Introduction to caps and floors

Caps and floors are financial instruments that protect you against changes in interest rates. They function like insurance against unwanted interest rate fluctuations.

- A cap sets an upper limit on the interest rate, preventing it from rising above an agreed maximum.
- A floor sets a lower limit on the interest rate, preventing it from falling below a specified minimum.

Caps and floors are typically used by borrowers and investors who seek greater predictability in their interest expenses or interest income, without fully committing to a fixed interest rate.

Opportunities offered by caps and floors

Various strategies can be constructed to assume or hedge interest rate risk using caps and floors. Some simple strategies are described here.

Purchased interest rate cap
A purchased interest rate cap protects you against rising interest rates by ensuring that the floating rate does not exceed an agreed level.

For example, if you have a loan with a floating interest rate and wish to protect yourself against rate increases, you can purchase a cap. The cap ensures that the interest rate you pay will never be higher than the agreed cap level.

Purchased interest rate floor
A purchased interest rate floor protects you against falling interest rates by ensuring a minimum interest rate.

If you wish to protect yourself against a decline in a floating interest rate, you can purchase a floor. The floor ensures that the interest rate you receive during a given period does not fall below the agreed level.

Interest rate collar
An interest rate collar is a combination of an interest rate cap and an interest rate floor. It establishes both a maximum and a minimum level for how the interest rate can develop.

1. General benefits and drawbacks

Caps and floors provide flexible hedging of interest rate risk and can be tailored to individual needs.

For buyers of caps and floors, the risk of loss is limited to the premium paid, while the profit potential is, in principle, unlimited.

However, these instruments are complex and can be difficult to understand and price. Premiums can be high, and for sellers of caps and floors, losses can be significant - in some cases unlimited. As the instruments are not listed on an exchange, there are not always clear market prices, which may affect both pricing and liquidity.

2. Purchased cap - benefits and drawbacks

Benefits
- Limits interest rate increases by ensuring that the rate does not exceed an agreed maximum
- Preserves the benefits of a floating interest rate if market rates decline
- Hedges interest rate risk with limited liquidity commitment, as you only pay a premium

Drawbacks
- You pay for the protection if the interest rate does not rise
- Due to the option premium, the solution may be more expensive than an interest rate swap if rates rise

3. Sold cap - benefits and drawbacks

Benefits
- You can increase your interest rate exposure in exchange for receiving a premium
- You can benefit from expectations of low or stable rates to generate ongoing income

Drawbacks
- The product can be complex and difficult to assess
- When selling caps, you are obliged to compensate the buyer if the reference rate exceeds the agreed strike. The buyer has only a right, not an obligation

4. Purchased floor - benefits and drawbacks

Benefits
- Protects against falling interest rates without giving up potential gains if rates rise
- Limited liquidity commitment, as you only pay the premium upfront

Drawbacks
- You pay for the protection if the interest rate does not fall
- Due to the option premium, the solution may be less advantageous than an interest rate swap if rates fall

5. Sold floor - benefits and drawbacks

Benefits
- You can increase your interest rate exposure in exchange for receiving a premium
- You can benefit from expectations of stable rates to generate income

Drawbacks
- The product is complex and requires an understanding of derivatives and model-based pricing
- When selling floors, you are obliged to compensate the buyer if the reference rate falls below the agreed strike. The buyer has only a right, not an obligation

6. About risk

Caps and floors options have an asymmetric risk profile.

For buyers of caps and floors, your maximum loss is limited to the premium paid, while the profit potential is, in principle, unlimited.

As a seller of caps or floors, the risk is, in principle, unlimited, as there is no upper limit to how much interest rates can move. The gain is limited to the premium received.

For a cap, the buyer receives a payout if the interest rate rises above the cap. For a floor, a payout occurs if the interest rate falls below the floor.

It is important to have sufficient financial strength to handle negative interest rate and market movements - even in cases of extreme fluctuations.

Caps and floors can be illiquid. Closing a contract before expiry may result in losses, especially during periods of market stress and low liquidity.

Key risks include:
- **Interest rate risk** - changes in interest rates affect the value of the instrument

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- **Volatility risk** - changes in interest rate volatility affect the premium and the value of entered caps and floors
- **Currency risk** - if caps and floors are traded in a foreign currency

When selling caps or floors, you must be able to provide collateral if the market value moves against you.

7. What you should know before trading

When trading derivative financial instruments with the Bank, you enter into a framework agreement. This agreement outlines how the Bank monitors the risk you assume and gives the Bank the right to terminate the contract or require collateral if the market value moves so far against you that it exceeds the agreed credit limits.

If you wish to receive individual advice on setting up and managing caps and floors on an ongoing basis, you should contact your adviser.

Tax
We only provide general tax advice. The applicable tax rules depend on how you invest - whether as a private individual, a personal business or a company. For specific advice, you should consult an accountant.

Costs
Trading options involves trading costs. The premium depends on several factors as well as an agreed margin, which covers the financial institution's expected costs and profit.

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