 68 (67) per cent including AHV. There is a considerable difference in benefits between private and public-sector pension funds, but the opposite trends have resulted in a slight compensation.

The median value for collective and common pension schemes (with brokers' fees and marketing expenses) that are active on the market is also 29 (30) per cent. Together with AHV, this makes an average replacement rate of 64 per cent, which is also well above the 60 per cent targeted by the legislator.

The sharp drop between 2014 and 2015 is partly explained by the changes in the way questions were formulated. Until 2014, answers were given based on the actual regulatory provisions, but since 2015, they have been recorded as calculations based on the golden rule (interest return equals wage growth) as the total of all retirement assets multiplied by the applicable conversion rates. It can be assumed that to determine benefits, this simplified formula will tend to produce lower results than those that actually apply, for example because real interest return is not included.

Chart A-5: Distribution of actual benefits calculated as a ratio of pension to insured salary



In addition to recording the benefits based on the regulations (A-4), for the first time it was examined how the actual benefits of pension funds have changed. The amount of average pension paid out was determined based on the average insured salary of active employees for 2014 and 2018. These actual benefits were evaluated in pension funds where information on pension and insured salary was available at intervals of at least three years.

The median value (2nd quartile) of the actual benefit, calculated as the quotient of the pension paid out and the insured salary, was 43 per cent for 2018 and had not changed between 2014 and 2018.

However, the opposite changes can be seen at the lower and upper end of the actual performance range, marked by the 1st quartile (value where 75 per cent of pension funds have a higher value) and the 3rd quartile (25 per cent with higher values).

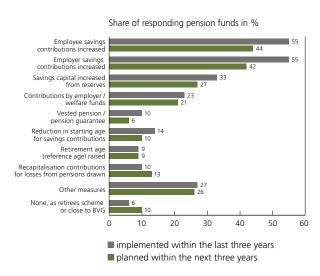
For the 3rd quartile (highest values), there is a slight reduction from 52 to 50 per cent, and for the 1st quartile (lowest values) an increase from 31 to 33 per cent.

If the actual benefits are based on the BVG savings target of 500 per cent of insured salary multiplied by the conversion rate of 6.8 per cent, this results in an average pension of 34 per cent of the last insured salary.

Not enough information was available to determine the trend in BVG minimum funds. Information about them (six funds) was not taken into account.

5 Measures to maintain benefits

Chart A-6: Measures taken in the last three years or to be taken in the next three years to maintain benefits



55 per cent (previous year 52) of responding pension funds state that they have increased the savings contributions of both employer and employee in the last three years, and a further 44 and 42 (37) per cent respectively plan to do so in the next three years. This corresponds to significant increases both in the past three years as well as in the next three years. It may be concluded from this that there is a widespread desire to maintain the level of benefits despite the volatile and difficult conditions on the capital markets, and to raise the necessary funds for this purpose.

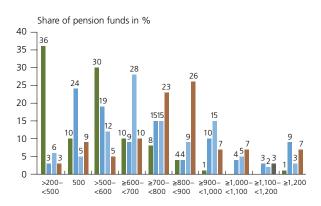
Many respondents still talk about increasing savings capital from provisions and about contributions from the employer and from welfare funds, but far fewer about reducing the minimum starting age for savings contributions and increasing the retirement age. A slightly higher proportion of respondents (10 per cent; 2019: 6 per cent) mention increasing the minimum starting age for savings contributions and/or raising the retirement age (9 per cent; 2019: 6 per cent).

However, increasing contributions and/or reducing benefits still seems to be considered more tolerable than raising the retirement age.

The frequent references to taking "other measures" in the next three years is noteworthy at 46 per cent. Respondents are clearly thinking seriously about maintaining the level of benefits, and also seem to be looking for new and unconventional solutions.

6 Savings target as percentage of insured annual salary

Chart A-7: Distribution of savings targets according to the coordination deduction model used



Savings target in % of the last insured annual salary

- No co-ordination deduction
- Fixed coordination deduction as per BVG
- Fixed coordination deduction not as per BVG
- Variable coordination deduction (salary-dependent)

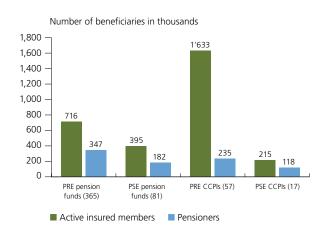
The frequency with which savings contributions were bolstered to maintain benefits, as seen in section 5, results in an increase in the savings target. As a total of retirement assets under BVG for the mandatory portion, this amounts to 500 per cent of the coordinated salary over the full contribution period of 40 years.

This value, i.e. a savings target of 500 per cent and a fixed coordination deduction in accordance with the BVG, now only applies to a relatively small minority, specifically to 5 per cent of survey participants. At the other end of the scale we find values of more than 1,200 per cent, but these are also exceptions. The most frequent values above the mandatory amounts lie between 600 and 1,000 per cent, i.e., up to double the statutory requirement.

The question of whether to increase statutory retirement assets as part of the compensatory measures for reducing the conversion rate – a question that will undoubtedly be discussed again as part of BVG reform – will only be significant for a small number of pension funds and only relevant to benefits in exceptional cases.

7 Active insured members and pensioners

Chart A-8: Active insured members and pensioners by pension fund category



There are substantial differences in the ratio of active insured members to pensioners across the various categories of pension fund, and this has a corresponding impact on their respective funding situation. It is striking that the collective and common pension schemes (CCPI) of private employers have a much lower proportion of pensioners compared to all other categories.

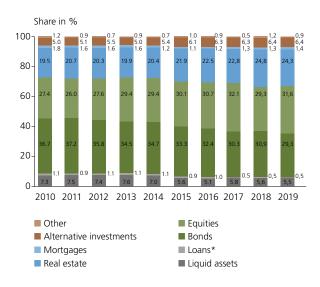
Looking at the total of all pension funds taking part in the survey, the proportion of pensioners out of the total number of beneficiaries is 23 per cent. For private pension funds this figure is 33 per cent, and for public funds 32 per cent. However, it is only 14 per cent for CCPIs with a private-sector sponsor, while the other CCPIs were marginally higher than the values for private and public-sector pension funds at 35 per cent.

The low proportion of pensioners in private CCPIs is partly due to the lower average age of the workforce of the affiliated companies.

B Capital investment and asset allocation

1 Asset allocation

Chart B-1: Asset allocation 2010-2019*



^{*} Until 2016, investments at the employer

In the year under review, the trend in asset allocation which has been discernible for some time continued. This trend is characterised by an increasing share of real assets with real estate and equities and a declining share in bonds. The latter have now reached a historic low, with a share of less than 30 per cent. Equities rose from 29.3 to 31.6 per cent, albeit less than would be expected based on the gains seen in 2019. This is probably the result of widespread rebalancing, which should prove useful in view of the turbulence being experienced this year. The share of real estate decreased slightly. The widely discussed warnings of a bubble in many parts of Switzerland and the lack of suitable properties may have had an impact here.

The other categories are still of minor importance. Alternative or non-conventional investments remain at 6.4 per cent. Mortgages are also of little consequence; however, many new service providers have emerged recently granting mortgages for pension funds, which means that some pension funds now offer mortgages to non-members.

Table B-1: Investment classes 2010-2019

Average asset allocation in %

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cash	7.3	7.5	7.4	7.6	7.0	5.6	5.1	5.8	5.6	5.5
Loans from 2017**	0.8	0.6	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5
Equities and other shareholdings with employer	0.4	0.3	0.3	0.3	0.3	0.2	0.2	*	*	*
Bonds CHF	27.3	27.5	25.5	24.6	24.3	22.9	21.7	20.0	20.3	19.3
Bonds foreign currencies	9.3	9.7	10.3	9.9	10.5	10.4	10.7	10.4	10.6	10.0
Domestic equities	12.7	11.9	12.4	13.2	13.1	13.4	13.1	14.2	12.8	13.8
Foreign equities	14.7	14.1	15.2	16.2	16.3	16.8	17.6	18.0	16.5	17.8
Domestic real estate	18.6	19.7	19.3	18.9	19.1	20.2	20.7	20.7	22.2	21.8
Foreign real estate	0.9	1.0	1.1	1.1	1.3	1.7	1.9	2.1	2.6	2.4
Mortgages	1.8	1.6	1.6	1.6	1.2	1.1	1.2	1.3	1.3	1.4
Hedge funds	2.2	2.0	1.9	1.7	1.5	1.4	1.4	1.2	1.3	1.1
Private equity	0.6	0.7	0.8	0.7	0.8	0.9	0.9	0.8	0.9	1.1
Commodities	1.4	1.5	1.7	1.3	1.1	0.8	0.9	0.8	0.6	0.7
Infrastructure investments	*	*	*	0.2	0.2	0.2	0.3	0.4	0.6	0.7
Non-traditional nominal value investments	*	*	*	*	*	0.5	0.5	0.6	0.5	0.6
Other alternative investments	0.8	0.9	1.1	1.1	1.8	2.1	2.2	2.4	2.4	2.4
Other assets	1.2	0.9	0.7	0.9	0.7	1.0	0.9	0.9	1.2	0.9
Total	100.0	99.9	100.1	100.1	100.0	100.0	100.1	100.0	99.9	100.0

^{*} Not determined

The values given in the table are purely average values. The OAK-BV values in its annual survey of the financial situation of pension funds are asset-weighted, which explains any discrepancies between the data. The larger number of pension funds covered by the OAK must also be taken into account.

^{**} Until 2016 investments with the employer

Table B-2: Investment forms and size of pension fund

Mean asset share per asset group in $\,\%\,$

	<50 million	50-100 million	100-500 million	500-1'000 million	1'000-5'000 million	>5'000 million
Investment foundations	27.1	22.6	20.3	19.0	20.3	14.2
Investment funds	50.4	60.1	48.1	50.2	44.0	36.8
Investment companies	0.3	1.3	0.9	1.2	2.5	1.8
Category-based mandates	14.6	3.8	17.2	25.5	24.3	47.9
Mixed mandates	40.6	66.4	47.8	28.6	9.2	1.8
Structured products	2.7	2.5	0.8	0.1	0.4	0.0
Real estate Switzerland: Direct investments	14.7	13.2	10.9	11.3	14.1	10.0
Real estate Switzerland: Indirect investments	17.0	19.5	14.9	13.3	10.6	8.0
Real estate abroad: Direct investments	0.0	0.0	0.1	0.0	0.0	0.3
Real estate abroad: Indirect investments	2.5	7.6	3.3	2.9	3.1	3.7
Index investments	6.0	29.5	35.4	34.0	30.3	31.3
Investments according to ESG criteria	3.7	14.5	11.9	11.1	44.8	50.0

The matrix of investment forms and size of pension fund shows the expected relationships. Investment foundations and investment funds become less important as the size of pension fund increases. This applies even more to mixed mandates, which are practically non-existent in large pension funds. Indirect real estate investments are also primarily found in smaller pension funds. Category-based mandates are the domain of large funds.

It is interesting to note that smaller funds in the real estate sector are proportionally more heavily invested in category-based mandates, both in direct and indirect investments. The total across both areas ranges from around 30 per cent for small foundations to less than 20 per cent for the largest.

The category of sustainable investments according to ESG criteria (environment, social, governance) was included in the survey for the first time. This has only gained in importance for pension funds with assets of CHF 1 billion or more, but is gaining in importance rapidly in this segment. This is probably less to do with lower exposure on the part of smaller pension funds than to differing classifications. The allocation is not consistent and not always clear. The asset-weighted share of sustainable investments of all responding pension funds amounts to 30 per cent.

Since investment forms can overlap several times in the individual asset categories, the percentages add up to more than 100 per cent.

Table B-3: Change in asset share in investment funds, investment foundations and indexed investments

Average asset share in %

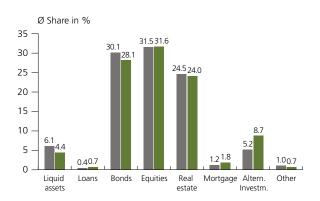
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Investment funds	33.1	34.2	37.6	40.8	41.1	40.9	43.2	42.2	46.0	44.1
Investment foundations	27.4	23.6	20.8	21.1	22.6	20.4	21.4	22.0	19.0	20.3
Index investments	21.4	21.8	24.5	22.4	24.9	24.1	26.8	28.1	29.0	31.1

The overview of the change in selected investment forms over the past ten years reveals some significant shifts. Investment funds have regularly gained in importance for a long time, but fell back slightly in the year under review.

Investment foundations posted a slight rise, but have lost ground compared to 2010. It is possible that in future they will benefit from the relief offered by the revised directive "Requirements for investment foundations" issued by the Occupational Pension Supervisory Commission (OAK) this year.

Index investments were able to increase their share further, and have already reached 31.1 per cent.

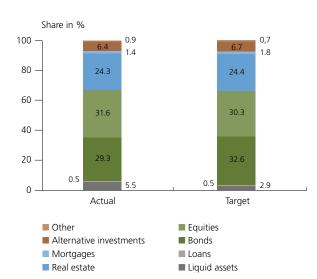
Chart B-2: Size of pension fund and asset allocation



■ ≤500 m. ■ >500 m. Chart B-2 shows the dependence of asset allocation on the size of the respective pension fund, with a distinction made between the size of assets at CHF 500 million.

Differences can be seen, but they are usually minor. The smaller funds have slightly more liquidity and bonds, but fewer alternative investments. They are practically the same in terms of equities and real estate.

Chart B-3: Comparison of actual/target asset allocation



The chart gives an impression of the extent to which the current distribution of invested funds is in line with the targets under the strategies.

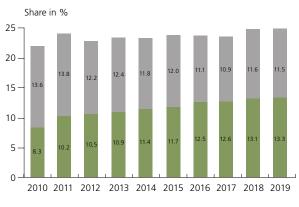
What stands out most is the broad alignment, with only minor deviations in individual categories. An increase in the number of equities is desired in alternative investments and bonds. The difference between the alternatives is very small, however, and is a matter of thousandths.

It is somewhat larger for bonds, which shows that the ongoing reduction in the share of this category due to the current interest rate situation is contrary to the needs of pension funds, and that people would like to invest more heavily in bonds if only the circumstances were different.

No changes are planned for equities and real estate, where the actual and target figures are largely the same.

2 **Real estate investments**

Chart B-4: Change in direct and indirect real estate investments



- Swiss real estate: direct investments
- Swiss real estate: indirect investments

The marked increase in the share of real estate investments noted in the previous year did not continue, and the breakdown between direct and indirect investments remained constant. The increasing significance of indirect investments seen in previous years was not repeated.

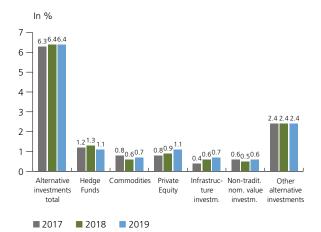
The situation on the real estate market also remains unchanged. The lack of suitable properties frequently forces pension funds to make indirect investments, increasingly in listed funds, since most NAV funds are closed.

This is particularly true for smaller pension funds with assets of less than CHF 500 million. Listed funds account for more than half (57 per cent) of their real estate investments, with the drawback of related premiums. Among larger pension funds, the share is 46 per cent.

Real estate investments at the end of 2019 accounted for 24.3 per cent of all asset allocation, 11.5 percentage points related to direct and 13.3 percentage points to indirect investments. The two values do not add up to 24.8 exactly due to the use of different survey methods.

3 Alternative investments

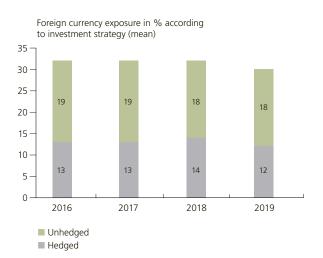
Chart B-5: Alternative investments as a multi-year comparison



There has been little change in terms of alternative investments. The total remains at the previous year's level, with a share of 6.4 per cent of total investments. In the sub-categories, decreases can be seen in hedge funds and commodities and increases in private equity and infrastructure investments. The latter category has developed steadily in recent years, which, albeit at a low level, can be described as a trend.

4 Hedging of foreign currency investments

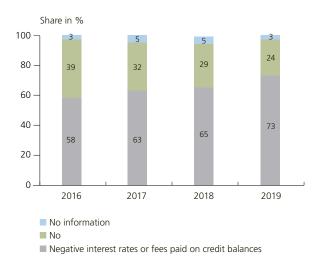
Chart B-6: Strategic foreign currency exposure



At 30 (32) per cent, foreign currency exposure was slightly lower than in the previous year, and is back to the levels seen in 2015 despite all the Swiss National Bank's efforts to strengthen investments in foreign currencies. The decline was largely seen in the area of hedged investments which fell from 14 to 12 per cent.

5 Negative interest rates

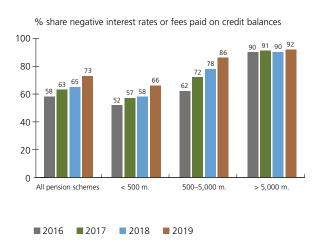
Chart B-7: Pension funds affected by negative interest rates 2016–2019



The Swiss National Bank (SNB) has been applying an interest rate of minus 0.75 per cent on deposits for the past five years. The banks are increasingly passing this onto pension funds in different ways. Almost three quarters of pension funds are now affected, which is a sharp increase over the previous year.

There is a perception that after a prolonged period of restraint, the banks are now largely passing on the costs imposed on them by the SNB to their clients. Only around a quarter of pension funds claim to be untouched by this, although they too are likely to be affected by indirect investments.

Chart B-8: Negative interest rates and size of pension fund

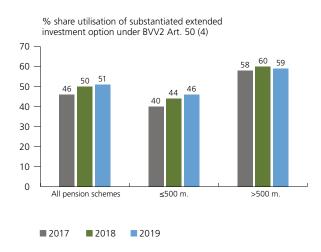


The proportion of funds affected by the SNB's negative interest rate regime has risen steadily from 58 to 73 per cent since 2016, and includes all categories of funds. However, little has changed for the largest funds in recent years, and the vast majority were affected from the outset.

The strong increase in all other size categories is of particular interest, especially in the smallest categories and those between CHF 500 million and CHF 5 billion in investment assets. Those in the latter category are now affected to the same extent as the largest funds.

6 Category restriction and substantiated extended investment option

Chart B-9: Utilisation of substantiated extended investment option by size of pension fund

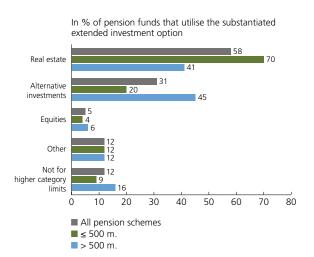


Under Art. 50 (4) BVV2, pension funds are given the option of exceeding the investment category limits of BVV2 through a substantiated extended investment option.

They are utilising this option very enthusiastically, especially most large pension funds, while a constant increase in take-up can also be seen in smaller funds.

In other words, exceeding individual limits or even multiple limits is standard practice in terms of a pension fund's investment activities. The importance of these limits increasingly seems to be reduced to non-binding benchmarks.

Chart B-10: Substantiated extended investment option by investment category



Not surprisingly, it is real estate investments that by far exceeded the 30 per cent limit the most frequently. In total, 58 per cent (previous year 55) of all responding pension funds did so. In the case of smaller funds with less than CHF 500 million in investment assets, the figure was as high as 70 (65) per cent. The limit on real estate investments is not without controversy, but it could prove to be expedient in view of the deteriorating overall economic situation in the current year and an increasing rate of empty residential properties.

As in previous years, alternative investments are in second place, though there was no significant change compared to the previous year. On the other hand, there was a small increase in equities with the total number rising from 3 to 5 per cent, possibly due to the strong price gains in the year under review.

C Performance

1 Performance

Chart C-1: Performance values 2010-2019

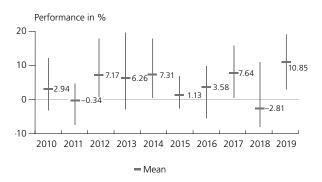


Chart C-1 gives an overview of performance over the past ten years with the high volatility of individual values.

After a disappointing 2018 with a low figure of –2.81 per cent, the year under review closed with the highest value in our ten-year overview of almost 11 per cent. This allowed reserves to be strengthened, which are now needed in the current year.

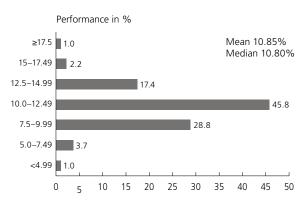
The range for 2019 stretches from a low of 3.00 per cent to a high of 19.3 per cent, the latter reported by a pension fund with a real estate share of 43 per cent.

Private-sector company pension funds reported an average return of 10.79 per cent and publicsector schemes 10.90 per cent. The difference is negligible.

The average value for collective and common pension schemes of private employers was 10.73 per cent. Within this category, market-active pension funds reported a slightly weaker result of 10.19 per cent.

ESG can only indicate the performance of one investment vehicle in the survey, even if there are several available.

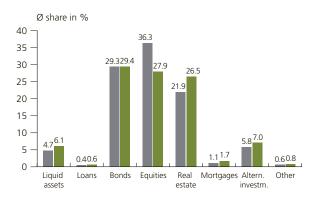
Chart C-2: Distribution of performance



Share of pension funds per range in %

Nearly half the funds report a performance in the narrow range between 10.0 and 12.5 per cent, which suggests that the investment strategy is largely consistent. The extremes go from between 3 and 5 per cent at the lower end of the scale, with just under 5 per cent of pension funds in this range, and between 15 and 19 per cent as the best results, which were achieved by a mere 3 per cent of respondents.

Chart C-3: Performance and asset allocation



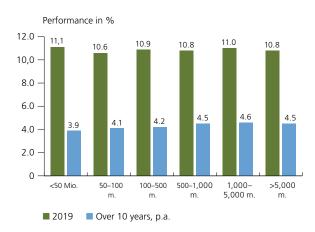
Pension schemes with a 2019 return of ≥11%
 Pension schemes with a 2019 return of <11%

Chart C-3 shows the correlation between the performance achieved and the respective asset allocation.

The pension funds with a performance of less than 11 per cent (green bars) on average have higher liquid assets, fewer equities, more real estate and slightly more alternative investments than the funds with a return of 11 per cent and above.

The key difference lies in equities, which performed excellently and achieved strong price gains in the year under review. This is in contrast to 2018 when a high proportion of equities proved to be detrimental to the reported rate of return after a slump in prices in December.

Chart C-4: Performance and size of pension fund



The high number of pension funds is often described as detrimental to the efficiency of occupational pension provision, and the much higher concentration of occupational pension schemes in countries such as the Netherlands or Canada is emphasised here. Chart C-4 provides information on the correlation between the size of a pension fund and the performance achieved in Switzerland.

It is also easy to see that there is no correlation between the two parameters for 2019. Somewhat surprisingly, the smallest funds with an investment volume of less than CHF 50 million show the highest average return. However, the number may not necessarily be representative due to the relatively small sample of 62 responding funds. That being said, there is no clear correlation between size and performance in the other categories during the year under review. The results fluctuated within a narrow range, especially in the range between CHF 100 million and CHF 5 billion and above which is probably due more to the sample than to any systematic correlation.

The situation is different over a Ten-year period, where two groups emerge, namely those with assets below CHF 500 million and the rest that are above that level. The smallest institutions in particular are falling behind with a result of 3.9 per cent, whereas no differences can be found above CHF 500 million.

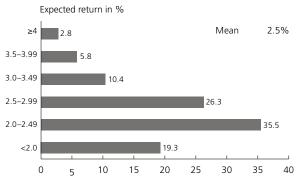
It is expected that many of the smaller pension funds will give up their independence in the next few years due to the ongoing consolidation process. This has both positive and negative aspects. In any case, it is regrettable when companyowned funds disappear, since the direct commitment of companies to occupational pension schemes is inevitably lost. On the other hand, there is no denying that in the long term, the smallest funds are not only lagging behind in terms of performance but also have significantly higher administrative costs per beneficiary.

However, the strong concentration demanded by international experts in line with the models mentioned above is not convincing, at least from the point of view of the returns achieved.

Whether they have assets of CHF 500 million or CHF 5 billion obviously has no impact on the result.

2 Reference return and expected return

Chart C-5: Expected return

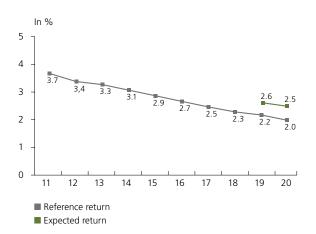


Share of pension funds per range in %

According to the survey, an average expected return of 2.5 per cent after deduction of asset management costs produces a remarkably wide range of less than 2 per cent to more than 4 per cent. The figures refer to the data in the actuarial valuation.

Among other reasons, the differences are probably due to the different pension components, with corresponding consequences for the investment strategy. The funds with an expected return of less than 2 per cent have an average share of pensioners among their beneficiaries of 33 per cent, while those with higher returns have 25 per cent. The high proportion of pensioners is combined with a comparatively high bond share of 37 per cent, 10 percentage points more than the other funds. In the case of equities, the percentages are 29 and 32 per cent respectively.

Chart C-6: Comparison of reference return and expected return



The profound changes in occupational pension provision in recent years can clearly be seen in the change in target return, which has almost halved since 2010. This represents a fundamental change for a pension system with capital cover.

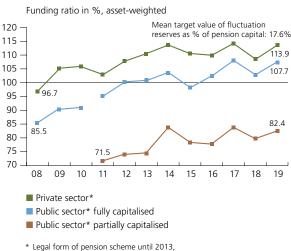
The expected return is significantly higher for the two years where data is available.

In this context, it should be remembered that although the average level of benefits has fallen somewhat, this has not led to a collapse. This is proof of the social partners' commitment to the Pillar 2 and the stability of the system.

D Funding ratio

1 Funding ratio and change in funding ratio*

Chart D-1: Change in funding ratio since 2008



Legal form of pension scheme until 2013, founder of the pension scheme from 2014

The year under review ended with an average funding ratio (asset-weighted) of 113.9 per cent (previous year 108.7) for pension funds of private-sector employers, and 96.7 (93.3) per cent for those with public-sector employers. Broken down by public-sector funds with and without full capitalisation, the respective funding ratios are 107.7 (102.6) per cent and 82.4 (79.6) per cent.

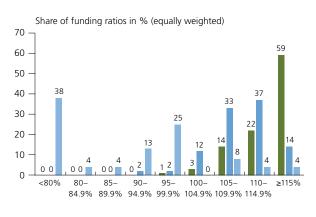
The change since the 2008 financial crisis has been positive overall, with a tendency towards rising funding ratios. Since 2014, pension funds of private-sector employers have usually been at a level of over 110 per cent, which is close to the target funding ratio of an average of 115 per cent, i.e., with a good reserve cushion.

The funding ratios of the pension funds of publicsector employers are also increasing over time, albeit 6 to 7 percentage points behind those of private employers.

The increase in funding ratios must be seen against the background of technical interest rates becoming lower. If interest rates remained unchanged, funding ratios would be around 5 percentage points higher.

According to the Swisscanto Pension Fund Monitor based on the asset allocation indicated in this study, the latest figures available when the study went to print show a funding ratio of 109 per cent for private funds, 103 per cent for fully capitalised public-sector funds and 79 per cent for partially capitalised funds as at the end of May 2020.

Chart D-2: Distribution of funding ratios by sponsor



- Sponsors: Private-sector employers
- Sponsors: Federal state/canton/municipalities (fully capitalised)
- Sponsors: Federal state/canton/municipalities (part. capitalised)

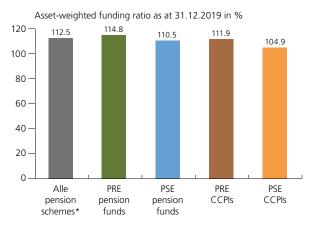
The distribution of funding ratios differs by sponsor (private-sector employer or public-sector employer with and without full capitalisation) and naturally shows significant differences.

The clear leaders with a 99 per cent share (previous year 93) with full coverage are pension funds with private employers, the worst performers of course being public-sector pension funds with partial capitalisation, only 16 (10) per cent of which have full coverage.

96 (84) per cent of pension funds with public employers and full capitalisation reported full coverage. In 2018, it was 95 per cent and in 2017 only 77 per cent.

The solution provided to the cantons by the legislator if their pension funds are underfunded, namely financing in the form of partial capitalisation backed with a state guarantee, appears to remove the motivation to carry out comprehensive restructuring. Even after a good investment year, 38 (48) of these pension funds still have a funding ratio of less than 80 per cent, which is the target set by law. 62 funds report a figure of above 80 per cent.



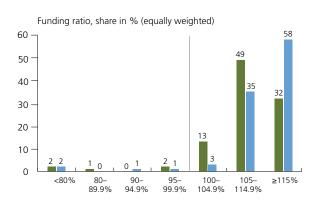


^{*} without part-capitalised pension funds

If the funding ratios are broken down by employer and type of management, the pension funds of private employers (PRE), with an overall average of 112.5 per cent (previous year 107.3), have an asset-weighted funding ratio of 114.8 (109.8) per cent and public-sector employers (PSE) have 110.5 (104.3) per cent.

The equivalent figures for private employers are 111.9 per cent (105.8) for collective and communal pension schemes and 104.9 per cent (100.9) for public employers.

Chart D-4: Distribution of funding ratios by type of management, without part-capitalised pension funds



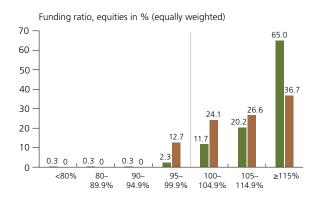
■ Collective and common pension schemes (CCPIs)

Pension funds (fully capitalised)

Chart D-4 shows the differences in the funding ratio distribution between fully capitalised pension funds and collective and common pension schemes.

The CCPIs generally have lower values, but since the extent of the shortfall is the same, the figures are level with each fund 5 per cent in the red. Compared to the previous year, the situation of the CCPI in particular improved significantly in 2019, when 19 per cent still showed a shortfall. There was no significant change in this respect in fully capitalised funds.

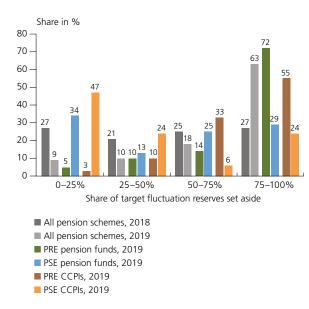
Chart D-5: Distribution of funding ratios of company pension funds and collective and common pension schemes



The distribution of funding ratios for company pension funds of private employers and collective and common pension schemes shows that the CCPIs also score lower. 13 per cent of CCPIs are underfunded compared to around 3 per cent of company pension funds.

2 Fluctuation reserves

Chart D-6: Change in target fluctuation reserves



The chart shows the marked recovery in accrued fluctuation reserves compared to the target fluctuation reserves for 2019.

Out of all participating funds, 63 (27) per cent had built up at least 75 per cent of their target reserves. As expected, the largest reserves can be found in the pension funds of private employers, with an average of 72 per cent. The public-sector coffers are significantly behind at only 29 per cent.

Given the considerable differences from year to year, the term "fluctuation reserves" is definitely appropriate. It is also clear that they do their job effectively, and that the criticism which is often heard when reserves are solid that the need for pensions to be secure is exaggerated can only be explained by a lack of understanding of the issue.

55 (14) per cent of collective and common pension schemes of private employers also have a satisfactory reserve cushion, and in the case of public employers, this figure had already risen to 24 per cent in 2019 after no foundation in this sector had achieved a figure of over 75 per cent in the previous year.

A value of at least 75 per cent is important for collective pension foundations, as under Art. 46 BVV2, it gives them the freedom to apply an interest rate to retirement assets above their technical interest rate, i.e., above the reference rate of the Swiss Chamber of Consulting Actuaries (FRP 4). This forms the upper limit if the target fluctuation reserves are lower.

E Technical interest rate and interest return

1 Technical interest rate – status and change

Chart E-1: Change in the average technical interest rate in defined contribution plans since 2010

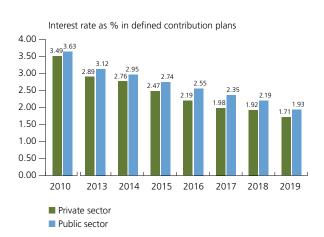
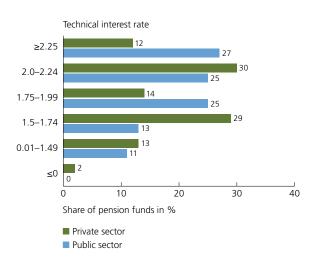


Chart E-1 very clearly shows the change in technical interest rates in defined contribution plans over the past ten years since 2010. The uninterrupted annual downward trend was almost linear, and also resulted in the value for public-sector funds being under 2 per cent for the first time in the year under review at 1.93 per cent, and 1.71 per cent for private-sector funds. The gap between the two pension fund categories has narrowed from 0.27 to 0.22 percentage points within a year.

Technical interest rates today are at a level that would have been considered unlikely just a few years ago, and together with the resulting conversion rates, are considered incompatible with the acceptance of Pillar 2 among insured members.

In defined benefit plans, the values for privatesector pension funds are 2.70 per cent and for public-sector funds a significant 2.75 per cent. The survey covered ten private-sector and nine publicsector funds.

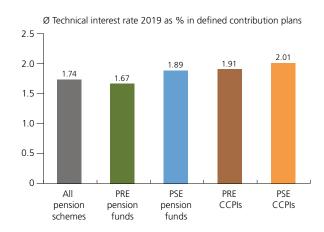
Chart E-2: Distribution of technical interest rates in pension funds in defined contribution plans



The proportion of pension funds with technical interest rates below 2 per cent is constantly rising. This proportion currently stands at 58 per cent (32) for private pension funds and 49 per cent (24) for public-sector ones. By means of comparison, in 2016 only 4 per cent of public funds had reported a rate of less than 2 per cent.

The highest value reported by a private pension fund was 3.50 per cent. The corresponding figures for public-sector funds range from 1.00 per cent to 3.25 per cent.

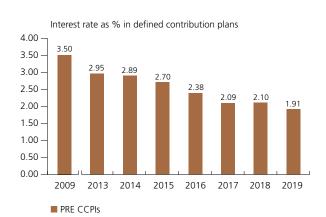
Chart E-3: Technical interest rates by pension fund category with defined contribution plans



Does the legal form of pension funds have any impact on the conversion rate or technical interest rate? The results of the survey confirm the assumption. The average of all pension funds is 1.74 per cent, with the funds of private employers having the lowest rate at 1.67 per cent compared to a figure of 1.89 per cent for public employers. The collective and common pension schemes scored 1.91 and 2.01 per cent respectively.

The rate applied by collective and common pension schemes that are active on the market is of particular interest in this context. CCPIs that are active on the market are motivated to offer the highest possible rates in order to stay competitive. At 2.11 per cent, the average calculated for this pension fund segment is well ahead of all other pension fund categories.

Chart E-4: Change in technical interest rate for CCPIs with private employers



The change in technical interest rates for private CCPIs largely corresponds to that of other pension funds as a whole. What is striking is the small 0.1 percentage point increase between 2017 and 2018, which may be related to changes in the sample. The difference between 2018 and 2019 again follows the pattern of previous years. The question arises about how long this reduction will last.

If the CCPIs active on the market are filtered out again as in point E-3, the result is a reduction from 3.50 to 2.09 per cent since 2009.

2 Interest return on retirement assets

Chart E-5: Distribution of interest return on retirement assets in 2019 by legal form

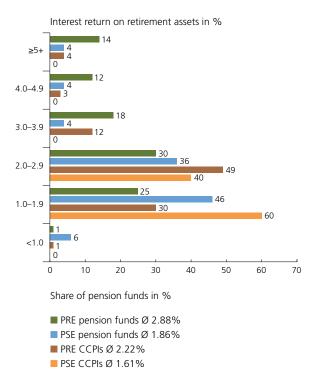
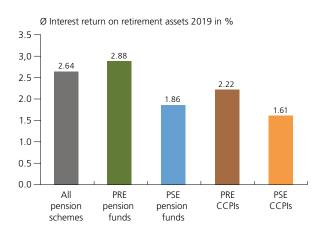


Chart E-5 shows the distribution of interest credited by pension funds to retirement assets. The large differences are striking, with rates ranging from under 1 per cent to over 5 per cent. The differences by employer and type of legal form are also noteworthy. The funds of private employers granted an average interest rate of 2.88 per cent, whereas those of public employers granted only 1.86 per cent. The collective and common pension schemes of private employers is in between at 2.22 per cent.

The applicable BVG minimum interest rate for 2019 remained unchanged at 1 per cent. A lower interest rate (usually combined with restructuring measures) is only found in a small minority of cases, but relatively often in public funds.

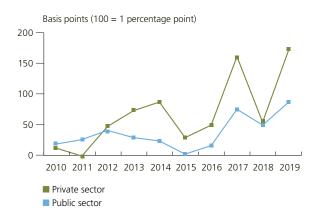
The majority of pension funds are in the 1 to 3 per cent range, with almost half of private pension funds accounting for between 2 and 3.9 per cent and 14 per cent even crediting more than 5 per cent.

Chart E-6: Interest return on retirement assets



The average interest return on retirement assets across all funds is 2.64 (1.55) per cent. Only the pension funds of private employers are above average at 2.88 per cent. The public-sector pension funds reported a significantly lower interest return of 1.86 per cent.

Chart E-7: Difference between the average interest return on retirement assets and the BVG minimum interest rate by legal form since 2010

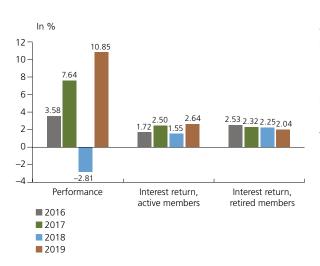


The trend in interest rates granted on retirement assets shows significantly greater fluctuations for private pension funds than for public funds which show a flatter trend. The reasons for this are difficult to discern. These may relate to a different cash management philosophy, though this has not yet been investigated in any great detail.

Secondly, it can be seen that private funds reported roughly the same rate as public funds except in 2011, but in the majority of the years investigated, they granted a higher rate. The interest return in private pension funds over the course of ten years was on average 70 basis points higher than the BVG minimum rate. This equivalent value for public-sector schemes is 38 basis points.

The differences in interest returns between public funds with and without full capitalisation are very clear. Funds that are fully capitalised have a mean interest return of 1.64 per cent, with a median of 1.63 per cent; the median for funds with partial capitalisation is the same, but the mean is 2.5 per cent. This leads to the conclusion that some partially capitalised funds granted a very high interest return.

Chart E-8: Interest return and performance



As a result of the minimum conversion rate being excessively high in technical terms, for years active insured members have had to accept a lower interest return on their retirement assets on average compared to the rates granted to pensioners.

The only exceptions are where an above-average investment performance means that active insured members are also granted an above-average return. Chart E-8 provides a revealing insight into this. In the period under review from 2016 to 2019, including two good to very good investment years in 2017 and 2019, active participants also received slightly higher rates than pensioners on two occasions.

In the year under review, the interest rate for active insured members exceeded that of pensioners by 0.6 percentage points; in 2017, the difference was 0.18 percentage points.

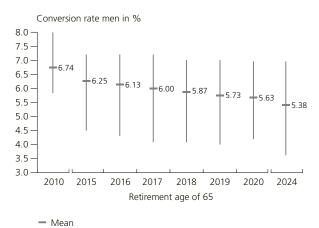
In this context, it is worth mentioning that the OAK-BV still estimated the redistribution capacity in 2019 at CHF 7.2 billion (previous year CHF 5.1 billion).

As can be seen from the chart, the interest on pensioners' retirement capital is steadily declining. In 2015, it was still 2.80 per cent, and has now fallen to 2.04 per cent.

F Conversion rate and other actuarial metrics

1 Conversion rate

Chart F-1: Change in conversion rate



The calculated average conversion rate as applied by pension funds to men with a retirement age of 65 is constantly falling, and reaches a new low every year. The figure for the current year is 5.63 per cent, with values ranging from 4.15 to 6.94 per cent.

The question about the rate for 2024 gave a result of 5.38 per cent, which is an average of strongly divergent figures between 3.60 and 6.94 per cent. In the previous year, a value of 5.45 per cent had been forecast for 2023.

The rate of reduction has hardly changed over the past ten years, and is mostly in the region of 0.1 percentage points. A conversion rate that is 1 percentage point lower results in an average loss of around 16 per cent for pensions.

Table F-1: Conversion rate in all-inclusive pension funds

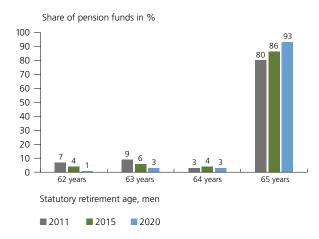
Gender	Reference					
	year	Minimum	Maximum	Average	Median	#
Rate for men at retirement age 65						
(defined contribution plans)	2020	4.15%	6.94%	5.63%	5.60%	448
Rate for women at retirement age 64						
(defined contribution plans)	2020	4.30%	6.94%	5.57%	5.50%	447

The credit principle allows all-inclusive pension funds that insure mandatory and supplementary benefits "under one roof" to reduce their conversion rates to significantly below the minimum conversion rate, provided that the statutory minimum benefits are guaranteed overall.

This mechanism also underlies the established current median of 5.60 per cent (previous year 5.70) for men in all-inclusive defined contribution plans, although the statutory minimum rate has been unchanged since 2005 at 6.8 per cent. For women, the value at a retirement age of 64 is 5.50 (5.65) per cent.

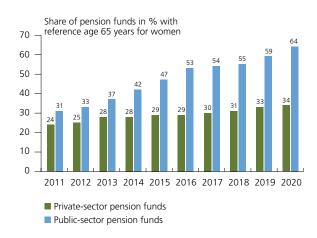
2 Standard and actual retirement age

Chart F-2: Change in standard retirement age (reference age) for men



The rise in the regulatory retirement age in order to achieve the benefits target, which has been observed for some considerable time, has not continued. Around 93.0 per cent of participating pension funds have set this age at 65 years for men; there are few cases of the age being lower.

F-3: Retirement age 65 for women

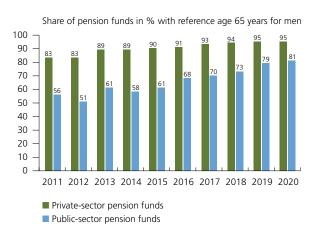


A regulatory retirement age of 65 for women has become increasingly widespread over the last ten years, although the AHV retirement age for women is still 64. It is surprising that a retirement age of 65 has been introduced far more frequently by public pension funds than private ones. Whereas in 2011, only 31 per cent of public funds set the retirement age for women at 65, today the figure is 64 per cent. The increase is much less pronounced among private pension funds, which went from 24 to 34 per cent respectively.

It is hard to find any reasons for this. One possible explanation is that when the lower retirement age for men, which was commonly used by public funds, was raised to 65, in many cases the retirement age for women was also raised to 65 at the same time.

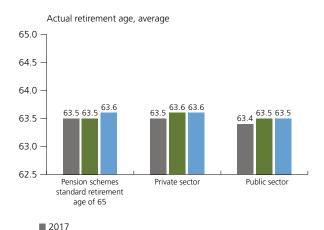
It is noteworthy that this development has so far received little public attention, although the raising of the retirement age for women to 65 as part of the revision of the AHV has met with strong opposition.

F-4: Retirement age 65 for men



The increasing prevalence of a regulatory retirement age of 65 for men is occurring under different conditions than for women. Once again, a bigger increase was recorded for public-sector funds, though starting at a significantly lower level than for private ones. The increase in public-sector funds went from 56 to 81 per cent, and from 83 to 95 per cent in the private-sector.

Chart F-5: Change in actual retirement age for men



The question about the actual (not regulatory) average retirement age has resulted in a value for 2019 which is unchanged on the previous year, both in the private and public-sectors. Although the comparative figures since 2017 show a slight increase, no real trend can be discerned.

■ 2018 ■ 2019

Chart F-6: Change in retirement age

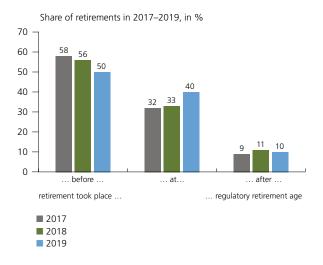
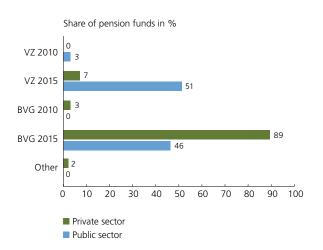


Chart F-6 shows that the proportion of beneficiaries who retire before the regulatory retirement age is declining. In 2019, it was still only half overall. 40 per cent took retirement at the regulatory retirement age and 10 per cent even later.

The figure for 2019 is based on 25,103 retired people.

3 Technical basis

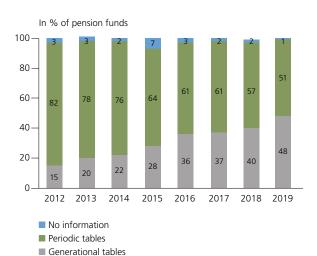
Chart F-7: Applied principles by legal form



The technical principles used by pension funds are almost exclusively those of the BVG 2015 and the official actuarial charts for 2015; based on their respective data, the BVG tables are preferred by private-sector pension funds whereas actuarial charts are preferred by public-sector funds.

The updated editions of the charts (BVG 2020 and actuarial charts 2020) are expected to be released next year.

Chart F-8: Use of periodic and generational tables

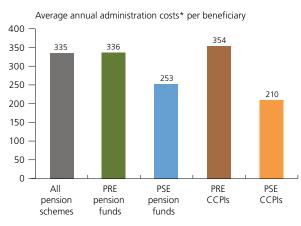


Generational tables are increasingly being used by participating pension funds. Within eigt years, their proportion has risen from 15 to 48 per cent, and it can be assumed that a majority will already be using generational tables this year. It should be noted that the shift towards the use of generational tables has a negative effect on the reported funding ratio. This can be estimated at around 1 to 2 percentage points.

G Management and investment costs

1 General management costs

Chart G-1: Distribution of annual management costs by beneficiary and legal form



^{*} General management, marketing, agent and broker activity, audit/experts/supervision

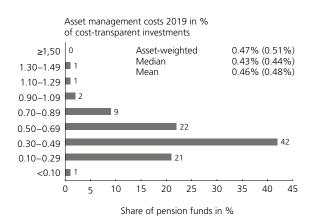
The management costs per beneficiary show a broad spread depending on the type of pension fund. The average for all pension funds is CHF 335; in 2017, the average was CHF 341.

In individual cases, major changes can be seen compared to 2017 that are not easy to explain. For example, there was a sharp drop in the CCPIs of private employers from CHF 402 to CHF 354, while at the same time the CCPIs of public employers increased from CHF 186 to CHF 210.

The most important reason for the differences between the different categories is the average size of the funds in relation to the beneficiaries. The CCPIs of public employers had the lowest value at CHF 210 (212). They insured an average of 19,618 beneficiaries, followed by the pension funds of public employers with 10,310 beneficiaries. The pension funds of private employers report CHF 336 (313), with an average of 2,912 beneficiaries.

2 Asset management costs

Chart G-2: Distribution of asset management costs 2019

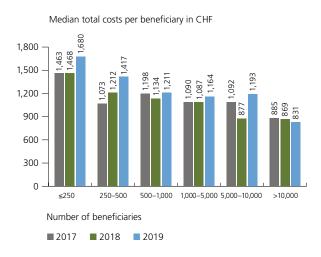


Asset-weighted asset management costs amount to 0.47 per cent (previous year 0.51) of cost-transparent investments, and have thus decreased again after a slight increase from 0.48 to 0.51 per cent in the previous year. The mean is 0.46 (0.48) per cent and the median 0.43 (0.44) per cent.

Since the introduction of the cost transparency ratio, this has increased from an average of 97.0 per cent to 99.4 per cent (previous year 99.2) from 2013 onwards, according to the survey participants. In other words, investments that are not cost-transparent play almost no further role.

3 Total management costs

Chart G-3: Total costs per beneficiary



The classification of total management costs – comprising general costs and asset management costs – shows the expected picture across the various size categories. The economies of scale as a theoretical concept can be derived directly from the real numbers and can be understood in practice.

However, the individual data observed for the period from 2016 to 2019 which is shown here again shows differences that are difficult to explain. While large pension funds with more than 10,000 insured members were able to continuously reduce their costs, all other categories showed a significant increase in costs for the year under review, particularly among funds with 5,000 to 10,000 beneficiaries, which showed an increase of more than a third from CHF 877 to CHF 1,193.

A smaller, but still noticeable increase over the period can be seen among pension funds with 1,000 to 5,000 insured members.

Survey participants

Aargauische Pensionskasse	Caisse de retraite MATISA		
Agrisano Pencas	Caisse Intercommunale de Pensions		
ALDI SUISSE Pensionskasse	Caisse paritaire de prévoyance de l'industrie		
Allgemeine Pensionskasse der SAirGroup	et de la construction CPPIC		
ALRIVO Vorsorgestiftung	CAP Prévoyance		
Alters-, Invaliden- und Hinterbliebenen-Fonds der	Capav		
Kalkfabrik Netstal AG	CAPREVI, PRÉVOYANCE CATERPILLAR		
ALVOSO LLB Pensionskasse	Cassa Pensioni di Lugano		
Ambassador Stiftung für die berufliche Vorsorge	CIEPP Caisse Inter-Entreprises de Prévoyance Professionnelle		
Angestellten-Pensionskasse Bucher Schweiz	Clariant-Pensionsstiftung		
Arbonia Vorsorge	comPlan		
Ascaro Vorsorgestiftung	CoOpera Sammelstiftung PUK		
ASGA Pensionskasse Genossenschaft	CPEG – Caisse de prévoyance de l'Etat de Genève		
avenirplus Sammelstiftung	CPP – Caisse de Pensions		
Bafidia Pensionskasse	CPVAL		
Bâloise-Sammelstiftung für die ausserobligatorische	EMMI VORSORGESTIFTUNG		
berufliche Vorsorge	Fondation complémentaire Isover		
Bâloise-Sammelstiftung für die obligatorische berufliche Vorsorge	Fondation de prévoyance Aon Hewitt		
Basellandschaftliche Pensionskasse	Fondation de prévoyance CONINCO		
Bayer Pensionskasse Schweiz	Fondation de prévoyance de British American Tobacco Switzerland SA		
Bernische Lehrerversicherungskasse BLVK	Fondation de Prévoyance des Paroisses et Institutions Catholiques		
Biral-Personalvorsorgestiftung	Fondation de prévoyance du Groupe Assura		
BVG Sammelstiftung Swiss Life	FONDATION DE PRÉVOYANCE DU GROUPE BNP PARIBAS EN SUISSE		
BVG-Personalvorsorgestiftung	Fondation de prévoyance en faveur du personnel		
BVG-Stiftung der SV Group	de la Deutsche Bank (Suisse) SA et des sociétés connexes		
BVG-Stiftung Handel Schweiz	Fondation de prévoyance en faveur du personnel		
Caisse de pension de la Société suisse de pharmacie	de la société RAYMOND WEIL		
Caisse de pension du Comité International de la Croix-Rouge	Fondation de prévoyance en faveur du personnel des Sociétés Liebherr en Suisse		
Caisse de pensions de Bobst Mex SA	Fondation de prévoyance LPP en faveur du personnel		
Caisse de Pensions de la BCV	de Siegfried Evionnaz SA et des entreprises apparentées		
Caisse de pensions de la Commune de Lausanne (CPCL)	Fondation de prévoyance LPP Mirabaud		
Caisse de pensions de la République et Canton du Jura	Fondation de prévoyance professionnelle AROMED		
Caisse de pensions de la Ville de Bulle	Fondation de prévoyance skycare		
Caisse de Pensions de l'État de Vaud	- Fondation LPP de TESA Sarl		
Caisse de pensions de ROLEX SA et de sociétés affiliées	- Fondation LPP Vibro-Meter		
Caisse de pensions du Centre Suisse d'Electronique et	Fonds de prévoyance des employés de la ville de Delémont FRED		
de Microtechnique S.A.– CSEM Recherche et Développement	Fonds de prévoyance du Centre Patronal		
Caisse de pensions du Groupe Eldora	Fonds de prévoyance en faveur du personnel		
Caisse de pensions du Personnel de la Ville de Carouge	de la Banque Cantonale du Jura		
Caisse de pensions du personnel du groupe Naef Immobilier	Fonds de prévoyance en faveur du personnel		
Caisse de pensions du TCS	de la maison Reitzel (Suisse) S.A.		
Caisse de Pensions Isover	Fonds de prévoyance en faveur du personnel		
Caisse de pensions Swatch Group (CPK)	de l'Association St-Camille		
Caisse de prévoyance de la Construction	Fonds en faveur du personnel de la société Payot		
Caisse de prévoyance du personnel	Fürsorgestiftung der Firma Johann Müller AG		
de la Banque Cantonale de Fribourg	Fürsorgestiftung II des Schweizerischen Baumeisterverbandes		
Caisse de prévoyance du personnel de la Ville de Fribourg	FUTURA Vorsorgestiftung		
Caisse de prévoyance en fay du pers querier laduri 8 Cia SA	Galenica Pensionskasse		
Caisse de prévoyance en fav. du pers. ouvrier Induni & Cie SA et des sociétés affililées	GastroSocial Pensionskasse		
Caisse de retraite de Febex S.A.	GEBA, Genossenschaft für kollektive Berufs- und Altersvorsorge		
Caisse de retraite de l'ebex 3.A. Caisse de retraite et de prévoyance du personnel	- Gemeinschaftsstiftung der Geberit Gruppe		
de la Banque Cantonale du Valais	Gemeinschaftsstiftung der Zellweger Luwa AG		
·	Gewerbepensionskasse		

Glarner Pensionskasse	Pensionskasse der Bernischen Kraftwerke	
Goodchild Graham	Pensionskasse der C&A Gruppe	
Groupe Mutuel Prévoyance	Pensionskasse der christkatholischen und evangelisch-reformierten	
Hapimag Pensionskasse	Pfarrer des Kantons Solothurn	
Hermann Sprüngli Personalstiftung	Pensionskasse der Colgate-Palmolive Gruppe Schweiz	
Hess-Honegger Personalvorsorgestiftung für die Embru-Werke	Pensionskasse der CONCORDIA Schweizerische	
HIAG Pensionskasse	Kranken- und Unfallversicherung AG	
Hilti Pensionskasse	Pensionskasse der Credit Suisse Group (Schweiz)	
HOTELA Fonds de prévoyance	Pensionskasse der Dätwyler Holding AG	
Integra Personalvorsorgestiftung	Pensionskasse der Diözese St. Gallen	
inVor Vorsorgeeinrichtung Industrie	Pensionskasse der ehemaligen Asklia-Gruppe	
Istituto di Previdenza del Cantone Ticino	Pensionskasse der Electrolux Gruppe Schweiz	
JTI Swiss Pension Fund	Pensionskasse der Elektro-Material AG	
Kaderversicherung der SAirGroup	Pensionskasse der F. Hoffmann-La Roche AG	
Kaiser Partner Personalvorsorgestiftung	Pensionskasse der Firma Max Zeller Söhne AG	
Kantonale Versicherungskasse des Kantons Appenzell I.Rh.	Pensionskasse der Fritz Meyer Holding AG	
La Collective de Prévoyance – Copré	c/o Swiss Life Pension Services AG	
Leica Pensionskasse	Pensionskasse der Gemeinde Emmen	
Loyalis BVG-Sammelstiftung	Pensionskasse der Gemeinde Horgen	
Luzerner Gemeindepersonalkasse	Pensionskasse der Gemeinde St. Moritz	
Luzerner Pensionskasse (LUPK)	Pensionskasse der Generali Versicherungen	
Mauritius Pensionskasse	Pensionskasse der GWF MessSysteme AG	
Mettler-Toledo Pensionskasse	Pensionskasse der Helvetia Versicherungen	
MIKRON Pensionskasse	Pensionskasse der HG COMMERCIALE	
MPK Migros-Pensionskasse	Pensionskasse der HOCHDORF-Gruppe	
Nest Sammelstiftung	Pensionskasse der ISS Schweiz	
Pensions- und Sparkasse der Securitas Gruppe	Pensionskasse der Julius Bär Gruppe	
Pensionsfonds Gruppe GastroSuisse	Pensionskasse der JURA-Holding	
Pensionskasse APG/SGA	Pensionskasse der Karl Bubenhofer AG	
Pensionskasse AR	Pensionskasse der Kimberly-Clark GmbH	
Pensionskasse Basel-Stadt	Pensionskasse der Lienhard Office Group	
Pensionskasse Berner Notariat und Advokatur	Pensionskasse der Loeb AG	
Pensionskasse BonAssistus	Pensionskasse der Luzerner Kantonalbank	
Pensionskasse Bosch Schweiz	Pensionskasse der NZZ-Mediengruppe	
	Pensionskasse der OBT AG	
Pensionskasse BRUGG Pensionskasse Bühler AG Uzwil	Pensionskasse der Orior Gruppe	
	Pensionskasse der Pilatus Flugzeugwerke AG	
Pensionskasse Caritas	Pensionskasse der PricewaterhouseCoopers	
Pensionskasse Conzzeta	Pensionskasse der Rhätischen Bahn	
Pensionskasse Coop CPV/CAP	Pensionskasse der Sanitas Troesch-Gruppe	
Pensionskasse Denner	Pensionskasse der Saurer-Unternehmungen	
Pensionskasse der 3M Firmen in der Schweiz	Pensionskasse der Schweizer Paraplegiker-Gruppe Nottwil	
Pensionskasse der Alcatel-Lucent Schweiz AG	Pensionskasse der Schweizerischen Epilepsie-Stiftung	
Pensionskasse der ALSO	Pensionskasse der Schweizerischen Hagel-Versicherungs-Gesellschaft	
Pensionskasse der Antalis AG	Pensionskasse der Siemens-Gesellschaften in der Schweiz	
Pensionskasse der AZ Medien Gruppe	Pensionskasse der SKF (Schweiz)	
Pensionskasse der Bank Vontobel AG	— Pensionskasse der Stadt Aarau	
Pensionskasse der BASF Gruppe Schweiz, I	Pensionskasse der Stadt Arbon	
Pensionskasse der BASF Gruppe Schweiz, II	Pensionskasse der Stadt Dübendorf	
Pensionskasse der Basler Kantonalbank	Pensionskasse der Stadt Frauenfeld	
Pensionskasse der Baumann Koelliker Gruppe	Pensionskasse der Stadt Olten	
Pensionskasse der BEKB BCBE	Pensionskasse der Stadt Rheinfelden	
Pensionskasse der Berner Versicherung-Gruppe	Pensionskasse der Stadt Weinfelden	

Pensionskasse der Stadt Winterthur	Pensionskasse Schweizer Zucker		
Pensionskasse der Stadt Zug	Pensionskasse Schweizerischer Anwaltsverband		
Pensionskasse der Stahl Gerlafingen AG	Pensionskasse Sefar AG		
Pensionskasse der Technischen Verbände SIA STV BSA FSAI USIC	Pensionskasse Siegfried		
Pensionskasse der Trisa	Pensionskasse Sika		
Pensionskasse der T-Systems Schweiz AG	Pensionskasse SPS und Jelmoli		
Pensionskasse der UBS	Pensionskasse SRG SSR		
Pensionskasse der Weidmann Unternehmen	Pensionskasse Stadt Chur		
Pensionskasse der Zuger Kantonalbank	Pensionskasse Stadt Luzern		
Pensionskasse der Zürcher Kantonalbank	Pensionskasse Stadt Rapperswil-Jona		
Pensionskasse der Zürich Versicherungs-Gruppe	Pensionskasse Stadt Zürich (PKZH)		
Pensionskasse des Bundes PUBLICA	Pensionskasse Sunrise		
Pensionskasse des Kantons Nidwalden	Pensionskasse Swiss Dairy Food AG		
Pensionskasse des Kantons Schwyz	Pensionskasse Swiss Re		
Pensionskasse des Opernhauses Zürich	Pensionskasse Syna		
Pensionskasse des Schweizerischen Bauernverbandes	Pensionskasse Syngenta		
Pensionskasse des Spitals Region Oberaargau (PK SRO)	Pensionskasse Thurgau		
Pensionskasse des SVTI	Pensionskasse Unilever Schweiz		
Pensionskasse DHL Schweiz	Pensionskasse Uri		
Pensionskasse Diakonat Bethesda Basel	Pensionskasse Vigier		
Pensionskasse dormakaba	Pensionskasse von Krankenversicherungs-Organisationen		
Pensionskasse EBM	Pensionskasse WWZ		
Pensionskasse Eternit	Pensionskasse Züriwerk		
Pensionskasse Evangelisches Gemeinschaftswerk	Personalfürsorgestiftung der Ausgleichskasse Handel Schweiz		
Pensionskasse fenaco	Personalfürsorgestiftung der Ausgleichskasse Hander Schweiz		
Pensionskasse Fiege Schweiz	Personalfürsorgestiftung der Larag Officerierindingen		
Pensionskasse Franke	Personalfürsorgestiftung der Oswald Nahrungsmittel GmbH		
Pensionskasse Freelance der Gewerkschaft syndicom	Personalstiftung Création Baumann AG		
Pensionskasse Frutiger	Personal-Stiftung der Leder Locher AG		
Pensionskasse für die AXA Schweiz	Personalstiftung der OERTLI Werkzeuge AG		
Pensionskasse für die Mitarbeitenden der Gruppe Mobiliar	Personalstiftung der Schweizerischen Rettungsflugwacht (Rega)		
Pensionskasse Gilgen Door Systems	Personalstiftung der Wyss Samen und Pflanzen AG		
Pensionskasse Graubünden	Personalversicherung der NCR Schweiz		
Pensionskasse HACO	Personalversicherungskasse der Evangref. Kirche BS		
Pensionskasse HACO Pensionskasse Heineken Switzerland	Personalvorsorge Gate Gourmet Switzerland		
Pensionskasse Helliekeri Switzerland Pensionskasse Hewlett-Packard Plus	Personalvorsorge Swissport		
Pensionskasse Hirslanden	Personalvorsorgeeinrichtung der PAGO AG		
Pensionskasse Hinsianueri Pensionskasse Huntsman (Switzerland)	Personalvorsorgekasse der Stadt Bern		
Pensionskasse Johnson & Johnson Schweiz	Personalvorsorgekasse Obwalden PVO		
Pensionskasse JUMBO	Personalvorsorgestiftung Müller Martini Zofingen		
Pensionskasse Kaminfeger	Personalvorsorgestiftung BELIMO Automation AG		
Pensionskasse Kanton Solothurn	Personalvorsorgestiftung der Accenture Schweiz		
Pensionskasse Kern & Co. AG	Personalvorsorgestiftung der adval tech Holding AG		
Pensionskasse LANDI	Personalvorsorgestiftung der Albers Gruppe		
Pensionskasse Manor	Personalvorsorgestiftung der Arthur Frey AG		
Pensionskasse Novartis 1	Personalvorsorgestiftung der Ärzte und Tierärzte PAT-BVG		
Pensionskasse Plüss-Staufer	Personalvorsorgestiftung der Basler & Hofmann AG, Ingenieure und Planer		
Pensionskasse Post	Personalvorsorgestiftung der BearingPoint Switzerland AG		
Pensionskasse Rheinmetall	Personalvorsorgestiftung der Bouygues ES InTec-Gruppe		
Pensionskasse Römisch-Katholische Landeskirche des Kantons Luzern	Personalvorsorgestiftung der Büchi Labortechnik AG		
Pensionskasse SBB	Personalvorsorgestiftung der Burgergemeinde Bern		
Pensionskasse Schaffhausen	rersonaryorsorgestritung der burgergemeinde bem		

Personalvorsorgestiftung der Canon (Schweiz) AG	PROSPERITA Stiftung für die berufliche Vorsorge		
Personalvorsorgestiftung der CSL Behring AG	Raiffeisen Pensionskasse Genossenschaft		
Personalvorsorgestiftung der CSS Versicherung	Rivora Sammelstiftung		
Personalvorsorgestiftung der Feldschlösschen-Getränkegruppe	RMF Vorsorgestiftung		
Personalvorsorgestiftung der Festo AG	Sammelstiftung Vita		
Personalvorsorgestiftung der Gemeinde Zollikon	Schindler Pensionskasse		
Personalvorsorgestiftung der graphischen Industrie pvgi	SECUNDA Sammelstiftung		
Personalvorsorgestiftung der Haecky Gruppe	SFS Pensionskasse		
Personalvorsorgestiftung der Hans Rychiger AG	Sonova Pensionskasse		
Personalvorsorgestiftung der Heizmann AG	Specogna Personalvorsorgestiftung		
Personalvorsorgestiftung der Helsana Versicherungen AG	Spida Personalvorsorgestiftung		
Personalvorsorgestiftung der HELVETAS Swiss Intercooperation	St. Galler Pensionskasse		
Personalvorsorgestiftung der Jungfraubahnen	St. Ursen-Vorsorgestiftung		
Personalvorsorgestiftung der Kalaidos Bildungsgruppe Schweiz	Städtische Pensionskasse Thun		
Personalvorsorgestiftung der LGT Gruppe (Schweiz)	Stiftung 2. Säule swissstaffing		
Personalvorsorgestiftung der Liechtensteinischen Landesbank	Stiftung Abendrot		
Personalvorsorgestiftung der Pfizer AG	Stiftung Auffangeinrichtung BVG		
Personalvorsorgestiftung der Planzer Transport AG	Stiftung für das Personal der Notz Unternehmungen in Liq.		
Personalvorsorgestiftung der Ringele AG	Stiftung für die Zusatzvorsorge der Angestellten der Allianz Suisse		
Personalvorsorgestiftung der SCHURTER AG	Stiftung Pensionskasse der Anliker AG Bauunternehmung		
Personalvorsorgestiftung der Schweizer Salinen AG	Sulzer Vorsorgeeinrichtung		
Personalvorsorgestiftung der Siegwerk Switzerland AG	Suprema		
Personalvorsorgestiftung der Siegweik Switzerland Ad	Swica Personalvorsorgestiftung		
Personalvorsorgestiftung der SV Group			
Personalvorsorgestiftung der Thurbo AG	SWISS Vorsorgestiftung für das Bodenpersonal Swisscanto Flex Sammelstiftung der Kantonalbanken		
Personalvorsorgestiftung der Mulbo AG Personalvorsorgestiftung der Wander AG	Swisscanto Sammelstiftung der Kantonalbanken		
Personalvorsorgestiftung der Würth-Gruppe Schweiz	Swisscanto Supra Sammelstiftung der Kantonalbanken		
Personalvorsorgestiftung der Walti-Grappe Schweiz	TRANSPARENTA Sammelstiftung für berufliche Vorsorge		
Personalvorsorgestiftung des Schweizerischen Bauernverbandes	Trigona Sammelstiftung für berufliche Vorsorge		
Personalvorsorgestiftung des schweizenschen bauernverbandes	TRIKOLON Sammelstiftung für berufliche Vorsorge		
Personalvorsorgestiftung für die Angestellten der Allianz Suisse	Unabhängige Gemeinschaftsstiftung Zürich UGZ		
Personalvorsorgestiftung für die Angestellten der Generalagenturen der Allianz Suisse	Varion Foundation		
Personalvorsorgestiftung Ituma	Varian Foundation		
Personalvorsorgestiftung Matterhorn Gotthard Bahn	Versicherungseinrichtung des Flugpersonals der SWISSAIR		
Personalvorsorge-Stiftung Providus	Versicherungskasse SWISSLOS		
Personalvorsorgestiftung RESPIRA	Veska Pensionskasse		
Personalvorsorgestiftung Visana	Vorsorge der BDO AG, Zürich		
Perspectiva Sammelstiftung für berufliche Vorsorge	VORSORGE in globo M		
PFS der Firma Permapack AG	VORSORGE RUAG		
Philip Morris en Suisse Caisse de Pensions	Vorsorgeeinrichtung der St. Galler Kantonalbank		
PK der Lyreco Switzerland AG	Vorsorgeeinrichtung der STUTZ-Gruppe		
PK Keramik Laufen	Vorsorgeeinrichtung der Suva		
PKE Vorsorgestiftung Energie	Vorsorgeeinrichtung W&W		
PKG Pensionskasse	Vorsorgestiftung der Basler Versicherung AG		
	Vorsorgestiftung der Camille Bauer AG		
Previs Vorsorge prévoyance.ne – Caisse de pensions de la fonction publique	Vorsorgestiftung der Habasit AG		
du canton de Neuchâtel	Vorsorgestiftung der PanGas		
Profelia Fondation de prévoyance	Vorsorge-Stiftung der Theatergenossenschaft Basel		
Profond Vorsorgeeinrichtung	Vorsorgestiftung der Verbände der Maschinenindustrie		
PROMEA Pensionskasse	Vorsorgestiftung des Spitalzentrums Biel		
ProPublic Vorsorge Genossenschaft	Vorsorgestiftung ERNE AG		
The delic versorige demoscrischare	Vorsorgestiftung Heilsarmee Schweiz		

Vorsorgestiftung Ospelt Gruppe
Vorsorgestiftung Swiss Life Personal
Vorsorgestiftung Swiss Life Personal Zusatzversicherung
Vorsorgestiftung VSAO
VSAO – ASMAC Stiftung für Selbständigerwerbende
VSM Sammelstiftung für Medizinalpersonen
Zuger Pensionskasse
Zusatzkasse der Orior Gruppe
Zusatzpensionskasse der Dätwyler Gruppe

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