



Pension Funds Novartis

What's good to know for your personal financial & retirement planning

Information events for Novartis associates

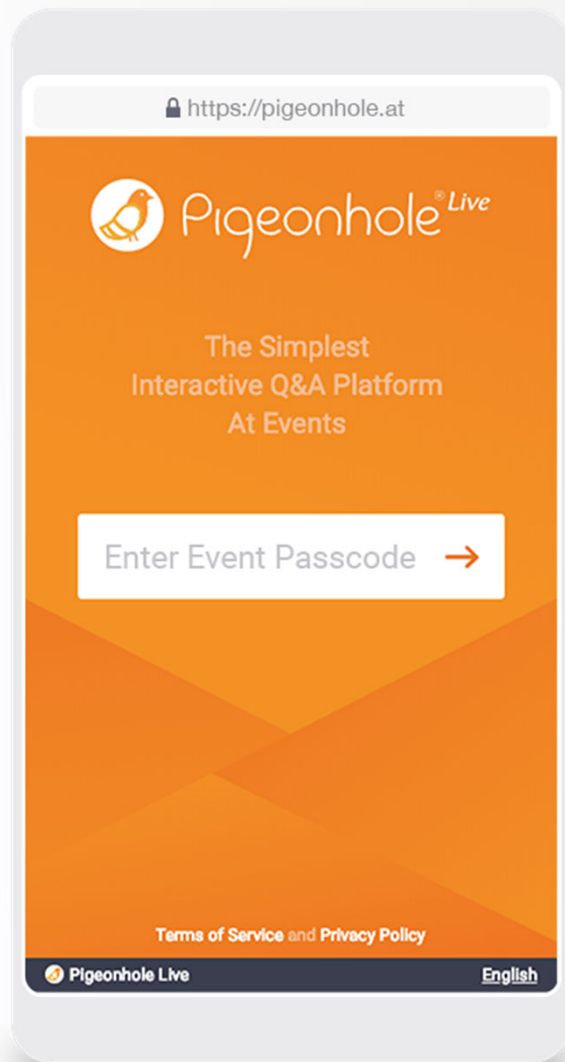
30 March / 1 June 2023

 **NOVARTIS** | Reimagining Medicine

Agenda

- Flexibility is key: The Novartis pension plans in Switzerland
 - The Novartis defined contributions concept at a glance
 - Retirement credits: 3 contribution scales to choose from
 - Investment allocation: 4 basic strategies for your selection
 - New: «Sustainable» investment strategy as a 5th option
 - The LifeCycle model as a 6th strategy: The way it works
- Presentation Vermögenszentrum (VZ)
 - Key factors of the risk structure
 - Impact of the risk structure
 - Payout of retirement benefits





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Flexibility is Key: The Swiss Pension Plans

- The retirement credits are age-related, with members being able to choose between three contribution scales (**“Standard”**, **“Standard Minus”** and **“Standard Plus”**).
- The funding arrangements are based on a **2:1 ratio of employer and employee contributions** (if the “Standard” contribution scale is chosen).
- **Early retirement** (also partially) is possible from age 60 onwards.
- An **additional savings plan** has been set up for all insured members aged 40 or older, based on equal contributions from associates/employer.
- At retirement, insured members may select a **lifelong survivor’s pension** for their partner in the same amount as the retirement pension („joint life“ annuity).

Flexibility is Key: The Swiss Pension Plans (2)

- **Investment strategy:** If your insured salary is partly covered in Pension Fund 2, then for your Pension Fund 2 retirement account you can choose from a variety of investment options.
- To make this possible, the Novartis Pension Fund had to be split into two separate legal entities, i.e., the **Pension Fund 1** and **Pension Fund 2**.
- As from January 2016, the **Management Pension Fund** also offers a choice of contribution scales and investment strategies.

The Novartis defined contributions concept at a glance

Risk 0 – 220'000	150'000 – 220'000	Novartis Pension Fund 2 (PF 2) <ul style="list-style-type: none">• Standard contributions of employer and insured members in ratio 2 : 1• Savings process in defined contributions plan (interest = investment performance)• Retirement benefits: lump sum• Risk benefits (death/disability): accrued capital, at least 400% of insured salary• Individual choice of investment strategy
	Savings 0 – 150'000	Novartis Pension Fund 1 (PF 1) <ul style="list-style-type: none">• Standard contributions of employer and insured members in ratio 2 : 1• Savings process in defined contributions plan (minimum interest 0%)• Retirement benefits: pension with sustainable conversion ratio / higher lump sum option (max. 50%)• Risk benefits (death/disability) in the form of a pension• Additional savings plan from age 40

3 contribution scales to choose from

e.g., Pension Fund Novartis 1

Age	Retirement credits ("Standard") % of insured salary			Standard plus	Standard minus
	Member	Novartis	Total	Member	Member
25 – 29	4.25	8.50	12.75	6.25	2.25
30 – 34	4.90	9.80	14.70	6.90	2.90
35 – 39	5.55	11.10	16.65	7.55	3.55
40 – 44	6.20	12.40	18.60	8.20	4.20
45 – 49	7.50	15.00	22.50	9.50	5.50
50 – 54	8.15	16.30	24.45	10.15	6.15
55 – 59	8.80	17.60	26.40	10.80	6.80
60 – 65	9.45	18.90	28.35	11.45	7.45

A further credit of **3.50%** applies to all members aged 40 and over. This is paid into an **additional savings plan** within Pension Fund 1. Half of this amount (i.e., 1.75%) is contributed by Novartis and half by members. Further contributions are paid by members and by Novartis towards **risk benefits** (disability & death)

Asset allocation: 4 basic strategies for selection

	Money Market	Bonds ^{Plus}	Equity 25 ^{Plus}	Equity 40 ^{Plus}
Cash	100.0%			
	100.0%			
Fixed income		80.0%	60.0%	45.0%
Bonds CHF Foreign		10.0%	10.0%	5.0%
Bonds Global (hCHF)		50.0%	30.0%	30.0%
Corporate Bonds Global (hCHF)		20.0%	20.0%	10.0%
Equity			25.0%	40.0%
Equity Switzerland			5.0%	10.0%
Equity World			17.0%	20.0%
Equity World (hCHF)				5.0%
Equity Emerging Markets			3.0%	5.0%
Real Estate		20.0%	15.0%	15.0%
Real Estate Switzerland		20.0%	15.0%	10.0%
Real Estate World (hCHF)				5.0%
Total	100.0%	100.0%	100.0%	100.0%
FX Exposure	0.0%	0.0%	20.0%	25.0%

New: Sustainable investment strategy

Background

- The Pension Fund Novartis (PF1) was among the early adopters of the idea to introduce **Environmental, Social & Governance (ESG) criteria** to its investment strategy almost 20 years ago.
 - The current ESG guidelines are available on the Pension Funds' website:
https://www.pensionskassen-novartis.ch/fileadmin/pkn/Diverses/E_Anlagerichtlinien.pdf
- With regard to Pension Fund Novartis 2 (PF2), all of the current strategies (Money Market, Bonds ^{Plus}, Equity 25 ^{Plus}, Equity 40 ^{Plus} and LifeCycle ^{Plus}) are in conformity with the exclusion list of the **Swiss Association for Responsible Investments (SVVK–ASIR)**.
- In May 2020, we complemented the existing selection with an additional, specifically designed «**ESG Strategy**», sporting similar risk-return characteristics as the Equity 25 ^{Plus} investment option.

Sustainable investment strategy

«Equity 25 ^{ESG}» as a 5th investment option

- The **UBS AST 2 BVG Equity 25 ^{ESG}** investment option joins the existing range of strategies (Money Market, Bonds ^{Plus}, Equity 25 ^{Plus}, Equity 40 ^{Plus} and LifeCycle ^{Plus}) as an additional, particularly sustainable variant.
 - The underlying asset classes of the new strategy follow a multiple research **screening process** in order to make a meaningful contribution to a more sustainable world.
 - The applied **sustainability policies** exclude certain companies and prefer companies with a high ESG score and with a strong climate awareness
 - ... and seek to **vote** consistently in line with recognized ESG-principles.
- The new Equity 25 ^{ESG} investment option has a very similar **risk/return profile** as the existing Equity 25 ^{Plus} strategy,
 - ... with only slightly higher Total expense ratio (TER) and switching costs (dilution levies).

Sustainable investment strategy

«Equity 25 ESG»: Comprehensive policy / approach

Index	ESG - Approach				
	Exclusions	Climate focus	Sustainability	ESG voting	GRESB
MSCI Switzerland IMI Socially Responsible	✓		✓	✓	
Equities Global Climate Aware	✓	✓	✓	✓	
MSCI Emerging Markets Socially Responsible	✓		✓	✓	
Global Bonds Climate Aware	✓	✓			
Global Corporate Bonds Climate Aware	✓	✓	✓		
Swiss Real Estate Securities Selection Passive					✓

Climate Focus: Meaningful carbon reduction and aligned to forward-looking carbon reduction targets

Sustainability: Strategies with sustainability/SI policies playing a significant role in the investment process

ESG-Voting: Seek to vote consistently and in line with UBS governance principles across all portfolios

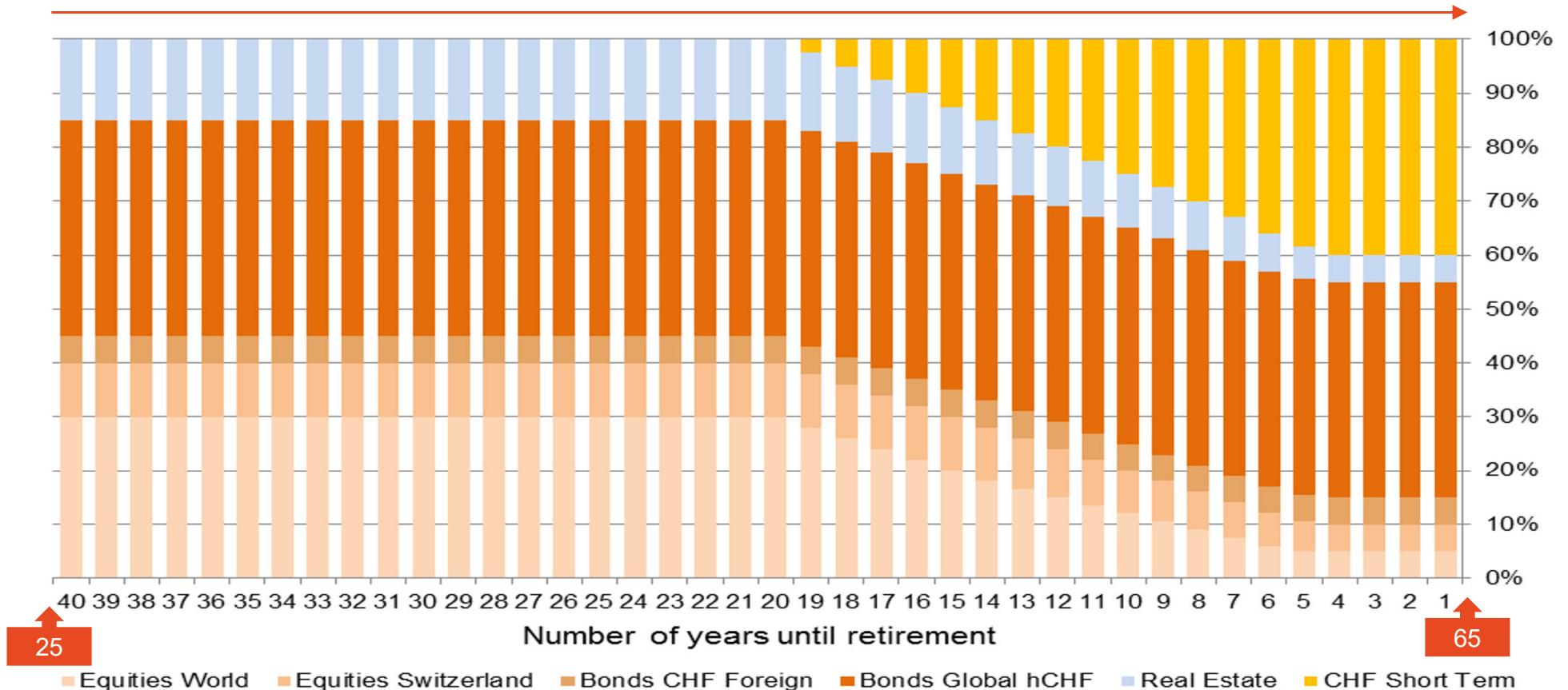
GRESB: Independent organization committed to assessing the environmental, social and governance performance of real estate portfolios across the world. GRESB is now recognized as the leading global sustainability benchmark.

“LifeCycle”-Model as a 6th strategy

- The **LifeCycle** solution works like a kind of “**autopilot**” that automatically factors in the investment horizon and risk.
- The fundamental concept is based on the assumption that the capacity to cope with investment volatility generally decreases the closer one gets to retirement.
- For this reason, the portion of Equities in the portfolio is gradually reduced.
- In view of a smooth implementation, focus was on **simplicity**:
 - Build-up based on the same indexed funds as already used by PF2 and MPF
 - Favorable pricing conditions
 - Reasonably staggered age-brackets so as not to unnecessarily complicate the setup (5-year “vintages” rather than 1 or 10-year spreads)

“LifeCycle”-Model: The way it works

Glide path management: Gradually reducing risk up to the time of retirement





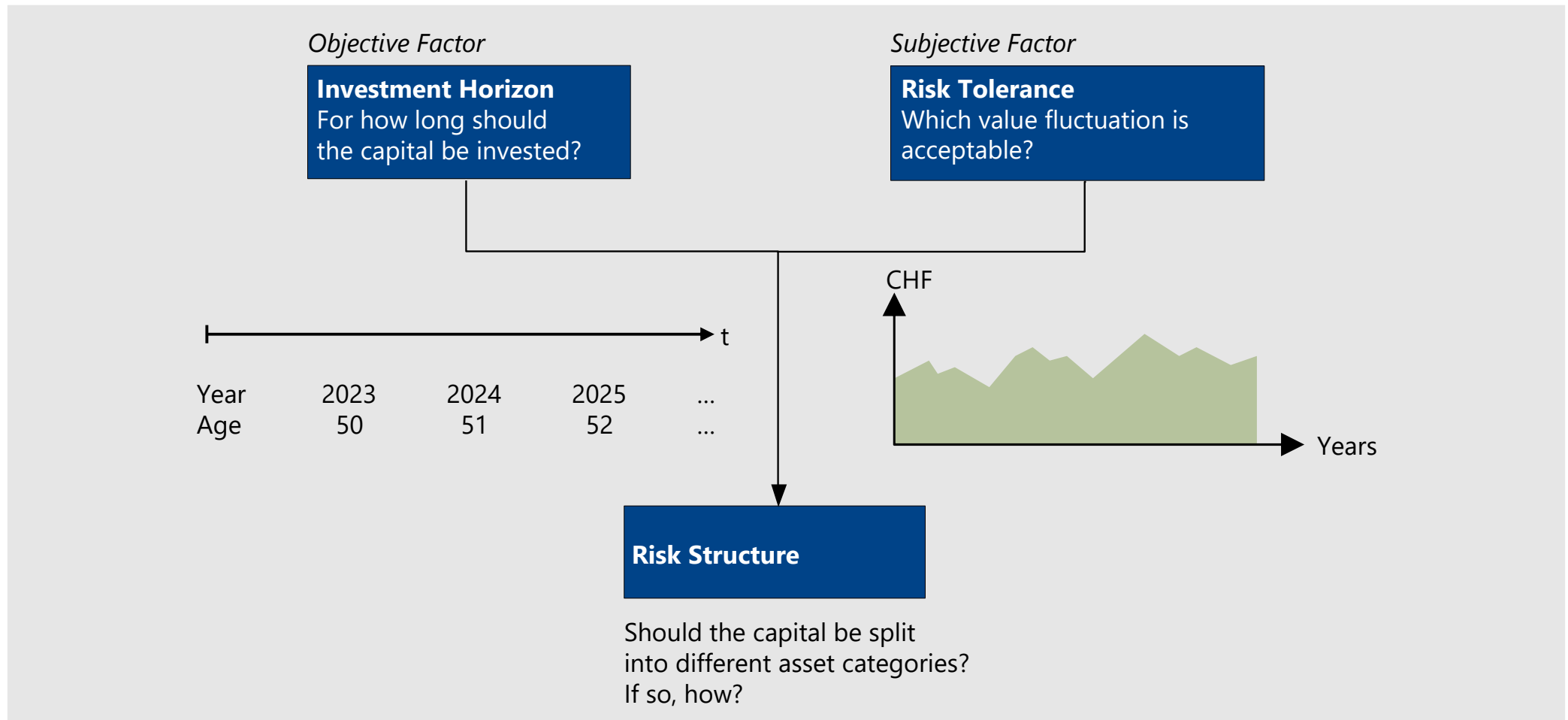
VZ VermögensZentrum



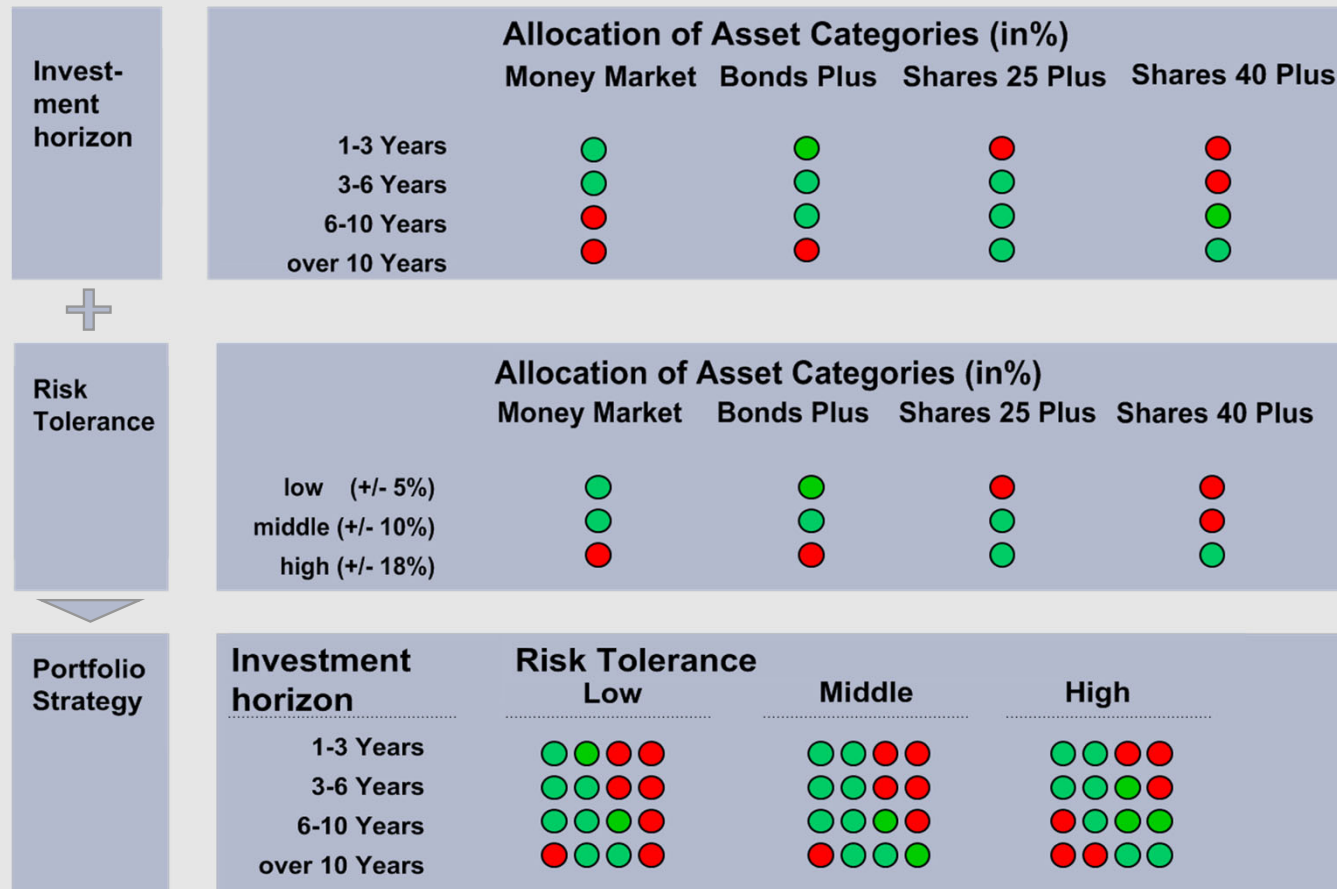
Karl Flubacher, Executive Board Member

Karl Flubacher, MA in Economics and Business Administration, is Associate Partner at VZ VermögensZentrum. He regularly gives public and company-internal seminars. He specializes in sophisticated retirement and inheritance planning strategies.

Definition of Risk Structure

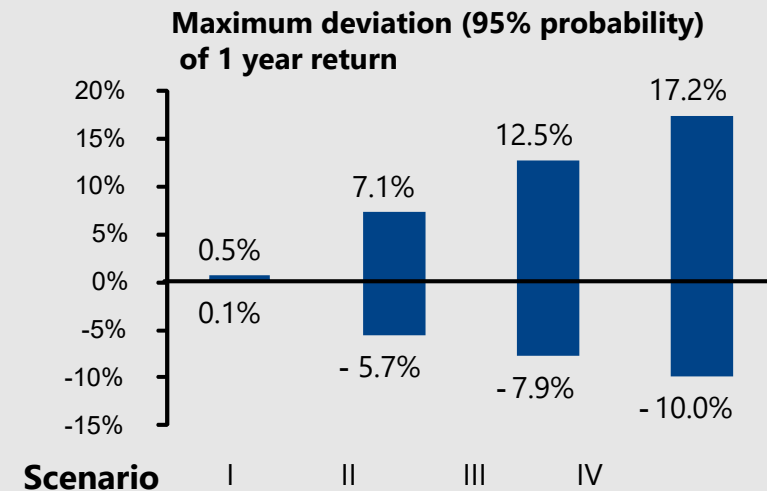
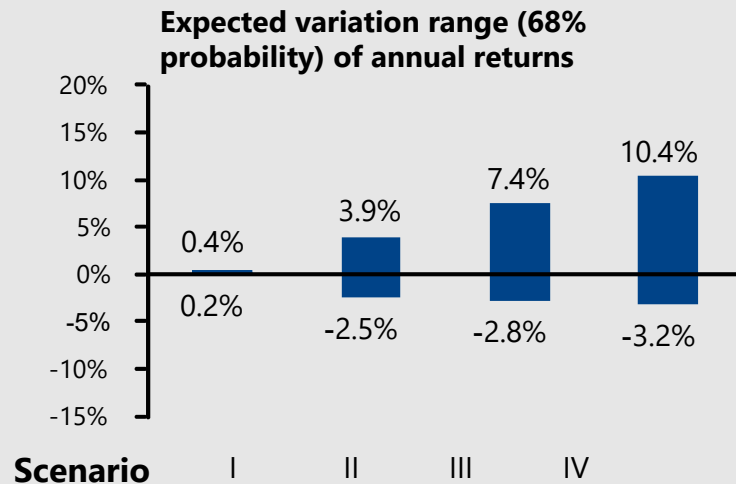


Derivation of the Risk Structure



Expected Return per Portfolio Strategy

Scenario	Strategy	Expected Return	Expected Variation Range		Best Case	Worst Case
I	Money Market	0.3%	0.4%	0.2%	0.5%	0.1%
II	Bonds Plus	0.7%	3.9%	-2.5%	7.1%	-5.7%
III	Shares 25 Plus	2.3%	7.4%	-2.8%	12.5%	-7.9%
IV	Shares 40 Plus	3.6%	10.4%	-3.2%	17.2%	-10.0%



Impact on Expected Return and Risk

in CHF

Scenario Asset Structure		Expected ¹⁾ Return	Risk Expectancy ²⁾	Expectations ³⁾ Positive Negative		Maximum Deviation ⁴⁾ Best Case Worst Case	
I	Money Market	+ 0.3% + 300 CHF	+/- 0.1% +/- 100 CHF	+ 0.4% + 400 CHF	+ 0.2% + 200 CHF	+ 0.5% + 500 CHF	+ 0.1% + 100 CHF
II	Bonds Plus	+ 0.7% + 700 CHF	+/- 3.2% +/- 3.200 CHF	+ 3.9% + 3.900 CHF	- 2.5% - 2.500 CHF	+ 7.1% + 7.100 CHF	- 5.7% - 5.700 CHF
III	Shares 25 Plus	+ 2.3% + 2.300 CHF	+/- 5.1% +/- 5.100 CHF	+ 7.4% + 7.400 CHF	- 2.8% - 2.800 CHF	+ 12.5% + 12.500 CHF	- 7.9% - 7.900 CHF
IV	Shares 40 Plus	+ 3.6% + 3.600 CHF	+/- 6.8% +/- 6.800 CHF	+ 10.4% + 10.400 CHF	- 3.2% - 3.200 CHF	+ 17.2% + 17.200 CHF	- 10.0% - 10.000 CHF
Investment Capital		100.000 CHF					

1) Expected long-term mean return per year

2) Expected fluctuation margin per year, based on standard deviation, viz. in 68% of all cases observed

3) Expected return after one year with standard deviation (68% of all values observed)

4) Expected return after one year with 2 standard deviation (95% of all cases observed)

Expected Returns for Different Investment Horizons

Source: MSCI World Total Return Index (in CHF) for all 1-, 3-, 5-, 8-, 10-, 12- and 15-year time series, from 31 Dec. 1972 until 31 Dec. 2022

Return p.a.	1 Year	3 Years	5 Years	8 Years	10 Years	12 Years	15 Years
> 16%	42.0%	22.9%	13.0%	7.0%	4.9%	0.0%	0.0%
12-16%	2.0%	18.8%	19.6%	11.6%	14.6%	15.4%	16.7%
8-12%	10.0%	10.4%	21.7%	30.2%	34.1%	35.9%	25.0%
4-8%	8.0%	16.7%	15.2%	18.6%	22.0%	25.6%	30.6%
0-4%	6.0%	8.3%	8.7%	20.9%	12.2%	15.4%	25.0%
< 0%	32.0%	22.9%	21.7%	11.6%	12.2%	7.7%	2.8%
		26.0 %	54.2 %	65.2 %	81.3 %	82.9 %	92.3 %
							97.3 %

Since 1972, there have been five 10-year-periods, in which a negative performance appeared. The last one was 2002-2011.

Impact of the Investment Strategy on Assets

Assumption: Person is 50 years old, income 200.000 CHF; retirement at 65 (in CHF)

Investment Strategy

Old Age Savings
(1 June 2023)

Expected Return

Estimated Old Age Savings
(30 June 2038)

Money Market

100.000

0.3%

272.000

Bonds Plus

100.000

0.7%

283.000

Shares 25 Plus

100.000

2.3%

336.000

Shares 40 Plus

100.000

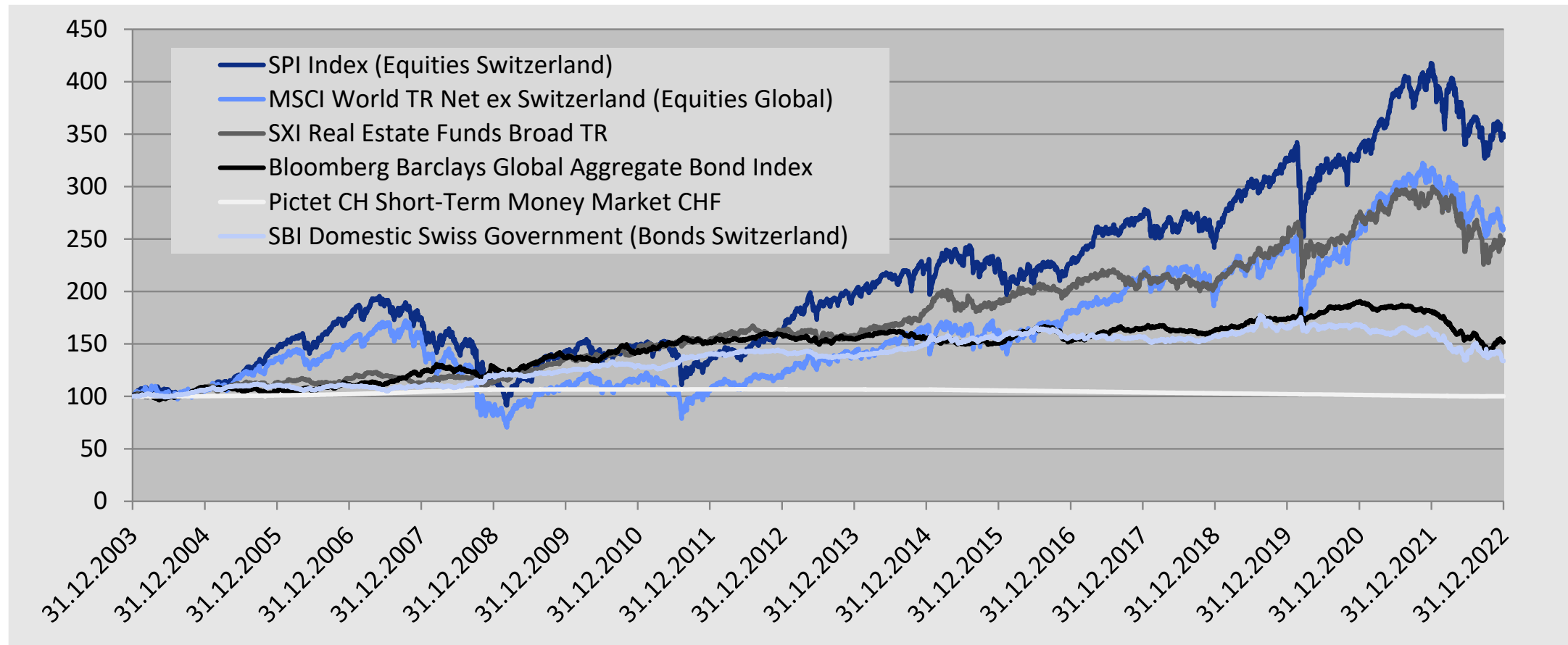
3.6%

387.000

Variation:
+ 42%

Benchmarking

Development of selected indices (from 31 December 2003 to 31 December 2022; in CHF)



Source: Bloomberg

Pension or Lump Sum: Comparison of Criteria

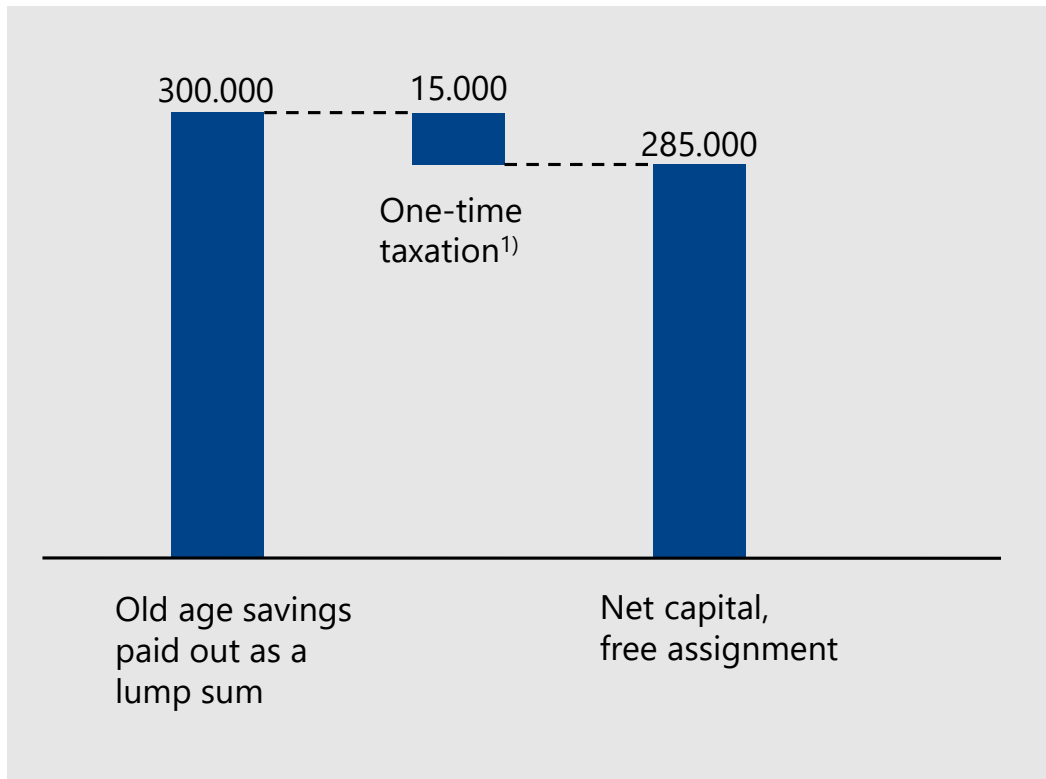
	Pension	Lump Sum
Security	High security	Security depends on asset allocation
Flexibility	No flexibility	High flexibility
Pension	Pay-out according to pension scheme regulations	3-6% return / remuneration, according to income-concept
Taxes		
• Pay-out	Not applicable, no pay-out	Non-recurring taxation 3-11% (BS) Non-recurring taxation 3-10% (BL) Remuneration (from 0%) up to 100% taxable, according to income-concept
• Pension	Pension 100% taxable	
Inflationary Compensation	According to pension scheme	According to individual planning
Coverage widow	60% of old age pension ¹⁾	Up to 100% of income ²⁾
Surviving depend	No entitlement	According to inheritance law, testament

1) Statutory regulation; deviations possible depending on pension scheme

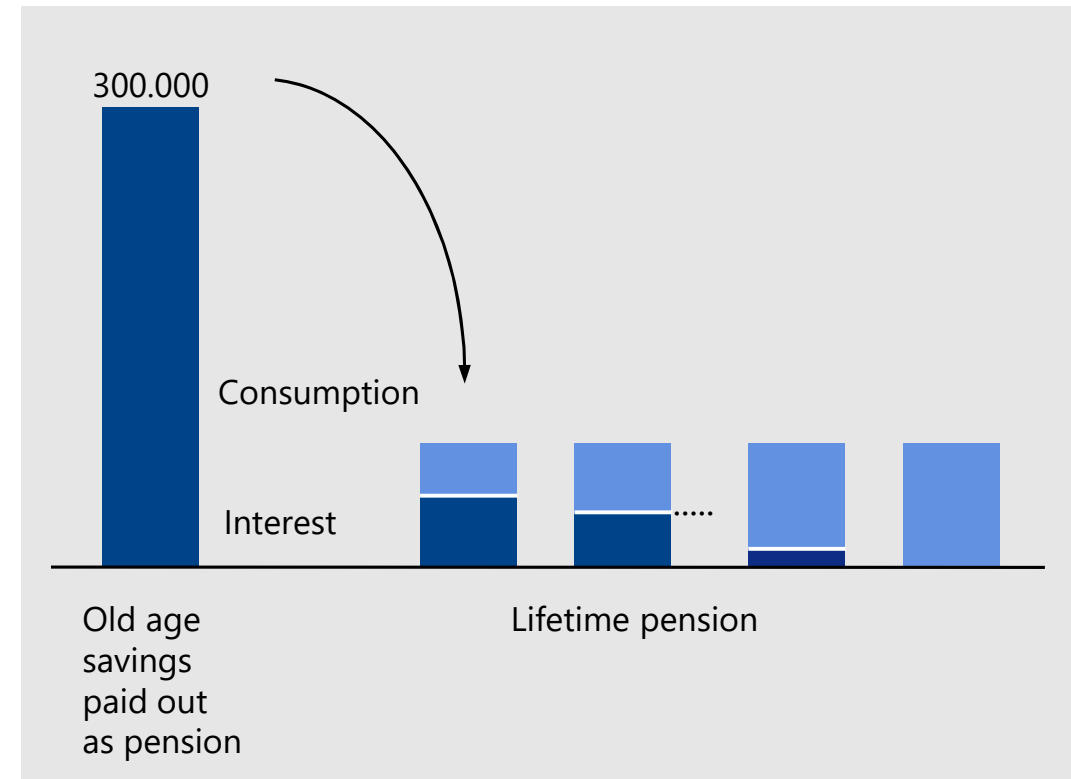
2) On condition of most-favoured treatment for widow / widower

Tax Treatment of Old Age Savings (in CHF)

Lump sum Payment



Lifetime Pension²⁾



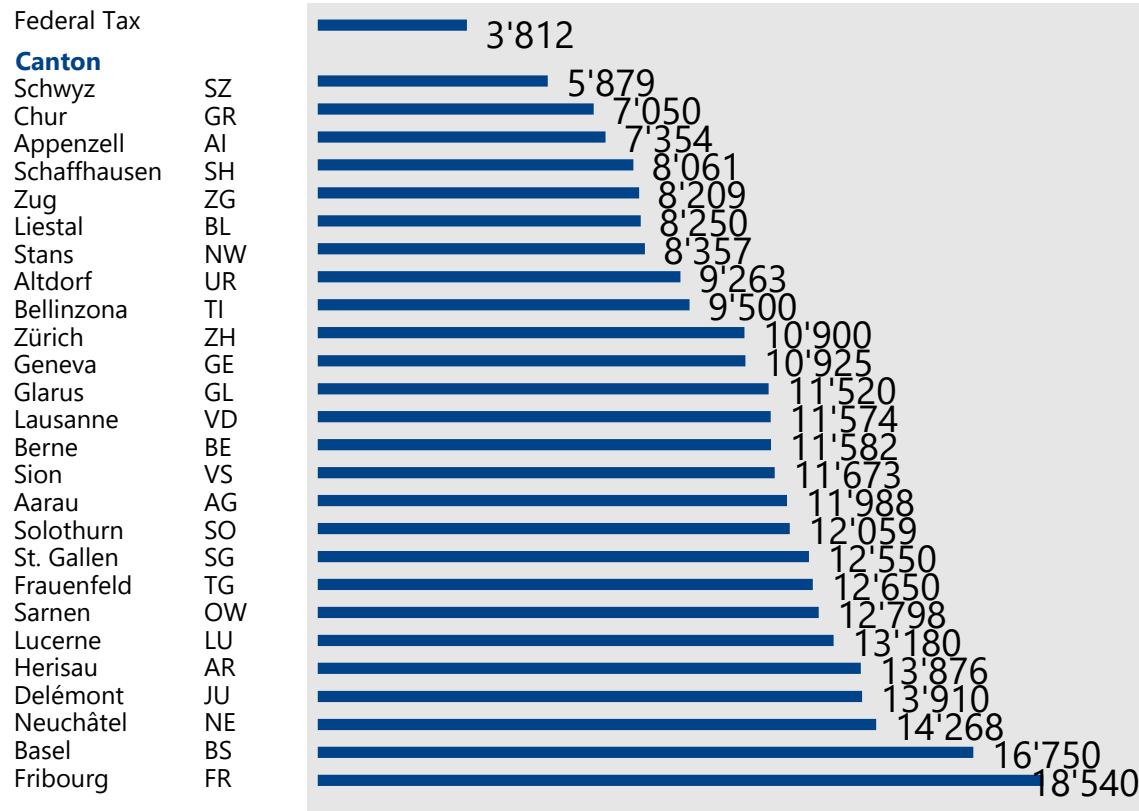
1) Taxation separated from residual income with reduced rate of taxation (cantonal differences)

2) Taxation together with residual income (cantonal differences in income tax rate)

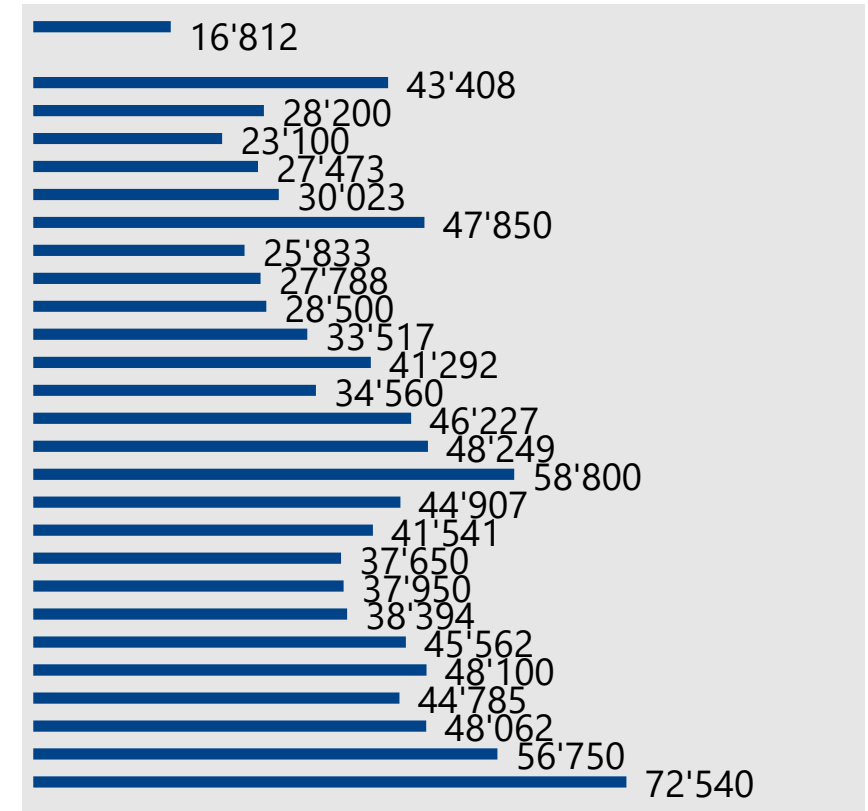
Lump Sum Payment with Domicile in Switzerland

Example: Person is married, 65 years old, domiciled in...

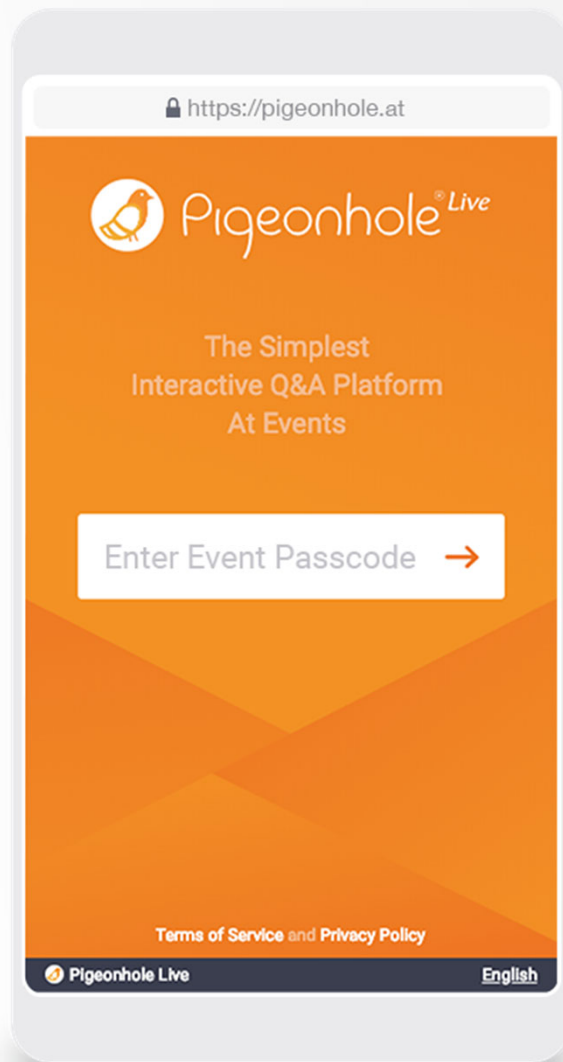
Lump Sum: 250.000 CHF



Lump Sum: 750.000 CHF



Your questions!



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Thank you

Back up

Overview of contributions

Pension Fund 1

Age	Savings Contribution ¹		Risk Contribution ²		Additional Savings Plan Contributions ³		Total Contributions	
	Employee ⁴	Employer	Employee	Employer	Employee	Employer	Employee ⁴	Employer
up to 25	-	-	0.5%	1.0%	-	-	0.50%	1.00%
25-29	4.25	8.50	0.6%	1.2%			4.85%	9.70%
30-34	4.90	9.80	0.6%	1.2%			5.50%	11.00%
35-39	5.55	11.10	0.6%	1.2%			6.15%	12.30%
40-44	6.20	12.40	0.6%	1.2%	1.75%	1.75%	8.55%	15.35%
45-49	7.50	15.00	0.6%	1.2%	1.75%	1.75%	9.85%	17.95%
50-54	8.15	16.30	0.6%	1.2%	1.75%	1.75%	10.50%	19.25%
55-59	8.80	17.60	0.6%	1.2%	1.75%	1.75%	11.15%	20.55%
60-65	9.45	18.90	0.6%	1.2%	1.75%	1.75%	11.80%	21.85%

¹ on insured salary PK1 (base salary plus incentive minus social security offset) up to CHF 150k

² on insured salary risk (base salary minus social security offset) up to CHF 220k base salary

³ on total insured salary (base salary plus incentive minus social security offset) up to CHF 220k base salary

⁴ indicates standard contribution; employees can chose to contribute 2% more or 2% less

Overview of benefits

Pension Fund 1

Age	Death	Disability
<p>Lifelong retirement pension</p> <ul style="list-style-type: none"> • Conversion rate at age: <ul style="list-style-type: none"> - 65: 5.00% - 64: 4.85% - 63: 4.72% - 62: 4.60% - 61: 4.48% - 60: 4.36% • of the accrued retirement plan assets. • Lump-sum pay-out instead of pension, up to max. 50% possible (time limit 3 months before retirement) <p>Retirement child pension</p> <ul style="list-style-type: none"> • 20% of retirement pension up to age 20/25 <p>Available savings plan assets may be</p> <ul style="list-style-type: none"> • used to finance a bridging pension until to statutory (AHV) retirement age (temporary retirement pension) or • paid out as a one-off retirement lump sum. 	<p>Spouse's or domestic partner's pension for active insured members:</p> <ul style="list-style-type: none"> • 60% of insured/current disability pension for retirement pension recipients: • 60% of retirement pension or, with the survivor's pension option, 100% of retirement pension <p>Orphan's pension</p> <ul style="list-style-type: none"> • 20% of insured or current disability or retirement pension up to age 20/25 <p>Lump sum on death</p> <p>Active insured members:</p> <ul style="list-style-type: none"> • 200% of insured disability pension • plus accrued savings plan assets • plus assets transferred from incentive/bonus and shift insurance on 1.1.2011 • plus voluntary extra contributions since 1.1.2011 paid into retirement and savings account • minus early withdrawals WEF / divorce transfers • minus retirement/disability benefits already paid out 	<p>Disability pension</p> <ul style="list-style-type: none"> • 60% of insured salary Risk up to age 65 • From age 65 onwards: conversion of accrued retirement assets, based on the current conversion rate (at present 5.00%) <p>Disability child pension</p> <ul style="list-style-type: none"> • 20% of disability pension, up to age 20/25 <p>Disability lump sum (with 100% disability)</p> <ul style="list-style-type: none"> • Accrued savings plan assets

Overview of contributions

Pension Fund 2

Age	Savings Contribution ¹		Risk Contribution ²		Total Contributions	
	Employee ³	Employer	Employee	Employer	Employee ³	Employer
up to 25	-	-	0.4%	0.8%	0.40%	0.80%
25-29	3.50%	7.0%	0.4%	0.8%	3.90%	7.80%
30-34	4.00%	8.0%	0.4%	0.8%	4.40%	8.80%
35-39	4.50%	9.0%	0.4%	0.8%	4.90%	9.80%
40-44	5.00%	10.0%	0.4%	0.8%	5.40%	10.80%
45-49	6.25%	12.5%	0.4%	0.8%	6.65%	13.30%
50-54	6.75%	13.5%	0.4%	0.8%	7.15%	14.30%
55-59	7.25%	14.5%	0.4%	0.8%	7.65%	15.30%
60-65	7.75%	15.5%	0.4%	0.8%	8.15%	16.30%

¹on insured salary PK2 (base salary plus incentive minus CHF 150k) up to 220k base salary

²on insured salary PK2 (base salary plus incentive minus CHF 150k) up to 220k base salary

³indicates standard contribution; employees can chose to contribute 2% more or 2% less

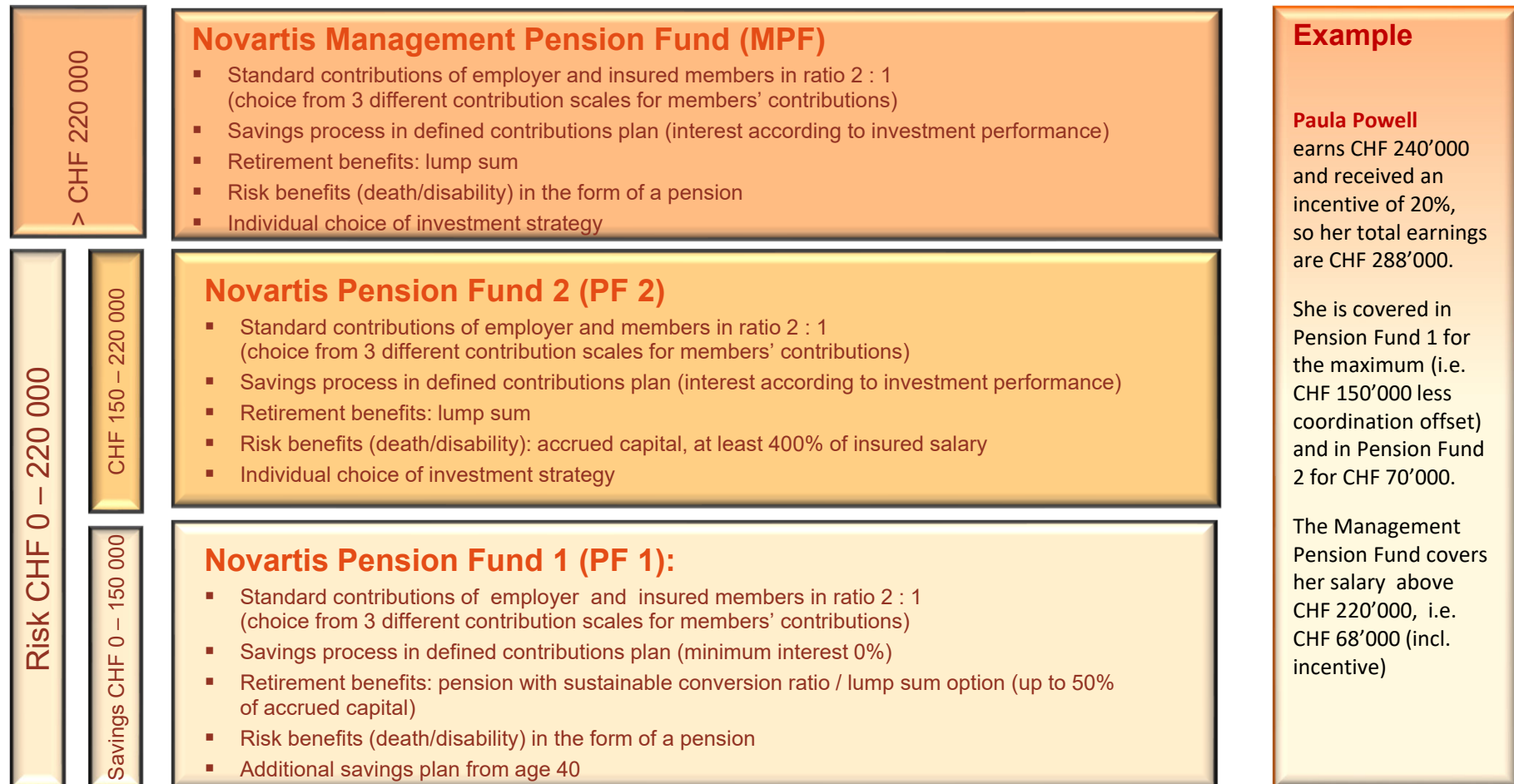
Pension Funds Novartis

Overview of benefits

Pension Fund 2

Retirement	Death	Disability
Lump sum on retirement <ul style="list-style-type: none">• Assets available at the time of retirement	Lump sum on death <ul style="list-style-type: none">• Assets available at the time of death,• at least 400% of insured salary	Lump sum on disability <ul style="list-style-type: none">• Assets available at the time when the disability pension starts,• at least 400% of insured salary

Management Pension Fund: A top-up plan



“Dilution Protection” (Transaction Fee)

as per January 2023

- Changing the strategy means that the portfolio manager has to buy and sell positions accordingly.
- The rebalancing costs are the higher the more often such transactions take place.
- Without an appropriate compensating mechanism, the costs are borne by all investors, affecting their performance.
- The dilution levies shall protect the existing investors by allocating the transaction costs to those who cause them (cost-by-cause principle).

■ Money Market	0.00 % / 0.00% (in/out)
■ Bonds ^{Plus}	0.24 % / 0.09 % (in/out)
■ BVG Equity-25 ^{Plus}	0.21 % / 0.08 % (in/out)
■ BVG Equity- 25 ^{ESG}	0.25 % / 0.11 % (in/out)
■ BVG Aktien-40 ^{Plus}	0.14 % / 0.06 % (in/out)
■ LifeCycle ^{Plus} 2020 - 2035	0.17 % / 0.06 % (in/out)
■ LifeCycle ^{Plus} 2040 - 2060	0.13 % / 0.06 % (in/out)

Performance Overview

Performance / Strategie	FY 2021	Q1 2022	Q2 2022	Q3 2022	FY 2022	YTD Jan 2023	YTD Feb 2023
Money Market	-0.78%	-0.23%	-0.54	-0.68	-0.63%	0.04%	0.07%
Bonds ^{Plus}	-0.41%	-5.33%	-11.39	-14.65	-14.03%	1.73%	0.46%
Equities 25 ^{Plus}	5.11%	-5.24%	-12.67	-16.02	-14.74%	2.93%	1.68%
Equities 25 ^{ESG} *	4.70%	-5.56%	-13.76	-17.79	-16.52%	3.16%	1.65%
Equities 40 ^{Plus}	8.60%	-4.62%	-12.17	-15.48	-13.97%	3.30%	2.02%
LifeCycle ^{Plus} 2025	1.45%	-3.46%	-7.73	-10.02	-9.17%	1.67%	0.77%
LifeCycle ^{Plus} 2060	8.46%	-4.59%	-12.09	-15.51	-13.97%	3.30%	2.01%
Total	3.22%	-4.53%	-10.70%	-13.74%	-12.72%	2.24%	1.11%

* Inception May 2020

- At the end of 2022, DC assets amounted to CHF 570.5m (PF2) and CHF 380.6m (MPF)
- By then, 92 participants have selected the new **Equities 25 ^{ESG}** strategy (83 in PF2 / 9 in MPF)