Investment Solutions & Sustainability
Swiss Economics

Individual optimization of the retirement provision

Swiss Retirement Study | April 2022

Voluntary payments
Increase in pension fund purchases in recent years

Page 15

Choice of investment strategy
Pillar 3a: Share of securities up, especially among the young

Page 22

Withdrawal of pension or capital
Trend toward more lump-sum withdrawals also harbors risks

Page 34

Imprint

Publisher: Credit Suisse AG, Investment Solutions & Sustainability
Dr. Nannette Hechler-Fayd'herbe
Head of Global Economics & Research
+41 44 333 17 06
nannette.hechler-fayd'herbe@credit-suisse.com

Dr. Sara Carnazzi Weber
Head of Policy & Thematic Economics
+41 44 333 58 82
sara.carnazzi@credit-suisse.com

Copy deadline
March 30, 2022

Orders
Electronic copies via
credit-suisse.com/retirementstudy

Source references
Credit Suisse unless specified

Authors

Dr. Jan Schüpbach
+41 44 333 77 36
jan.schuepbach@credit-suisse.com

Emilie Gachet
+41 44 332 09 74
emilie.gachet@credit-suisse.com

Dr. Markus Stierli
+41 44 334 88 57
markus.stierli@credit-suisse.com

Contribution

Markus Kunz
Aleksandra Paprota
Andreas Weber
Maciej Zolotenki

Editorial

Dear Readers,

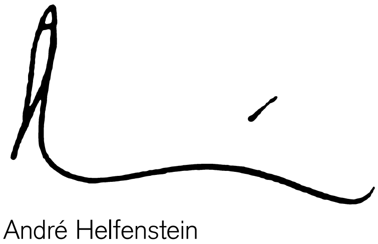
It has long been clear that reforms are essential for the sustainable financing of the retirement provision in an aging society. The low interest rate environment of recent years has further exacerbated the imbalances. After several failed attempts – the last successful revisions of the first and second pillars in Switzerland were 25 and 18 years ago respectively – it remains unclear whether acceptable solutions will finally be found in 2022.

From the perspective of the insured persons, irrespective of the need for reforms, there are already various parameters that can be used with foresight to improve one's own financial situation in old age. This study focuses on these individual options for optimizing the retirement provision and examines the extent to which the Swiss make use of these options.

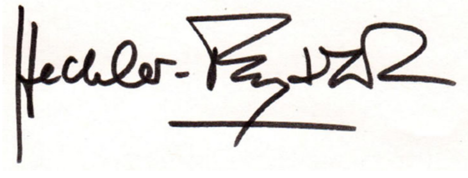
The results suggest that the population is increasingly aware of the growing importance of individual efforts to ensure an adequate standard of living in old age: payments into Pillar 3a, voluntary higher savings contributions to occupational pension plans and purchases into pension funds have tended to rise in recent years. It is also encouraging that the penetration of securities has increased particularly significantly among young 3a savers – who generally have a long investment horizon. Women, on the other hand, not only pay less frequently into Pillar 3a than men, they also often pursue a rather conservative investment strategy with a surplus of cash and a significant underinvestment in equities.

The first-ever analysis of anonymized data from the Pension Fund of Credit Suisse Group (Switzerland) provides rare insights into the investment behavior of a large pool of employees covered by 1e pension plans. A significant proportion – especially those nearing retirement, but also insureds with low 1e assets and women – choose the low-risk strategy. While this can often make sense for those with a short investment horizon, it generally does not for many insureds, as the expected returns on low-risk investments are currently negative due to the current interest rate situation. The study underscores the need to individually define the savings and investment process according to the risk profile and risk capacity. At the same time, it must be ensured that insured persons do not opt for investment strategies, because they are uninformed or unaware, that make it difficult to achieve a positive return and, in the longer term, lead to a performance from pension assets that is far below what is possible and common in the second pillar.

We hope you enjoy reading this publication.



André Helfenstein
CEO Credit Suisse (Switzerland) AG



Nannette Hechler-Fayd'herbe
Head of Global Economics & Research

Contents

Management Summary

Self-determination in the three-pillar system
(P. 9)

Ways of achieving an individual mix in the retirement provision
In the three-pillar system of the Swiss retirement provision, the third pillar, as is well known, offers the opportunity to build up a completely voluntary retirement provision. However, it is also possible to actively influence the pension situation in the first and second pillars. This study focuses on the existing possibilities to positively influence the individual pension situation through self-determined measures and analyzes to what extent the Swiss people make use of them.

Voluntary payments
(P. 11 – 14)

Pillar 3a gains in importance
Self-determined voluntary payments into the tax-privileged Pillar 3a are a well-known way of saving for one's own retirement. According to data from the Swiss Federal Statistical Office, around 60% of Swiss employees made either regular (53%) or irregular (6%) contributions to tied private pension plans in 2019. In 2020, the Pillar 3a market recorded solid growth. The number of customers paying into Pillar 3a rose by around 9% in the first year of the coronavirus pandemic, according to data from the Swiss Pension Fund Association (VVS). The share of employed persons paying into Pillar 3a is lower for women than for men. In a regression analysis, however, we show that under otherwise identical conditions (e.g., same age, same level of education and income), women are slightly more likely to invest in Pillar 3a than men. However, the share of those paying into 3a is below average among young people under 35. Due to the compound interest effect, it is worth starting saving for retirement as early as possible. Pillar 3a is also interesting because of the tax advantage: payments can be deducted from taxable income up to the statutory maximum amount (currently CHF 6,883 for employed persons with a pension fund). The tax saving effect essentially depends on the individual marginal tax rate and can vary greatly depending on where you live.

Voluntary payments
(P. 15 – 20)

Increase in pension fund purchases in recent years
In occupational pension plans, too, there are opportunities for insured persons to make additional voluntary savings for old age. First, certain pension funds allow employees to choose whether they want to make higher savings contributions on their insured salary than those provided for in the standard plan. According to data from Swisscanto, around 53% of Swiss pension funds offered different savings plans in 2020. On average, just under one in four insured persons in all pension schemes with options opted for a higher contribution option than the standard plan. Secondly, additional retirement capital can be built up with voluntary purchases into the pension fund and pension gaps can be closed. In 2020, the active insureds of Swiss pension schemes made single deposits and purchases worth a total of more than CHF 6.8 billion. This is a good two-thirds more than in 2010. One important reason for the increase is likely to be the population's growing awareness of the challenges of retirement provision. But the solid financial market performance of recent years has probably also played a part, as insured persons are often likely to finance purchases from extraordinary income such as bonus payments or high returns on private assets. Analysis of policyholder data from the Pension Fund of Credit Suisse Group (Switzerland) shows that voluntary purchases were made most frequently between the ages of 45 and 60, not surprisingly above average by people with higher incomes. The tax advantages of staggered purchases appear to be well known to bank employees: 72% of those who made purchases into the CS pension fund between 2017 and 2021 did so in a staggered manner over several years.

Choice of investment strategy
(P. 22 – 24)

Pillar 3a: Share of securities on the rise, especially among younger people
The return opportunities in Pillar 3a can be increased by using securities solutions, because historically, securities solutions have yielded better returns than interest accounts. For example, if we look at the net performance of a Credit Suisse 3a securities solution compared with a conventional 3a interest account in the period from 1987 to 2021 (in each case with annual payment of the statutory maximum amount for employed persons with a second pillar), the use of the securities solution results in an additional return of CHF 157,349. However, securities investments are associated with higher risks and fees. In general, investors should tailor the equity share to their risk tolerance and remaining investment horizon.

A vast majority of the Pillar 3a capital invested with banks is still in interest-bearing accounts. However, the share of capital invested in 3a securities solutions has increased significantly in recent years and currently stands at around 30%, compared with 23% in 2016. Securities penetration is higher among men than among women (32% and 25% respectively). Securities solutions are generally more suitable the longer the investment horizon. Such solutions therefore often make sense for younger beneficiaries. It is therefore encouraging to note that the strongest increase in securities penetration can be observed among the younger age groups: among 18 to 24-year-olds, 32% of 3a assets are now invested in custody accounts, and among 25 to 34-year-olds, 27% – in 2016, these figures were 16% and 19%, respectively. What is particularly impressive is the data collected for the first time in 2020 on the investment behavior of four exclusively digital providers, whose market share is currently only 1.6% and 76% of whose customers are under 45 years of age: here, securities penetration is over 70% for all age groups.

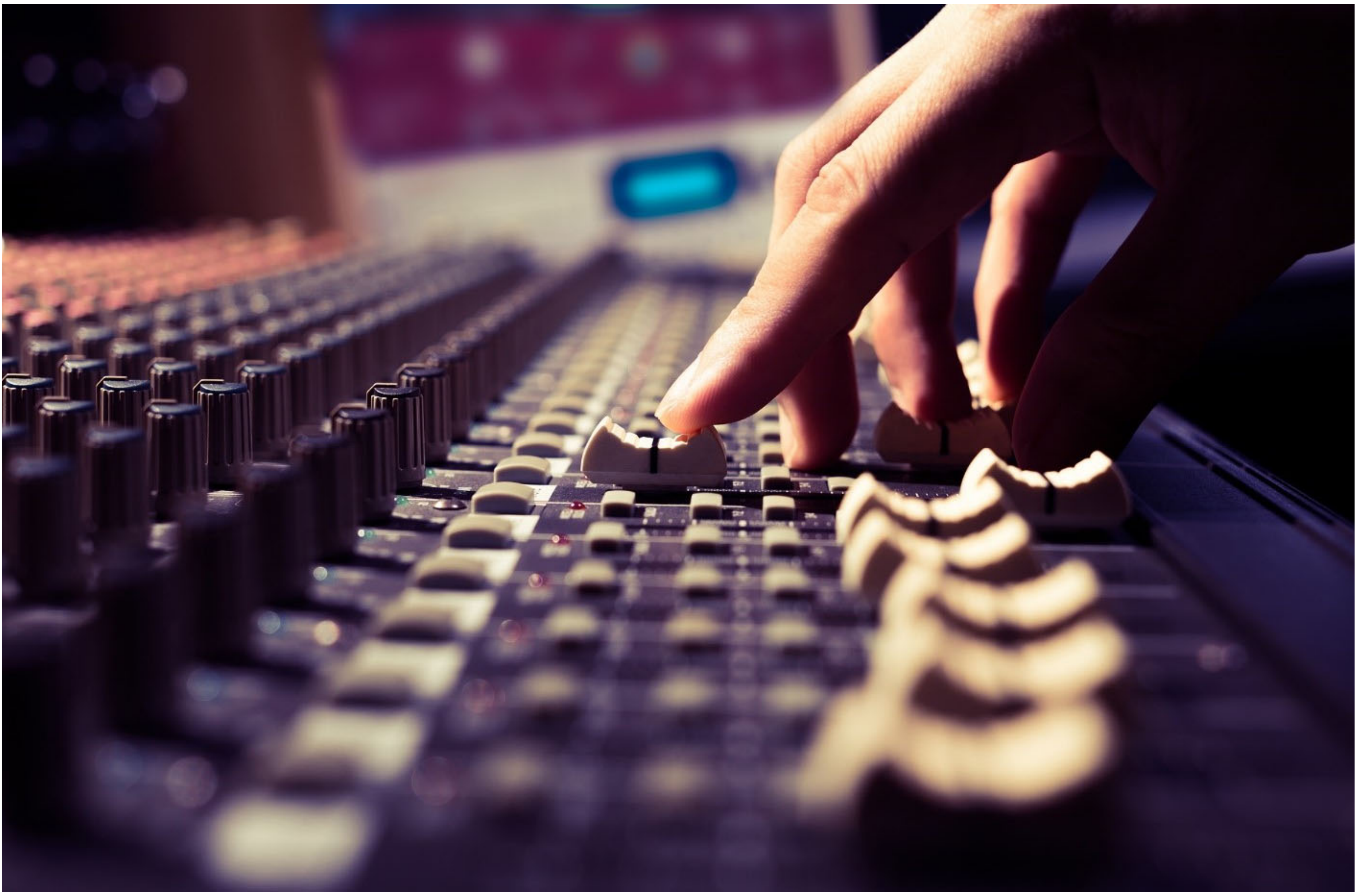
Choice of investment strategy
(P. 25 – 32)

1e investment strategies with lowest and highest risk most frequent
1e pension plans for high earners offer an individual choice of investment strategy in occupational pension plans, similar to Pillar 3a, provided their employer has introduced such a plan. These plans have recently gained in importance, as the 1e market has quadrupled in five years. This first-ever analysis of anonymized data from the Pension Fund of Credit Suisse Group (Switzerland) provides rare insights into the investment behavior of a large pool of employees covered by 1e plans. The low-risk strategy turns out to be the most frequent, followed by the strategy with the highest share of equities and correspondingly the highest risk. Individuals with very little capital in the 1e plan often chose the low-risk strategy – but overall, nearly 90% of the capital is invested in a strategy with a securities component. Higher wealth and a longer investment horizon during working life are the key explanatory factors associated with a higher risk profile. In addition, there are gender differences: on average, a woman chooses a securities share that is about 9% lower than a man with otherwise comparable characteristics (marital status, age, pension assets, etc.). The risk appetite is also lower among divorced persons and those close to retirement age. The results underscore the need to inform 1e insured persons about investment strategies and the associated risks and costs. At the same time, however, it must be ensured that insured persons do not refuse any prospect of return because they are uninformed or unaware.

Withdrawal of pension or capital
(P. 34 – 38)

Trend toward more lump-sum withdrawals also harbors risks
Pension fund assets can be drawn as a monthly pension, as a one-time lump-sum payout, or as a combination of both. According to provisional figures for 2020, 54% of new pension fund recipients (excluding vested benefits institutions) received at least part of their pension as a lump sum (34% received a lump sum only and 20% a combination of pension and lump sum). At 46%, just under half of insureds still received a pure monthly pension, women somewhat more frequently than men. The share of pension-only withdrawals decreased slightly in recent years, while lump-sum-only withdrawals increased. This increase could be partly explained by the good stock market performance in recent years, which may have encouraged lump-sum withdrawals. In addition, pension funds have increasingly required beneficiaries to withdraw part of the accumulated retirement assets in lump-sum form in recent years in order to avoid longer-term pension obligations. An additional driver for this development is likely to be the increase in 1e pension plans for higher incomes, where retirement benefits are paid out as a lump sum.

Financial aspects play an important role in the decision between pension and lump sum. Due to regional differences in the burden of income, lump-sum withdrawal and wealth taxes, the income available in old age also depends on the place of residence. Overall, lump-sum withdrawals require a very comfortable asset situation so that the financial resources are not used up too early. Longevity is a financial risk in this context. Lastly, it is important to plan any lump-sum withdrawals from the second or third pillar early on. Depending on the canton, a lump-sum withdrawal spread over several years can bring considerable tax advantages. For example, a married couple who withdraw a lump-sum totaling CHF 800,000 (CHF 50,000 and CHF 100,000 from Pillar 3a, CHF 250,000 and CHF 400,000 from the second pillar) over four years will reduce taxes on lump-sum withdrawals in the cantons of Valais, Basel-Landschaft and Schwyz by CHF 27,050 to CHF 34,312.



Ways of achieving an individual mix in the retirement provision

In the three-pillar system of the Swiss retirement provision, the third pillar, as is well known, offers the opportunity to build up a completely voluntary retirement provision. However, it is also possible to actively influence the pension situation in the first and second pillars.

Reform backlog in the three-pillar system

The Swiss pension system with its three pillars is a success story, but it is increasingly challenged by developments such as demographic aging and low interest rates. Reforms are overdue, but have so far failed due to political realities. In various studies, we have highlighted the key challenges in the retirement provision, examined their consequences for insureds and also analyzed possible approaches to reform.

Self-determination is already possible

This study focuses on the existing possibilities to positively influence the individual pension situation through self-determined measures (see table) and analyzes to what extent the Swiss people make use of them. In the obligatory pension scheme, i.e., in the state pension scheme as well as in the obligatory part of the occupational pension scheme, the possibilities for co-determination are rather limited. It is crucial to counteract income and pension gaps and to choose the timing of retirement wisely.[1] There is also room for maneuver in occupational pension schemes when it comes to choosing the contribution option or voluntary purchases. Insured persons with 1e pension plans can also choose the investment strategy. In private pension plans, savings and investment strategies tailored to one's own situation can be used to create an individual supplement to AHV and occupational pension schemes. Lastly, in the second pillar as well as in Pillar 3a, it is important to plan any lump-sum withdrawals with foresight.

	1st pillar state pension	**2nd pillar occupational pension**		**3rd pillar private pension**	
	Old-age and survivors' insurance (AHV) Disability insurance (IV) Supplementary benefits (EL)	**Pension fund**	**1e pension plans**	**Pillar 3a (tied pension provision)**	**Pillar 3b (flexible pension provision)**
Counteract income and pension gaps	Think carefully about career breaks and reduced working hours (may reduce the amount of AHV pension)	Think carefully about career breaks and reduced working hours (slows down accumulation of retirement capital)			
	Pay AHV contributions without gaps from the age of 20 onwards				
Retirement timing	Consider early retirement carefully and, if possible, plan in good time (partial retirement and reduction in working hours as an alternative). Consider deferred retirement.				
Voluntary purchases and payments	In the case of short-term stays abroad, AHV contributions can be paid on a voluntary basis under certain circumstances[2]	(Staggered) purchases into the pension fund	(Staggered) purchases into 1e pension plan (if available)	Make early and regular payments into Pillar 3a	No legal barriers to investment choice
		Adjustment of the contribution option (depending on the pension fund)			
Choose investment strategy	Not available	Not available	Investment strategy can be chosen: Check return opportunities through securities solutions (the share of equities should be adapted to the individual risk tolerance and the remaining investment horizon)		
Pension or lump sum	No lump-sum withdrawal possible	Depending on the pension fund and savings plan, monthly pension, one-time lump-sum payout or combination of the two	Exclusively lump-sum withdrawal	Lump-sum withdrawal or life annuity (insurance)	
		Plan staggered withdrawal of retirement capital at an early stage			

Source: Credit Suisse

[1] More information on contribution gaps in Credit Suisse (2019), Private Pension Plans, Mind the Gap: Part time, Time out, Pension shortfalls. Retirement timing is a topic in Credit Suisse (2020), Pension study, Early retirement: the path is becoming more difficult
[2] If you are moving to a country that is not an EU, EFTA or other country with a social security agreement with Switzerland.

Pillar 3a gains in importance

Around 60% of the Swiss workforce paid into Pillar 3a in 2019. In 2020, the proportion of people paying into Pillar 3a increased significantly compared with the previous year. However, among young people under 35, the proportion of people paying into Pillar 3a is significantly below average. Due to the compound interest effect, it is worth starting saving for retirement as early as possible.

Pillar 3a: Save voluntarily for retirement and benefit from tax advantages

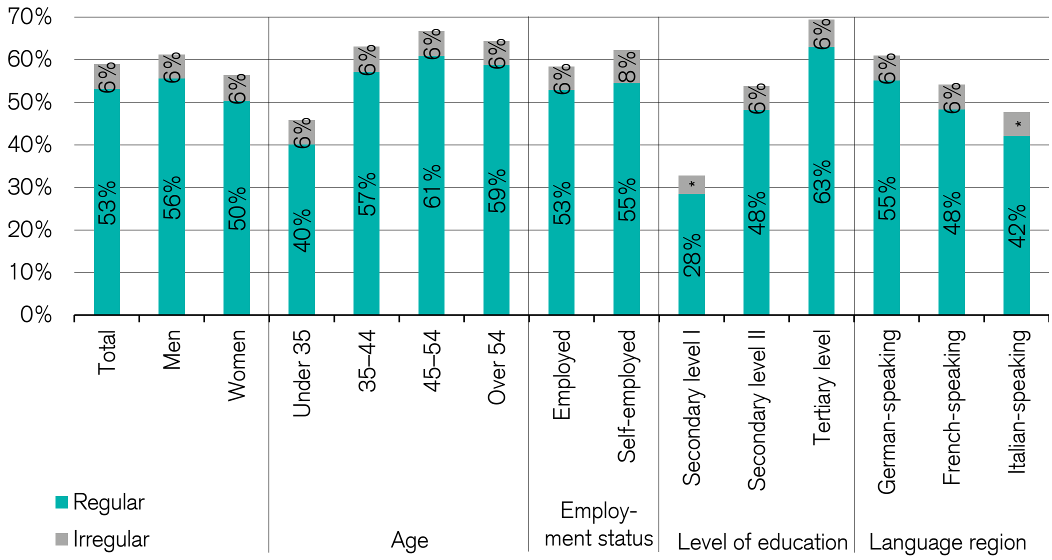
In addition to compulsory saving in the first and second pillars, voluntary private saving in the third pillar offers opportunities to counteract pension gaps and thus improve the financial situation in old age. Employed persons from the age of 18 can pay into the tied private pension plan (Pillar 3a). In the case of self-employed persons, private pension provision can partially replace the lack of occupational pension provision. Pillar 3a is tax-privileged, but on the other hand the possibilities of paying in and withdrawal are limited. For employed persons who are affiliated to a pension fund, the maximum payment is currently CHF 6,883 per year (see table on page 20). The accumulated capital may be withdrawn no earlier than five years before reaching the normal AHV retirement age; early withdrawal is only possible under certain conditions (e.g., purchase of a home, taking up self-employment or purchasing pension benefits).

More than every second employed person regularly pays into Pillar 3a

In the Swiss Labor Force Survey (SAKE) conducted by the Federal Statistical Office (BFS) in 2019, a total of 53% of employed respondents between the ages of 18 and the normal retirement age said they regularly paid into Pillar 3a (see Figure 1). A further 6% make contributions on an irregular basis. Compared with an earlier survey from 2015, the picture has not changed fundamentally: at that time, 55% of employed people made regular contributions and 6% made irregular contributions. The main reason given for not paying into Pillar 3a was a lack of financial resources (44% of cases), while 15% stated that they had never considered doing so or were unaware of the option. Of the employed people who pay into Pillar 3a and are affiliated to a pension fund, 55% contributed the maximum annual amount in 2019 and 19% contributed more than half of it.

Figure 1: Around 60% of those in employment pay into Pillar 3a

Payment of contributions to Pillar 3a, in % of the employed population between 18 years of age and the normal AHV retirement age (64 years for women, 65 years for men), by selected sociodemographic characteristics, 2019



Source: Swiss Federal Statistical Office (FSO), Credit Suisse; * The results should be interpreted with caution due to the small sample size.

Strong increase in 3a clients with payments in the pandemic year 2020

In 2020, the first year of the coronavirus pandemic, the Pillar 3a market recorded solid growth despite the recession (see section "Monitor – Pillar 3a" on page 14). According to a survey conducted by the Swiss Pension Fund Association (VVS), the number of customers with the most important Pillar 3a foundations (excluding insurance companies) increased by 2.8% year-on-year. According to the VVS survey, the number of customers who effectively also made a payment into Pillar 3a even rose by a high 9% in 2020. At least 62% of the now more than 2.135 million customers made a deposit in 2020. The increase in the number of customers and the payment rate can probably be explained by the fact that many Swiss people were able to save more than usual during the coronavirus lockdown due to restricted consumer opportunities (e.g., leisure activities, restaurants or travel) and had more time to deal with their personal financial situation.

All things being equal, women pay into Pillar 3a more often than men do

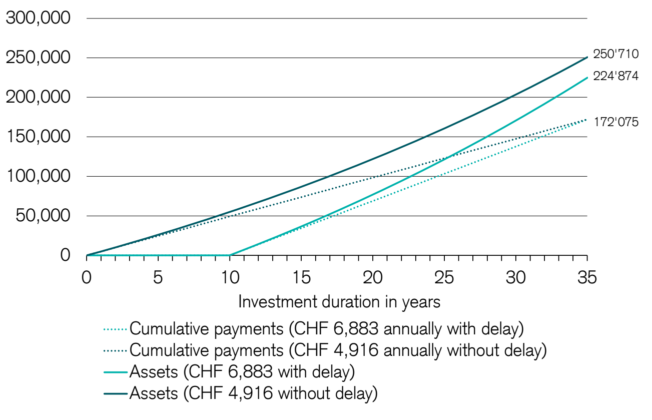
When analyzing the 2019 BFS survey on 3a payment behavior by sociodemographic and socioeconomic characteristics, some significant differences come to light (see Figure 1). For example, at 50%, the share of employed women who regularly pay into Pillar 3a is lower than that for men (56%). However, a regression analysis shows that under otherwise identical conditions (e.g., same age, same level of education and income, similar family situation), women invest in Pillar 3a not less frequently but slightly more frequently than men. The main driver for payments into Pillar 3a is – unsurprisingly – income. The fact that the share of female 3a depositors is effectively lower than that of male 3a depositors can thus largely be explained by the gender income gap. Age also plays a role: at 40%, the share of employed persons with regular payments into Pillar 3a is significantly smaller among young people under 35 than in the other age groups. In addition to a lack of financial resources, an above-average number of younger people also cite a lack of know-how regarding this instrument as a reason for not paying in.

It pays to start with Pillar 3a as early as possible

It is advisable to start saving for retirement at as young an age as possible, provided your personal financial situation allows it – even if you cannot pay in the maximum amount. Those who save over a longer period achieve a higher final wealth with the same return[3] thanks to the compound interest effect. A simple example to illustrate this (see Figure 2): if someone pays around CHF 4,916 per year into Pillar 3a over 35 years, he or she will achieve (assuming an average return of 2% p.a.) a final wealth that is over CHF 25,800 higher than someone who only starts saving for retirement ten years later, but invests the current maximum amount of CHF 6,883 each year – despite the fact that the sum of the payments is identical for both. Because of the compound interest effect, it also makes sense to pay into Pillar 3a at the beginning of the year, if possible, instead of at the end of the year. It should also be noted that according to the current legislation, payments missed in one year cannot be made up for later (see box below "Current political developments regarding Pillar 3a").

Figure 2: Starting early pays off, even with smaller amounts

Performance of the capital in Pillar 3a with regular payments (at the beginning of each year) of CHF 4,916 as well as the current maximum amount (CHF 6,883), but with a 10-year delay; average return: 2% p.a.

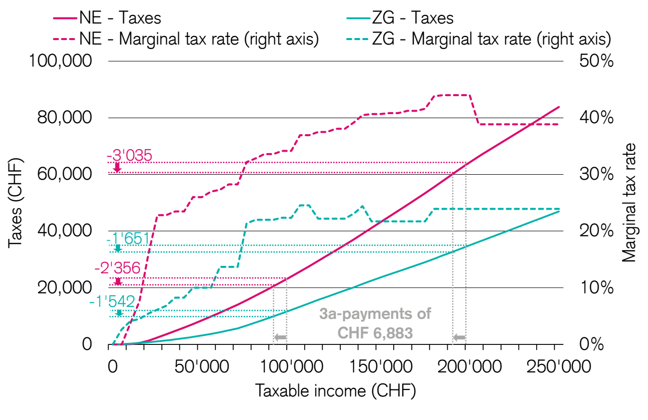


Past performance or financial market scenarios are no reliable indicator of future performance.

Source: Credit Suisse

Figure 3: Tax savings depend on marginal tax rate

Tax burden and marginal tax rate for an unmarried person without children with a different taxable income in the municipalities of Neuchâtel and Zug, 2022



Disclaimer: See footnote 4

Source: TaxWare, Credit Suisse

[3] How the return opportunities can be increased by using securities solutions is the topic of the section "Choice of investment strategy – Pillar 3a" from page 23.

Tax savings thanks to Pillar 3a vary significantly from region to region

Pillar 3a is interesting not least because of its tax advantages.[4] Payments up to the statutory maximum amount can be deducted from taxable income. No wealth, income or withholding tax is payable during the entire investment period. When the capital is withdrawn, it is taxed separately from the rest of the income at a reduced rate (see section "Withdrawal of pension or capital" from page 34). The tax saving effect essentially depends on the individual marginal tax rate. This expresses how the tax burden changes when taxable income increases or decreases by a certain amount. Due to tax progression, the marginal tax rate generally increases with taxable income, although the extent of tax progression – and thus the tax savings achieved thanks to Pillar 3a – can vary greatly depending on the place of residence. Figure 3 shows this using the example of the two municipalities of Zug and Neuchâtel. An unmarried person without children with a taxable income of CHF 100,000 can save CHF 2,356 in income taxes in Neuchâtel by deducting CHF 6,883 (the current 3a maximum amount for employed persons with a pension fund affiliation); in Zug it would be CHF 1,542 due to the lower marginal tax rate. With a taxable income of CHF 200,000, the tax bill is reduced by CHF 3,035 in Neuchâtel and by CHF 1,651 in Zug. Payments into Pillar 3a are therefore particularly worthwhile in cantons and municipalities with a higher tax burden. In monetary terms, high incomes benefit the most. In percentage terms, however, lower incomes – provided they can raise the amount of money – can reduce their tax burden more. However, in order to determine the total tax saving effect over the entire investment period, the taxes incurred on the withdrawal of capital must also be taken into account. Since these are less significant than the tax savings realized on the deposit, the tax benefit – in addition to the interest or the return on the 3a product itself – results in an overall additional return, which, however, varies depending on the place of residence.[5]

Current political developments regarding Pillar 3a.

Given the challenges facing the Swiss pension system, voluntary saving will continue to gain importance as a complement to compulsory saving. For this reason, there has been increasing discussion among politicians and the general public in recent years about expanding Pillar 3a and making it more flexible. The reform proposals put forward basically include (1) increasing the maximum amounts, (2) opening up Pillar 3a to non-employed people, and (3) introducing the possibility of making back payments for missed contribution years or years in which the maximum amount was not reached.[6]

Raising the maximum amounts has already failed several times in parliament in the past, but the topic came up again in the context of the current debates on occupational pension reform (BVG reform). In mid-March, the National Council approved a parliamentary initiative to raise the 3a maximum amount (with pension fund affiliation) to CHF 15,000 (20.494 "Strengthening personal pension provision"). The matter is now before the Committee for Social Security and Health of the Council of States. A motion to allow payments into the third pillar by the non-working spouse or registered partner was rejected by the National Council in December 2021. In contrast, the Council of States and National Council adopted Motion 19.3702 "Enabling purchases into Pillar 3a" in September 2019 and June 2020, respectively. The Federal Council was thus instructed to amend the legal situation in such a way that employed persons who were unable to pay any or only partial contributions into Pillar 3a in previous years are given the opportunity to make up for this (so-called 3a purchase) and to benefit from the tax deduction in the year of purchase. The purchase options are to be limited in terms of time and money (e.g., purchase only possible every five years, limitation of the purchase amount to five times the current maximum amount). The draft is currently still being prepared, but should soon be submitted to parliament. It is likely to enter into force at the beginning of 2025. Such an option to make back payments would primarily help to reduce gaps in 3a payments due to career breaks, for example as a result of maternity leave or training. But it would also benefit the many people who do not pay in much or at all, including many young people.

[4] The tax treatment depends on the individual circumstances of each client and may change over time. This document does not contain tax advice of any kind. General tax-related information contained in this document is not a substitute for comprehensive personal tax advice. Consult a professional tax advisor if you feel it is necessary.
[5] For more information, see Credit Suisse (2017), Private Retirement Provision: 3a Saving in Switzerland.
[6] See also Credit Suisse (2019), Private pension provision – Mind the Gap: Part time, Time out, Pension shortfalls.

Further growth for Pillar 3a

The Pillar 3a market grew by just under 4% in 2020

The Swiss Pillar 3a market has grown steadily in recent decades (see Figure 1). Despite the recession, 3a pension assets held with banks and insurance companies continued to grow in the first year of the coronavirus pandemic. At the end of 2020, they totaled over CHF 135.2 billion. This corresponds to a good eighth of the assets in occupational pension plans (second pillar). With a year-on-year increase of 3.9%, volume growth in Pillar 3a in 2020 was only slightly weaker than the average for the years 2011 to 2019 (+4.8% p.a.).

Strong growth in securities solutions

However, large differences were observed between the individual product categories. Given the very low interest rates, it is hardly surprising that the funds invested in interest-bearing 3a pension accounts with banks virtually stagnated in 2020 (+0.4%), while the assets invested in 3a securities solutions climbed 17.0%. This is attributable to the encouraging financial market performance in 2020 despite Covid-19 on the one hand, and increased customer interest in these products on the other hand. The members of the Swiss Pension Fund Association (VVS), which include the most important Pillar 3a foundations, recorded over 136,500 newly opened 3a custody accounts in 2020, as well as an increase in the number of customers with custody accounts of almost 11%. This includes both customers who are new to Pillar 3a pension provision and existing 3a customers who had previously only invested their money in interest-bearing accounts.

Securities penetration for bank products is around 30%

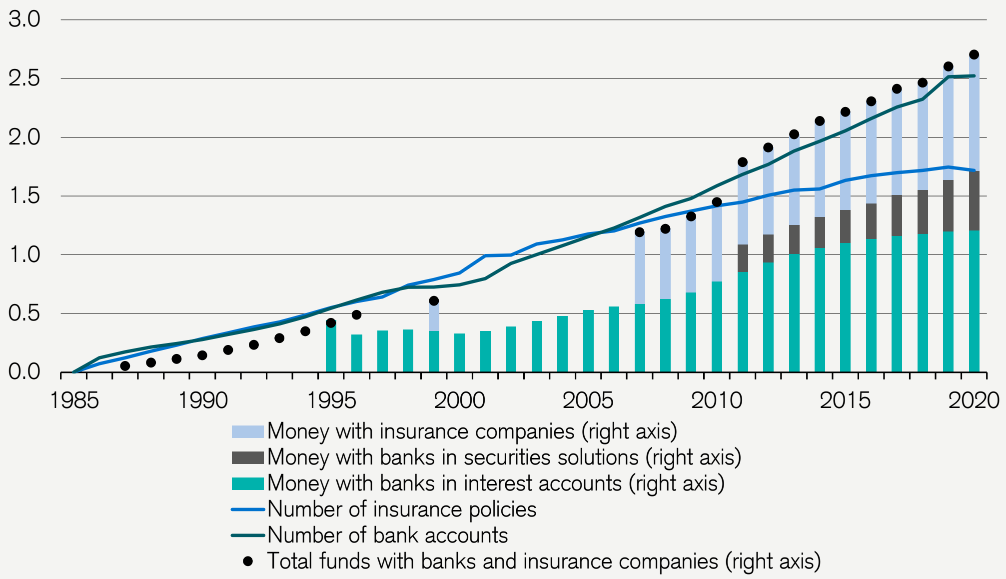
According to estimates by the Federal Social Insurance Office, securities solutions accounted for just under 30% of 3a retirement assets invested with banks at the end of 2020. This corresponds to an increase of a good three percentage points within a year (2019: 26.5%). In 2013, this share was still around 20%. You can find out more about the penetration of securities in Pillar 3a in the section "Choice of investment strategy – Pillar 3a" from page 22.

Opening multiple 3a accounts is still not very common

Maintaining multiple 3a accounts is still relatively uncommon despite the tax advantages that can result when withdrawing the capital (see the section "Withdrawal of pension or capital" on page 34). Only 36% of the employed persons surveyed in 2019 as part of the Swiss Labor Force Survey (SAKE) who had a Pillar 3a reported having multiple accounts. Among VVS members, the average number of accounts per client in 2020 was 1.18.

Figure 1: The Pillar 3a market grew by more than 50% between 2011 and 2020

Pillar 3a: Number of bank accounts and insurance policies in millions, funds in CHF billion (Banks: Estimate for funds in securities solutions only available from 2011; insurance companies: data not available for all years)



Source: Federal Social Insurance Office, Credit Suisse. Last data point: 2020

Increase in pension fund purchases in recent years

Voluntary purchases of occupational pension benefits have increased in recent years. In 2020, they totaled CHF 6.8 billion, a good two-thirds more than in 2010. Around a quarter of insured persons who have a choice in their pension fund opt for higher savings contributions. Whether someone makes voluntary contributions to the second pillar depends largely on age and income.

Voluntarily saving more in occupational pension plans: Check higher savings contributions ...

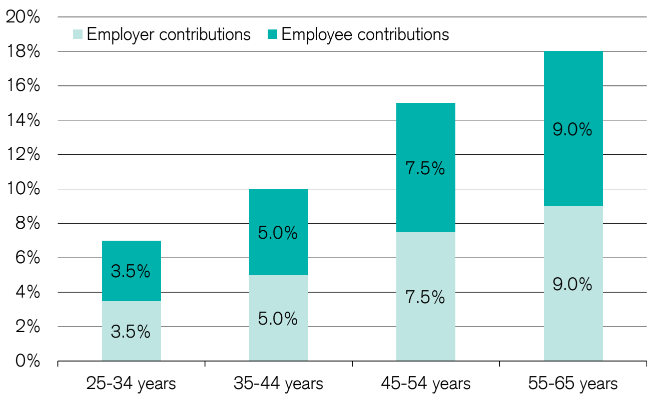
In occupational pension plans (second pillar), there are also opportunities for insured persons to make additional voluntary savings for old age. First, certain pension funds allow employees to choose whether they want to make higher (or lower) savings contributions on their insured salary than those provided for in the standard plan. This is the case, among others, with the Pension Fund of Credit Suisse Group (Switzerland): while the law provides for only one contribution rate per age category in the BVG compulsory pension scheme (see Figure 1), the CS pension fund offers its insureds three variants. The "Standard" contribution rate is the default rate, but there is also a "Basic" variant with a lower rate and a "Top" variant with a higher rate (see Figure 2). If higher savings contributions are paid, this leads, on the one hand, to the formation of additional capital in the occupational pension plan and thus to better benefits in old age. On the other hand, taxes can be saved because the net salary is reduced.

... and purchases

In the pension fund, there is also often the possibility of a voluntary purchase, with which additional retirement capital can be built up and pension gaps can be closed. In contrast to Pillar 3a, there is no fixed maximum amount here: the maximum possible purchase amount is individual and can usually be taken from the personal pension fund statement (see table on page 20). Purchase potential arises for various reasons, e.g., due to salary increases, changes in working hours or a break in employment. Similar to payments into Pillar 3a, purchases made in one year can be deducted in full from taxable income. It should be noted, however, that purchases are subject to a lock-up period of three years, during which the resulting benefits may not be withdrawn as capital. If a lump-sum withdrawal is made within three years of the purchase, the income taxes saved will be reclaimed retroactively by the tax authorities. Repurchases after a divorce are not subject to the lock-up period. Moreover, anyone who has previously withdrawn retirement capital as part of the promotion of home ownership (WEF) must, in principle, first repay these amounts to the pension fund before tax-privileged voluntary purchases are possible again. If the purchase potential has already been exhausted by "normal" purchases, additional purchase contributions can be made to

Figure 1: In the BVG compulsory pension scheme, one contribution rate applies per age category.

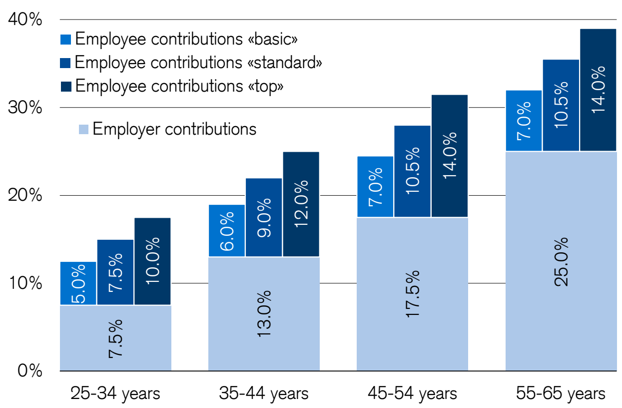
Contribution rates in the BVG compulsory pension scheme, savings portion only, without risk contributions, by age category, 2022



Source: Swiss Federal Statistical Office, Credit Suisse

Figure 2: However, pension funds can offer several variants

Contribution rates at the Credit Suisse Pension Fund, savings portion only, without risk contributions, by age category and contribution option, 2022



Source: Pension Fund of Credit Suisse Group (Switzerland) finance early retirement, depending on the pension fund. In this case, however, you must actually take early retirement; otherwise, for legal reasons, part of the purchased amount may be forfeited to the pension fund.

Only a minority chooses a higher contribution option

According to a pension fund survey by Swisscanto, in 2020 around 53% of Swiss pension funds offered their insured members different savings plans. A year earlier, the figure was 48%. According to the survey, an average of just under one in four insured persons in all pension schemes with options chose a pension model with a higher contribution than the standard plan, with significant differences being observed depending on the sector. The proportion of insured persons with a higher contribution option is below average, particularly in public administration. It is also slightly below average in the construction industry and in healthcare and social services. In the finance and insurance sectors, on the other hand, it is above average.

Voluntary purchases in the amount of CHF 6.8 billion in 2020

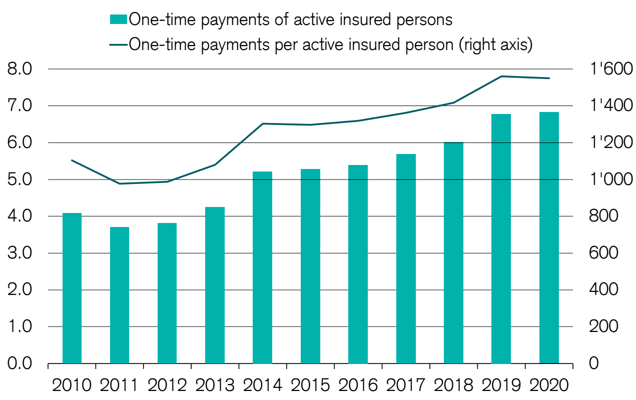
According to data from the Swiss Federal Statistical Office, active insured members of Swiss pension funds made voluntary one-time payments and purchases (excluding entry benefits, repayments of WEF advance withdrawals and payments due to divorce) worth a total of more than CHF 6.8 billion in 2020. This corresponds to an amount of around CHF 1,550 per active insured person (see Figure 3). Compared to 2010 (CHF 4.1 billion), the total purchase amount thus increased by a good two-thirds. This significant growth can only be partially explained by the increase in the number of insureds. Between 2010 and 2020, the number of active insured persons in occupational pension plans increased by "only" 19%. By contrast, the average purchase per person and year grew strongly by 40% during this period. In 2010, this figure was only around CHF 1,100.

Increase in purchases due to growing awareness of pension challenges

One important reason for the increase in purchases over time is likely to be the population's growing awareness of the challenges of retirement provision in a context of falling conversion rates and sluggish reforms. The issue has clearly gained media presence over the past decade. With purchases, insured persons have the opportunity to increase their retirement capital in occupational pension plans and thus to improve their pension benefits at the same conversion rate or to compensate somewhat for pension losses in the event of a declining conversion rate. In addition, the solid financial market performance of recent years is also likely to have played a role. As shown in Figure 4, the change in purchase amounts correlates with that of important stock market indices such as the Swiss Market Index (SMI) or the global MSCI Index. Thus, in good stock market years, more or higher purchases tend to be made into occupational pension plans. This suggests that insured persons often do not finance any purchases from their regular income, but rather from extraordinary inflows such as bonus payments or high returns on privately invested assets (or even inheritances).

Figure 3: Purchases into the second pillar have increased by a good two-thirds since 2010

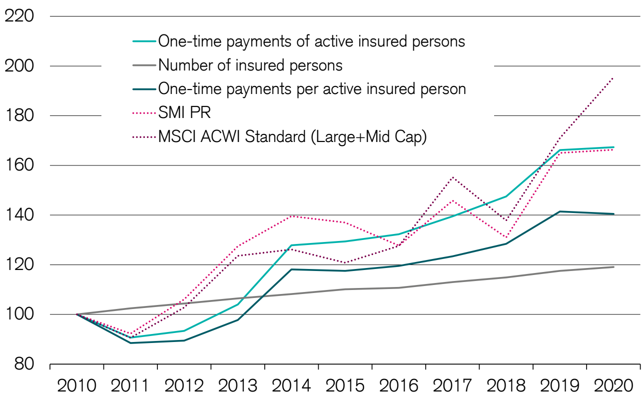
Total single deposits of active insured persons (in CHF billion) and average deposit per active insured person (in CHF)



Source: Federal Statistical Office (pension fund statistics), Credit Suisse. Last data point: 2020

Figure 4: Purchases correlate with financial market performance

Indices, 2010 = 100; SMI and MSCI: Status at the end of each year



Past performance or financial market scenarios are no reliable indicator of future performance.

Source: Federal Statistical Office (pension fund statistics), Credit Suisse, MSCI, SMI. Last data point: 2020

Which factors influence voluntary saving into the second pillar?

Unfortunately, the data available from the Federal Statistical Office's pension fund statistics do not provide any further information on the profile of individuals who effectively make purchases or opt for a higher contribution option. In the following, we analyze how certain sociodemographic and socioeconomic factors influence saving and purchasing behavior in occupational pension plans based on anonymized insurance data from the Pension Fund of Credit Suisse Group (Switzerland). With total assets of CHF 19.4 billion and just under 18,000 active insured persons (as at the end of 2021), the CS Pension Fund is one of the largest pension funds in Switzerland. First, we investigate which contribution option the persons actively insured in the pension fund as of the end of 2021 have chosen and which role characteristics such as gender, marital status, age or income play in this decision. Second, we take a detailed look at the profile of those insured persons who have made one or more voluntary purchases into the pension fund in the last five years, i.e., in the period 2017 to 2021 ("normal" purchases as well as purchases to finance early retirement, excluding WEF repayments and repurchases after a divorce). In order to be able to make solid statements in this regard, we mostly restrict our analyses of purchasing behavior to insured persons who were affiliated with the CS Pension Fund in the entire period from 2017 to 2021.

Figure 5: Age and income as the strongest drivers of purchases into the pension fund

Active insured members of the Pension Fund of Credit Suisse Group (Switzerland): influence of various factors on the probability of selecting the "Top" contribution option or on the probability of having made one or more purchases in the past five years, as well as influence on the total of these purchases; all active insured persons as of the end of 2021 (contribution option) or all persons who were actively insured with the Pension Fund of Credit Suisse Group (Switzerland) in the entire period from 2017 to 2021 (purchases).

* Income distribution within the pension fund, incl. bonus payments; ** Difference from base not significant at the 10% level.

Legend: A person belonging to the highest-income 20% (5th quintile) has a significantly higher probability of having made a purchase into the pension fund in the last five years compared to a person belonging to the lowest-income category (1st quintile, base) but otherwise having the same characteristics (gender, age, marital status, etc.).

Source: Pension Fund of Credit Suisse Group (Switzerland), Credit Suisse

Gender does not play a significant role in the choice of contribution option

The proportion of insured members of the Pension Fund of Credit Suisse Group (Switzerland) who opted for the highest "Top" contribution option grew steadily between 2017 and 2021 and, at 27%, was already 8 percentage points higher last year than at the beginning of the observation period. This proportion is significantly lower for women than for men. However, if the influence of various factors is controlled simultaneously in a regression analysis, it becomes apparent that, all other things being equal (same age, same income level, same marital status, etc.), gender does not actually play a statistically significant role in the choice of the highest contribution option (see Figure 5). However, the probability of opting for the "top" contribution option increases most strongly with the age and income of the insured person.

Voluntary purchases are most common between ages 45 and 60

When analyzing the data from the CS pension fund, age and income also emerge as the strongest drivers for voluntary purchases (see Figure 5). Overall, about one-fifth of insureds made a purchase into the pension fund in at least one year over the past five years. 43% of annual purchases (as measured by the number of incidents from 2017 to 2021) were made by individuals in the top income quintile, while by definition their share of the total active insureds is only about 20%. The median age for purchases is 49, and the highest proportion of insureds with purchases is in the 55 to 60-year-old age group, at just under one-third. This figure is also above average for 45 to 54-year-olds. 72% of those who made purchases into the CS pension fund between 2017 and 2021 did so in a staggered manner over several years – which makes sense from a tax perspective, as we will show below. Similar to payments into Pillar 3a (see section "Voluntary payments – Pillar 3a" from page 11), the proportion of insured persons making voluntary purchases into the pension fund is lower for women than for men. However, the results of our regression analysis show that, all other things being equal (same income, same age, same marital status, etc.), women actually make pension fund purchases slightly more frequently than men, with the influence of gender on the amount of the purchase not being significant (see Figure 5). However, being divorced has a clear negative impact. This is not surprising insofar as repurchases due to divorce were not taken into account in the analysis. The gap in pension fund capital after a divorce is first filled again before voluntary payments are posted in the data as "normal" purchases.

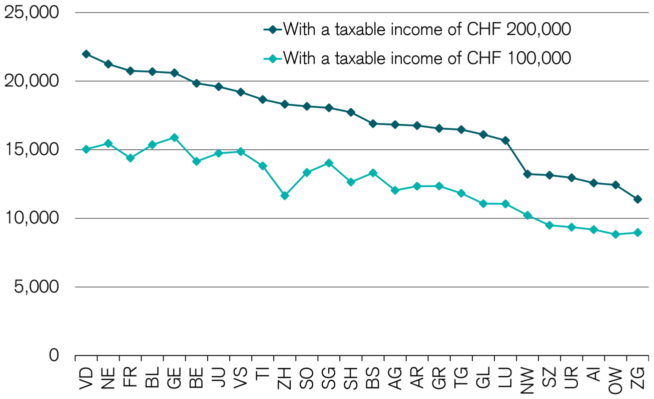
Purchases are particularly worthwhile in years with high incomes

Whether and at what time it makes sense to buy into the pension fund depends on various factors and must therefore be examined individually in each case. In principle, however, the higher the taxable income, the greater the absolute savings on income taxes that result from a purchase. As with Pillar 3a, the tax saving effect depends primarily on the marginal tax rate and varies accordingly depending on the place of residence (see Figure 6).[7] Consequently, purchases are particularly worthwhile in years with exceptionally high taxable income (e.g., through bonus payments) – which is in line with the observation that more purchases tend to be made in good stock market years (see Figure 4 on page 16). Conversely, purchases in years with comparatively low taxable income – for example, due to high deductions for home renovations – bring less in tax terms. The data analysis presented above has shown that purchases are mostly made between the ages of 45 and 60. With an average career path, the salary is often highest in this age range. Furthermore, the additional return[8] resulting from the tax benefit is not diluted over too long a period in this case. In addition, there is still enough time to stagger the purchases (see below) and to avoid the problem of the three-year lock-up period before a lump-sum withdrawal (which is relevant, among other things, in the event of an unplanned early retirement). If one has several pension fund connections (e.g., basic vs. executive/1e pension plans, or in the case of a married couple two different pension funds), it is advisable to first take advantage of the purchase potential with the affiliation that offers the better conditions (higher interest rate, better conversion rate, more flexible regulations, etc.). The financial condition of the pension fund (keyword: funding ratio) should generally be a key criterion when deciding to buy in. The fact that longer-term performance regarding these points is difficult to estimate tends to argue against purchases at a very young age when the time until retirement is still relatively long.

[7] The tax treatment depends on the individual circumstances of each client and may change over time. This document does not contain tax advice of any kind. General tax-related information contained in this document is not a substitute for comprehensive personal tax advice. Consult a professional tax advisor if you feel it is necessary.
[8] For the concept of additional returns, see section "Voluntary payments – Pillar 3a" on page 13 as well as Credit Suisse (2017), Private Retirement Provision: 3a Saving in Switzerland.

Figure 6: Purchases best in years with high-incomes

Savings in income taxes by deducting a one-time pension fund purchase of CHF 50,000, single person without children with a taxable income (before deduction) of CHF 100,000 or CHF 200,000; cantonal capitals, 2022

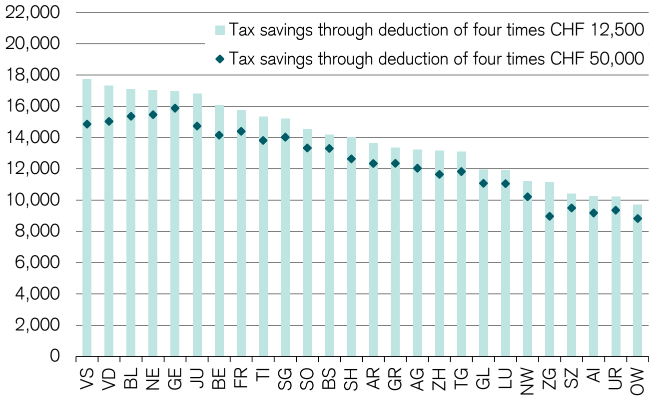


Disclaimer: See footnote 7

Source: TaxWare, Credit Suisse

Figure 7: Increase tax benefit by staggering purchases

Savings in income taxes by deducting a pension fund purchase of CHF 50,000, one-off compared to staggered over four years (CHF 12,500 per year), single person without children with a taxable income (before deduction) of CHF 100,000; cantonal capitals, 2022



Disclaimer: See footnote 7

Source: TaxWare, Credit Suisse

Higher tax savings by staggering purchases

By spreading a larger purchase amount over several years (staggering), a higher tax saving can usually be achieved compared to a one-off purchase. We show this in Figure 7 using the example of a single person with a taxable income of CHF 100,000 (before tax deduction). If a deduction for a pension fund purchase of CHF 50,000 is claimed, CHF 14,864 in income taxes can be saved in Sion (VS). If the purchase – and thus the tax deduction – is now spread over four years (CHF 12,500 per year), this results in a total tax saving of CHF 17,736 (four times CHF 4,434), i.e., the tax saving effect is CHF 2,872 higher than with a one-off purchase. However, the benefits of staggering vary depending on the place of residence. In municipalities such as Sarnen (OW) or Altdorf (UR), the additional tax savings through staggering in this specific example are significantly lower than in Sion (VS), at around CHF 870.

Pension fund purchase or payment into Pillar 3a?

Other aspects that should be carefully examined and considered before purchasing a pension fund are listed in the table on the following page. The table also compares pension fund purchases with payments into Pillar 3a. Although both variants constitute voluntary, tax-privileged retirement savings and thus have similarities, there are nevertheless significant differences that should be taken into account. When deciding between pension fund purchases and 3a payments, it is therefore also important to consider the individual situation. However, there are a number of reasons – provided there are sufficient free funds available – why it is better to pay in the maximum Pillar 3a amount before making any pension fund purchases. First, according to the current legislation, 3a payments missed in a year cannot be made up for later (see box "Current political developments regarding Pillar 3a" from page 13), whereas the purchase potential in the pension fund remains and can still be exhausted at a later date – provided personal circumstances do not change fundamentally in the meantime (e.g., salary reduction due to reduced working hours, change of employer or pension fund, etc.). Second, Pillar 3a is fundamentally more flexible in terms of withdrawal: This is not tied to cessation of employment and is possible as early as five years before the normal retirement age. In addition, there are no lock-up periods to observe, and staggered withdrawals are easier to manage with Pillar 3a assets (for the advantages of staggered withdrawals of retirement capital, see section "Withdrawal of pension or capital" on page 34). If it was not financially possible to buy into a pension fund and you would still like to increase your retirement capital in the occupational pension plan in order to receive a higher pension, you can transfer your Pillar 3a assets to the pension fund before you retire without incurring tax. To increase the chances of a higher return, you can choose between different investment strategies for Pillar 3a, which is usually not the case with the pension fund – 1e pension plans are an exception (see section "Choice of investment strategy" starting on page 25).

Comparison of purchases into the pension fund and payments into Pillar 3a

	Purchase into the 2nd pillar	Paying into Pillar 3a
Save taxes	Yes	Yes
Maximum amounts 2022	Individual purchase limit according to pension fund statement, usually significantly higher than with Pillar 3a	With pension fund: CHF 6,883 per year. Without pension fund: 20% of net earned income, maximum CHF 34,416 per year
Form of investment	Retirement capital managed by the pension fund. For 1e pension plans, portfolio with securities	Interest-bearing pension account or portfolio with securities
Interest rate	Guaranteed minimum interest on the compulsory part (currently 1.0%)	Preferential interest rate on the 3a account (averaged 0.09% in January 2022)
Withdrawal	As a lump sum or as a pension, note possible restrictions on lump-sum withdrawals according to pension fund regulations. For 1e pension plans as a lump sum	Withdrawal as a lump sum (for life annuity insurance as a pension)
Withdrawal before normal retirement age	Depending on pension fund regulations, at age 58 at the earliest	Five years before reaching AHV age at the earliest
Staggered withdrawal	Yes, if provided for in the pension fund regulations in the context of partial retirement	Yes, if several accounts exist
Withdrawal after normal retirement age	Yes, up to the age of 70, if still employed and provided for in the pension fund regulations	Yes, provided continued employment until age 69 (women) or 70 (men). Until this age, tax-privileged contributions can continue to be made to Pillar 3a.
Death	Payment in accordance with the beneficiary regulations, if provided for in the pension fund regulations	Payment in accordance with the beneficiary regulations

Source: Credit Suisse

Pay into tied pension provision or invest freely?

Like payments into Pillar 3a, voluntary additional savings into the second pillar (pension fund purchases, higher savings contributions) are considered tied pension provision. The accumulated money can only be withdrawn before retirement under certain conditions. In addition to tied pension savings, however, private savings are also possible (referred to as free pension savings or Pillar 3b). When deciding between tied and free pension provision, various aspects must be taken into account and an overall view of the individual case must be taken. Pillar 3b can be appropriate if you want to put money aside for your old age, but do not want to make a long-term commitment. The money can be withdrawn flexibly at any time. On the other hand, the tax advantages and the associated additional returns do not apply (exception: certain forms of life insurance). In view of the actual purpose of pension savings – to ensure an adequate standard of living in old age – it is precisely the disciplining effect of tied pension provision that is advantageous. As far as expected returns are concerned: those who want to invest very aggressively and can also bear the associated investment risk will find more options in Pillar 3b, since unlike Pillar 3a and 1e pension plans, there are no statutory restrictions on the choice of investments (see section "Choice of investment strategy" from page 22). In addition, capital gains in Pillar 3b are tax-free, in contrast to tied pension plans, where they are taxed – at a reduced rate – when capital is withdrawn (see section "Withdrawal of pension or capital" from page 34). On the other hand, tied pension assets are not subject to income and wealth taxes during their term.

Pillar 3a: Share of securities up, especially among the young

In the current low interest rate environment, asset accumulation is also sluggish in conventional 3a interest accounts. The proportion of capital invested in 3a securities solutions has increased significantly in recent years – especially among young people and users of digital providers. The share of equities is still significantly lower for women than for men.

Low interest rate environment significantly slows asset accumulation

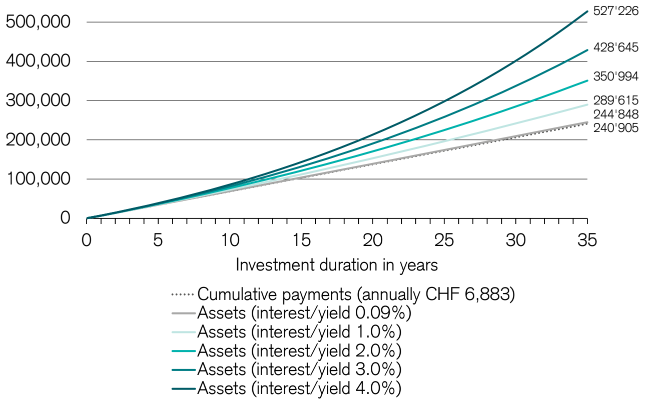
The figure below clearly shows how strongly the return achieved influences the compound interest effect and thus the capital accumulation in Pillar 3a. According to the Swiss National Bank, the average interest rate on 3a retirement accounts is currently a record low 0.09% (as at January 2022). If we calculate with this interest rate over an investment horizon of 35 years, an annual payment of the current maximum amount results in cumulative interest income of CHF 3,943 and a final capital of CHF 244,848. With an average interest rate of 1%, the interest income increases to CHF 48,710. With a return of 4%, the interest income amounts to CHF 286,324 and the final capital is more than twice as high as in the scenario with the current low interest rates. Although this is still associated with many uncertainties, against the background of the inflation trend, a turnaround in interest rates is slowly becoming apparent – the compound interest effect should therefore have a stronger impact again in the future.

Exploiting yield opportunities with securities solutions

The return opportunities in Pillar 3a can be increased by using securities solutions, because historically, securities solutions have yielded better returns than interest accounts. For example, if we look at the net performance of a Credit Suisse 3a securities solution compared with a conventional 3a interest account over the period from 1987 to 2021 (in each case with annual payment of the statutory maximum amount for employed persons with a second pillar), the use of the securities solution results in an additional return of CHF 157,349 (see Figure 2). However, securities investments are associated with higher risks and fees. In general, investors should tailor the equity share to their risk tolerance and remaining investment horizon. In order to reduce the risk of selling the securities at an unfavorable time, it is important to reduce the share of securities in good time before the planned withdrawal or to bring it into line with the planned investment strategy for the

Figure 1: Interest rate/return decisive for wealth accumulation

Performance of capital in Pillar 3a with regular payments (at the beginning of the year) of the current maximum amount (CHF 6,883) with different assumptions regarding average interest/return

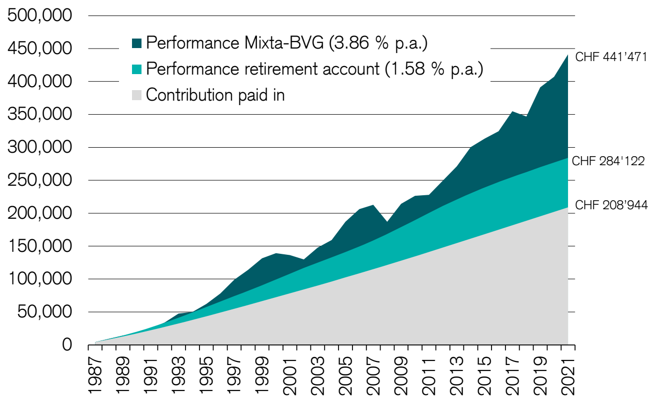


Past performance or financial market scenarios are no reliable indicator of future performance.

Source: Credit Suisse

Figure 2: Securities solutions can increase return opportunities

Comparison of the Credit Suisse investment group CSA Mixta-BVG with the3rd pillar retirement savings account (net performance from Jan. Jan. 1, 1987 to Jan. 31, 2021) with regular payment (at the beginning of the year) of the respective maximum amount



Past performance or financial market scenarios are no reliable indicator of future performance.

Source: Credit Suisse

period after (early) retirement. What else needs to be taken into account when withdrawing 3a assets is explained in more detail from page 34.

Less than one in three invests 3a pension assets in securities

A vast majority of the Pillar 3a capital invested with banks is still in interest-bearing accounts. According to estimates by the Federal Social Insurance Office, at the end of 2020 just under 30% of 3a assets held with banks were invested in securities solutions that include equities or other risk assets (see Figure 1 on page 14). In 2013, securities penetration was still just under 20%. The annual survey conducted by the Swiss Pension Fund Association (VVS) among its members – which include the most important Pillar 3a institutions – confirms this figure: in 2020, just under 30% of deposited pension assets among VVS members were invested in securities solutions, compared with 23% in 2016 (see Figure 3).

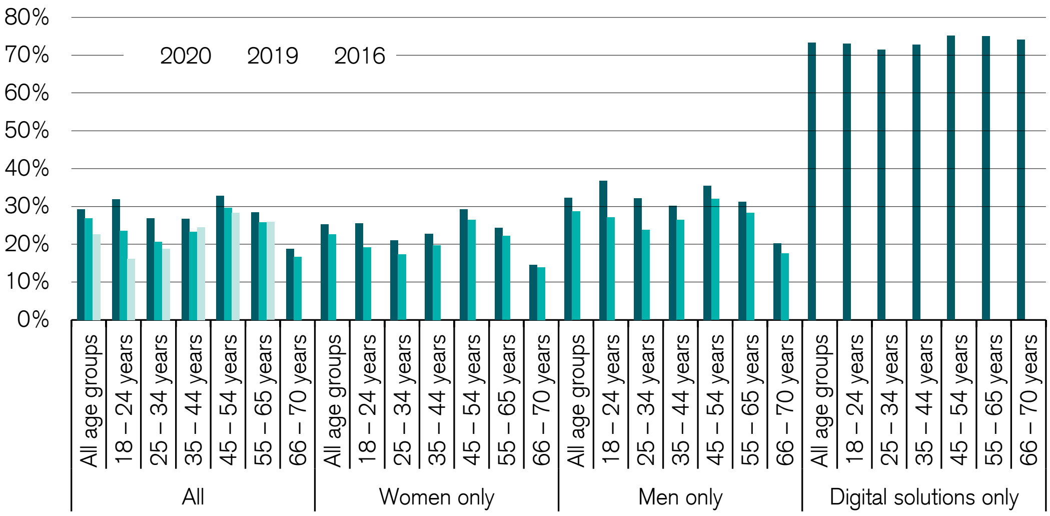
Young people are increasingly investing their 3a pension assets in securities

Securities solutions are generally more suitable the longer the investment horizon. Such solutions therefore often make sense for younger beneficiaries. Of all age categories, 45 to 54-year-olds have the highest securities penetration in 2020. It is encouraging, however, that the VVS data show the most significant increase in securities penetration over the years among the younger age groups: among 18 to 24-year-olds, 32% of 3a assets are now invested in custody accounts, and among 25 to 34-year-olds, 27% – in 2016, these figures were 16% and 19%, respectively (see Figure 3). What is particularly impressive is the data collected for the first time in 2020 on the investment behavior of four exclusively digital providers, whose market share is currently only 1.6% and 76% of whose customers are under 45 years of age: here, securities penetration is over 70% for all age groups.

Unfortunately, the data available to us do not allow us to identify the reasons for the still rather low overall securities penetration and the disparities by age group. Possible reasons include a lack of interest, a low willingness or ability to take risks, or a lack of information and financial knowledge. In addition, the question arises as to whether the investment horizon is actually longer for younger people, for example if an early withdrawal is planned for the purpose of acquiring residential property or taking up self-employment. This could explain the lower share of securities among 25 to 44-year-olds. Those aged 45 to 54 are often more likely to have the financial requirements and at the same time still have a sufficiently long window of opportunity to increase the equity share before it is reduced again in the years preceding retirement.

Figure 3: Securities penetration at just under 30%, with digital providers at over 70%

Securities penetration: Share of custody accounts in total assets invested in 3a accounts and custody accounts in %, by age group.



Source: Swiss Pension Fund Association (VVS), Credit Suisse

Securities penetration higher among men than women

The VVS data also reveal gender-specific differences in 3a investment behavior. In 2020, the overall securities penetration was 32% for men and only 25% for women. This divergence holds across all age groups and is in line with other studies showing that women often choose a more cautious investment strategy than men. Women tend to invest for the long term, are less likely to trade, hold a greater proportion of their assets in real estate and other tangible assets, and are particularly interested in environmental, social and governance (ESG) criteria and impact investing. These tendencies are manifested in the more conservative investment strategies of many women, with a surplus of cash and significant underinvestment in equities. Over the long term, this could contribute to a lower performance and lead to an investment gap.[9]

[9] Credit Suisse (2020), Lifecycle Investing for Women: Woman to Woman.

1e investment strategies with lowest and highest risk most frequent

1e pension plans for high earners offer an individual choice of investment strategy in occupational pension plans similar to Pillar 3a. These plans have gained in importance in recent years. The first-ever analysis of data from the Pension Fund of Credit Suisse Group (Switzerland) provides rare insights into the investment behavior of a large number of 1e policyholders. Strategies with the lowest and highest proportion of securities are most popular. However, risk appetite varies by wealth situation, investment horizon and gender.

Differences in returns have a decisive influence on asset accumulation in the second pillar

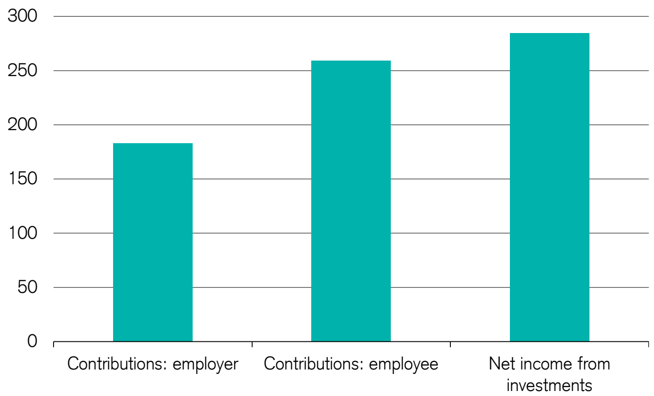
The accumulation of assets in occupational pension plans is largely due to pension funds making steady investment returns in the capital markets. According to the Credit Suisse Pension Fund Index, the annual return for the period 2011 to 2020 was 4.54%. Net returns from asset management during this period amounted to CHF 285 billion, exceeding both employer and employee contributions (see Figure 1). They represented 39% of the inflows into pension assets. This third contributor is of great importance in the Swiss pension system. The achievement of long-term returns and the assumption of investment risks are part of this pension system. This is manifested in the asset allocations of pension funds, which have increasingly invested in real assets such as equities and real estate, especially due to falling returns on bonds.

Insured persons can barely influence the return contribution of their assets in the second pillar

Since pension funds invest the pension assets of all insured persons according to a uniform investment strategy, it is impossible for individuals to influence the return potential of their own pension assets – apart from consciously considering the risk capacity and willingness of the potential employer's pension fund when looking for a job. In addition, pension funds are required to reimburse the insured persons for the entry benefits and contributions paid, including interest, upon withdrawal. For this reason, among others, provisions must be set aside in the event of a positive investment result in order to meet the obligations even if returns are negative. Ultimately, pension plans that provide retirement pensions face the challenge that excessively high pension promises and future conversion rate losses must also be financed by returns generated in the present.

Figure 1: Investment returns account for a significant portion of inflows into pension assets

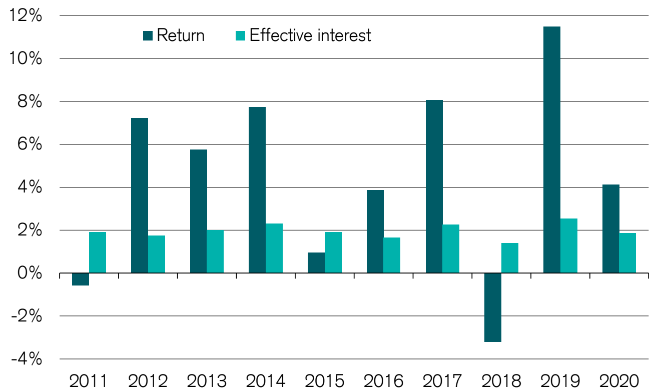
Contributions and investment return (in CHF billion) of pension funds, 2011 – 2020



Source: Swiss Federal Statistical Office, Credit Suisse

Figure 2: Investment return in the last decade 4.54%; effective interest on retirement assets only 1.95%

Effective interest on retirement assets and return on the Credit Suisse pension fund index, 2011 – 2020



Source: PPCmetrics, Credit Suisse

As a consequence, only part of the return can be credited to the active insureds. According to the analysis of pension fund annual reports by the consulting firm PPCmetrics, the effective rate of return in the period from 2011 to 2020 was 1.95%. In contrast, the average return of pension funds according to the Credit Suisse Pension Fund Index was 4.54% (see Figure 2). In return, the insureds bear neither market nor longevity risks.

1e pension plans offer flexibility and individualization in occupational pension plans

Compared to this traditional second pillar pension model, which is based on a uniform investment strategy for all insured persons, 1e pension plans are an exception. In 1e pension plans, insured persons can choose their own investment strategy and bear the investment risks themselves. Due to the absence of any redistribution and the lack of a provision for fluctuations in value, the insured persons participate one-to-one in the results of the investment. Companies that decide to introduce a 1e pension plan can get rid of the implicit deficit restructuring obligation for the 1e portion. This tends to free up equity capital. 1e pension plans are also particularly suitable for company owners who use pension plans as a tactical instrument as part of a withdrawal strategy (see box below "1e pension plans in brief").

1e pension plans in brief

1e pension plans are named after the corresponding article in the Ordinance on Occupational Retirement, Survivors' and Disability Pension Plans (BVV 2). According to this article, pension plans that cover salary components in excess of CHF 129,060 may offer their beneficiaries a choice of up to a maximum of ten different investment strategies within a pension plan, at least one of which must have a low-risk profile. The beneficiaries bear the full investment risk and withdraw the accumulated assets as a lump sum upon retirement. These pension plans have actually existed since 2006, but it is only since a corresponding change in the provisions of the Vested Pension Benefits Act on October 1, 2017 that pension funds no longer have to provide minimum guarantees to their beneficiaries upon withdrawal. This change has significantly increased the attractiveness of 1e pension plans for pension funds and brought these pension models themselves into the focus of institutions and the general public (see Monitor | 1e pension plans on page 31).

Advantages and disadvantages of 1e pension plans

Advantages

For employers	For insured persons
No underfunding of the non-compulsory pension plan possible, as the insured persons bear the risks themselves	Protection against redistribution, as the pension assets in the non-compulsory plan are managed separately
When accounting for defined contribution plans, reserves can be reduced to cover asset losses in the occupational pension plan (in accordance with IAS 19)	Investments can be adjusted regularly according to personal situation and planning

Disadvantages

For employers	For insured persons
Increases the complexity of occupational pension plans	The investment risk must be borne by the insured persons themselves
Reduced ability to restructure the existing institution	In the event of withdrawal due to a change of employer or unemployment, losses can occur in the context of an unfavorable stock market environment if the new employer does not provide a 1e plan. Then the capital must be sold at a loss and transferred to a traditional pension fund. In the event of withdrawal due to retirement, on the other hand, the capital can continue to be invested in private assets.

Source: Credit Suisse

Investment decisions in 1e plans can affect a large portion of assets

While Pillar 3a and 1e pension plans have the individual choice of investment strategy in common, they differ in two key respects: firstly, for 1e plans, the choice of investment strategy is not only possible, but compulsory. If an employer introduces a 1e pension plan, all insured persons with income above the threshold set by the employer (currently a minimum of CHF 129,060) are affected. Secondly, much higher amounts can be saved in 1e pension plans over the working life than in Pillar 3a. The legal requirement that savings contributions of a maximum average of 25% on salary components between 1.5 and 10 times the upper threshold amount (currently CHF 129,060 and CHF 860,400) are permitted allows contributions to the second pillar that are up to

25 times higher than the maximum contributions permitted to Pillar 3a if the income is sufficient. For example: If one calculates, as in the previous section, with an investment horizon of 35 years and an interest rate of 4%, an AHV salary of CHF 250,000, a coordination deduction of CHF 129,060 and maximum possible savings contributions of 25%, this results in cumulative securities income of over CHF 1.2 million and a final capital of CHF 2.2 million. For the highest earners, these amounts increase again significantly.

In summary, individual investment decisions can or must be made only if the employer provides for such a pension plan. These individual investment decisions can relate to a much larger part of the individual's wealth situation than is the case with Pillar 3a assets. Consequently, it is all the more interesting to discuss the factors that influence investment behavior in these pension plans.

First analysis of the chosen investment strategies of 1e-insured persons of the Pension Fund of Credit Suisse Group (Switzerland)

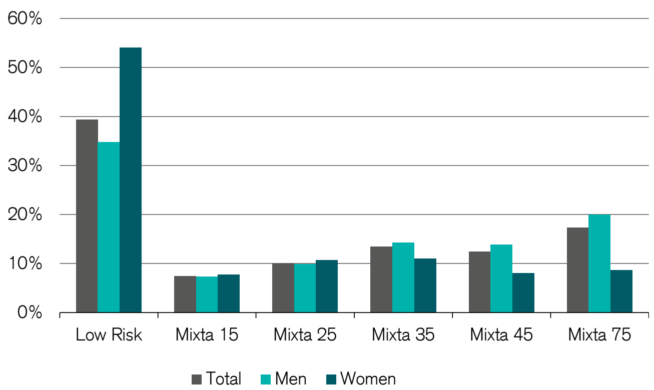
To date, little is known about investment behavior in 1e pension plans. For the first time, data from the CS pension fund in 2020 and 2021 allow an insight into the investment behavior of a large pool of employees insured in 1e pension plans. At the start of the plan in February 2020, insured employees had the choice of transferring their assets from the lump-sum plan to the new 1e pension solution. They were also able to choose from six investment groups. If no active choice was made, the low-risk strategy was automatically applied. The remaining investment groups contain different proportions of equities ranging from 15% (Mixta 15) to 75% (Mixta 75). Since 2022, additional investment strategies with a 65% and 100% equity share have been available.[10]

Low-risk strategy most frequent, followed by the highest-risk strategy

On the one hand, the low-risk strategy is aimed at insured persons with a very low risk capacity – for example, if retirement is imminent and the lump-sum withdrawal will largely serve to maintain their accustomed standard of living. On the other hand, the strategy appeals to insured persons who want to shield their pension assets against fluctuations on the financial market and thus have a fundamentally very low risk tolerance. In the current environment with negative risk-free interest rates, this almost completely prevents positive returns being achieved. As a result, the performance of pension assets remains far below what is possible and common in the second pillar. Figure 3 shows that in the case of the CS pension fund, a good 40% of insured persons have chosen the low-risk strategy. Moreover, the latter is also the dominant strategy across all age categories (see Figure 4). However, this does not mean that a large proportion of insured persons deliberately avoid any investment risk. This group also includes those insured persons who have been assigned to this strategy under the regulations due to a lack of investment decision. Nevertheless, the high proportion of insureds in the low-risk strategy may come as a surprise in view of the relatively high investment returns in recent years.

Figure 3: 40% choose the "Low Risk" strategy

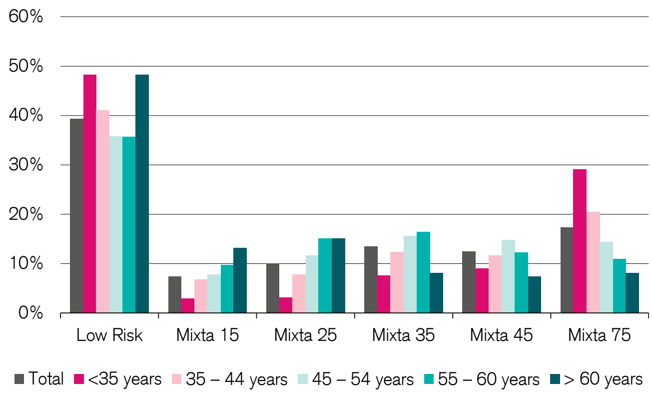
Distribution of selected investment strategies of Credit Suisse employees insured in 1e plans in Switzerland as at December 31, 2021, by gender



Source: Pension Fund of Credit Suisse Group (Switzerland), Credit Suisse

Figure 4: 75% equity share second most popular strategy among younger people

Distribution of selected investment strategies of Credit Suisse employees insured in 1e plans in Switzerland as at December 31, 2021, by age group



Source: Pension Fund of Credit Suisse Group (Switzerland), Credit Suisse

[10]More information on the investment strategies in 1e retirement capital savings of Pension Fund 2 of Credit Suisse Group (Switzerland) is available at https://pensionskasse.credit-suisse.com/fileadmin/PKCS/Dokumente/Publikationen_Anlagestrategie/Produktblatt/Produktblatt_EN.pdf

Which factors influence the choice of investment strategy?

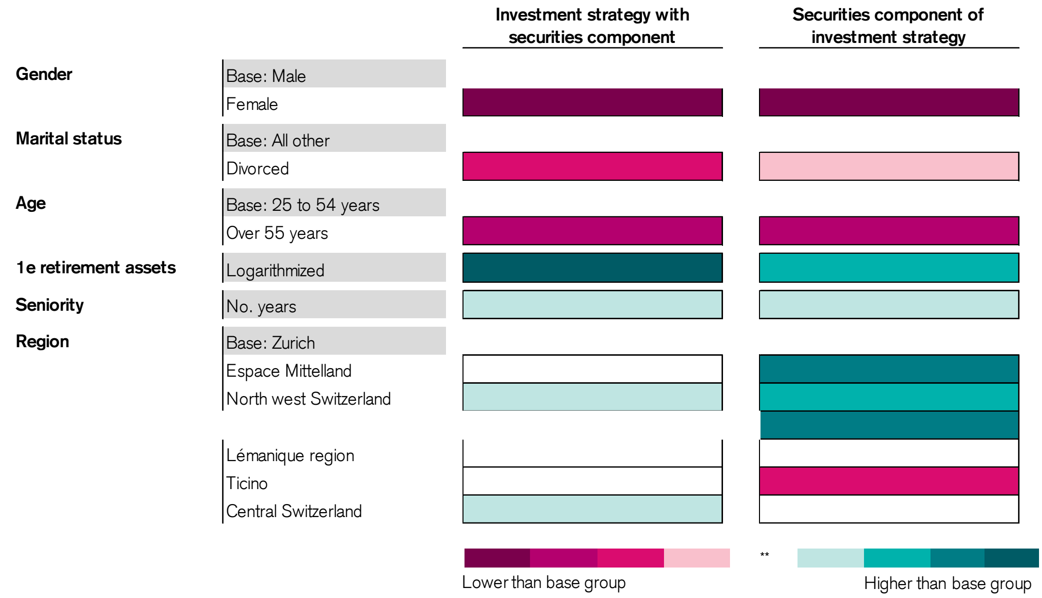
In order to determine the key factors in the choice of investment strategy, anonymized policyholder data were statistically analyzed. Two questions were distinguished. Firstly: Which factors explain whether investors generally expose their pension assets to investment risk? And secondly: Which factors explain the risk profile – measured here by the equity portion of the investment strategy – that investors follow when choosing an investment strategy?

Women and divorcees are more risk-averse investors

As in the case of Pillar 3a, the results show that gender plays a crucial role in investment behavior: compared with men, women are less likely to opt for a strategy that involves investment risk (see Figure 5). In addition, it is clear that male policyholders increasingly choose strategies with a higher risk profile in cases outside the low-risk strategy, while such a trend is basically absent among female policyholders (see Figure 3). On average, a woman chooses a securities share that is about 9% lower than a man with otherwise comparable characteristics (marital status, age, pension assets, etc.). For insured persons who are married or living together, the choice of investment strategy also always has an impact on household assets – a fact that was debated in the consultation on the introduction of 1e pension plans. Ultimately, the Federal Council decided that the choice of investment strategy does not require the consent of the partner. The theory that married insured persons invest more cautiously cannot be substantiated. Meanwhile, divorced insureds choose the low-risk strategy more often than other insureds and show a lower risk profile. Moreover, if all groups differing in marital status are included in the calculation model, there is no indication that there is a connection between marital status and investment behavior.

Figure 5: Lower risk appetite among women and those approaching retirement age

Active insureds in the 1e pension plan of Pension Fund 2 of Credit Suisse Group (Switzerland) as at the end of 2021: Influence of various factors on the likelihood of selecting an investment strategy with a securities component (i.e., all except "Low Risk"), or on the amount of securities in the investment strategy



** Difference from baseline not significant at the 10% level.

Legend: A woman is significantly less likely to choose an investment strategy with a securities component compared to a man with otherwise identical characteristics (marital status, age, retirement assets, etc.).

Source: Pension Fund of Credit Suisse Group (Switzerland), Credit Suisse

Decreasing risk appetite before retirement

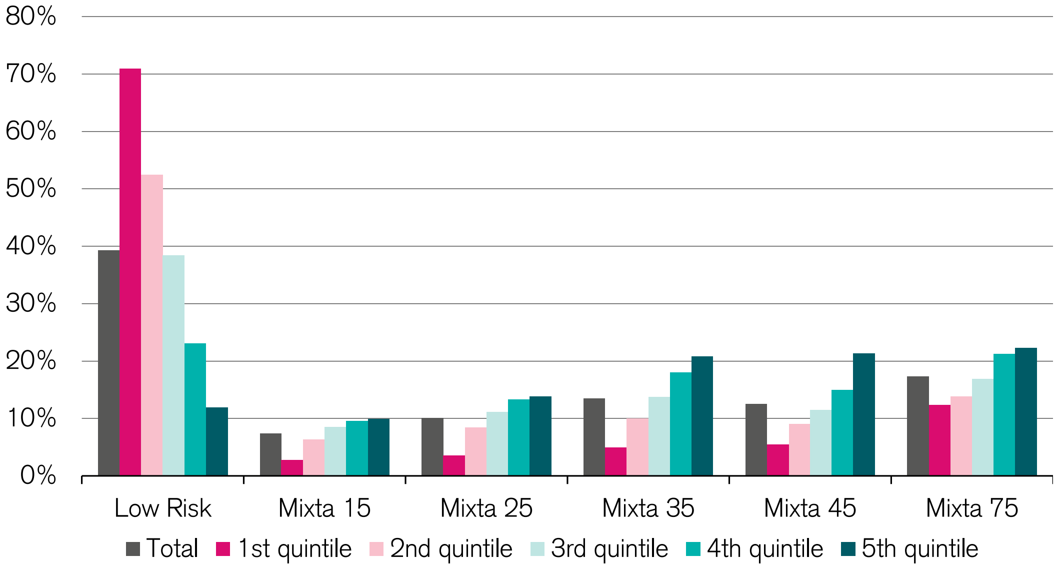
The age of the insured person also plays an important role when considering investment behavior. In line with the principle of suitability and appropriateness, which is common in the financial market, only those with a correspondingly long-term investment horizon should invest in higher-risk assets. In the case of 1e plans, however, this is sometimes difficult to assess: in the event of withdrawal due to unemployment, the capital can continue to be invested in a vested benefits foundation - so in the event of an unfavorable stock market environment, any losses do not have to be realized. In the event of a change of employer, it is advantageous if the new employer also provides a 1e plan.[11] Retirement and the associated loss of earned income, on the other hand, often put a natural end to the investment horizon. This is particularly the case if the insured person is dependent on the full extent of the pension assets released upon lump-sum withdrawal to finance their usual living expenses. However, in cases where the insured person is not dependent on the pension assets, imminent retirement by no means implies that investment risks are to be categorically avoided as of that age. In line with the view that a higher proportion of equities requires an investment horizon of up to ten years, it was investigated whether the group of people aged 55 and over exhibits more defensive investment behavior. The results do indeed suggest this relationship.

Role of existing pension assets

Higher wealth is associated with higher income, a higher hierarchical position in the company and an advanced working life. Since the group of insureds studied is active in the financial sector, a high degree of knowledge and experience with investment products associated with growing wealth is obvious. In addition, when the pension plan was introduced, the insureds had the option of transferring their previous pension assets to the new 1e pension plan. The transfer of larger assets to the 1e pension plan thus suggests that investment risks were actively sought by the respective insureds at the time of introduction, which clearly argues against the choice of the low-risk strategy. The result is therefore unambiguous: there is a strong correlation between the existing pension assets in the 1e plan and the risk profile of the selected investment strategy. Figure 6 shows that individuals with comparatively high capital in the 1e pension plan rarely choose the low-risk strategy. For example, among the 20% of individuals with the highest 1e capital (5th quintile), only 12% chose this strategy. In turn, there are many individuals with very little capital in the 1e plan who do not invest in securities at all. Overall, almost 90% of the capital is invested in a strategy with a securities component.

Figure 6: Insured persons with (so far) little 1e capital often choose the low-risk strategy, but overall almost 90% of the capital is invested in investment strategies with a securities component

Distribution of selected investment strategies of Credit Suisse employees insured in 1e plans in Switzerland as at Dec. 31, 2021, by quintile of existing 1e assets



Source: Pension Fund of Credit Suisse Group (Switzerland), Credit Suisse

Careful consideration of risks, costs and return prospects of 1e investment strategies required

Due to the absence of any redistribution and the lack of a provision for fluctuations in value, the insured persons in 1e pension plans participate fully in the results of the investment. Compared to traditional pension funds and collective foundations, which have to allocate a significant portion of their positive investment results to redistribution and reserve accumulation, 1e pension plans have a significantly higher return potential in the context of long-term rising financial markets with

[11] In September 2021, motion 21.4142 "Protecting retirement assets when leaving a 1e plan" was submitted, according to which the retirement assets could be left in a vested benefits institution for up to two years when leaving a 1e pension plan. This would prevent a compulsory loss on the vested benefits. The motion is currently in the preliminary consultation stage. As with an identical motion from 2019, the Federal Council is proposing that the motion be rejected.

higher risks at the same time. The study of the investment behavior of the insured group in the 1e pension plan of the Credit Suisse pension fund shows that many insured persons make use of the choice of investment strategy and are also willing to take higher risks. Higher wealth and a longer investment horizon during working life are the key explanatory factors associated with a higher risk profile. In addition, there are gender differences: compared with men, women choose investment strategies with a significantly lower proportion of securities. Regional differences can also be identified, although their interpretation is difficult. Overall, a surprisingly large proportion of insureds choose the low-risk strategy, especially people with (still) low 1e capital. This is despite the fact that the expected return on low-risk investments is currently negative due to the current interest rate situation. The legal requirement that all insured persons must be informed about the investment strategies and the associated risks and costs in the case of 1e pension plans is now considered to be very important. At the same time, however, it must be ensured that insured persons do not refuse any prospect of return because they are uninformed or unaware. For this reason, too, in-depth information for all insured persons in 1e pension plans is essential.

1e market has quadrupled in five years

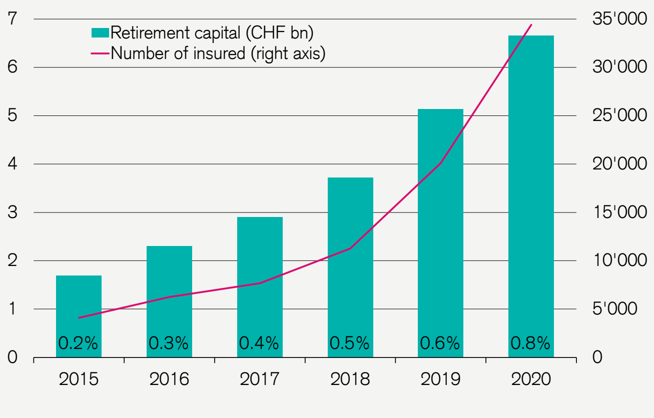
1e pension plans are gaining in importance

With a retirement capital of CHF 6.66 billion at the end of 2020 – 0.8% of the total retirement capital – 1e pension plans currently still play a minor role (see Figure 1).[12] In recent years, however, they have gained in importance: At the end of 2015, when these data were recorded for the first time, they amounted to only CHF 1.69 billion (0.2%) The market has thus almost quadrupled within five years. We expect these pension solutions to become even more important in the coming years[13]. A survey of 17 Swiss 1e foundations (14 of which are collective foundations) conducted by PWC in 2021 also indicates sustained growth. Thus, the investment assets in the 1e plans of the foundations surveyed amounted to around CHF 5.8 billion at the end of 2020, of which CHF 4.3 billion were in collective foundations. The collective foundations expect annual growth of 17% until 2026 and an increase in investment assets to around CHF 9.3 billion. Accordingly, the total 1e market is expected to exceed the CHF 10 billion threshold in 2026.

In the long term, the 1e market should still grow significantly. Based on the income distribution according to the Swiss Labor Force Survey (SAKE) of the Swiss Federal Statistical Office, we have estimated the group of potential 1e policyholders: In 2020, about 12% of employed persons crossing the entry threshold into occupational pension plans had an income of more than CHF 129,060 (see Figure 2). 1e pension plans are clearly only relevant for a minority of Swiss employees. Expressed in pension capital, we currently estimate the potential for 1e pension plans at around CHF 65 billion.

Figure 1: 1e pension plans: High growth starting from a low level

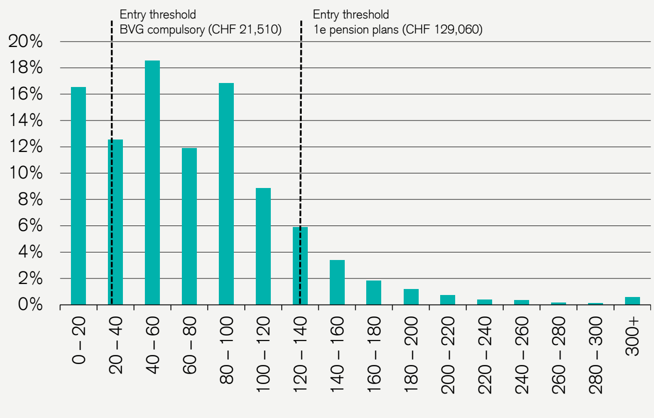
Performance of retirement capital (in CHF billion and as % of total retirement capital) and number of insureds in 1e pension plans (right axis)



Source: Swiss Federal Supervisory Commission for Occupational Pensions (OAK BV), Credit Suisse

Figure 2: Approximately 12% of assets meet the condition for 1e pension plans

Annual earned income in CHF thousand, shares in %, 2020



Source: Federal Statistical Office (SAKE), Credit Suisse

Further boost also in view of key challenges in occupational pension plans

The current challenges in occupational pension plans should continue to boost 1e pension plans. Since termination benefits are paid exclusively in lump-sum form, there is no need to set aside provisions for future conversion rate losses. Consequently, there is no redistribution from the active insureds to the pensioners. Since the guarantee otherwise applicable in occupational pension plans, according to which the insured person is entitled to the entry benefits and contributions made, including interest, upon withdrawal, does not apply, 1e pension plans are also not obliged to form reserves for securities losses. In comparison with traditional pension funds and collective

[12] See Report on the financial situation of pension funds 2020, the Swiss Federal Supervisory Commission for Occupational Pensions (OAK BV)
[13] See Occupational pensions: Lump sum or annuity?, Credit Suisse, August 2018

foundations, which have to allocate a significant portion of their positive investment results to redistribution and the reserve accumulation, 1e pension funds have a significantly higher return potential in the context of long-term rising financial markets. Accordingly, the option of choosing an individual investment strategy represents an advantage for insured persons if they are willing to bear longer-term investment risks themselves.

Trend toward more lump-sum withdrawals also harbors risks

At the end of a person's working life, the pension fund balance often represents the largest asset item. Accordingly, it is important to decide whether it should be withdrawn as a lump sum or in the form of a retirement pension. Coordinating lump-sum withdrawals at an early stage also opens up considerable tax advantages, depending on the region. In recent years, the proportion of lump sum recipients has increased slightly.

Pension, lump sum or mixed solution?

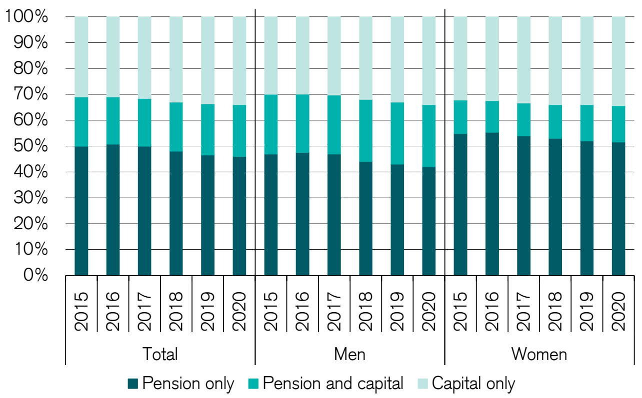
At the time of retirement, insured persons can withdraw their assets from the occupational pension plan in three different ways: As a monthly pension, as a one-time lump-sum payout, or as a combination of both. Many pension funds offer their insureds the option of withdrawing half or even all of their retirement assets in the form of a lump sum. However, the law only requires a minimum payout ratio of 25% of the compulsory portion at the request of the insured.

In the meantime, the majority receive at least a partial lump-sum payout upon retirement.

The New Pension Statistics (NRS) of the Swiss Federal Statistical Office provide interesting insights into the benefit combination chosen by the Swiss people when drawing retirement benefits from occupational pension plans. The share of pension-only withdrawals decreased slightly in recent years, while lump-sum-only withdrawals increased (see Figure 1). According to provisional figures for 2020, 54% of new pension fund recipients (excluding vested benefits institutions) received at least part of their pension as a lump sum (34% received a lump sum only and 20% a combination of pension and lump sum). At 46%, just under half of insureds still received a pure monthly pension, women somewhat more frequently than men.

Figure 1: One-third of insured persons receive entire pension fund assets in lump-sum form

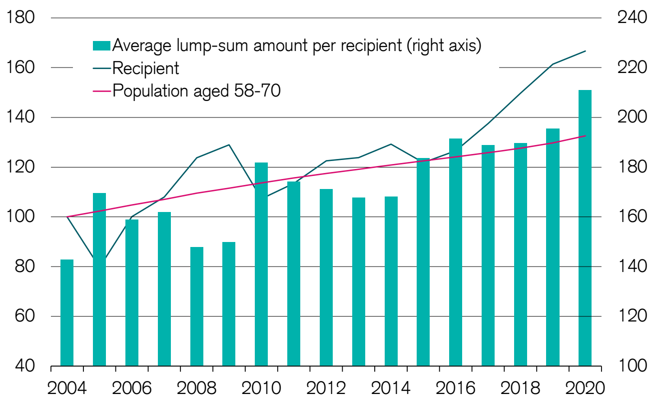
New recipients[14] of occupational pension benefits (pension funds only)[15] by combination of benefits and gender, in %



Source: Federal Statistical Office (New pension statistics), Credit Suisse

Figure 2: Lump-sum withdrawals are gaining in importance

Recipients of regulatory lump-sum benefits at retirement and population aged 58-70: Index 2004 = 100; average lump-sum amount per recipient in CHF thousand (right axis)



Source: Federal Statistical Office (pension fund statistics, population statistics), Credit Suisse

[14] Whether a person has made/will make an additional withdrawal in the past/future is not evident from the statistics. Under certain circumstances, it is possible for a lump-sum and new pension withdrawal to occur at different times during retirement. The proportions per year may also fluctuate as a result.
[15] In the case of vested benefits institutions, only around 2% of all newly paid retirement benefits are pensions; the remaining 98% are lump-sum payouts.

Slight trend toward more lump-sum withdrawals

The pension fund statistics of the Swiss Federal Statistical Office confirm the increase in the number of lump-sum withdrawals in recent years (see Figure 2). This development can be partly explained by the demographically induced increase in retirements. Nevertheless, a trend toward increased lump-sum withdrawals is emerging: If we put the number of lump-sum recipients in relation to the changes in the population that could potentially retire each year, a slight trend toward more frequent lump-sum withdrawals has been discernible since 2016. In parallel, the average lump-sum amount per recipient has also increased. In 2020, lump-sum benefits across Switzerland totaled over CHF 9.9 billion, with an average of CHF 211,038 per recipient. In the past, too, there were phases of increasing lump-sum withdrawals that seemed to coincide with good stock market years. This may partly explain the current increase. In addition, pension funds have increasingly required beneficiaries to withdraw part of the accumulated retirement assets in lump-sum form in recent years in order to avoid longer-term pension obligations. The introduction of such a compulsory lump-sum withdrawal is only possible in the non-compulsory part of occupational pension plans. In part, this is implemented within the framework of 1e pension plans, in which insured persons can choose between different investment strategies for salary components of CHF 129,060 or more and the accumulated capital is generally paid out upon retirement (see section "1e pension plans" from page 25).

Financial aspects in the decision-making process

In any case, the decision between pension and lump sum – or the question of which portion should be drawn as a lump sum – must be thoroughly considered. Financial aspects play an important role here. The amount of the pension or the expected capital income (capital consumption plus return) depends on various factors (see table).

Central factors influencing the amount of pension and capital income

	Retirement pension	Capital income
Conversion rate	The higher the conversion rate, the higher the resulting retirement pension	No influence
Duration of capital consumption	No influence	The shorter the period over which the drawn capital must be used for living expenses, the higher the annual capital income
Expected return on the capital	No influence	The higher the expected return on the capital drawn, the higher the annual capital income
Taxation	No influence at retirement Pension payments fully taxable (income tax)	Lump-sum withdrawal tax at retirement. The lower the taxes on lump-sum withdrawals, the higher the annual capital income Capital is transferred to private assets (wealth tax) Capital gains and capital consumption not taxable Return on capital (rental income, interest income, coupons, dividends) fully taxable (income tax)

Source: Credit Suisse

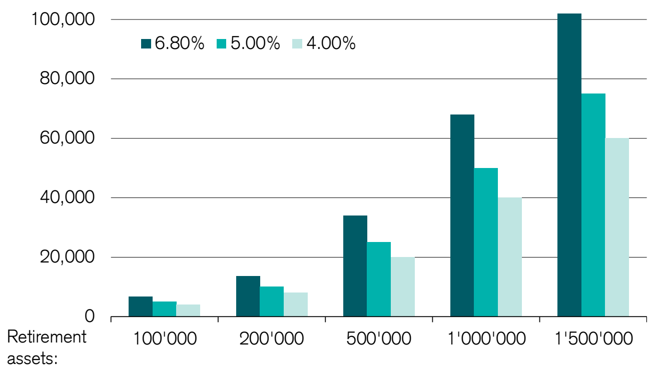
Falling conversion rates reduce attractiveness of pension withdrawal

When retirement assets are drawn from the second pillar in the form of a pension, they are paid out monthly for life without any need to worry about investments. The pension payments are subject to ordinary income tax. The amount of the pension is calculated using the conversion rate. In the BVG compulsory pension scheme, this conversion rate is set by law and is currently 6.8%. This means that the annual retirement pension corresponds to 6.8% of the accumulated retirement assets (see Figure 3 on the next page). With a retirement capital of CHF 500,000, for example, the pension is therefore CHF 34,000 per year. For benefits that exceed the BVG compulsory pension scheme, the conversion rate can be freely defined by the pension fund. In 2020, the average effectively applied conversion rate was 5.5%.[16] In order to do the best possible justice to low interest rates and progressive demographic aging, pension funds are using the existing leeway in the non-compulsory area. The observable trend towards falling conversion rates and technical interest rates in the non-compulsory part of the occupational pension scheme is likely to continue in the coming years. Future pensioners must therefore expect lower pensions.[17]

[16] See report on the financial situation of pension funds 2020, the Swiss Federal Supervisory Commission for Occupational Pensions (OAK BV).
[17] The key challenges in the second pillar from the perspective of pension funds and the resulting marked reduction in pensions for future generations compared with today's pensioners are the subject of our study "Second Pillar: Growing gap between the generations" Credit Suisse (2019).

Figure 3: Falling conversion rates reduce the resulting pension

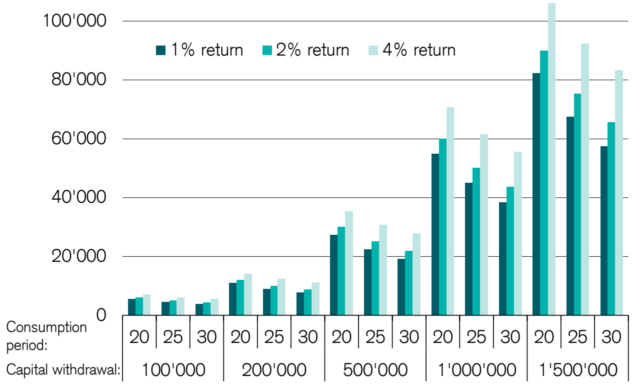
Annual gross income from pension payments (in CHF) for various levels of retirement assets and conversion rates



Source: Credit Suisse

Figure 4: Rein in capital consumption accordingly with low returns and long time horizon.

Annual gross income in CHF for different lump-sum withdrawals (after taxes) with different capital consumption periods (in years) and return assumptions



Past performance or financial market scenarios are no reliable indicator of future performance.

Source: Credit Suisse

Capital withdrawal strategy based on various assumptions

When capital is withdrawn, significantly more factors play a role. First, lump-sum withdrawal taxes are incurred upon withdrawal, which vary from municipality to municipality (details follow below). The capital remaining after deduction of the lump-sum withdrawal taxes due is transferred to private assets. The recipient can freely dispose of this credit, invest the money, use it to pay off a mortgage or finance an expensive hobby. When calculating the annual capital income available from the lump-sum withdrawal, the expected consumption period and the expected return must be taken into account. The longer the capital is supposed to last and the lower the expected return on the invested capital, the lower the maximum annual capital withdrawal should be for the same return (see Figure 4). The overall tax burden is generally significantly lower in the case of a complete lump-sum withdrawal than in the case of for a pension withdrawal: More wealth taxes are incurred, but this is more than offset by the reduction in income taxes. For people with high retirement assets, the tax burden should definitely be taken into account when deciding between a lump sum and a pension, especially in regions with high income taxes.

Lump-sum withdrawal requires a comfortable asset situation

The overall financial assessment must be made for the specific case – taking into account any other assets that may be available, such as real estate or equity interests. Due to regional differences in the burden of income, lump-sum withdrawal and wealth taxes, the income available in old age also depends on the place of residence.[18] Since a capital withdrawal strategy is based on various unknowns, these values should be chosen carefully, especially if the capital income is to cover a considerable part of the cost of living. In addition, it is advantageous if there is already a certain amount of experience with investments before retirement. Overall, lump-sum withdrawals require a very comfortable asset situation so that the financial resources are not used up too early. Longevity is a financial risk in this context. Up to a pension fund capital of CHF 500,000, pension withdrawal is generally recommended. If a partial lump-sum withdrawal is intended, there is a rule of thumb according to which the pension together with the AHV and other regular long-term income (for example rental income or insurance payments) should cover fixed costs. The remaining amount can then be drawn as capital.

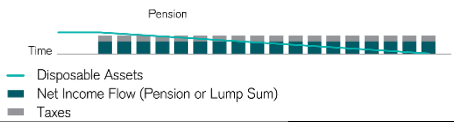
Individual assessment of the advantages and disadvantages of the various solutions recommended

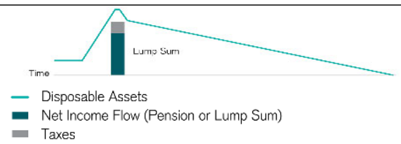
Not least because of the uncertainties outlined in the assessment of the financial aspects, the specific case should be considered carefully. For example, very good health and a high life expectancy clearly speak in favor of drawing a pension. Family circumstances, the desire to influence investments or the need for regular income are further aspects that must be considered and prioritized on an individual basis (see overview "Comparison of pension and capital"). In addition to the personal situation, legal and regulatory framework conditions must be taken into account. Alongside the applicable laws, the fundamentals of the pension fund regulations are also of central importance. In this context, special mention should be made of lump-sum withdrawal restrictions or deadlines for the application for a lump-sum payout. Finally, the psychological component must

[18] In the study "Occupational pensions: Lump sum or annuity?" (Credit Suisse, August 2018), we estimated the resulting net income after taxes for all municipalities in Switzerland and for a large number of different scenarios. This also took into account the burden of lump-sum withdrawal, income and wealth taxes, which varies from municipality to municipality.

also be taken into account. In the case of a lump-sum withdrawal and corresponding investment of the funds, depending on the strategy selected, there may be greater fluctuations in the value of the investment assets that have to be tolerated. On the other hand, there are of course additional opportunities for returns. If you are more interested in security and a regular income, you may be better off with a pension solution.

Comparison of pension and capital





	Pension	Capital
Security	Lifetime pensions	Capital is used up over years
Income	Regular, until end of life (depending on conversion rate), loss of value due to inflation is not always compensated for	Irregular, depending on investment returns (income or losses possible)
Investment decisions	Made by the pension fund	Made individually
Flexibility	No flexibility	Flexible availability (e.g., mortgage repayment)
Capital consumption	Systematic	According to need
Death (hereditability)	Pension fund pays survivor's pension (usually 50% – 60% for spouse and 20% for children); depending on pension fund also benefits for unmarried survivors	Residual capital comes under the estate
Taxes	Pension 100% taxable	One-off taxation at pension tariff (varies from canton to canton), capital drawn is subject to wealth tax, investment income taxable, capital gains not taxable

Source: Credit Suisse

Plan the staggered withdrawal of retirement capital in good time, ...

If pension benefits from the second or third pillar are drawn as a lump sum, it is important to include the timing of the withdrawal in the planning of retirement. This is because retirement capital is taxed separately from other income at a reduced rate. All lump-sum withdrawals made in a calendar year are taxed together, i.e., any payment of pension fund capital or vested benefits capital in the same year is cumulated with the Pillar 3a credit. In addition, withdrawals by partners in a marriage or registered partnership are also added together. As at the federal level, taxes on lump-sum payouts are subject to a progression in most cantons: high lump-sum payouts are thus taxed proportionately more heavily. For this reason, the staggered withdrawal of capital spread over several years brings considerable tax advantages in many cantons. However, staggered withdrawals must be planned well in advance – not least because tax practice varies widely from canton to canton. Among other things, the following points must be taken into account:

- The capital from the pension fund cannot be withdrawn over several years upon retirement. Partial retirement is an exception. [19]
- Vested benefits accounts and 3a accounts can also only be paid out in full. However, when leaving the pension fund, it is possible to split the benefits between two different vested benefits institutions, and several accounts may also be opened in Pillar 3a. Vested benefits accounts as well as 3a accounts may be drawn up to five years after the normal retirement age. However, in the case of 3a accounts, proof must be provided that employment will continue. For this reason, it is advisable to draw on 3a accounts before ordinary retirement (but no earlier than five years before ordinary AHV retirement age) and any vested benefits accounts thereafter.
- There is another option in the promotion of home ownership for staggered withdrawal of retirement capital: Depending on the situation, it may make sense to withdraw funds from Pillar 3a or the pension fund in order to amortize, renovate or convert one's home. Pillar 3a may be tapped every five years in the promotion of home ownership. Partial withdrawals of the 3a assets are also possible up to five years before reaching the normal retirement age. After that, only the entire assets can be claimed at once. It is therefore worthwhile to maintain several 3a retirement savings accounts. Advance withdrawals from the pension fund are generally possible without restriction until the age of 50. Later, it is either the credit balance that was available in the pension fund at the time of the 50th birthday or half of the current credit balance – the higher amount of both can be used for home ownership. As a rule, advance withdrawals and pledges are permitted up to three

[19] Details on early retirement are given in Credit Suisse (2020), Retirement provision, Early retirement: the path is becoming more difficult

years before normal retirement. However, before using pension assets for home ownership, the financial pension situation should be clarified in detail so that there are no pension gaps in retirement.

... because the tax advantages are considerable, depending on the canton.

The tax advantages resulting from the staggered withdrawal of retirement capital are substantial, depending on the region.[20] In the example below of a married couple, for example, the staggered withdrawal of a total of CHF 800,000 from the pension fund as well as Pillar 3a over four years can save between CHF 27,050 and CHF 34,312 in the main cantons of Valais, Basel-Landschaft and Schwyz (see Figure 5). The cantons of Glarus, Obwalden, St. Gallen, Thurgau and Uri have a uniform tax rate regardless of the amount of the lump-sum withdrawal. In these cantons, the advantage is smaller in the case of a staggered withdrawal, since only the federal share is subject to progression there. If a lot of capital has been saved, a change of residence to a region with lower payout taxes may also be an option, depending on the personal situation. This can be relevant if there is a desire to move to a vacation home or a smaller apartment. In this case, however, one's life must actually be moved to the new place of residence and remain there for a certain period of time. Some cantons limit the maximum permissible number of lump-sum withdrawals to two or three. For the individual case, it must therefore be clarified whether the desired staggering is permissible.

Figure 5: Large tax savings potential through staggered lump-sum withdrawals

Lump-sum withdrawal taxes for withdrawals staggered over four years (e.g., CHF 50,000 as well as CHF 100,000 from Pillar 3a, CHF 250,000 as well as CHF 400,000 from the second pillar) versus a one-off lump-sum withdrawal of the total of CHF 800,000; married couple, cantonal capitals; 2022

Disclaimer: See footnote 20

Source: TaxWare, Credit Suisse

[20] The tax treatment depends on the individual circumstances of each client and may change over time. This document does not contain tax advice of any kind. General tax-related information contained in this document is not a substitute for comprehensive personal tax advice. Consult a professional tax advisor if you feel it is necessary.

Important Information

This report represents the views of the Investment Strategy Department of CS and has not been prepared in accordance with the legal requirements designed to promote the independence of investment research. It is not a product of the Credit Suisse Research Department even if it references published research recommendations. CS has policies in place to manage conflicts of interest including policies relating to dealing ahead of the dissemination of investment research. These policies do not apply to the views of Investment Strategists contained in this report. Please find further important information at the end of this material. Singapore: For accredited investors only. Hong Kong: For professional investors only. Australia: For wholesale clients only.

Risk Warning

Every investment involves risk, especially with regard to fluctuations in value and return. If an investment is denominated in a currency other than your base currency, changes in the rate of exchange may have an adverse effect on value, price or income.

This document may include information on investments that involve special risks. You should seek the advice of your independent financial advisor prior to taking any investment decisions based on this document or for any necessary explanation of its contents. Further information is also available in the information brochure "Risks Involved in Trading Financial Instruments" available from the Swiss Bankers Association.

Past performance is not an indicator of future performance. Performance can be affected by commissions, fees or other charges as well as exchange rate fluctuations.

Financial market risks

Historical returns and financial market scenarios are no reliable indicators of future performance. The price and value of investments mentioned and any income that might accrue could fall or rise or fluctuate. You should consult with such advisor(s) as you consider necessary to assist you in making these determinations.
Investments may have no public market or only a restricted secondary market. Where a secondary market exists, it is not possible to predict the price at which investments will trade in the market or whether such market will be liquid or illiquid.

Emerging markets

Where this document relates to emerging markets, you should be aware that there are uncertainties and risks associated with investments and transactions in various types of investments of, or related or linked to, issuers and obligors incorporated, based or principally engaged in business in emerging markets countries. Investments related to emerging markets countries may be considered speculative, and their prices will be much more volatile than those in the more developed countries of the world. Investments in emerging markets investments should be made only by sophisticated investors or experienced professionals who have independent knowledge of the relevant markets, are able to consider and weigh the various risks presented by such investments, and have the financial resources necessary to bear the substantial risk of loss of investment in such investments. It is your responsibility to manage the risks which arise as a result of investing in emerging markets investments and the allocation of assets in your portfolio. You should seek advice from your own advisers with regard to the various risks and factors to be considered when investing in an emerging markets investment.

Alternative investments

Hedge funds are not subject to the numerous investor protection regulations that apply to regulated authorized collective investments and hedge fund managers are largely unregulated. Hedge funds are not limited to any particular investment discipline or trading strategy, and seek to profit in all kinds of markets by using leverage, derivatives, and complex speculative investment strategies that may increase the risk of investment loss.
Commodity transactions carry a high degree of risk, including the loss of the entire investment, and may not be suitable for many private investors. The performance of such investments depends on unpredictable factors such as natural catastrophes, climate influences, hauling capacities, political unrest, seasonal fluctuations and strong influences of rolling-forward, particularly in futures and indices.
Investors in real estate are exposed to liquidity, foreign currency and other risks, including cyclical risk, rental and local market risk as well as environmental risk, and changes to the legal situation.

Private Equity

Private Equity (hereafter "PE") means private equity capital investment in companies that are not traded publicly (i.e. are not listed on a stock exchange), they are complex, usually illiquid and long-lasting. Investments in a PE fund generally involve a significant degree of financial and/or business risk. Investments in private equity funds are not principal-protected nor guaranteed. Investors will be required to meet capital calls of investments over an extended period of time. Failure to do so may traditionally result in the forfeiture of a portion or the entirety of the capital account, forego any future income or gains on investments made prior to such default and among other things, lose any rights to participate in future investments or forced to sell their investments at a very low price, much lower than secondary market valuations. Companies or funds may be highly leveraged and therefore may be more sensitive to adverse business and/or financial developments or economic factors. Such investments may face intense competition, changing business or economic conditions or other developments that may adversely affect their performance.

Interest rate and credit risks

The retention of value of a bond is dependent on the creditworthiness of the Issuer and/or Guarantor (as applicable), which may change over the term of the bond. In the event of default by the Issuer and/or Guarantor of the bond, the bond or any income derived from it is not guaranteed and you may get back none of, or less than, what was originally invested.

Investment Strategy Department

Investment Strategists are responsible for multi-asset class strategy formation and subsequent implementation in CS's discretionary and advisory businesses. If shown, Model Portfolios are provided for illustrative purposes only. Your asset allocation, portfolio weightings and performance may look significantly different based on your particular circumstances and risk tolerance. Opinions and views of Investment Strategists may be different from those expressed by other Departments at CS. Investment Strategist views may change at any time without notice and with no obligation to update. CS is under no obligation to ensure that such updates are brought to your attention.

From time to time, Investment Strategists may reference previously published Research articles, including recommendations and rating changes collated in the form of lists. The recommendations contained herein are extracts and/or references to previously published recommendations by Credit Suisse Research. For equities, this relates to the respective Company Note or Company Summary of the issuer. Recommendations for bonds can be found within the respective Research Alert (bonds) publication or Institutional Research Flash/Alert– Credit Update Switzerland. These items are available on request or via online banking.

Disclosures are available from

https://www.credit-suisse.com/disclosure

Global disclaimer / Important information

The information provided herein constitutes marketing material; it is not investment research. This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject CS to any registration or licensing requirement within such jurisdiction.

References in this report to CS include Credit Suisse AG, the Swiss bank, its subsidiaries and affiliates. For more information on our structure, please use the following link: https://www.credit-suisse.com

NO DISTRIBUTION, SOLICITATION, OR ADVICE: This document is provided for information and illustrative purposes and is intended for your use only. It is not a solicitation, offer or recommendation to buy or sell any security or other financial instrument. Any information including facts, opinions or quotations, may be condensed or summarized and is expressed as of the date of writing. The information contained in this document has been provided as a general market commentary only and does not constitute any form of regulated investment research financial advice, legal, tax or other regulated service. It does not take into account the financial objectives, situation or needs of any persons, which are necessary considerations before making any investment decision. You should seek the advice of your independent financial advisor prior to taking any investment decisions based on this document or for any necessary explanation of its contents. This document is intended only to provide observations and views of CS at the date of writing, regardless of the date on which you receive or access the information. Observations and views contained in this document may be different from those expressed by other Departments at CS and may change at any time without notice and with no obligation to update. CS is under no obligation to ensure that such updates are brought to your attention. FORECASTS & ESTIMATES: Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. To the extent that this report contains statements about future performance, such statements are forward looking and subject to a number of risks and uncertainties. Unless indicated to the contrary, all figures are unaudited. All valuations mentioned herein are subject to CS valuation policies and procedures. CONFLICTS: CS reserves the right to remedy any errors that may be present in this report. CS, its affiliates and/or their employees may have a position or holding, or other material interest or effect transactions in any securities mentioned or options thereon, or other investments related thereto and from time to time may add to or dispose of such investments. CS may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investments listed in this report or a related investment to any company or issuer mentioned. Some investments referred to in this report will be offered by a single entity or an associate of CS or CS may be the only market maker in such investments. CS is involved in many businesses that relate to companies mentioned in this report. These businesses include specialized trading, risk arbitrage, market making, and other proprietary trading. TAX: Nothing in this report constitutes investment, legal, accounting or tax advice. CS does not advise on the tax consequences of investments and you are advised to contact an independent tax advisor. The levels and basis of taxation are dependent on individual circumstances and are subject to change. SOURCES: Information and opinions presented in this report have been obtained or derived from sources which in the opinion of CS are reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for a loss arising from the use of this report. WEBSITES: This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed the linked site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of the linked site does not in any way form part of this report. Accessing such a website or following such a link through this report or CS's website shall be at your own risk. DATA PRIVACY: Your Personal Data will be processed in accordance with the Credit Suisse privacy statement accessible at your domicile through the official Credit Suisse website
https://www.credit-suisse.com
In order to provide you with marketing materials concerning our products and services, Credit Suisse Group AG and its subsidiaries may process your basic Personal Data (i.e. contact details such as name, e-mail address) until you notify us that you no longer wish to receive them. You can opt out from receiving these materials at any time by informing your Relationship Manager.

Distributing entities

Except otherwise specified herein, this report is distributed by Credit Suisse AG, a Swiss bank, authorized and regulated by the Swiss Financial Market Supervisory Authority Bahrain: This report is distributed by Credit Suisse AG, Bahrain Branch, a branch of Credit Suisse AG, Zurich/Switzerland, duly authorized and regulated by the Central Bank of Bahrain (CBB) as an Investment Business Firm Category 2. Related financial services or products are only made available to Accredited Investors, as defined by the CBB, and are not intended for any other persons. The Central Bank of Bahrain has not reviewed, nor has it approved, this document or the marketing of any investment vehicle referred to herein in the Kingdom of Bahrain and is not responsible for the performance of any such investment vehicle. Credit Suisse AG, Bahrain Branch is located at Level 21, East Tower, Bahrain World Trade Centre, Manama, Kingdom of Bahrain. Brazil: This report is distributed in Brazil by Credit Suisse (Brasil) S.A. Corretora de Títulos e Valores Mobiliários or its affiliates. Chile: This report is distributed by Credit Suisse Agencia de Valores (Chile) Limitada, a branch of Credit Suisse AG (incorporated in the Canton of Zurich), regulated by the Chilean Financial Market Commission. Neither the issuer nor the securities have been registered with the Financial Market Commission of Chile (Comisión para el Mercado Financiero) pursuant to Law no. 18.045, the Ley de Mercado de Valores, and regulations thereunder, so they may not be offered or sold publicly in Chile. This document does not constitute an offer of, or an invitation to subscribe for or purchase, the securities in the Republic of Chile, other than to individually identified investors pursuant to a private offering within the meaning of article 4 of the Ley de Mercado de Valores (an offer that is not "addressed to the public in general or to a certain sector or specific group of the public"). DIFC: This information is being distributed by Credit Suisse AG (DIFC Branch). Credit Suisse AG (DIFC Branch) is licensed and regulated by the Dubai Financial Services Authority ("DFSA"). Related financial services or products are only made available to Professional Clients or Market Counterparties, as defined by the DFSA and are not intended for any other persons. Credit Suisse AG (DIFC Branch) is located on Level 9 East, The Gate Building, DIFC, Dubai, United Arab Emirates. France: This report is distributed by Credit Suisse (Luxembourg) S.A. Succursale en France (the "France branch"), which is a branch of Credit Suisse (Luxembourg) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. The France branch is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), and of the French supervisory authorities, the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and the Autorité des Marchés Financiers (AMF). Germany: This report is distributed by Credit Suisse (Deutschland) Aktiengesellschaft regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin"). Guernsey: This report is distributed by Credit Suisse AG Guernsey Branch, a branch of Credit Suisse AG (incorporated in the Canton of Zurich), with its place of business at Helvetia Court, Les Echelons, South Esplanade, St Peter Port, Guernsey. Credit Suisse AG Guernsey Branch is wholly owned by Credit Suisse AG and regulated by the Guernsey Financial Services Commission. Copies of the latest audited accounts of Credit Suisse AG are available on request. India: This report is distributed by Credit Suisse Securities (India) Private Limited (CIN no. U67120MH1996PTC104392), regulated by the Securities and Exchange Board of India as Research Analyst (registration no. INH 000001030), as Portfolio Manager (registration no. INP000002478) and as Stock Broker (registration no. INZ000248233), having registered address at 9th Floor, Ceejay House, Dr. Annie Besant Road, Worli, Mumbai – 400 018, India, T- +91-22 6777 3777. Israel: If distributed by Credit Suisse Financial Services (Israel) Ltd. in Israel: This document is distributed by Credit Suisse Financial Services (Israel) Ltd. Credit Suisse AG, including the services offered in Israel, is not supervised by the Supervisor of Banks at the Bank of Israel, but by the competent banking supervision authority in Switzerland. Credit Suisse Financial Services (Israel) Ltd. is a licensed investment marketer in Israel and thus, its investment marketing activities are supervised by the Israel Securities Authority. Italy: This report is distributed in Italy by Credit Suisse (Italy) S.p.A., a bank incorporated and registered under Italian law subject to the supervision and control of Banca d'Italia and CONSOB. Lebanon: This report is distributed by Credit Suisse (Lebanon) Finance SAL ("CSLF"), a financial institution incorporated in Lebanon and regulated by the Central Bank of Lebanon ("CBL") and having a financial institution license number 42. Credit Suisse (Lebanon) Finance SAL is subject to the CBL's laws and circulars as well as the laws and regulations of the Capital Markets Authority of Lebanon ("CMA"). CSLF is a subsidiary of Credit Suisse AG and part of the Credit Suisse Group (CS). The CMA does not accept any responsibility for the content of the information included in this report, including the accuracy or completeness of such information. The liability for the content of this report lies with the issuer, its directors and other persons, such as experts, whose opinions are included in the report with their consent. The CMA has also not assessed the suitability of the investment for any particular investor or type of investor. It is hereby expressly understood and acknowledged that investments in financial markets may involve a high degree of complexity and risk of loss in value and may not be suitable to all investors. The suitability assessment performed by CSLF with respect to this investment will be undertaken based on information that the investor would have provided to CSLF as at the date of such assessment and in accordance with Credit Suisse internal policies and processes. It is understood that the English language will be used in all communication and documentation provided by CS and/or CSLF. By accepting to invest in the product, the investor expressly and irrevocably confirms that he fully understands, and has no objection to the use of the English language. Luxembourg: This report is distributed by Credit Suisse (Luxembourg) S.A., a duly autho- rized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. Credit Suisse (Luxembourg) S.A. is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF). Mexico: This document represents the view of the person who provides his/her services to C. Suisse Asesoría México, S.A. de C.V. ("C. Suisse As- esoría") and/or Banco Credit Suisse (México), S.A., Institución de Banca Múltiple, Grupo Financiero Credit Suisse (México) ("Banco CS") so that both C. Suisse Asesoría and Banco CS reserve the right to change their mind at any time not assuming any liability in this regard. This document is distributed for informational purposes only and does not imply a personal recommendation or suggestion, nor the invitation to celebrate any operation and does not replace the communication you have with your executive in relation to C. Suisse Asesoría and/or Banco CS prior to taking any investment decision. C. Suisse Asesoría and/or Banco CS does not assume any responsibility for investment decisions based on information contained in the document sent, as the same may not take into account the context of the investment strategy and objectives of particular clients. Prospectus, brochures, investment regimes of investment funds, annual reports or periodic financial information contain all additional useful information for investors. These documents can be obtained free of charge directly from issuers, operators of investment funds, in the Internet page of the stock exchange in which they are listed or through its executive in C. Suisse Asesoría and/or Banco CS. Past performance and the various scenarios of existing markets do not guarantee present or future yields. In the event that the information contained in this document is incomplete, incorrect or unclear, please contact your Executive of C. Suisse Asesoría and/or Banco CS as soon as possible. It is possible that this document may suffer modifications without any responsibility for C. Suisse Asesoría and/or Banco CS. This document is distributed for informational purposes only and is not a substitute for the Operations Reports and/or Account Statements you receive from C. Suisse Asesoría and/or Banco CS in terms of the General Provisions Applicable to Financial Institutions and other Legal Entities that Provide Investment Services issued by the Mexican Banking and Securities Commission ("CNBV"). Given the nature of this document, C. Suisse Asesoría and/or Banco CS does not assume any responsibility derived from the information contained therein. Without prejudice to the fact that the information was obtained from or based on sources believed to be reliable by C. Suisse Asesoría and/or Banco CS, there is no guarantee that the information is either accurate or complete. Banco CS and/or C. Suisse Asesoría does not accept any liability arising from any loss arising from the use of the information contained in the document sent to you. It is recommended that the investor make sure that the information provided is in accordance to his/her personal circumstances and investment profile, in relation to any particular legal, regulatory or fiscal situation, or to obtain independent professional advice. C. Suisse Asesoría México, S.A. de C.V. is an investment adviser created in accordance with the Mexican Securities Market Law ("LMV"), registered with the CNBV under the folio number 30070. C. Suisse Asesoría México, S.A. de C.V. is not part of Grupo Financiero Credit Suisse (México), S.A. de C.V., or any other financial group in Mexico. C. Suisse Asesoría México, S.A. de C.V. is not an independent investment adviser as provided by LMV and other applicable regulations due to its direct relationship with Credit Suisse AG, a foreign financial institution, and its indirect relationship with the entities that make up Grupo Financiero Credit Suisse (México), S.A. de C.V. Netherlands: This report is distributed by Credit Suisse (Luxembourg) S.A., Netherlands Branch (the "Netherlands branch"), which is a branch of Credit Suisse (Luxembourg) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. The Netherlands branch is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), and of the Dutch supervisory authority, De Nederlansche Bank (DNB), and of the Dutch market supervisor, the Autoriteit Financiële Markten (AFM). Portugal: This report is distributed by Credit Suisse (Luxembourg) S.A., Sucursal em Portugal (the "Portugal branch"), which is a branch of Credit Suisse (Luxembourg) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. The Portugal branch is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), and of the Portuguese supervisory authorities, the Banco de Portugal (BdP) and the Comissão do Mercado dos Valores Mobiliários (CMVM). Qatar: This information has been distributed by Credit Suisse (Qatar) L.L.C., which is duly authorized and regulated by the Qatar Financial Centre Regulatory Authority (QFCRA) under QFC License No. 00005. All related financial products or services will only be available to Eligible Counterparties (as defined by the QFCRA) or Business Customers (as defined by the QFCRA), including individuals, who have opted to be classified as a Business Customer, with net assets in excess of QR 4 million, and who have sufficient financial knowledge, experience and understanding to participate in such products and/or services. Therefore, this information must not be delivered to, or relied on by, any other type of individual. Saudi Arabia: This document is distributed by Credit Suisse Saudi Arabia (CR Number 1010228645), duly licensed and regulated by the Saudi Arabian Capital Market Authority pursuant to License Number 08104-37 dated 23/03/1429H corresponding to 21/03/2008AD. Credit Suisse Saudi Arabia's principal place of business is at King Fahad Road, Hay Al Mhamadiya, 12361- 6858 Riyadh, Saudi Arabia. Website: https://www.credit-suisse.com/sa.

Under the Rules on the Offer of Securities and Continuing Obligations, this document may not be distributed in the Kingdom except to such persons as are permitted under the Rules on the Offer of Securities and Continuing Obligations issued by the Capital Market Authority. The Capital Market Authority does not make any representation as to the accuracy or completeness of this document, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorized financial advisor. Under the Investment Fund Regulations, this document may not be distributed in the Kingdom except to such persons as are permitted under the Investment Fund Regulations issued by the Capital Market Authority. The Capital Market Authority does not make any representation as to the accuracy or completeness of this document, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective subscribers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document you should consult an authorized financial adviser. South Africa: This information is being distributed by Credit Suisse AG which is registered as a financial services provider with the Financial Sector Conduct Authority in South Africa with FSP number 9788 and / or by Credit Suisse (UK) Limited, which is registered as a financial services provider with the Financial Sector Conduct Authority in South Africa with FSP number 48779. Spain: This document is a marketing material and is provided by Credit Suisse AG, Sucursal en España, legal entity registered at the Comisión Nacional del Mercado de Valores for information purposes. It is exclusively addressed to the recipient for personal use only and, according to current regulations in force, by no means can it be considered as a security offer, personal investment advice or any general or specific recommendation of products or investment strategies with the aim that you perform any operation. The client shall be deemed responsible, in all cases, for taking whatever decisions on investments or disinvestments, and therefore the client takes all responsibility for the benefits or losses resulting from the operations that the client decides to perform based on the information and opinions included in this document. This document is not the result of a financial analysis or research and therefore, neither it is subject to the current regulations that apply to the production and distribution of financial research, nor its content complies with the legal requirements of independence of financial research. Turkey: The investment information, comments and recommendations contained herein are not within the scope of investment advisory activity. The investment advisory services are provided by the authorized institutions to the persons in a customized manner taking into account the risk and return preferences of the persons. Whereas, the comments and advices included herein are of general nature. Therefore recommendations may not be suitable for your finan- cial status or risk and yield preferences. For this reason, making an investment decision only by relying on the information given herein may not give rise to results that fit your expectations. This report is distributed by Credit Suisse Istanbul Menkul Degerler Anonim Sirketi, regulated by the Capital Markets Board of Turkey, with its registered address at Levazim Mahallesi, Koru Sokak No. 2 Zorlu Center Terasevler No. 61 34340 Besiktas/Istanbul-Turkey. United Kingdom: This material is distributed by Credit Suisse (UK) Limited. Credit Suisse (UK) Limited, is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Where this material is distributed into the United Kingdom by an offshore entity not exempted under the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 the following will apply: To the extent communicated in the United Kingdom ("UK") or capable of having an effect in the UK, this document constitutes a financial promotion which has been approved by Credit Suisse (UK) Limited, which is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority for the conduct of investment business in the UK. The registered address of Credit Suisse (UK) Limited is Five Cabot Square, London, E14 4QR. Please note that the rules under the UK's Financial Services and Markets Act 2000 relating to the protection of retail clients will not be applicable to you and that any potential compensation made available to "eligible claimants" under the UK's Financial Services Compensation Scheme will also not be available to you. Tax treatment depends on the individual circumstances of each client and may be subject to changes in future.

Important regional disclosure information

Pursuant to CVM Resolution No. 20/2021, of February 25, 2021, the author(s) of the report hereby certify(ies) that the views expressed in this report solely and exclusively reflect the personal opinions of the author(s) and have been prepared independently, including with respect to Credit Suisse. Part of the author(s)´s compensation is based on various factors, including the total revenues

of Credit Suisse, but no part of the compensation has been, is, or will be related to the specific recommendations or views expressed in this report. In addition, Credit Suisse declares that: Credit Suisse has provided, and/or may in the future provide investment banking, brokerage, asset management,

commercial banking and other financial services to the subject company/companies or its affiliates, for which they have received or may receive customary

fees and commissions, and which constituted or may constitute relevant financial or commercial interests in relation to the subject company/companies or the subject securities.

UNITED STATES: NEITHER THIS REPORT NOR ANY COPY THEREOF MAY BE SENT, TAKEN INTO OR DISTRIBUTED IN THE UNITED STATES OR TO ANY US PERSON (within the meaning of Regulation S under the US Securities Act of 1933, as amended).

APAC - IMPORTANT NOTICE

The information provided herein constitutes marketing material; it is not investment research. For all, except accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: This material has been prepared by Credit Suisse AG ("Credit Suisse") as general information only. This material is not and does not purport to provide substantive research or analysis and, accordingly, is not investment research or a research recommendation for regulatory purposes. It does not take into account the financial objectives, situation or needs of any person, which are necessary considerations before making any investment decision. The information provided is not intended to provide a sufficient basis on which to make an investment decision and is not a personal recommendation or investment advice. Credit Suisse makes no representation as to the suitability of the products or services specified in this material for any particular investor. It does not constitute an invitation or an offer to any person to subscribe for or purchase any of the products or services specified in this material or to participate in any other transactions. The only legally binding terms are to be found in the applicable product documentation or specific contracts and confirmations prepared by Credit Suisse. For accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: This material has been prepared by Credit Suisse AG ("Credit Suisse") as general information only. This material is not and does not purport to provide substantive research or analysis and, accordingly, is not investment research for regulatory purposes. It does not take into account the financial objectives, situation or needs of any person, which are necessary considerations before making any investment decision. Credit Suisse makes no representation as to the appropriateness of the products or services specified in this material for any particular investor. It does not constitute an invitation or an offer to any person to subscribe for or purchase any of the products or services specified in this material or to participate in any other transactions. The only legally binding terms are to be found in the applicable product documentation or specific contracts and confirmations prepared by Credit Suisse. For all: In connection with the products specified in this material, Credit Suisse and/or its affiliates may:

(i) have had a previous role in arranging or providing financing to the subject entities;
(ii) be a counterparty in any subsequent transaction in connection with the subject entities; or
(iii) pay, or may have paid, or receive, or may have received, one-time or recurring remuneration from the entities specified in this material, as part of its/their compensation. These payments may be paid to or received from third parties.

Credit Suisse and/or its affiliates (including their respective officers, directors and employees) may be, or may have been, involved in other transactions with the subject entities specified in this material or other parties specified in this material which are not disclosed in this material. Credit Suisse, for itself and on behalf of each of its affiliates, reserves the right to, provide and continue to provide services, and deal and continue to deal with the subject entities of the products specified in this material or other parties in connection with any product specified in this material. Credit Suisse or its affiliates may also hold, or may be holding, trading positions in the share capital of any of the subject entities specified in this material.

For all, except accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: A Credit Suisse affiliate may have acted upon the information and analysis contained in this material before being made available to the recipient. A Credit Suisse affiliate may, to the extent permitted by law, participate or invest in other financing transactions with the issuer of any securities referred to herein, perform services or solicit business from such issuers, or have a position or effect transactions in the securities or options thereof. To the fullest extent permitted by law, Credit Suisse and its affiliates and each of their respective directors, employees and consultants do not accept any liability arising from an error or omission in this material or for any direct, indirect, incidental, specific or consequential loss and/or damage suffered by the recipient of this material or any other person from the use of or reliance on the information set out in this material. None of Credit Suisse or its affiliates (or their respective directors, officers, employees or advisers) makes any warranty or representation as to the accuracy, reliability and/or completeness of the information set out in this material. The information contained in this material has been provided as a general market commentary only and does not constitute any form of regulated financial advice, legal, tax or other regulated service. Observations and views contained in this material may be different from, or inconsistent with, the observations and views of Credit Suisse's Research analysts, other divisions or the proprietary positions of Credit Suisse. Credit Suisse is under no obligation to update, notify or provide any additional information to any person if Credit Suisse becomes aware of any inaccuracy, incompleteness or change in the information contained in the material. To the extent that this material contains statements about future performance, such statements are forward looking and subject to a number of risks and uncertainties. Past performance is not a reliable indicator of future performance.

For accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: A Credit Suisse affiliate may have acted upon the information and analysis contained in this material before being made available to the recipient. A Credit Suisse affiliate may, to the extent permitted by law, participate or invest in other financing transactions with the issuer of any securities referred to herein, perform services or solicit business from such issuers, or have a position or effect transactions in the securities or options thereof. To the fullest extent permitted by law, Credit Suisse and its affiliates and each of their respective directors, employees and consultants do not accept any liability arising from an error or omission in this material or for any direct, indirect, incidental, specific or consequential loss and/or damage suffered by the recipient of this material or any other person from the use of or reliance on the information set out in this material. None of Credit Suisse or its affiliates (or their respective directors, officers, employees or advisers) makes any warranty or representation as to the accuracy, reliability and/ or completeness of the information set out in this material. The information contained in this material has been provided as a general market commentary only and does not constitute any form of legal, tax or other regulated service. Observations and views contained in this material may be different from, or inconsistent with, the observations and views of Credit Suisse's Research analysts, other divisions or the proprietary positions of Credit Suisse. Credit Suisse is under no obligation to update, notify or provide any additional information to any person if Credit Suisse becomes aware of any inaccuracy, incompleteness or change in the information contained in the material. To the extent that this material contains statements about future performance, such statements are forward looking and subject to a number of risks and uncertainties. Past performance is not a reliable indicator of future performance. For all: This material is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of, or is located in, any jurisdiction where such distribution, publication, availability or use would be contrary to applicable law or regulation, or which would subject Credit Suisse and/or its subsidiaries or affiliates to any registration or licensing requirement within such jurisdiction. Materials have been furnished to the recipient and should not be redistributed without the express prior written consent of Credit Suisse. For further information, please contact your Relationship Manager. To the extent that this material contains an appendix comprising research reports, the following additional notice applies to such appendix.

ADDITIONAL IMPORTANT NOTICE FOR APPENDIX

The reports in the Appendix ("Reports") have been authored by members of the Credit Suisse Research department, and the information and opinions expressed therein were as of the date of writing and are subject to change without notice. Views expressed in respect of a particular security in the Reports may be different from, or inconsistent with, the observations and views of the Credit Suisse Research department of the Investment Banking division due to the differences in evaluation criteria. These Reports have been previously published by Credit Suisse Research on the web:

Credit Suisse does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that Credit Suisse may have a conflict of interest that could affect the objectivity of these Reports.

For all, except accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: Credit Suisse may not have taken any steps to ensure that the securities referred to in these Reports are suitable for any particular investor. Credit Suisse will not treat recipients of the Reports as its customers by virtue of their receiving the Reports. For accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: Credit Suisse may not have taken any steps to ensure that the securities referred to in these Reports are appropriate for any particular investor. Credit Suisse will not treat recipients of the Reports as its customers by virtue of their receiving the Reports. For all: For a discussion of the risks of investing in the securities mentioned in the Reports, please refer to the following Internet link:
https://research.credit-suisse.com/riskdisclosure

For information regarding disclosure information on Credit Suisse Investment Banking rated companies mentioned in this report, please refer to the Investment Banking division disclosure site at:

https://rave.credit-suisse.com/disclosures

For further information, including disclosures with respect to any other issuers, please refer to the Credit Suisse Global Research Disclosure site at:
https://www.credit-suisse.com/disclosure

AUSTRALIA This material is distributed in Australia by Credit Suisse AG, Sydney Branch solely for information purposes only to persons who are "wholesale clients" (as defined by section 761G(7) of the Corporations Act). Credit Suisse AG, Sydney Branch does not guarantee the performance of, nor make any assurances with respect to the performance of any financial product referred herein. In Australia, Credit Suisse Group entities, other than Credit Suisse AG, Sydney Branch, are not authorized deposit-taking institutions for the purposes of the Banking Act 1959 (Cth.) and their obligations do not represent deposits or other liabilities of Credit Suisse AG, Sydney Branch. Credit Suisse AG, Sydney Branch does not guarantee or otherwise provide assurance in respect of the obligations of such Credit Suisse entities or the funds. HONG KONG: This material is distributed in Hong Kong by Credit Suisse AG, Hong Kong Branch, an Authorized Institution regulated by the Hong Kong Monetary Authority and a Registered Institution regulated by the Securities and Futures Commission, and was prepared in compliance with section 16 of the "Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission." The contents of this material have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to any offer. If you are in any doubt about any of the contents of this material, you should obtain independent professional advice. No one may have issued or had in its possession for the purposes of issue, or issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or material relating to this product, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than where this product is or is intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made thereunder. SINGAPORE: This material is distributed in Singapore by Credit Suisse AG, Singapore Branch, which is licensed by the Monetary Authority of Singapore under the Banking Act (Cap. 19) to carry on banking business. This report has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (each as defined under the Financial Advisers Regulations ("FAR")) only. Credit Suisse AG, Singapore Branch may distribute reports produced by its foreign entities or affiliates pursuant to an arrangement under Regulation 32C of the FAR. Singapore recipients should contact Credit Suisse AG, Singapore Branch at +65-6212-2000 for matters arising from, or in connection with, this report. By virtue of your status as an institutional investor, accredited investor or expert investor, Credit Suisse AG, Singapore Branch is exempted from complying with certain requirements under the Financial Advisers Act, Chapter 110 of Singapore (the "FAA"), the FAR and the relevant Notices and Guidelines issued thereunder, in respect of any financial advisory service which Credit Suisse AG, Singapore branch may provide to you. These include exemptions from complying with:

i) Section 25 of the FAA (pursuant to Regulation 33(1) of the FAR
ii) Section 27 of the FAA (pursuant to Regulation 34(1) of the FAR); and
iii) Section 36 of the FAA (pursuant to Regulation 35(1) of the FAR).

Singapore recipients should contact Credit Suisse AG, Singapore Branch for any matters arising from, or in connection with, this material. If you have any queries/objections relating to the receipt of marketing materials from us, please contact our Data Protection Officer at datapro- tectionofficer.pb@credit-suisse.com
(for Credit Suisse AG, HK Branch) or PDPO.SGD@credit-suisse.com (for Credit Suisse AG, SG Branch) or csau.privacyofficer@credit-suisse.com (for Credit Suisse AG, Sydney Branch). (for Credit Suisse AG, HK Branch) or PDPO.SGD@credit-suisse.com (for Credit Suisse AG, SG Branch) or csau.privacyofficer@credit-suisse.com (for Credit Suisse AG, Sydney Branch).

22C014A_IS

Other publications from Credit Suisse

Switzerland Monitor
Q1 2022

The Switzerland Monitor (credit-suisse.com/monitorswitzerland) analyzes and forecasts the development of the Swiss economy.

March 16, 2022

Pension Fund Study 2021
Swiss pension funds invest more sustainably

Investing with ESG criteria has also become increasingly important for Swiss pension funds. Based on survey data, among other things, the study examines whether and why Swiss pension funds invest sustainably, and what key challenges they face. (credit-suisse.com/pensionfundstudy)

November 30, 2021

Retirement provision
Early retirement: the path is becoming more difficult

The study examines the retirement behavior of the Swiss population. Early retirement is widespread, but results in significant pension losses. In view of declining pension fund benefits, the path to early retirement is likely to become even more difficult in the future. (credit-suisse.com/retirementstudy)

September 22, 2020

Occupational Pensions:
A growing gap between generations

The study analyzes the central challenges in the second pillar from the perspective of pension funds and insured persons. Comparing generations shows that, without countermeasures, the pension situation will deteriorate considerably in the future. The study sheds light on possible reform measures and shows how current employees can already improve their pension situation.

October 9, 2019

CREDIT SUISSE

CREDIT SUISSE
Investment Solutions & Sustainability
Postfach 300
CH-8070 Zürich
credit-suisse.com