

**University of Macerata**  
**Economics - A.Y. 2022/2023**  
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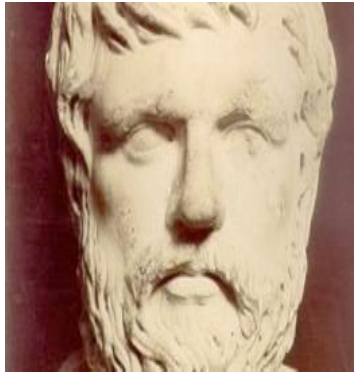
# Introductory concepts

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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**.



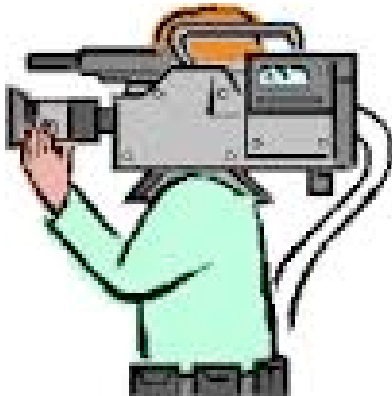
L'economista Federico Caffè.  
(Pescara, 6 gennaio 1914 - Roma, 15  
aprile 1987)

**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:

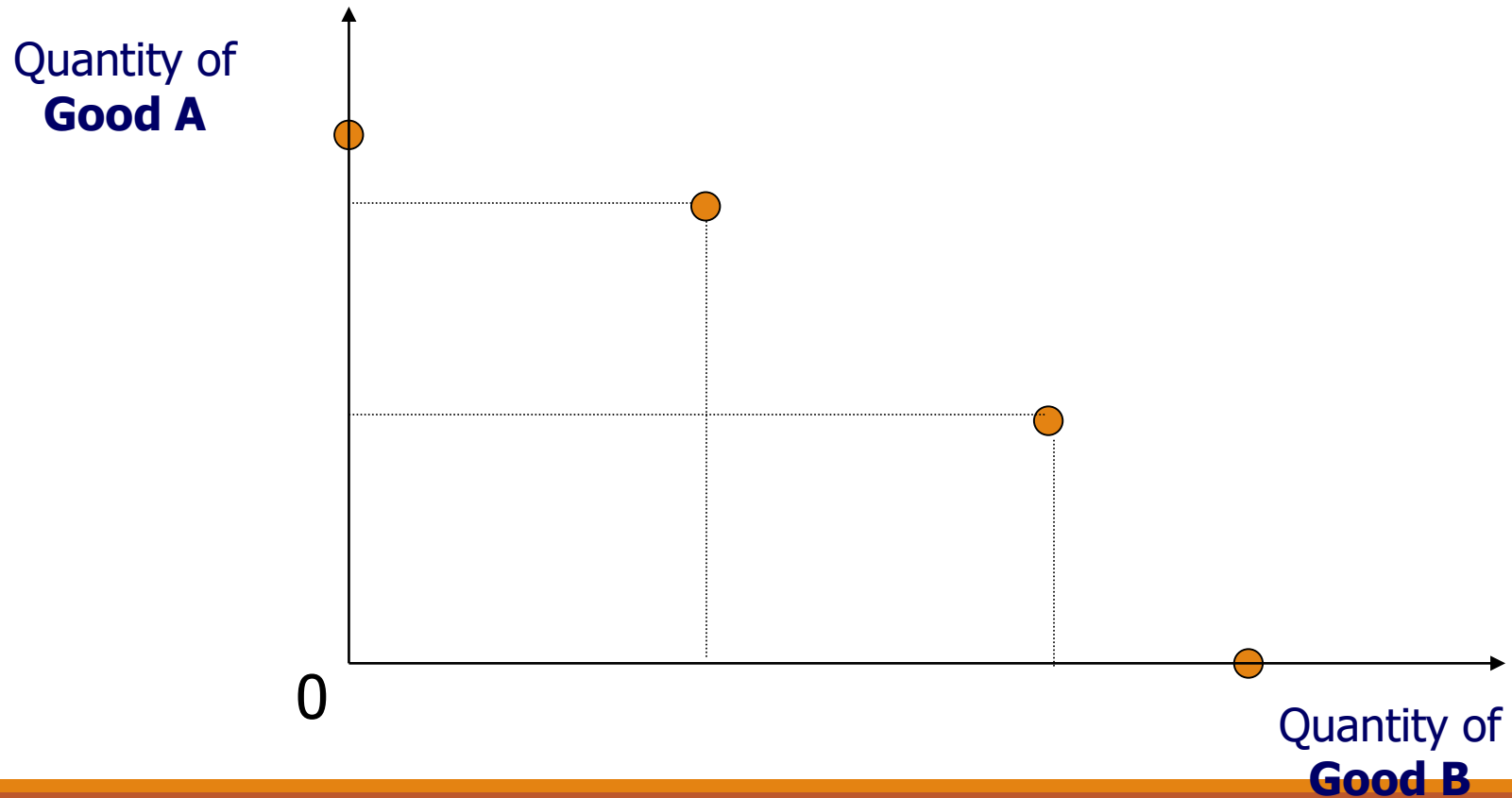
1. Scarcity => What goods and services are produced and in what quantities (material constraints)
2. Organization of production => How to produce (who is responsible for producing, with which resources and which technologies)
3. Distribution mechanisms => For whom to produce (distribution of product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

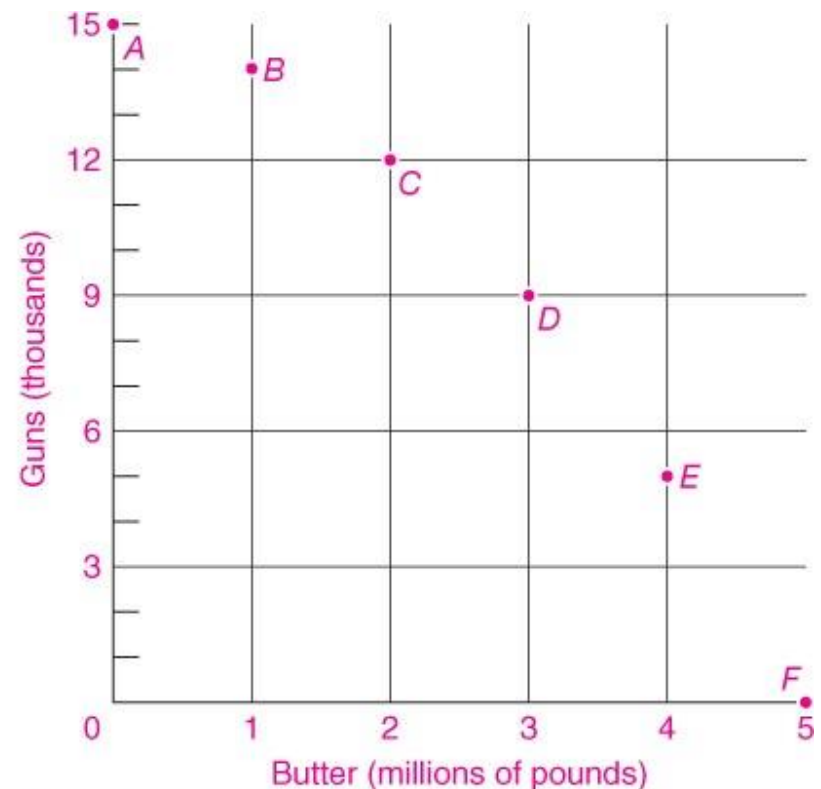


# The production possibilities

**Alternative Production Possibilities**

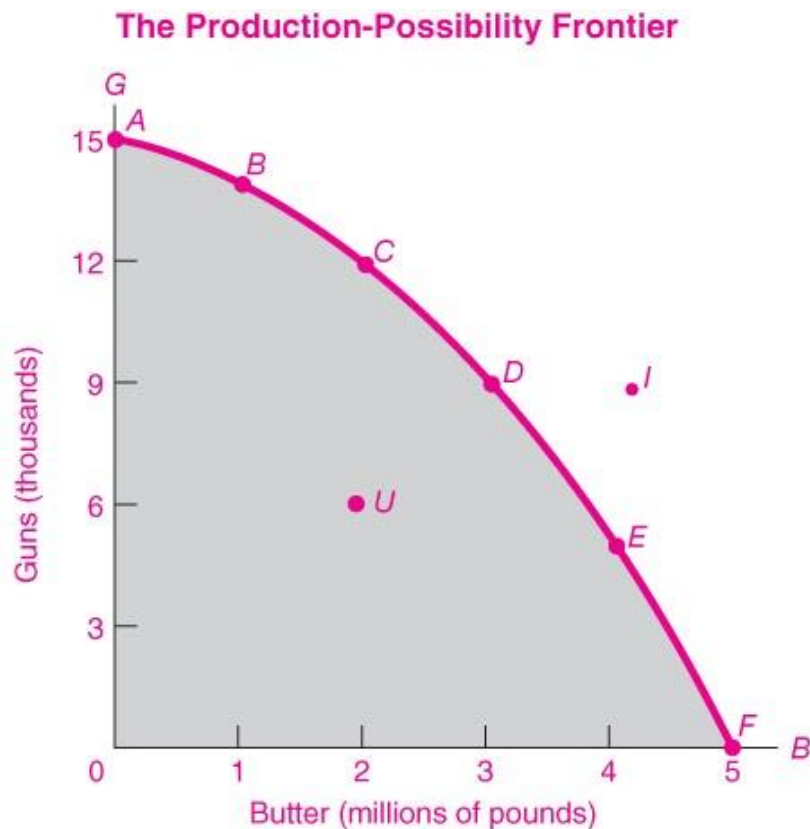
Possibilities	Butter (millions of pounds)	Guns (thousands)
A	0	15
B	1	14
C	2	12
D	3	9
E	4	5
F	5	0

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



**FIGURE I-1. The Production Possibilities in a Graph**

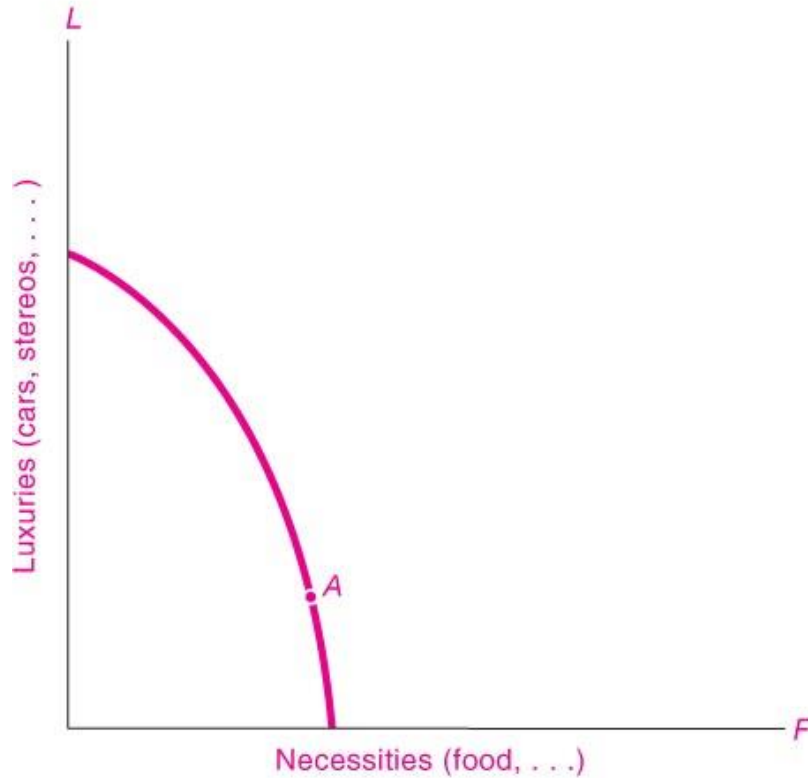
# The production-possibility frontier



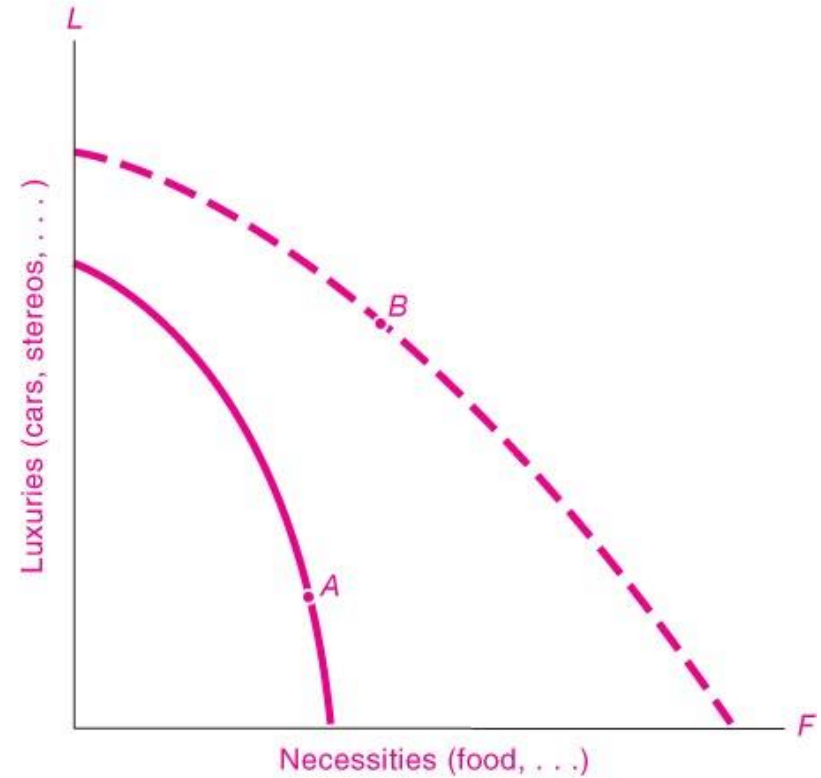
**FIGURE 1-2.** A Smooth Curve Connects the Plotted Points of the Numerical Production Possibilities

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

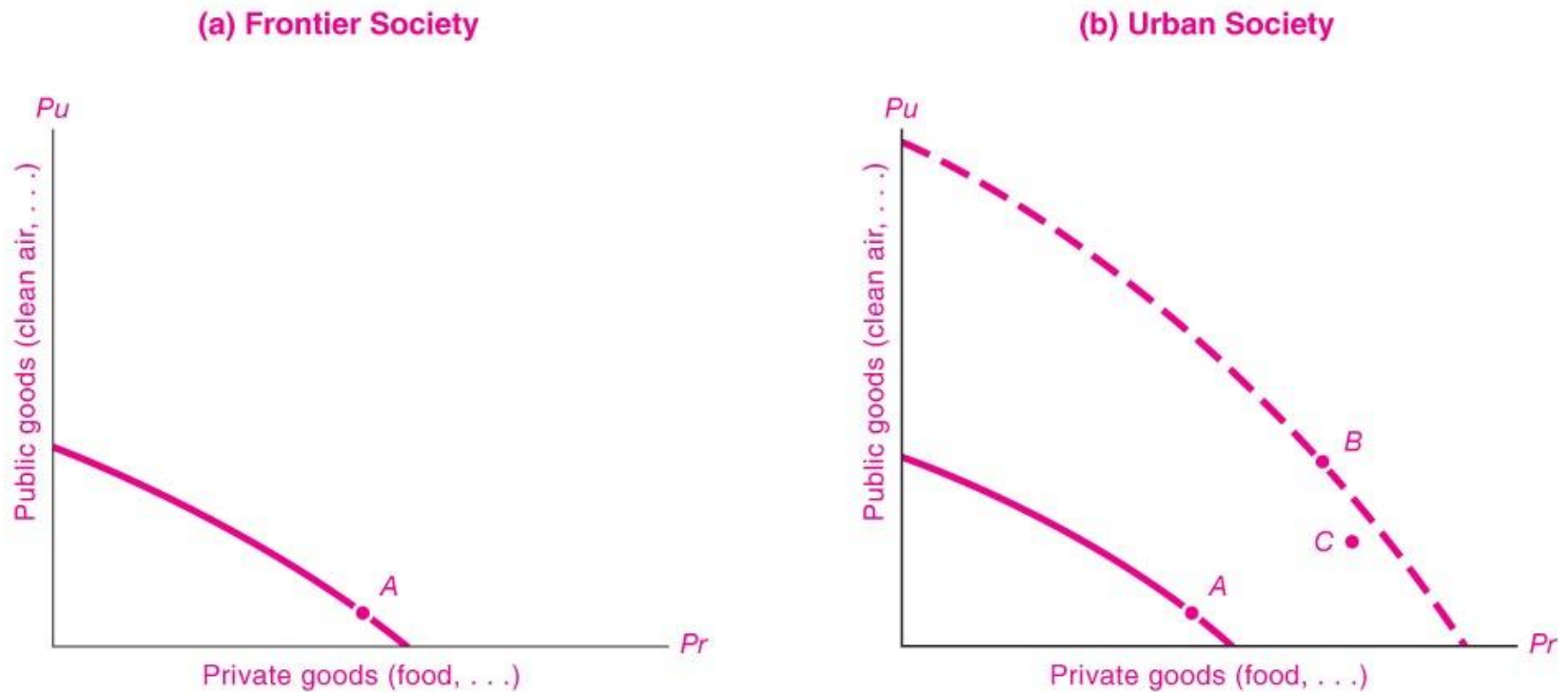


(b) High-Income Nation



**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



**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**

