Introduction

Sunday, 11 December 2022 1:00 PM

Derivatives markets is huge as compared to the stock market.

A derivative involves two parties agreeing to a future transaction, and it depends on the values of other underlying variables.

Exchange Traded Markets
Chicago board of trade - farmers and merchants to standardise quality and quantity of the grains that were traded.

A rival exchange Chicago mercantile exchange

CBOT merged with CME to form CME Group

What is call and put options ?
A call option is the right to buy a stock at a specific price by expiration date, and a put option is the right to sell a stock at a specific price by an expiration date.

Clearance Houses takes the risk not traders

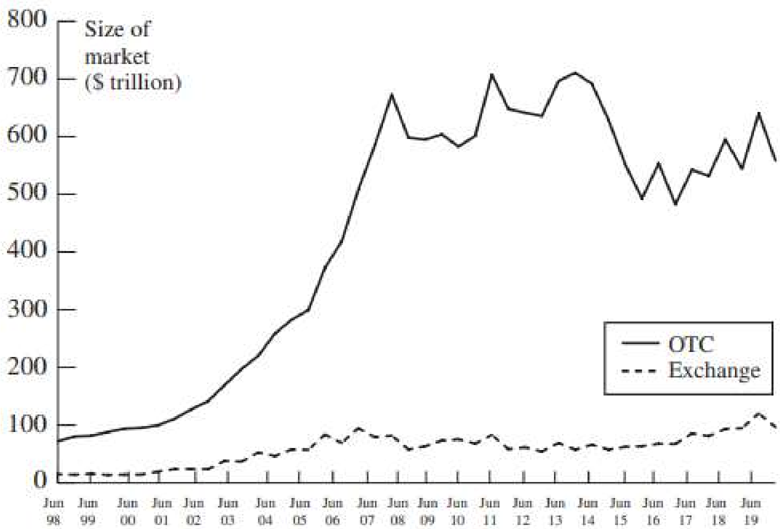
Over the Counter Markets

Central Counterparty is like clearing house or the trades are cleared bilaterally

Development of new regulations because of Lehman Brothers disaster. These new regulations focuses on reducing systematic risk and increase transparency in OTC markets

- Swap Execution facilities
- CCO to be used for most standardised derivatives transactions between financial institutions.
- All trades must be reported to a central repository

Figure 1.1 Size of over-the-counter and exchange-traded derivatives markets.



FORWARD CONTRACTS

It is an agreement to buy or sell an asset at a certain future for a certain price. Traded in the OTC market
Forward contracts on forex are very popular.

Table 1.1 Spot and forward quotes for the exchange rate between USD and GBP on May 21, 2020 (GBP = British pound; USD = U.S. dollar; quote is number of USD per GBP).

	Bid	*Ask*
Spot	1.2217	1.2220
1-month forward	1.2218	1.2222
3-month forward	1.2220	1.2225
6-month forward	1.2224	1.2230

Bid is buying and Asking is Selling
A institution at one time can buy and sell together.

Payoffs from Forward Contracts
Long Position Payoff is St - K where St is the spot price and K is the delivery price
Short Position Payoff is K-St where K is the delivery price and St is the spot price

FUTURE CONTRACTS

What is the difference between a forward contract and a future contract ?

A forward contract is a private and customisable agreement that settles at the end of the agreement and is traded over the counter.
A futures contract has standardised terms and **is traded on an exchange**, were prices are settled on a daily basis until the end of the contract.

Exchange clearance house stands between the two parties to settle the disputes

if more traders want to go long than go short then the price goes up; if the reverse is true then the prices goes down

OPTIONS
Traded on Exchanges and OTC markets
The price of the contract is known as the exercise price or strike price; the date in the contract is known as the expiration date or maturity.

American options can be exercised at any time up to the expiration date.
European options can be exercised only at the maturity.
Most options traded are American options

Options gives the holder the right to do something, the holder might not exercise the right, but it's still present.

What is strike price ?
the price fixed by the seller of a security after receiving bids in a tender offer.
The price of a call option decreases as the strike prices increases, while the price of a put option increases as the strike price increases.
as the time increases but the call and put options prices increases.

TYPES OF TRADERS

Hedgers use derivatives to reduce the risk they face from a potential future movements in a market variable. Arbitrageurs take offsetting positions in two or more instruments and Speculators use them to bet on the future direction of a market variables.

Figure 1.4 Value of the stock holding in 2 months with and without hedging.

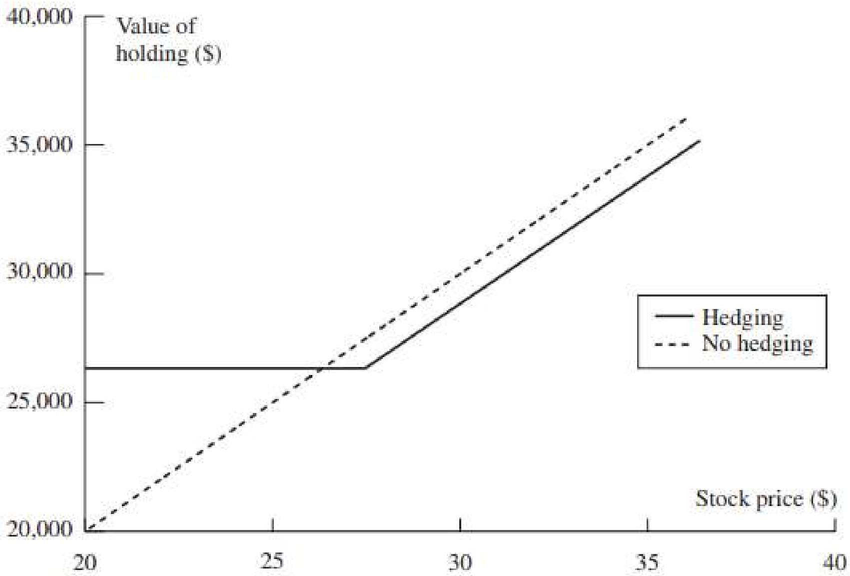
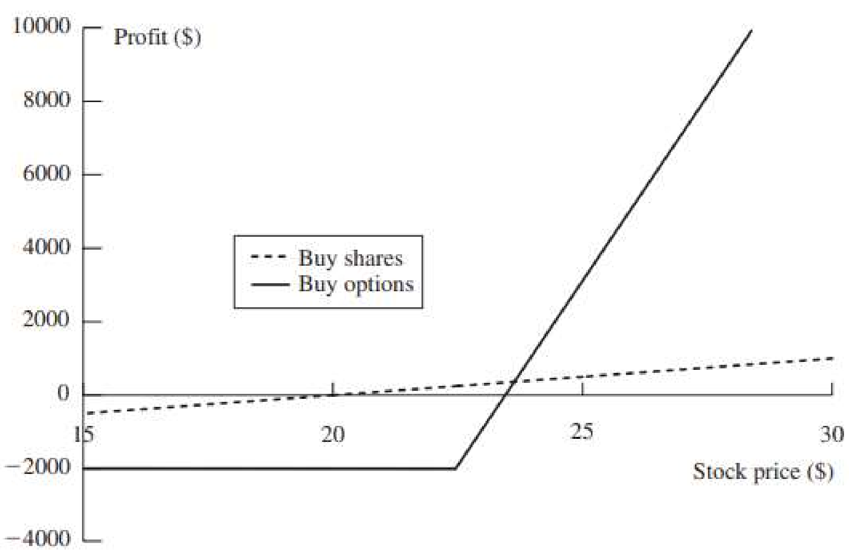


Figure 1.5 Profit or loss from two alternative strategies for speculating on a stock currently worth $20.



NEED TO DO EXERCISE