

=> You do $S_T - F_{0,T}$ Reverse cash and carry

By: ~~Short~~ : $-S_T + S_0 e^{-st}$

and ~~borrow~~ : $-S_0 e^{-st} + S_0 e^{(r-s)t}$

=> $S_0 e^{(r-s)t} - F_{0,T}$ ✓

Customer want to take long position in $F(0,T)$.

=> You do cash and carry

By: $F_{0,T} - S_T$

Buy: $-S_0 e^{-st} + S_T$

Borrow: $+S_0 e^{-st} - S_0 e^{(r-s)t}$

=> $F_{0,T} - S_0 e^{(r-s)t}$ ✓

If main fund money deposited at the end of the year in Reinvestment problem.

=> $Avn = (KX) + (ix)(IS) \overline{a}_{\overline{n}|i}$ ✓

Suppose one-year zero coupon bonds yield 7% and two-year zero coupon bonds yield 7.5%. Calculate the level swap rate implied by the zero coupon bonds.

- A. 7:15%
- B. 7:23%
- C. 7:29%
- D. 7:35%
- E. 7:48%

$$\$1 = \frac{1xr}{1.07} + \frac{1xr}{1.075^2} \leftarrow \frac{1}{1.075^2}$$

$r = 0.0748$ ✓

Mod D is the % increase in price resulting from a 100 basis point decrease in yield. ✓

Mod D is greater for $i^{(m)}$, than i . ✓

Mac D is same for $i^{(m)}$, than i . ✓

Mac D is the weighted average of times of cash flow occurs weighted by PV of each cash flow ✓

Bonds with higher coupons have higher Mod D. ✓