

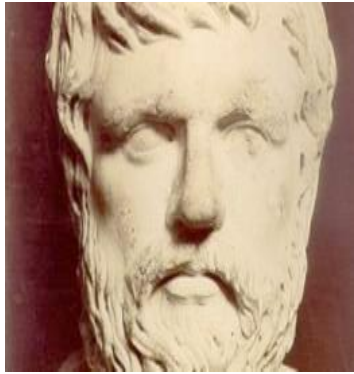
University of Macerata
Economics - A.Y. 2023/2024
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Introductory concepts

REF. Chapter 1 and 2

Economics: subject of study

Economics



From Ancient Greek to Latin ***oikonomía*** :
"oikos" = household/domestic
"nomos" = rule/law/administration/management

Economics deals with...

"the good administration/management of the *domestic* resources"

Reasons for studying economics are associated with a **fundamental economic problem** => the available resources (e.g., human energies, productive capacities, natural reserves, ...) are **scarce**:

- there are quantitative limitations;
- they can be used for multiple uses to achieve the same end;
- they are able to satisfy different and competing ends.

Economics is therefore often considered "the science of **efficiency**, that is, the study of **the best use of scarce resources**" (Robbins, 1932).
(=> principle of maximum result and minimum means)

Economic system

Studying *economics* (how societies use scarce resources to produce valuable goods and services and distribute them among different individuals) entails studying the **economic system**, namely:

a system of interdependencies between different individual or collective **actors** (consumers, companies, industries, public administrations, etc.) who carry out production activities and give rise to economic-financial exchanges, determining a particular **allocation of resources** between alternative uses for the satisfaction of **human needs**.

Different ways of organizing the economic system (e.g., **market economy, command economy, mixed economy**) can give rise to different results in terms, for example, of what goods and services are produced, efficiency in the allocation of resources; distribution of production among individuals, and accumulation of wealth over time.

=> There is a strong connection between the results of the **economic system**, the conformation of **society** (its groups and coalitions, conflicts among them, objectives) and **political institutions** governing the allocation of resources.

Different levels of analysis of an economic system

1) *Positive vs. normative*

Positive (descriptive) analysis: it is aimed at describing the reality under analysis, that is the economic system and its results. It is the 'lens' through which the economic system is represented, highlighting the founding elements, the theoretical concepts and their connections, which explain and interpret the present and determine the future.

Normative analysis (prescriptive): it is aimed at prescribing how reality should be and the conduct to be adopted in view of this objective (=> **value judgments**). It studies the interventions of governments (local, national and supranational) on the economic system, that is, **economic policy**.



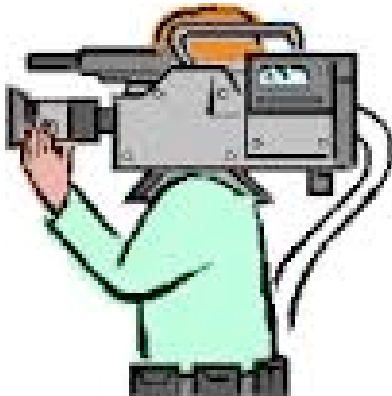
L'economista Federico Caffè.
(Pescara, 6 gennaio 1914 - Roma, 15
aprile 1987)

Federico Caffè (1978), **economic policy** is "... the discipline that seeks rules of conduct tending to influence economic phenomena in order to orient them in a **desired direction**".

2) *static vs. dynamic*



Static analysis: describes the economic system, its structure and results, **at a given moment in time.**



Dynamic analysis: describes how the economic system, its structure and its results change **over time.**

3) microeconomic vs. macroeconomic

Microeconomic: Analysis of the behavior of **individual economic agents** (markets, consumers, businesses). For example, analysis of the market structure (competition, oligopoly, monopoly,...), the results it achieves in terms of prices and quantities produced and the related corrective policies.

Adam Smith, The Wealth of Nations, 1776

Macroeconomic: Analysis of the characteristics of the economic system as a whole, of the **aggregate results** reached by the economic system. For example, analysis of the aggregate economic variables (unemployment, inflation, aggregate production,...), their connections and related public policies.

John M. Keynes, General Theory of employment, interest and money, 1936

Study method

Use of:

Abstractions

Theories are formulated through simplifications for:

- explaining real facts / contexts;
- predicting economic events.

Models

Conceptual structures are developed for clarify and simplify economic concepts, creating environments or situations which apply laws and rules of economic behavior.

The three problems of economic organization

The three problems of economic organization:

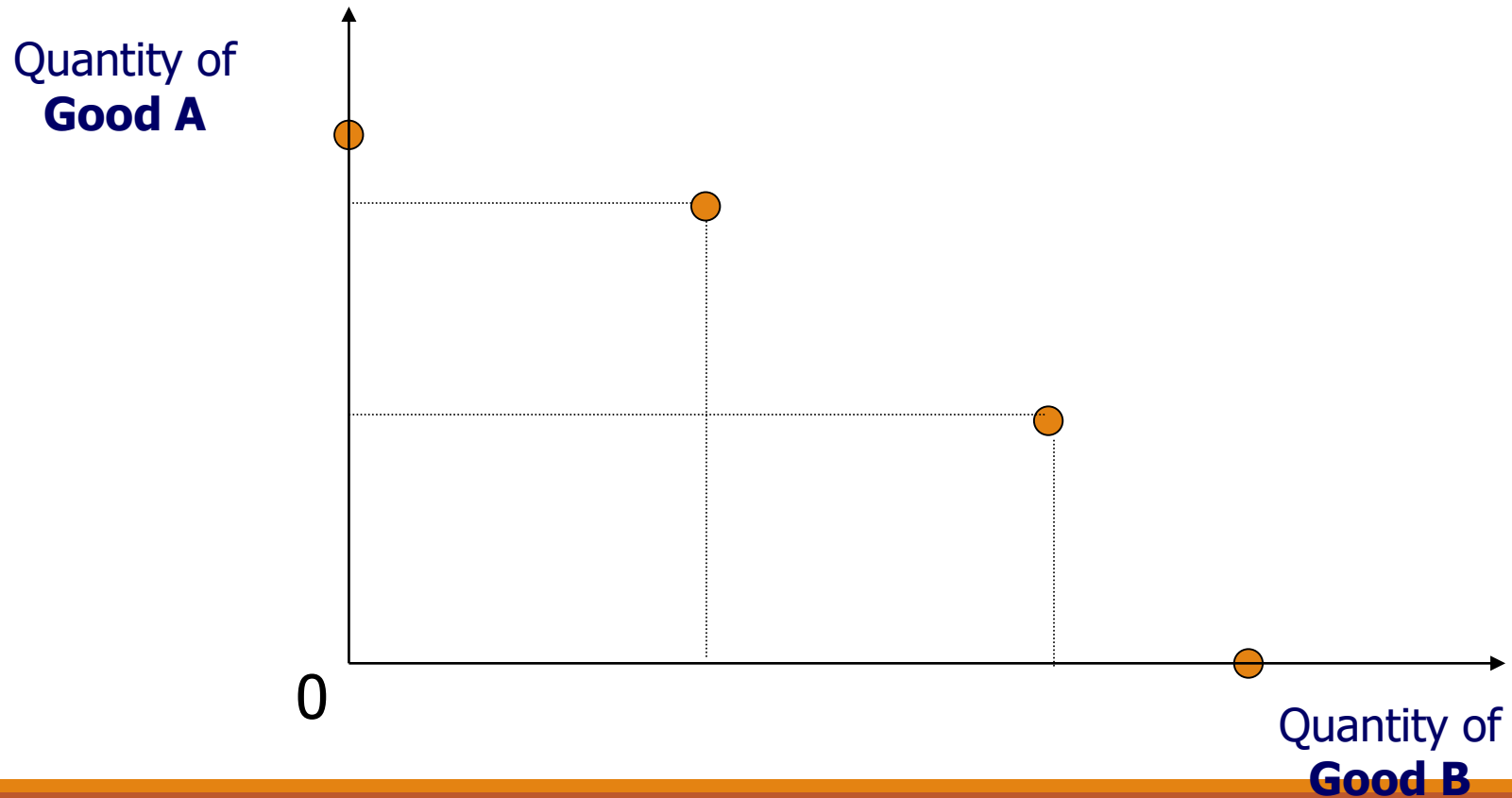
1. Scarcity => What goods and services are produced and in what quantities (material constraints)
2. Organization of production => How to produce (who is responsible for producing, with which resources and which technologies)
3. Distribution mechanisms => For whom to produce (distribution of product and income)

The **answer** depends mainly on the forms of institutional organization of the economic system:

- **Market economy** (*laissez faire*) (Smith, 1776)
- **Command economy** (e.g. Soviet Union, 1917-1989)
- **Mixed economy** (the most economies)

1. What to produce: the production possibilities of a country

- only two goods (good A and good B, **output**)
- given stock of productive resources (**inputs**)
- given production techniques (**technology**)



The production possibilities

Alternative Production Possibilities

Possibilities	Butter (millions of pounds)	Guns (thousands)
A	0	15
B	1	14
C	2	12
D	3	9
E	4	5
F	5	0

TABLE 1-1. Limitation of Scarce Resources Implies the Guns-Butter Tradeoff

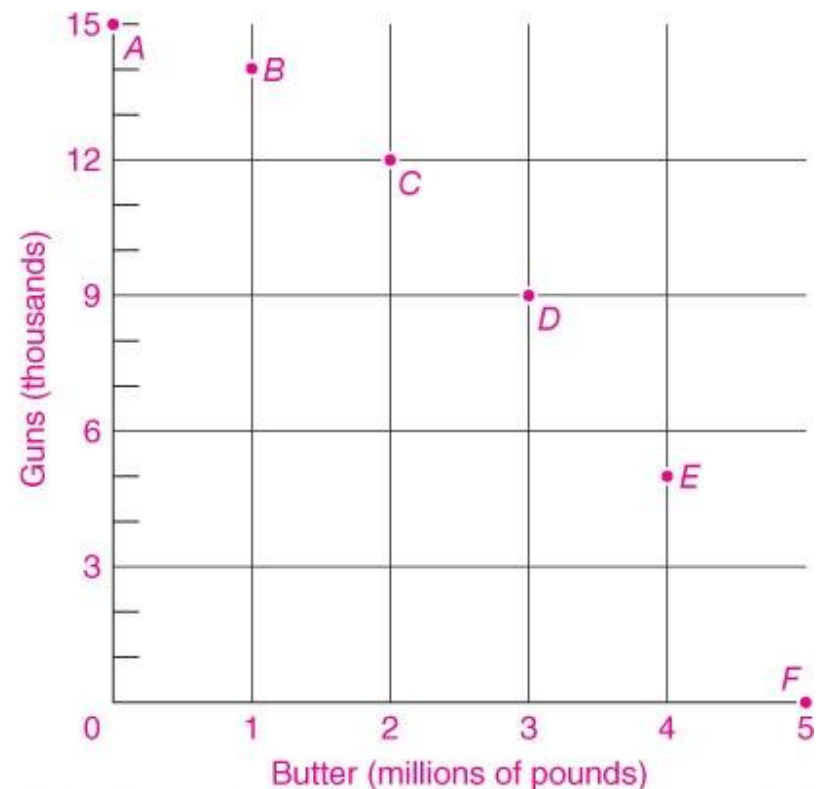


FIGURE 1-1. The Production Possibilities in a Graph

The production-possibility frontier

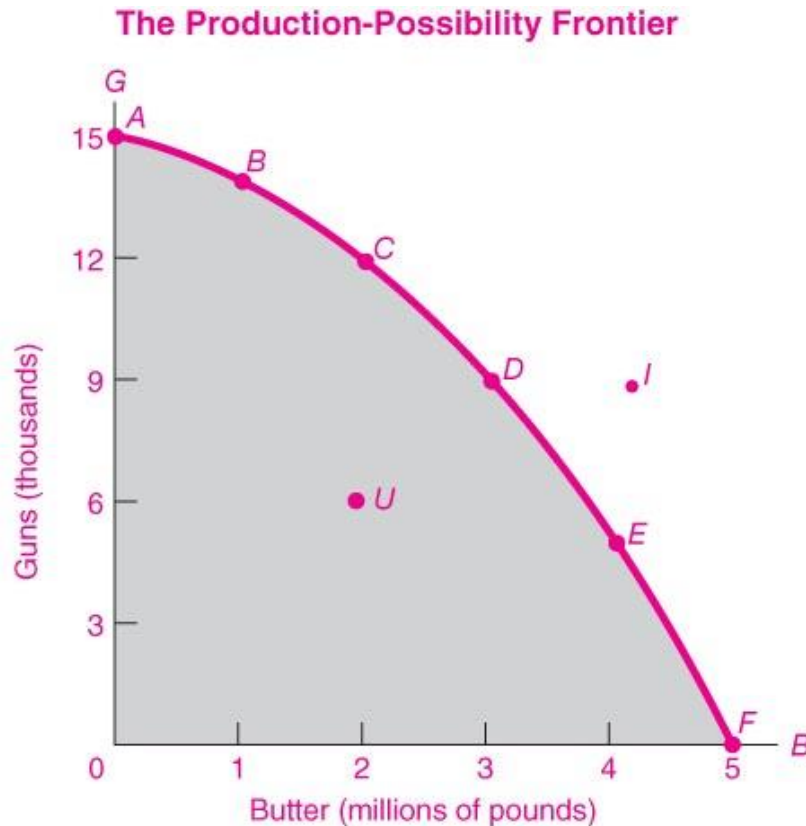
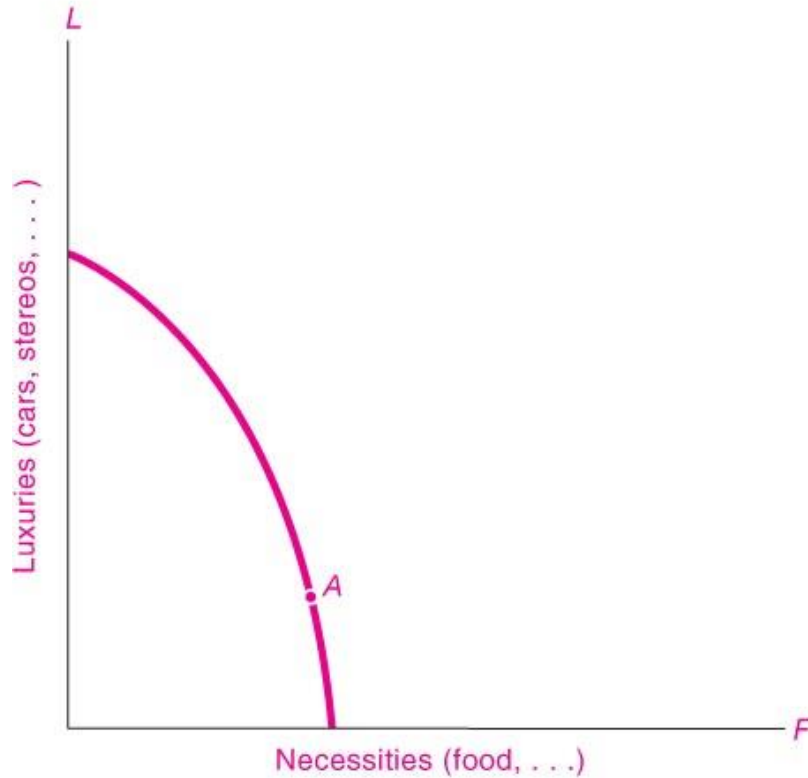


FIGURE 1-2. A Smooth Curve Connects the Plotted Points of the Numerical Production Possibilities

For each level of production of a good, the production-possibility frontier shows the maximum quantity of another good that the economic system is capable of producing. It constitutes the basket of possible choices for society.

(a) Poor Nation



(b) High-Income Nation

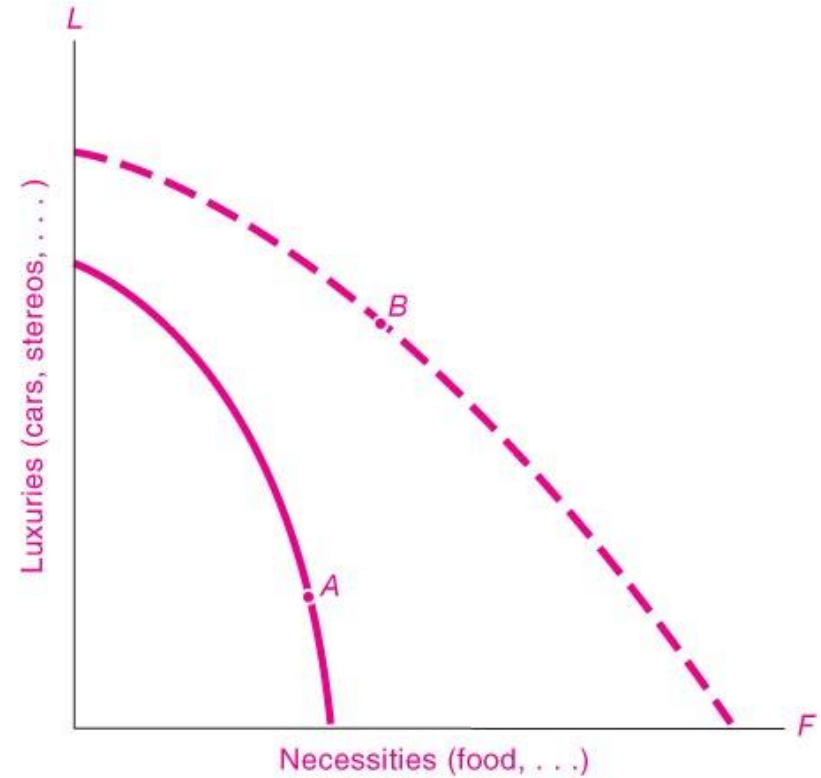
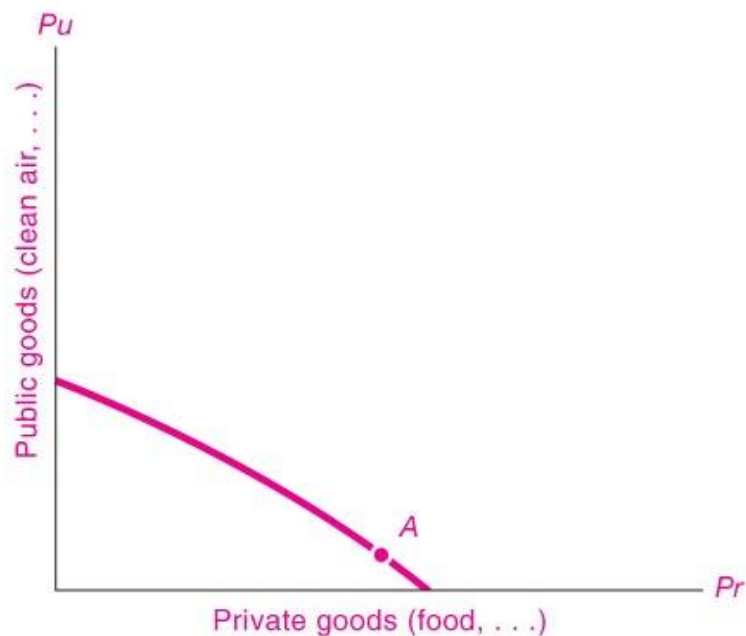


FIGURE 1-3. Economic Growth Shifts the PPF Outward

The increase in **inputs** and **technological changes** move the frontier of production possibilities outwards. With **economic growth**, a nation moves from A to B, experiencing a limited increase in the consumption of foodstuffs compared to the increase in the consumption of luxury goods. If desired, the nation can increase the consumption of both goods

(a) Frontier Society



(b) Urban Society

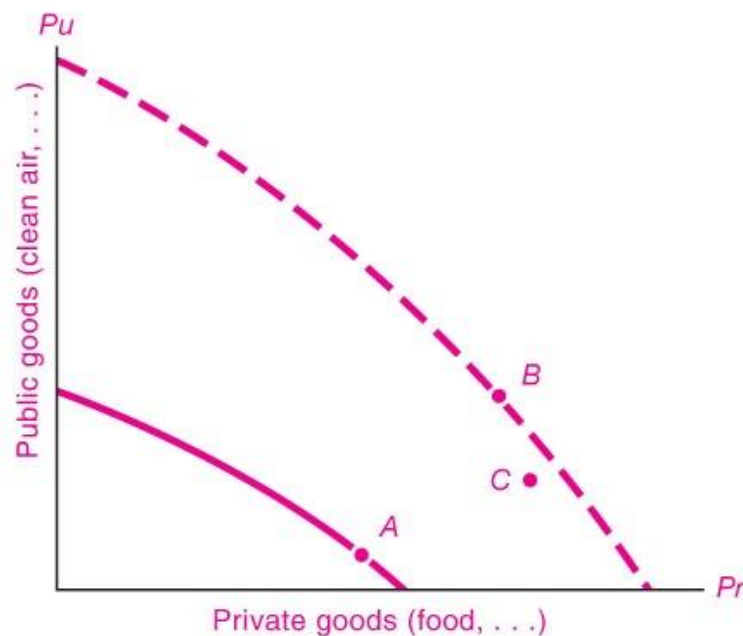


FIGURE 1-4. Economies Must Choose between Public Goods and Private Goods

- (a) A poor frontier society consumes a large part of its resources to feed itself. There is therefore very little left for luxury goods, such as cars, or for **public goods**, such as motorways, healthcare or scientific research.
- (b) A modern urbanized industrial economy is richer and can decide to spend a greater part of its income on public goods or services (roads, defense, environmental protection, health, education).

Productive efficiency and opportunity cost

Two important concepts arise from the production-possibility frontier:

- Productive efficiency
- Opportunity cost

Productive efficiency is the situation that society reaches when it is on the frontier of production possibilities: the available quantity of a good cannot be increased without reducing the quantity of the other good.

Below the frontier, the allocation is not efficient as part of the social resources are badly used (the output is not maximum) or are not used at all.

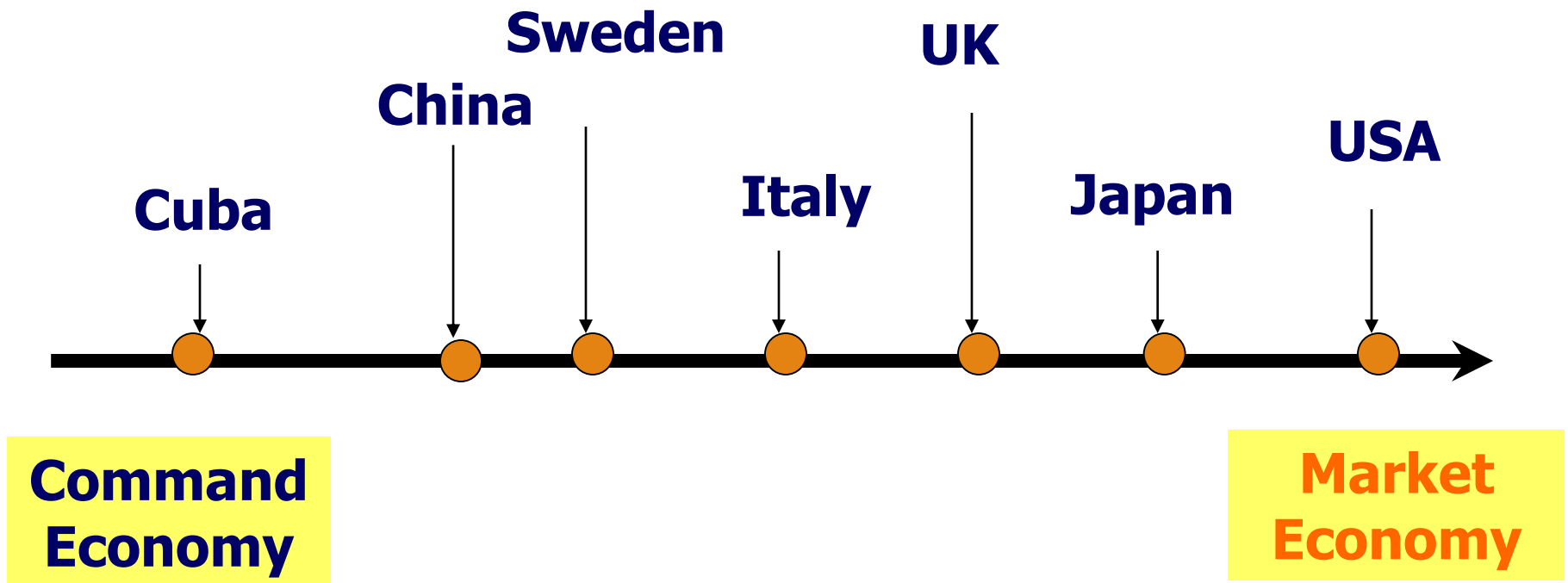
The opportunity cost

The **opportunity cost**: as resources are **scarce**, a choice must be made in production/consumption decisions.

The opportunity cost defines **the quantity of a certain good or service that must be renounced in order to have an additional unit of another good or service.** (The "butter" that must be renounced to produce an extra "gun")

If resources are scarce, the opportunity cost is the **"sacrifice"** that must be made in terms of giving up a certain amount of good A in order to access a certain amount of good B.

(2) *How* and (3) *for whom* to produce: the role of the market



General definitions

Market

Mechanism through which buyers and sellers come into contact and interact in order to exchange goods or services, setting the price and quantity to be exchanged

Demand

quantity of a good that consumers want to buy at each price level

Supply

quantity of a good that producers wish to sell for each price level

Equilibrium price

price for which the quantity offered is equal to the quantity demanded

Market economy

In a market economy, **private actors** are responsible for solving the **three economic problems**:

what: consumers, "dollar votes" in their daily purchase decisions.

how: competition between firms

for whom: remuneration of production factors (profits, wages, rents)

In summary: the coordination of individuals, activities and companies takes place automatically, through a **price system**.

Everything has a price, which is the **value** of the good in terms of money.

Prices act as **signals** for producers and consumers, **coordinating** their decisions: higher prices tend to reduce consumer purchases and encourage production and vice versa. This brings prices to the **equilibrium level**.

The market mechanism: supply and demand

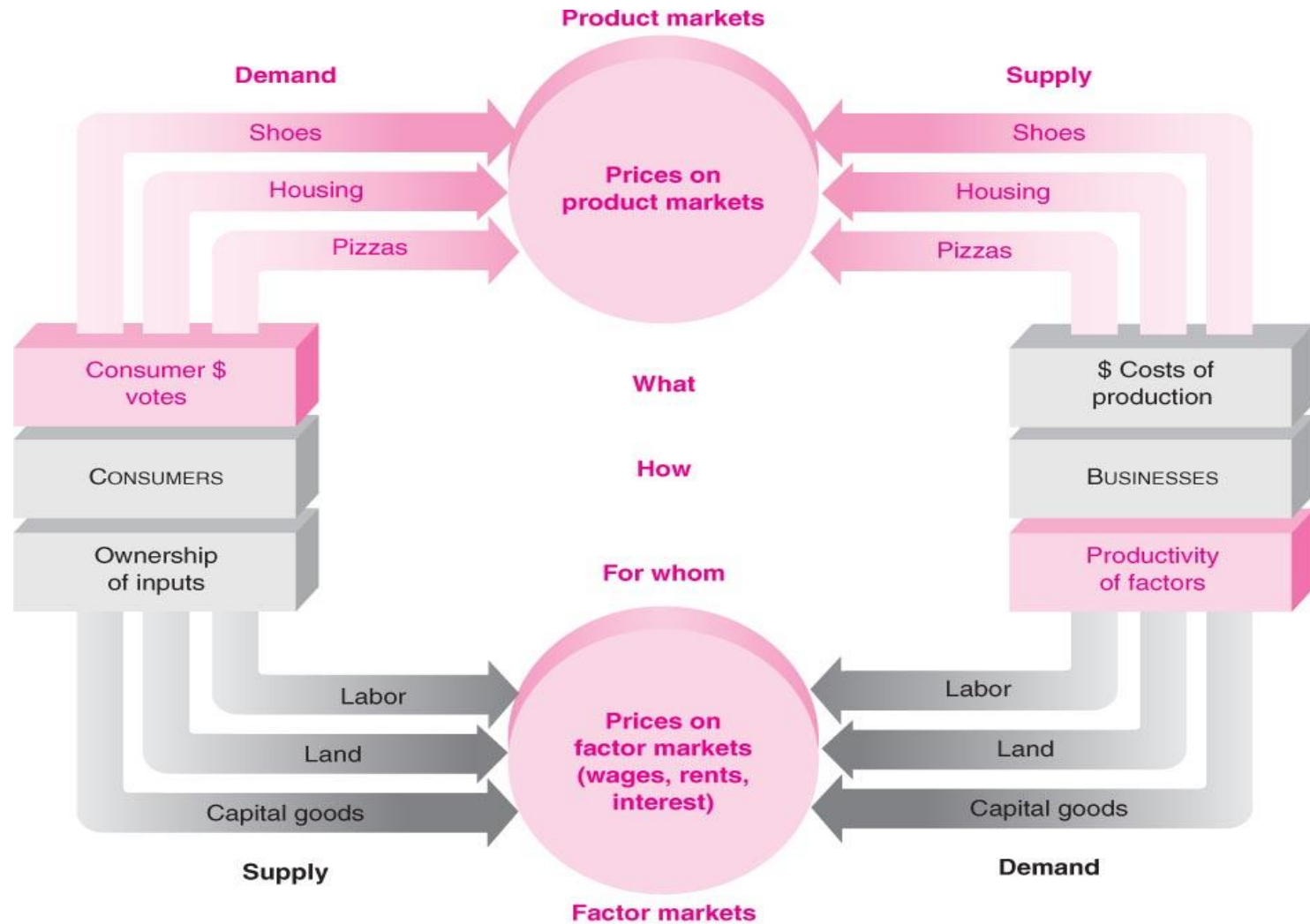
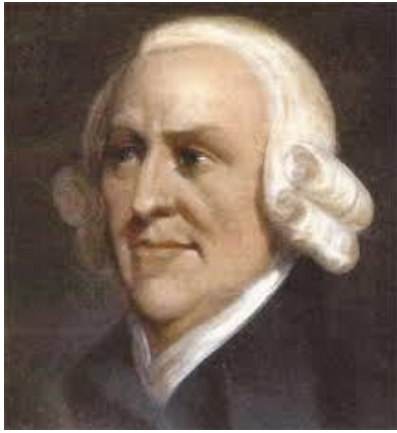


FIGURE 2-1. The Market System Relies on Supply and Demand to Solve the Trio of Economic Problems

The functioning of the market

Capitalist economies are based on 3 elements:

- 1. Trade and specialization** (concentration of efforts on a set of specific activities so that the individual or the nation make the best use of their skills and resources - job specialization)
- 2. Money** (means of payment that acts as a lubricant for exchanges. The state controls the supply)
- 3. Capital** (durable input, durable production tool, which is itself produced in the economic system. It is necessary to accumulate it in order to start and carry out production. E.g. machines, PCs, buildings, or other durable goods).



The functioning of the **market system** is described by **A. Smith** through the metaphor of the "**Invisible Hand**"

Idea of the **invisible hand**: there is no central authority that establishes what should be the optimal allocation of social resources but the actions of private actors, guided by their **personal interest** as by an invisible hand, *spontaneously* produce an optimal social result in terms of efficiency.

The self-interest of competing producers in making the highest profit from the sale of their product and that of consumers in buying the higher-quality products at the lowest prices pushes producers to continuous improvements in production to better meet consumer preferences (in this way market supply and demand tend to meet).

It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages.

=> He explains the social conformation starting from individual behaviors, in the markets (free trade economy)

The "Invisible Hand"

- **Mechanism that allows the balance of the markets**

Supply and demand on different markets tend to be **equal**: the free functioning of a competitive market, in addition to making the market price converge to the real price, tends **to eliminate any excess of demand or supply**.

- **Process by which a social order is created**

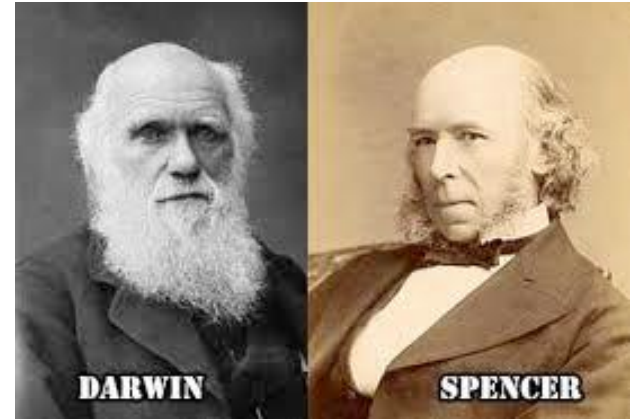
The invisible hand ensures the realization of a **social order** that satisfies the general interest (the spontaneous convergence of personal interests towards the collective interest).

In short: the goods and services produced reflect consumer preferences (demand) and the use of the best technology to achieve them thanks to competition between producers (supply). The result of well-functioning markets is (allocative and productive) efficiency in the production of goods and services.

Attention: **efficiency** does not entail **equity** ...

If a particular firm is unable to make a "normal profit", probably because it is unable to produce at the highest level of efficiency, it is forced to withdraw from the market (see Natural Selection).

Perfect competition dictates its discipline: all surviving firms are forced to produce at **the highest level of efficiency** allowed by the current state of technology.



In capitalist economies, those who do not possess the technology and the ability to compete in the markets (product or labour) tend to remain excluded from the productive system.

Political implications => Many governments intervene in market dynamics to mitigate the inequalities and disparities created by the capitalist economic system and avoid social conflicts: for example, they invest public resources in R&D to make their production systems advanced and able to compete on international markets, make education compulsory, offer re-employment programs for the unemployed or protection and assistance for the elderly and the weak, redistribute wealth through progressive taxes ...

=> The social conformation is explained not only starting from **individual behaviors** in the markets, but also from **collective actions**, i.e. groups that act at a political level to change the allocation of resources (**mixed economy**)

Market failures

Towards the mixed or commend economy ... the reasons for public intervention

- Incorrect and socially unequal allocation of the wealth produced (inequality => transfers and taxes) **Equity**
- Some goods are not produced spontaneously (e.g. defense and all public goods => public production) **Efficiency**
- The production activity of companies can have "negative side effects" (e.g. Pollution and negative externalities => environmental laws) **Efficiency**
- Lack of competition in certain sectors (e.g. for collusive agreements between companies => antitrust laws) **Efficiency**
- Abnormal economic trends (economic cycle => specific support policies against inflation and unemployment)

Macroeconomic problems

Failure of market economy	Government intervention	Current examples of government policy
Inefficiency:		
Monopoly	Encourage competition	Antitrust laws, deregulation
Externalities	Intervene in markets	Antipollution laws, antismoking ordinances
Public goods	Encourage beneficial activities	Provide public education, build roads
Inequality:		
Unacceptable inequalities of income and wealth	Redistribute income	Progressive taxation of income and wealth Income-support or transfer programs (e.g., subsidize health care)
Macroeconomic problems:		
Business cycles (high inflation and unemployment)	Stabilize through macroeconomic policies	Monetary policies (e.g., changes in money supply and interest rates) Fiscal policies (e.g., taxes and spending programs)
Slow economic growth	Stimulate growth	Improve efficiency of tax system Raise national savings rate by reducing budget deficit or increasing budget surplus

TABLE 2-1. Government Can Remedy the Shortcomings of the Market

RECAP

1. Subject of study of economics
2. Positive and normative theory
3. Static and dynamic analysis
4. Macro-economics (Keynes) and Micro-economics (Smith)
5. Three typical problems: *what, how* and *for whom* to produce
6. Economic system configuration (market, command and mixed economy)
7. General concepts: the market, demand, supply
8. Market Economy: characteristics according to Smith (invisible hand and job specialization)
9. Market failures

REFERENCES: Chapter 1 and 2