



Welcome to the wonderful
world of economics. Everything
precious in life has a cost.

Russ Roberts

“ quote fancy



Trying to buy anything
in college like



Why can't you buy everything you want?

If you can buy either books or restaurant food this week, how do you choose?

Can you buy everything? If not, what will you sacrifice?

You say, you want to save, but end up ordering food or clothes online.



If two phones both call, text, take photos, and use apps... why does one cost much more?

Are you buying just a phone, or access to a lifestyle and ecosystem?



Why might a cup of tea that costs BDT15 at campus cost BDT200 at a restaurant?

If this restaurant moves to campus, can it sell tea at BDT200?

If restaurant tea price increases from BDT200 to 250, will demand fall sharply?

If campus tea rises from BDT15 to 30, what happens?

I have done nothing productive
all day.



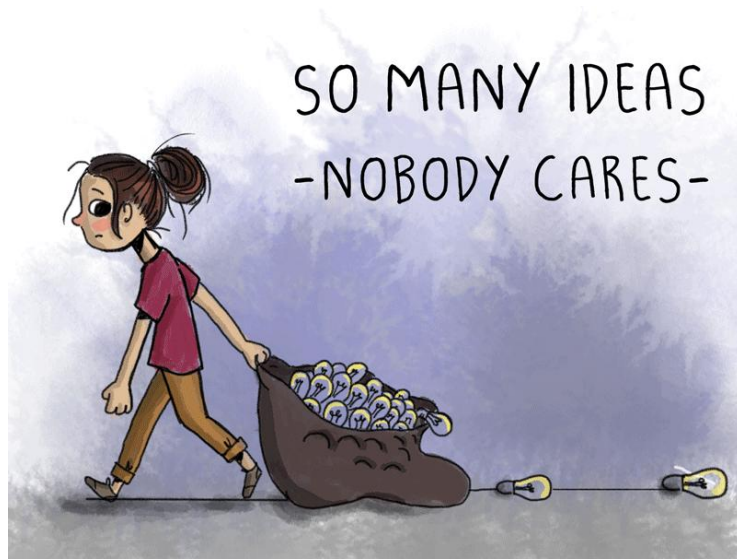
gifday





Why does the person feel poorer even after a salary increase?

What is the economic problem here?



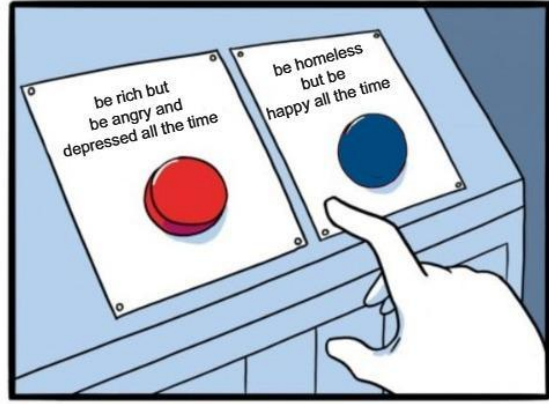
"Finished University... Now What?"

What is the economic problem here?

Does unemployment always mean people don't want to work?

Why might someone have education but still struggle to find a job?

If people are willing to work but cannot find jobs, is unemployment an individual problem—or an economic system problem?



Does having more money always mean life is better?

If your pocket money increases, is your life automatically better?

If a country becomes richer but people still lack hospitals or schools, has it really developed?

If the economy produces more goods, does everyone benefit equally?

Can a country have modern buildings and still face underdevelopment?



Principles of Economics

Chapter 1

Nature and Scope of Economics



Contents

Understanding Scarcity

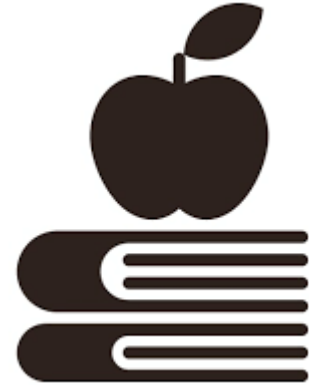
Decision-making agents in the economy

Objects of choice and economic activities

Macroeconomics vs. Microeconomics

Three problems of every economy

Economic models



Introduction

Basic economics typically revolve around understanding fundamental economic concepts, principles, and theories that help individuals comprehend how economies function.



Introduction

The word **economy** comes from the Greek word **oikonomos**, which means “**one who manages a household**.” Households and economies have much in common.

A household faces many decisions. a household must allocate its scarce resources (time, dessert, car mileage) among its various members, taking into account each member's abilities, efforts, and desires.

In the 20th century, English economist Lionel Robbins defined economics as “the science which studies human behaviour as a relationship between (given) ends and scarce means which have alternative uses.” In other words, Robbins said that economics is the science of economizing.

Canadian-born economist Jacob Viner:
Economics is what economists do.



Introduction

Economics is the study of how society manages its scarce resources. The behavior of an economy reflects the behavior of the individuals who make up the economy.

Economists study how people make decisions: how much they work, what they buy, how much they save, and how they invest their savings. Economists study how people interact with one another.

Economists analyze the forces and trends that affect the economy as a whole, including the growth in average income, the fraction of the population that cannot find work, and the rate at which prices are rising.



Economic concepts

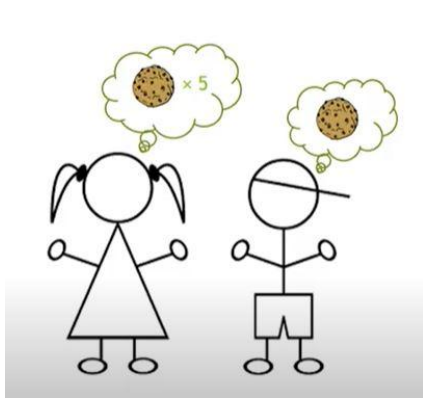
Scarcity means that society has limited resources and therefore cannot produce all the goods and services people wish to have.

- Scarcity is the foundation of economics.
- The problem of unlimited want and limited resources.
- How we decide who gets what
- Scarcity exists, every choice involves a trade-off and an opportunity cost.



Materials science helps reduce scarcity; economics studies the consequences of scarcity.

Equality and Efficiency



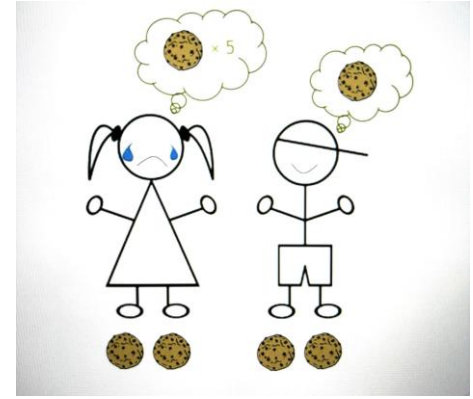
Equality

- Everyone gets exactly the same treatment
- the property of distributing economic prosperity uniformly among the members of society



Efficiency

- Allocate optimally, generate as much happiness as possible
- the property of society getting the most it can from its scarce resources



How people make decisions

Principle 1: People Face Trade-offs

One classic trade-off is between “guns and butter.” The more a society spends on national defense (guns) to protect its shores from foreign aggressors, the less it can spend on consumer goods (butter) to raise the standard of living at home.

Important in modern society is the trade-off between a clean environment and a high level of income!

Society often faces a trade-off between efficiency and equality. Government programs such as welfare, unemployment benefits, and progressive taxes help reduce income inequality by supporting those with lower incomes. However, these policies may reduce incentives to work and earn more, which can lower productivity and economic efficiency.



Economics is like a Google map! It helps you understand the trade-offs so you can make better decisions yourself.

How people make decisions

Principle 2: The Cost of Something Is What You Give Up to Get It

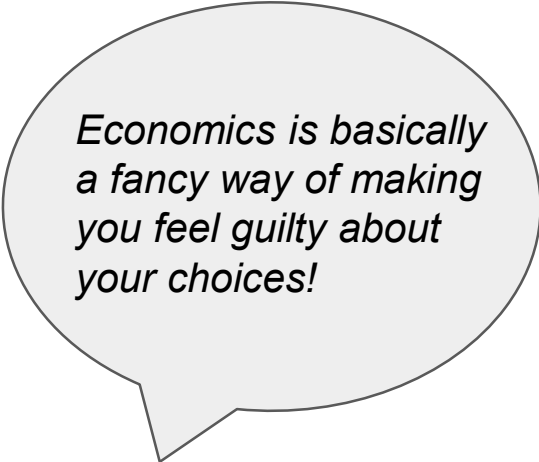
Because people face trade-offs, making decisions requires comparing the costs and benefits of alternative courses of action.

The opportunity cost of an item is what you give up to get that item. When making any decision, decision makers should be aware of the opportunity costs that accompany each possible action. In fact, they usually are.

Spending BDT5000 on a concert ticket: You cannot use that BDT5000 for new clothes.

Studying for an exam: You give up the time you could have spent watching movies or sleeping.

Society's Trade-off: Increasing environmental regulations (cleaner air) often costs firms money, leading to lower wages or higher prices for consumers.



Economics is basically a fancy way of making you feel guilty about your choices!

How people make decisions

Principle 3: Rational People Think at the Margin

Economists don't ask how many plates they can eat.

They ask whether the next bite is worth it!

*Eat as much
biriyani as
you want!*



How people make decisions

Principle 3: Rational People Think at the Margin

Rational people systematically and purposefully do the best they can to achieve their objectives, given the available opportunities. Economists use the term marginal change to describe a small incremental adjustment to an existing plan of action. Keep in mind that margin means “edge,” so marginal changes are adjustments around the edges of what you are doing. Rational people often make decisions by comparing marginal benefits and marginal costs. **A rational decision maker takes an action if and only if the marginal benefit of the action exceeds the marginal cost.**

Suppose you already spend BDT200 per day on food and drinks. One morning, you consider buying an extra cup of Coffee for BDT35. You think the coffee will make you more alert and productive, and you value that benefit at about BDT50.

If you focus on your total daily spending (BDT235), it may feel expensive. But economics says you should focus on the marginal cost (the extra BDT35) and the marginal benefit (the extra satisfaction/productivity worth BDT50).

How people make decisions

Principle 4: People Respond to Incentives

An incentive is something (such as the prospect of a punishment or reward) that induces a person to act. Because rational people make decisions by comparing costs and benefits, they respond to incentives.

When apple prices rise, consumers often cut back on their purchases because apples become more costly. Meanwhile, farmers respond by harvesting and supplying more apples to take advantage of the higher prices. Thus, prices act as signals that influence both consumers and producers.

Higher gasoline taxes create incentives for people to reduce fuel consumption by choosing smaller and more fuel-efficient vehicles, using public transportation, carpooling, and living closer to their workplaces.



*So prices are basically
WhatsApp messages for
the economy!*

*For you: "Buy less."
For farmer: "Make more."*

How people interact

Principle 5: Trade Can Make Everyone Better Off

Trade between two countries can make each country better off. Trade allows countries to specialize in what they do best and to enjoy a greater variety of goods and services.

Families in an economy both compete and cooperate with other families. They compete for jobs and better prices when buying goods. Despite this competition, complete isolation would make families worse off, because they would have to produce everything on their own (food, clothing, housing). Trade benefits families by allowing each member to specialize in what they do best (e.g., farming, sewing, building). **Through trade, families can access more goods and services at lower cost and greater variety than they could produce alone.**

Countries benefit from trade by specializing in production where they are most efficient. **International trade increases variety, efficiency, and overall living standards.**



How people interact

Principle 6: Markets Are Usually a Good Way to Organize Economic Activity

Market economy: an economy that allocates resources through the decentralized decisions of many firms and households as they interact in markets for goods and services.

Markets coordinate economic activity through prices, which guide the decisions of buyers and sellers. Buyers decide how much to demand based on price. Sellers decide how much to supply based on price.

Through these decisions, **prices naturally adjust in the market. Prices reflect both: the value of goods to society, and the cost of producing them.**

This leads to Adam Smith's idea of the invisible hand. **The “invisible hand” means the market system automatically coordinates economic activity, leading to socially beneficial outcomes even though no one intends to do so.**

Different types markets: perfect competition, monopoly, monopolistic competition, duopoly, oligopoly.



How people interact

Principle 7: Governments Can Sometimes Improve Market Outcomes

If the invisible hand of the market is so great, why do we need government? **One purpose of studying economics is to refine your view about the proper role and scope of government policy.**

The invisible hand can work its magic only if the government enforces the rules and maintains the institutions that are key to a market economy. Most important, market economies need institutions to **enforce property rights** so individuals can own and control scarce resources.

We need government to **correct market failure**: a situation in which the market on its own fails to produce an efficient allocation of resources.

Causes of market failure: **externality** (the impact of one person's actions on the well-being of a bystander or third party) and **market power** (the ability of a single economic actor or small group of actors to have a substantial influence on market prices)



How the economy as a whole works

Principle 8: A Country's Standard of Living Depends on Its Ability to Produce Goods and Services

Citizens of high-income countries have more TV sets, more cars, better nutrition, better healthcare, and a longer life expectancy than citizens of low-income countries.

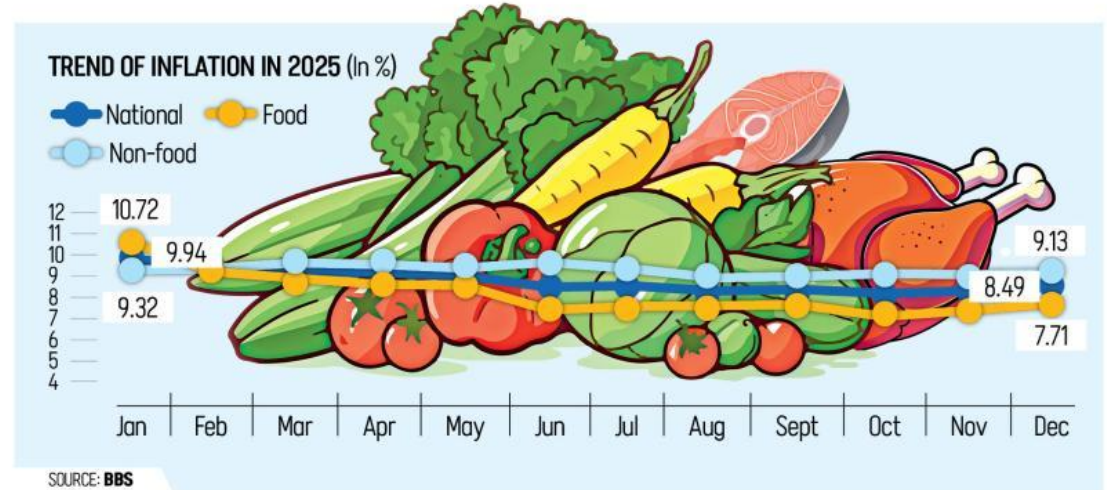
Almost all variation in living standards is attributable to differences in countries' productivity—that is, the amount of goods and services produced by each unit of labor input. In nations where workers can produce a large quantity of goods and services per hour, most people enjoy a high standard of living; in nations where workers are less productive, most people endure a more meager existence.

To boost living standards, policymakers need to raise productivity by ensuring that workers are well educated, have the tools they need to produce goods and services, and have access to the best available technology.

How the economy as a whole works

Principle 9: Prices Rise When the Government Prints Too Much Money

Inflation:
an increase in the overall level
of prices in the economy



How the economy as a whole works

Principle 10: Society Faces a Short-Run Trade-off between Inflation and Unemployment

- Increasing the amount of money in the economy stimulates the overall level of spending and thus the demand for goods and services.
- Higher demand may over time cause firms to raise their prices, but in the meantime, it also encourages them to hire more workers and produce a larger quantity of goods and services.
- More hiring means lower unemployment.

Society faces a short-run trade-off between inflation and unemployment. This simply means that, over a period of a year or two, many economic policies push inflation and unemployment in opposite directions.



Economic (decision-making) agents

Economic agents are **individuals, entities, or groups** that participate in economic activities by making decisions regarding the allocation of resources, production, consumption, and investment.



Households:

- **Role:** Households are groups of individuals living together and sharing resources.
- **Function:** They are consumers of goods and services, provide labor to firms, and make decisions about consumption, saving, and investment.

Economic (decision-making) agents

Economic agents are **individuals, entities, or groups** that participate in economic activities by making decisions regarding the allocation of resources, production, consumption, and investment.



Firms (Businesses):

- **Role:** Firms are entities engaged in the production and sale of goods and services.
- **Function:** They hire labor, acquire capital, and make decisions about what to produce, how to produce, and how much to produce. Firms also make pricing and investment decisions.

Economic (decision-making) agents

Economic agents are **individuals, entities, or groups** that participate in economic activities by making decisions regarding the allocation of resources, production, consumption, and investment.



Governments:

- **Role:** Governments at various levels (local, regional, national) play a regulatory and interventionist role in the economy.
- **Function:** They collect taxes, provide public goods and services, regulate economic activities, and implement fiscal and monetary policies.

Economic (decision-making) agents

Economic agents are **individuals, entities, or groups** that participate in economic activities by making decisions regarding the allocation of resources, production, consumption, and investment.



FINANCIAL INSTITUTION

Function: They facilitate the flow of money and credit in the economy by providing loans, managing deposits, and offering investment services.



TRADE UNIONS

Function: They make decisions about employment, negotiate for better working conditions, and contribute to the production process. Labor unions advocate for the rights and interests of workers.

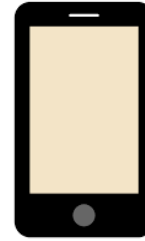


Individuals combine for collective consumption choices

Objects of choice and economic activities

In economic activity, individuals and organizations make choices about how to allocate scarce resources to satisfy their needs and wants. Commodities are called the objects of choice.

Goods are tangible products that have a physical presence and provide utility or satisfaction to consumers.



Services are intangible activities or tasks that are performed by one party for another, providing value or benefit without the transfer of a physical product.



Objects of choice and economic activities

In economic activity, individuals and organizations make choices about how to allocate scarce resources to satisfy their needs and wants. There are three types of economic activities.



Consumption is a fundamental economic activity that refers to the use of goods and services by individuals, households, or entities to satisfy their wants and needs. It is a critical component of the overall economic process and is often analyzed in the context of microeconomics, which focuses on the behavior of individual economic agents.

Production is a fundamental economic activity that involves the transformation of inputs (resources) into outputs (goods and services) to satisfy human wants and needs. It is a key element in the economic process, contributing to the creation of wealth and the overall growth of an economy.



Exchange is a fundamental economic activity that involves the transfer of goods, services, or assets between individuals, businesses, or governments. It is a core concept in economics and plays a crucial role in the allocation of resources, the formation of prices, and the functioning of markets.

Microeconomics and Macroeconomics (scope of economics)



Microeconomics is a branch of economics that focuses on the study of individual economic units, such as households, firms, and markets. It examines how these entities make decisions regarding resource allocation, production, consumption, and pricing in the context of supply and demand.



Macroeconomics is a branch of economics that studies the behavior, performance, and structure of an entire economy as a whole. Macroeconomics looks at broader aggregates, such as national income, employment, inflation, and overall economic output.

The Economist as policy advisor

- Economists trying to explain the world (**as scientists**)
- Economists trying to help improve the world (**as policy advisors**)



Minimum-wage
laws cause
unemployment

The government
should raise the
minimum wage



Who is talking like a
scientist and who
like a policy advisor?

The Economist as policy advisor

- Economists as scientists and as policy advisors use two languages: **positive and normative**
- **Positive (objective) statements** claims that attempt to describe the world as it is (using facts and figures, past and present comparison, description and explanation).
- **Normative (subjective) statements** claims that attempt to prescribe how the world should be (recommendations, ethical considerations, cannot be tested).



The government should raise the minimum wage



Who is making a positive statement and who a normative one?

The Economist as policy advisor



Who is making a positive statement and who a normative one?

The Economist as policy advisor



Who is making a positive statement and who a normative one?

Who is talking like a scientist and who like a policy advisor?

Central problems of the economy



What
to produce



How
to produce



For whom
to produce

Central problems of the economy

WHAT TO PRODUCE

- This question addresses the issue of resource allocation and decision-making regarding the goods and services to be produced in an economy.
- It involves choices about what types of products and services should be prioritized based on the needs and wants of the society.



Central problems of the economy

WHAT TO PRODUCE

- This question addresses the issue of resource allocation and decision-making regarding the goods and services to be produced in an economy.
- It involves choices about what types of products and services should be prioritized based on the needs and wants of the society.



More food and
education



More defence

Central problems of the economy

HOW TO PRODUCE

- This question focuses on the methods and technology used in the production process.
- It involves decisions about the most efficient and cost-effective ways to produce goods and services (**maximum output at minimum cost**).
- Different economies may employ various production methods, and the choice can impact factors such as labor, capital, and technology utilization.



Cheap labor



Expensive labor

Central problems of the economy

HOW TO PRODUCE



Central problems of the economy

FOR WHOM TO PRODUCE

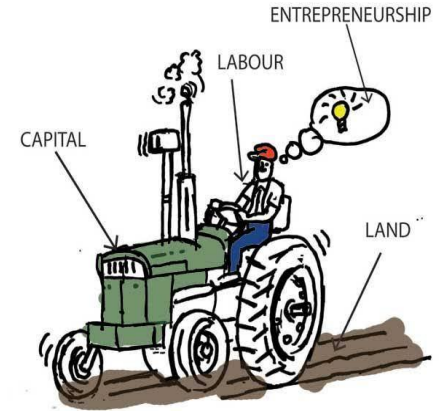
- This question revolves around the distribution of goods and services among the members of society.
- It considers issues of income distribution, wealth inequality, and the criteria used to determine how resources are allocated to individuals or groups.
- Economic systems may differ in their approaches to addressing this question, from market-based systems to centrally planned economies.
- **Market economy:** goods and services are produced for anyone who has the purchasing power and willingness to pay.
- **Planned economy:** Goods and services are distributed directly to the populace according to assigned needs, ration quotas, or universal entitlement programs rather than purchasing power.



Central problems of the economy

FOR WHOM TO PRODUCE

- **Two types of distribution:** Personal/size distribution and Functional distribution
- **Personal/size distribution:** who gets how much income, how national income is distributed among different individuals.
- **Functional distribution:** distribution of income according to the productive agents (land, labor, capital and entrepreneur), who receive the income (rent, wage, interest, profit).



Central problems of the economy

Economic Problem	Key Question	Example
What to produce?	What goods to make?	Food or Weapons.
How to produce?	Method of production?	Workers or Machines.
For whom to produce? Types of Distribution	Who gets the output? Who earns what and how?	Rich or Everyone. Personal vs Functional.

Economic Models: Circular flow diagram

Circular-flow diagram: a visual model of the economy that shows how dollars flow through markets among households and firms.

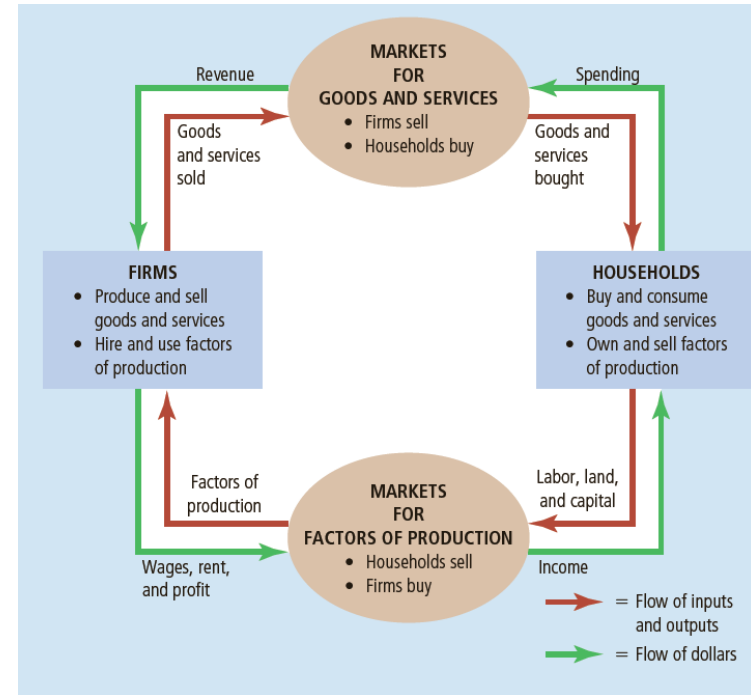
Households and firms interact in two types of markets: goods market and market for factors of production.

In the markets for goods and services, households are buyers, and firms are sellers.

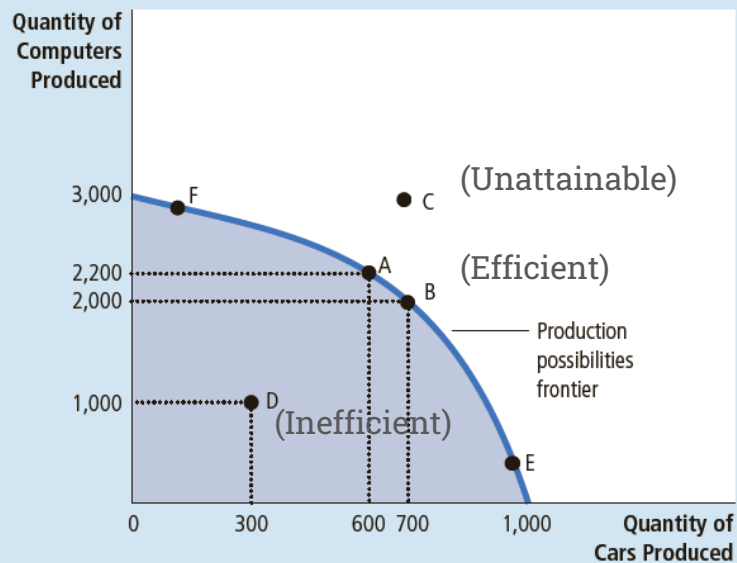
In the markets for the factors of production, households are sellers, and firms are buyers.

The inner loop represents the flows of inputs and outputs.

The outer loop of the diagram represents the corresponding flow of dollars. The households spend money to buy goods and services from the firms. The firms use some of the revenue from these sales to pay for the factors of production



Economic Models: The Production Possibilities Frontier



The production possibilities frontier shows the combinations of output—in this case, cars and computers—that the economy can possibly produce.

The slope of the production possibilities frontier measures the opportunity cost of a car in terms of computers. Marginal rate of transformation (the opportunity cost) varies, depending on how much of the two goods the economy is producing.

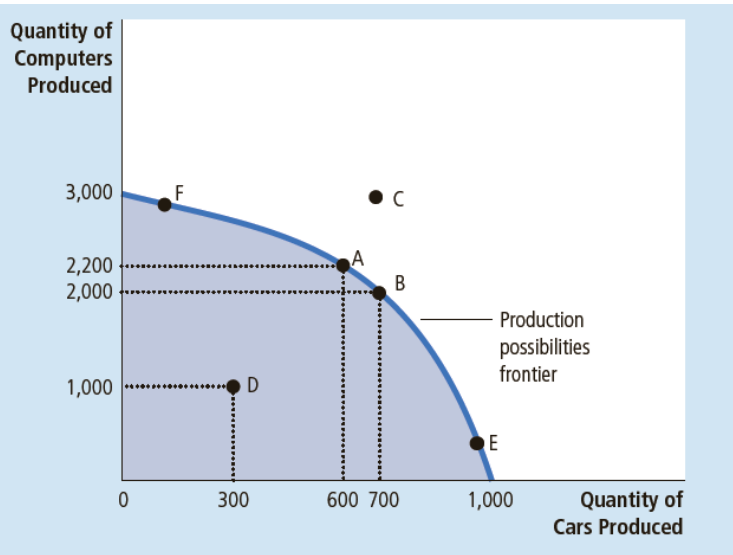
$$\text{Slope of PPF} = \frac{\Delta \text{Computers}}{\Delta \text{Cars}}$$

Efficient point: When the economy is producing at such a point, say point A, there is no way to produce more of one good without producing less of the other.

Inefficient point: the economy is producing less than it could from the resources it has available

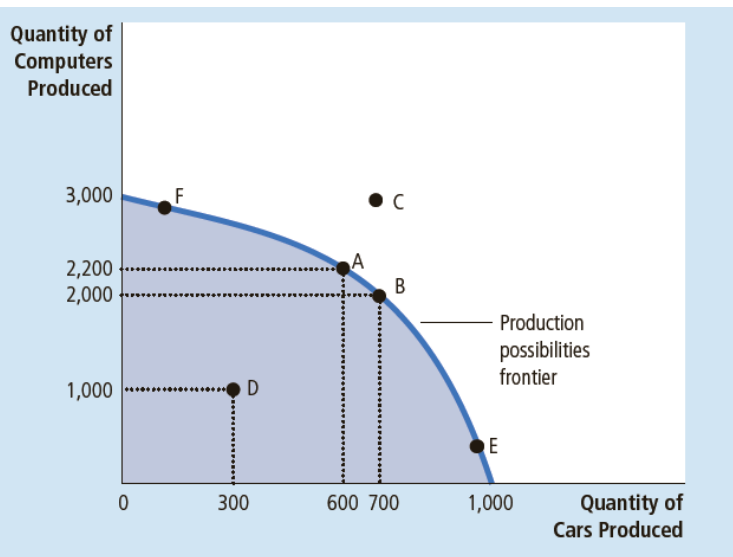
Unattainable: when the economy does not have enough resources to produce the outputs, given the technology level.

Economic Models: The Production Possibilities Frontier



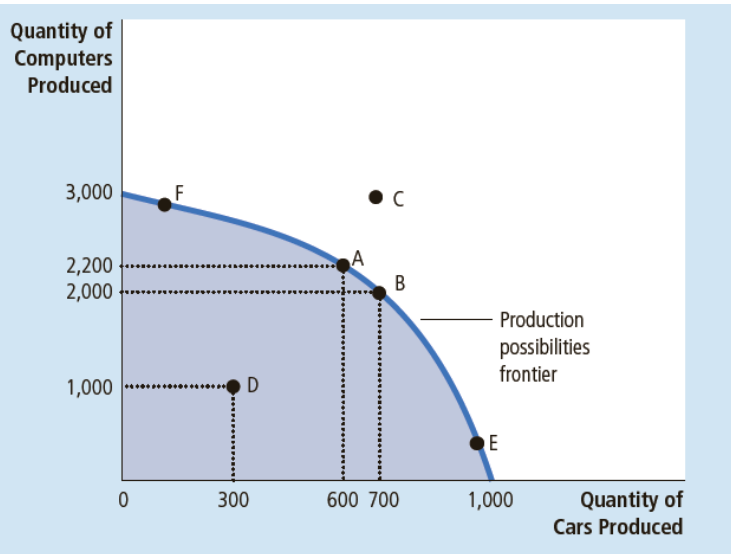
- **Point F:** When the economy is using most of its resources to make computers, resources best suited to car production, such as skilled autoworkers, are being used in the computer industry.
- Because these workers probably aren't very good at making computers, increasing car production by one unit will cause only a slight reduction in the number of computers produced.
- **At point F, the opportunity cost of a car in terms of computers is small, and the frontier is relatively flat.**
- **From Point F to Point A (F: 100 cars, 2800 com; A: 600 cars, 2200 com)**
- To produce one additional car, the economy gives up about 1.2 computers. **The opportunity cost is relatively small, so the frontier is flat near point F.**

Economic Models: The Production Possibilities Frontier



- **From point A to point B (A: 600 cars, 2200 com; B: 700 cars, 2000 com)**
- One additional car now costs 2 computers. The opportunity cost is increasing.

Economic Models: The Production Possibilities Frontier



- **Point E:** When the economy is using most of its resources to make cars, resources best suited to making cars are already at work in the car industry.
- Producing an additional car means moving some of the best computer technicians out of the computer industry and turning them into autoworkers.
- **From Point B to Point E (B: 700 cars, 2000 com; E: 900 cars, 400 com)**
- Each additional car costs 8 computers.
- Producing an additional car requires a substantial loss of computer output. **The opportunity cost of a car is high, and the frontier is steep.**

every story has an end
but in life
every end is a new beginning

