



**Investment & Actuarial Consulting,  
Controlling and Research.**



**[www.ppcmetrics.ch](http://www.ppcmetrics.ch)**



## **Investment Consulting**

# **SNB Policy Rate Hike and General Interest Rate Increase**

## **Impact on institutional investors (in particular Swiss pension funds)**

### **PPCmetrics AG**

Dr Oliver Dichter, Partner

Dr Stephan Skaanes, CFA, Partner

Dr Luzius Neubert, CFA, Partner

Zurich, 21 June 2022

# Content

---

• Initial Situation	3 - 7
• Impact on Asset Liability Management	8 - 12
• Impact on Asset Manager Selection	13 - 16
• Impact on Investment Controlling	17 - 20
• Conclusion	21 - 22

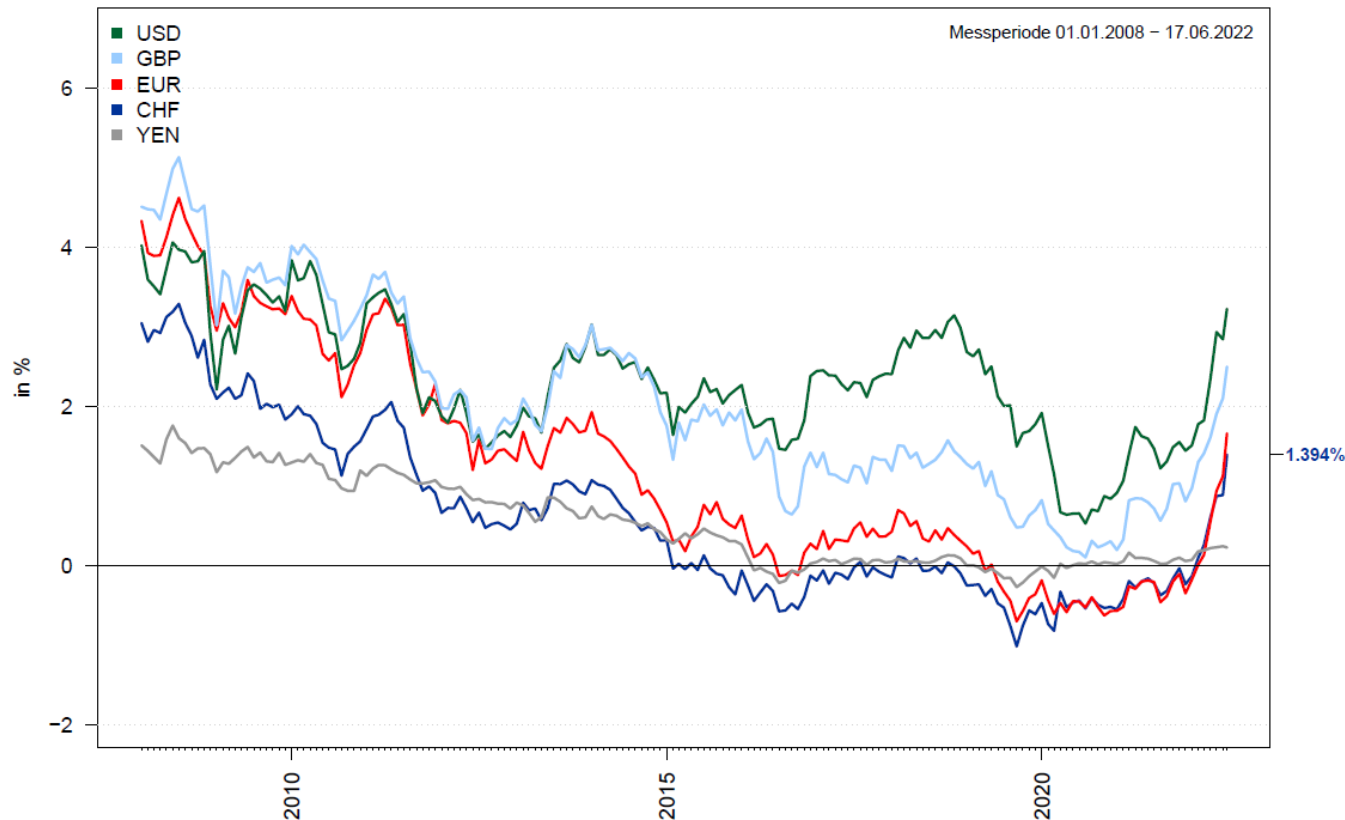
## Initial Situation

# Interest Rate Increase: Extent and Causes

---

- Since the beginning of the year, yields to maturity on 10-year Swiss government bonds have increased from -0.13% (31.12.2021) to +1.39% (as of 17.06.2022) (cf. p. 5). Market interest rates in other currency areas have also increased by a similar amount.
  - The reason for this sharp increase in interest rates was primarily the expectation of market participants that central banks would raise key interest rates to fight inflation.
  - This expectation has been confirmed in recent months, with foreign central banks raising key interest rates (e.g. USA, UK).
  - On 16 June 2022, the Swiss National Bank (SNB) also decided for the same reason to raise its policy rate and the deposit rate for commercial banks by half a percentage point from -0.75% to -0.25%.
- **This presentation will show the impact of the increase in interest rates on institutional investors.**

# Development of Long-Term Interest Rates



© PPCmetrics AG / 20.06.2022 / Quelle: Bloomberg

- ▶ Since the beginning of 2022, 10-year government bond yields have risen significantly.

# Impact on Financial Markets and Pension Funds

- On the **bond markets**, the interest rate hikes since the beginning of 2022 have resulted in **substantial losses**.
- The **stock markets reacted negatively** to the interest rate hikes as well. In addition to rising interest rates, the reasons were fears of deglobalisation and recession as well as commodity shortages due to Russia's war on Ukraine.
- With the exception of commodities, gold and real estate Switzerland (unlisted), **all important asset classes** exhibit a **negative total return** since the beginning of the year (see p. 7).

## PPCmetrics Pension Ticker

Daily updated estimate of the return and the funding ratio of Swiss pension funds

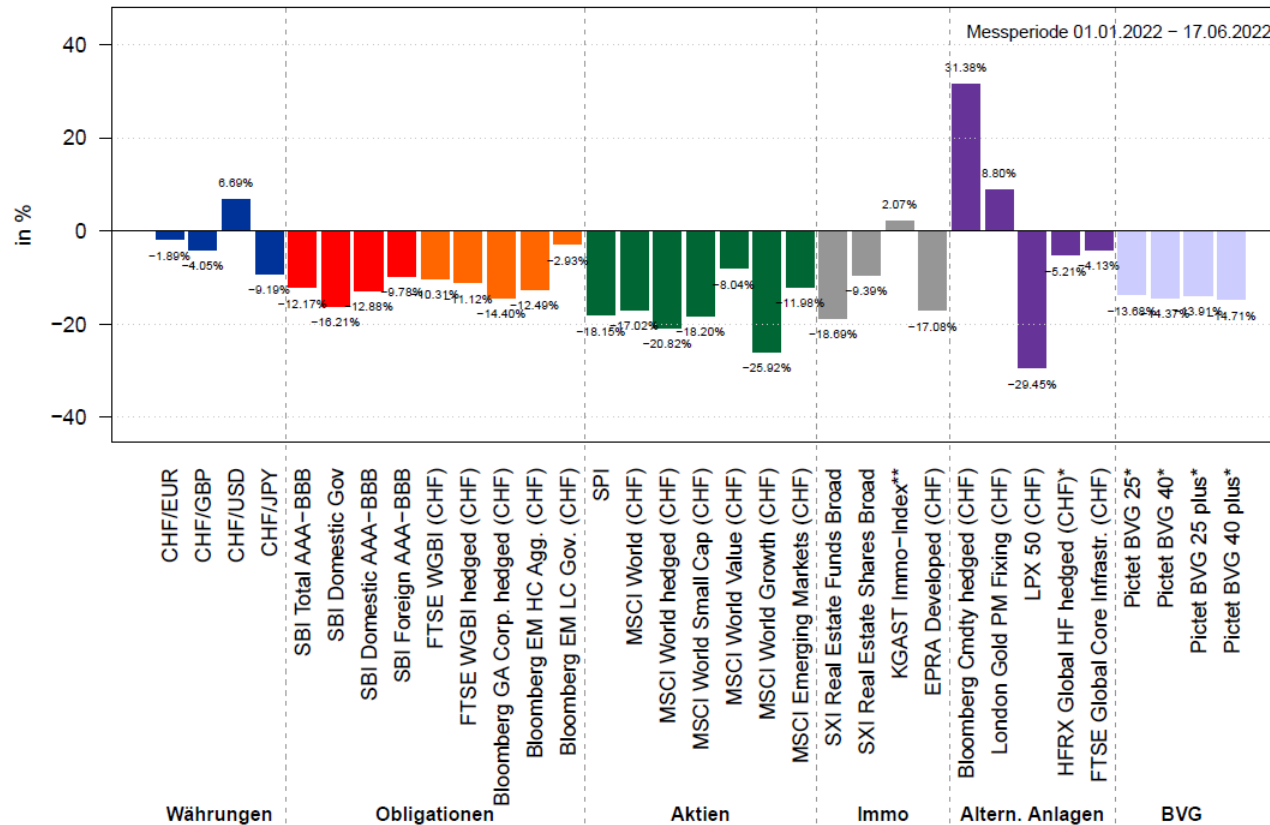
Pension Ticker per 17.06.2022

Year-to-date performance -12.4%

Actuarial funding ratio 104.8%

- As of 17 June 2022, the average **estimated year-to-date return** for Swiss pension funds is **-12.4%**.
- As a result, their average **actuarial funding ratio** decreased to **104.8%** (see box, [www.ppcmetrics.ch/pension-ticker](http://www.ppcmetrics.ch/pension-ticker)).

# Cumulative Year-To-Date Performance



© PPCmetrics AG / 20.06.2022 / Quelle: Bloomberg

\* Die Schlusskurse der Indizes können mehrere Tage verzögert sein.

\*\* Geschätzte Renditen.

- Since the beginning of the year, most asset classes show substantial negative performances.



## **Impact on Asset Liability Management**

- The **level of interest rates** is **a key element** in asset liability management (i.e. when determining the investment strategy taking into account benefits).
- Among other things, the following **variables are affected by the interest rate level**:
  - Expected return on investments
  - Asset valuation
  - Interest rate on retirement savings\*
  - Discount rates for the valuation of liabilities (e.g. actuarial interest rate\*)
- ▶ **The next time these parameters are reviewed, it is advisable to take the changed conditions into account.**
- ▶ **In particular, we recommend examining the possibility of linking the actuarial interest rate to the market interest rate (cf. p. 11 f.).**

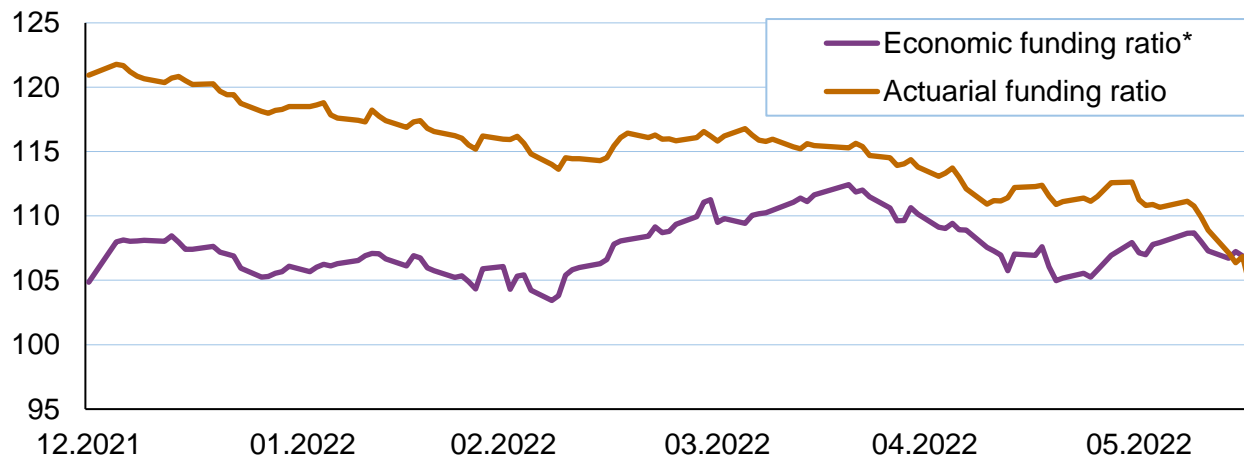
\* In the case of Swiss pension funds, these two variables are affected by the BVG minimum interest rate and the FRP 4 technical guideline, which in turn are based on the interest rate level.

# Asset Liability Management

## Funding ratio of Swiss pension funds

- The average **actuarial funding ratio** of Swiss pension funds (PPCmetrics Peer Group) fell from 121% at the beginning of the year to around 105% as of 17 June 2022 (decrease of around 16 percentage points).
- However, when pension liabilities and pension losses are valued at the current risk-free interest rate (**economic funding ratio**), the financial situation of the pension funds has hardly changed.

Funding ratio of Swiss pension funds (PPCmetrics Pension Ticker)

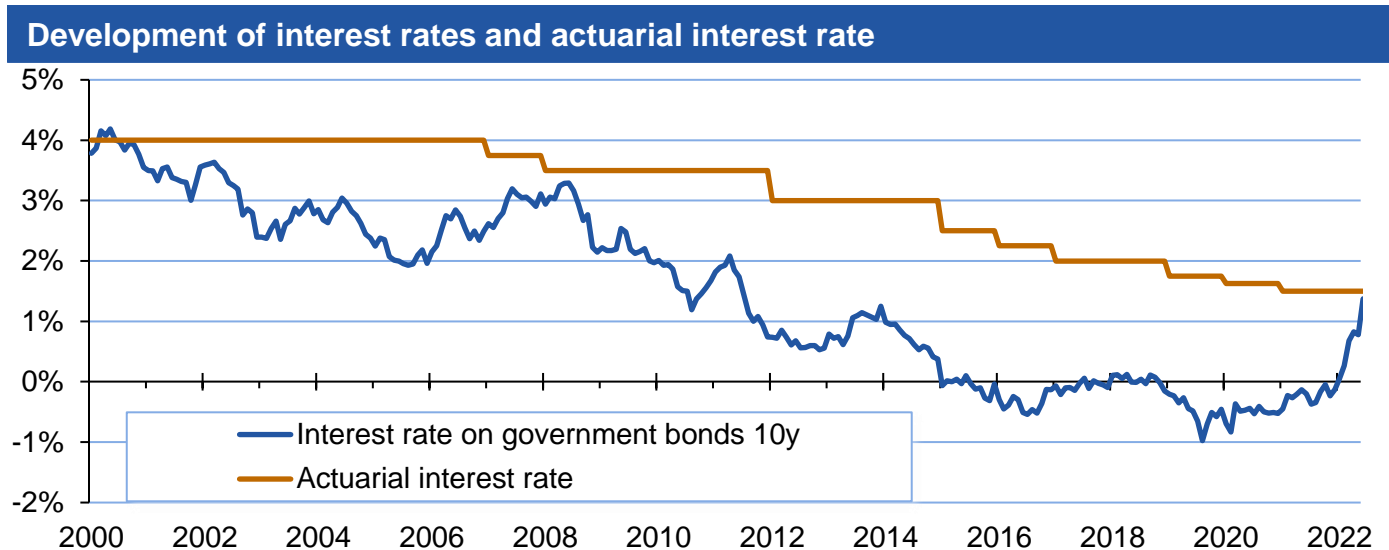


\* Including economic pension losses (and gains) over the next 5 years.

Source: [www.ppcmetrics.ch/pension-ticker](http://www.ppcmetrics.ch/pension-ticker).

# Asset Liability Management

## Actuarial interest rate of Swiss pension funds



- The long-term risk-free interest rate (yield to maturity of **10-year Swiss federal bonds**) equals now approximately the average **actuarial interest rate**.
- Therefore, the **economic funding ratio currently** largely **corresponds to the actuarial funding ratio**.

Source for values: SNB, OAK report on the financial situation of pension funds 2021, PPCmetrics Peer Group

## Findings

---

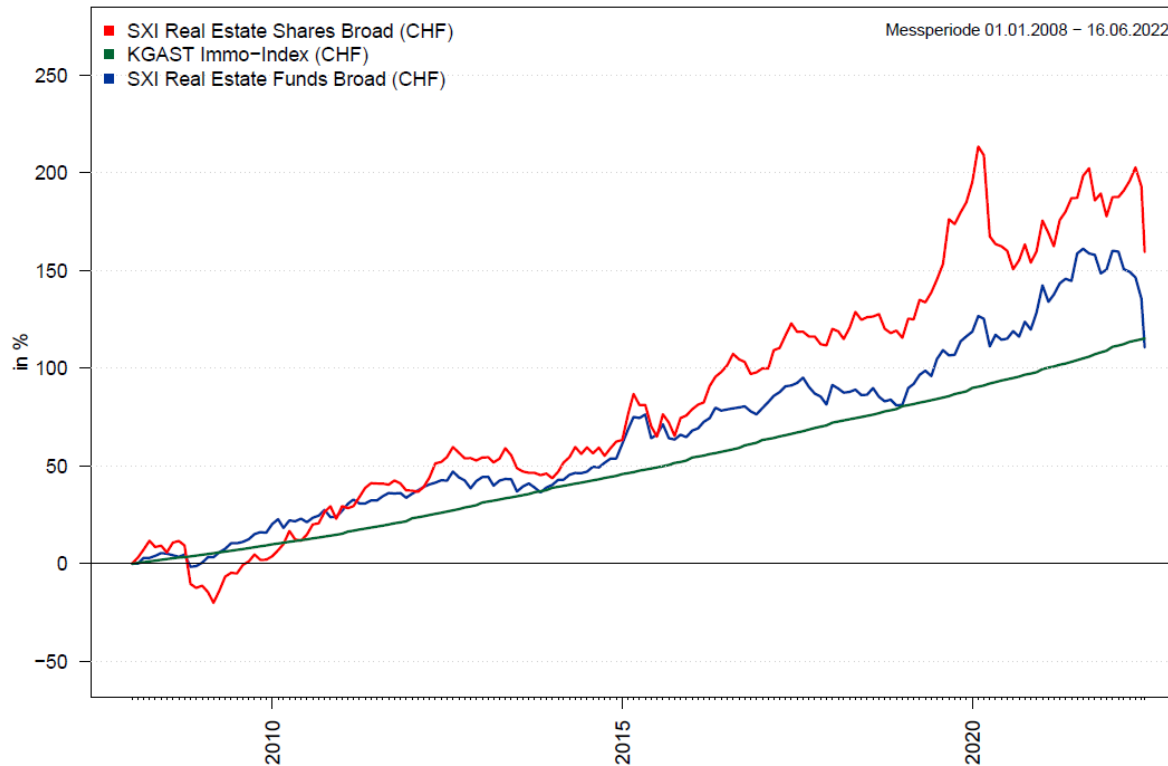
- From a **actuarial point of view**, the significant year-to-date price losses resulted in a **serious deterioration of the financial situation of pension funds**.
- However, from an **economic perspective** (economic funding ratio), the **financial risk capacity** of an average Swiss pension fund has **hardly changed** since the beginning of the year.
- From an ALM point of view, **rising interest rates** also have the **long-term advantage** that **future benefits can be financed more easily**.
- A potential **recapitalisation of the pension fund becomes** also more easy as a zero interest rate round adds to the recapitalisation of the fund even without any investment risk. Thus, the restructuring capacity has increased since the beginning of the year.
- For many pension funds, **decoupling the actuarial interest rate from the conversion rate and linking it to market interest rates instead would be** conceivable at the moment.

## Impact on Asset Manager Selection

- In **asset manager selection**, the rapid and sharp rise in interest rates leads to challenges especially in the **selection** and **purchase of illiquid investments**.
- Liquid investments react quickly to a rise in interest rates. However, illiquid investments are usually subject to a **valuation lag** (cf. p. 15). Current prices might not reflect the effective value of the investments.
- **Among** others, **the following asset classes** may be affected by these developments, provided they are **not listed on the stock exchange** or valued daily at market prices:
  - Real estate (e.g. investment foundations, unlisted funds, direct investments)
  - Private equity
  - Private Debt
  - Infrastructure
- The **challenges** are, among other things, to **measure performance** and to **value assets accurately**.

# Asset Manager Selection

## Performance of liquid vs. illiquid investments



© PPCmetrics AG / 17.06.2022 / Quelle: Bloomberg

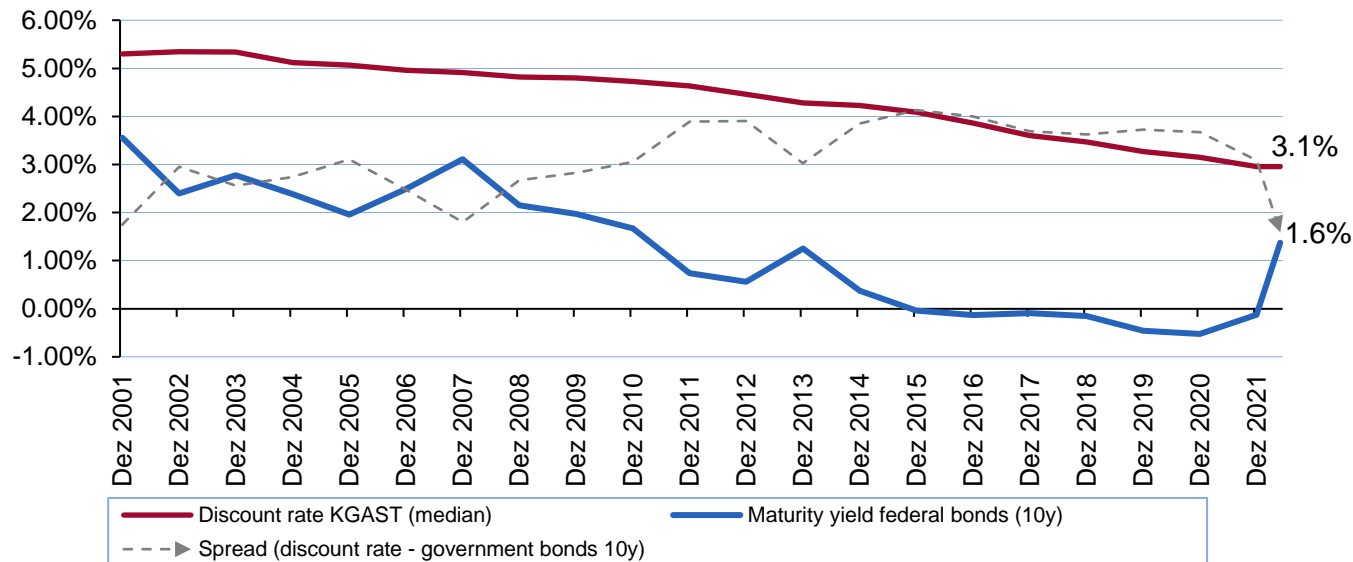
- ▶ **Liquid investments (example: real estate funds and shares) reacted immediately to the interest rates rise, whereas illiquid investments (example: investment foundations).did not so.**



# Asset Manager Selection

## Valuation of real estate investment foundations

Development of discount rates (since 2001) - Investment foundations



- ▶ At the end of 2021, Swiss real estate investment foundations valued their properties at median discount rates that were 3.1 percentage points above the yield-to-maturity of 10-year federal bonds.
- ▶ This difference (= risk premium included in the valuations) has since fallen to 1.6 percentage points. This raises the question of how up-to-date the discount rates or the valuations still are.

Source: Swiss National Bank, KGAST, Annual Reports Investment Foundations

## Impact on Investment Controlling

## Need for clarification

---

The substantial rise in interest rates also affects **Investment Controlling**:

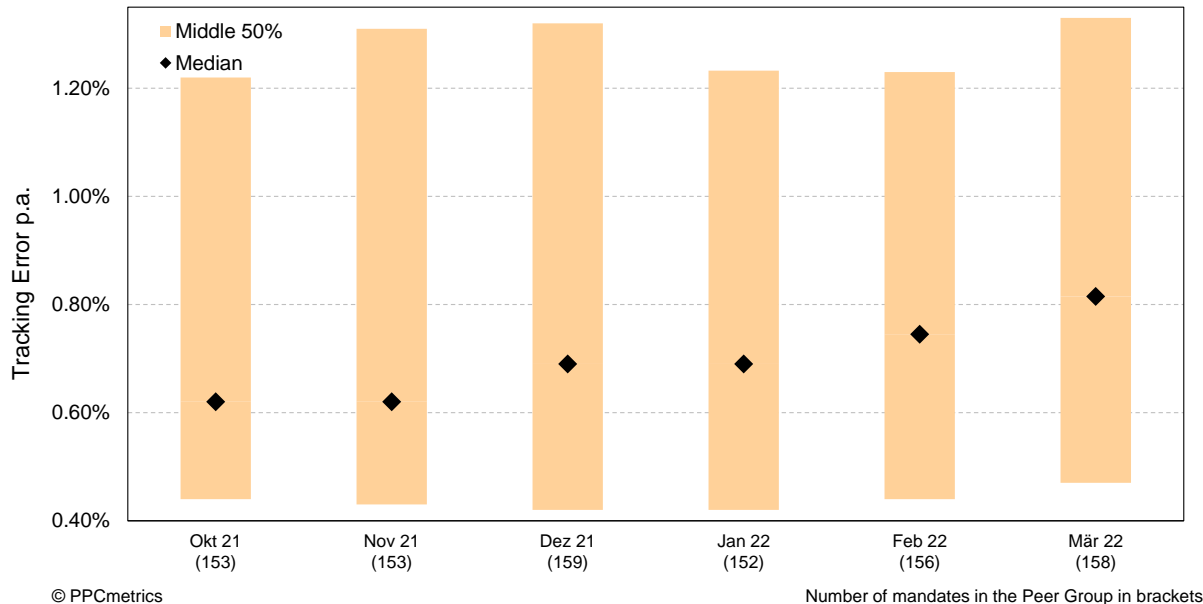
- **Performance**: The rise in interest rates affects credit risk spreads to varying degrees (e.g. for government bonds in the euro area). As a result, deviations from benchmarks increased (increased tracking error, see p. 19). Intensified monitoring is therefore highly recommended.
- **Benchmarking**: The benchmarking of illiquid investments must be interpreted with additional caution due to valuation effects. When the benchmark reflects a certain interest rate level (e.g. absolute fixed yield 4% p.a.), it must be clarified whether the benchmark is still appropriate.
- **Interest rate conditions**: Many conditions that depend on the interest rate level, such as interest on account balances, have so far been based on the policy interest rate (previously: -0.75%, new: -0.25%).
- **Contracts and exemption limits**: In recent years, several investors have negotiated exemption limits (no negative interest rate). In some cases, asset management or custody fees have also been linked to an existing exemption limit. In these cases, a review and renegotiation of the corresponding clauses is highly recommended.

# Investment Controlling

## Increased tracking error

PPCmetrics Peer Group comparison - rolling tracking error over 12 months

Peer Group: Bonds foreign currency active



- ▶ The rise in interest rates increased the difference between individual borrowers on the capital markets.
- ▶ This is one of the reasons why the tracking error of active foreign currency bond mandates has increased.

# Investment Controlling

## Conditions

Statistics Offers: interest rate	Min	Q1	Median	Ø	Q3	Max
Interest rate CHF	-1.22%	-0.95%	-0.95%	-0.88%	-0.75%	-0.75%

- In recent years, **global custody fees have** often been negotiated in combination with an exemption limit to avoid negative interest.
- As the above table shows, the interest rate conditions for cash accounts outside the exemption limit are on average around -0.88% p.a.
- Due to the rise in interest rates, the **interest rate conditions** on cash accounts should be negotiated **in a timely manner** and improved as quickly as possible.

Source: Quotes PPCmetrics clients

Average interest rate conditions in global custody (outside the exemption limit) 2017 - 2021

## Conclusion

# Conclusion

---

- The actuarial funding ratio of Swiss pension funds has deteriorated substantially since the beginning of the year. However, the economic situation of the pension funds has not changed significantly.
- Higher interest rates are even an advantage in the long run, as the financing of future benefits is simplified. **Recapitalisations** also become easier, as a zero interest rate on working members' capital has a stronger effect with higher interest rates.
- ▶ **We recommend to discuss that the actuarial interest rate be linked to the market interest rate.**
- ▶ **The selection of asset managers is more challenging in the current environment, especially for illiquid investments, as there can be uncertainty about the effective valuation of the underlying investments.**
- ▶ **In Investment Controlling, it is advisable to check the interest conditions and exemption limits in a timely manner and to renegotiate them if necessary.**



Investment & Actuarial Consulting,  
Controlling and Research

**PPCmetrics AG**

Badenerstrasse 6  
Postfach  
CH-8021 Zürich

Phone +41 44 204 31 11  
E-Mail [zurich@ppcmetrics.ch](mailto:zurich@ppcmetrics.ch)

**PPCmetrics SA**

23, route de St-Cergue  
CH-1260 Nyon

Phone +41 22 704 03 11  
E-Mail [nyon@ppcmetrics.ch](mailto:nyon@ppcmetrics.ch)

Website [www.ppcmmetrics.ch](http://www.ppcmmetrics.ch)  
Social Media   

**About PPCmetrics**

PPCmetrics AG is a leading consulting firm whose services include investment controlling and investment consulting, selection of financial service providers (asset manager selection) including public procurements for such selection, asset liability management (ALM), definition of investment strategies, asset allocation, portfolio analyses, drafting of investment regulations, consulting on sustainable investments, legal consulting (BVG/LPP, financial market legislation, pension fund governance) and actuarial consulting as well as activities as pension actuary.

Our clients in Switzerland and abroad include institutional investors such as insurance companies, as well as renowned professional investors such as pension funds, employee benefits foundations, public social insurances and pension funds and other public-law entities, large companies, foundations, associations (in particular non-profit organisations) or ultra-high-net-worth individuals (UHNWI) and their consultants (e.g. family offices).

**Legal Notice**

PPCmetrics AG advises its clients upon their own initiative and carries out its analyses according to the processes it has developed. It does not make any investment decisions on behalf or for the clients and expressly does not make any investment recommendation. As well-informed investors it is in the clients' responsibility and at their discretion how they decide and act based on the advice offered by PPCmetrics AG. PPCmetrics AG assumes that the clients possess the necessary knowledge and sufficient experience in the financial field to make their investment decisions and assess the associated risks. PPCmetrics AG does not perform an assessment of appropriateness or of suitability pursuant to the FinSA. Based on the clients' specifications, PPCmetrics AG assumes that the investments are compatible with their investment objectives, in particular their risk capacity as well as the asset allocation and the time horizon of the investments. PPCmetrics AG is not involved in the development, management or recommendation of financial instruments. It does not participate in the distribution of financial instruments, does not accept any compensation from third parties in connection with the provision of its services and is compensated exclusively by its clients according to a fee agreement. The partners of PPCmetrics AG are registered as investment advisors in the advisor register of BX Swiss AG ([www.regservices.ch](http://www.regservices.ch)). PPCmetrics AG is affiliated to the financial ombudsman FINOS, Talstrasse 20, 8001 Zurich ([www.finos.ch](http://www.finos.ch)). Furthermore, PPCmetrics AG is accredited by the OPSC as a pension actuary. Please consult [www.ppcmmetrics.ch/de/uber-uns/regulierung](http://www.ppcmmetrics.ch/de/uber-uns/regulierung) for further information and notes.



We publish more than 40 articles on various topics per year.



**Publications**



Our experts share their knowledge and opinions with the public.

**Videos**



Experience our conferences, which we organize several times per year.



**Conferences**

PPCmetrics AG  
Investment & Actuarial Consulting,  
Controlling, and Research.  
[Read more](#)



**Website**

