

Producer Theory

Lecture 15: Elasticity — Demand Recap & Supply Elasticity

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Recap: Lecture 1

Key concepts we covered:



Economics studies **scarcity** and **efficiency**



Macroeconomics (big picture) vs.  **Microeconomics** (individual decisions)



Three fundamental questions: **WHAT, HOW, FOR WHOM**



Positive (facts) vs.  **Normative** (values) economics



Today: How do different economic systems answer these questions?

The Three Fundamental Economic Problems

Every Society Must Solve

THE THREE ECONOMIC PROBLEMS

Every economy, regardless of its system, must answer three fundamental questions about resource allocation.

1. WHAT goods and services to produce?

- Which products? How much of each?
- Current consumption vs. future investment?

2. HOW to produce them?

- Which technologies? Which resources?
- Labor-intensive vs. capital-intensive?

3. FOR WHOM are goods produced?

Problem 1: WHAT to Produce?

Tourism Sector Choices

 Hotels & Accommodation

 Transport Infrastructure

 Restaurants & Dining

 Beach Facilities

 Museums & Culture



 *Scarce resources mean choosing between alternatives!*

Problem 2: HOW to Produce?

Different Production Methods: Hotel Check-in

Traditional Method

- Human receptionists
- Paper forms
- Phone bookings
- High labor cost
- Flexible service
- Personal touch

 **Cost per check-in:** ~€8-12

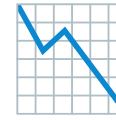
 **Decision factors:** Initial investment, labor costs, customer preferences, technology reliability

Automated Method

- Self-service kiosks
- Online booking
- Mobile check-in
- High capital cost
- 24/7 availability
- Limited flexibility

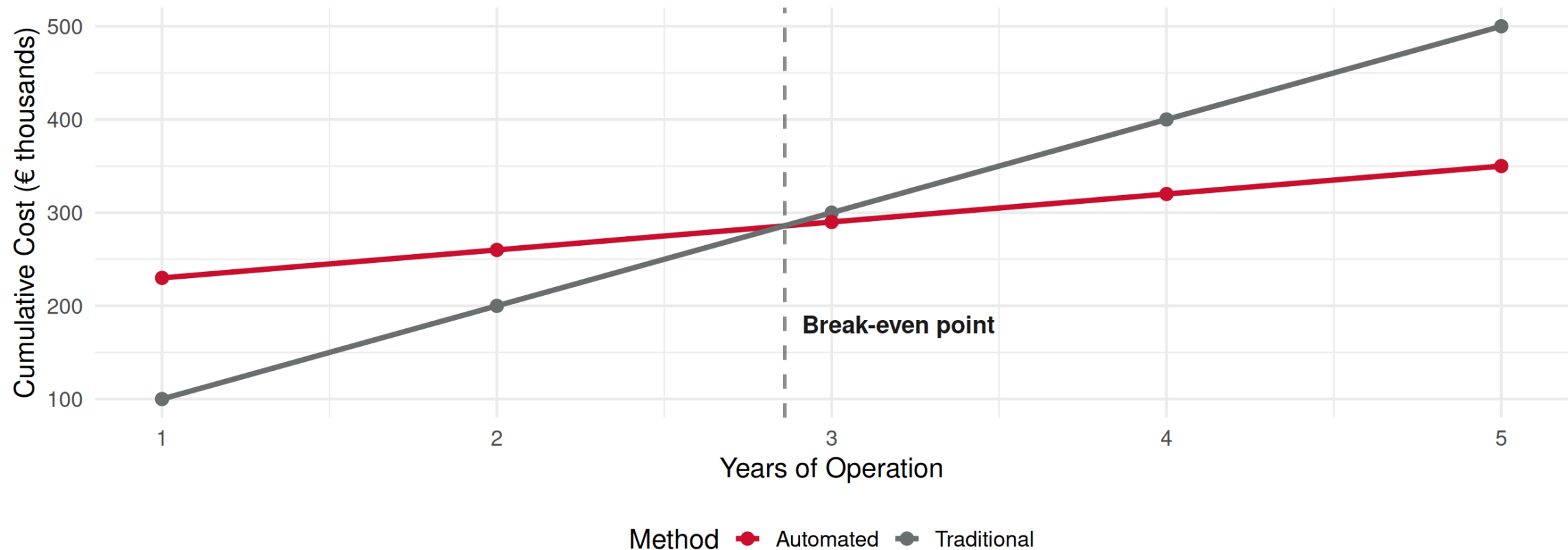
 **Cost per check-in:** ~€2-4

HOW: Production Cost Comparison



Cumulative Cost: Traditional vs. Automated Check-in










HOW to produce: Technology choice affects long-term costs



Hypothetical illustration of cost trade-offs

Problem 3: FOR WHOM?

Who consumes the tourism services produced?

-  Business Travel
-  Family Vacations
-  Sport Tourism
-  Luxury Travel
-  **Distribution depends on:** Income levels, prices, preferences, government policies
-  Nature Tourism
-  Adventure Travel
-  Educational Tourism
-  Beach Holidays

Economic Systems

How Societies Organize Production

ECONOMIC SYSTEM

The way a society organizes the production and distribution of goods and services to answer the three fundamental questions.

Three fundamental types:

- 1 Market Economy** (Laissez-faire) - Decisions by individuals and firms
- 2 Centrally Planned Economy** - Government makes decisions
- 3 Mixed Economy** (Most common today) - Combination of market and government

Market Economy

Individuals and companies make key production and consumption decisions through markets

Key Features

 **Private ownership** of resources

 **Voluntary exchange** in markets

 **Profit motive** drives decisions

 **Price signals** coordinate activity

The “Invisible Hand”

- No central coordinator needed
- Self-interest → social benefit
- Competition drives efficiency
- Markets allocate resources

Adam Smith, “The Wealth of Nations” (1776)

Market Economy: Advantages & Disadvantages

Advantages ✓

 **Efficient allocation** - Resources go where most valued

 **Innovation incentives** - Profit rewards new ideas

 **Consumer sovereignty** - Demand drives production

 **Flexibility** - Quick adaptation to changes

Disadvantages ⚠️

 **Inequality** - Unequal income distribution

 **Market failures** - Externalities, public goods

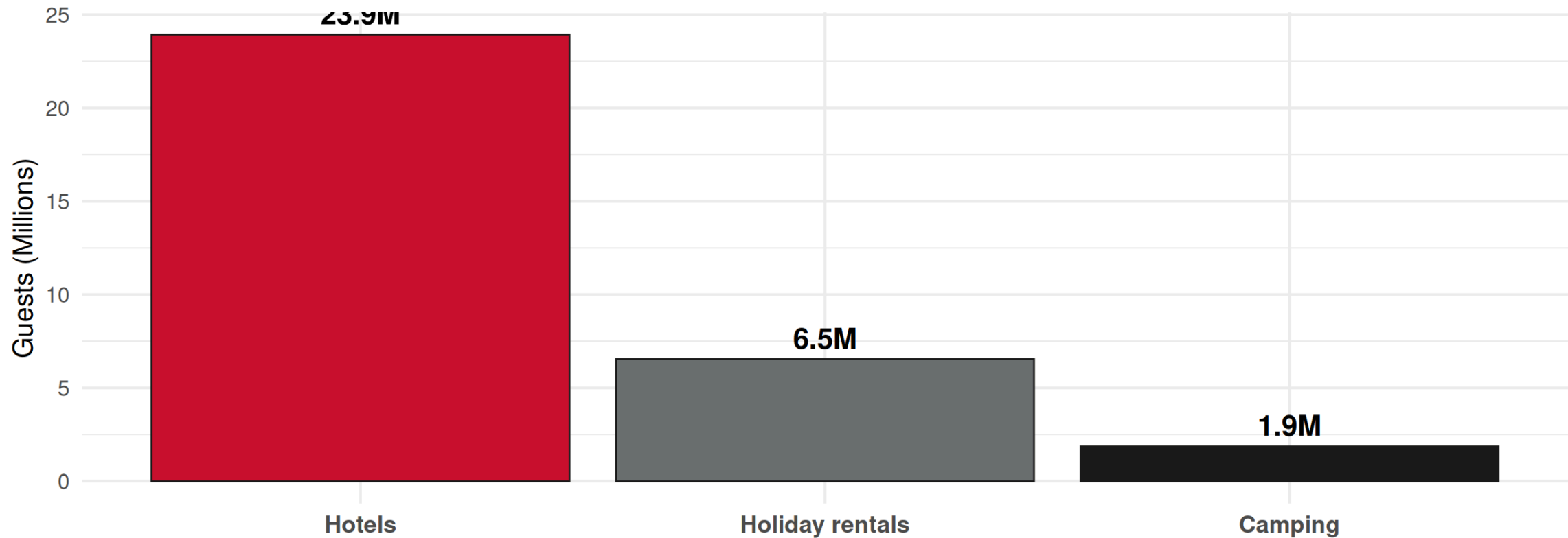
 **Monopoly power** - Reduced competition

 **Short-term focus** - May ignore long-term issues

Market Economy in Tourism

Portugal: Private Market Decides Accommodation Mix (2024)

Market economy in action: consumers and investors determine product offerings



Source: Eurostat (tour_occ_arnraw)

Centrally Planned Economy

Government makes key production and consumption decisions

Key Features

 **State ownership** of resources

 **Central planning** authority

 **Government quotas** and targets

 **Command system** (not prices)





The Central Plan

- Government decides WHAT, HOW, FOR WHOM
- 5-year plans common
- Quotas for production
- Fixed prices





Examples: Soviet Union (historical), Cuba, North Korea

Centrally Planned: Advantages & Disadvantages

Advantages ✓

-  **Equality focus** - More equal distribution
-  **Long-term planning** - Can prioritize future
-  **Social stability** - Basic needs guaranteed
-  **Rapid mobilization** - Can focus resources quickly

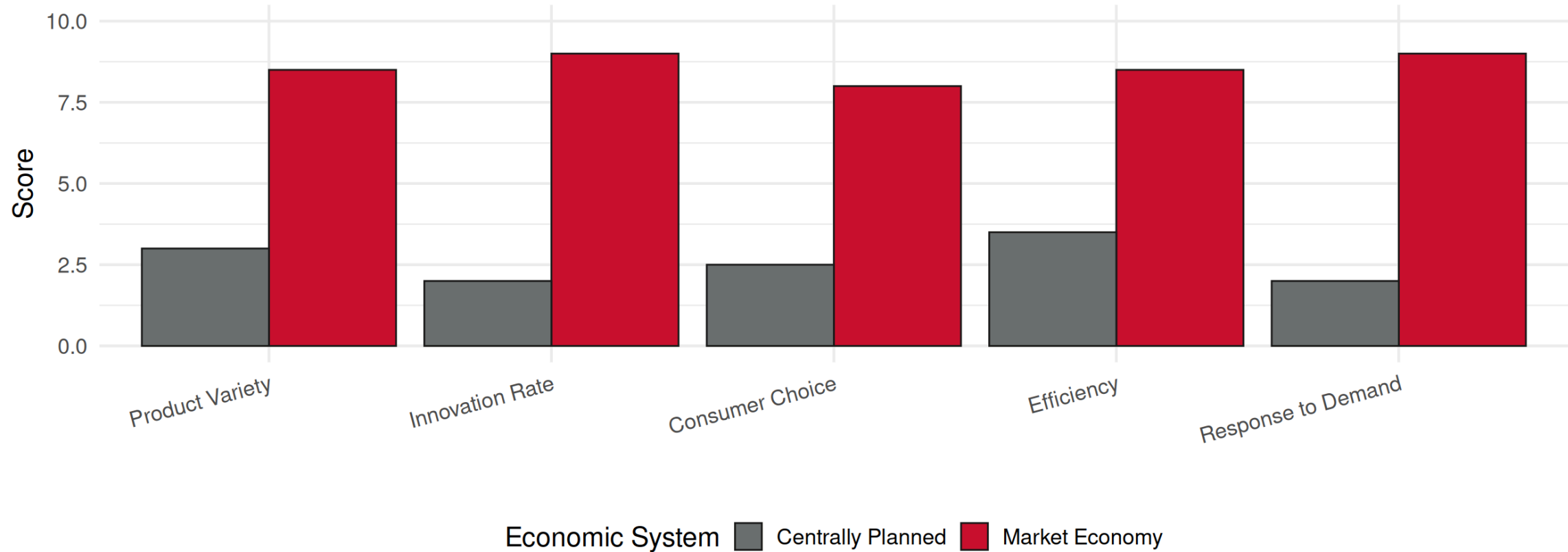
Disadvantages ✗

-  **Inefficiency** - Information problems, no market signals
-  **No innovation** - Weak incentives to improve
-  **Consumer dissatisfaction** - Limited choice, shortages
-  **Bureaucracy** - Slow, rigid decision-making

Centrally Planned Economy Example

Market vs. Centrally Planned Systems

Hypothetical comparison of system characteristics (scale 0-10)



Mixed Economy

MIXED ECONOMY

Combines elements of both market and centrally planned systems. Most modern economies are mixed, with varying degrees of market freedom and government intervention.

Characteristics:



Private & public ownership coexist



Markets operate but with government regulation



Government provides public goods and services



Redistributive policies to address inequality

Mixed Economy: The Balance :scales:

Government's Role in Mixed Economies

Market Activities

Most goods and services produced privately based on profit motive and consumer demand

Tourism example: Hotels, restaurants, tour operators

👉 **The mix varies:** USA (more market), Nordic countries (more government), Portugal (balanced)

Government Activities

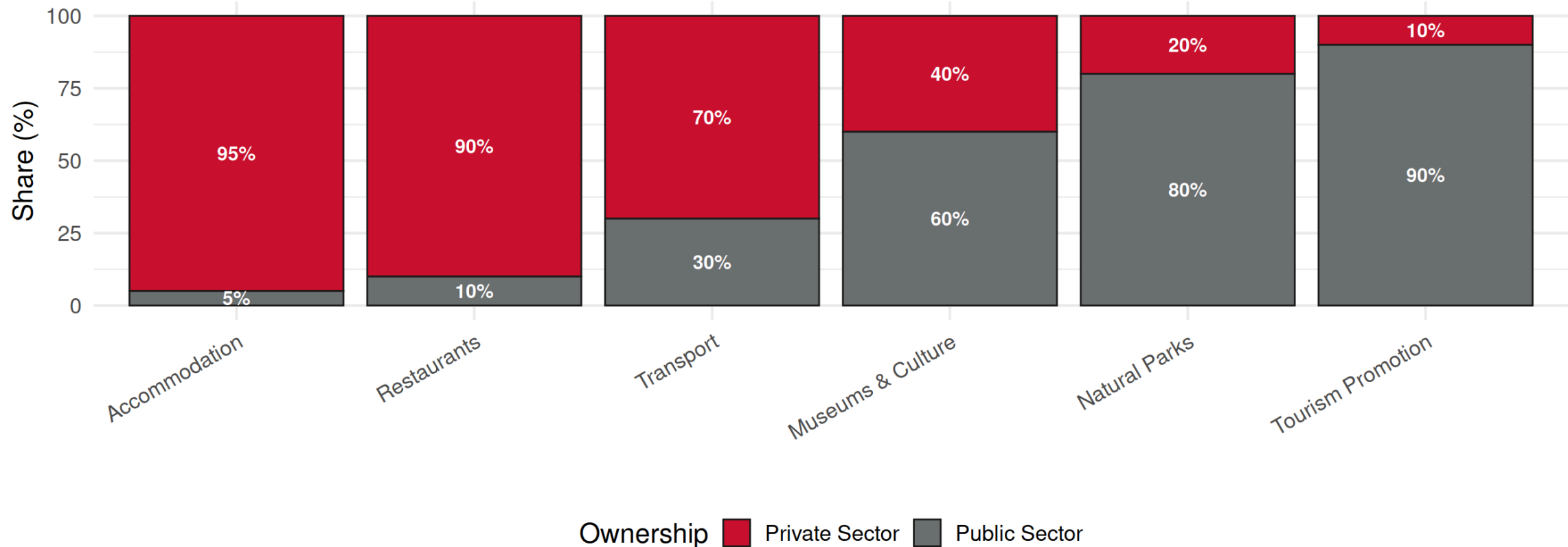
Public goods, regulation, redistribution, addressing market failures

Tourism example: National parks, tourism promotion, safety regulations

Portugal: A Mixed Economy Example

Public vs. Private in Portuguese Tourism (Hypothetical)

Mixed economy: different sectors have different balances



Production Factors

The Inputs of Production

FACTORS OF PRODUCTION

The resources (inputs) used to produce goods and services. All economic systems must decide how to allocate these scarce factors.

Three main factors:

 **Land** - Natural resources

 **Labor** - Human effort

 **Capital** - Produced resources

 *(Some add: Entrepreneurship - organizing & risk-taking)*

Land

Natural resources and raw materials

Examples

- Agricultural land
- Energy resources (oil, gas)
- Minerals and metals
- Forests and water
- Clean air
- Climate conditions

In Tourism

- Beaches and coastlines
- Mountains and landscapes
- Climate (sun, snow)
- Natural parks
- Geographic location

Portugal's natural assets are key tourism factors!

Labor

Human effort - physical and mental work

Characteristics

- Physical work
- Mental work
- Skills & education (human capital)
- Time and effort spent
- Experience and training

In Tourism

- Hotel staff and management
- Tour guides
- Restaurant workers
- Airline crew
- Event organizers

Labor-intensive industry!

Capital

Produced resources used to make other goods/services

Types

- Physical capital: Machinery, buildings
- Infrastructure: Roads, airports
- Technology: Software, systems
- Financial capital: Money for investment

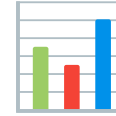
Not the same as money - capital produces!

In Tourism

- Hotel buildings
- Airports and airlines
- Booking systems
- Restaurant equipment
- Transport vehicles

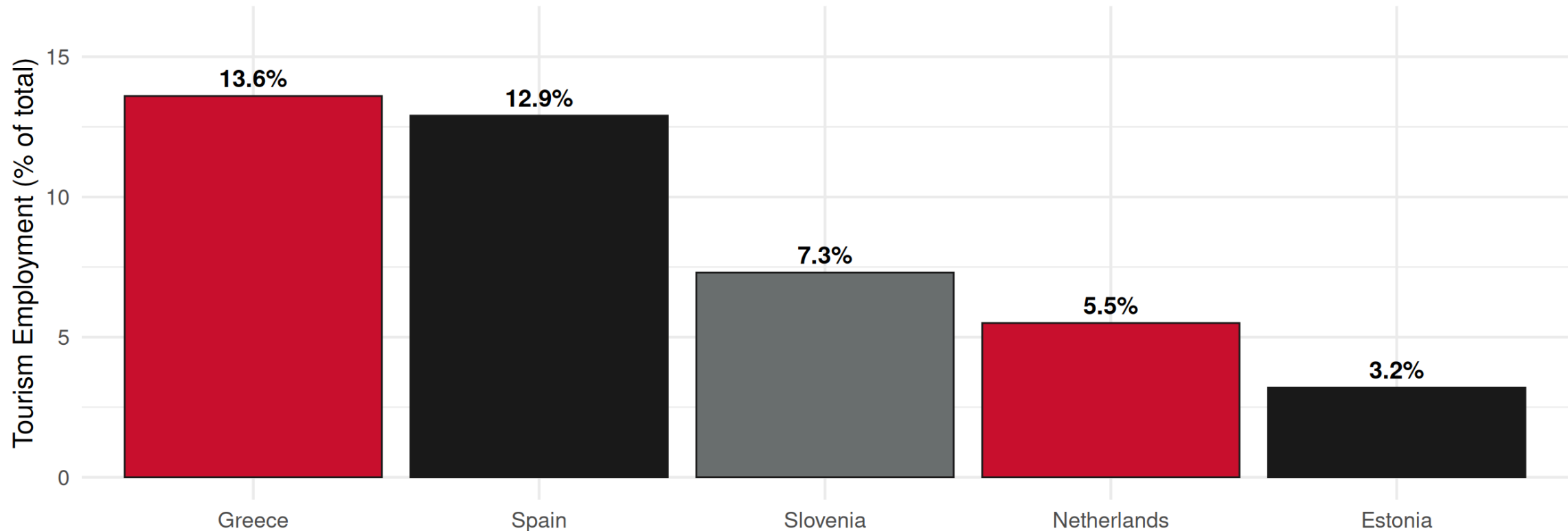
High capital requirements!

Production Factors in European Tourism



Tourism Employment as % of Total Employment

Labor factor: Tourism's importance varies across EU countries



Source: OECD (Tourism Employment Indicator)

Comparing Economic Systems

Aspect	Market Economy	Centrally Planned	Mixed Economy
Ownership	Private	State	Both
Coordination	Prices/markets	Central plan	Markets + regulation
Incentives	Profit	Quotas/orders	Profit + public interest
Innovation	High	Low	Medium-High
Efficiency	Generally high	Often low	Variable
Equity	Low (unequal)	High (equal poverty)	Medium
Examples	(Pure: rare)	Cuba, N. Korea	USA, EU, Portugal

Real-World Example: COVID-19 Tourism Response 🧑‍🤔

Different Systems, Different Responses

Market-Led: Portugal 🇵🇹

- ✅ Private hotels closed voluntarily
- 💰 Government support (furlough schemes)
- 📈 Market-driven reopening
- 💡 Rapid innovation (safety protocols)
- 🚀 **Fast recovery:** 31.6M visitors (2024)

Centrally-Planned: Cuba 🇨🇺

- 🏢 State-owned hotels closed by decree
- 🚫 No market signals
- 📜 Political decision to reopen
- 🐌 Limited innovation
- 😞 **Slower recovery:** ~50% of 2019 levels

Key Concepts Summary



Concept	Definition
Three Economic Problems	WHAT, HOW, FOR WHOM to produce
Market Economy	Private decisions via prices and markets
Centrally Planned	Government makes all major decisions
Mixed Economy	Combination (most common today)
Land	Natural resources used in production
Labor	Human effort (physical & mental)
Capital	Produced resources used to make goods

Exercises

Time for practice!

Let's test your understanding.

Exercise 1: Multiple Choice

In a market economy, the question “FOR WHOM are goods produced?” is primarily answered by:

- A. Government planners deciding who gets what
- B. Equal distribution to all citizens
- C. Willingness and ability to pay
- D. First-come, first-served basis

Answer: C - In market economies, goods go to those willing and able to pay for them. This is how markets allocate resources based on purchasing power.

Exercise 2: Multiple Choice

Which of the following is an example of the CAPITAL factor of production in tourism?

- A. A tour guide's knowledge and skills
- B. The beach at Algarve
- C. A hotel building in Lisbon
- D. The manager's decision-making ability

Answer: C - The hotel building is capital (produced resource used to provide services). A is labor, B is land, D is labor/entrepreneurship.

Exercise 3: Open Question

Scenario: The Portuguese government is considering two policies for tourism development:

- **Policy A:** Let private investors freely build hotels wherever they want
- **Policy B:** Government decides where hotels should be built and provides subsidies

Questions:

- a. Identify which economic system each policy represents
- b. List 2 advantages and 2 disadvantages of each policy
- c. Calculate: If a private hotel costs €5M to build and generates €800k annual profit, what's the payback period?
- d. Recommend which policy Portugal should adopt (justify with economic reasoning)

Exercise 3: Solution (Part a & b)

a) Economic systems:

- **Policy A:** Market economy approach
- **Policy B:** Centrally planned economy approach

b) Advantages and Disadvantages:

Policy A (Market)	Policy B (Planned)
✓ Efficient allocation (demand-driven)	✓ Can correct market failures
✓ Innovation & competition	✓ Ensures regional development
✗ May ignore externalities (overtourism)	✗ Information problems
✗ Unequal regional development	✗ Bureaucratic inefficiency

Exercise 3: Solution (Part c & d)

c) Payback period calculation:

$$\text{Payback Period} = \frac{\text{Initial Investment}}{\text{Annual Profit}} = \frac{€5,000,000}{€800,000} = 6.25 \text{ years}$$

d) Recommendation: **Mixed approach** (combination)

👉 Use **market mechanism** (Policy A) as primary driver - private sector is more efficient at identifying demand and driving innovation


👉 Add **selective government intervention** (Policy B elements) - regional development incentives, environmental regulations, infrastructure investment

💡 **This is what Portugal actually does** - mostly private sector with strategic government support!

Next Lecture

Lecture 3 (February 12, 2026):

- Rationality and Economic Behavior
- Choices and Decision-Making
- **Opportunity Cost** (crucial concept!)
- Production Possibilities Frontier (PPF)

 **Preparation:** Think about a recent choice you made. What did you give up to make that choice?

Thank You! 🙌

Questions?

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Next class: Thursday, February 12, 2026