Amity School of Business

BBA, Semester V

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Trading Strategies Involving Options

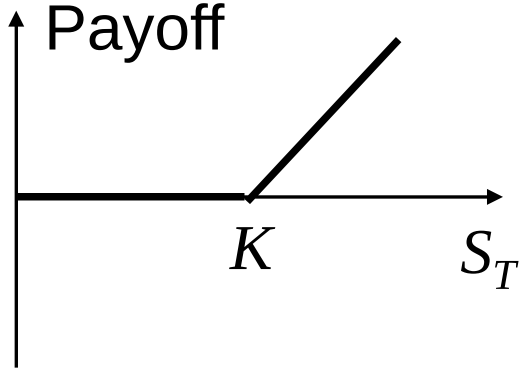
Type of strategies

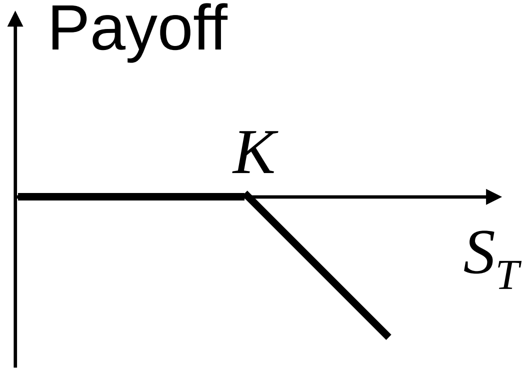
- Take a position in the option and the underlying
- Take a position in 2 or more options of the same type (A spread)
- Combination: Take a position in a mixture of calls & puts (A combination)

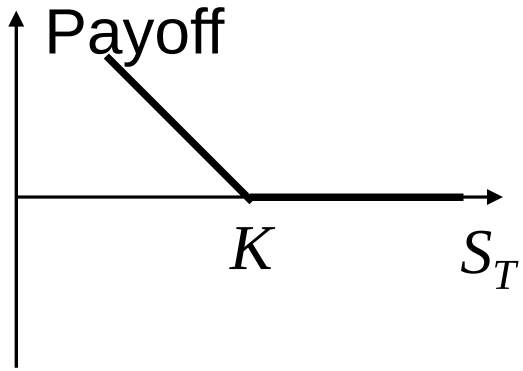
Payoffs from options

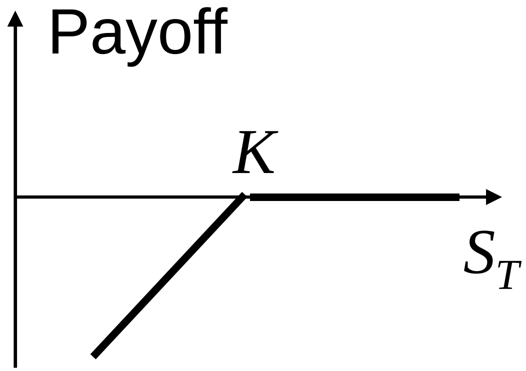
long call

short call









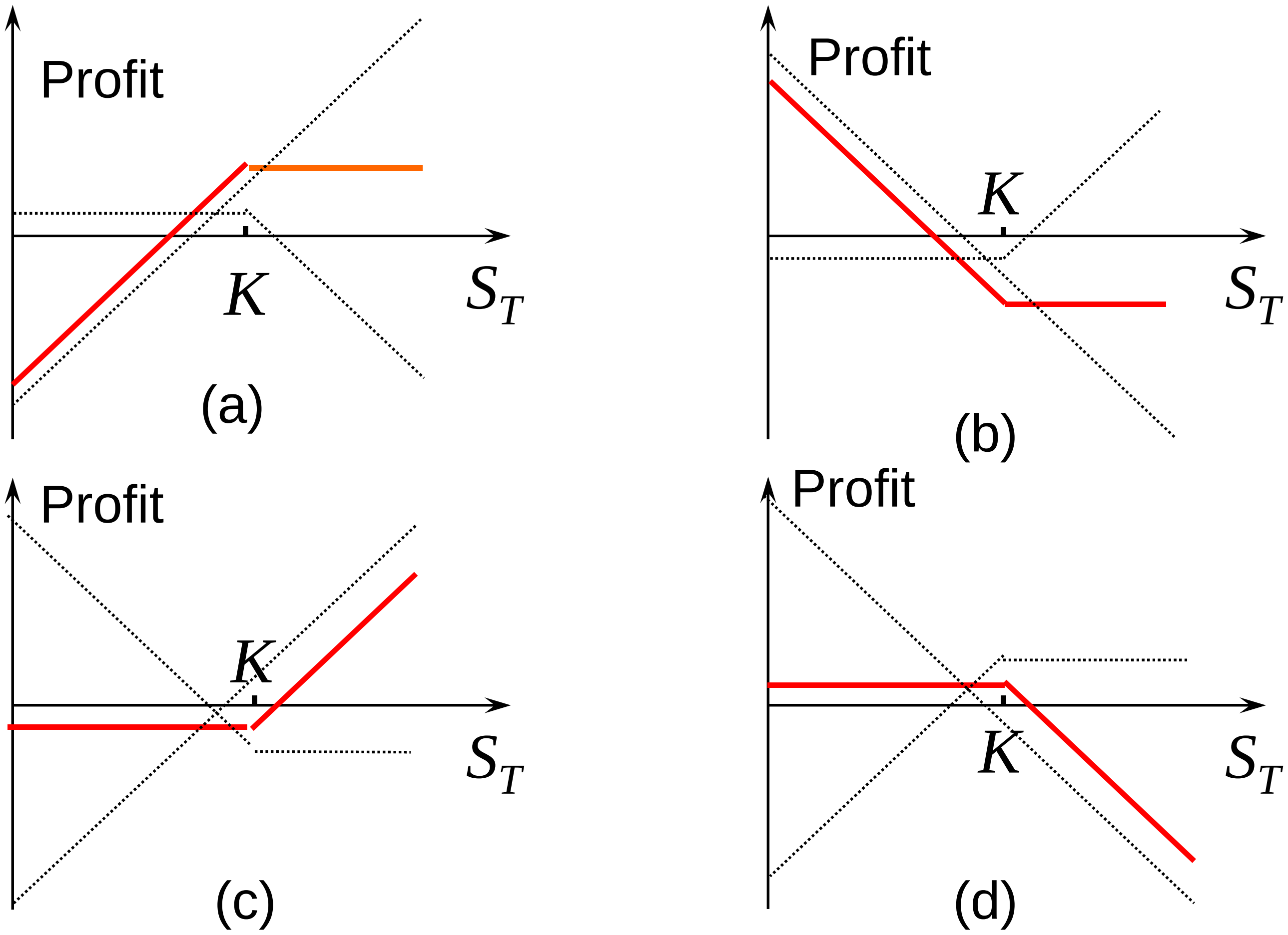
Long put

short put

Trading strategies

a) Strategy involving a single option and a stock
   a) Long stock and short call
   b) Short stock and long call
   c) Long put and long stock
   d) Short put and short stock

Position in the option and the underlying



Bull spread

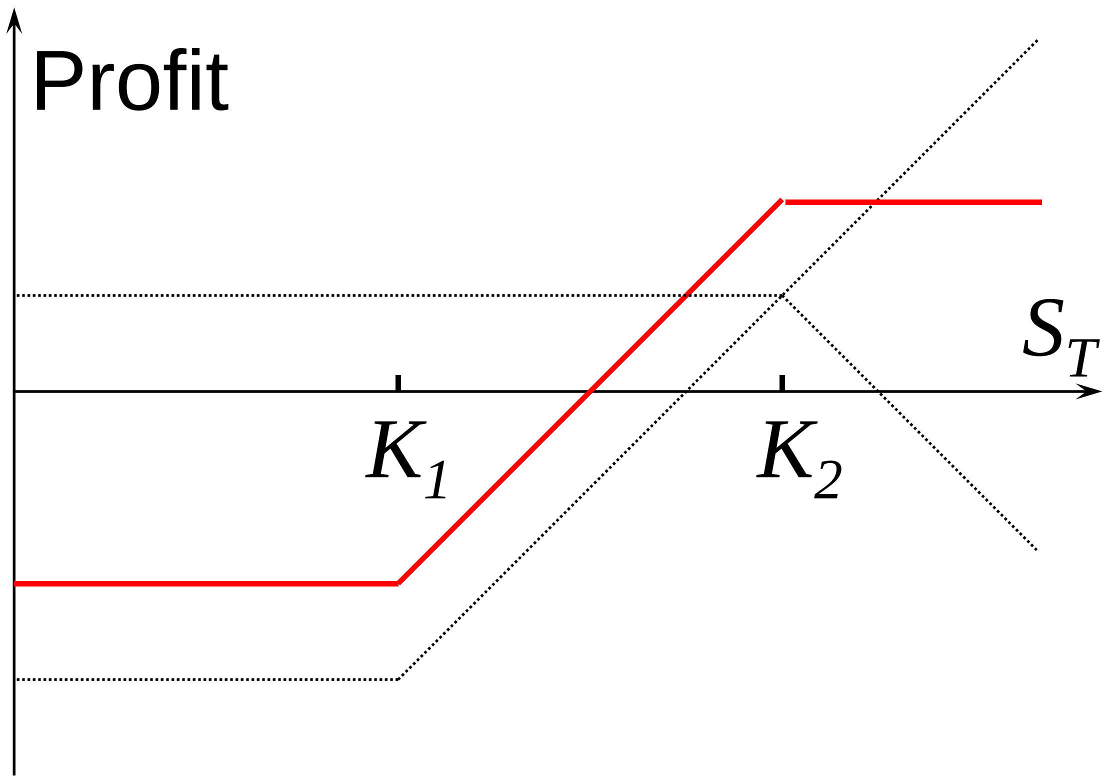
- In bull spread you expect the market to rise
- The profits and risk though are limited

Problem

- An investor buys for Rs3 a call with a strike price of Rs30 and sells for Rs1 a call with a strike price of Rs35.

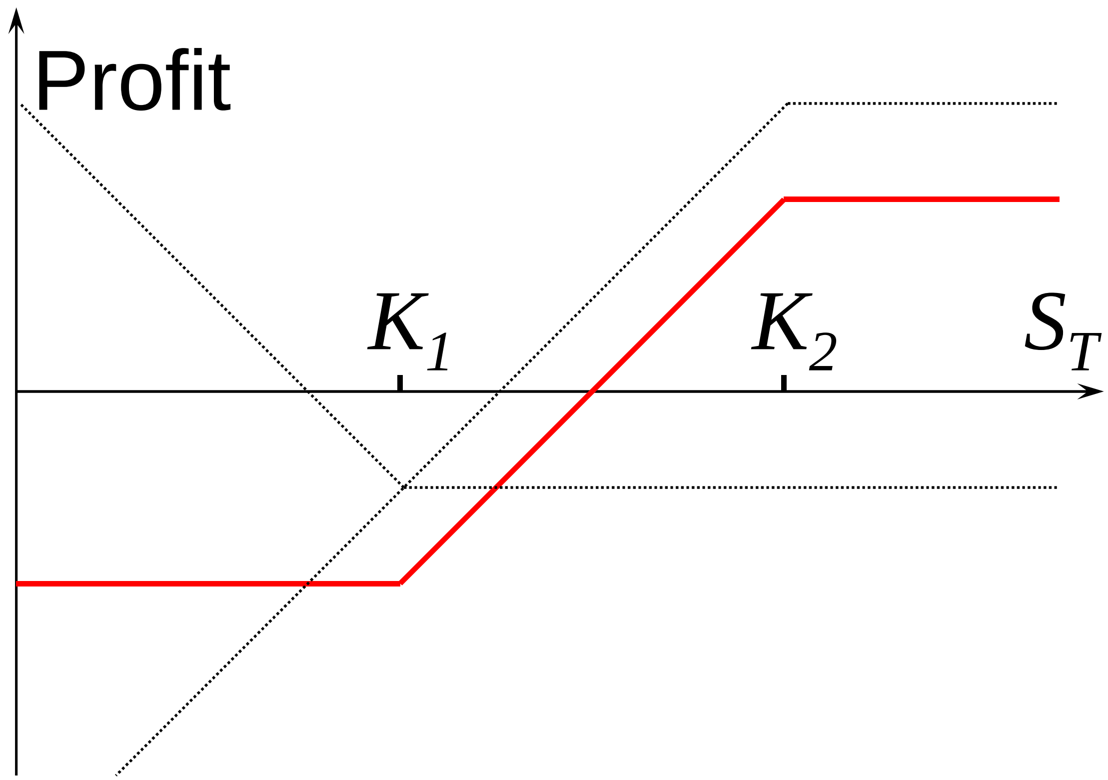
Bull spread using call

Longing a call and shorting a call at a higher price



Bull spread using Puts

Longing a put and shorting a put at a higher price



Bear spread

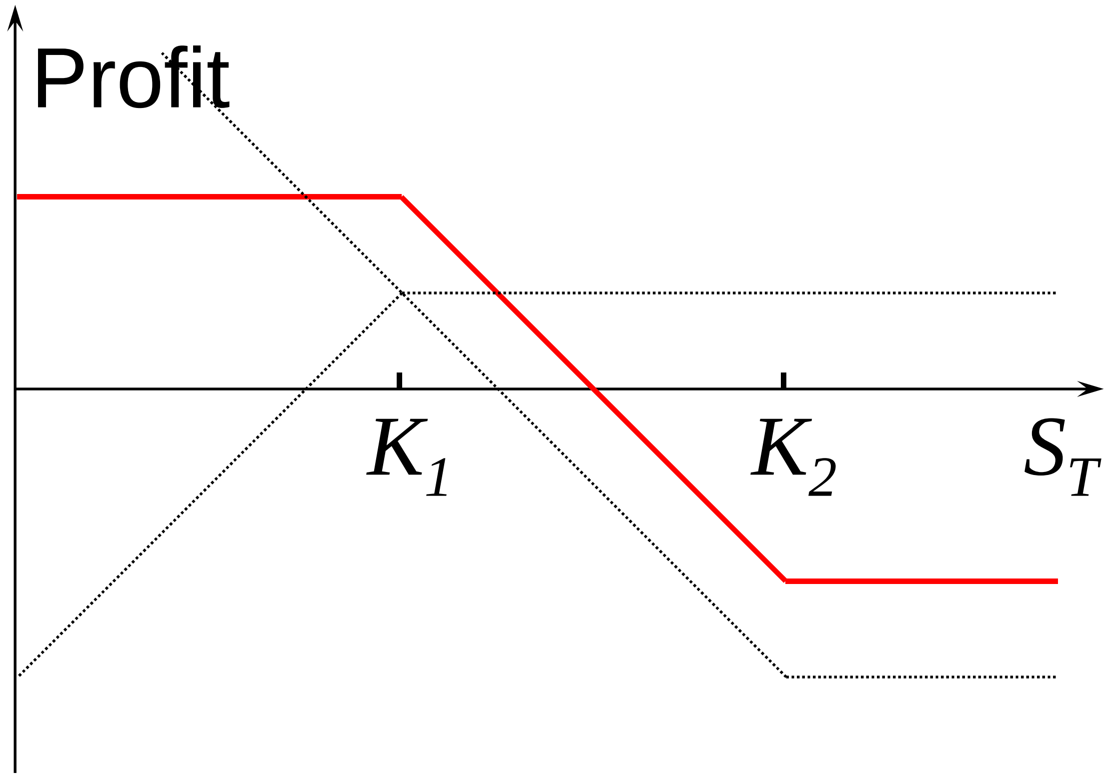
- In bear spread you expect the market to fall
- The profits and risk though are limited

Problem

- An investor buys for Rs3 a put with a strike price of Rs35 and sells for Rs1 a put with a strike price of Rs30.

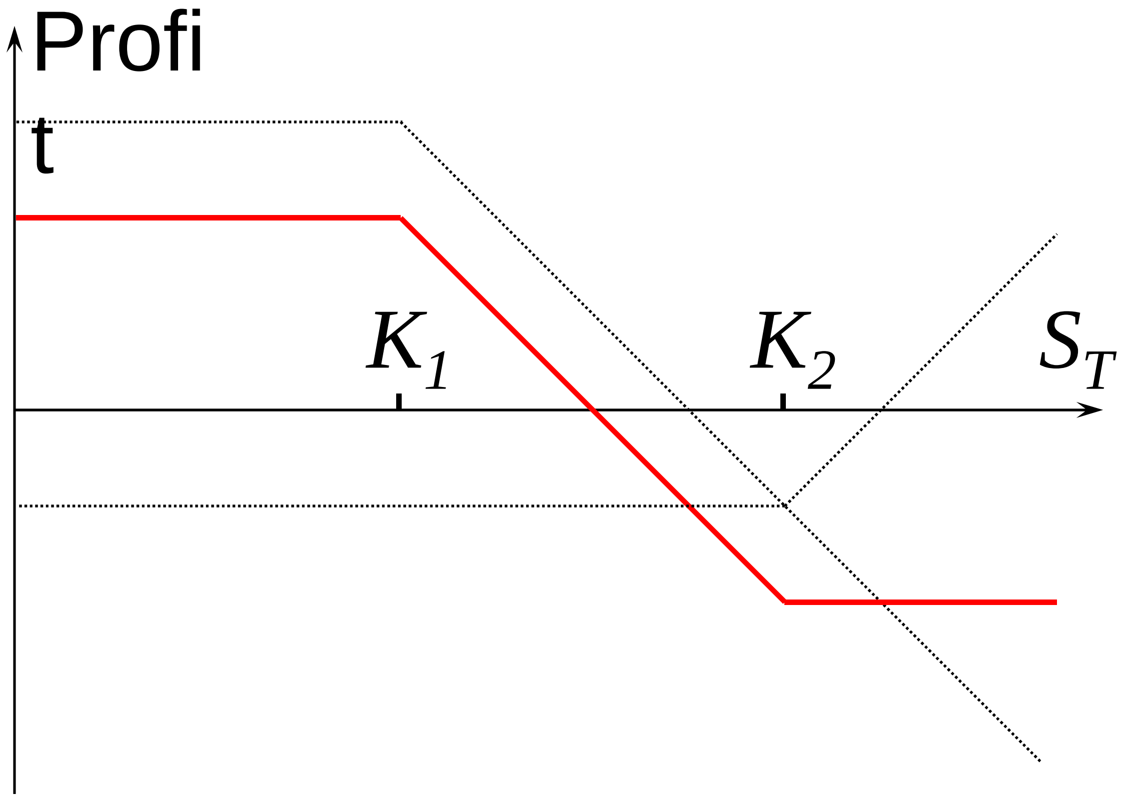
Bear spread using Puts

Longing a put and shorting a put at a lower price



Bear spread using calls

Longing a call and shorting a call at a lower price



Box spread

- A combination of a bull call spread and a bear put spread
- If all options are European a box spread is worth the present value of the difference between the strike prices
- If they are American this is not necessarily so.

Butterfly spread

- When the price of share in the market is not expected to change in the relevant time period.
- The profits are limited and will be available for s short span. The loss is also limited.

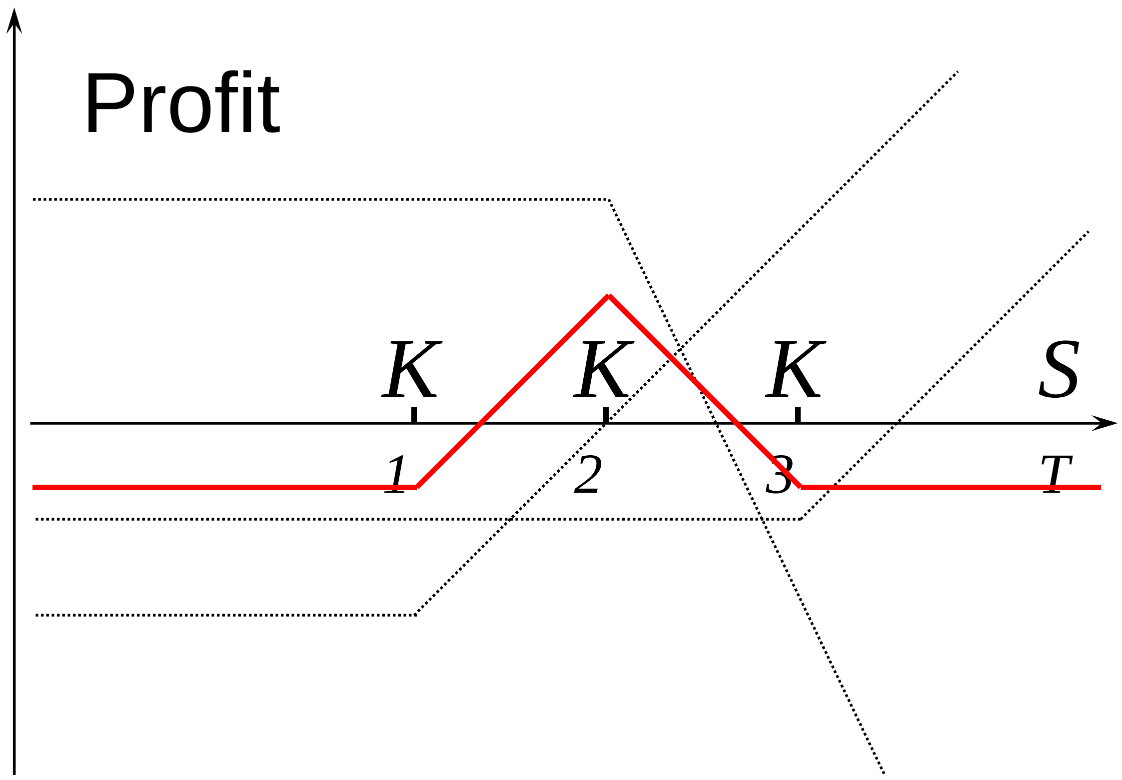
Problem

- Stock price is Rs 61and Investor feel the market will not be volatile for another 6 months. The calls available are

Strike Price	Call price
55	10
60	7
65	5

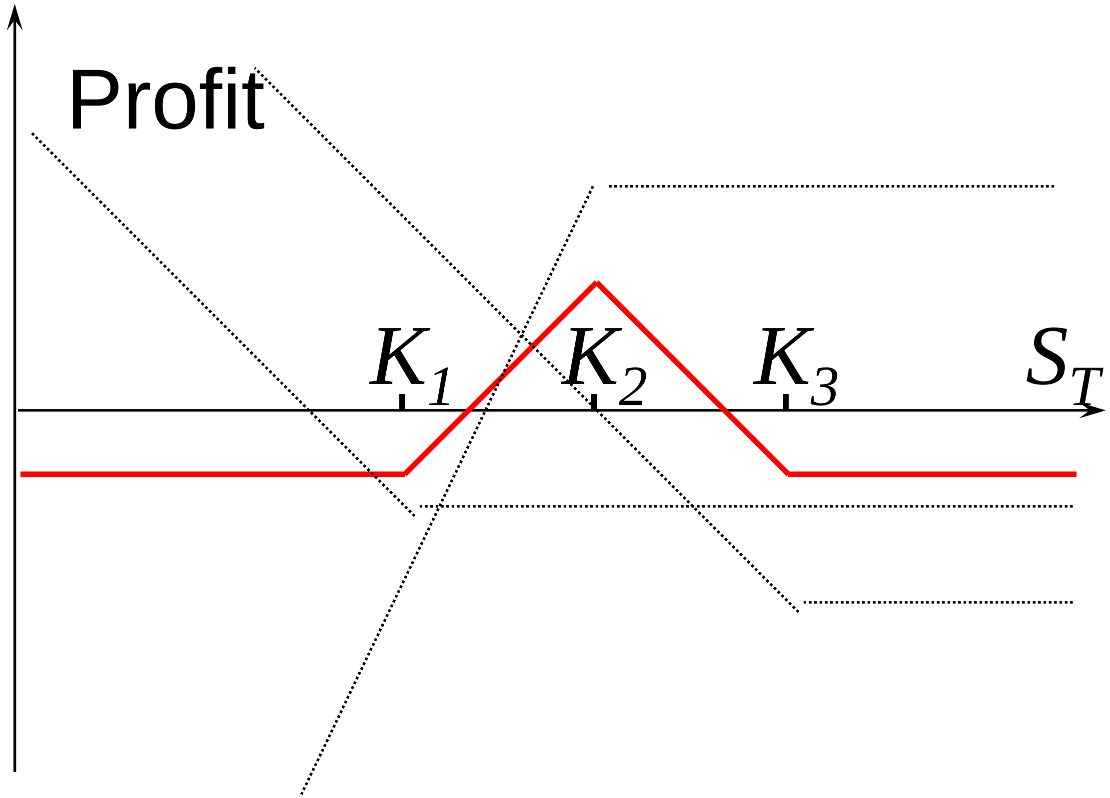
Butterfly spread using calls

Longing a call with low strike price K1, longing a call option with relatively high strike price K3 and selling two call option with strike price K2, halfway between K1 and K3



Butterfly spread using Puts

Longing a put with low strike price K1, and buys a put with relatively high strike price K3, and shorting two put at a strike price K2, midway between K1 and K3.



Straddle combination

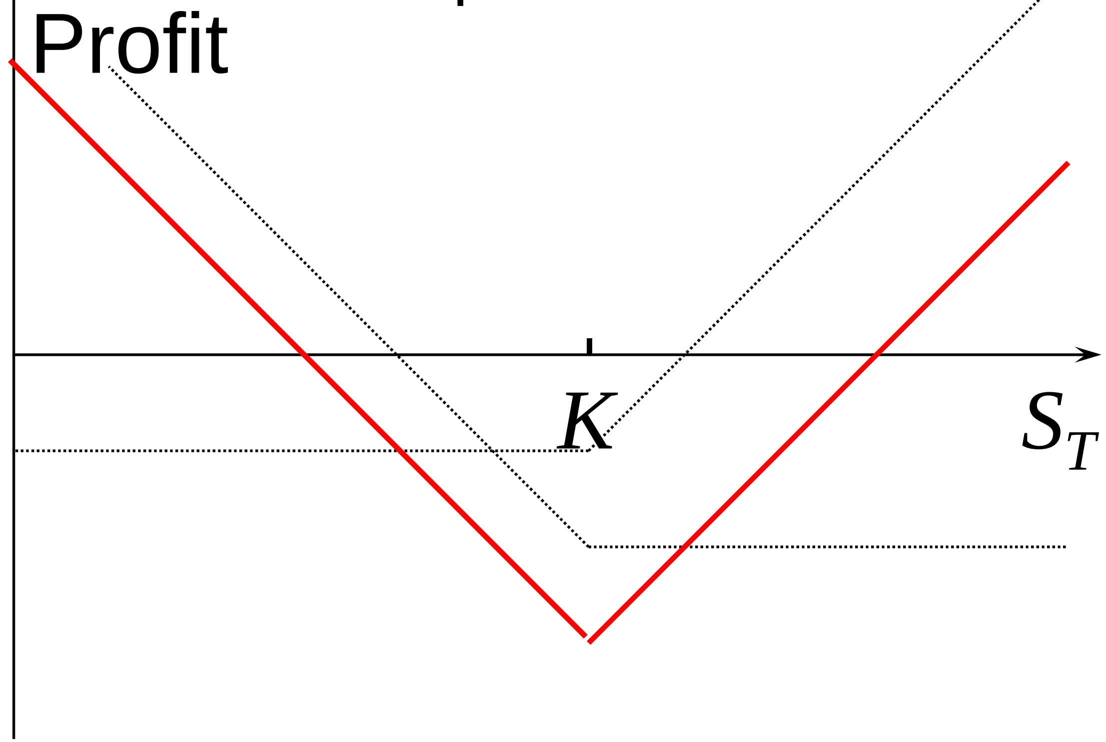
- If the stock price is close to the strike price, straddle leads to a loss. However, if there is a sufficient large move in either direction it leads to a great amount of profit.

Problem

- Stock is currently valued at Rs 69 and is expected highly volatile in next three month. Call and put are available for Rs 4 and Rs3 respectively, for a strike price Rs70 and same expiration date.

Straddle combination

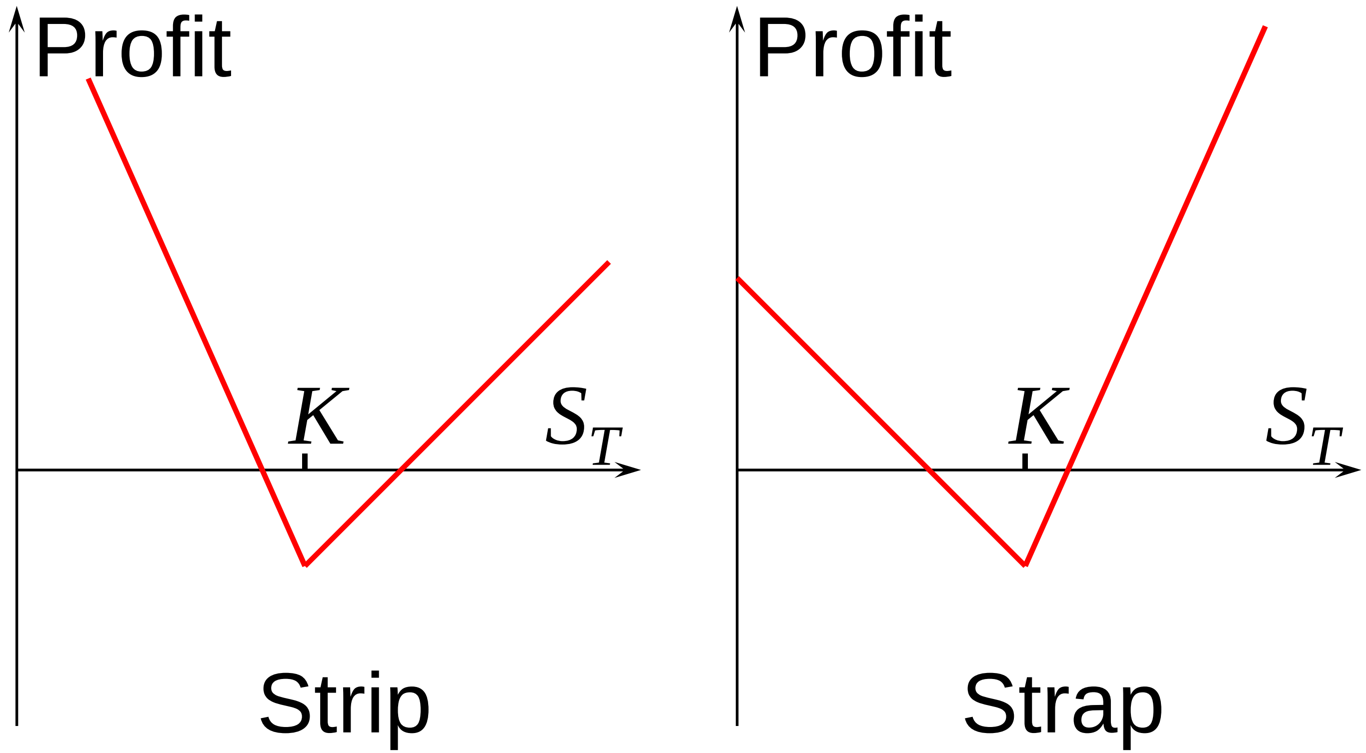
Longing a call and longing a put at a same strike price and same expiration date



Strip & Strap

- Strip - Longing a call and longing two put at the same strike price for same maturity date.
- A large movement is expected towards lower side
- Strap - Longing two call and longing a put at the same strike price for same maturity date.
- A large movement is expected towards upper side

Strip & Strap



Strangle combination

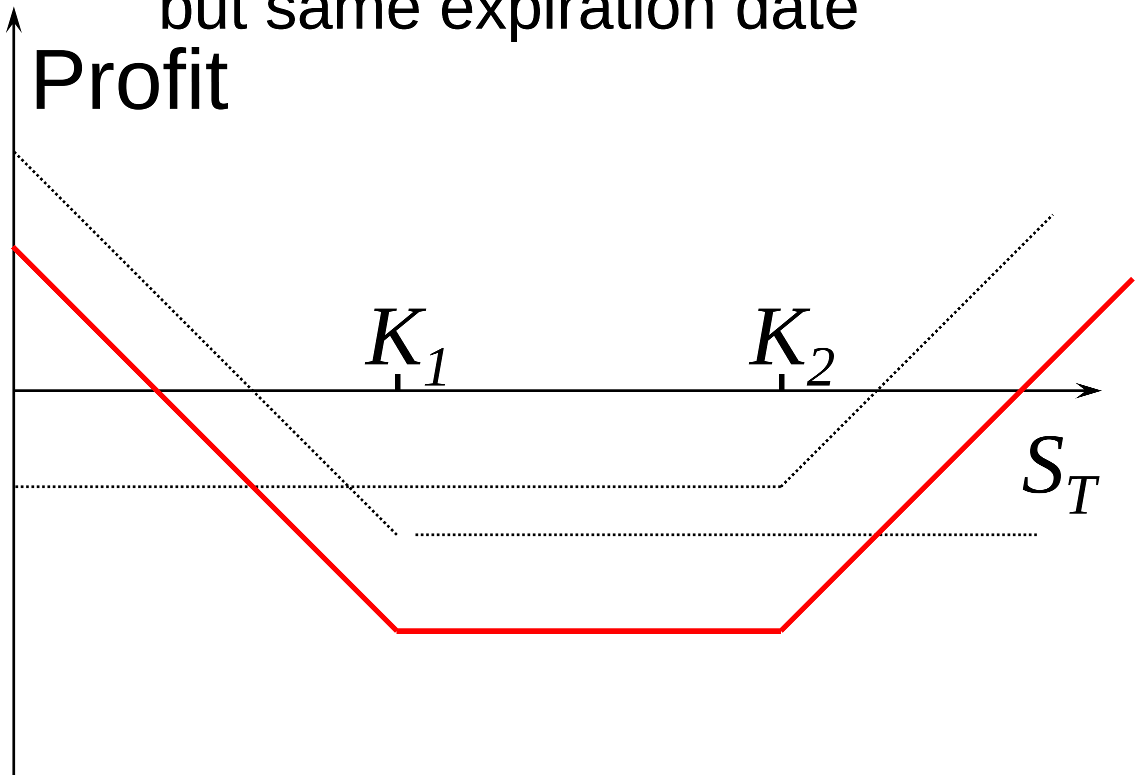
- When it is expected that a large movement is expected but the direction is uncertain.
- The call strike price is higher than the put strike price.
- For profits in strangle the price have to move in great amount as compared to straddle. But the loss is limited as compared to straddle.

Problem

- The call and put are available at Rs4 and Rs3 respectively. The strike price of call and put is Rs 74 and Rs 69 respectively.

Strangle combination

Longing a call and longing a put at a different strike price but same expiration date



Problems

- What strategy will you apply when the market is highly volatile in nature and the investor don’t know in which direction will the market move.
- Market is expected to be volatile as budget approaches. FM wants to increase the prices of Petrol by a Rs and reduce steel excise duty by 2%. What strategies will you recommend a investor for profit making.
- If an investor buys for Rs3 100 call with a strike price of Rs30 and sells for Rs1 100 call with a strike price of Rs35. Draw a strategy for the same
- An investor buys for Rs3 100 call with a strike price of Rs100, buys for Rs2 100 call with a strike price of Rs140 and sells for Rs1 200 call with a strike price of Rs120. Draw his strategy.