



# **Asset Liability Management**

## **Pension Fund of Credit Suisse Group (Switzerland)**

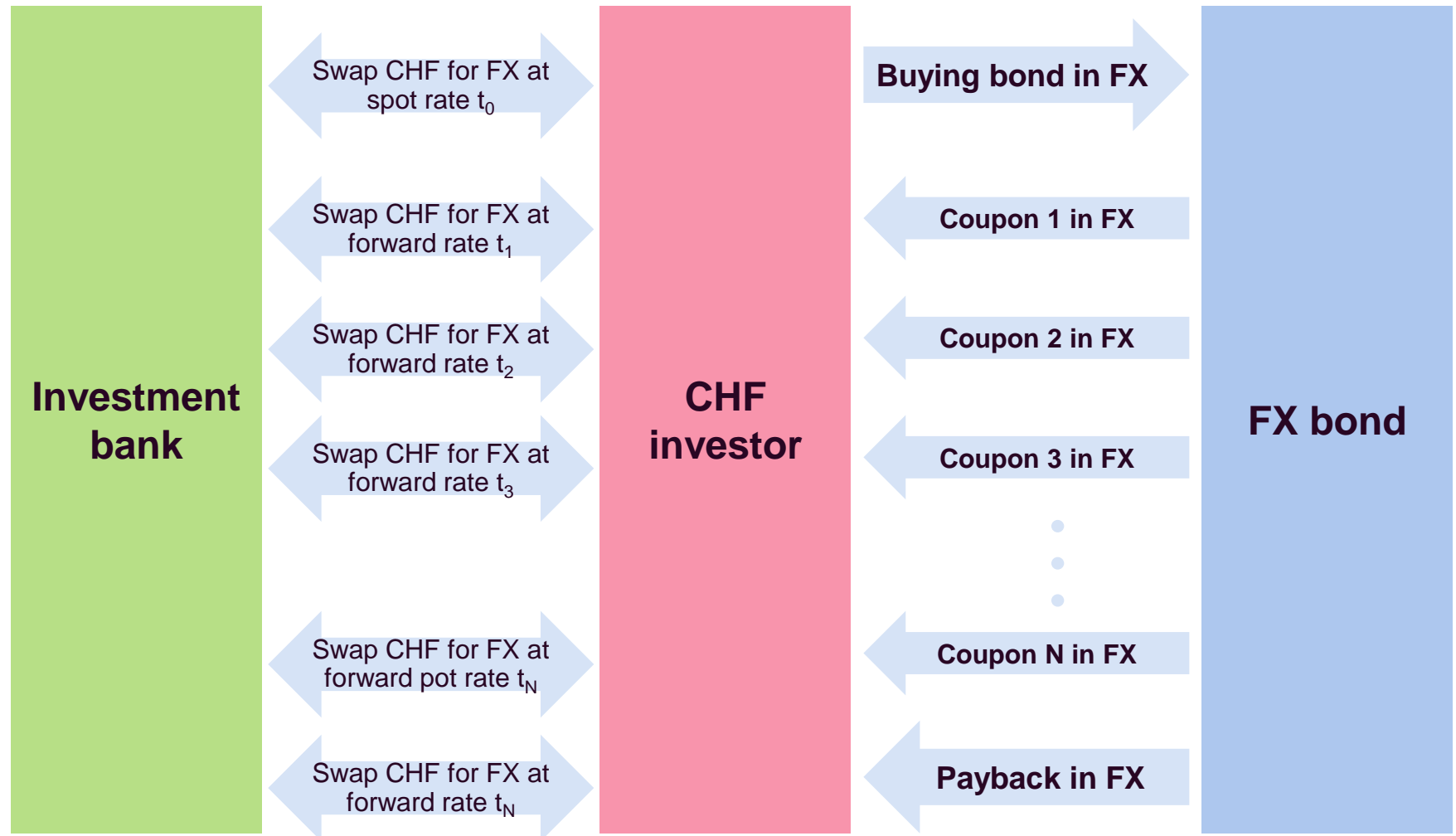
### **Hedging FX bonds cross-currency fix-fix**

**PPCmetrics AG**

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# Hedging of a coupon bond cross-currency fix-fix Functionality



# Interpretation

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- All **current and future cash flows** (coupons and payback of nominal) are hedged to CHF at the current spot and forward exchange rates.
- The **cost** of this hedge is the **interest rate difference** between CHF and the foreign currency at matching maturities.
- Economically, a foreign currency bond that is hedged to CHF fix-fix may thus be **considered as a synthetic CHF bond**.
- A cross-currency swap fix-fix, does hence **not only hedge the foreign currency risk**, but also the basis risk between the foreign currency yield curve and the CHF yield curve.
- This is not the case when the foreign currency risk is hedged using rolling FX forwards (currency overlay).
- An overlay strategy represents a series of short term cross-currency swaps.
- The cost of an overlay strategy is thus only the difference between short term rates.
- FX bonds hedged with an overlay strategy are thus still subject to the foreign interest rate risk.

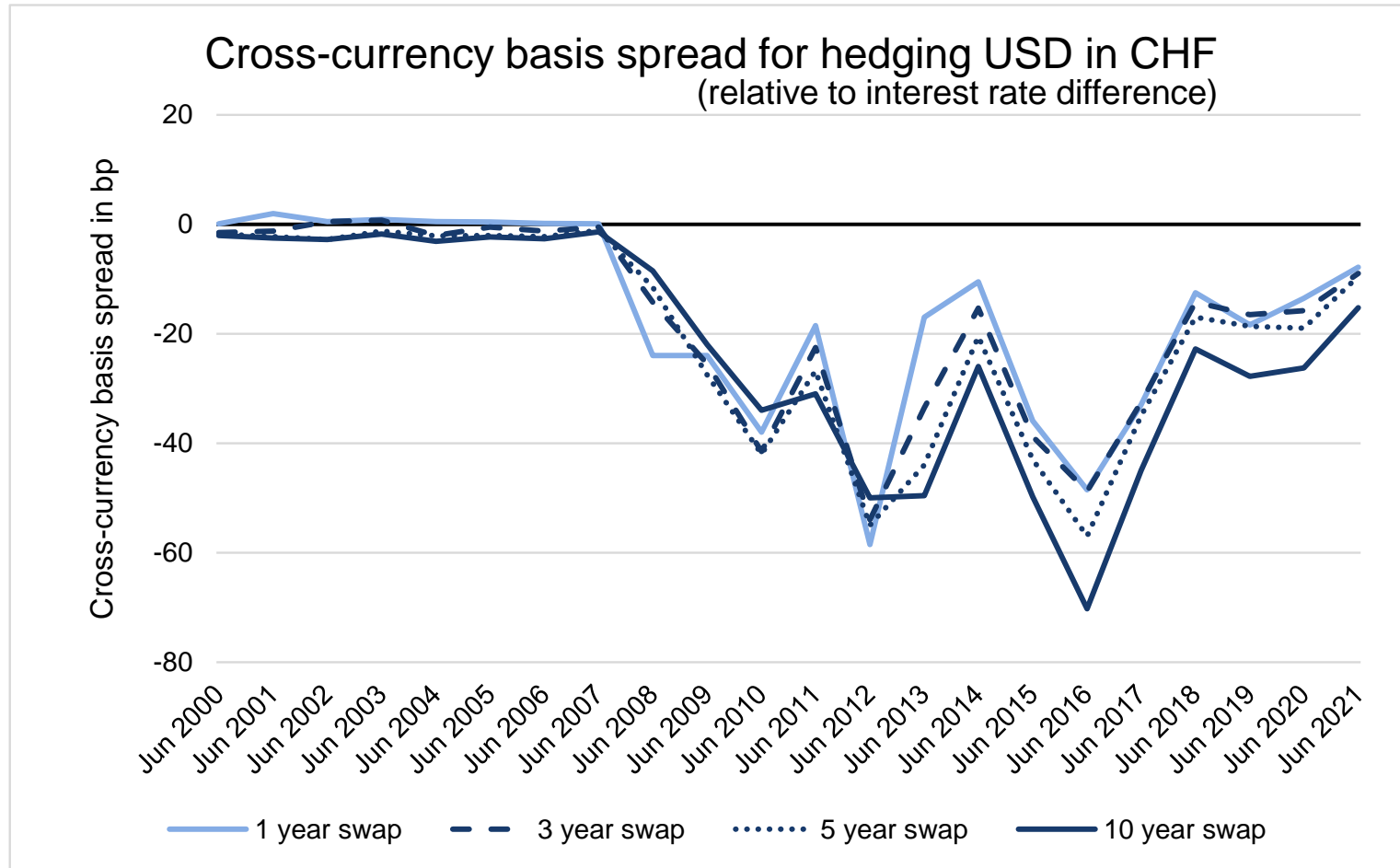
# Operational aspects

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- The advantage of allowing for cross-currency fix-fix hedges is a **widening of investment opportunities** within the asset class «Swiss bonds».
- Cross-currency fix-fix hedging is however **operationally demanding**.
  - There is either a separate contract for each bond required,
  - or a system which enables the aggregation of cash flows of different bonds over different time buckets (Macro hedging).
- Moreover, there are **imperfections due to credit risk**
  - If a bond is subject to a credit event, the hedge must be unwound
  - The credit risk of the investment bank and the investor requires that a margin account is maintained.
- **Long term** cross-currency fix-fix **hedges may be more expensive than an overlay strategy** (see next slide).

# Cross-currency basis spread

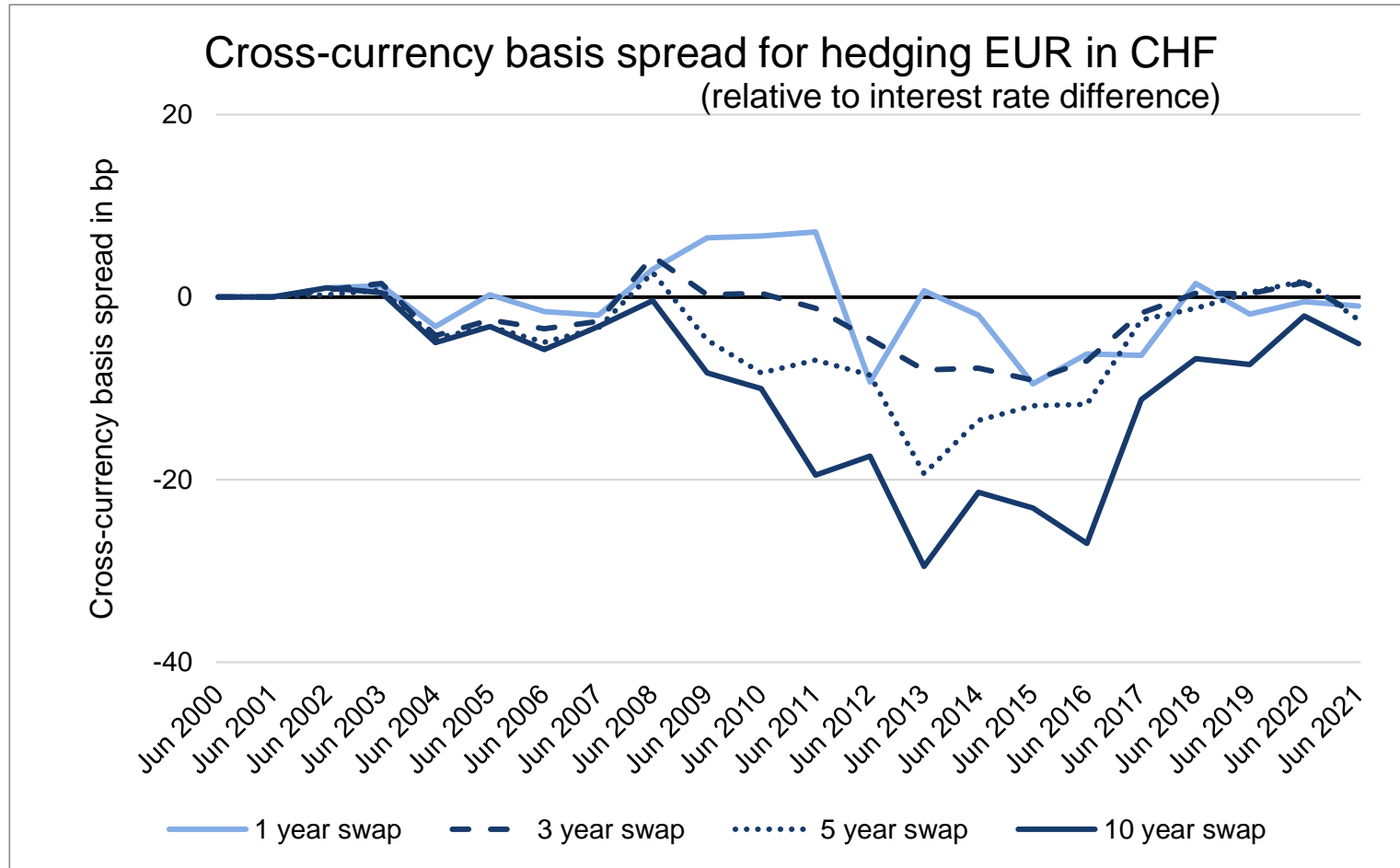
## Example USD-CHF



Source: Own illustration based on data from Bloomberg

# Cross-currency basis spread

## Example EUR-CHF



Source: Own illustration based on data from Bloomberg

# Recommendation

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- A **portfolio of FX swaps that is hedged cross-currency fix-fix** may be considered as a portfolio of synthetic CHF bonds and should thus be **classified as Swiss bonds** in the investment strategy.
- A **separate strategic allocation** for FX bonds hedged cross-currency fix-fix is **not required**.



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