PFL Academy

Chapter 14.3: Supply and Demand in Personal Finance

Student Activity Packet

THE CHALLENGE

Why does gas cost more in summer than winter? Why does rent cost more in some cities than others? Why did hand sanitizer prices spike during the pandemic? Why are airline tickets cheaper on Tuesdays? Why do roses cost triple on Valentine's Day? The answer to ALL of these questions is the same: Supply and Demand. Understanding these market forces will help you time purchases strategically, choose careers with strong demand, invest in appreciating assets, and avoid overpaying for goods and services.

How can understanding supply and demand help you make smarter financial decisions?

Learning Objectives

- Explain the law of demand and law of supply.
- Analyze how supply and demand curves determine market equilibrium prices.
- Identify factors that shift supply and demand in real markets.
- Predict how price changes affect markets relevant to personal finance.

CORE CONCEPTS

Term	Definition
Law of Demand	As price increases, quantity demanded decreases (and vice versa), all else being equal.
Law of Supply	As price increases, quantity supplied increases (and vice versa), all else being equal.
Equilibrium	The price where quantity demanded equals quantity supplied—the market "clears" with no shortage or surplus.
Demand Shift	Movement of the entire demand curve due to changes in income, preferences, population, or related goods.
Supply Shift	Movement of the entire supply curve due to changes in input costs, technology, regulations, or number of sellers.

Background: Supply and demand curves show HOW prices reach their levels and WHY they change. Prices signal scarcity: high prices tell you something is scarce relative to demand; low prices indicate abundance. Understanding these forces helps you time purchases (buy when demand is low), choose careers (where demand exceeds supply), and avoid overpaying (recognize temporary price spikes).

APPLY IT

PART A: MARKET EQUILIBRIUM ANALYSIS

Analyze the used car market to find the equilibrium price:

Price	Quantity Demanded	Quantity Supplied	Market Condition
$30,000	100	400	Surplus (300 cars)
$25,000	200	300	Surplus (100 cars)
$20,000	**300**	**300**	
$15,000	400	200	Shortage (200 cars)
$10,000	500	100	Shortage (400 cars)

1. At what price does the market reach equilibrium? What is the market condition at $20,000?

2. If sellers price cars at $30,000, what happens? How does the market self-correct?

PART B: DEMAND SHIFTERS

Identify what happens to demand when each factor changes:

3. For each scenario, indicate whether demand INCREASES (shifts right) or DECREASES (shifts left):

Scenario	Demand Shifts...	Price Effect
Income in the region increases		
Price of a substitute good increases		
Population decreases (people move away)		
Consumers expect prices to rise soon		

PART C: SUPPLY SHIFTERS

Identify what happens to supply when each factor changes:

4. For each scenario, indicate whether supply INCREASES (shifts right) or DECREASES (shifts left):

Scenario	Supply Shifts...	Price Effect
Production costs (materials, labor) increase		

New technology makes production cheaper		
Government adds new regulations and taxes		
More businesses enter the market		

> **Personal Finance Application:** *When you see supply disruptions (factory closures, shipping delays), expect prices to rise temporarily. Stock up before disruptions or wait for supply to recover.*

CHECK YOUR UNDERSTANDING

1. According to the law of demand, when the price of a product increases:

- ☐ A. Quantity demanded increases
- ☐ B. Quantity demanded decreases
- ☐ C. Quantity supplied decreases
- ☐ D. Supply shifts right

2. What happens at market equilibrium?

- ☐ A. Prices are at their highest point
- ☐ B. Quantity demanded equals quantity supplied
- ☐ C. Sellers make maximum profit
- ☐ D. Buyers get the lowest possible price

3. Gas prices are typically higher in summer. Is this due to a change in supply or demand? Explain why this occurs.

4. Using supply and demand, explain why roses cost 3× more on Valentine's Day than a week later.

5. Reflection: Think of a major purchase you're planning (car, apartment, electronics). When would be the best time to buy based on supply and demand patterns? How much might you save by timing your purchase strategically?