# Intermediate Microeconomics

## Chapter 1

*Introduction*

# What is microeconomics?

- Economics = the study of how people and societies deal with scarcity
- Microeconomics = the branch of economics focusing on the economic behavior of individual decision-making units *and* how these individual decisions fit together

# The three questions in (micro)economics

1. What to produce?
   - opportunity cost = what is given up in order to obtain something
2. How to produce it?
   - allocation of resources
3. Who gets the output?
   - centrally planned economies vs. market system

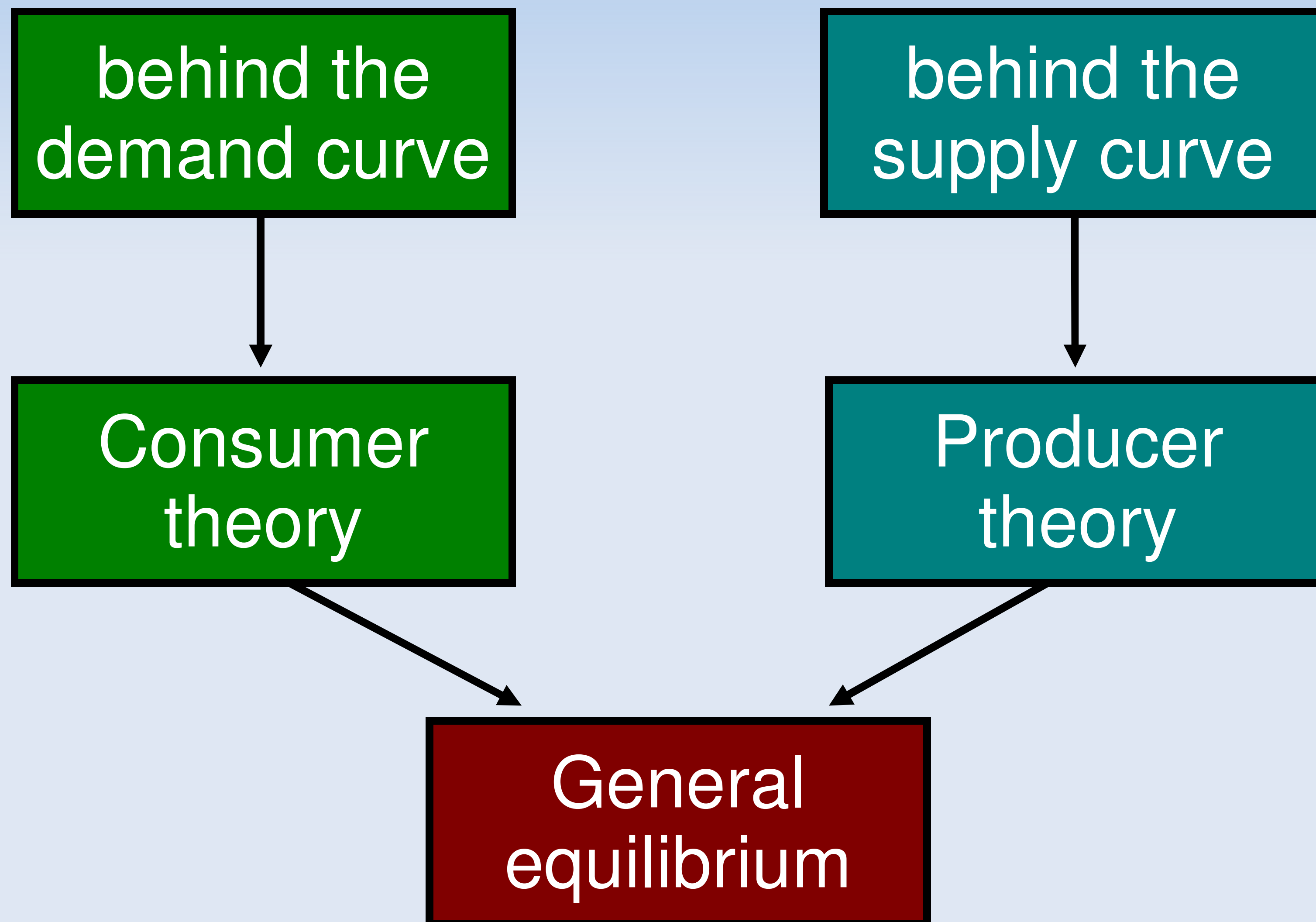
# Economic analysis

- Models = a simplified description of some aspect of the economy
  - used to answer specific questions based on some simplifying assumptions
- Two types of analysis/statements:
  - normative = descriptive statements (cause and effect)
  - positive = value judgments

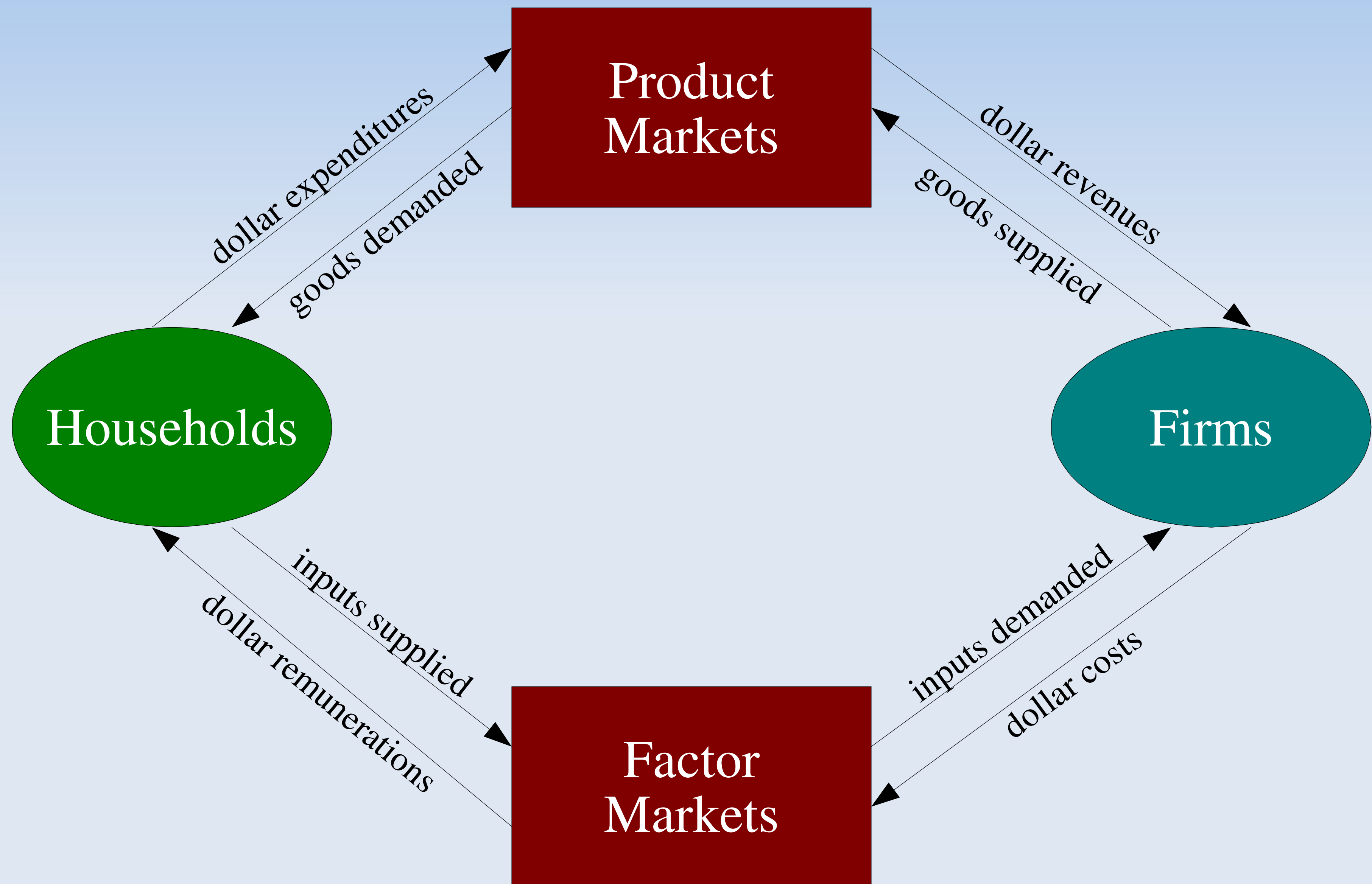
# Microeconomic foundations

- How consumers choose what to consume
- How firms choose how much to produce
- How firms choose the amount of labor and capital to use
- How do these actions coincide to bring about a market outcome

# Microeconomic foundations



# Circular flow of the economy



# Circular flow of the economy

- Markets regulate the flows between the two sectors
- Simplifying assumptions:
  - ignores within-sector transactions (firm-firm or household-household)
  - ignores government (provision of law, taxes, public goods, etc.)

# Supply and demand model

- What guarantees that the activities of the two sectors are coordinated?
- In a centrally planned economy, a central planner would try to adjust quantity produced and/or price so as to reach a consensus
- In a decentralized (market) economy, this is achieved by the interaction of supply and demand

# Demand

- Factors influencing demand:
  - tastes
  - price – inversely related (*law of demand*)
  - income – positively (*normal good*) or negatively (*inferior good*)
  - prices of related goods – positively (*complements*) or negatively (*substitutes*)

# Demand schedule vs. Quantity demanded

- Demand schedule = the relationship between market price and quantity demanded at a given time, all other things equal (*ceteris paribus*)
- Changes in factors:
  - price – *movement along the curve*
  - any other factor – *shift in the curve*

# Supply

- Factors influencing supply:
  - technology
  - price – positively (*law of supply*)
  - price of inputs – negatively

# Supply schedule vs. Quantity supplied

- Supply schedule = the relationship between market price and quantity supplied at a given time, all other things equal (*ceteris paribus*)
- Changes in factors:
  - price – *movement along the curve*
  - any other factor – *shift in the curve*

# Equilibrium

- Equilibrium = a state that persists because nobody has any incentive to change their behavior
- In the supply and demand model, equilibrium is achieved when quantity supplied ($Q^s$) = quantity demanded ($Q^d$):
  - if $Q^s > Q^d$ (*excess supply*), then price falls
  - if $Q^s < Q^d$ (*excess demand*), then price rises

# The market for inputs

- The supply and demand model can be applied to the market for inputs as well
- In this case:
  - demand comes from firms
  - supply comes from households
  - price = wages, rents, etc.
- The equilibrium is coordinated by “prices”

# The role of prices

- Prices have three major roles:

(1) convey information – signal changes in the market factors, inducing the corresponding changes in behavior

(2) ration scarce resources – more scarce resources cost more, hence quantity demanded is lower

(3) determine incomes – who gets what is produced

# Part 1: Consumer theory

- Preferences
- Utility functions
- Budget constraints
- Optimal choice
- Demand

# Part 2: Producer theory

- Technology
- Production functions
- Cost curves
- Profit maximization
- Supply

# Part 3: General equilibrium

- Pareto efficiency
- An exchange economy
- A production economy
- Production and consumption in general equilibrium
- The fundamental theorems of welfare economics

# Part 4: Market failure

- Market power:
  - monopoly
  - monopolistic competition
  - oligopoly
  - strategic behavior among firms
- Missing markets:
  - public goods
  - externalities