

10 principles of

ECONOMICS





Mumtahina Rahman Tushi

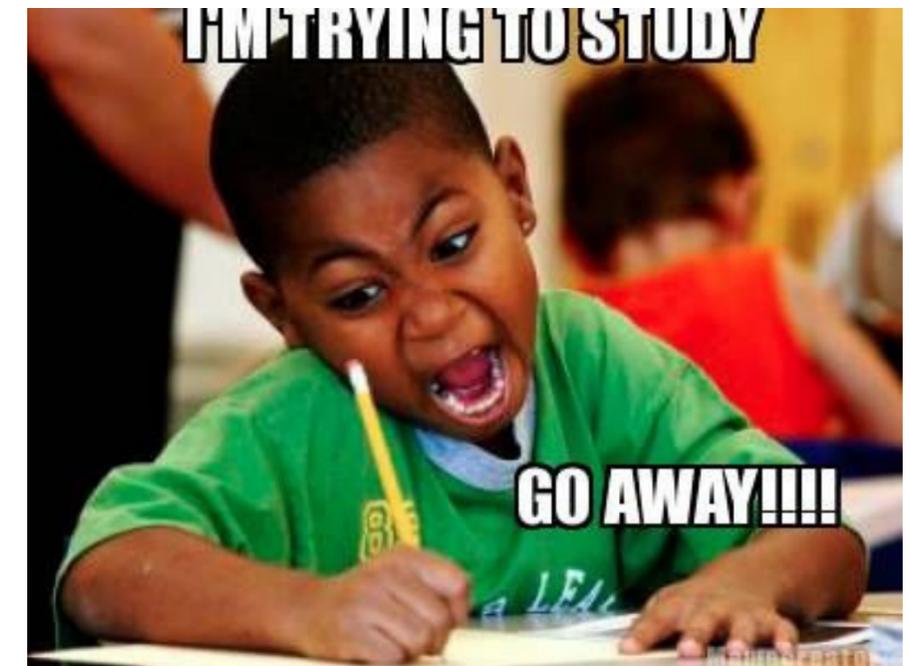
242, BS CSE
Instructor, Ostitto
CSR, Eventa
QACC, 10 Minute School

CD, ACS Future School
MI, 10 Minute School
SMM, SquidX

10 Principles of Economics

The 10 Principles of Economics were introduced by **N. Gregory Mankiw** in his economics textbook.

These principles explain **how people make decisions, how they interact, and how the economy works.**



10 Principles of Economics

People Face Trade-offs

To get one thing, we usually have to give up something else.

Example: Spending money on a phone means you cannot spend it on clothes.

WHEN YOU TRADE OFF YOUR
FROG



FOR SOMETHING BETTER

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"People face trade off"

The rational people

যে logically চিন্তা করে

to get something people have to sacrifice some other things

example 1) A teacher who sacrifice time for money

2) Income tax দিতে গিলে নিজের খরচের জন্য টাকা কমে যায়

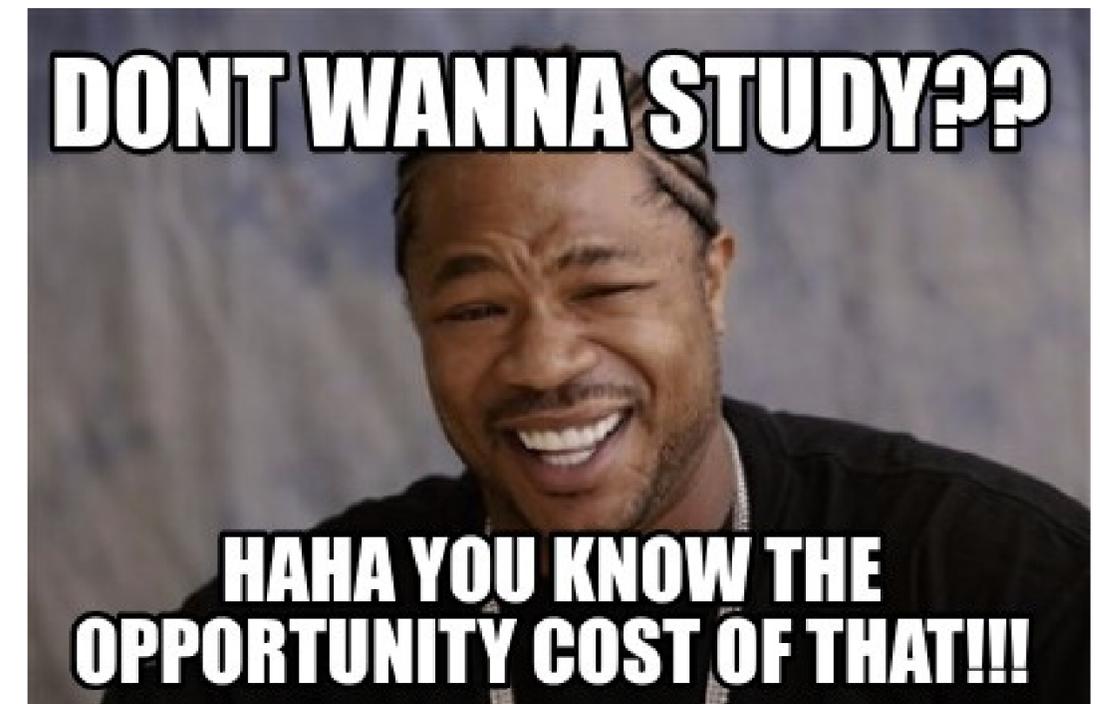
Note: trade of কখনোই exchange/ বিনিময় না। Trade off হলো Sacrifice

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The Cost of Something is What You Give Up to Get It

This is called Opportunity Cost.

Example: If you study for an exam instead of watching a movie, the movie is your opportunity cost.



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"The cost of something is what you give up to get it."

↳ Opportunity Cost

↓
The next / second best alternative sacrifice

example: My _{priority} : 1) Attending Class 1st Priority (Trade off) → multiple ছাড়ছি

2) Sleep → Opportunity cost (Trade off না করলে মেটা করতাম)

3) Hangout

.....

↳ সেহা best টা ছাড়ছি

Note: মেটার Opportunity cost বেশি মেটা আবে বরি।
মেটার Opportunity cost কম মেটা ছেড়ে দেয়।

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Real-Life Economic Example of Trade-Off and Opportunity Cost

Scenario: Government Budget Allocation

A government has a budget of \$10 billion and must decide how to allocate it between two key sectors:

1. Healthcare – Investing in hospitals, medical staff, and medicines to improve public health.
2. Infrastructure – Building roads, bridges, and public transportation to boost economic growth.

Trade-Off:

If the government spends more on healthcare, fewer funds are available for infrastructure projects. If it prioritizes infrastructure, healthcare services might suffer due to insufficient funding.

Opportunity Cost:

If the government chooses healthcare, the opportunity cost is the economic benefits that could have come from improved infrastructure, such as better transportation and increased trade.

If the government chooses infrastructure, the opportunity cost is the potential improvement in public health and lower medical costs in the long run.

This example shows how trade-offs and opportunity costs are crucial in economic decision-making, affecting a country's long-term development and well-being.

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Rational People Think at the Margin

People make decisions by comparing additional benefits and additional costs.



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"Rational People think at the margin"

↓
Marginal Analysis

(প্রান্তিক)

Marginal Analysis shows if a variable is changed by 1 Unit, how much the total of another variable changes.

example: Marginal Analysis এর কয়েকটি হিঁদের একত্রায়ন হতে পারে →

- Marginal Product MP
- Marginal Utility MU
- Marginal Cost MC

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Marginal Product

MP

✓ The marginal product (MP) definition is the change in output as a result of one additional unit of input being added to production

✓ প্রান্তিক পণ্য (MP) সংজ্ঞা হল উৎপাদনে একটি অতিরিক্ত একক ইনপুট যোগ করার ফলে আউটপুটে পরিবর্তন

example

Input	Output (TP)
-------	-------------

10 L _(Labor)	TP= 100
-------------------------	---------

11 L	TP= 110
------	---------

* 1 unit বাড়তেও পারে, কমতেও পারে

$$\therefore MP = 110 - 100$$

* নিচেরটা আগে হ্রস্ব

$$= \boxed{10} \uparrow$$

এই MP দেখে বুঝছি 1 জন লোক নিলে

Production বাড়ে। So, help নেওয়াটা Preferable!

Marginal Analysis

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Marginal Utility [একক Util]

MU

- ✓ Marginal utility is the extra satisfaction or benefit that a person gets from consuming one more unit of a product or service.
- ✓ It's a key concept in economics that helps explain how consumers value different units of a commodity.

✓ 1 unit variable 1 → Δ Variable দরকার

example

Consumption	Total Utility
1 bottle coke	90 Util
2 bottle coke	50 Util
<hr/>	
	$\therefore TU = 50 - 90$
	$= -40 \text{ Util}$

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Marginal Cost

MC

Production	Total Cost
to design 100 websites	10 M
to design 101 websites	11 M

$$\begin{aligned} MC &= 11 - 10 \\ &= 1M \end{aligned}$$

- ✓✓ Marginal cost is the extra cost of producing one more unit of a product or service.
- ✓✓ It's an important metric for businesses to help them decide if new products will be profitable.

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People Respond to Incentives

People change their behavior when rewards or penalties change.
Example: Higher salary encourages people to work more.



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Trade Can Make Everyone Better Off

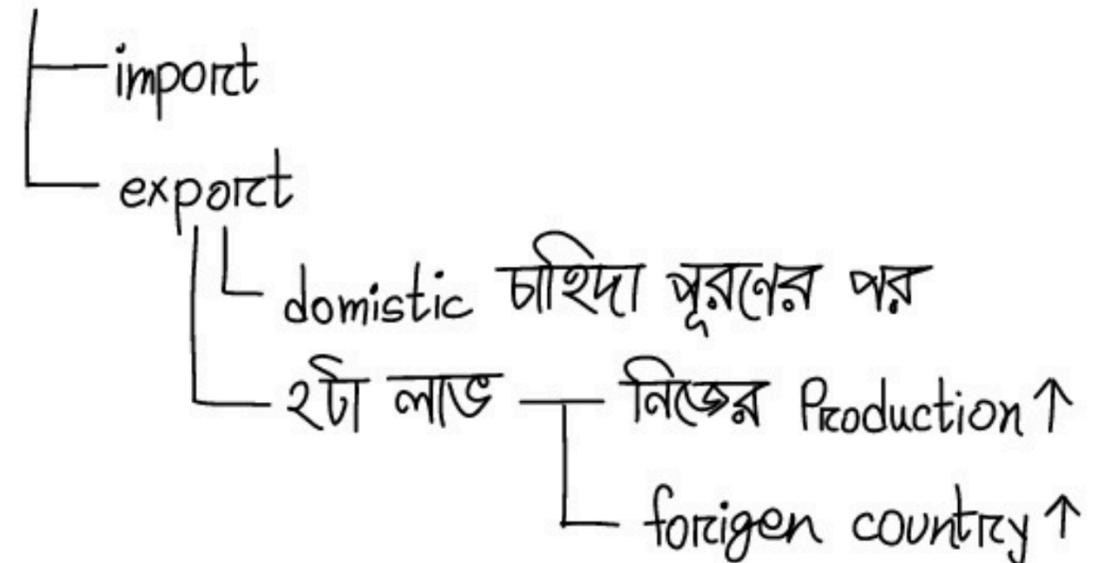
When people or countries trade, everyone can benefit because they can specialize in what they do best.



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“Trade can make everyone better-off”

কখন better হবে? → যখন trade/int. trade হবে



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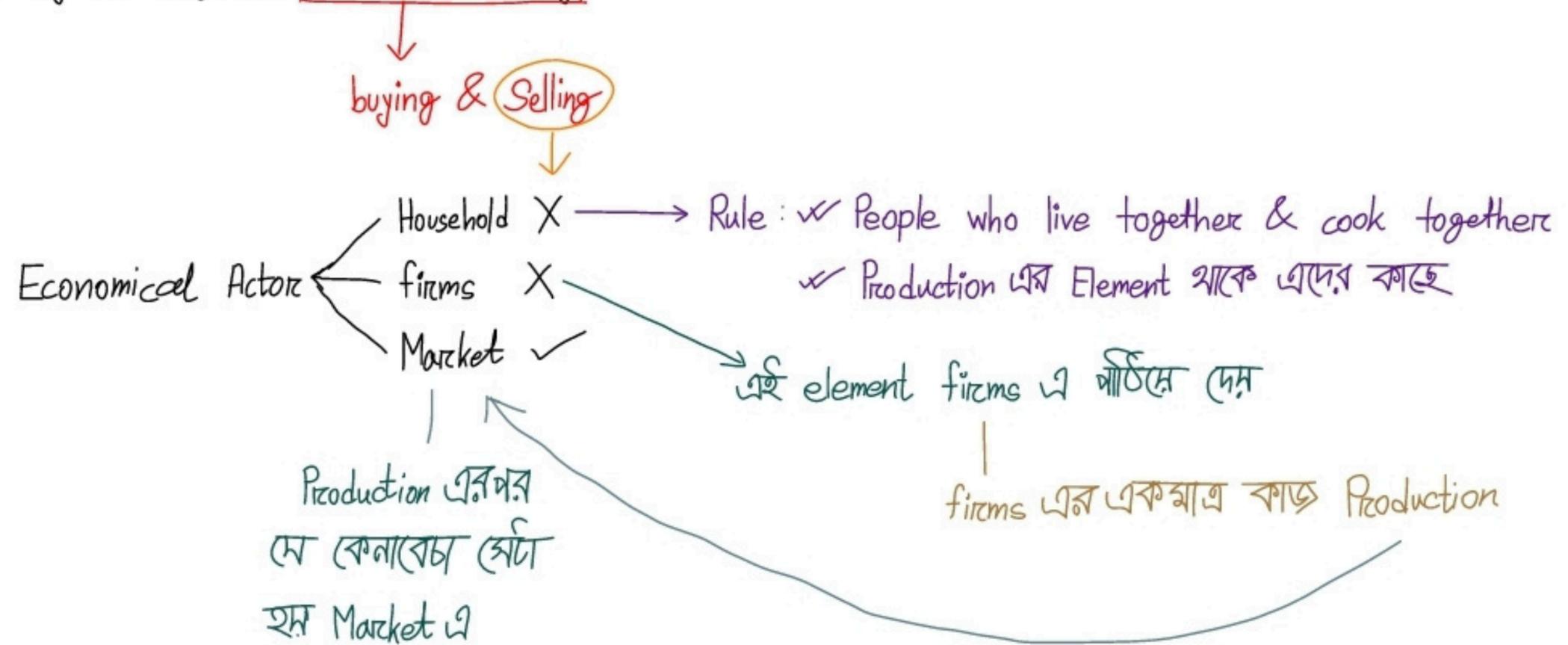
Markets Are Usually a Good Way to Organize Economic Activity

Markets allow buyers and sellers to interact and determine prices and production efficiently.



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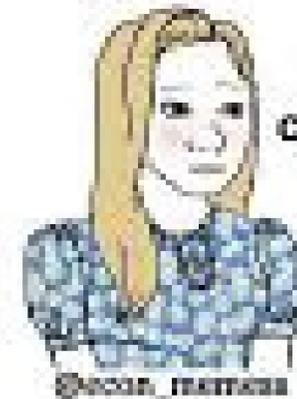
"Markets are usually a good way to organize economic activity"



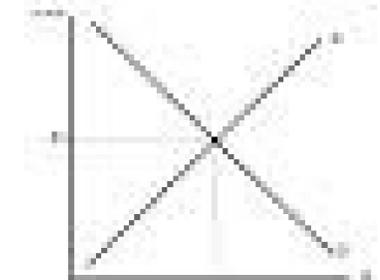
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Governments Can Sometimes Improve Market Outcomes

Government intervention may be needed to correct market failures, protect property rights, or control monopolies.



thank you for
changing my life



i'm literally a graph

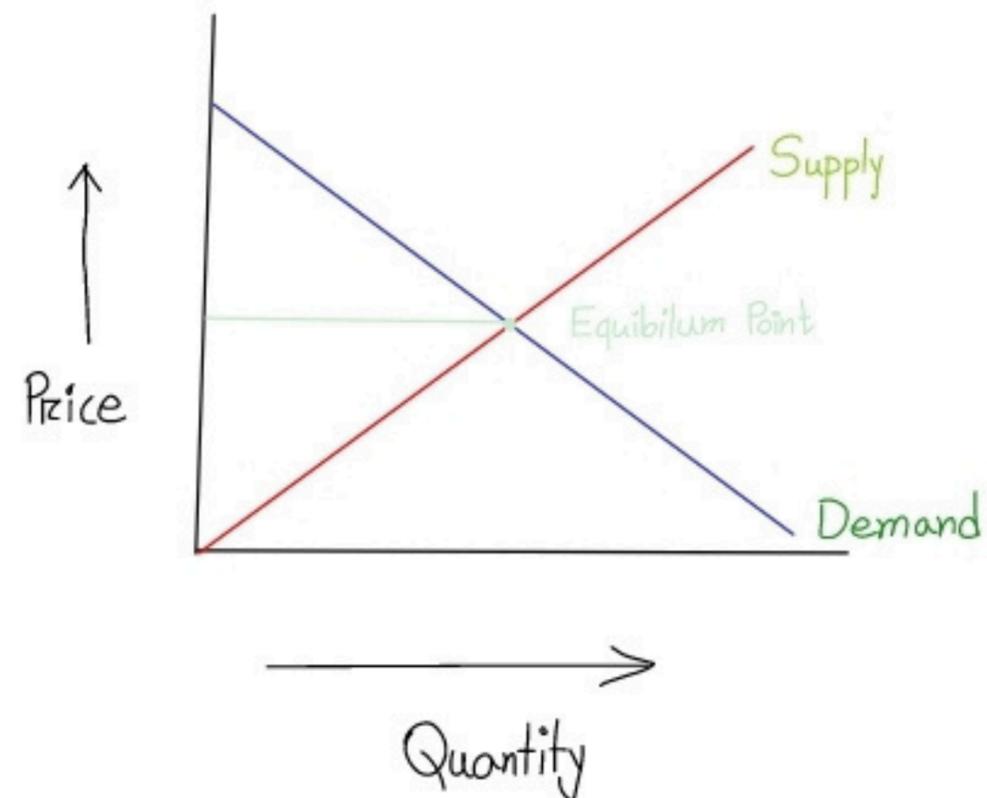
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Govt can sometimes improve the market outcome
↓
Price & Quality

Free market Approach

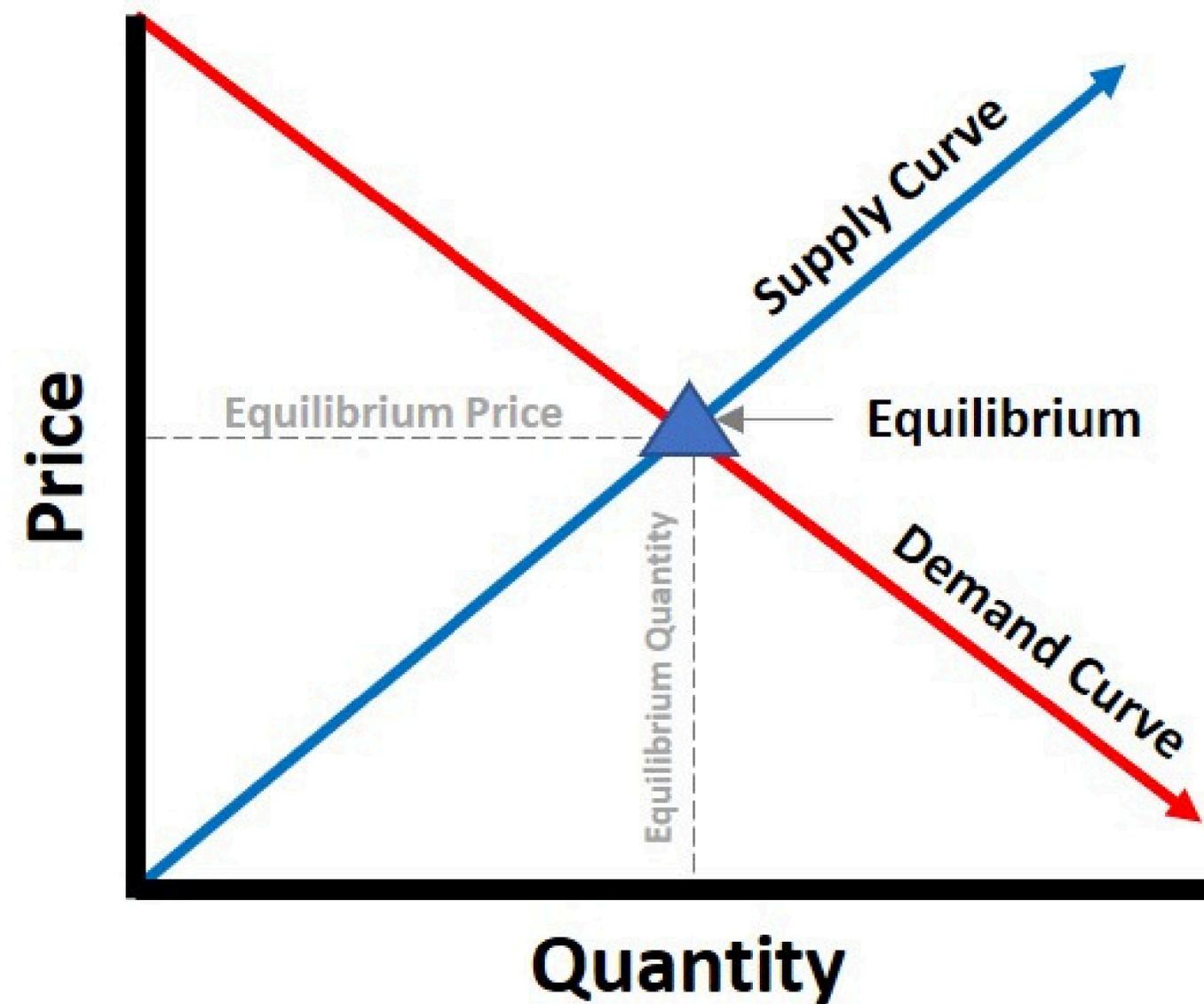
✓ মার্কেটে প্রোডাক্টের দাম কত থাকবে তা নির্ধারণ করে Supply Demand Chain

↳ Invisible Hand Theory

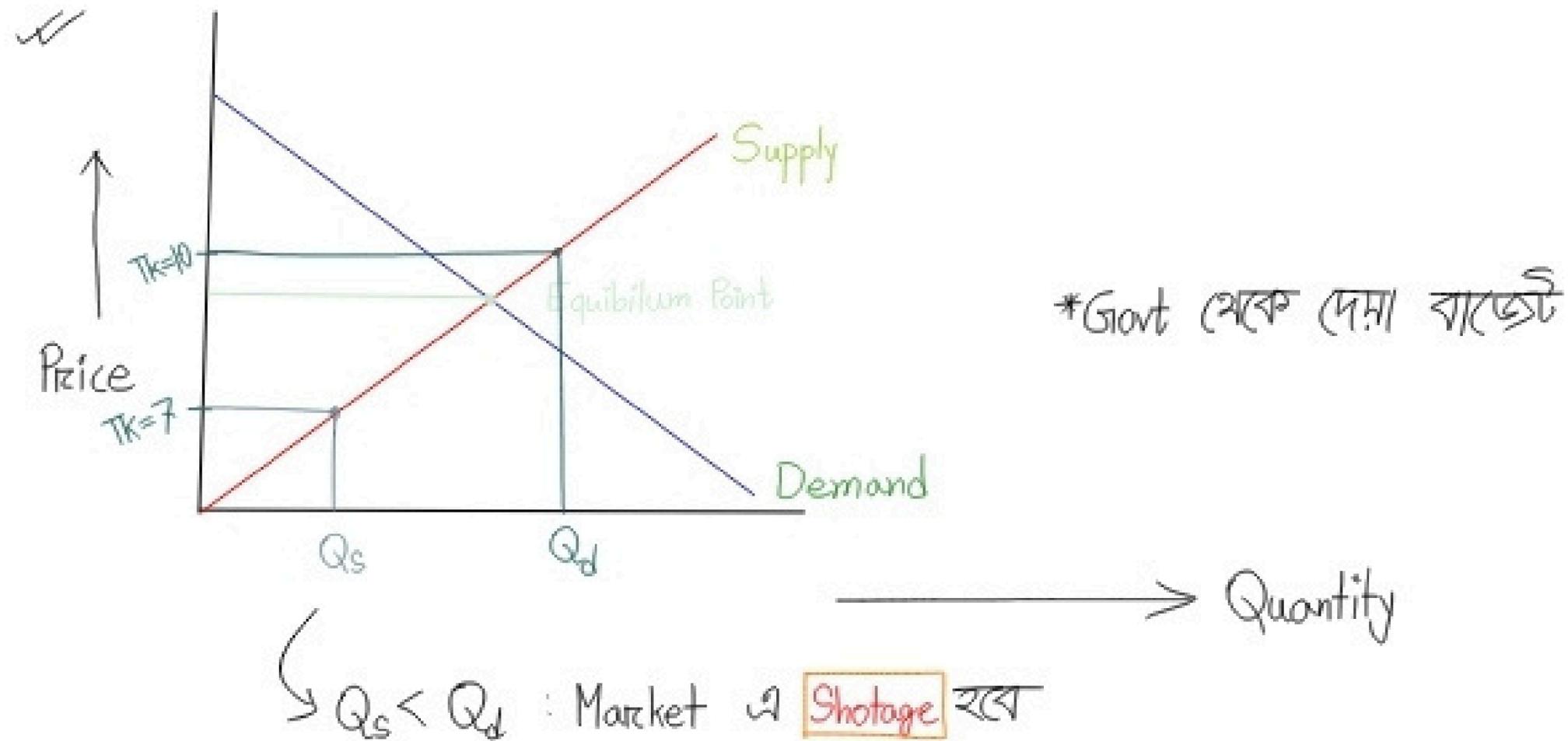


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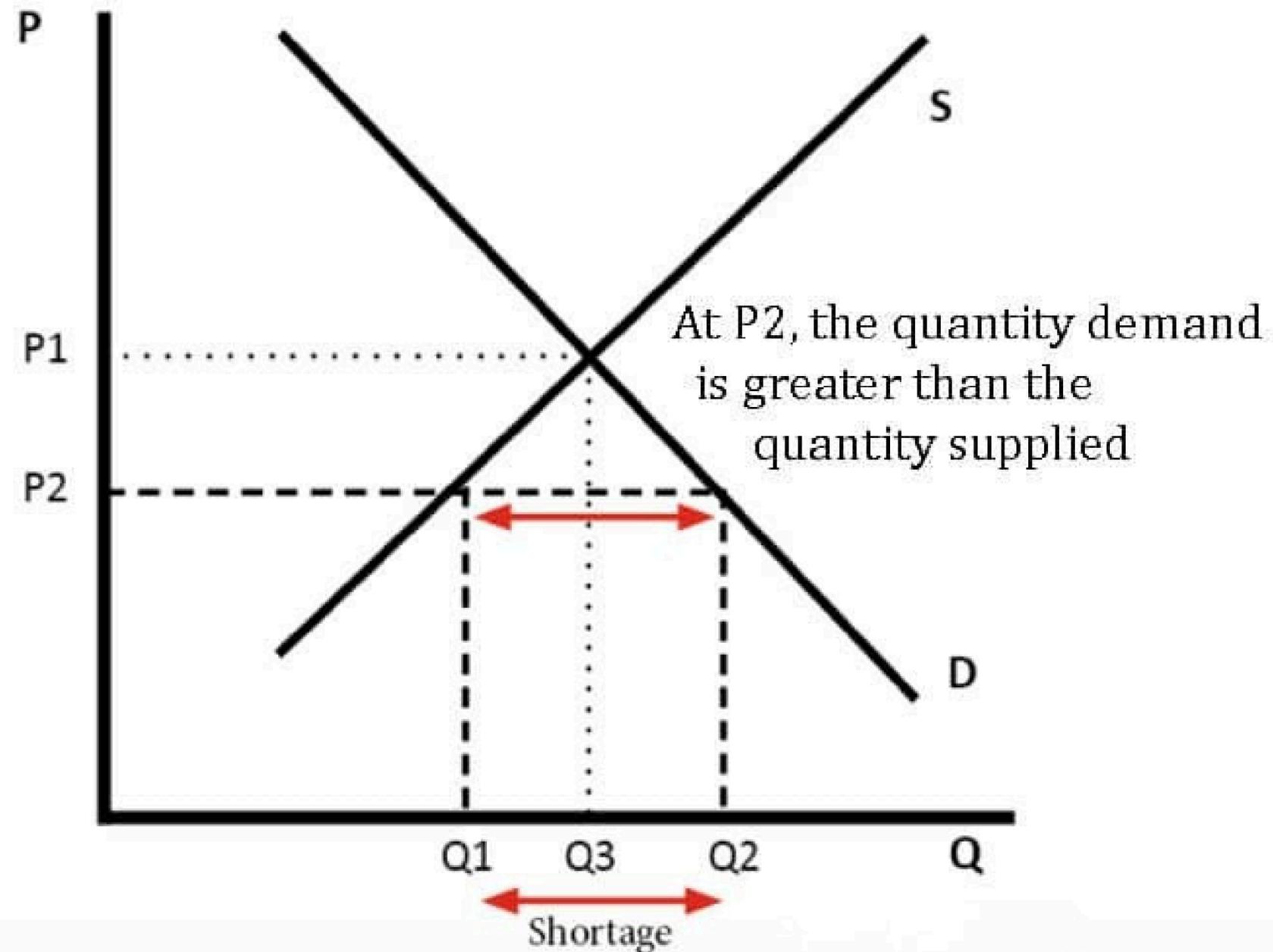
Supply and Demand Curve



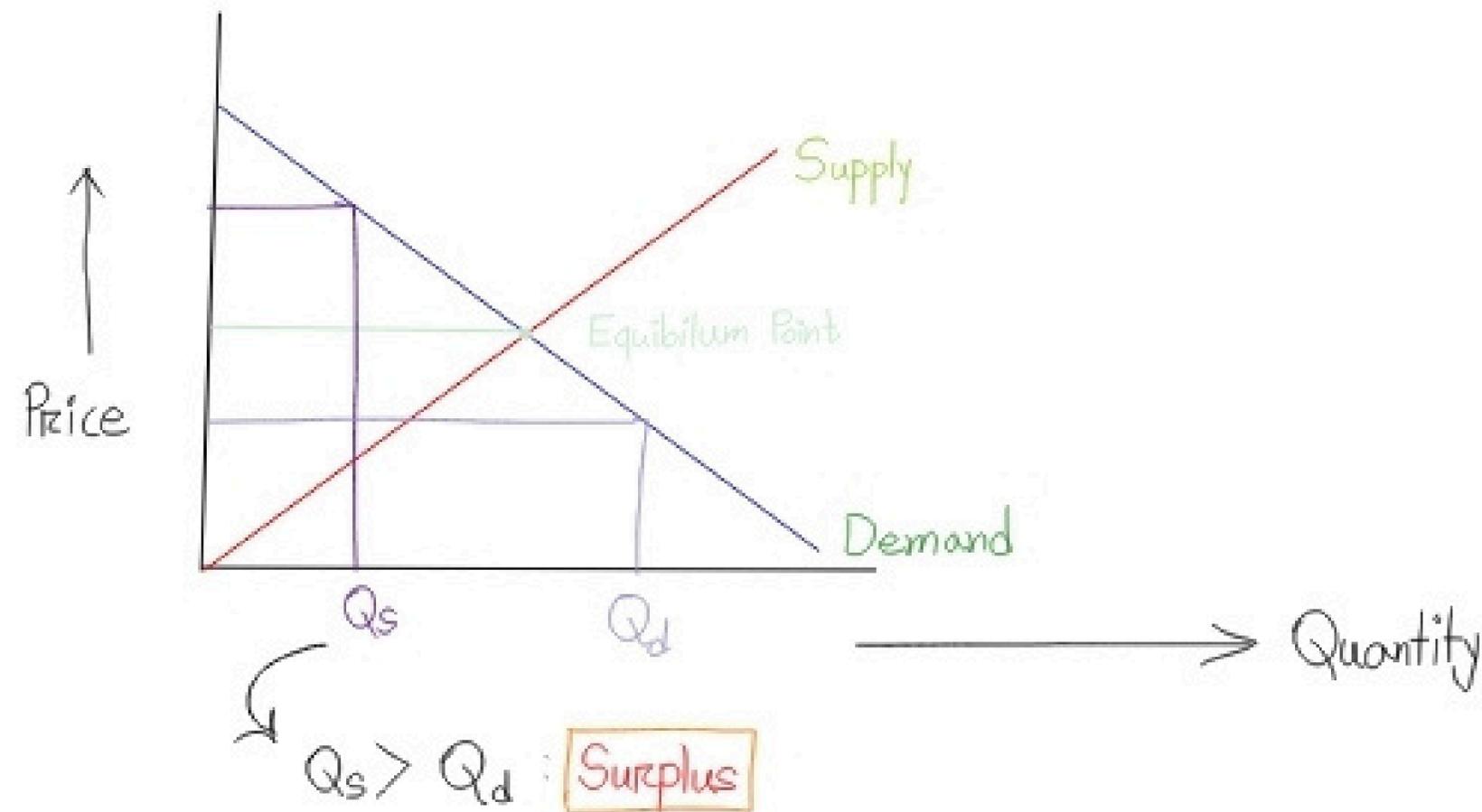
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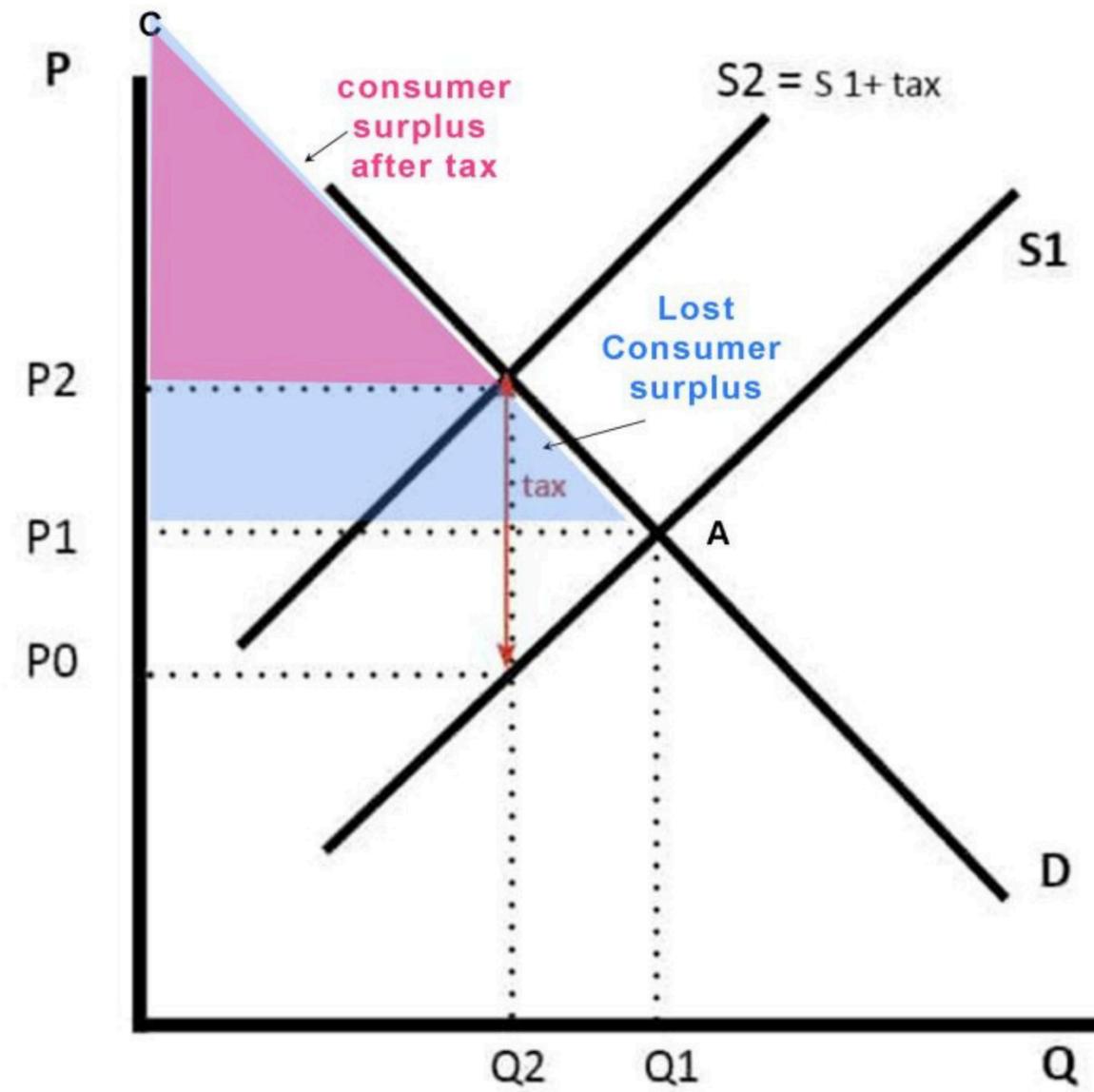


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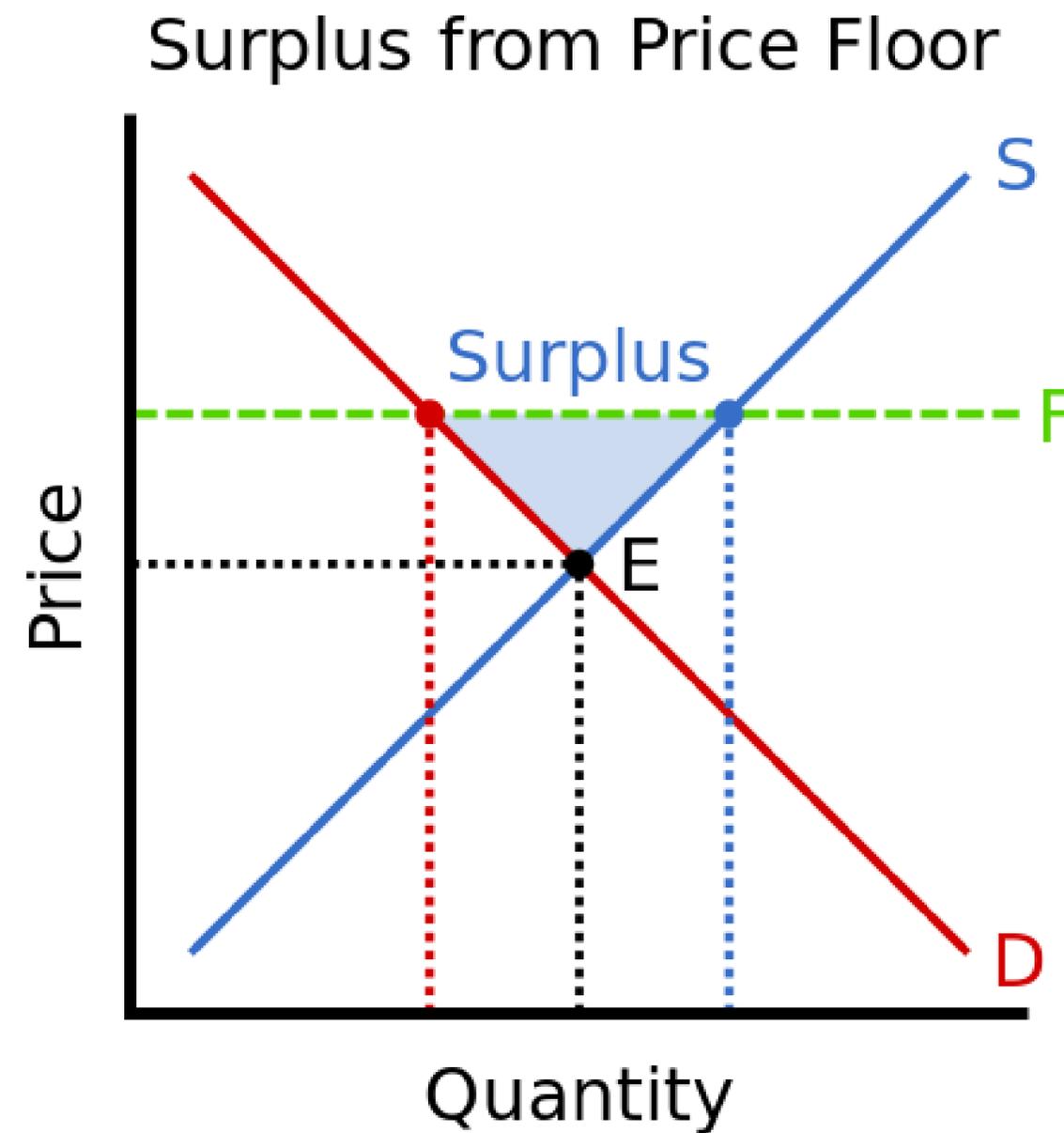


✓ $Q_s < Q_d \rightarrow$ Shortage
 $Q_s > Q_d \rightarrow$ Surplus

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

Countries that produce more goods and services generally have a higher standard of living.

Prices Rise When the Government Prints Too Much Money

This causes inflation, meaning the general level of prices increases.

10 Society Faces a Short-Run Trade-off Between Inflation and Unemployment

In the short term, reducing unemployment may increase inflation and vice versa.

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Rule 8: A country's standard of living depends on its ability to produce goods and services

Rule 9: Price rise when government prints too much money

↓
Inflation

Rule 10:

Society faces a short run Trade-off between inflation and unemployment

রিপ্লেস করা যাবে না এমন কিছু।
যেভাবে শুরু করেছি ওভাবেই করতে
হবে

*long run:

nothing is constant
here. we can change a...

Money Supply ↑

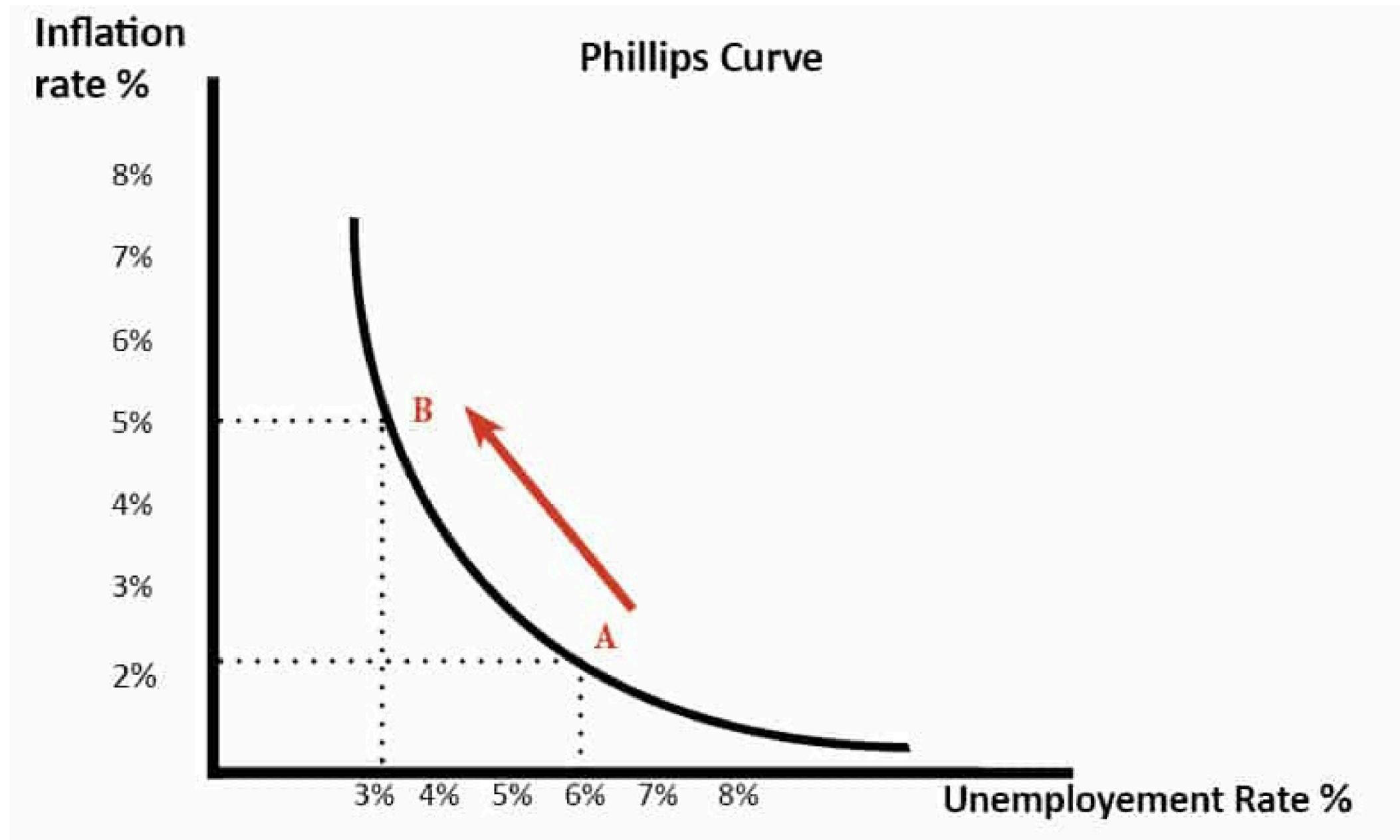
Phillips Curve



Inflation Rate ↑
Loan ↓
Investment ↓
New Job Sector ↓
Unemployment ↑

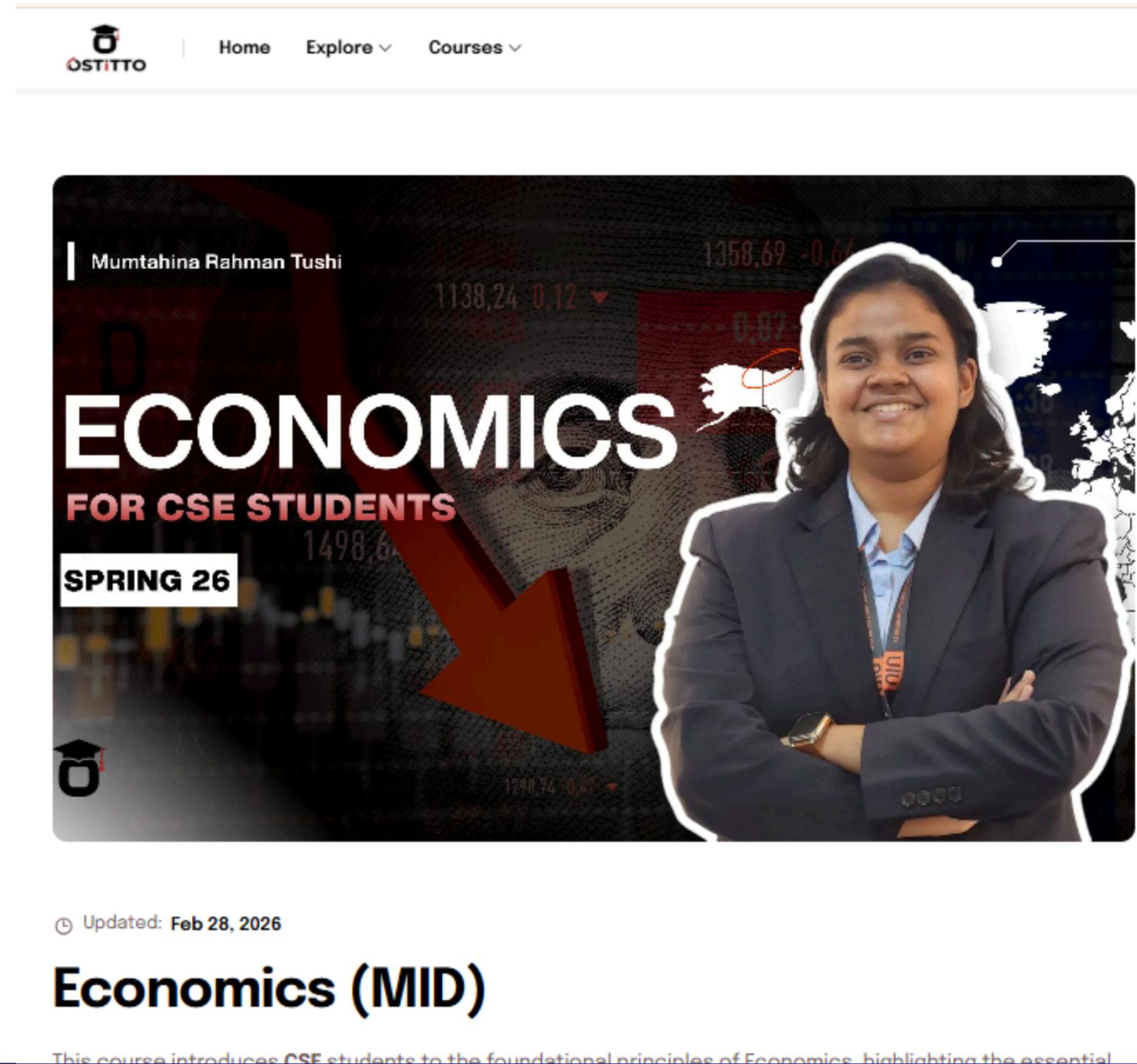
Inflation Rate ↓
Loan ↑
Investment ↑
New Job Sector ↑
Unemployment ↓

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