Asset Liability Management

Pension Fund of Credit Suisse Group (Switzerland)

ALM study part II (ICR scheme)

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Zurich, 5 May 2022

Draft

Goals

- The management rules for the interest crediting rate (ICR) on the retirement savings capital should satisfy the following conditions:
  - The ICR scheme is defined relative to the economic funded status as it is currently defined by AON.
  - The ICR scheme is predictable and comprehensible
  - The scheme results in an expected ICR that is higher than the expected return on assets (total portfolio).

Suggestion for crediting scheme

Levels FS = Economic funded status	ICR on retirement savings	Pension improvements (in % of retirement capital)	
FS ≥ 130%	BVG minimum rate + 4-8%	2-4%	distributing
130% > FS ≥ 125%	BVG minimum rate + 4-7%	1-3%	
125% > FS ≥ 120%	BVG minimum rate + 4-6%	0-2%	
120% > FS ≥ 115%	BVG minimum rate + 3-5%		
115% > FS ≥ 113%	BVG minimum rate + 2-4%		
113% > FS ≥ 107%	BVG minimum rate + 1%		stabilizing
107% > FS ≥ 100%	BVG minimum rate		
100% > FS ≥ 90%	50% BVG minimum rate		
90% > FS ≥ 0%	0%*		

Remark: Economic Funding status as currently calculated by AON (10 year economic pension losses with retirement age 61)

* Must be checked with legal framework in due time.

Interpretation of crediting scheme

- We suggest implementing a **combination of the BVG minimum rate and a surplus ICR** that depends on the economic funding ratio.
- To avoid extreme fluctuations of the ICR, we suggest that the **surplus ICR is limited within a range** (e.g. 2-4% for 115%>FS≥113%).
- This approach has the following **advantages**:
  - ICR depends on the financial situation o the pension fund
  - ICR is **predictable**
  - ICR is **smoothed**
  - The BOT is still left with **some discretionary leeway** to react on specific scenarios.

    Example: While in years of high asset returns, peer group pressure typically leads to a request for high ICR, in years of negative asset returns, an ICR oriented at the lower bandwidth might still appear generous.
- The width should be discussed on the BOT – the wider the range, the higher the discretionary leeway.

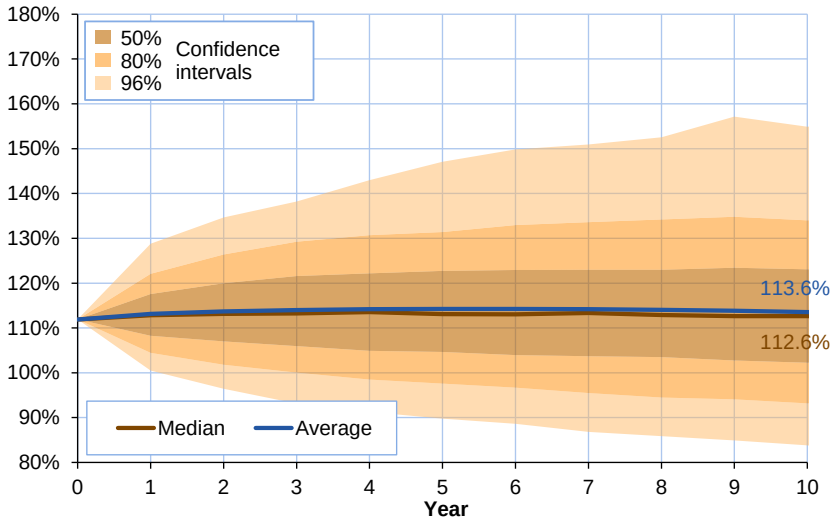
Increasing stability by provisions (buffers)

- In previous discussions, we mentioned the possibility to introduce **buffers** to
  - **a) enable a scheme with more volatile ICR but smooth the ICR** between years with extremely high and low returns and
  - b) to create an instrument to **involve the pensioners in potential recapitalizing measures (provision that can be dissolved in case of recapitalization of the fund)**.

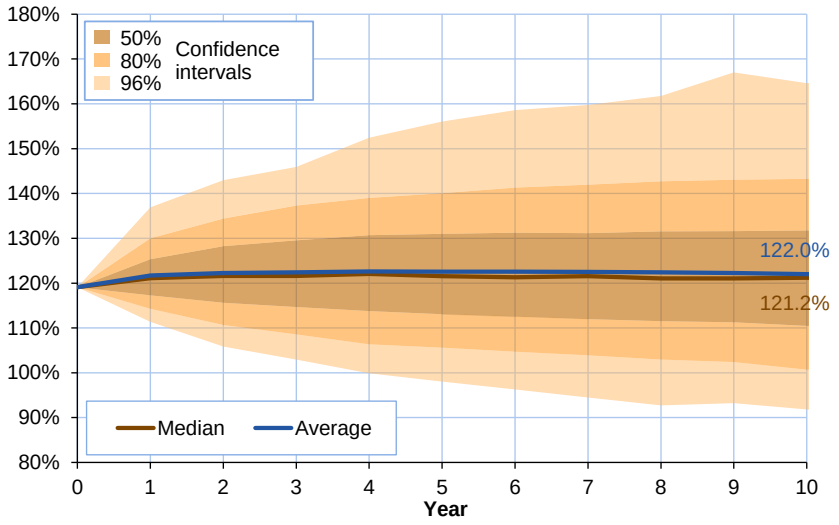
- **Point a) is already addressed** based on the scheme presented above. Additionally introducing ICR provisions that cannot be dissolved for recapitalization purposes and do not lead to an increase of expected ICR only impacts the reported FS and the reported overfunding, respectively. There is no impact on the long-term financial stability or ICR distributed to active employees.
  - **For simplicity and comprehensibility, we suggest to refrain from introducing ICR buffers at the current stage of the discussion.**
- **Point b)** increases the financial stability of the pension fund because it adds to the recapitalizing capability. It is however **not directly related to the ICR** for the actives.
  - **We would thus suggest to discuss a potential provision for pension increases at a later stage.**

Simulation of the suggested scheme
Economic and US GAAP funded status

Economic funded status



US-GAAP Funded Status



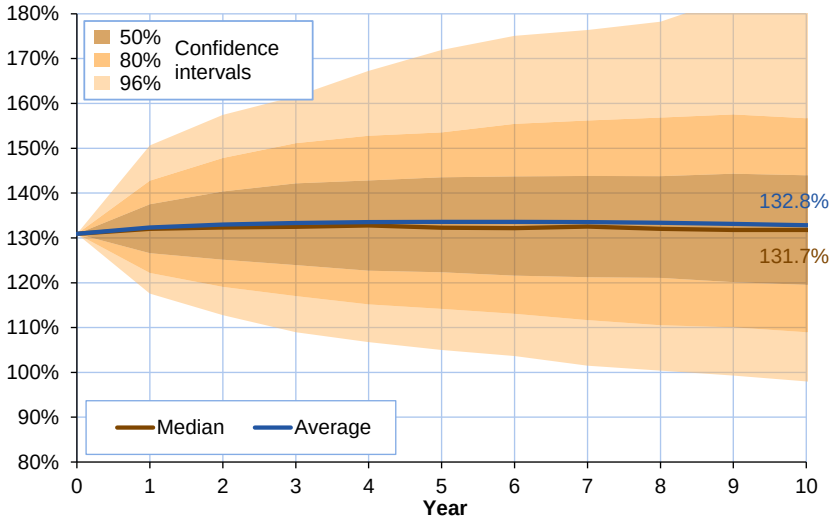
Distribution of econ. funded status			
in year	1	3	10
above 113%	49%	51%	49%
100% - 113%	49%	39%	31%
90% - 100%	2%	9%	13%
80% - 90%	0%	1%	6%
0% - 80%	0%	0%	1%

Distribution of US-GAAP funded status			
in year	1	3	10
above 113%	94%	79%	70%
100% - 113%	6%	20%	21%
90% - 100%	0%	1%	7%
80% - 90%	0%	0%	2%
0% - 80%	0%	0%	0%

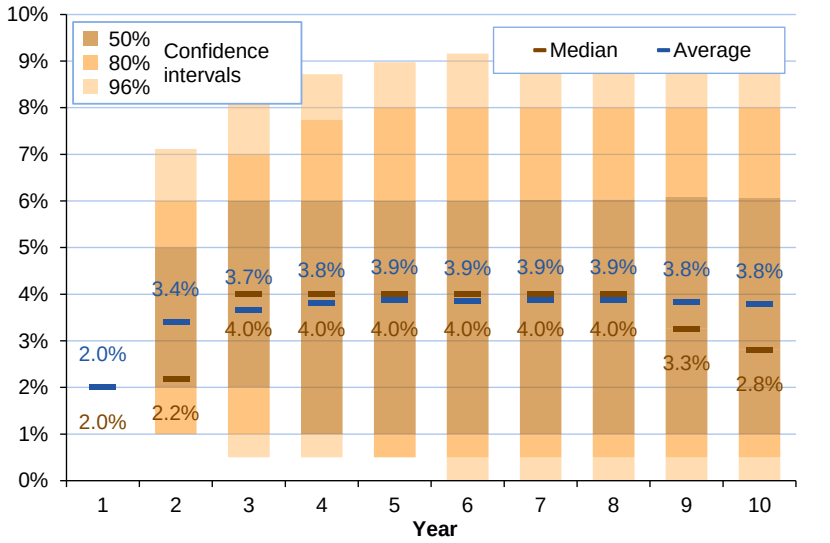
Simulation of the suggested scheme

Swiss GAAP FER funded status and interest credit rate

Actuarial funded status



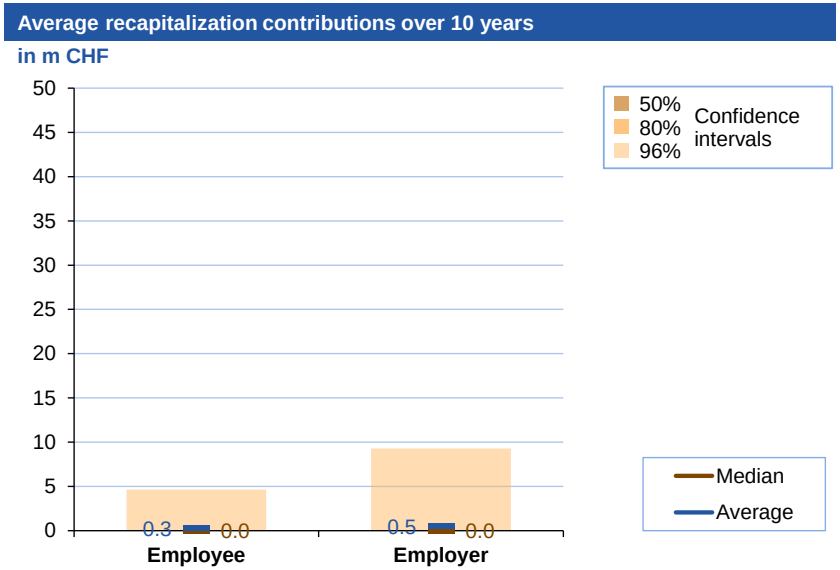
Nominal interest retirement savings capitals



Distribution of econ. funded status in year	1	3	10
above 113%	49%	51%	49%
100% - 113%	49%	39%	31%
90% - 100%	2%	9%	13%
80% - 90%	0%	1%	6%
0% - 80%	0%	0%	1%

Ø interest cr. over 10 years	Interest credit nominal	 real
Average	3.58%	2.91%
Median	3.46%	2.80%
"Best case" (98.0%)	7.18%	6.31%
"Worst case" (2.0%)	0.65%	0.12%

Simulation of the suggested scheme
Recapitalization contributions



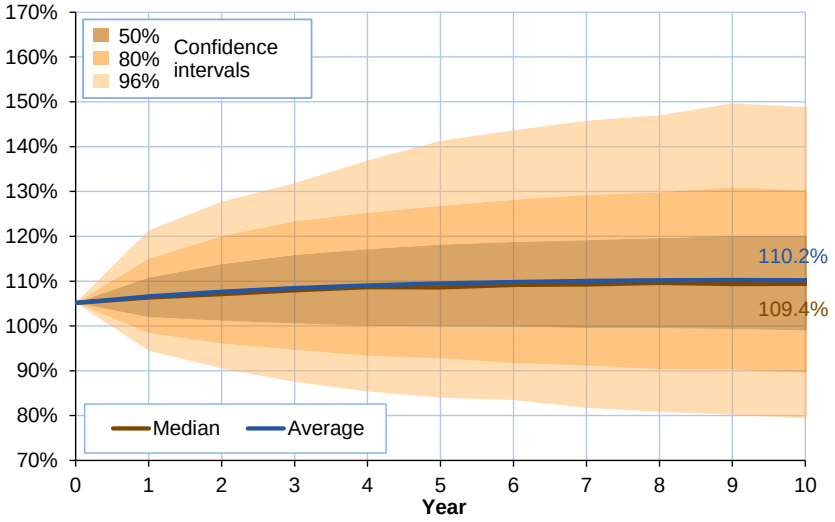
Frequency of recapitalization cbns above 10 years	ER	EE
Per year (Ø)	1%	1%
At least one year	5%	5%

Ø recapitalization cbns over 10 years in m CHF	ER	EE
Average	0.3	0.5
Median	0.0	0.0
"Best case" (2.0%)	0.0	0.0
"Worst case" (98.0%)	4.6	9.3

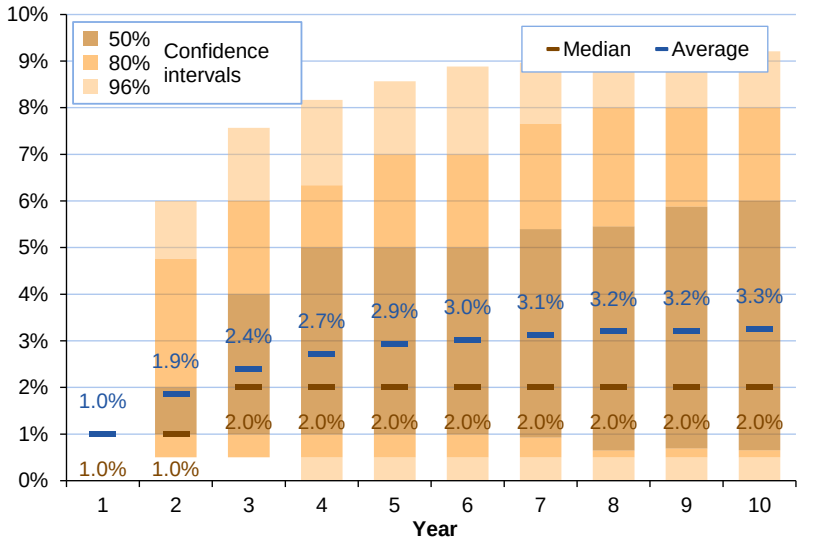
Levels FS = Swiss GAAP FER funded status			Recapitalization cbns of plan members in % of insured salaries	Recapitalization cbns of employer in % of insured salaries
	> FS ≥	100%	0.0%	0.0%
100%	> FS ≥	96%	1.0%	2.0%
96%	> FS ≥	92%	2.0%	4.0%
92%	> FS ≥	88%	3.0%	6.0%
88%	> FS ≥	0%	5.0%	10.0%

Simulation when starting with economic FS of 105%

Economic funded status



Nominal interest retirement savings capitals

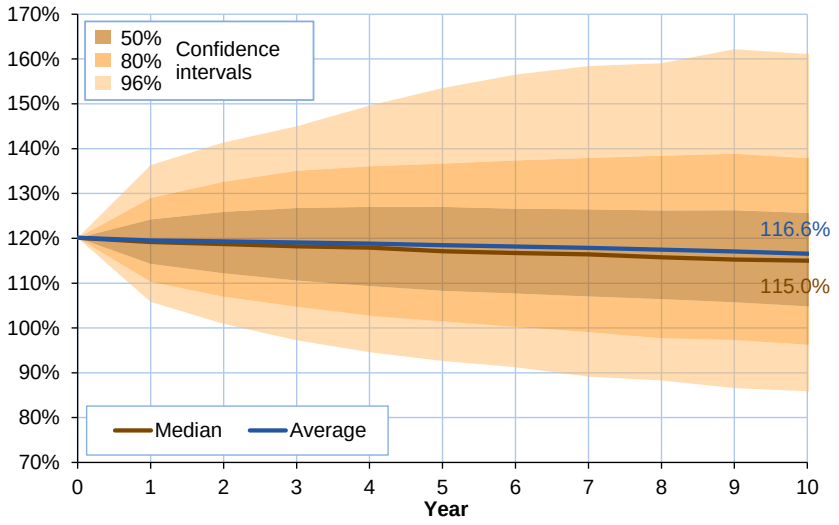


Distribution of econ. funded status			
in year	1	3	10
above 113%	16%	33%	41%
100% - 113%	68%	43%	31%
90% - 100%	16%	20%	17%
80% - 90%	0%	4%	8%
0% - 80%	0%	0%	2%

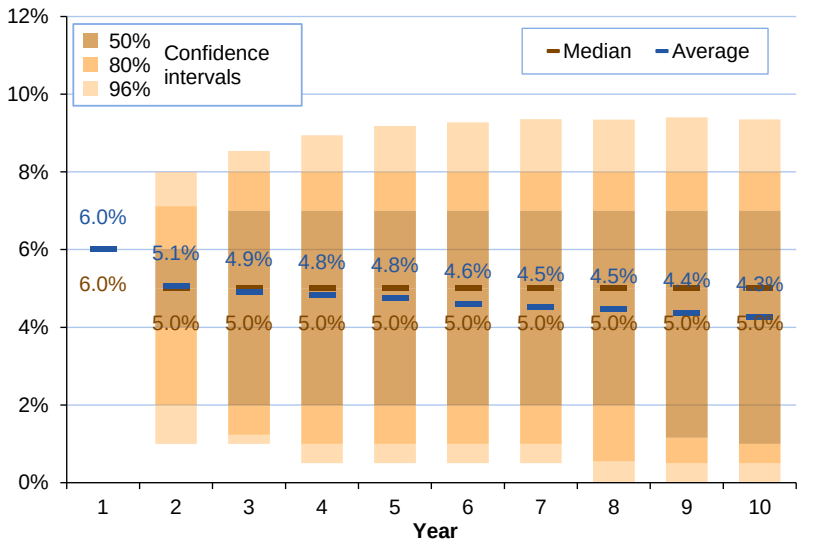
Ø interest cr. over 10 years	Interest credit	
	nominal	real
Average	2.66%	2.00%
Median	2.34%	1.70%
"Best case" (98.0%)	6.53%	5.55%
"Worst case" (2.0%)	0.32%	-0.30%

Simulation when starting with economic FS of 120%

Economic funded status



Nominal interest retirement savings capitals



Distribution of econ. funded status			
in year	1	3	10
above 113%	81%	68%	55%
100% - 113%	19%	28%	29%
90% - 100%	0%	4%	12%
80% - 90%	0%	0%	4%
0% - 80%	0%	0%	1%

Ø interest cr. over 10 years	Interest credit	
	nominal	real
Average	4.76%	4.09%
Median	4.79%	4.13%
"Best case" (98.0%)	8.02%	7.15%
"Worst case" (2.0%)	1.38%	0.90%

Key assumptions

Key assumptions

- BVG minimum rate = 10y risk free +0.5%, minimum 1%
- Investment strategy: RB 51%
- In the simulations, we assume the following surplus ICR:
  - FS ≥ 130% ➡ 7%
  - 130% > FS ≥ 125% ➡ 6%
  - 125% > FS ≥ 120% ➡ 5%
  - 120% > FS ≥ 115% ➡ 4%
  - 115% > FS ≥ 113% ➡ 3%
  - 113% > FS ≥ 107% ➡ 2%
- In the simulations, we assume the following pension improvements:
  - FS ≥ 130% ➡ 3%
  - 130% > FS ≥ 125% ➡ 2%
  - 125% > FS ≥ 120% ➡ 1%
- In the simulation model, the ICR and pension improvements are based on the FS at the end of the previous year (t-1). In reality, the basis would be the FS at the end of the current year (t).

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