

Chapter 1

Forward contract

Call option

put option

- 1) Structure ??
- 2) Long / short
- 3) payoff. (not just formula)

(why??)

4) profit vs payoff

Summary sheet

Exercises

a) Ass'g 1 : 2.4 , 2.14 payoff / profit

b) CA 6-Sep : MLC D

c) Tutorial:

12-Sep :

1) fair forward price

2) payoff vs profit

3) ELCD

Chapter 2

1) Exchange vs OTC

2) Use of derivatives

3) Cost in trading

— Commission

— bid / ask spread.

4) Volume, O.I.

Exercises

Assig 1: 1.7 bid-ask spread, commission

AP 1 Volume, O.I.

CA: 13-Sep Volume, O.I.

Chapter 3

a) Option trading strategies:

— hedging

— speculation $\left\{ \begin{array}{l} \rightarrow \text{Directional perspective} \\ \rightarrow \text{Non-directional} \end{array} \right.$

b) Compare Similar Strategies
— when the one better the other.

c) When does profit occur?

d) when does loss occur?

e) Use of put - call parity to create
the same strategy from other type
of option.

f) put - call parity: synthetic forward.

Summary sheet

Exercises

Assig 1:

3.13 Straddle

3.14 Box Spread

3.15 Ratio Spread

3.16 premium ratio spread, bull / bear

3.17 asymmetric butterfly.

AP2 put - call parity to create butterfly buy

use call options only

CA 18-Sep: asym butterfly

Tut 18-Sep: (1) Call bull vs put bull
(2) Compare straddle and strangle.

Chester 4

- 1) Pre-paid forward ??
- 2) forward vs pre-paid forward
- 3) $F_{0,T}^P$, $F_{0,T}$?? (relation)
- 4) Synthetic forward, stock, bond

$\text{Payoff} = S_T - K$
- 5) Synthetic position {

hedging

arbitrage.
- 6) Futures contract (compare with forward)
 - mark to market.
 - settlement price.

Assy 2

- 5.2 Forward, Pre-paid forward
5.4 ~~annualized~~ annualized forward premium
5.5 Synthetic position + hedging
5.8 Synthetic position + arbitrage
5.12 mark to market.

CA 20-Sep : Synthetic position + arbitrage

Tut 20-Sep : (1) Synthetic position + arbitrage
(2) Synthetic position

Chapter 5

- 1) Storage cost
 - 2) Convenience yield
 - 3) Backwardation, Contango.
 - 4) Lease rate
 - 5) Cost of carry.
- } $\Rightarrow F_{0,T}$

Exercises

Assy 2 6.6 Discrete storage cost

AP 1

CA 27-Sep : lease rate
Tut 10-Oct : Storage cost +
Synthetic position.

Chapter 6

- ① $r \in [t_0, t_2]$?
- ② Table 7.1 ??

Exercises

Assy 2 7.3 } \approx Table 7.1
 7.7

Tut 10-Oct Q2 \approx Table 7.1

Chapter 7

① Long Swap = Long a portfolio of forward contracts.

② Long / Short

③ Physical / Financial settlement.

④ Hedging of the swap
- back to back } pros and cons
- forward

⑤ Market value of swap.

⑥ Compute swap rate.

Ex

Problems for Chapters 7 and 8

8.2 swap rate

8.10 swap rate

8.11 swap rate

CA 11-oct swap rate + market value of swap

Tut 17-oct hedging of swap.

Chapter 8

1) Put - call parity

2) Generalized put - call parity.

3) Options on exchange rates.

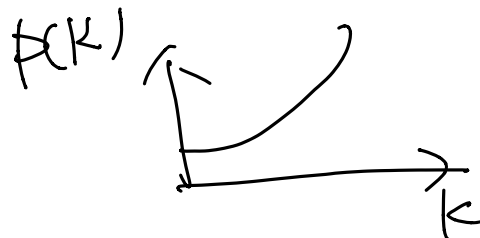
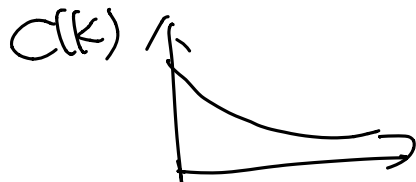
4) upper bound & lower bound of option price

5) Early Ex of American option.

6) Inequalities

— Time to expiration

— Strike K .



Ex

K

Problems for Chapters 7 & 8

9.1 put - call parity

9.3 put - call parity + arbitrage

9.7 option on exchange rate

9.9 Ineq. + arbitrage

9.13 Early Ex of Amer. option

AP1 Ineq + arbitrage

AP2 $P(K_t, t) \uparrow$ as $t \uparrow$ $K_t = K e^{rt}$

AP3 Generalized put - call parity

Tat

24-oct

① option on exchange rate

② Early Ex of Amer option

③ Ineq + arbitrage.

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