Example of a call option

- Call option on Marks and Spencer share (the underlying)
- The option is a contract giving the holder the right (but not the obligation) to buy shares in M and S at an agreed time in the future at a price agreed now (exercise price: say £10 per share).
- Your decision at option maturity: exercise the option or throw it away.
- The option has a price: traded in an option exchange (eg CBOE).

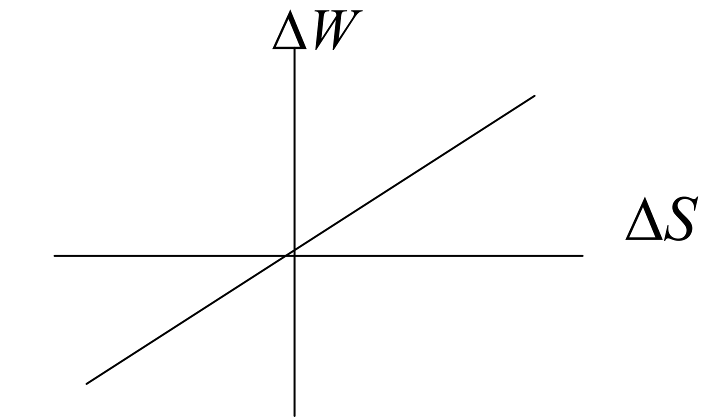
Call Option: example (continued)

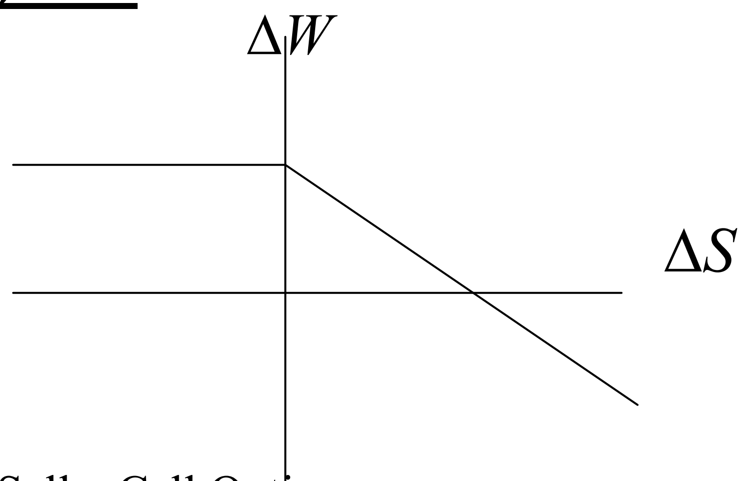
- If M and S shares are £13 at maturity, exercise the option: buy the shares for £10, sell the shares immediately for £13: profit £3.
- If M and S shares £8 at maturity: throw away the option (why use option to buy for £10, when you can buy in the market for £8?)

Put Option

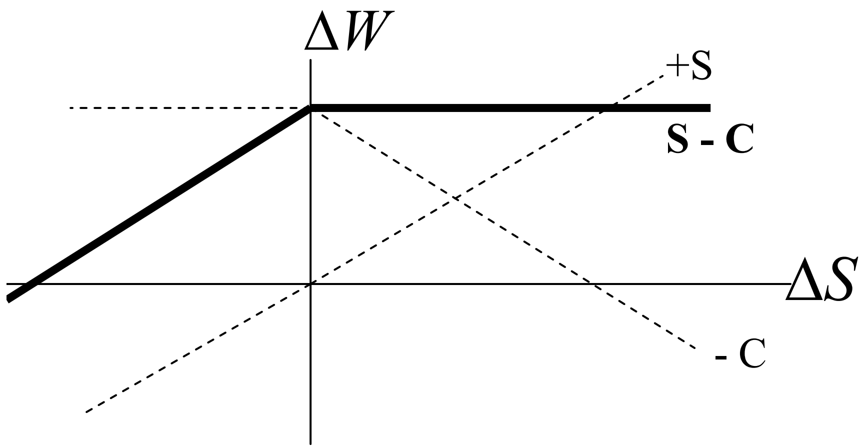
- Gives the holder the right (but not the obligation) to sell a share at option maturity date in the future for price agreed now.
- Eg put option on M and S shares: you can sell them for £10 per share at maturity.
- If M and S trading at £8 per share at maturity: buy them and then sell them at £10 = £2 profit.
- If M and S shares trading for £11 per share at maturity, throw the option away. (If you buy for £11, and then sell for £10, you make a loss!)

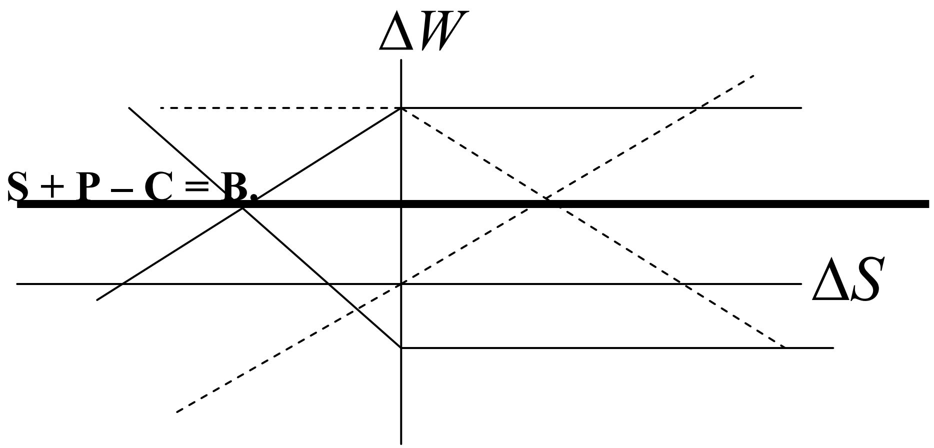
<u>Using Options to hedge (reduce) risk</u>





Long in Stock Plus Sell a Call Option.

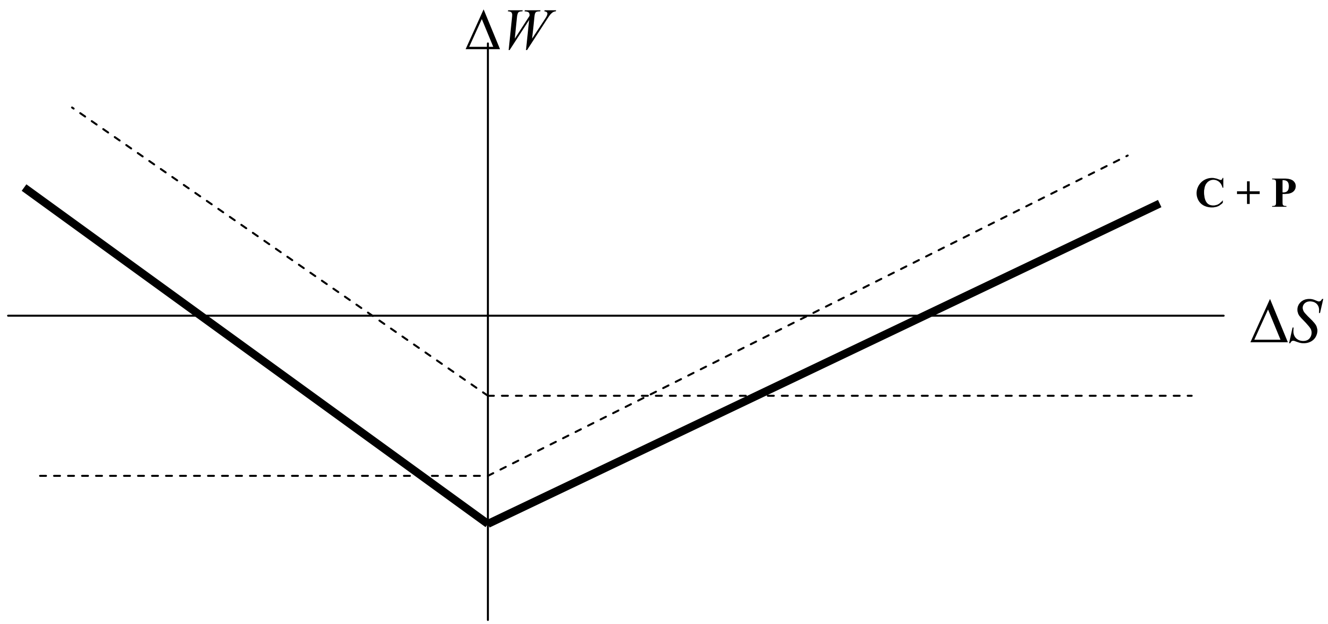




Plus buy a put: S + P – C = B.

Another Example: Straddle.

Buy a Call Plus buy a Put.



A straddle loses money for small changes in the stock price, and gains for large changes.

But, in an efficient market, we pay a fair price for this (as always).