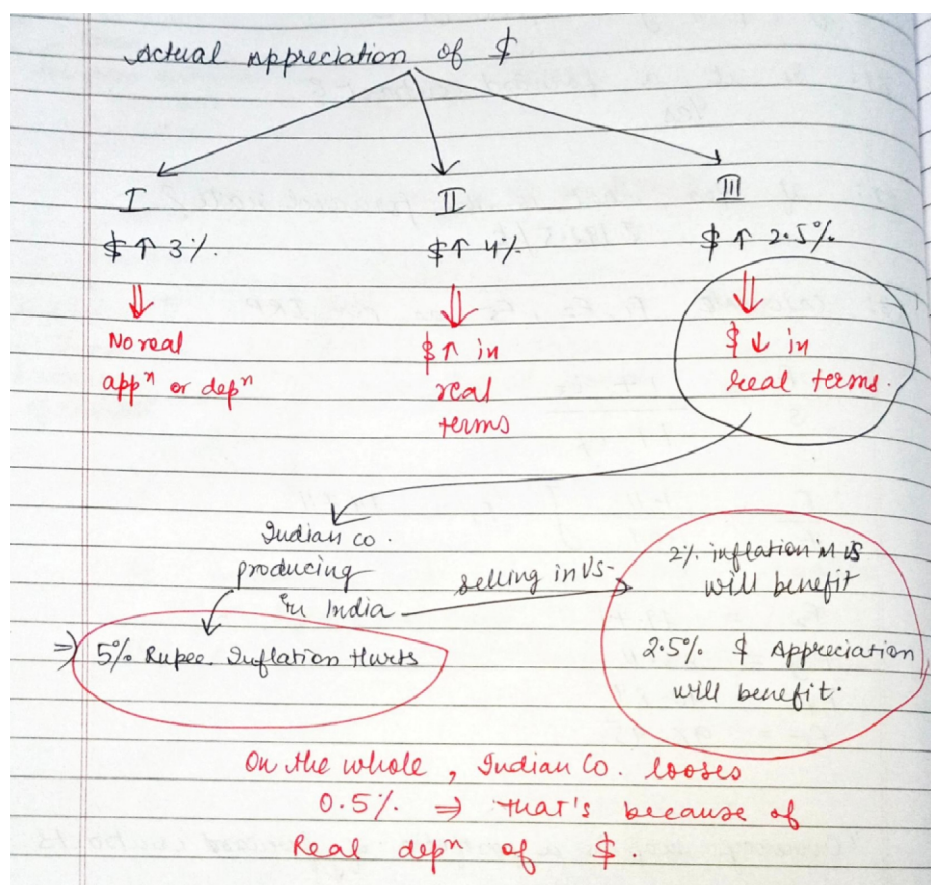


Roll of PPP in determining the extent of operating exposure

PPP : If exp inf in us (2%) < India (5%), "\$" should appreciate by 3% (approx.)



Conclusion : Since PPP generally holds good in the long run, exchange rate changes in nominal terms equal inflation differential. There is no real change in exchange rate.

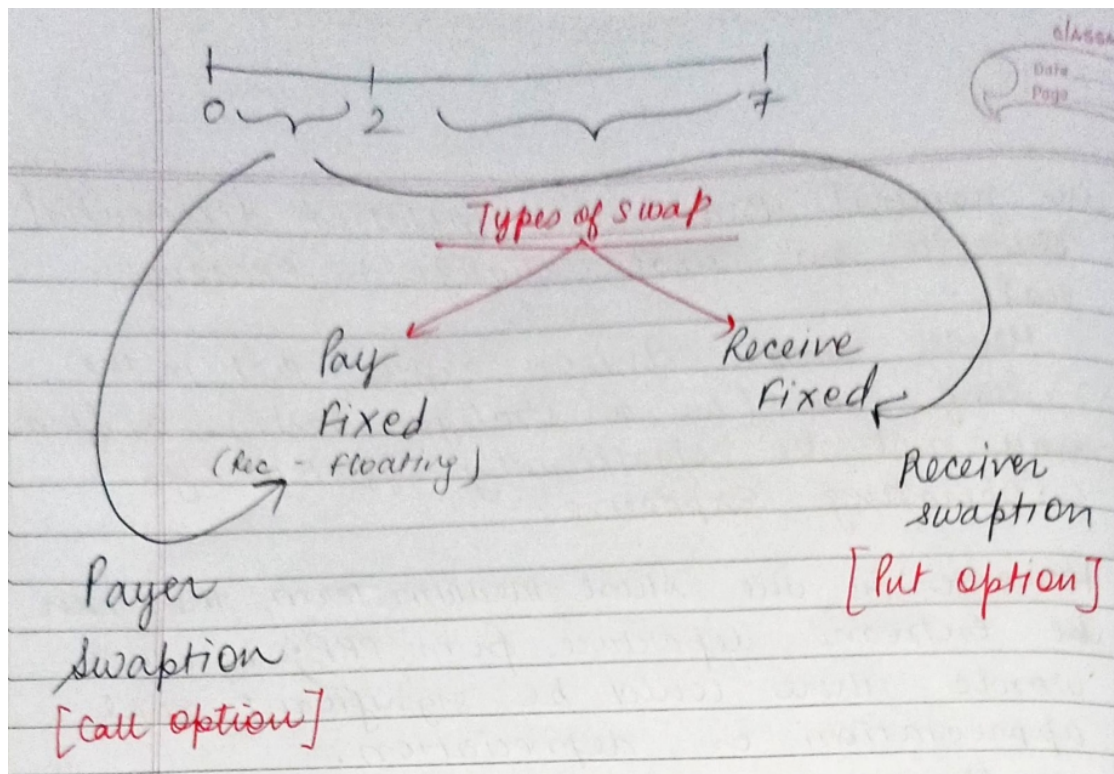
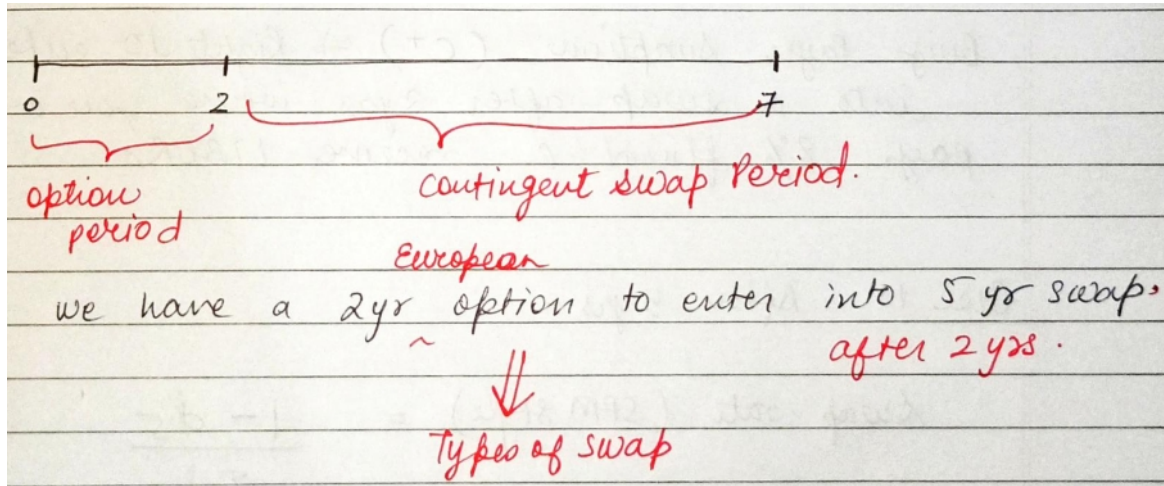
Hence many advisors agree that in the long run (on a strategic basis), a firm may not be significantly affected by operating exposure.

However in the short medium term, there can be extreme departure from PPP. In other words there could be significant real appreciation or depreciations.

Hence, it is necessary to manage operating Expenses at least to some extent.

Swaption

Option to enter into a swap.



Payer swaption

NP = \$ 200 m

Option maturity = 2 yrs

Underlying swap = 5 yrs. Swap after 2 yrs.

(X) Strike Rate = 8% v/s LIBOR

Buy Payer swaption (C⁺) = Right to enter into a swap after 2yrs. Where you will pay 8% fixed & receive LIBOR.

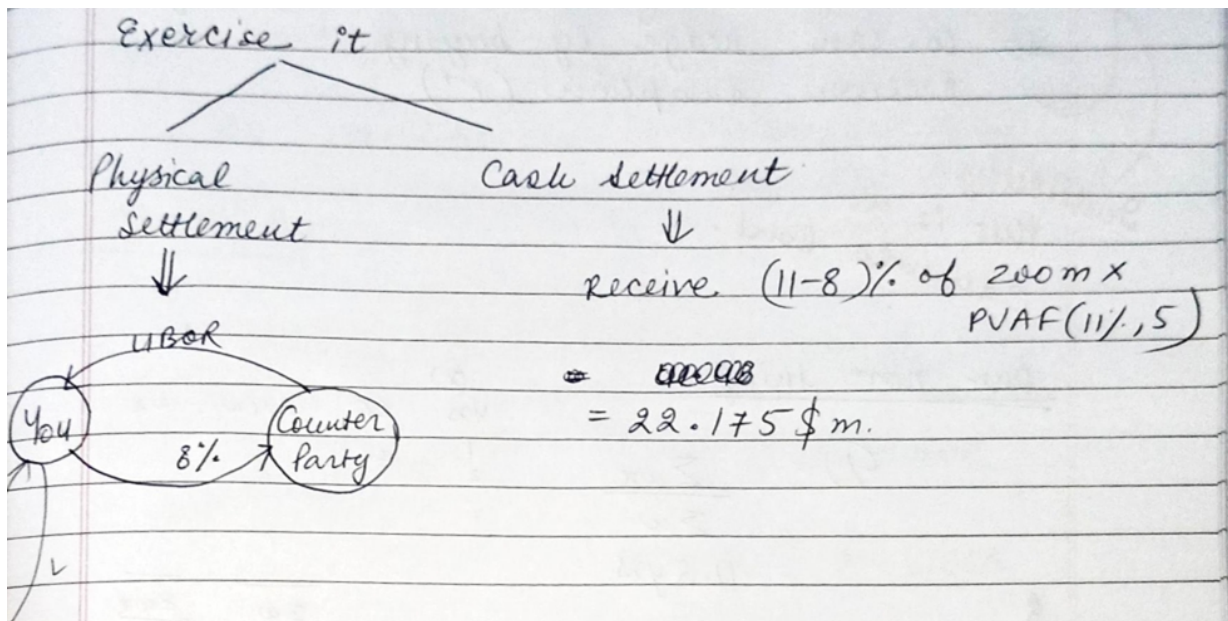
Case 1 : After 5 yrs.

$$\text{Swap rate (SFM style)} = \frac{1 - d_5}{\sum d} = 6\%$$

Since $S_T < X \rightarrow$ **Lapse**

Case 2 : After 5 yrs.

Swap rate = 11%



Receiver Swaption

Buy	Receiver	P^+
Receive		pay

Callable Bond

- Fixed Coupon Bond
- Usually a long term say, 10 to 20 yrs
- Co. is afraid of interest rate falling so company can hedge by buying Receiver swaption (P^+)

Indirectly this is a callable bond.

One more thing

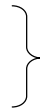
$$D = \frac{\sum Wx}{\sum W} = 11.2 \text{ yrs}$$

X				
Yrs	CF	PV (W)	Wx	
$\frac{1}{2}$	120			
-	-	-	-	-
-	-	-	-	-
		$\sum W$	$\sum Wx$	

Avg waiting time

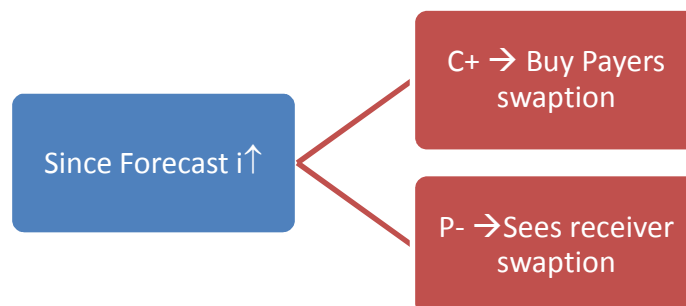
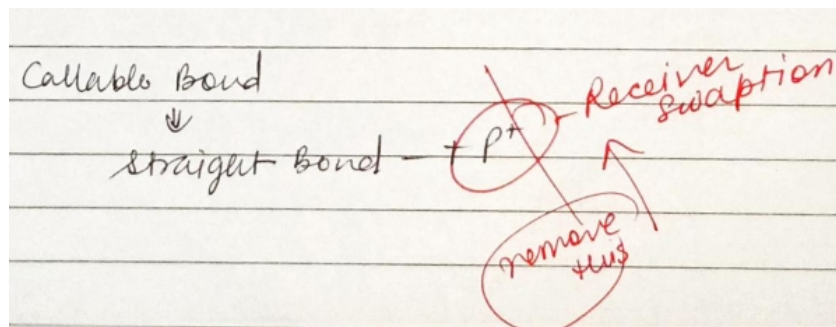
Callable to putable Bond – $D < 11.2$ yrs.

Callable & Putable Bonds



$D < D$ of option free bond

CS -4 (Jan-Feb) 4.1



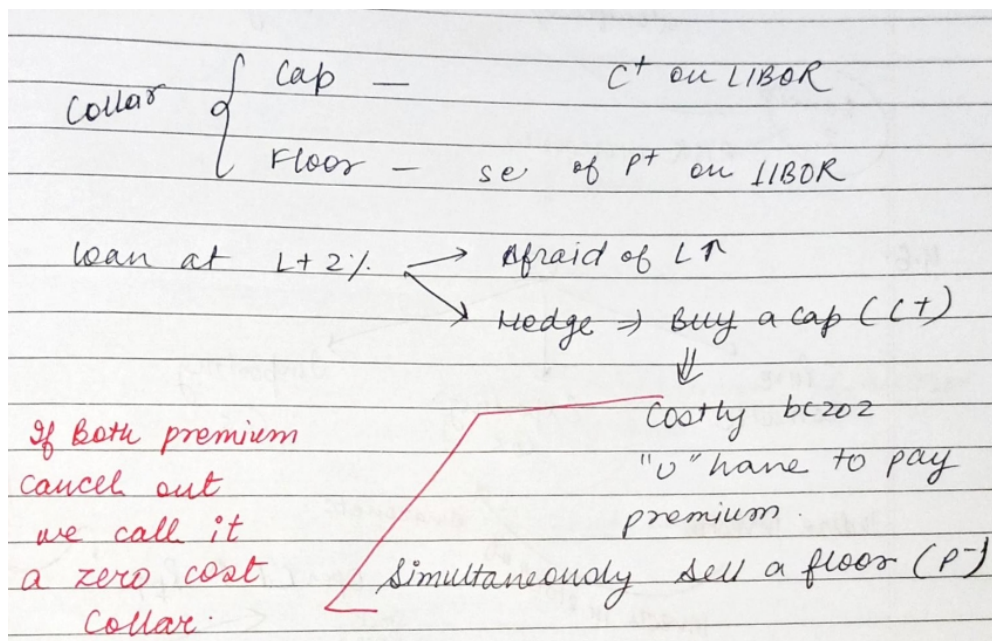
To square off the Receive swaption

You want $D_L \uparrow$

So callable Bond \rightarrow Straight Bond Cut the P^+ with P^-

Option D

Cap & Floor



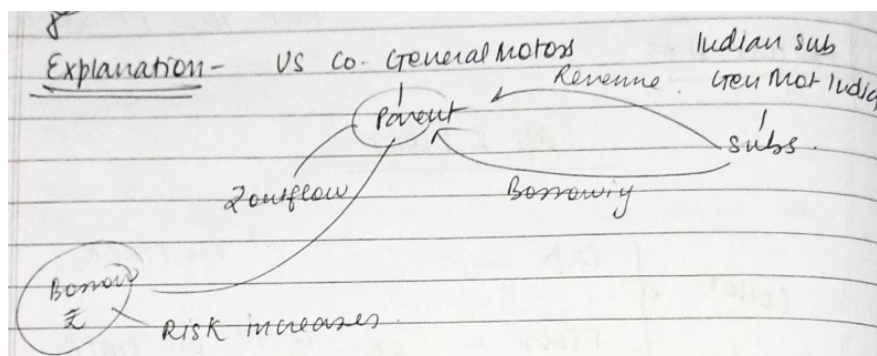
Question 4.2 - A

Question 4.4 - B

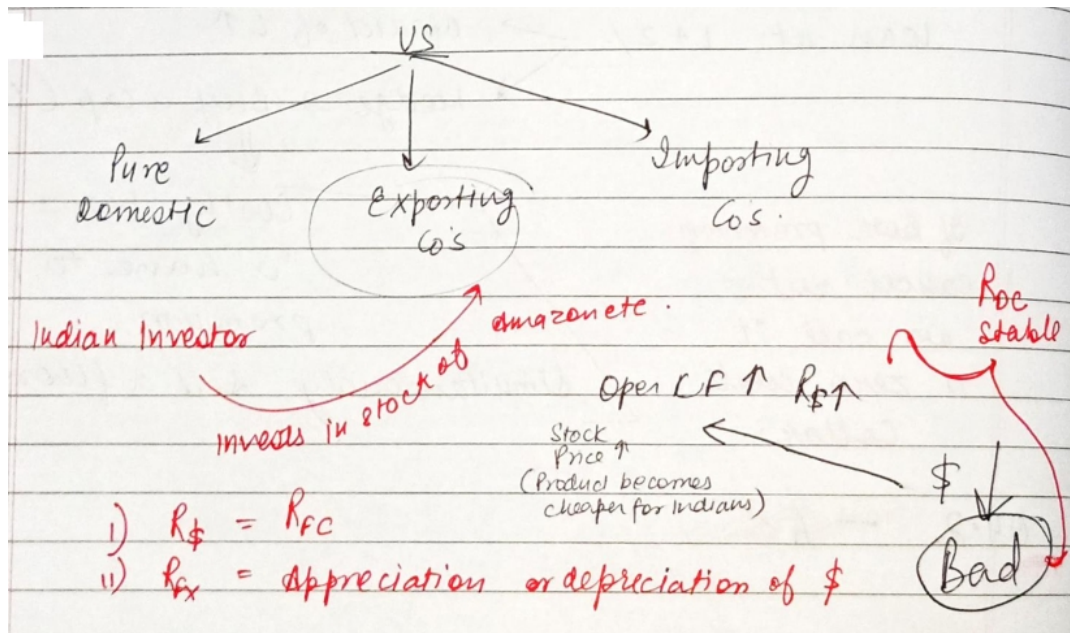
- A. FC v/s MMC
- C. Currency Swap

Question 4.5 - C (but can also be D)

Explanation:



Question 4.6



If you have in a Stock of in a Foreign Exp. Co. Changes in exchange Rate will reduce the risk of foreign investment.

$$\sigma_p = \sqrt{\sigma_{sm}^2 + \sigma_{rf}^2 + 2 \cdot r_{sm,rf} \cdot \sigma_{sm} \cdot \sigma_{rf}}$$

(-)

Question 4.7

- Various markets the firm is present & competition in those markets.
- Input substitutability
- Demand (**Kash low**) & Supply (**Kash high**) elasticity

Last para of CS

PPP part answer in starting of class

Question 4.8

Fin Hedge v/s Op. Hedge

Advantage

Can be done faster speed

Creates competitive advantage in long run

Currency options v/s Forward Contract

Question 4.9

Risk Register maintain formal record of all risks & their control, fixation of responsibilities.

Those column Headings. (SM)

No disadvantages