Contents

1 Chapter 4

1.1 Introduction to Elasticity

- closeness of substitutes is critical to understanding elasticity of supply and demand

1.2 Elasticity of Demand

1.2.1 Calculting Elasticity of Demand

- Price elasticity of demand is a unit free measure of the responsiveness of quantity demanded to a change in price when all other influences stay the same
- percentage change in quantity demanded/percentage change in price
- percent change in price is calculated as change in price/average of two goods/services

1.2.2 Inelastic and Elastic Demand

- Demand can be inelastic, unit elastic, or elastic
- Elasticity can range from 0 to infinity
- If quantity demanded doesn't change when the price changes, price elasticity = 0 and the good has perfectly inelastic demand (Vertical demand curve)
- If price elasticity equals exactly one, the good has unit elastic demand
- If price elasticity of demand is less than 1 then the good has inelastic demand
- If price elasticity is greater than 1, then the good has an elastic demand
- If the price elasticity is infinity, the good has a perfectly elastic demand (Horizontal demand curve)

1.3 Factors Influencing Elasticity of Demand

1.3.1 Closeness of substitutes

- the closer the substitutes, the more elastic the demand for a good or service
- necessities, such as food or housing, generally have an inelastic demands
- luxuries, such as exotic vacations, generally have elastic demand

1.3.2 Proportion of Income Spent on Good

- The greater the portion of income consumers spend on a good, the larger the elasticity of demand

1.3.3 Time Elapsed Since Price Change

- The more time consumers have to adjust to a price change or the longer the good can be stored without losing its value, the more elastic the demand for the good

1.4 Elasticity on a Linear Demand Curve & Total Revenue Test

- At the midpoint of a linear demand curve, demand is unit elastic
- At prices above the midpoint, demand is elastic
- At prices below the midpoint, demand is inelastic

1.4.1 Total Revenue and Elasticity

- Total revenue from the sale of a good or service = price of good * quantity sold
- Raising the price doesn't always increase total revenue
- If demand is elastic, a 1% price cut increases quantity sold by >1%, total revenue decreases
- If demand is inelastic, a 1% price cut increases the quantity <1%, total revenue decreases
- If demand is unit elastic a 1% price cut increases the quantity sold by 1%, total revenue same

1.4.2 Total Revenue Test

- a method of estimating the price elasticity of demand by observing the change in total revenue that results from a price change
- If a price cut increases total revenue, demand is elastic
- If price cut decreases total revenue demand is inelastic

- If a price cut doesn't change total revenue, demand is unit elastic
- On a bell curve, increase shows elastic, decrease shows inelastic, and peak is unit elastic

1.5 Income Elasticity and Cross Elasticity of Demand

1.5.1 Income Elasticity

- Income elasticity of demand measures how the quantity demanded responds to a change in income
  - % change in quantity demanded/ % change in income
- If income elasticity is >1, demand is income elastic and the good is a normal good
- If the income elasticity is 0<x<1, demand is income inelastic and the good is normal elastic
- If income elasticity is <0, the good is an inferior good

1.5.2 Cross Elasticity of Demand

- Measure of the responsiveness of demand to change in the price of a substitute/complement
  - % change in quantity demanded/ % change in price of substitute/complement
- Cross elasticity of demand is:
  - positive for a substitute
  - negative for a complement

1.6 Elasticity of Supply

- Elasticity of supply: measures the responsiveness of quantity suppled to a change in price
  - % change in quantity supplied / % change in price
- Supply is perfectly inelastic when supply curve is vertical and elasticity = 0

- Supply is unit elastic if the supply curve is linear and passes through the origin
- Supply is perfectly elastic when the supply curve is elastic and the elasticity = infinity

1.6.1 Factors Influencing Elasticity of Supply

- Depends on
  - Resource substitution possibilities
    - The easier it is to substitute among resources used, the greater the elasticity of supply
  - Time frame for supply decision
    - Momentary supply - perfectly inelastic for physical goods
    - Short-run supply is somewhat elastoc
    - Long-run supply is the most elastic

2 Chapter 3

2.1 Introduction

- Markets are any arrangements that enable buyers and sellers to get information and do business with each other
- Competitive Market: many buyers and many sellers so no single buyer or seller can influence prices

2.2 Demand

- Reflects the buyers' side of the market
- If you demand something, you
  - want it
  - can afford it
  - have a definite plan to buy it
- Quantity demanded: amount that consumers plan to buy during a particular time @ a particular price

- Law of Demand: other things remaining the same, the higher the price of a good, the smaller the quantity demanded (and vice versa)
- Substitution Effect: when the relative price of a good rises, people seek substitutes so the quantity demanded decreases
- When the price of a good rises relative to income, people cannot afford all the things they previously bought so quantity demanded decreases
- Demand Curve and Demand Schedule
  - the term demand refers to the entire relationship between good and quantity demanded
- Demand Curve: exhibits relationshit between quantity demanded and price when all other consumers' planned purchases remain constant
- Willingess and Ability to Pay
  - The smaller the quantity available, the higher the price someone is willing to pay for another unit
  - Willingness to pay measures marginal benefit
- Changes in Demand: when some influence on buying plans other than price changes, there is a shift in demand for that good
- 6 factors influencing demand:
  - Price of related goods
    - substitutes - good that can be used in place of another
    - complement - good that is used in conjunction with another
    - If $ substitute inc or $ complement dec, demand of good inc
    - if $ substitute dec or $ complement inc, demand of good dec
  - Expected future prices
    - if expected future price inc, current demand inc
    - if expected future price dec, current demand dec
  - Income
    - normal good: a good for which demand inc as income inc
    - inferior good: a good for which demand dec as income inc
    - if expected future income increases/credit is easier to get, current demand inc

- Population
    * The higher the population, the higher the demand
- Preferences
    * People with the same income have different demands if they have different preferences

2.3 Supply

- If a firm is a supplier, they
    - have the resources and tech to produce it
    - can profit from producing it
    - has a definite plan to produce and sell it
- Quantity supplied: the amount producers plan to sell during a given time at a particular price
- Law of Supply: Other things remaning the same, the higher the price of a good, the greater the quantity supplied (and vice versa).
- Supply Curve and Supply Schedule
    - Minimum supply price: As quantity produced inc, marginal cost inc.
    - The lowest price at which someone is willing to sell an additional unit rises
    - This lowest price is called the marginal cost
- Changes in Supply
    - Increases in supply shifts the curve to the right (and vice versa)
- Factors that affect Supply
    - Prices of factors of production
        * If the price of an input inc, supply dec; curve shifts left
    - Prices of related goods produced
        * denoted by substitute for production, not just substitute
        * supply of a good inc if price of a substitute dec
        * complements in production: goods that must be produced together (beef & leather)

    * supply of a good inc if the price of a complement in production inc
  - Expected Future Prices
    * If expected future price inc, current supply dec
  - Number of Suppliers
    * as number of suppliers inc, supply inc
  - Technology
    * Advances in technology lower the cost of making existing products
    * inc in technology means inc in supply
  - State of Nature
    * natural forces and disasters can dec supply

2.4 Equilibrium

- Equilibrium: a situation in which opposing forces balance each other
- Equilibrium Price: the price at which quantity demanded = quantity supplied
- Equilibrium Quantity: quantity bought and sold at equilibrium cost
- Price Regulation
  - Price regulates buying and selling plans
  - Price adjusts when plans don't match
- Price adjustments
  - Surplus forces prices down
  - Shortage forces prices up
- Increases in demand
  - When demand increases without changes in supply, shortages occur
  - Price therefore increaes
- Decrease in demand
  - At the original price, there is a surplus

    - Price therefore falls

- Increase in supply
    - At the original price, there is a surplus
    - Price therefore falls

- Decrease in supply
    - At the original price, there is a shortage
    - Price therefore increases

3 Chapter 1

3.1 Scarcity

- all economic questions arise because we want more than we can get
- inability to satisfy all wants because of scarcity
- scarcity = limited resources

3.2 Definition of Economics

- because we face scarcity, we must make choices
- incentive = a reward that encourages an action or a penalty that discourages an action
- economics is the social science that studies the choices that individuals, businesses, etc. make as they cope with scarcity and the incentives that influence and reconcile those choices
- Economics divides into two parts:
    - Microeconomics = study of choices that individuals and businesses make & how those choices interact with markets and the influence of governments
    - Macroeconomics = the study of the performance of national and global economies

3.3 6 Key Ideas

- a choice is a tradeoff: ever choice is an exchange giving up one thing for another
- making a rational choice: a rational choice compares costs and benefits, maximizing benefit
- benefit = what you gain: the gain or pleasure something brings about, determined by preferences
  - preferences = what a person likes, dislikes, and the intensity of those feelings
- cost = what must be given up
  - opportunity cost = highest val alternative that must be given up
- choosing at the margin: the benefit of pursuing an incremental increase in some action is marginal benefit of that action
  - the opportunity cost of pursuing an incremental increase in some action is marginal cost
  - if marginal benefit > marginal cost, rational choice is to do more of that action
- choices respond to incentives: a change in marginal cost/benefit changes our incentives & choices

3.4 Positive & Normative

- economists distinguish between two types of statements:
  - positive statements: can be tested by checking the facts
  - normative statements: express an untestable opinion
- economists as social scientists
  - economists test economic models
  - economic model = a description of some aspect of the world w only the necessary features
- economists as policy advisors

3.5 Resources & Highest Valued Use

- the scope of economics:
  - how do choices end up determining "what, how, and for whom" goods and services get produced
- goods and services are produced using productive resources called factors of production
  - land
  - labor
  - capital
  - entrepreneurship
- who gets goods and services depends on income
  - land earns rent, labor earns wages, capital earns interest, entrepreneruship earns profit
- **resources gravitate towards their highest value use**

3.6 Self Interest & Social Interest

- self interest = choices that are made because you think they are the best for you
- social interest = choices that are best for society as a whole
- social interest has two dimensions:
  - efficiency: resource use is efficient if it is not possible to make someone better off without making someone else worse off (no waste to be eliminated)
  - fair shares/equity: refers to the fairness with which resource division occurs in a society
- tension between self & social interest: information revolution, climate change, globalization