

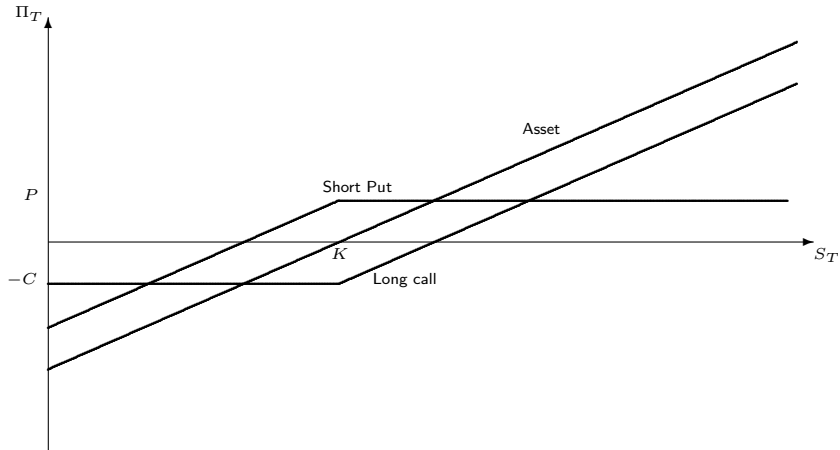
Andreas Krause

Investment strategies with options

# Combining options

- ▶ We can combine options and generate different payoff profiles at maturity of the option
- ▶ We combine put and call options, long and short options, and options with different strike prices
- ▶ Such payoff profiles might suit the needs of specific investors

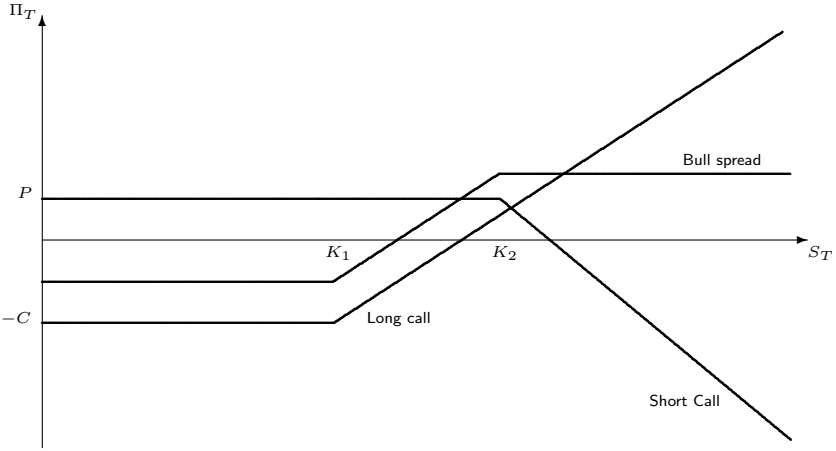
# Synthetic asset



## Reason to re-create the underlying asset

- ▶ The underlying asset might not be available to an investors, using options he can construct the same exposure
- ▶ Assets might not be available due to regulatory constraints, such as capital controls or limited access to assets seen as of national importance
- ▶ Investors might not want to obtain the asset directly, for example to avoid disclosing significant share holdings
- ▶ Using options can circumvent these restrictions, but in case of stocks without obtaining voting rights

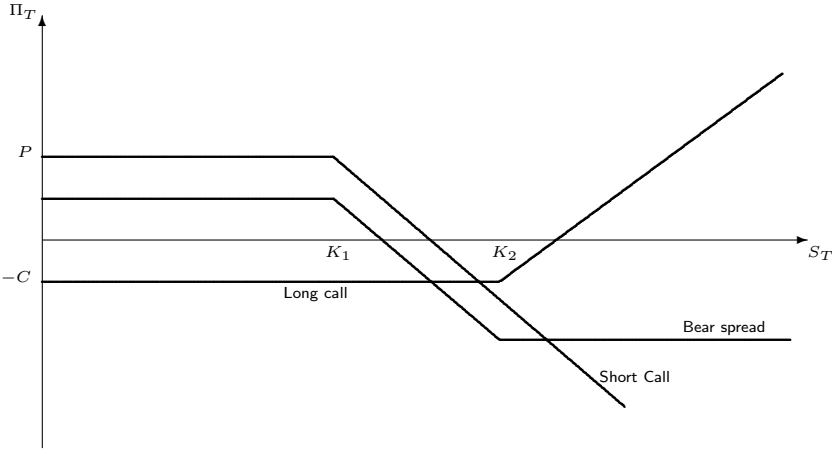
# Bull spread



## Limiting profits to reduce losses

- ▶ Investors might believe the asset to increase in value, but want to protect themselves against a fall in value
- ▶ By limiting their profits through selling a call, they gain additional revenue
- ▶ This limits the losses from the premium of the long call option, but also limits potential profits

# Bear spread

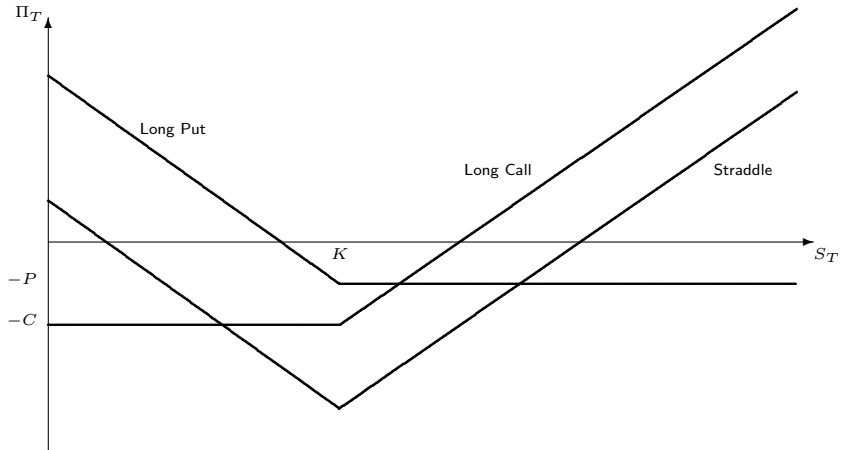


## Limiting profits to reduce losses

- ▶ A bear spread is similar to a bull spread, only the profits are generated if the asset value falls
- ▶ Investors limit their profits from selling a call option by buying another call
- ▶ This limits the losses from the premium of the long call option in the case the asset value increases



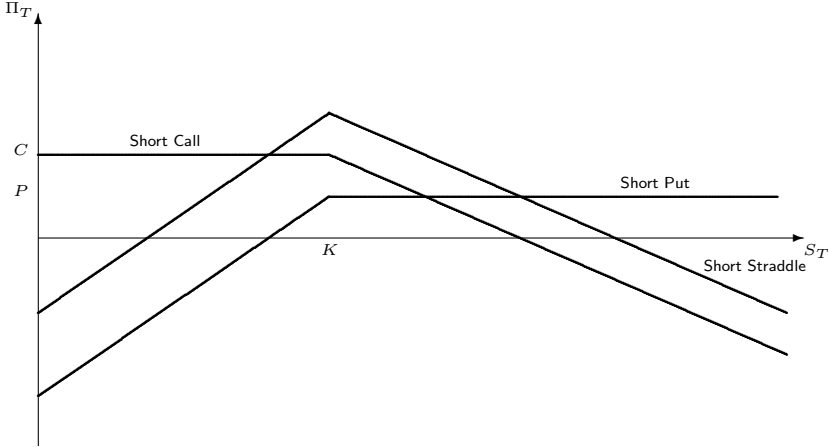
# Straddle



# Investing at times of high volatility

- ▶ If volatility is high, prices are moving more widely and at maturity are more likely to have moved further away from the current value
- ▶ If the strike price of the options chosen is the current asset value, investors make profits if asset prices move much
- ▶ Investors seeking to exploit times of high volatility could use a straddle if they do not have information on the direction of price movements

# Short Straddle



# Investing at times of low volatility

- ▶ If volatility is low, prices are moving less widely and at maturity are more likely to have stayed close to their current value
- ▶ If the strike price of the options chosen is the current asset value, investors make profits if stock prices do not move much
- ▶ Investors seeking to exploit times of low volatility could use a short straddle if they do not have information on the direction of price movement

# Benefits of using option strategies

- ▶ Many more option strategies exist and can be exploited, some involving three or more options
- ▶ Many option strategies can also be achieved with different combinations of options
- ▶ Options strategies are often used to limit losses if price movements are adverse, but they often also limit profits
- ▶ As option premia are low compared to the underlying asset, considerable leverage can be achieved using option strategies



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Andreas Krause  
Department of Economics  
University of Bath  
Claverton Down  
Bath BA2 7AY  
United Kingdom

E-mail: [mnsak@bath.ac.uk](mailto:mnsak@bath.ac.uk)