

ILO - SHIF

Actuarial funding study of the ILO's
Service Health Insurance Fund (SHIF)

February 2026

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Methodology – Projections' approach

	Approach	Comments
Liability projection method	Open group valuation over 10-year period	This method provides a basis for estimating the future growth of the beneficiary population
Census Data	Participants data supplied by the ILO as of 31st December 2024 (excluding voluntary covered dependents)	The database is the same as for the IPSAS 39 valuation
Active census growth	0%. No change in headcount: new entrants replace leavers	The active eligible population headcount – comprising staff members with temporary contracts who are enrolled in a medical plan – will remain constant throughout the forecast period.
Profile of New Active Participant Entrants	Staff profiles based on the recent experience are provided in Section 3	Those statistics are derived from patterns observed in the census data of new entrants collected from 2021 to 2024
Dependent coverage profile	Based on the recent experience are provided in Section 3.	Those statistics are derived from patterns observed in the census data in 2024
Funding mechanism	- Funding on a per family basis - Actives : SHIF Base Salary $\times$ Contribution Rates $\times$ 2 - Future Retirees : SHIF Base Salary $\times$ Base to Pensionable Salary Ratio $\times$ Replacement Rate $\times$ Enrolment probability $\times$ Contribution Rates $\times$ 3 - Retirees: Annual Contribution $\times$ 3	- The Contribution Rates are determined per age and based on observed data from 2021 to 2024 - These formulas include the Organization coverage as it doubles the actives' contributions and triples the retirees and survivors' contributions.
Other Actuarial assumptions	Based on the 2024 IPSAS valuation	Refer to the actuarial accounting assumptions from FY2024 as detailed in the December 31, 2024, valuation report.

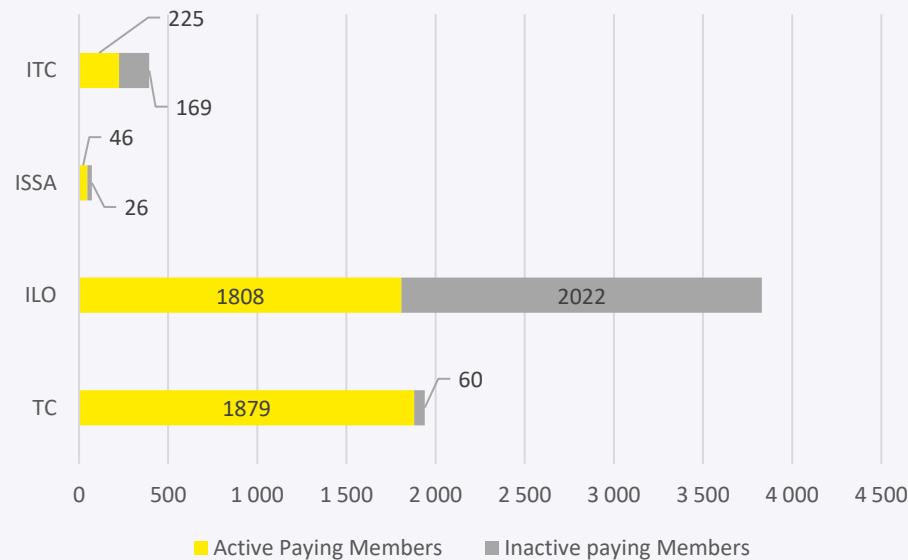
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Demographics

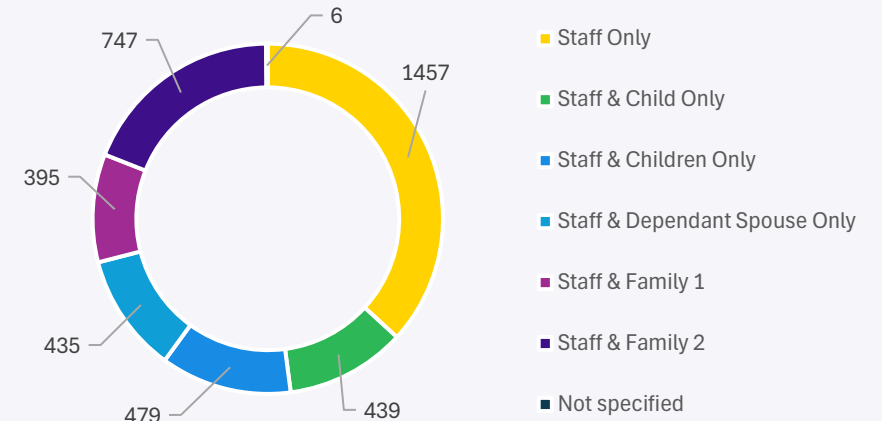
Headcount of current participants

- ▶ The current participants data is based on the ASHI database as of December 31st, 2024
- ▶ It includes 7,384 participants, out of which 6,235 Paying members:
 - ▶ Active: 3,958
 - ▶ Inactive: 2,277

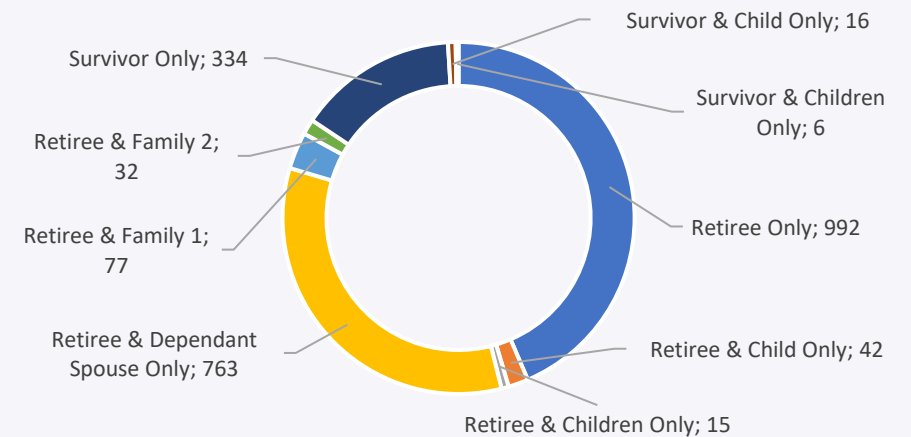
Current paying members by entity



Current active participants by medical coverage code



Current inactive participants by status

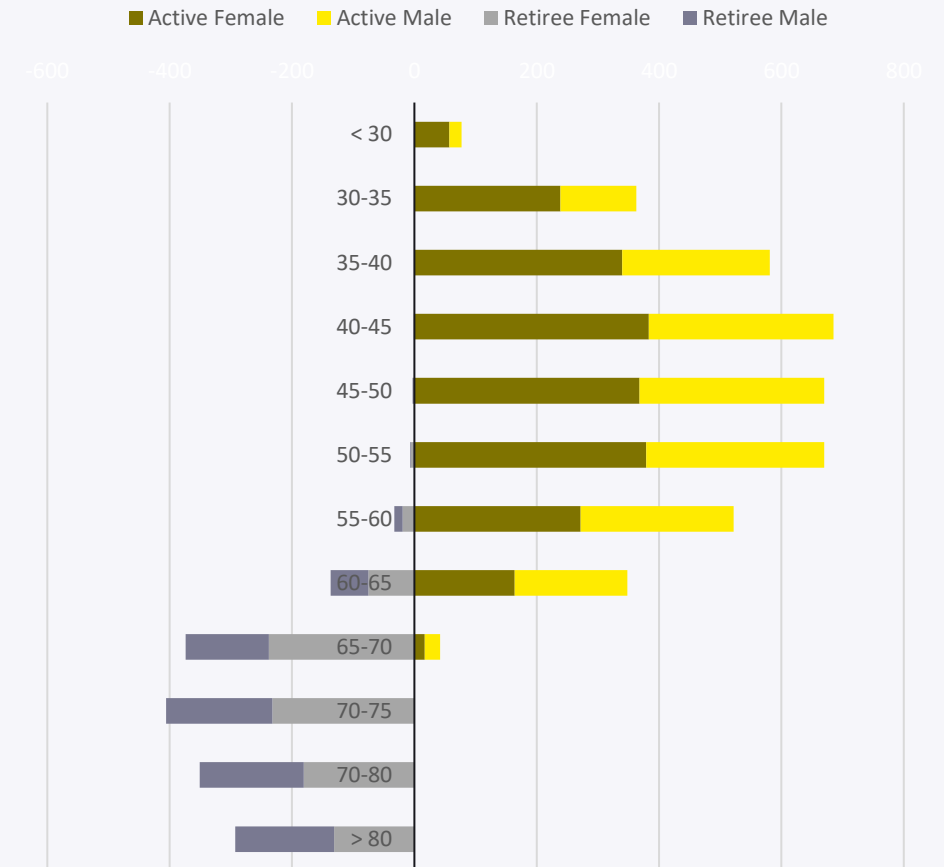


Overview of the current profile of the participants

ILO Statistics based on 2024 census data	Active	Inactive
Headcount	3 958	2 277 (*)
<i>2021 census data</i>	<i>3 900</i>	<i>2 318 (*)</i>
Ratio active to inactive	1,74	
Average age	47	76
<i>2021 census data</i>	<i>46</i>	<i>76</i>
%male / %female	44% / 56%	41% / 59%
<i>2021 census data</i>	<i>45% / 55%</i>	<i>42% / 58%</i>
Average Seniority	10	
Professional Category	38%	
% of members with spouse coverage	40%	
% of members with other dependent coverage	52%	
Average monthly basis salary for contribution (\$)	7 829	
<i>2021 census data</i>	<i>7 126</i>	

(*) Excluding dependents and volunteers

Current ILO participants distribution by age, sex and member type (excluding dependents and survivors)



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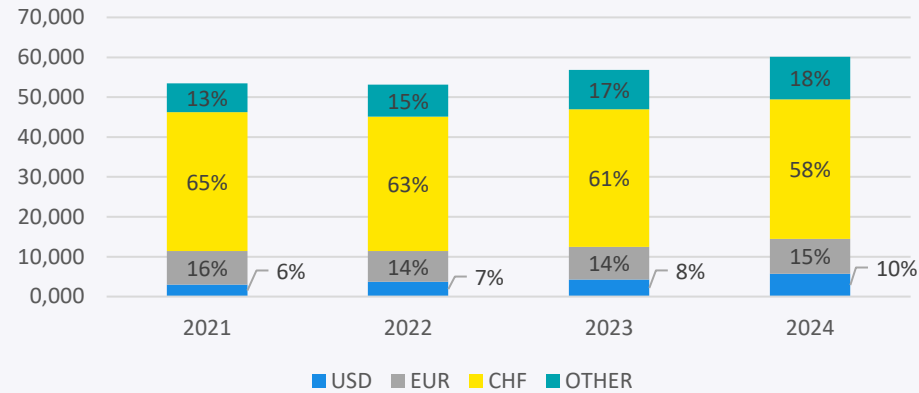
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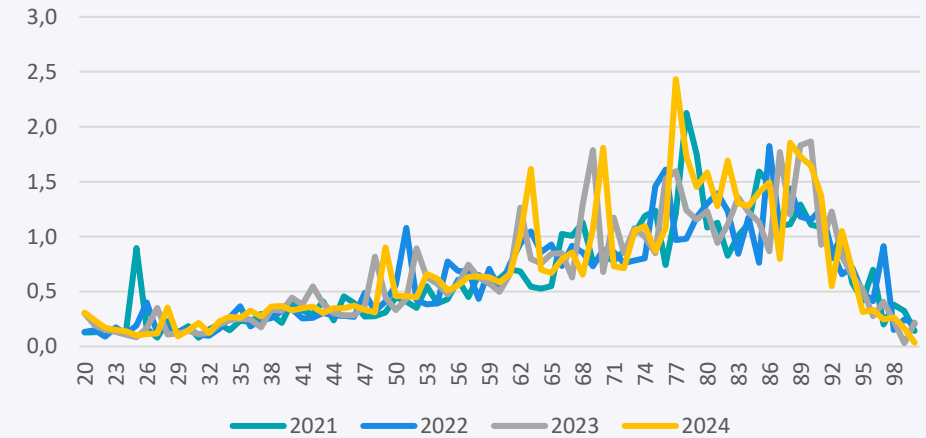
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Claims descriptive statistics

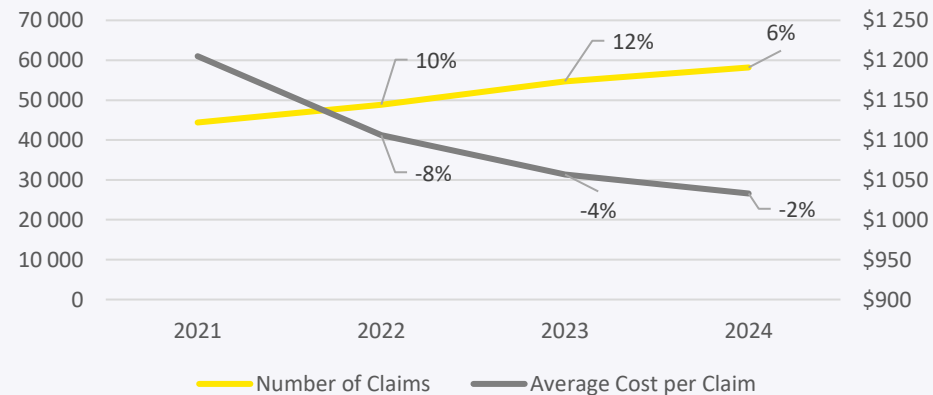
Claims by invoice currency (Actives and Retirees, M USD)



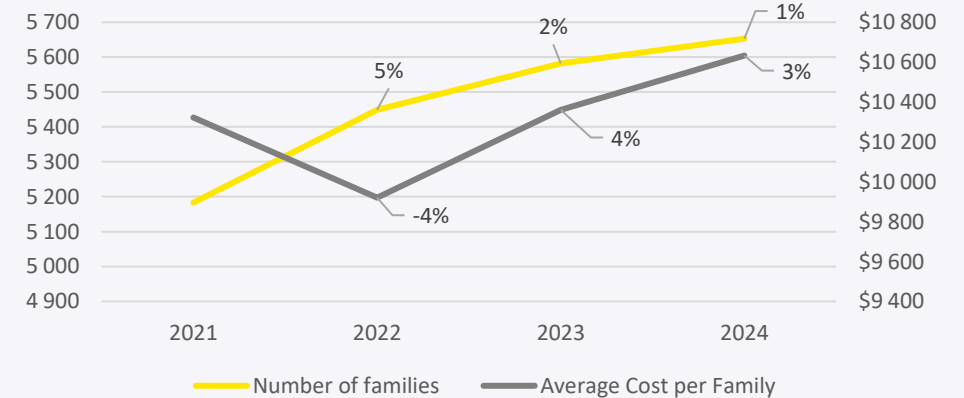
Total claims by age (M USD)



Evolution of average claims (USD) and number of claims



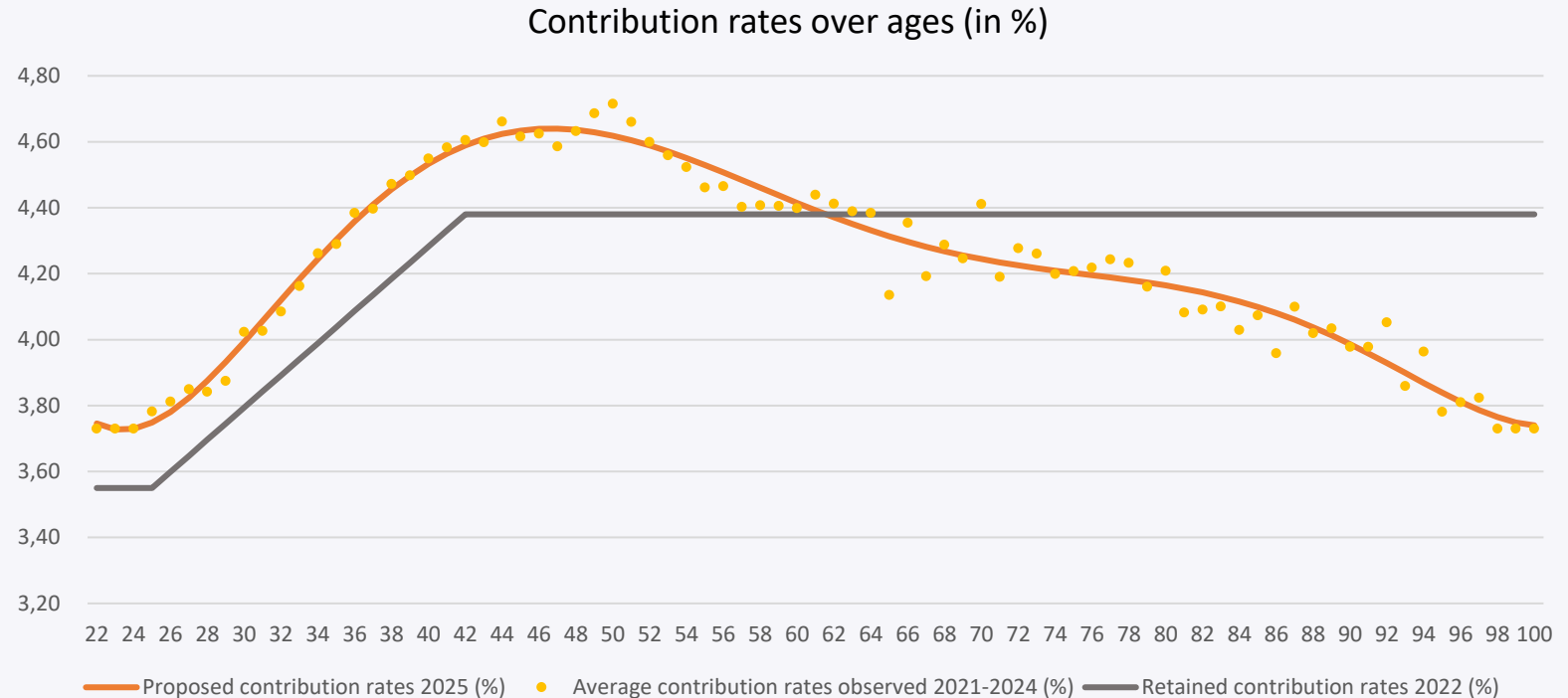
Evolution of average per family claims (USD) and number of families with claims





Assumptions

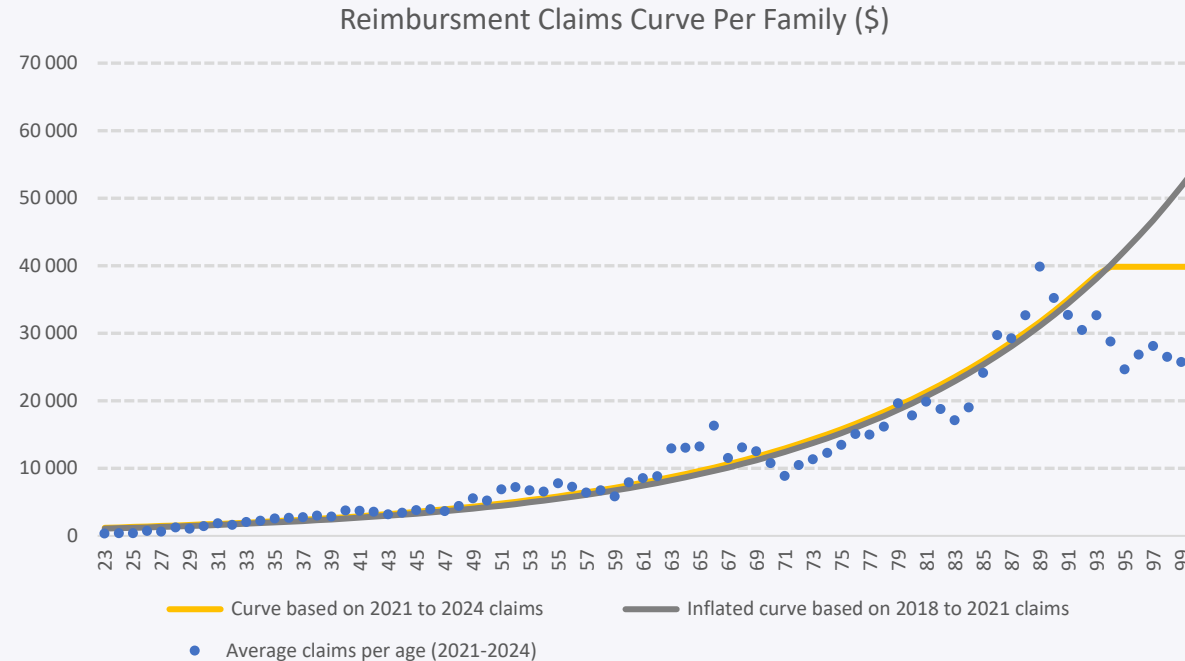
Contributions curve



Methodology used to build the per family contributions assumption on the insured population:

- Identification of contributions per age for each year of history
- Application of an increase according to the rates evolutions as of 01/01/2024 and 01/01/2025

Reimbursements claims curves



We understand that the subsidy by the canton of Geneva will be discontinued effective January 1, 2027.

This subsidy was applicable to retirees hospitalized at the Geneva University Hospitals, amounting to approximately CHF 500'000 per year.

The effect of this change was not reflected in the projections, but it should represent only c.1% of the annual claims and would marginally deteriorate the long-term projections, anticipating the depletion of the assets by less than 1 year

Methodology used to build the per capita claim assumption on the insured population:

- ▶ Reimbursement claims history is provided for the years 2021 to 2024 for the ILO SHIF
- ▶ Identification of claims by family, by principal's age and for each year of history
- ▶ Determination and smoothing of the distribution of reimbursement claims per age for each year of history
- ▶ A ceiling corresponding to the highest average claims per age is applied

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Other assumptions - Demographic assumptions

Assumptions	2025	2022	Source
Mortality, Retirement and disability rates	UNJSPF 2024 tables	UNJSPF 2021 tables	UN Task Force
Withdrawal rates	2021 ASHI assumptions weighted by entity headcounts	2021 ASHI assumptions weighted by entity headcounts	ILO Based on the 2011-2021 ILO experience
Demographics of new entrants	See next page	See next page	Based on the ILO experience (resp. 2021-2024 and 2018-2021)

Profile of new entrants and active staff

Expected proportion of new entrants by age group

Age group (in years)	Assumption 2022	Assumption 2025 Based on statistics
20-30	17%	13%
30-35	24%	24%
35-40	21%	22%
40-45	15%	17%
45-50	12%	13%
50+	11%	12%

Profile of spouse coverage

	Gender	Assumption 2022	Assumption 2025 Based on statistics
Probability of having a dependent spouse	Female / Male	33% / 68%	32% / 65%
Age difference between spouses	Female / Male	5 / -5	3.0 / -5.5

Average monthly SHIF Base (USD) for new entrants

Age band	Assumption 2022	Assumption 2025	P Staff	G Staff
20-30	3 647	3 651	6 897	2 240
30-35	3 630	4 036	8 099	2 477
35-40	3 854	4 143	9 739	2 597
40-45	4 572	5 300	11 429	2 755
45-50	5 241	5 904	11 779	3 101
50+	6 685	7 477	12 960	2 996

Expected distributions by gender and status

New entrants	Assumption 2022	Assumption 2025 Based on statistics
Female / Male	54% / 46%	55% / 45%
Professional staff / General staff	30% / 70%	30% / 70%

- It is assumed that in the initial salaries for new entrants will increase with inflation.

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Other assumptions - Financial assumptions

Assumptions	2025	2022	Source
Per Capita claims assumption per age	Average claim cost over 2021-2024	Average claim cost over 2018-2021	Actual SHI claims observations over the historical period & analysis by EY
Percentage of actives electing the retiree coverage	97.0%	97.5%	ILO
Pension increases	2.50%	2.50%	US CPI assumption from UN Task Force
Medical Inflation	2025: 6.00% 2026: 5.55% 2027: 5.10% 2028: 4.65% 2029: 4.20% 2030: 3.75% 2031: 3.30% 2032: 2.85% 2033: 2.80%	2022: 3.20% 2023: 3.10% 2024: 3.00% 2025: 2.90%	Ultimate rate by currency from UN Task Force and Initial rate from market trends
Expected return on investments	2.50%	2.50%	ILO

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Other assumptions - Financial assumptions

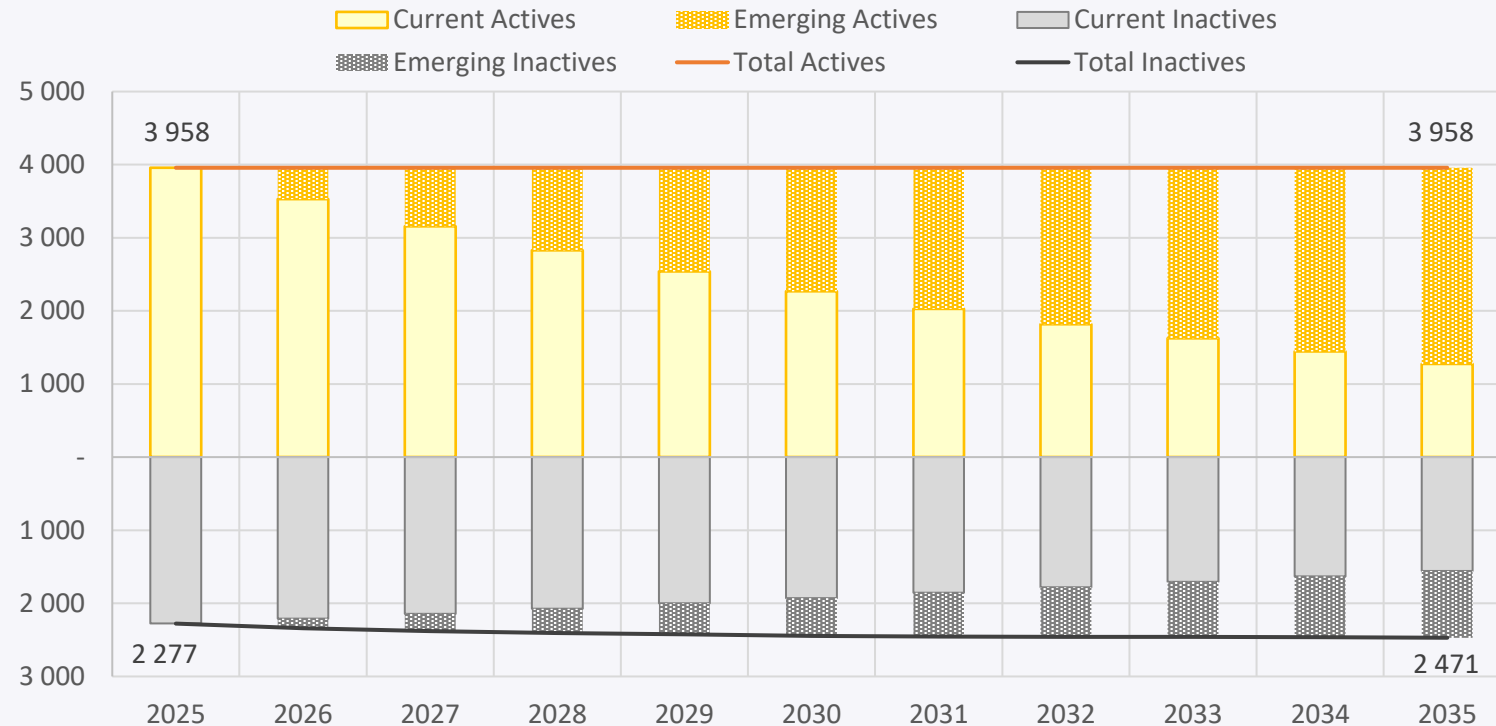
Assumptions	2025	2022	Source
IBNR	29%	28%	ILO Experience analysis based respectively on the 2021-2024 and 2017-2021 claims
Salary increase assumption and merit scale	UNJSPF 2024 assumption	UNJSPF 2021 assumption	UN Task Force
Average contribution rates	3.73% to 4.66%	3.55% to 4.47%	Actual contributions by SHI rules with family structure from historical experience
Pension replacement rate	50%	51%	EY Experience analysis based on the 2021-2024 data and 2018-2021 data
Ratio between Pensionable salary and SHIF base salary	130%	126%	EY Experience analysis based on the 2021-2024 data and 2018-2021 data

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Baseline results

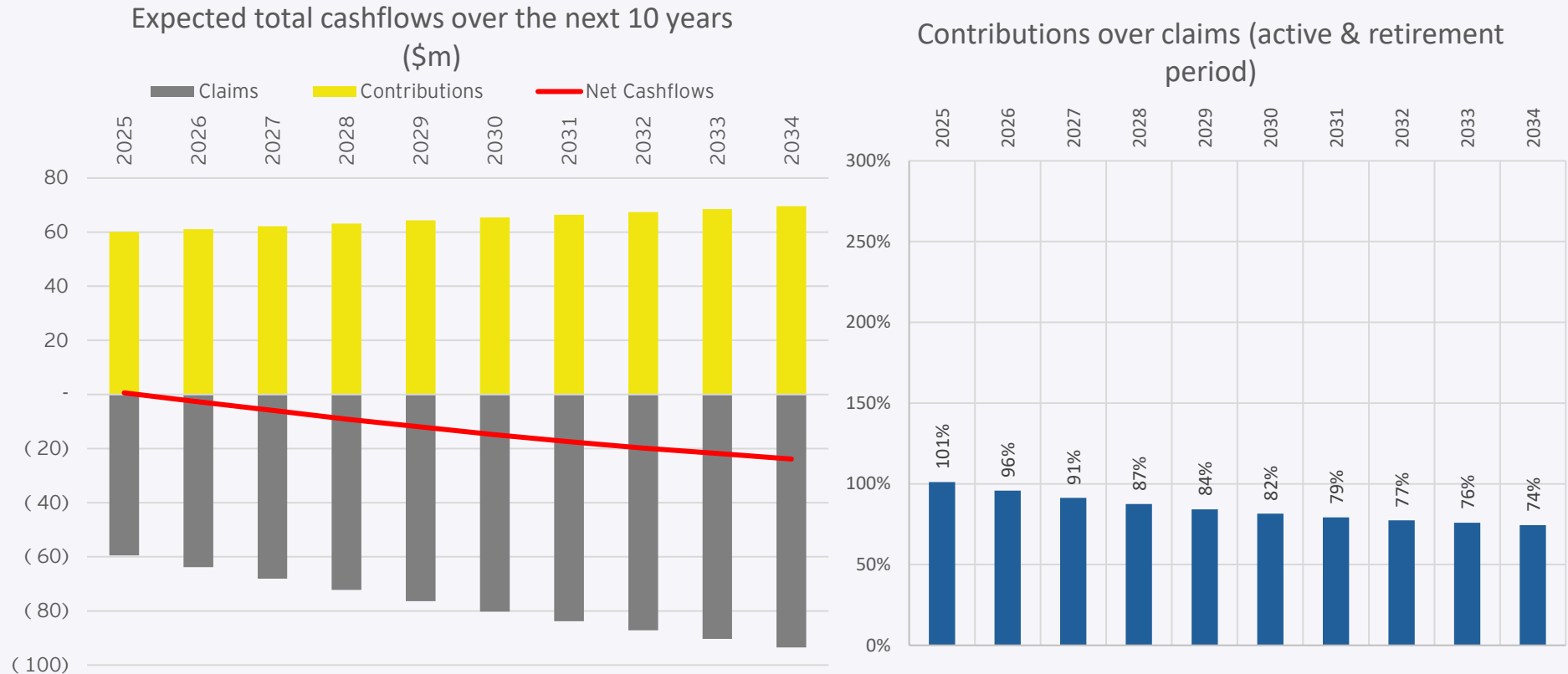
Change in participants headcount structure

Projected headcount of active and inactive participants over the next 10 years



- ▶ The above graph shows the changes in the headcount structure over the next 10 years, considering current and future active and inactive staff under the baseline scenario.
- ▶ New entrants contribute to the replacement (1 for 1) of leaving active staff, while current active staff members gradually transition into retirees. This results in a slight increase in the inactive population and a shift in the ratio of active to retiree staff. Over a 10-year period, the ratio of active participants per retiree decreases from 1.74 to around 1.60.

Expected net cashflows (active and retirement period)



- ▶ The above graphs show the projected net cash flows (claims - contributions) and the ratio of contributions over the claims over a 25-year period, **for both active and retirement period**, in the baseline scenario.
- ▶ Operational net cash flows –defined as contributions minus gross claims (excluding admin fees)– turn negative in 2026, marking the start of a structural imbalance, with a continuously declining coverage ratio (contributions ÷ claims), which is projected to fall from the current 101% to below 80% by 2031.

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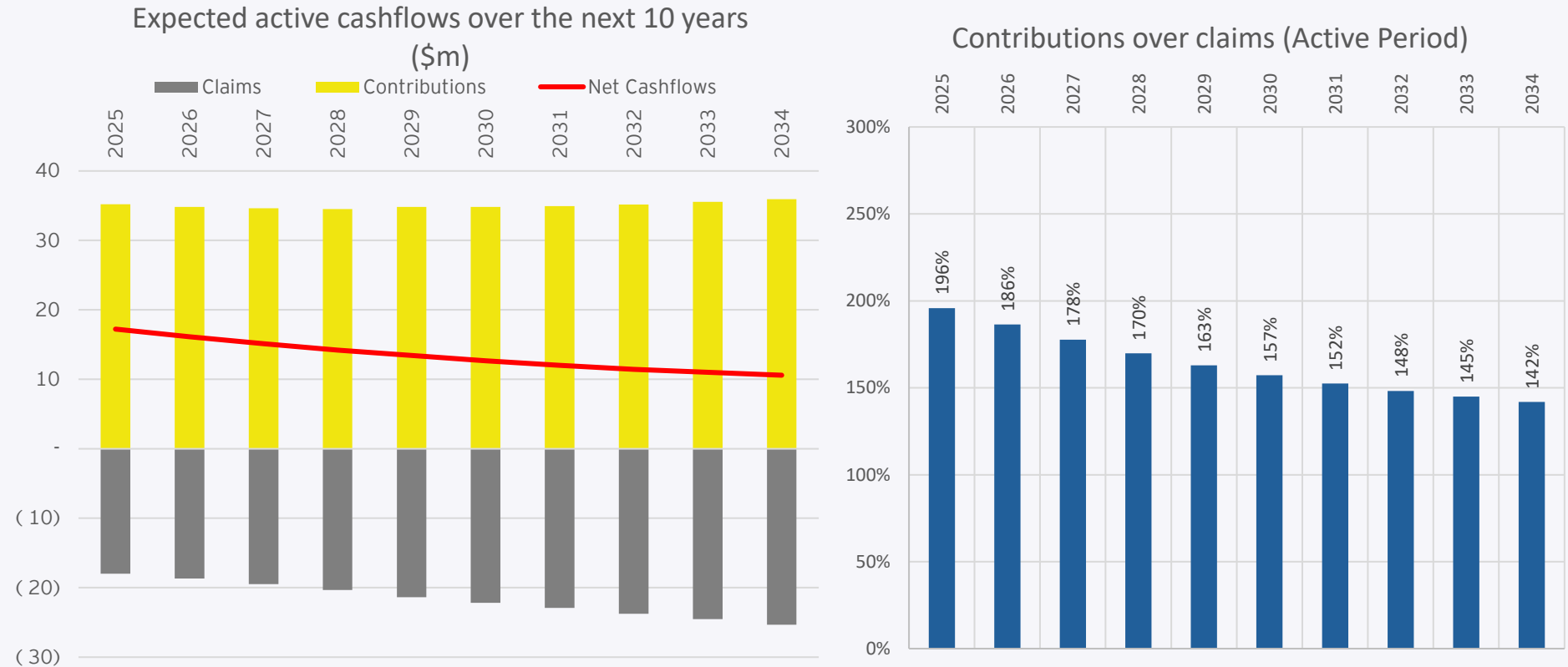
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Expected net cashflows (active period)



- ▶ The above graphs show the projected claims and contributions over a 10-year period in the baseline scenario, for **active period**.
- ▶ Operational net cash flows –defined as contributions minus gross claims (excluding admin fees)– are always positive but continuously decreasing from \$17m to \$11m in 2034, with a continuously declining coverage ratio (contributions ÷ claims), which is projected to fall from the current 196% to 142%.

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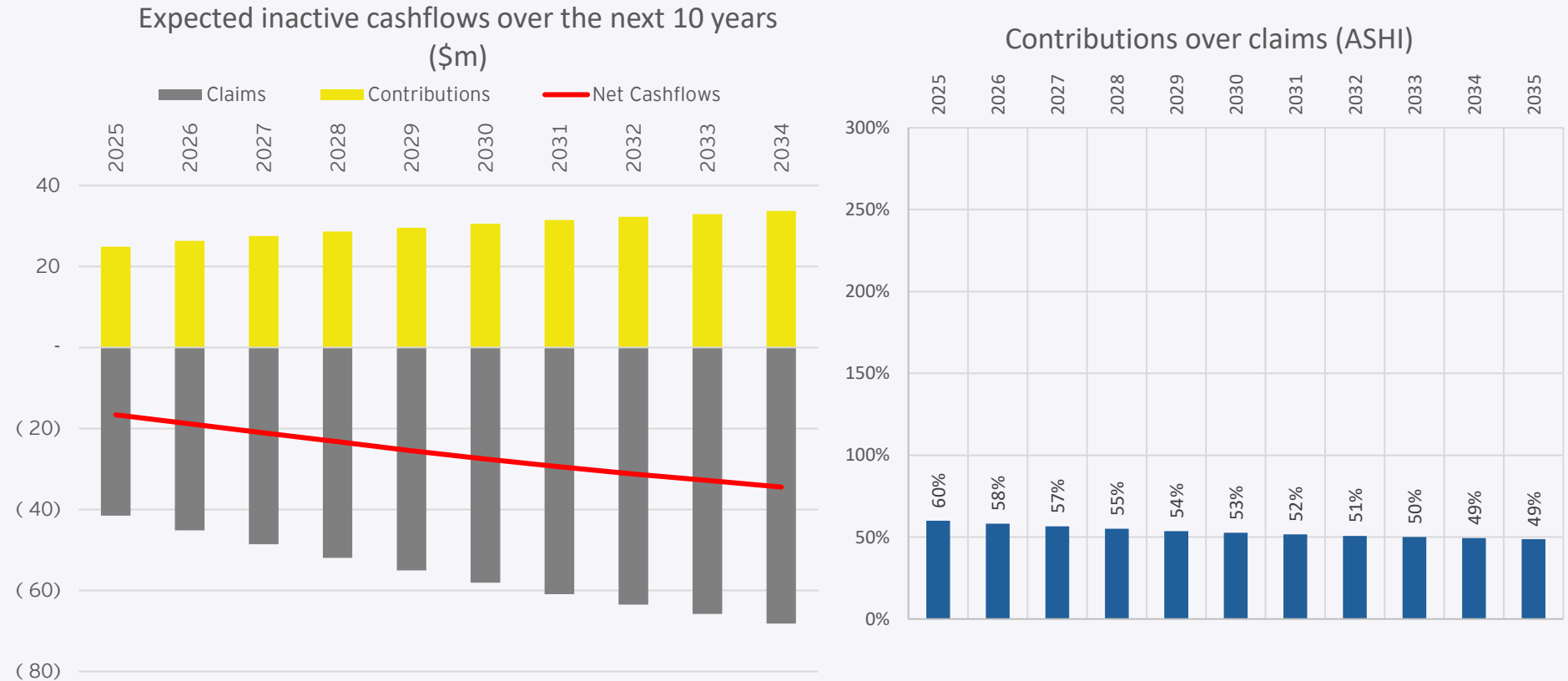
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Expected net cashflows (retirement period)



- ▶ The above graphs show the projected claims and contributions over a 10-year period in the baseline scenario, for **inactive period**.
- ▶ Operational net cash flows –defined as contributions minus gross claims (excluding admin fees)– are always negative and continuously decreasing from a deficit of \$17m to a deficit of \$34m in 2034.

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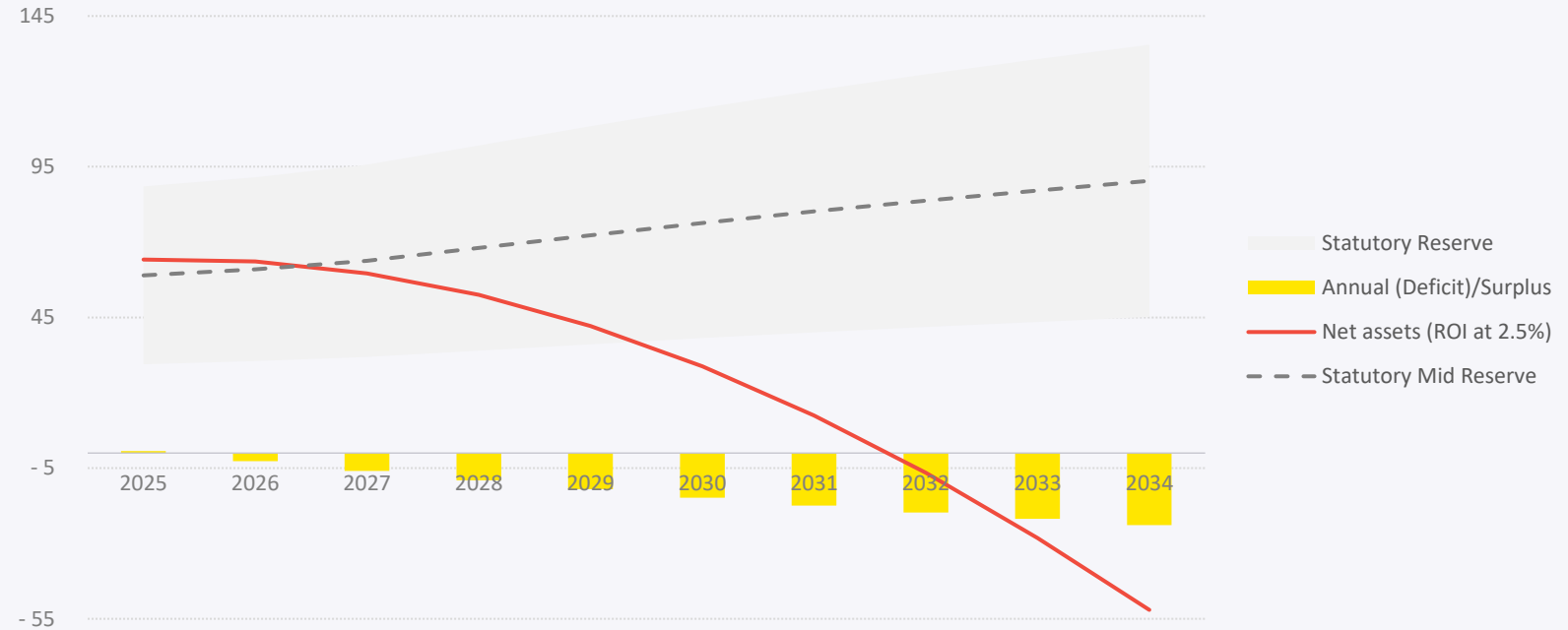
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Net assets

Net assets and deficit/surplus over years (\$m)



- ▶ The above graph shows the net assets and the annual deficit/surplus over a 10-year period, for both active and retirement period, in the baseline scenario.
- ▶ Annual shortfalls between contributions and claims widen steadily—from -\$3m in 2026 to -\$24m by 2034, and the reserve fund begins to decline significantly in subsequent years, dropping from \$60m in 2025 to zero in 2032.
- ▶ **Net assets would go below the minimum statutory reserve in 2030.**

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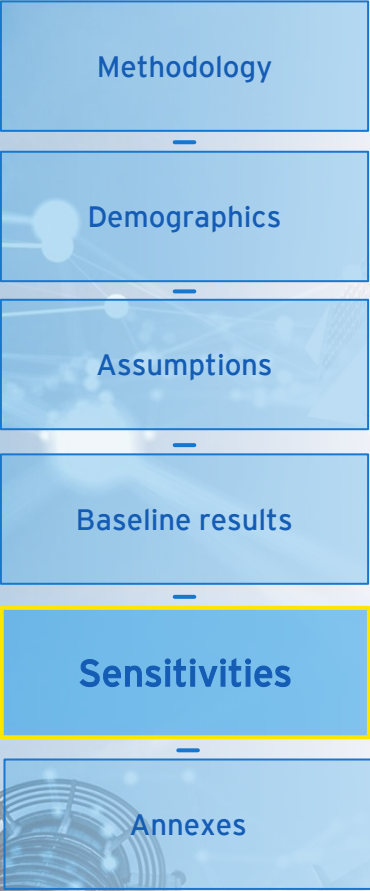
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Summary results

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total claims (in m\$)	(59)	(64)	(68)	(72)	(76)	(80)	(84)	(87)	(90)	(93)
Total contributions (in m\$)	60	61	62	63	64	65	66	67	69	70
Technical balance (in m\$)	1	(3)	(6)	(9)	(12)	(15)	(17)	(20)	(22)	(24)
<i>incl. technical balance over active period (in m\$)</i>	17	16	15	14	13	13	12	11	11	11
<i>incl. technical balance over retirement period (in m\$)</i>	(17)	(19)	(21)	(23)	(25)	(28)	(29)	(31)	(33)	(34)
Contributions over claims	101%	96%	91%	87%	84%	82%	79%	77%	76%	74%
Investment income (in m\$)	2	2	2	2	2	1	1	1	0	0
Net assets as of 31.12. (in m\$)	64	64	60	52	42	29	12	(7)	(28)	(52)

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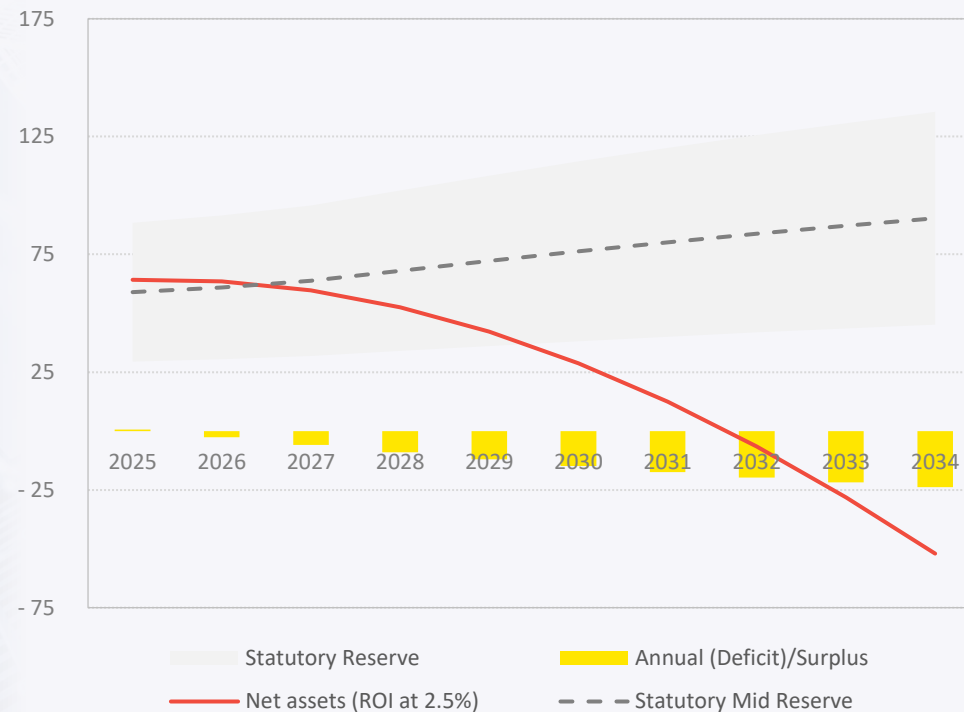
Projections scenarios

- ▶ The following sensitivity scenarios have been performed:
 - ▶ Medical inflation assumption as set in 2021 (2.90% from 2024)
 - ▶ Medical inflation +/- 50bp
 - ▶ Yearly contribution increase of +5% from 2026 to 2028
 - ▶ Workforce reduction of -20% over three years (2025-2027)

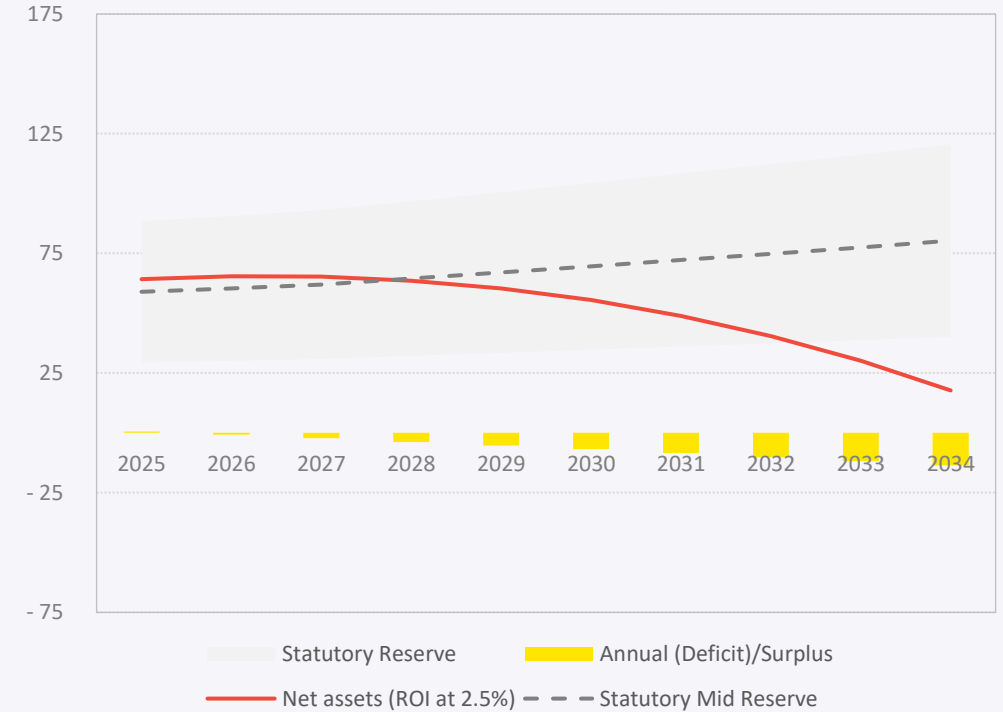
Sensitivity to medical inflation - 2024 vs 2021

- ▶ We compare in the below graphs the results using the 2024 baseline assumption (left) and the 2021 assumption (right) for medical cost increases. The 2024 baseline assumes significantly deteriorated short-term increases (and a comparable long-term target).

Net assets and deficit/surplus over years (\$m)
2024 Baseline (6.0% in 2025 down to 2.8% in 2033)



Net assets and deficit/surplus over years (\$m)
2021 assumption (3.2% in 2022 down to 2.9% in 2025)



- ▶ The update of this assumption explains most of the degradation of the net assets compared to 2021.

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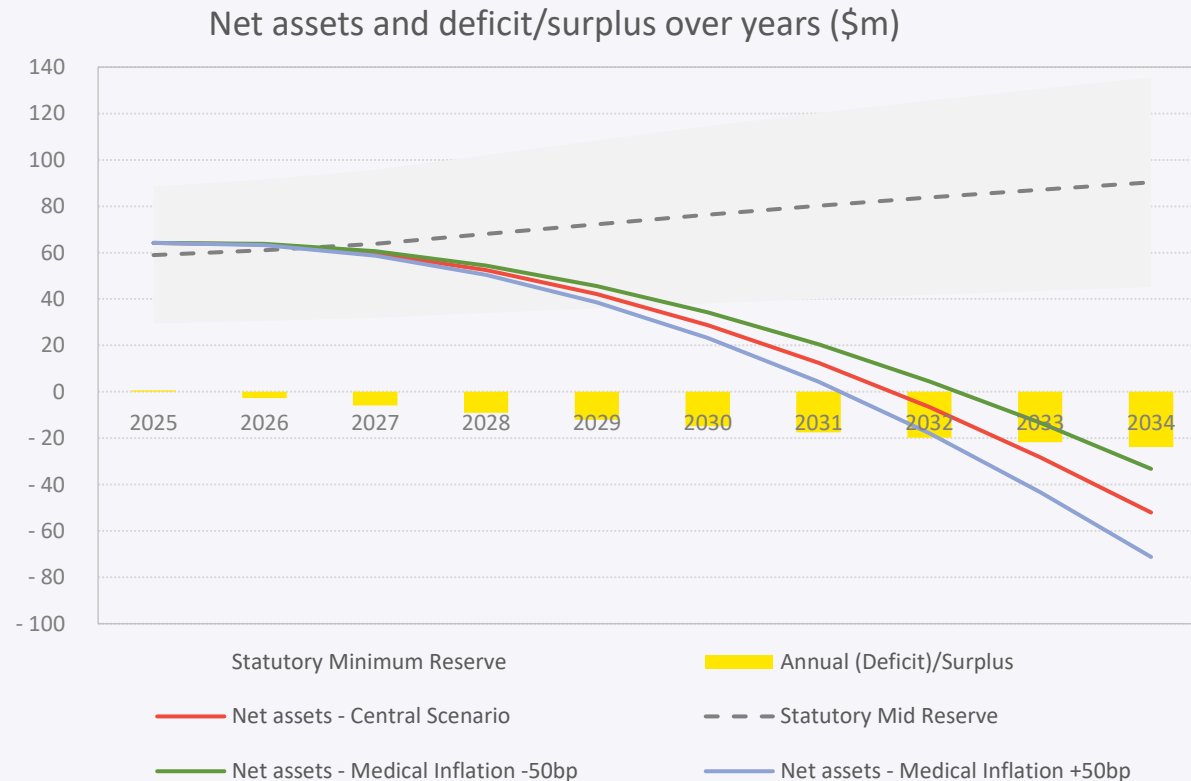
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Sensitivity to medical inflation - 50bps range

- ▶ The below graph shows the net assets and the annual deficit/surplus over a 10-year period under the baseline scenario and the medical inflation sensitivities.



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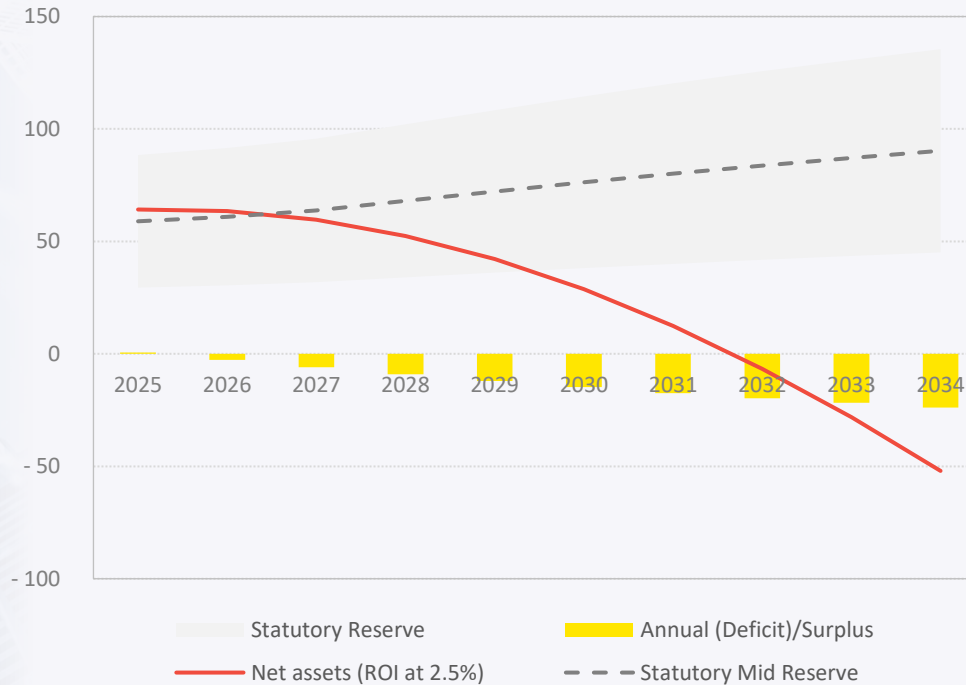
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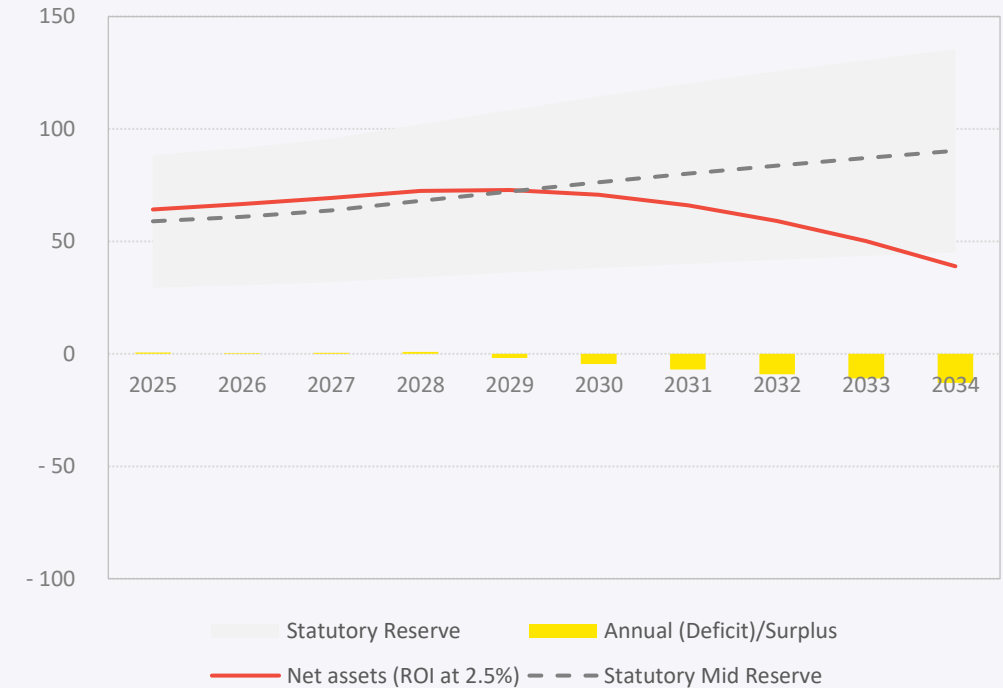
Increase in contributions by 15% over 3 years

- ▶ The below graphs show the net assets and the annual deficit/surplus over a 10-year period, both in the baseline scenario and the sensitivity.

Net assets and deficit/surplus over years (\$m)
2024 Baseline (current rules)



Net assets and deficit/surplus over years (\$m)
Increase in contributions by 15% over 3 years

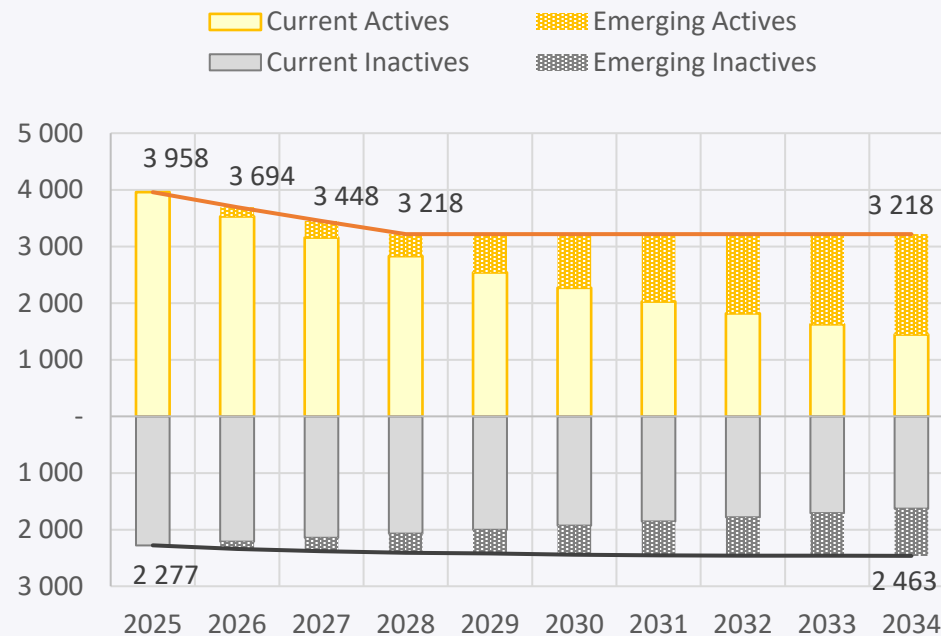


- ▶ Such increase in the contributions would allow to stay above the minimum statutory reserve over the next 10 years.

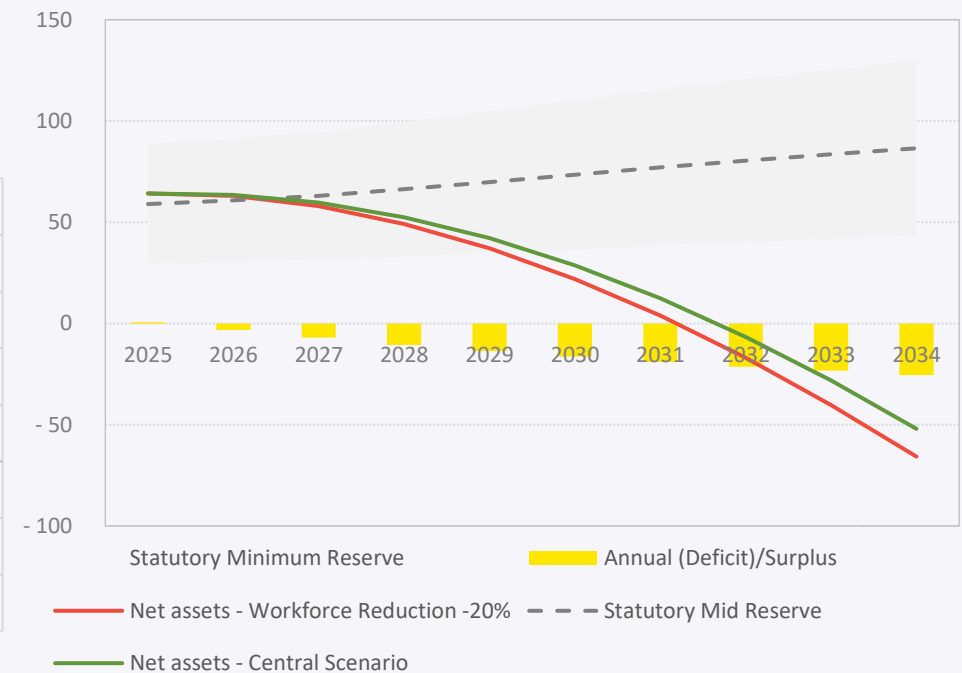
Workforce reduction (-20%)

- A sensitivity has been carried out with a workforce reduction close to -20%, with a reduction of -6,7% over 3 years (2025-2027). The reduction was applied uniformly over the emerging new actives, considering the non-replacement of some leavers.

Projected headcount of active and inactive family participants from over the next 10 years



Net assets and deficit/surplus over years (\$m)



- The net assets decrease faster in this sensitivity, as the contributions typically exceed claims for the active population.

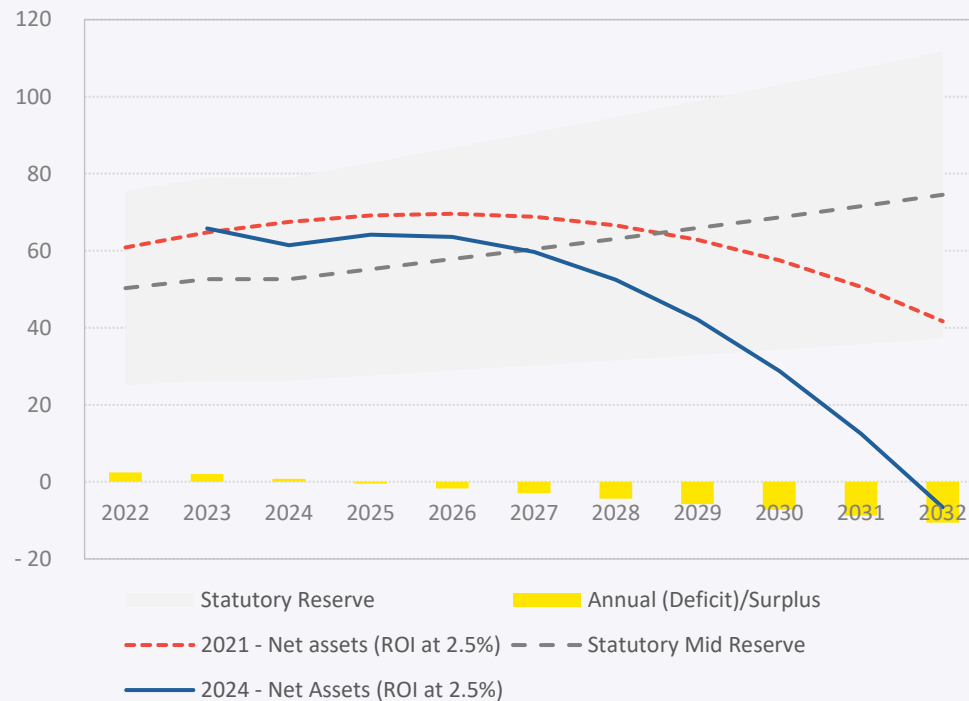
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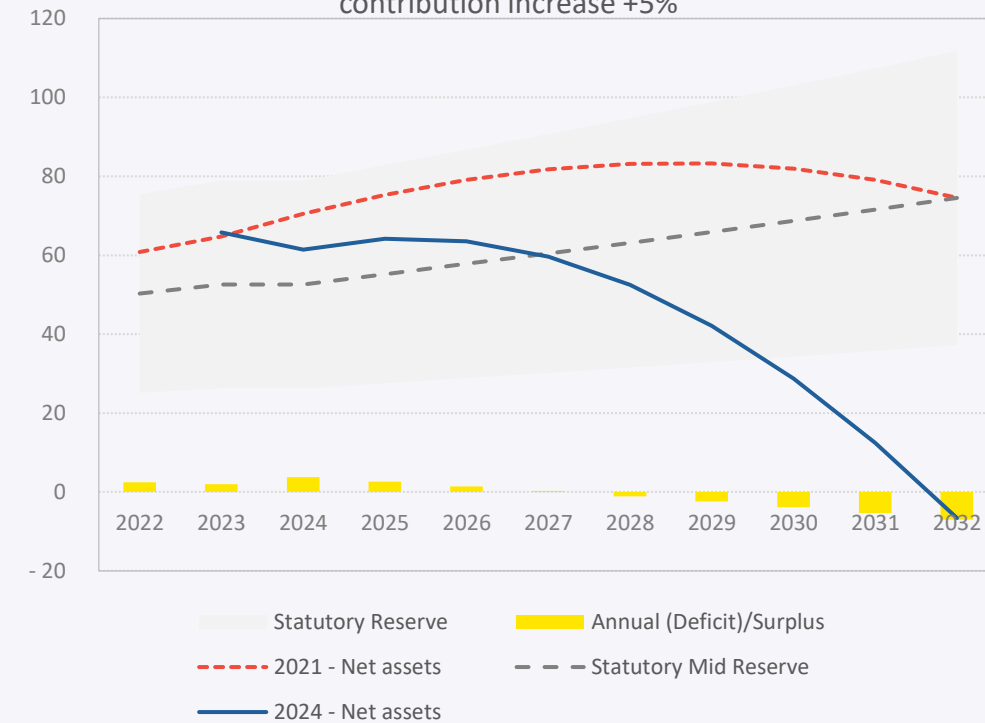
Comparison of 2024 and 2021 results

- The below graphs show the net assets and the annual deficit/surplus over a 10-year period according to the 2021 study (central scenario and contributions +5% in 2024) and the 2024 study.

Net assets and deficit/surplus over years (\$m)
2024 baseline vs 2021 baseline



Net assets and deficit/surplus over years (\$m)
2024 baseline vs 2021 baseline adjusted for 2024
contribution increase +5%



- The actual net assets decrease in 2024 is notably explained by losses on currency position and by claims higher than expected.

