

ECONOMICS 12 • BC CURRICULUM

Unit 1

Economic Foundations

The Big Questions • Scarcity • Opportunity Cost • Diminishing Returns • Efficiency & PPC

Unit 1 — What We Will Learn

Five essential economic concepts that explain how every society answers the same fundamental problem.

1

**The Three
Big Questions**

What · How · For Whom

2

**Scarcity &
Choice**

4 Factors of Production

3

**Opportunity
Cost**

Best Alternative Given
Up

4

**Diminishing
Returns**

More ≠ Better (always)

5

**Economic
Efficiency**

PPC & the Frontier

SECTION 1 • ECONOMICS 12

The Three Big Questions

Every economy in history must answer the same three fundamental questions. Let's find out what they are.



The Three Economic Questions

Every society — from ancient China to modern Canada — must answer all three.

01

生产什么？

What to Produce?

Which goods and services should be made? Resources used for one thing cannot be used for another.

Example:

A Beijing restaurant must choose: baozi OR noodles — it cannot make maximum quantities of both.

02

怎么生产？

How to Produce?

Which methods and technology should be used? Many workers or large machines?

Example:

Dumplings by hand (labor-intensive) vs. by machine (capital-intensive) — same product, different costs.

03

为谁生产？

For Whom to Produce?

Who receives the goods? Market price, income level, or government policy decides distribution.

Example:

A phone costing ¥10,000 goes only to wealthy buyers. Price determines "for whom."

Scarcity & Choice

Resources are always limited — but human wants are unlimited. This is the fundamental problem of economics.



The Four Factors of Production

Scarcity means all four are limited — forcing every person and government to make choices.

Land

All natural resources: soil, water, forests, oil, sunlight, minerals.

→ China has 7% of world farmland — yet feeds 18% of the world's population.

Labor

Human work — physical (building, farming) and mental (planning, designing, teaching).

→ Skilled labor takes years of education to develop and cannot be instantly replaced.

Capital

Made tools & equipment — machines, buildings, computers. NOT just money.

→ A factory's assembly line is capital. It makes each worker far more productive.

Entrepreneurship

Organizing land, labor & capital — and taking risks to build something new.

→ Jack Ma organized resources and took risks to build Alibaba into a global company.

Scarcity: Wants Always Exceed Available Resources

What is Scarcity?

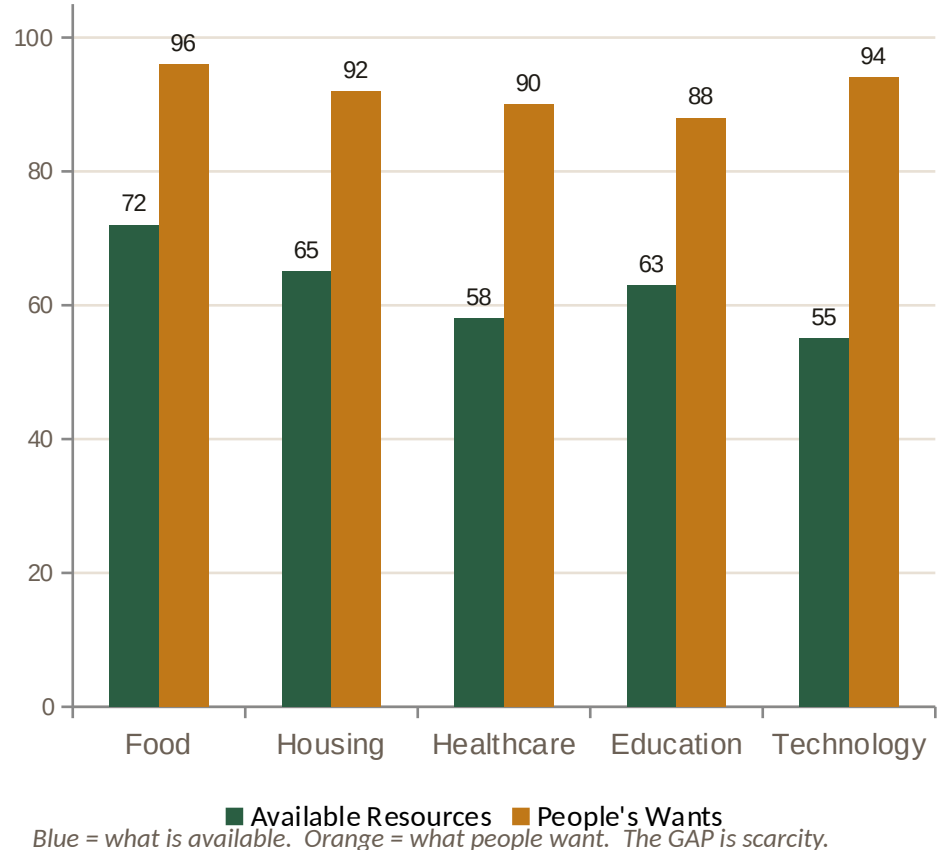
Resources are finite — but wants never stop growing.
Even wealthy countries face scarcity.

Scarcity ≠ Poverty

Scarcity = Limited Resources + Unlimited Wants

💡 Did You Know?

China has only 7% of the world's farmland — yet must feed 18% of the world's population. This classic scarcity problem was solved through better farming technology (capital) and a hardworking labor force.



Opportunity Cost

Every choice has a hidden cost — the best thing you gave up. This is one of the most powerful ideas in all of economics.



Opportunity Cost

Opportunity Cost = the value of the NEXT BEST alternative given up — not money, not all alternatives, only the ONE BEST.

Example 1 — Money

Scenario:

You have ¥50. You can buy a book OR go to a movie. You choose the book.

Opportunity Cost:

Opportunity cost = the movie (not everything else you could have bought — only the NEXT BEST choice).

Example 2 — Time

Scenario:

Saturday: study economics (3 hrs) OR watch your favourite show online.

Opportunity Cost:

You choose to study. Opportunity cost = the enjoyment of 3 hours of entertainment.

Example 3 — Government

Scenario:

China spends ¥500 billion to build new high-speed railways.

Opportunity Cost:

Opportunity cost = the hospitals, schools, or clean energy projects that could have been funded instead.

"There is no such thing as a free lunch."

— A foundational principle of economics



Time always has a cost

Even free events cost you hours. Those hours had an opportunity cost.



Money always has a cost

Every ¥ spent on X is a ¥ NOT spent on the next best Y.



Government always has a cost

Free textbooks, free healthcare — someone paid. That budget could have gone elsewhere.

The Law of Diminishing Returns

Adding more of one input eventually produces less and less extra output. More workers does not always mean more output.



The Baozi Shop — Diminishing Returns

Fixed kitchen (2 steam machines) + variable workers → each new worker adds LESS than the previous one.

The Law

Adding more of ONE variable input, while other inputs stay FIXED, produces less and less extra output each time.

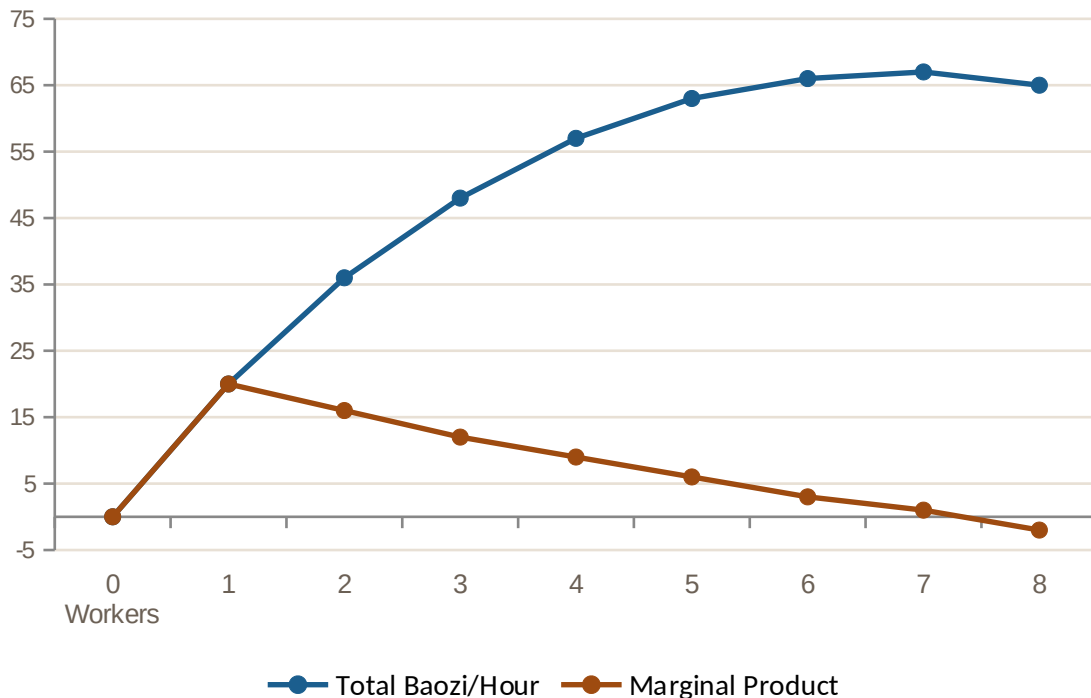
Fixed: kitchen size + 2 steam machines
Variable: number of workers hired



Applies to studying too!
After several hours, each extra hour gives less and less new learning.

Workers 1-6: total output rises (diminishing)
Worker 7: barely any gain
Worker 8: output FALLS (negative!)

Output as Workers Are Added



Economic Efficiency & the PPC

How do we know if an economy is working as well as it should? The Production Possibilities Curve gives us a powerful visual answer.



The Production Possibilities Curve (PPC)

A model showing the maximum combinations of two goods an economy can produce when ALL resources are fully used.

ON the curve



All resources fully used. No waste.
This is **PRODUCTIVE EFFICIENCY** — the goal.

INSIDE the curve



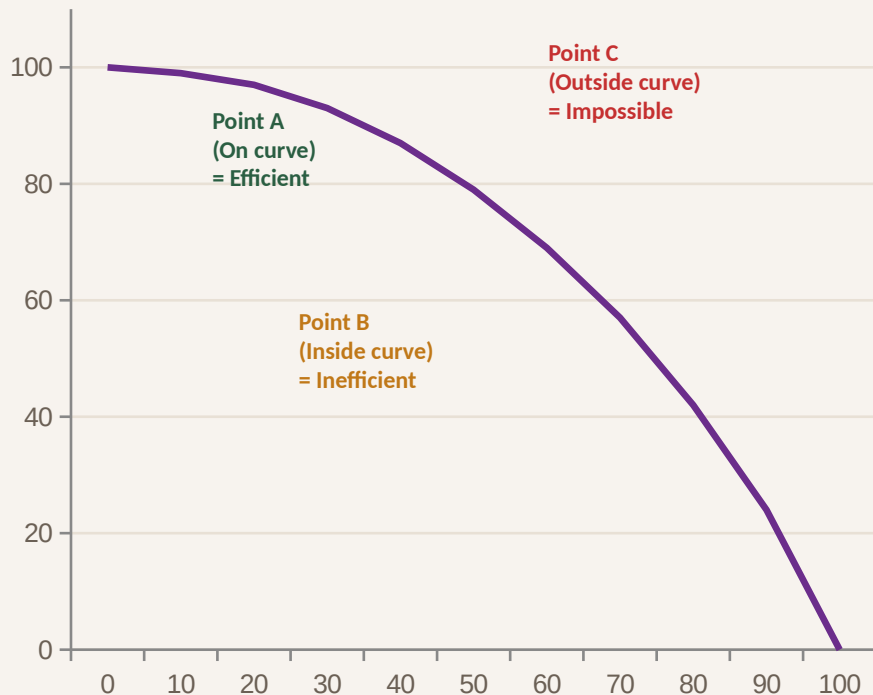
Resources are wasted. Workers unemployed.
Machines sit idle. Economy could do better.

OUTSIDE the curve



Impossible with current resources.
Cannot be reached without new technology or more inputs.

Smartphones vs. Rice (PPC)



X-axis = Rice Production Y-axis = Smartphone Production

Two Types of Efficiency

Being on the PPC is not enough — you also need to be at the RIGHT point on the curve.

PRODUCTIVE EFFICIENCY

Making goods at the LOWEST POSSIBLE COST, with no waste of resources.

How to identify:

The economy is operating ON the PPC curve — no workers unemployed, no machines sitting idle.

Key question: Are we using ALL resources without waste?

ALLOCATIVE EFFICIENCY

Producing the RIGHT COMBINATION of goods — the mix that people in society actually want most.

How to identify:

Being at the RIGHT point on the PPC — where the mix of goods matches what society actually wants.

Key question: Are we making what people actually WANT?

Unit 1 — Key Takeaways

Everything you need to carry forward from Economic Foundations:

1

Every economy must answer: WHAT to produce, HOW to produce, and FOR WHOM to produce.

2

SCARCITY (limited resources + unlimited wants) forces all people and governments to make choices.

3

OPPORTUNITY COST = only the NEXT BEST alternative given up — not all alternatives, not just money.

4

DIMINISHING RETURNS: adding more of one input (while others are fixed) produces less extra output each time.

5

The PPC: ON the curve = efficient. INSIDE = waste. OUTSIDE = impossible. PPC shifts OUT = economic growth.