

### 1. Product Description:

This is a structured bond with a 1-year maturity, 6% annual fixed coupon (paid quarterly), and a final redemption linked to CMS1 (1-year constant maturity swap rate). At maturity:

- If  $\text{CMS1} \geq 1\%$ , investor receives 100% of principal.
- If  $\text{CMS1} < 1\%$ , investor receives principal scaled as:  $\text{Calc Amount} \times \text{MAX}(\text{Final CMS1} / 1\%, 0)$ .

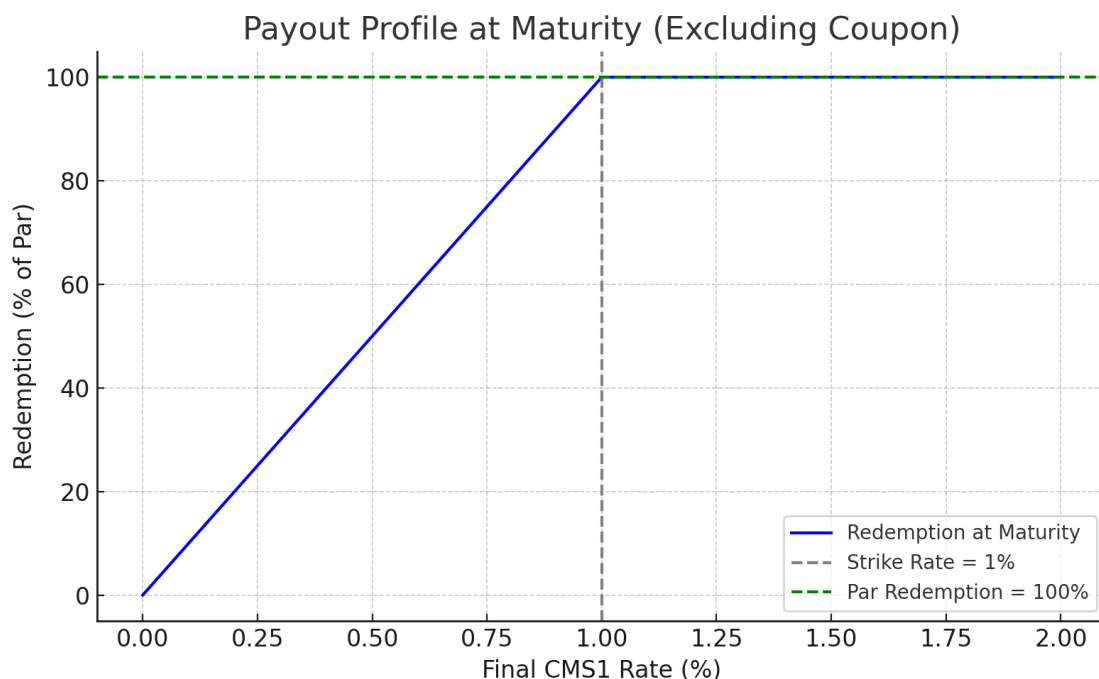
Downside: Investor loses principal if  $\text{CMS1} < 1\%$ , with worst case receiving \$0 if  $\text{CMS1} = 0\%$ .

Benefit: Investor receives a high 6% fixed coupon, regardless of CMS1, and full principal if CMS1 finishes  $\geq 1\%$ .

### 2. Payout Profile (Excluding Coupon):

See attached plot. Y-axis: Redemption (% of Par), X-axis: Final CMS1 Rate (%).

Payoff increases linearly from 0% to 1% CMS1, then flattens at 100% par.



### 3. Embedded Options:

There is a single embedded option affecting redemption:

- Type: Linear put-style option on CMS1
- Underlying: CMS1 (1-year constant maturity swap rate)
- Strike: 1%
- Size: Notional = Calculation Amount = \$1,000 (per bond)
- Position: Investor is SHORT the option (issuer is long)
- Expiry: At maturity (1 year)
- Payout: Proportional loss of principal if  $\text{CMS1} < 1\%$

#### 4. Risk at Inception (Issuer's Perspective):

- Delta: Positive (issuer gains as CMS1 rises; they owe full principal only if  $\text{CMS1} \geq 1\%$ )
- Vega: Negative (issuer benefits if volatility falls - less chance  $\text{CMS1} < 1\%$ )
- Gamma: Negative (non-linear exposure to changes in CMS1 near strike)

#### 5. How Risk Changes Over Time:

- As CMS1 rises, delta decreases (less exposure to rate moves)
- As CMS1 approaches 1% from below, gamma increases (steeper payout curve)
- Vega sensitivity is higher when CMS1 is near strike; falls as CMS1 moves away from 1%

#### 6. Why Would an Investor Choose This Product?

- Attractive in low-volatility, range-bound rate environments where CMS1 is expected to stay above 1%
- Good for investors seeking high coupons and willing to take principal risk tied to CMS1
- Investors with a bullish or stable view on short-term swap rates might find this structure rewarding