Chapter 6: Price Controls

Vocabulary	
Price Controls	an attempt to set prices through government regulations in the market
Price Ceiling	a legally established maximum price for a good or service
Black Markets	illegal markets that arise when price controls are in place
Rent Control	a price ceiling that applies to the market for apartment rentals
Price Gouging Laws	temporary ceilings on the prices that sellers can charge during times of emergency
Price Floor	a legally established minimum price for a good or service
Minimum Wage	the lowest hourly wage rate that firms may legally pay their workers
Non-Binding Price Controls	price ceiling is above the equilibrium price
Binding Price Ceiling	price ceiling is below the equilibrium price
Binding Price Floor	price floor above the equilibrium price
Non-binding price floor	price floor below the equilibrium price
Relationships	
Binding Price Ceilings cause...	shortages, decrease in good quality, opportunity of finding the good will increase, black markets for the good will increase, smaller quantity supplied, and higher price for those who purchase the good on the black market
Non-binding Price Ceilings...	do not influence the market
Binding Price Ceiling in the short run versus long run	in the short run there is a shortage (along with the other consequences described above) and in the long run the shortage expands)
Price Floors result from...	political pressures of suppliers to keep prices high
Price gouging laws cause...	the same consequences as the a binding price ceiling HOWEVER this is temporary as the market will return to normal after the disaster is over
Non-binding price floors...	have no impact on the market
Binding Price Floors cause...	a surplus, illegal discounts to reduce the surplus, producers are worse off, smaller quantity demanded, black market to eliminate surplus
Binding Price Floors in the short run versus long run	in the short run there is a surplus (along with the other consequences described above) and in the long run the surplus expands
Minimum wage laws cause...	increased unemployment, less hours for employees, and worse benefits

Market Inefficiencies

Definitions	
Externalities	the costs or benefits of a market activity that affect a third party
Market Failure	condition occurring when there is an inefficient allocation of resources in a market
Internal Costs	the costs of a market activity paid only by an individual participant
External Costs	the costs of a market activity imposed on people who are not participants in that market
Social Costs	the sum of the internal costs and external costs of a market activity
Third-Party Problem	a situation in which those not directly involved in a market activity experience negative or positive externalities
Social Optimum	the price and quantity combination that would exist if there were no externalities
Internalize	relating to a firm's handling of externalities, to take into account the external costs (or benefits) to society that occur as a result of the firm's actions
Property Rights	an owner's ability to exercise control over a resource
Private Property	provision of an exclusive right of ownership that allows for the use, and especially the exchange, of property
Coase Theorem	theorem stating that if there are no barriers to negotiations, and if property rights are fully specified, interested parties will bargain to correct externalities
Excludable Good	a good for which access can be limited to paying customers
Rival Good	a good that cannot be enjoyed by more than one person at a time
Private Good	excludable and rival
Public Good	Non-excludable and nonrival;a good that can be consumed by more than one person, and from which nonpayers are difficult to exclude
Free-Rider Problem	phenomenon occurring when someone receives a benefit without having to pay for it
Club Good	nonrival and excludable
Common-resource good	rival and nonexcludable

Market Inefficiencies (cont)

Cost-benefit analysis	a process that economists use to determine whether the benefits of providing a public good outweigh the costs
Tragedy of the Commons	the depletion of a common-resource good
Cap and Trade	an approach used to curb pollution by creating a system of emissions permits that are traded in an open market
Relationships	
Correct negative externalities with...	taxes or charges
Correct positive externalities with...	subsidies or government provision

Business Costs and Production

Vocabulary	
Total Revenue	the amount a firm receives from the sale of goods and services
Total Cost	the amount a firm spends to produce and/or sell goods and services
Profit	the result when total revenue is higher than total cost
Loss	the result when total revenue is less than total cost
Explicit Costs	tangible out-of-pocket expenses
implicit costs	the costs of resources already owned, for which no out-of-pocket payment is made
Accounting Profit	profit calculated by subtracting a firm's explicit costs from total revenue
Economic Profit	profit calculated by subtracting both the explicit costs and the implicit costs from a firm's total revenue
Output	the production the firm creates
Factors of Production	the inputs (labor, land, and capital) used in producing goods and services
Production Function	the relationship between the inputs a firm uses and the output it creates
Marginal Product	the change in output associated with one additional unit of an input
Diminishing Marginal Product	condition occurring when successive increases in inputs are associated with a slower rise in output
Variable Costs	costs that change with the rate of output
Fixed Costs	costs that do not vary with a firm's output in the short run; also known as overhead
Average Variable Cost (AVC)	an amount determined by dividing a firm's total variable costs by the output

Business Costs and Production (cont)	
Average Fixed Cost (AFC)	an amount determined by dividing a firm's total fixed costs by the output
Average Total Cost (ATC)	the sum of average variable cost and average fixed cost
Marginal Cost (MC)	the increase in cost that occurs from producing one additional unit of output
Scale	the size of the production process
Efficient Scale	the output level that minimizes average total cost in the long run
Economies of Scale	condition occurring when long-run average total costs decline as output expands
Diseconomies of Scale	condition occurring when long-run average total costs rise as output expands
Constant Returns to scale (or constant economies of scale)	condition occurring when long-run average total costs remain constant as output expands
Equations and relationships	
average fixed costs curve	will never increase gets closer and closer to zero
average variable costs curve	parabola-ish shaped above average fixed costs curve
average total costs curve	parabola-ish shaped above average variable costs curve
marginal costs curve	parabola-ish shaped above average fixed costs curve and below average variable cost curve and crosses average variable cost curve and average total costs curve at their minimum
total cost = explicit costs + implicit costs	
profit (or loss) = total revenues - total costs	
accounting profit = total revenue - explicit costs	
economic profit = total revenues - (explicit costs + implicit costs)	
economic profit = accounting profit - implicit costs	
Total costs = total variable costs + total fixed costs	
average variable cost = total variable cost / quantity	
average fixed cost = total fixed cost / quantity	
average total cost = total total cost / quantity	
average total cost = average variable cost + average fixed cost	
marginal cost = change in total variable cost / change in quantity	
marginal cost = change in total cost / change in quantity	
in the long run the average total cost curve for...	
diseconomies of scale increases	
constant returns to scale levels out	
economies of scale decreases	

Firms in a Competitive Market

Definitions	
Price taker	a firm with no control over the price set by the market
Marginal Revenue	the change in total revenue a firm receives when it produces one additional unit of output
Profit-Maximizing Rule	the rule stating that profit maximization occurs when a firm chooses the quantity of output that equates marginal revenue and marginal cost, or MR = MC
Sunk Costs	unrecoverable costs that have been incurred as a result of past decisions
Signals	information conveyed by profits and losses about the profitability of various markets
Relationships	
Breakeven point	lowest point on ATC curve
If MC>P	decrease output
entry and exit play a crucial role in signaling where to guide resources in markets	
losses signal that there are too many firms in the industry relative to market demand	
Characteristics of a competitive market	many sellers, similar products, free entry and exit, price taking, every firm is small
Calculate profit from graph	price at quantity minus ATC at quantity times quantity
when to operate versus when to shut down in terms of MR...	if MR>minimum ATC, then firm earns profit; if AVC<MR<ATC, then firm will operate at a loss; if MR<AVC, then the firm will shut down
when to operate versus when to shut down in the short run in terms of P...	if P>ATC, then firm earns profit; if ATC>P>AVC, then firm will operate to minimize loss; if P<AVC, then the firm will temporarily shut down
the short-run supply curve and marginal cost curve are equivalent when the price is above the minimum point on the average variable cost curve. Below that point, the firm shuts down and no supply exists	
The long-run supply curve and marginal cost curve are equivalent when the price is above the minimum point on the average total cost curve. Below that point, the firm shuts down and no supply exists.	
long-run shutdown criteria	if P>ATC, then the firm makes a profit; if P<ATC, then the firm will shut down
The market supply is determined by summing the individual supplies of all the firms in the market	
In the long run the price is equal to the minimum point on the ATC curve and the long run supply curve is horizontal	
when there is a decrease in demand the price drops and and quantity drops and the firm incurs a short run loss	
in the long run a decrease in demand will cause some firms to exit the market decreasing supply and shifting everything back to market equilibrium	

Understanding Monopolies

Definitions	
Monopoly power	measure of a monopolist's ability to set the price of a good or service
Barriers to entry	restrictions that make it difficult for new firms to enter a market

Understanding Monopolies (cont)

natural monopoly	the situation that occurs when a single large firm has lower costs than any potential smaller competitor
price maker	a firm with some control over the price it charges
renk seeking	occurs when resources are used to secure monopoly rights through the political process
Relationships	
the lowest a government can force a monopoly to charge is at the breakeven point	
Conditions to become a monopoly	unique product/service, a way to prevent competitors from entering the market
Natural Barriers to entry	control of resources, problems raiding capital, economies of scale
government-created barriers	licensing, patents and copyright law
characteristics of monopolies	one seller, a unique product without close substitutes, high barriers to entry, price making, may earn long-run economic profits, produces less than the efficent level of output (because P>MC)
demand curve for competitive firm versus monopoly	competitive firm: horizontal; monopolist: downward sloping
price effect	how a lower price effects revenue
output effects	how a lower price reflects the number of consumer
profit-maximizing rule for monopolies	produce at the quantity where MC=MR but set price at where that quantity intersects the demand curve
calculate monopoly profit	price minus ATC times quantity
problems with monopoly	inefficient output and price, few choices for consumers, rent seeking
solutions to the problems of monopoly	breaking up the monopoly, reducing trade barriers, regulating markets

Link to Graph Document

https://docs.google.com/document/d/1oOCFD-5JjJpghhxC2W4pTVPwqSu4Sxxa86qszWiasNo/edit?usp=sharing