

Revision (Midterm Exam)

Chapter 1

Forward
call option
put option



- 1) Structure
- 2) Long / Short
- 3) Payoff
- 4) Profit vs payoff

Summary sheet

Exercises

- 1) Assig 1 : 2.4 , 2.14 payoff / profit
- 2) CA : 4 - Sep : MLCD (replication)
- 3) Tutorial:
10 - 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
- 4) Volume, O.I.

Exercises

Assy 1 : API, Volume, O.I.

CA : 11-Sep Volume, O.I.

Tut : 17-Sep Q1, bid-ask spread
Commission

Chapter 3

1) Option Trading Strategies

- hedging

- speculation

└─ Directional perspective
└─ non-directional.

2) Compare similar strategies

— which one is better than the other

3) put - call parity

4) synthetic forward from the put - call parity

Ex

Ass'g 1

3.13

straddle

3.14

Box Spread

3.15

Ratio spread

3.16

bull / bear / butterfly spread

3.17

asymmetric butterfly.

AP 2 : put - call parity

CA : 18-Sep : asym butterfly

Test 17-Sep Q2, Q3

Tut : 24-Sep Q1, call bull vs put bull
 Q2 Zero-cost collar
 Q3 Straddle vs Strangle

Chapter 4

1) pre-paid forward ??

2) pre-paid forward \rightarrow forward.

$F_{0,T}^P$, $F_{0,T}$??

3) synthetic forward ?? $S_T - K$

4) synthetic position $\left\{ \begin{array}{l} \text{hedging} \\ \text{arbitrage} \end{array} \right.$

5) Futures contract (

— mark to market

— settlement method

Ex
 Assg 2

5.2

Forward vs Pre-forward
 annuized forward premium

5.4

5.5 synthetic position + hedging

5.8

... + arbitrage

5.12

mark to market

CA 25-Sep

put 8-Oct

}

synthetic position + arbitrage

Chapter 5

1) storage cost

(negative of dividend)

2) convenience yield

(dividend)

3) Backwardation vs contango

4) lease rate

5) cost of carry.

Ex

Assy 2

6.6

storage cost

AP1

AP2

forward price.

CA

9-Oct

put

15-Oct

}

storage cost +

lease cost

Chapter 6

- Table 7.1

EX

Ass'g 2 7.3
 7.7 } Table 7.1
Tot 15 - Oct

Chapter 7

- ① Swap vs forward contract
- ② What is Long / Short?
- ③ What is fixed-rate payer / fixed rate receiver?
- 4) Physical / Financial Settlement.
- 5) Hedging of swap { back to back
 use forward
- 6) Market value of swap.

Ex.

Problems for chapter 7 & 8

8.2
8.10
8.12 } swap rate ??

CA 16-Oct market value of swap

cut 22-Oct hedging of swap use forward.

Chapter 8

- 1) put-call parity
- 2) Generalized put-call parity
- 3) option on exchange rate
- 4) Inequalities of option price
- 5) Early Ex of American options

Ex

Prob from 7 8 8

9.1 put - call parity

9.3 put - call parity + arbitrage

9.7 option on ex. rate

9.9 Ineq + arbitrage

9.13 Early Ex of Amer option

Ap1 Ineq + arbitrage

Ap2 Generalize put - call parity.

CA 23-oct Ex chge rate option
! Ineq + arbitrage

Tut 22-oct (2), (3)

Tut 29-oct (1), (2), (3)

Day (1) : (1) + (2)

Day (2) : (3)