## Interest derivatives for insurers

**Contents:**

*Introduction* **a)** Briefly explain the risk the minimum guarantee implies for the insurer, and that this risk needs to be taken into account when determining sufficient capital needed. **b)** Why might this matter more for a privatly held insurer than for a governmental backed insurere?]

*Asset management* **a)** Explain possible different asset classes to be invested in (sjekk Storebrands rsrapport for dagens asset mix). **b)** Explain what an overlay strategy implies (and that the goal is to NOT make money on the overlay, but rather to hedge risk exposure)

*Overlay structures in the interest rate universe* **a)** Explain basic products (floor, cap, reciver- and payerswaptions) **b)** interest rate floor strategies for insurers **c)** receiver swaption strategies for insurers **d)** why not just use swaps (receive fixed rate)?

*Numerical example* Model an interest rate portfolios return i with and without floors or receivers. This example will also show the advantage of optionality instead of fixed rate swaps.