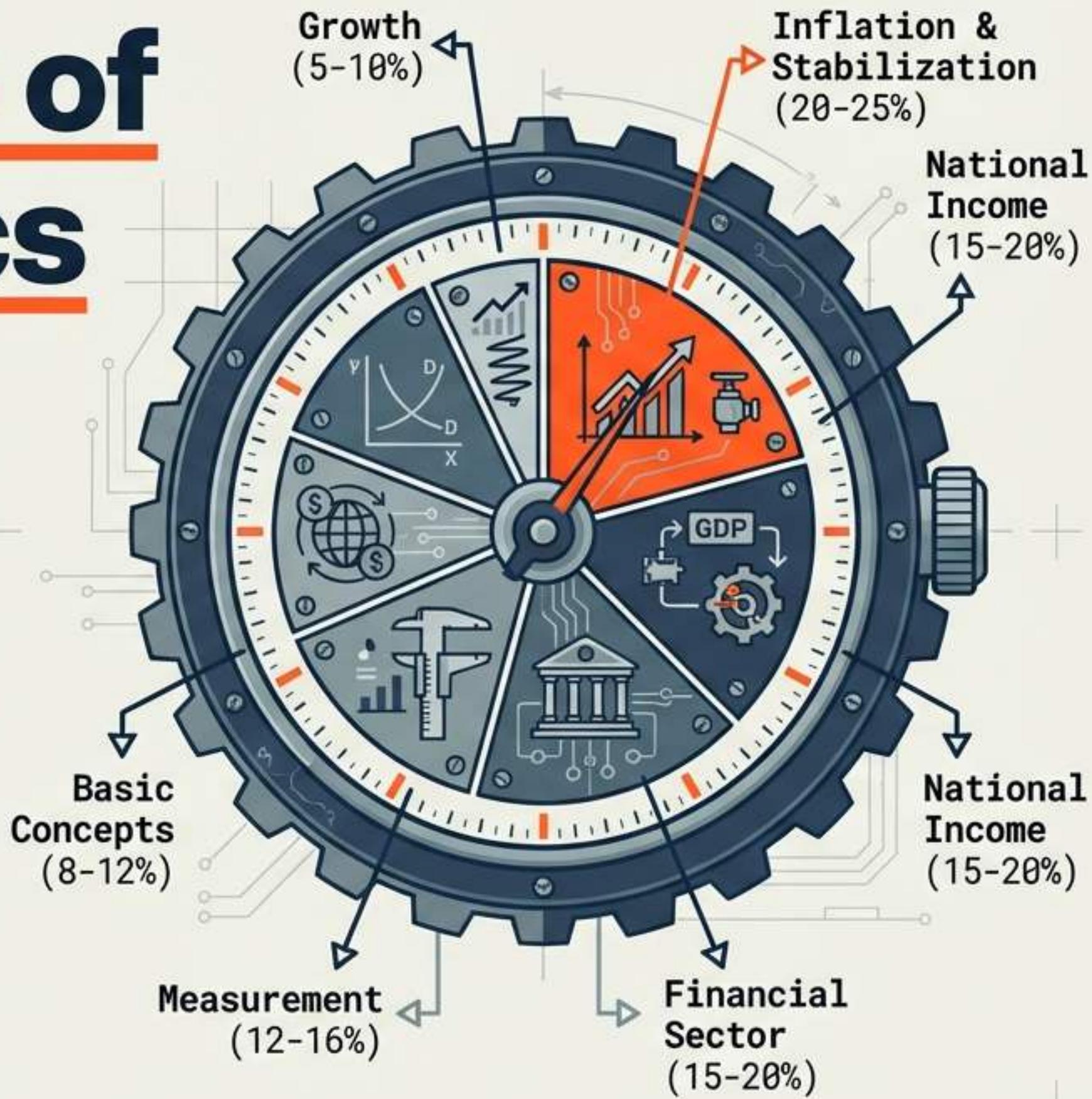
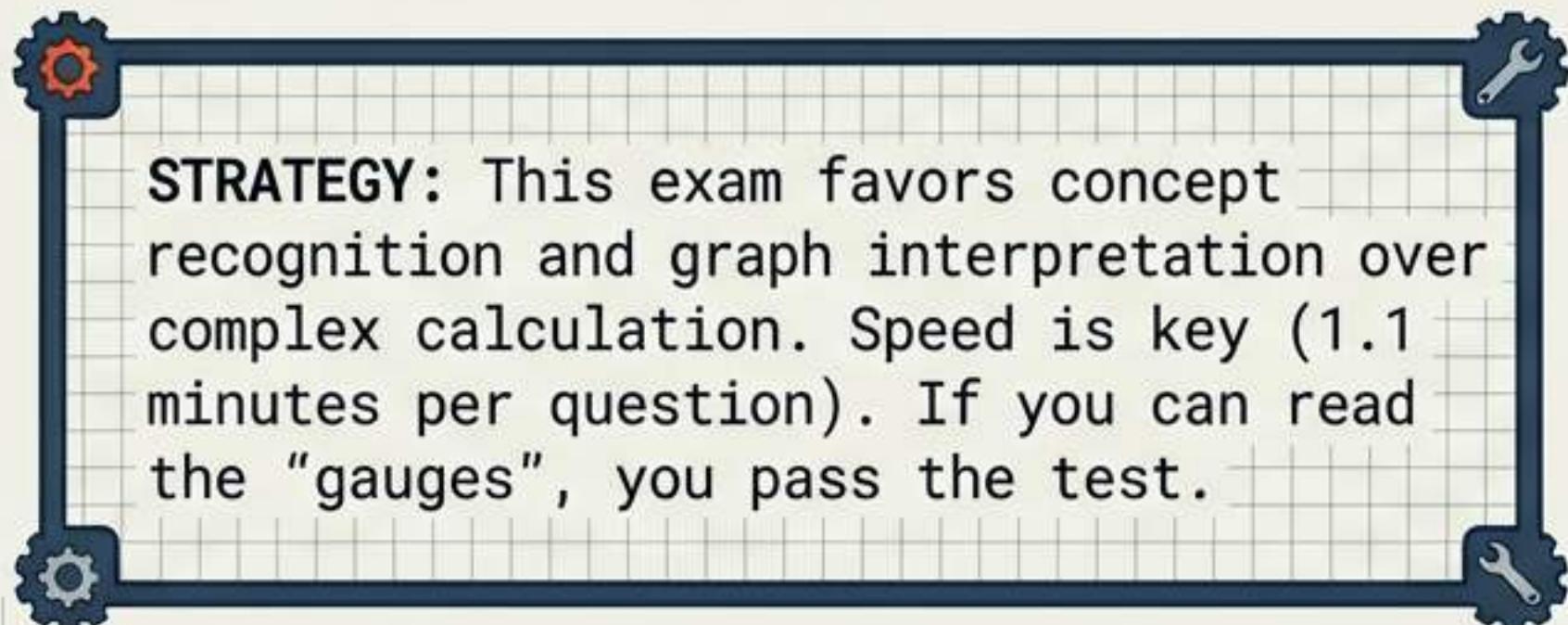


CLEP Principles of Macroeconomics

The Mechanic's Manual:
80 Questions. 90 Minutes.
Zero-to-Pass.



The Universal Truth: Scarcity

The permanent condition where wants exceed limited resources.



SIGNAL WORDS

- ➡ Trade-off, Foregone,
- ➡ Next best alternative,
- ➡ Marginal analysis.

OPPORTUNITY COST

= The value of the NEXT BEST alternative foregone.

(Not the sum of all alternatives).

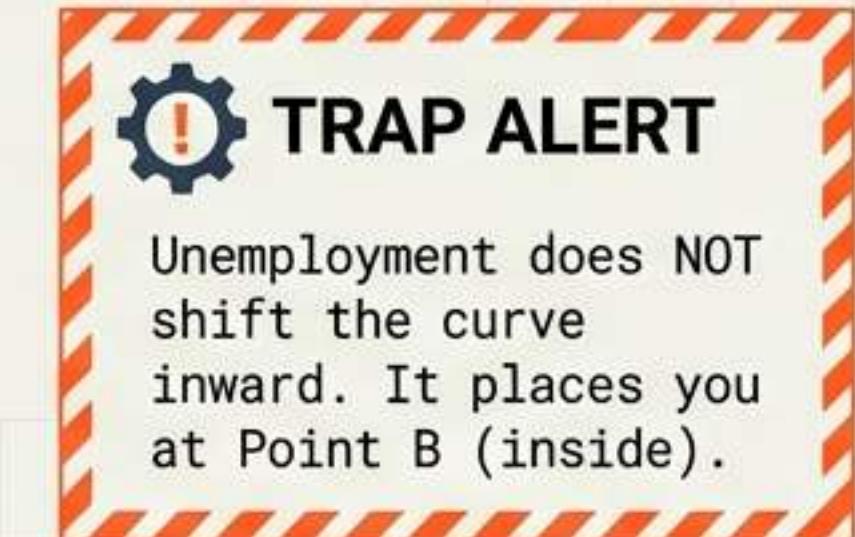
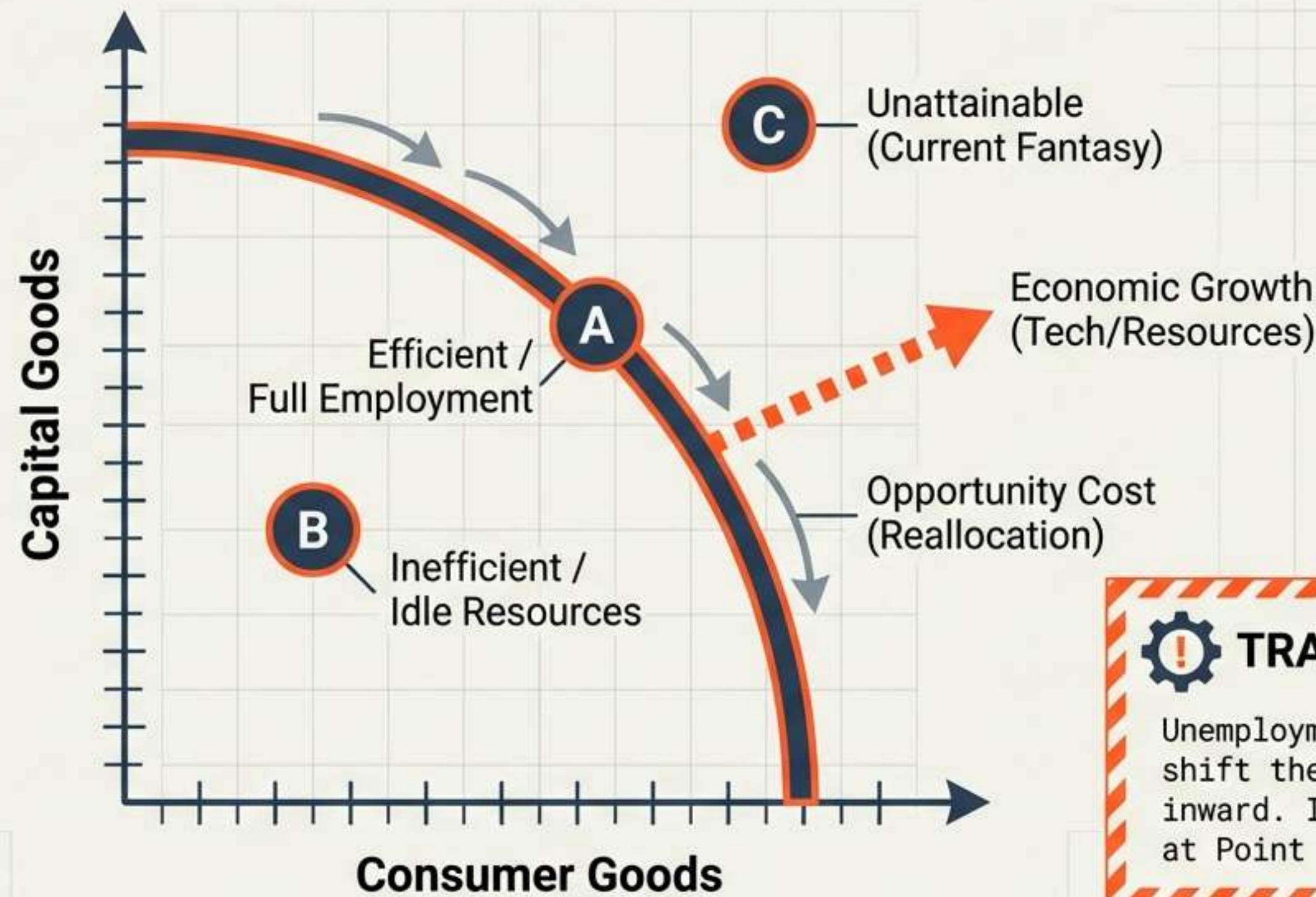


TRAP ALERT

Do not confuse SCARCITY (permanent, universal) with SHORTAGE (temporary, market glitch).

Visualizing Limits: The PPC

Production Possibilities Curve



The Logic of Trade: Comparative Advantage

Definition

Trade is driven by
COMPARATIVE ADVANTAGE
(Lower Opportunity Cost),
not Absolute Advantage
(Total Output).



SIGNAL WORDS

Specialize, Gains from trade,
Terms of trade.

Cheat Sheet

OUTPUT PROBLEM (Product Produced)
Formula: $OC = \text{Other} / \text{Over}$

(The "Other" good goes over the target good)

INPUT PROBLEM (Hours/Labor Required)

Formula: $OC = \text{It} / \text{Over}$

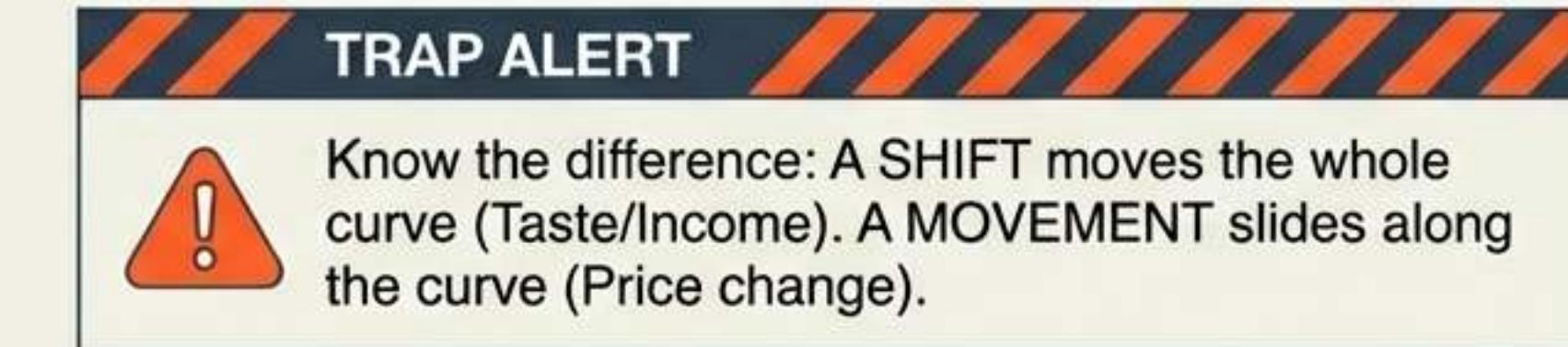
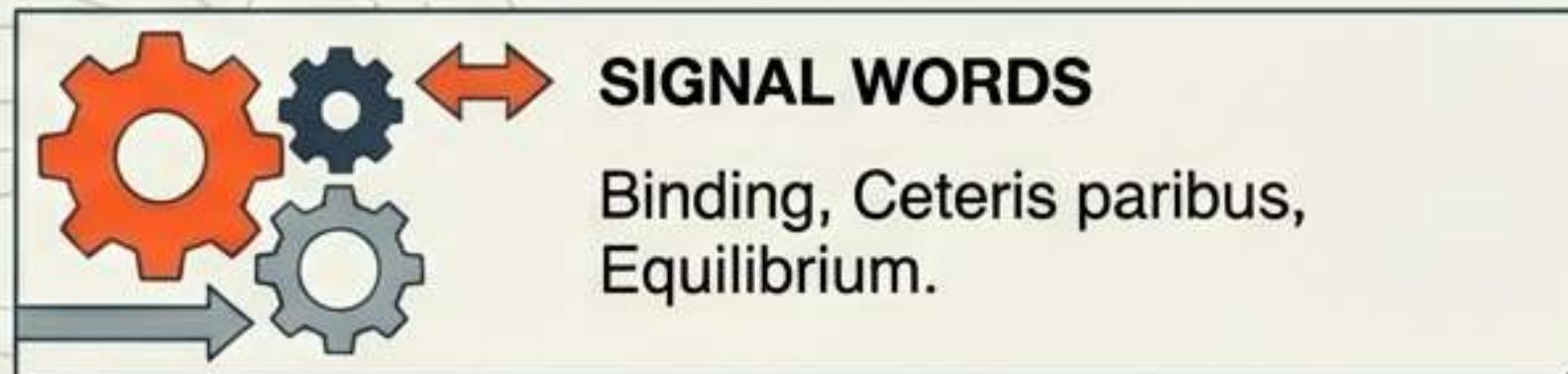
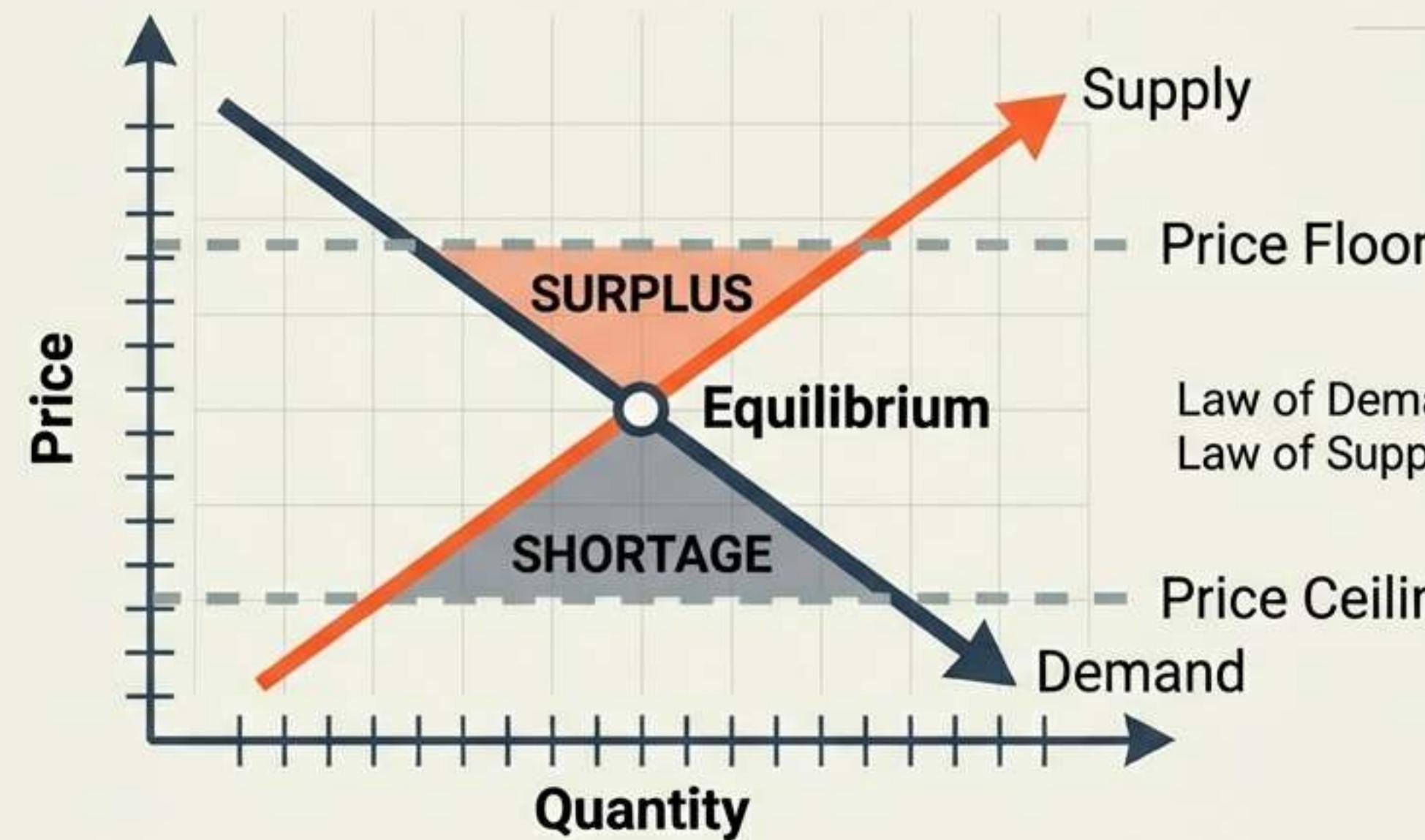
(The "It" good goes over the other good)

TRAP ALERT



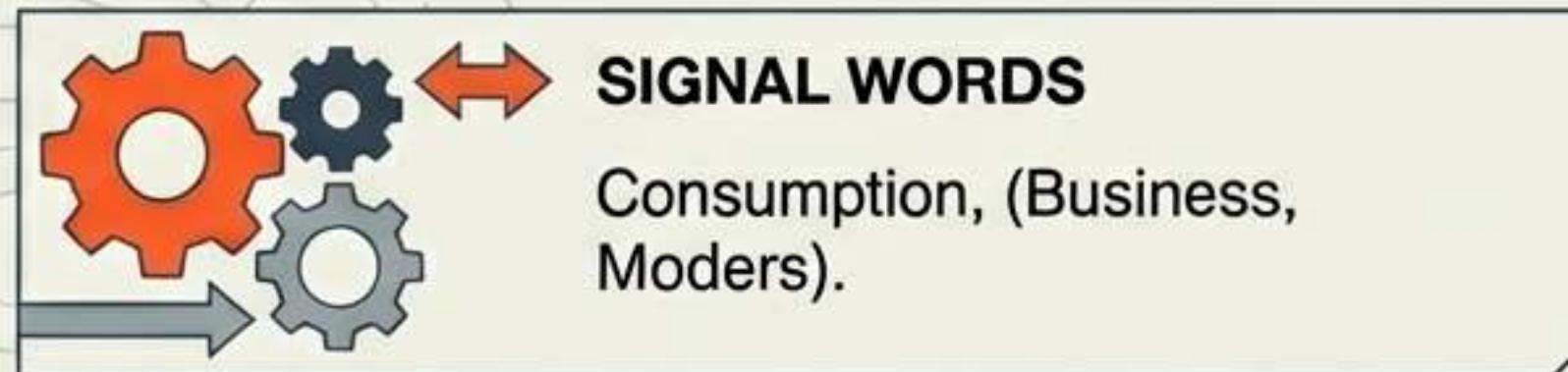
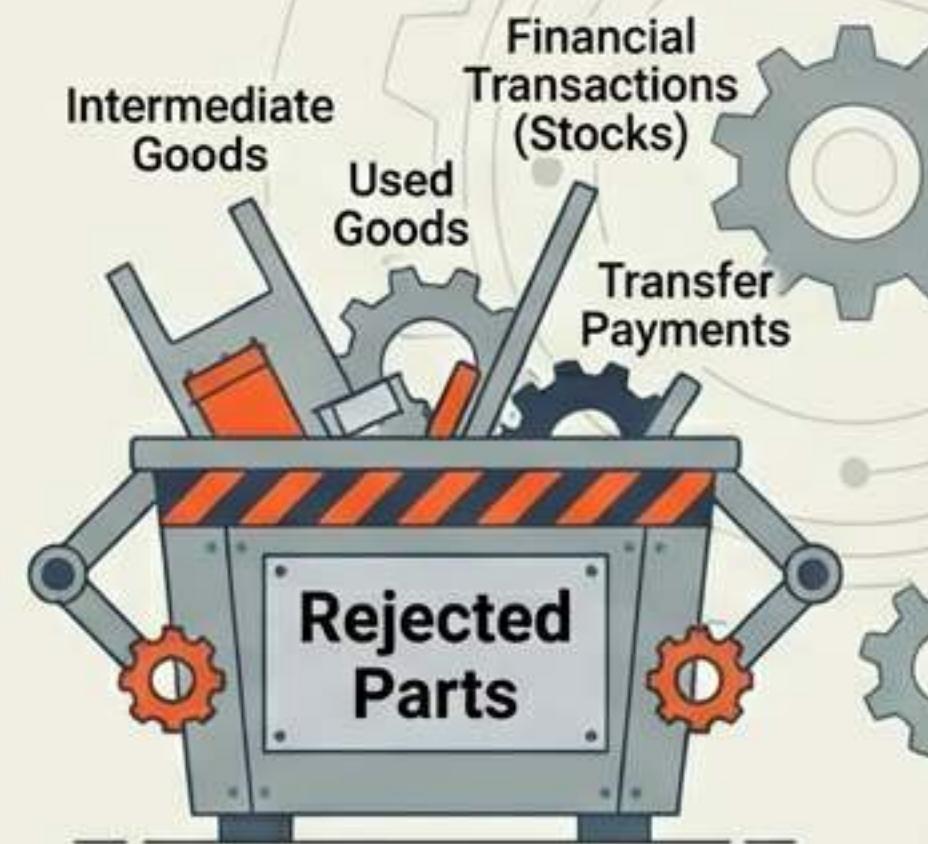
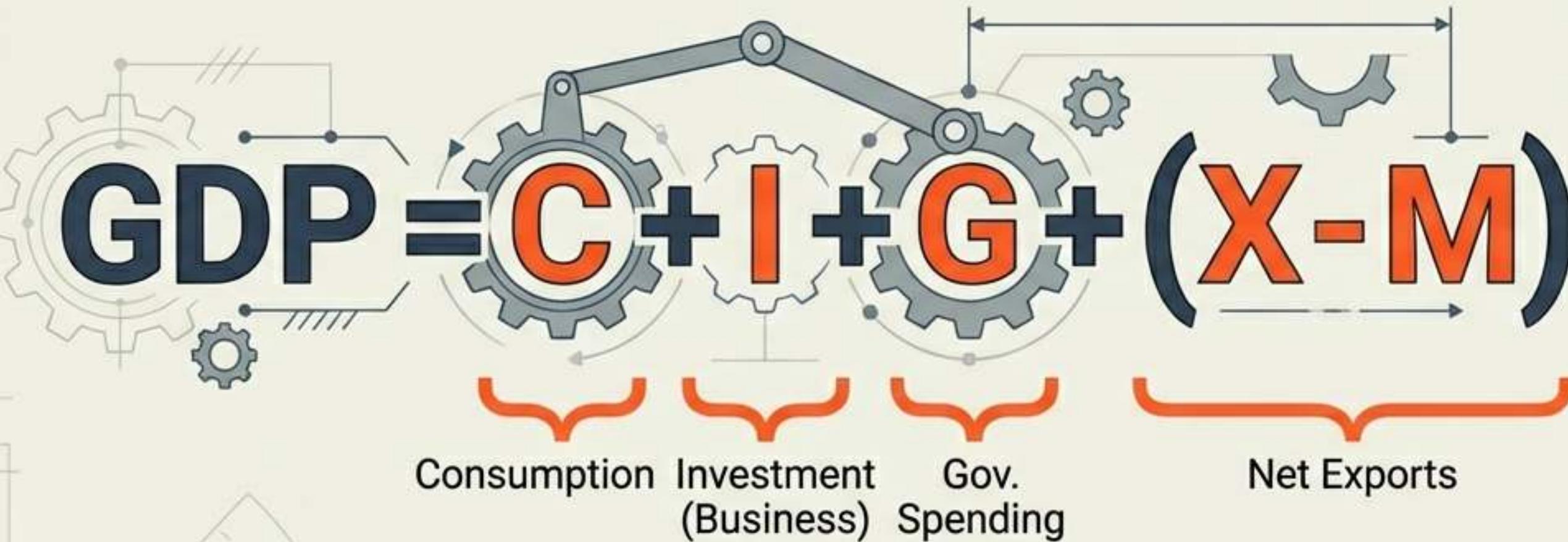
Being better at everything (Absolute Advantage) does not mean you should do everything. Look for the lower Opportunity Cost.

The Market Mechanism: Supply & Demand

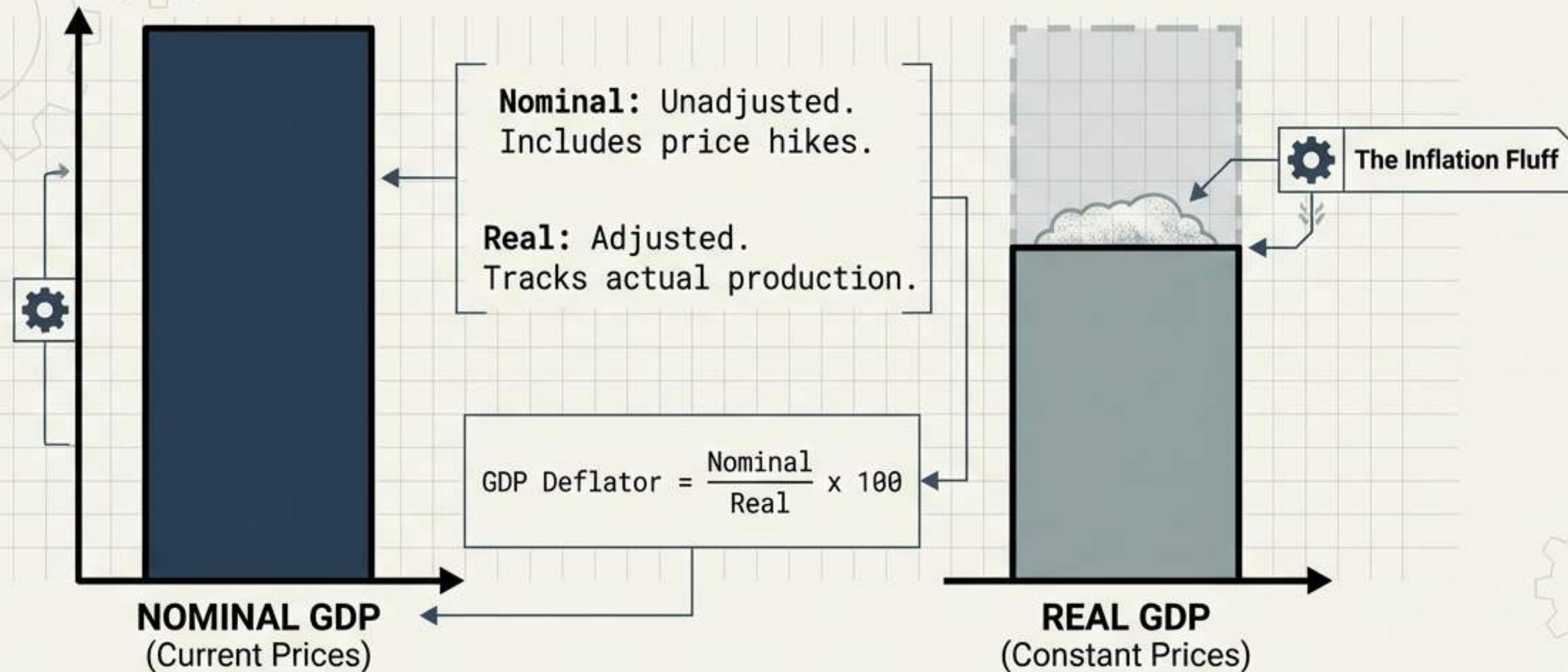


The Scorecard: Gross Domestic Product (GDP)

Market value of **all final goods** produced within borders.



The Inflation Illusion: Nominal vs. Real GDP



⚙️ ➤ SIGNAL WORDS ➤

Base year, Current prices, Constant dollars.

⚠️ TRAP ALERT

If Nominal rises but Real stays flat, the economy didn't grow—prices just got more expensive.

The Cost of Living: CPI

Consumer Price Index



$$\text{CPI} = \left(\frac{\text{Cost of Basket Current}}{\text{Cost of Basket Base}} \right) \times 100$$

$$\text{Inflation Rate \%} = \left(\frac{\text{Year 2} - \text{Year 1}}{\text{Year 1}} \right) \times 100$$

CPI:

Consumer goods only
(includes imports).

GDP Deflator:

All domestic production
(excludes imports).



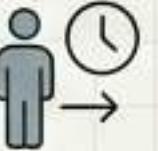
TRAP ALERT

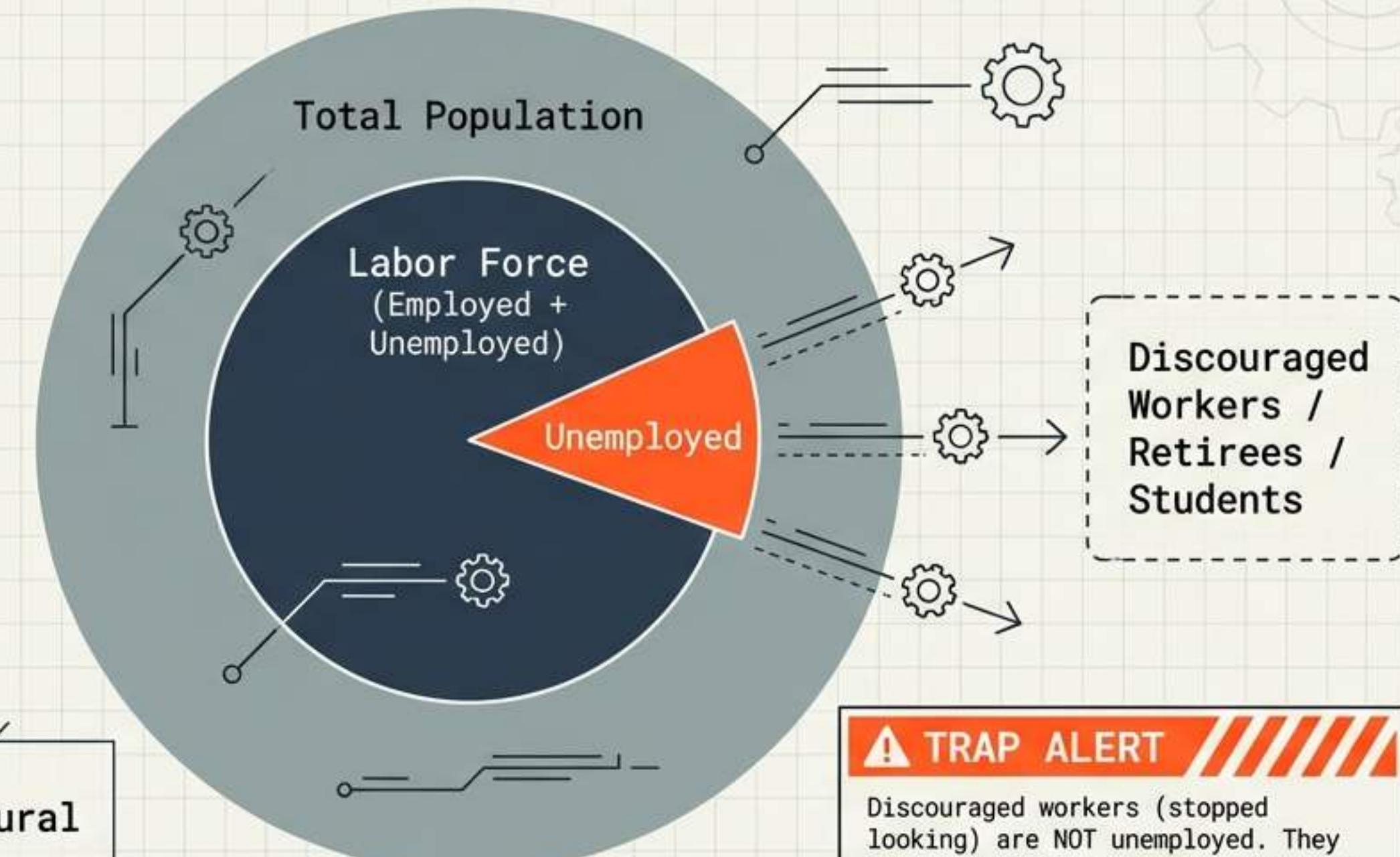
Math Trap: When calculating the inflation rate percentage change, the denominator is always the EARLIER year (Year 1).

The Labor Market: Unemployment

Understanding the Workforce Dynamics and Joblessness

The Three Types

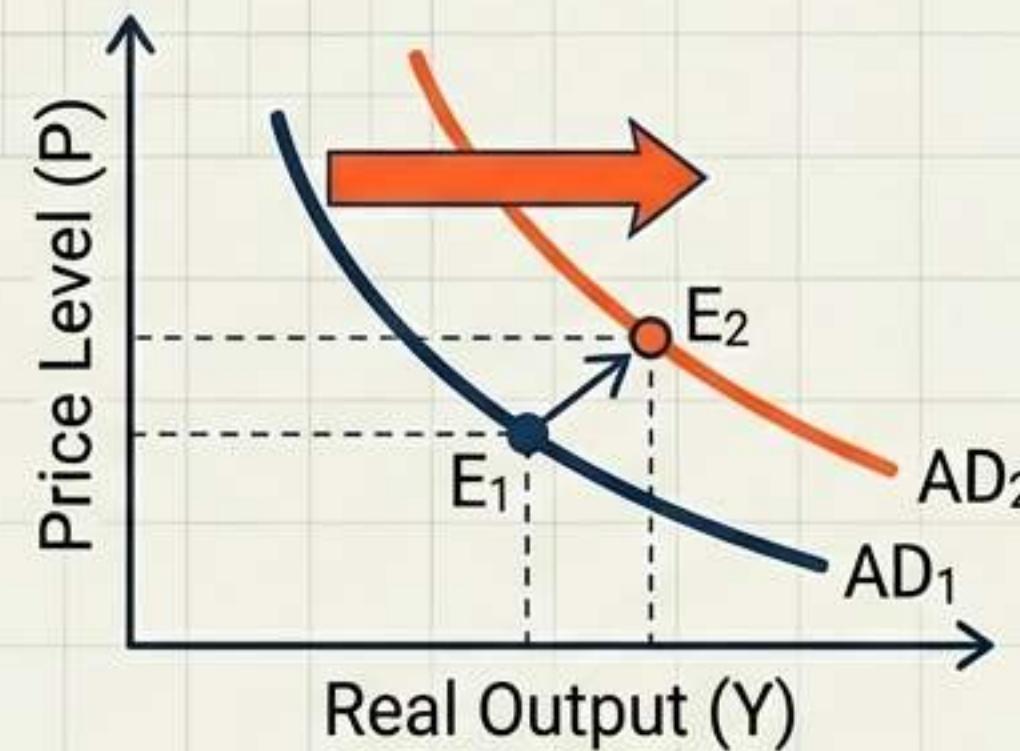
1. Frictional
(Between jobs/Search time) 
2. Structural
(Skills mismatch/Obsolete) 
3. Cyclical
(Recession-caused) 



Natural Rate (NRU) = Frictional + Structural

When Prices Rise: Types of Inflation

DEMAND-PULL



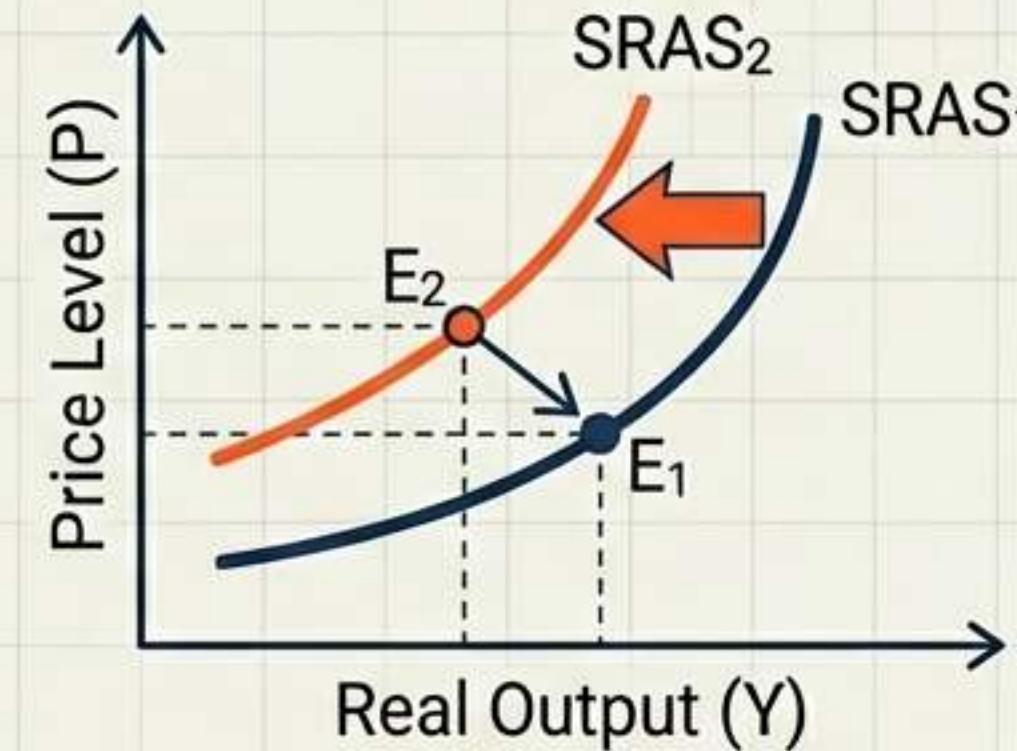
Too much money chasing too few goods.

Prices ↑, Output ↑

SIGNAL WORDS

Supply shock, Excess spending, Stagflation.

COST-PUSH



Supply shock / Input costs rise.

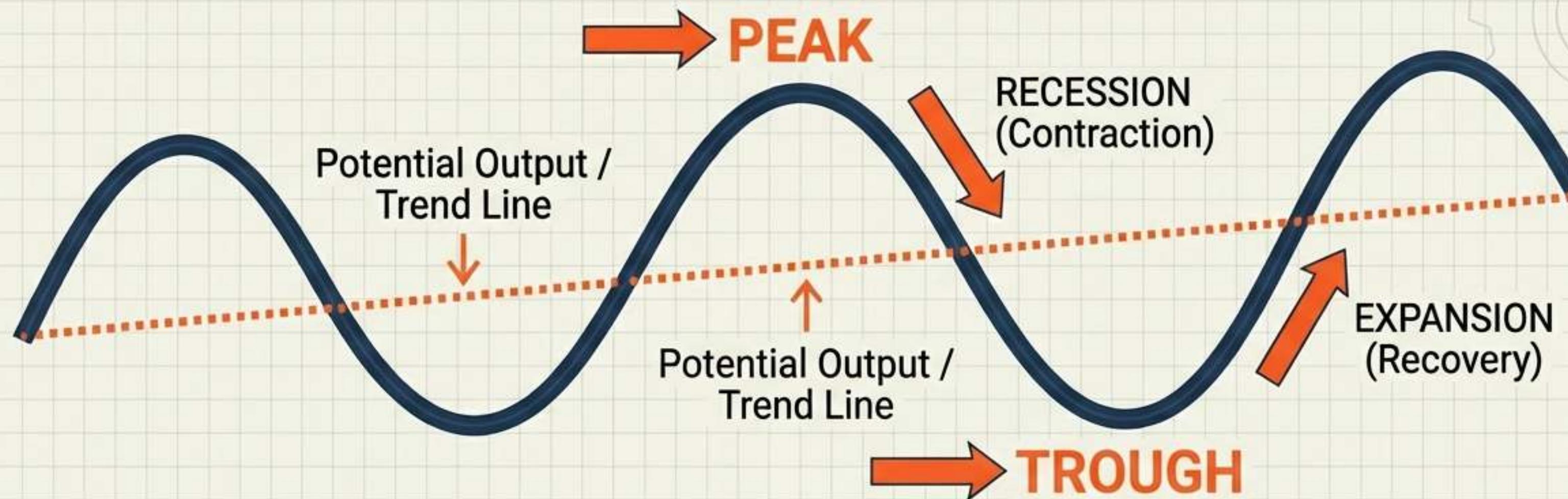
Prices ↑, Output ↓ (Stagflation)



TRAP ALERT

Cost-Push is the dangerous one. It creates **Stagflation** (Inflation + Unemployment).

The Rollercoaster: The Business Cycle



Recession = 2 consecutive quarters of falling Real GDP.

SIGNAL WORDS

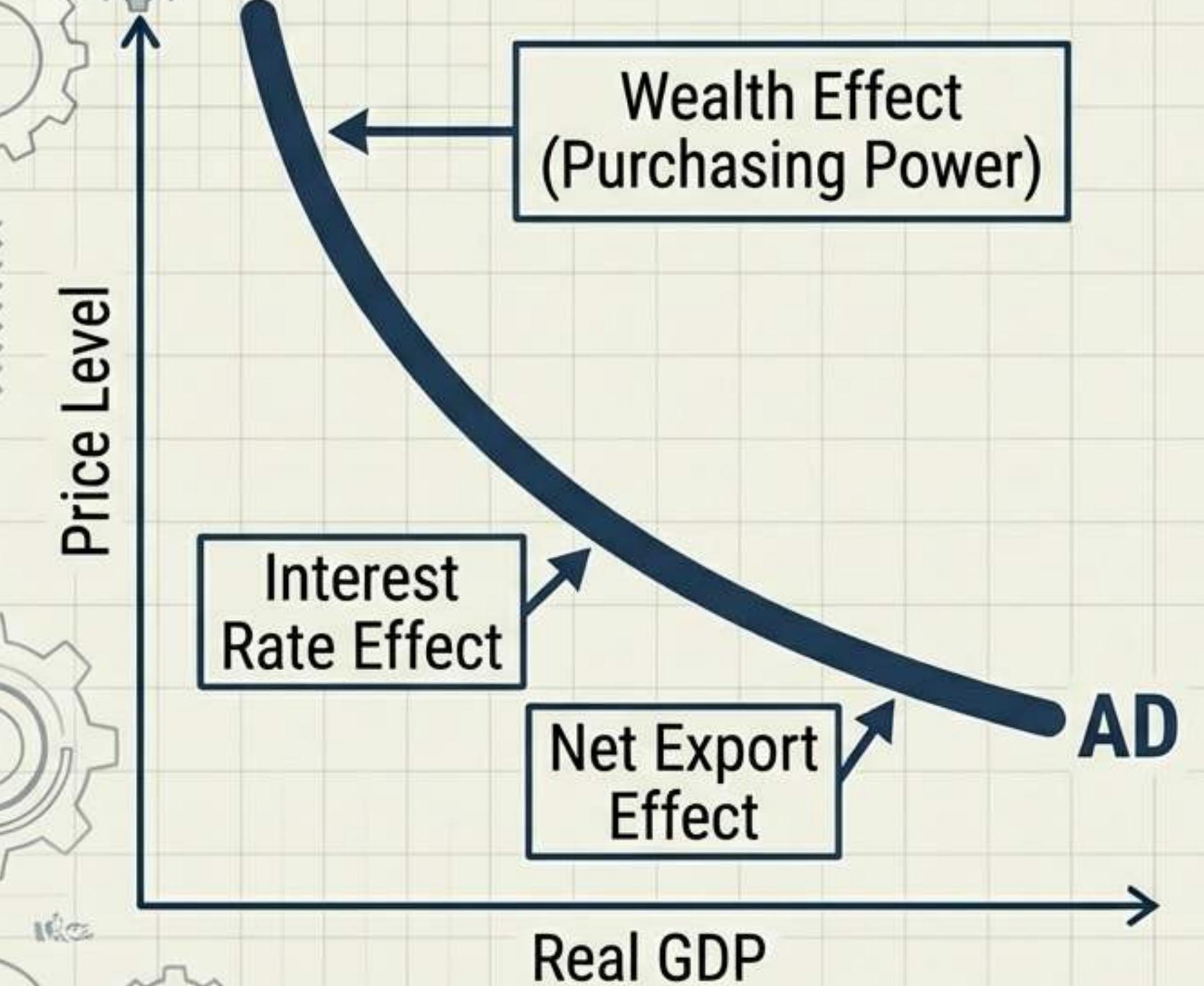
Potential Output, Trend line, Recovery.



TRAP ALERT

A recession is defined by OUTPUT (GDP), not just unemployment or consumer sentiment.

The Engine Block: Aggregate Demand (AD)



THE SHIFTERS ($C+I+G+NX$)

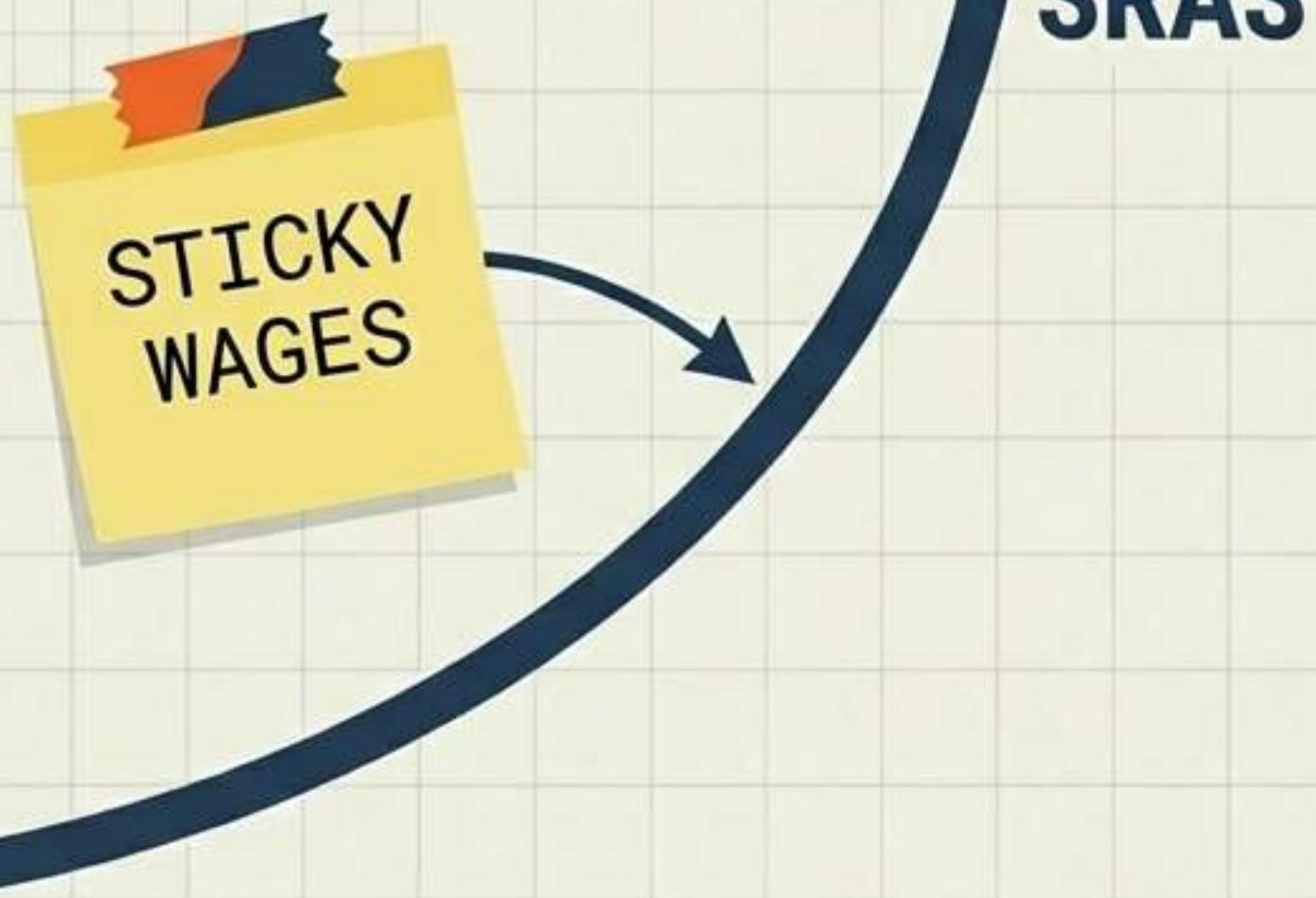
- Consumer Confidence (C)
- Business Investment (I)
- Gov Policy (G)
- Foreign Exchange (NX)



TRAP ALERT

Do NOT use 'Substitution Effect' (Micro) to explain the AD slope. Use Wealth/Interest Rate effects.

The Sticky Short Run: SRAS



SIGNAL WORDS

Sticky wages, Input costs, Supply shock.

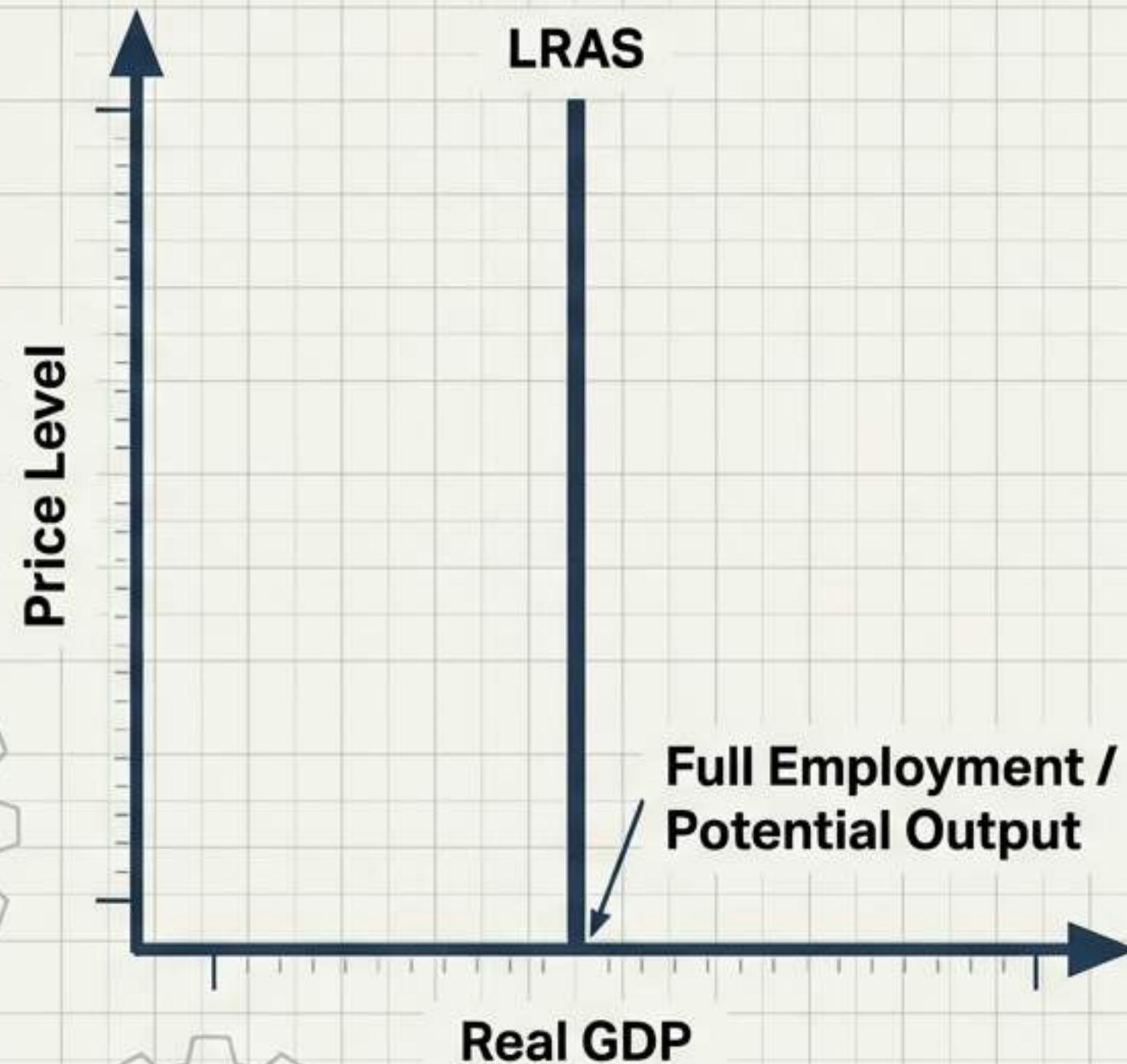
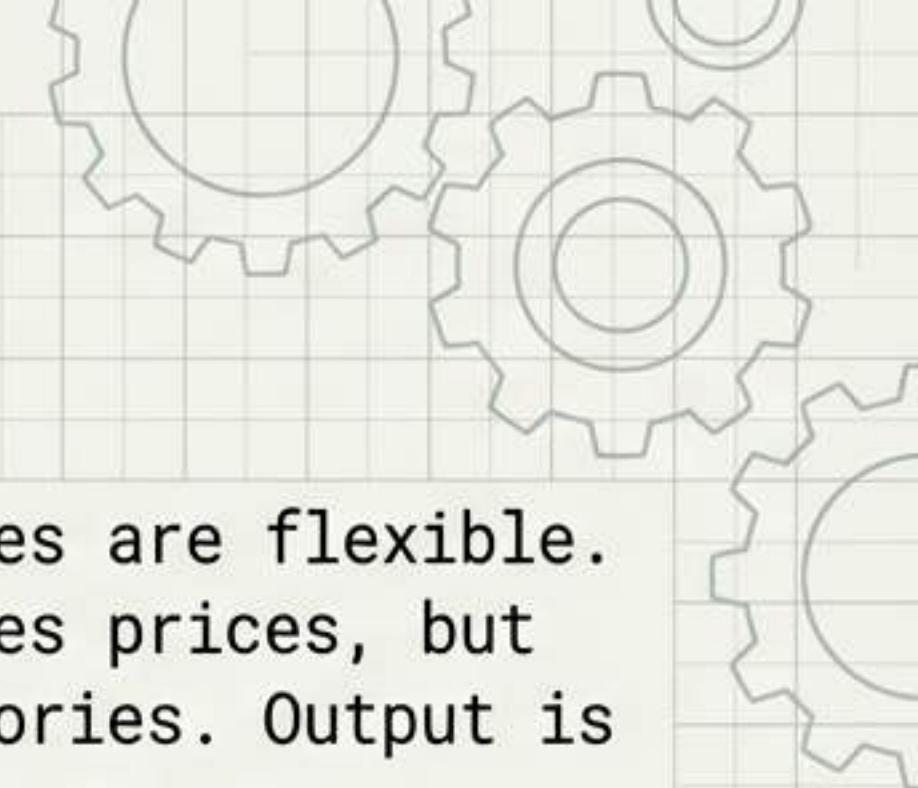
In the short run, input prices (wages) are sticky. If product prices rise but wages stay low, profit margins expand = Firms produce more.

SHIFTERS (I.R.A.P.)

- I: Inflationary Expectations
- R: Resource Prices (Oil, Wages)
- A: Actions of Gov (Taxes)
- P: Productivity



The Flexible Long Run: LRAS



In the long run, wages are flexible. Printing money changes prices, but does not create factories. Output is determined by REAL resources.

SHIFTERS (Real Stuff Only)

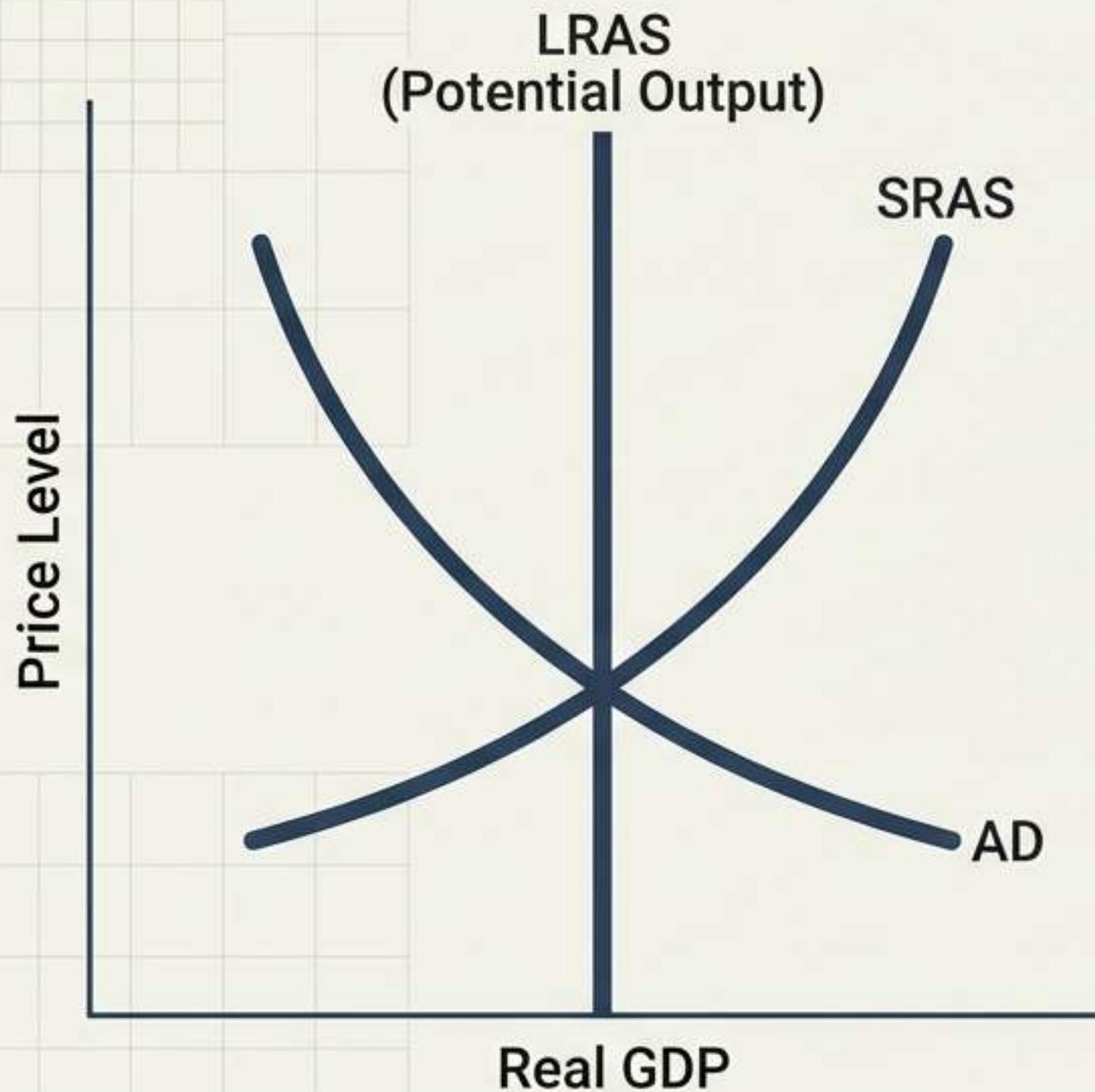
- Quantity/Quality of Resources (Land, Labor, Capital)
- Technology



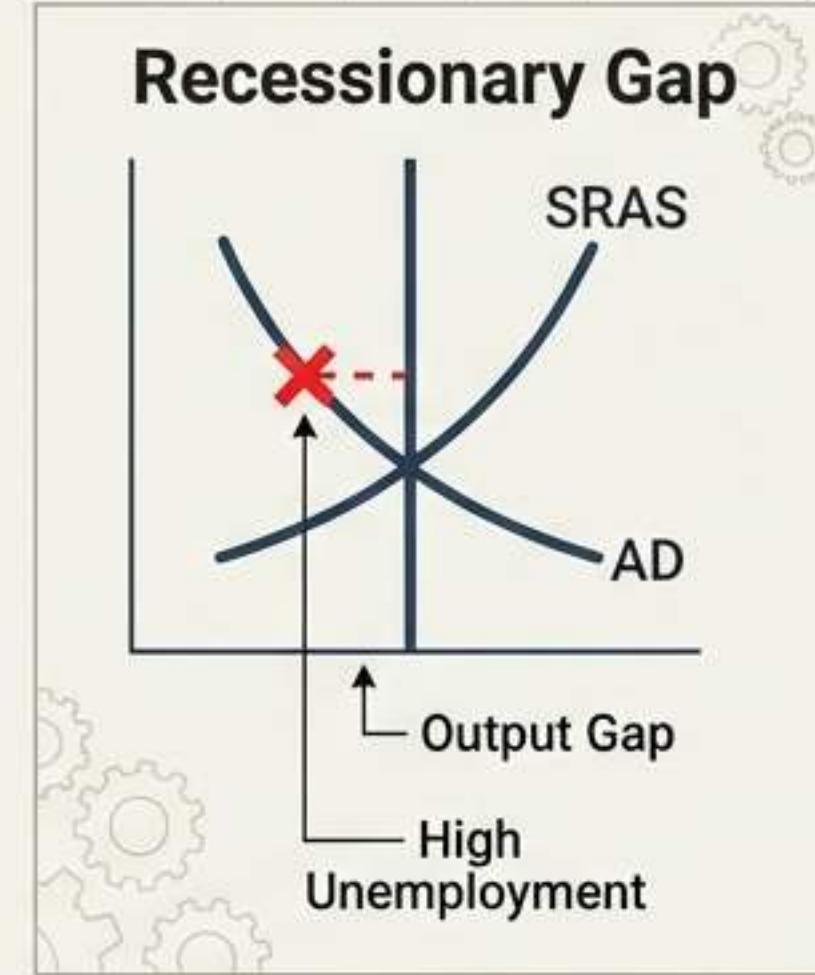
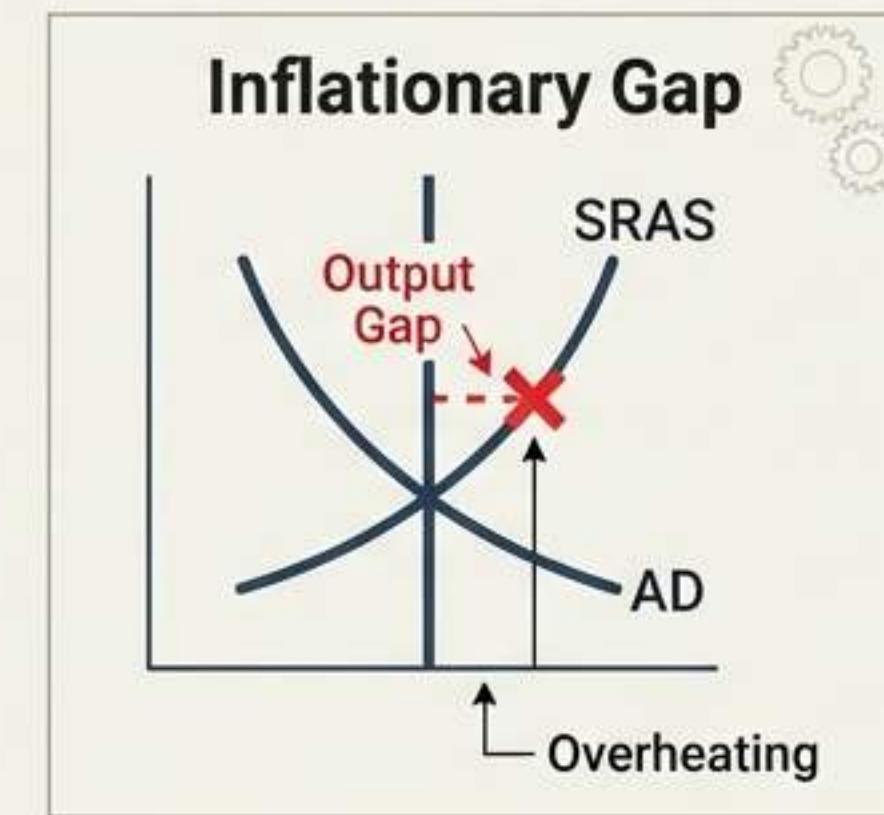
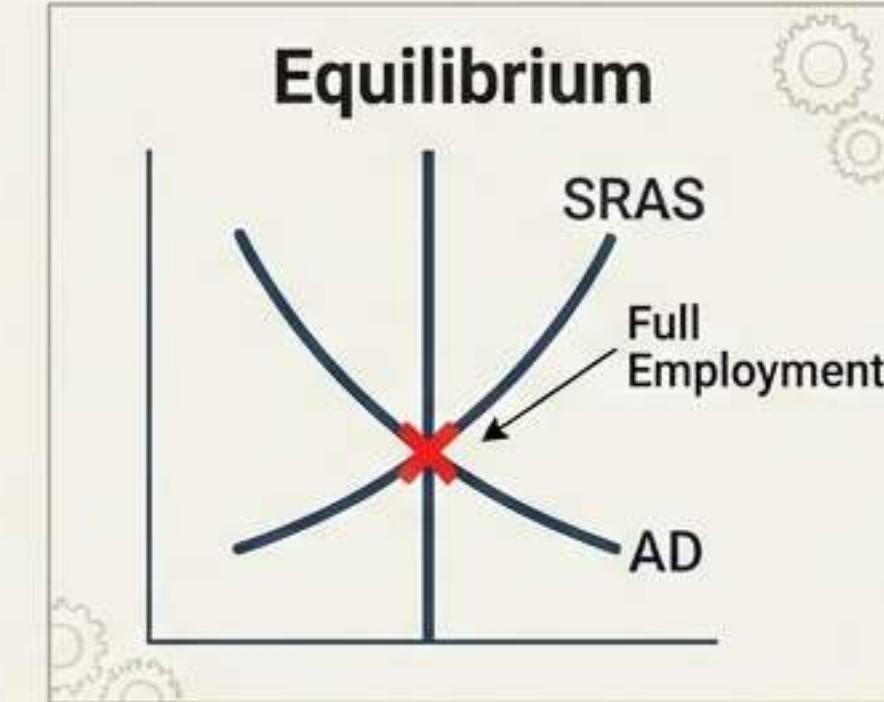
! TRAP ALERT

Price level changes NEVER shift the LRAS. Only "Real" changes (Tech, Resources) do.

The State of the Union: Equilibrium & Gaps



The Output Gap is the distance between the "X" and the vertical line.



TRAP ALERT

The rest of this course is simply about how the Government and the Fed try to push the "X" back to the vertical line.



Small Change, Massive Impact



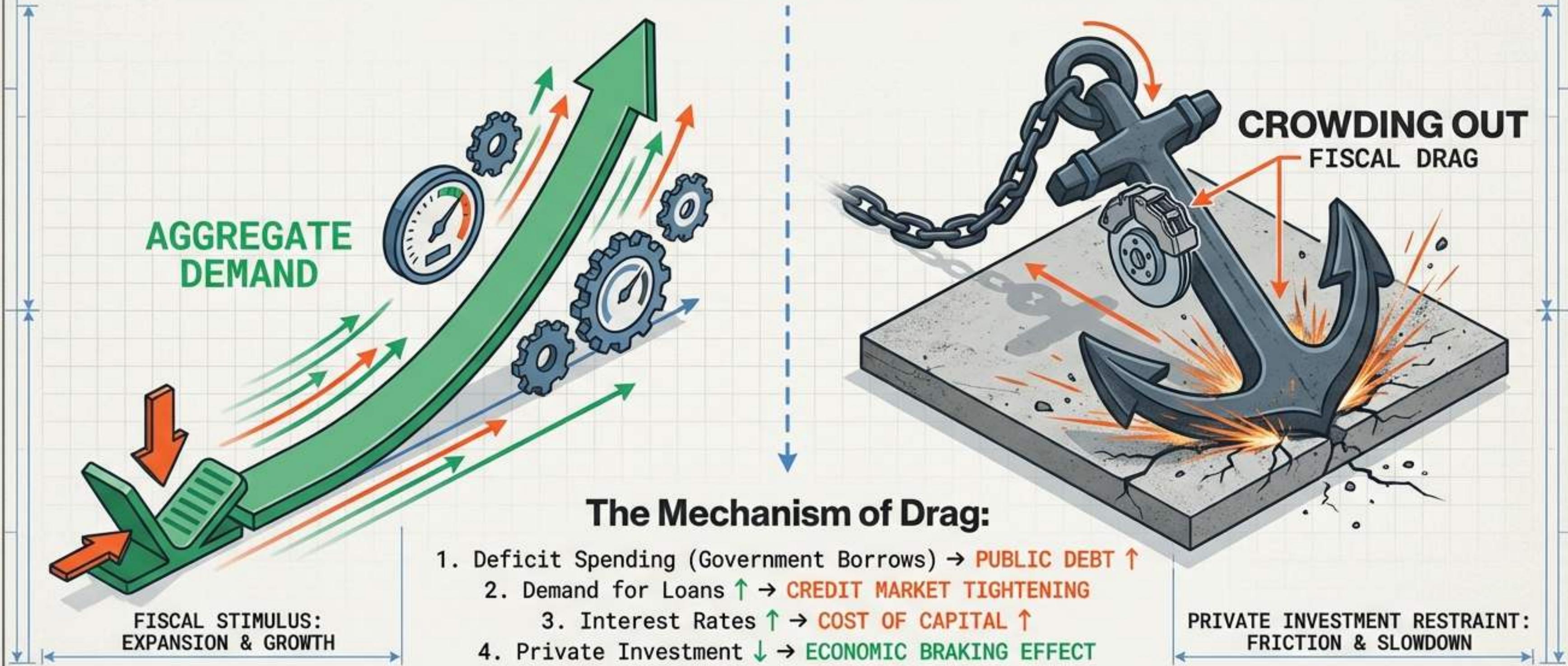
$$\text{Spending Multiplier} = \frac{1}{(1-\text{MPC})}$$

$$\text{Spending Multiplier} = \frac{1}{\text{MPS}}$$

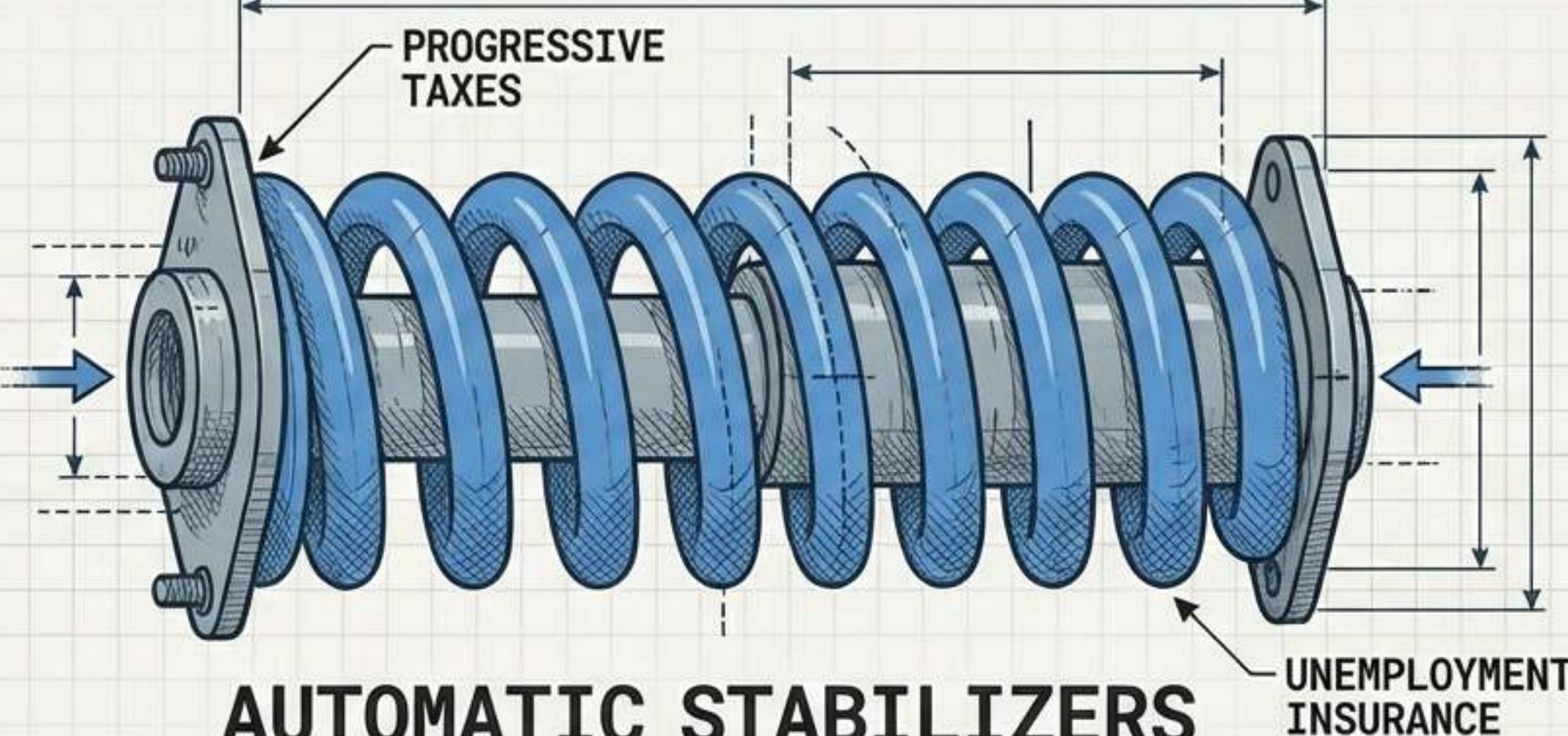
WARNING:
The Tax Multiplier
is always smaller.

Formula: $\frac{-\text{MPC}}{\text{MPS}}$

The Government's Gas Pedal... and the Parking Brake



The Economy's Shock Absorbers



AUTOMATIC STABILIZERS

RECESSION
HITS

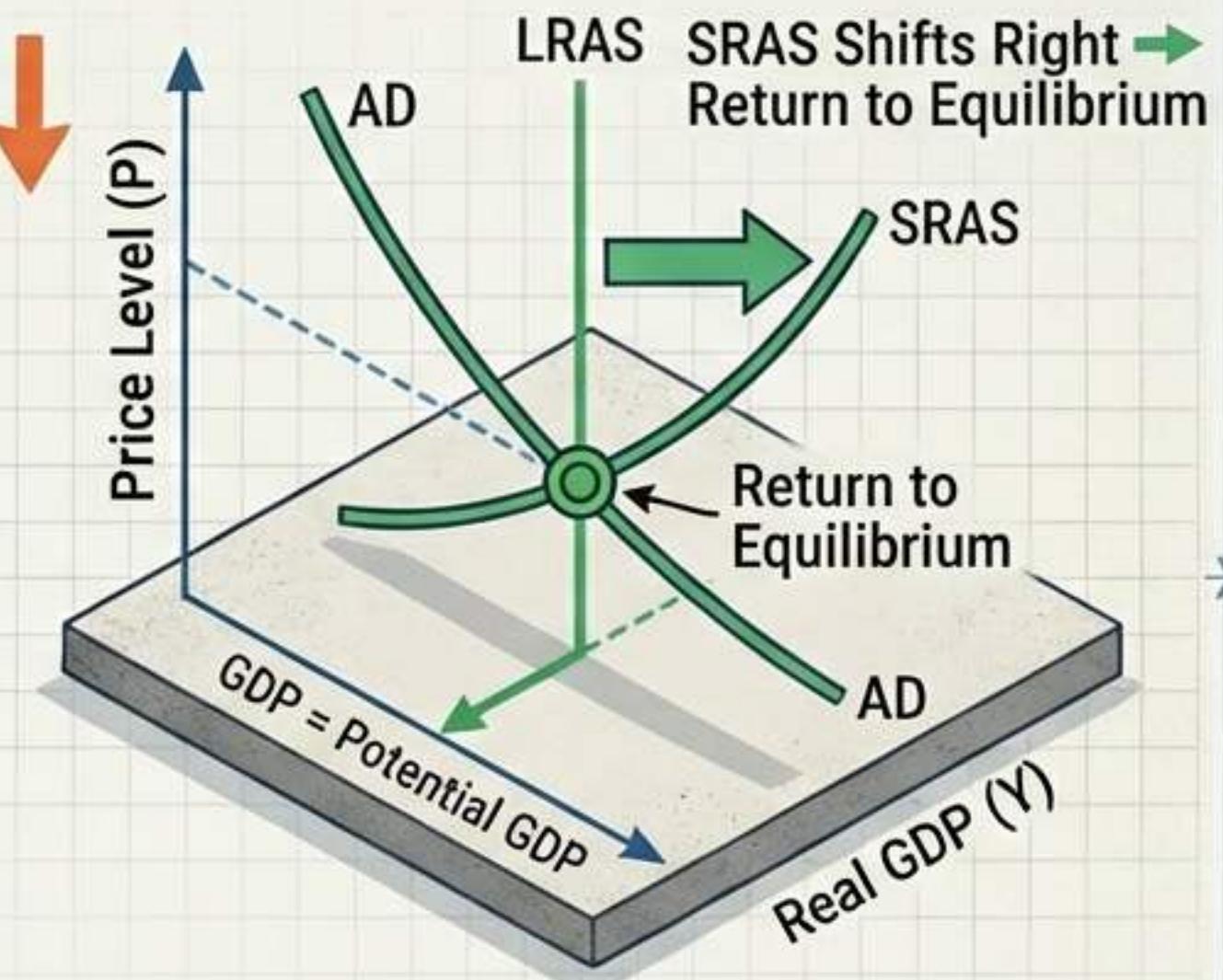
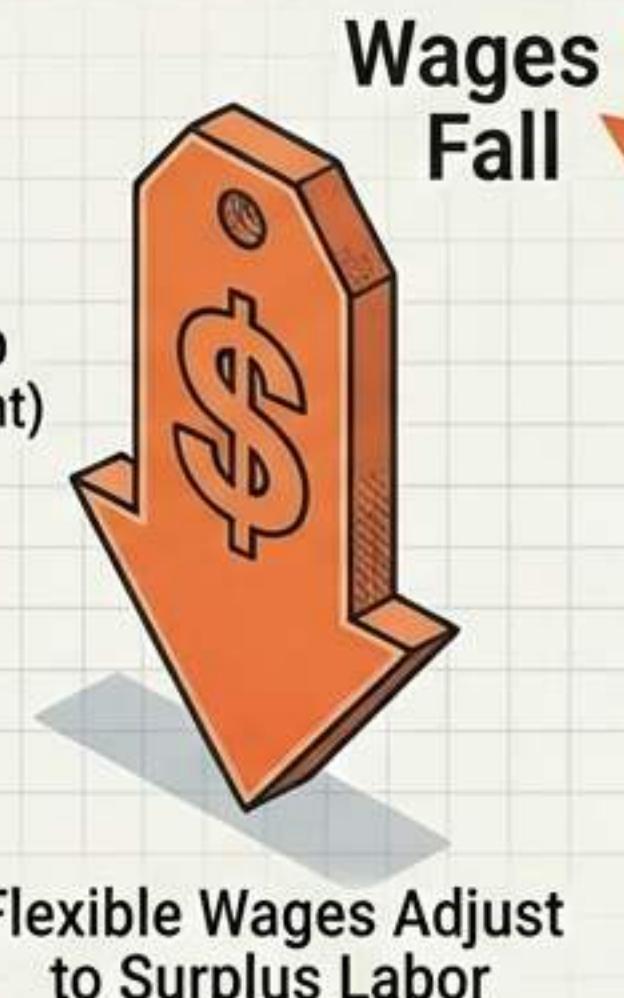
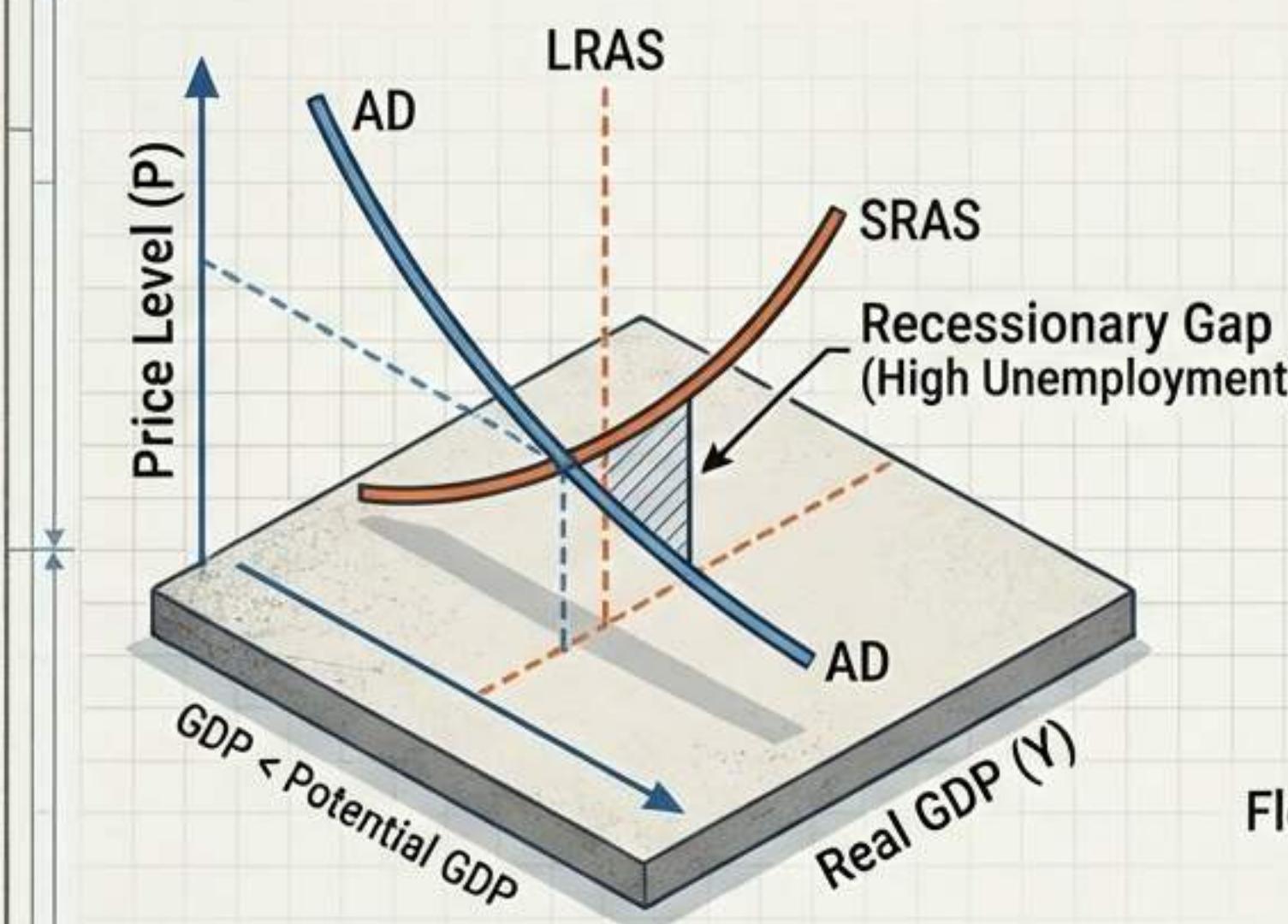
GDP
FALLS

TAX REVENUE
↓
+ TRANSFERS ↑

AGGREGATE
DEMAND
SUPPORTED



The Waiting Game: Self-Correction



The Mechanism: Flexible Wages

In the Long Run, the economy heals itself without intervention.



More Than Just Cash



Medium of Exchange
(Trade)

Unit of Account
(Measurement)

Store of Value
(Future Power)

LIQUIDITY HIERARCHY

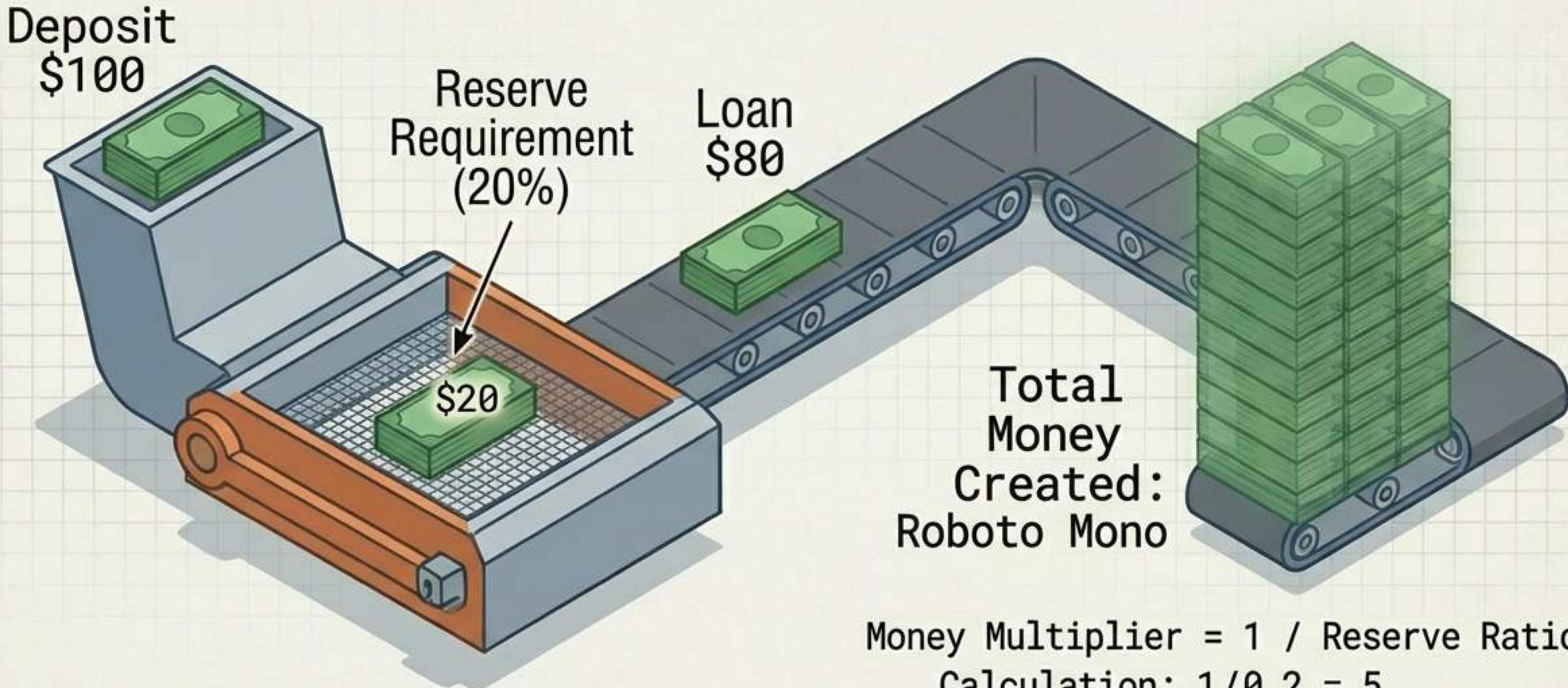
M1: Cash + Checking
(Most Liquid)



M2: M1 +
Savings + CDs
(Less Liquid)

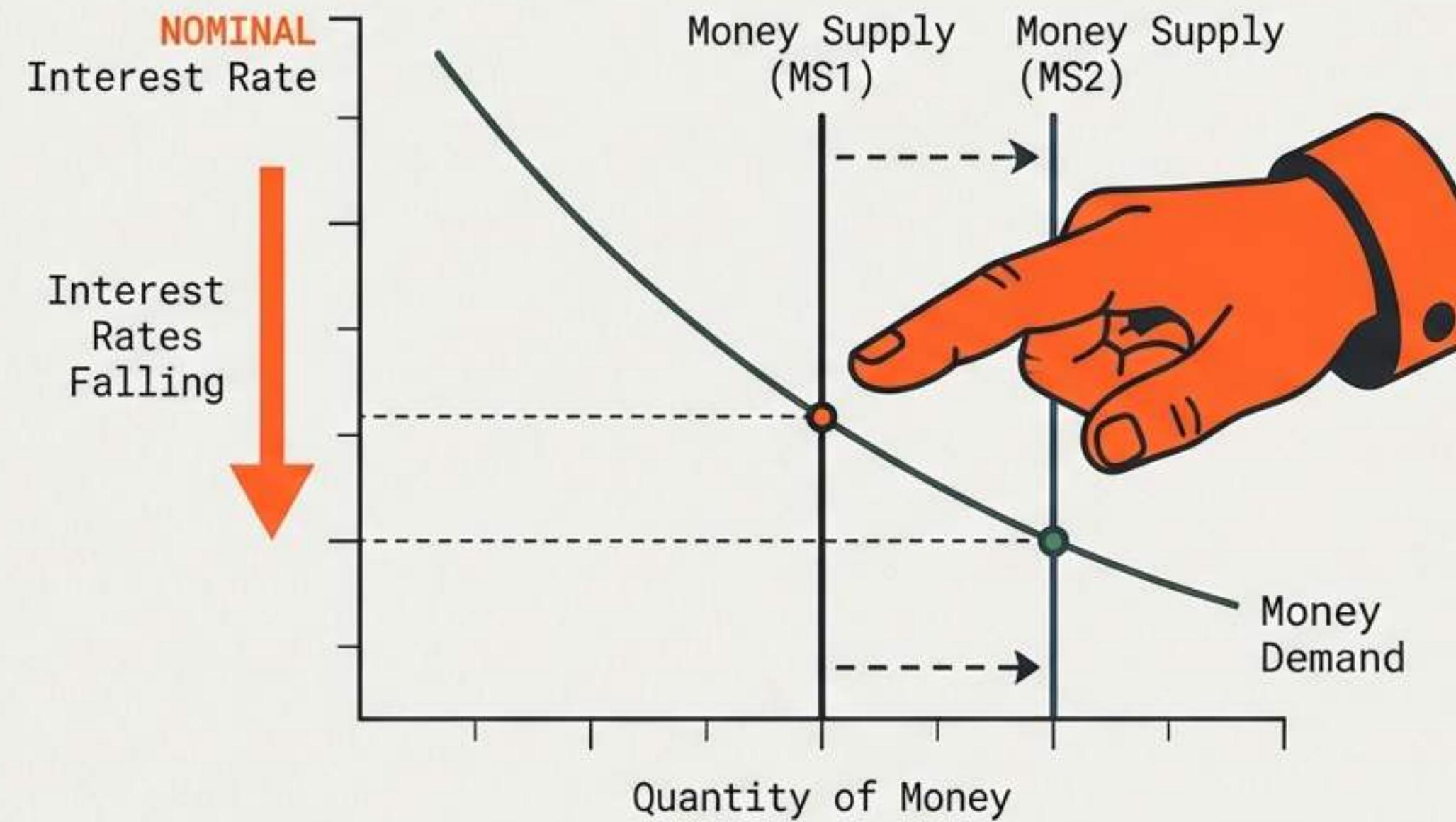


How Banks Create Money

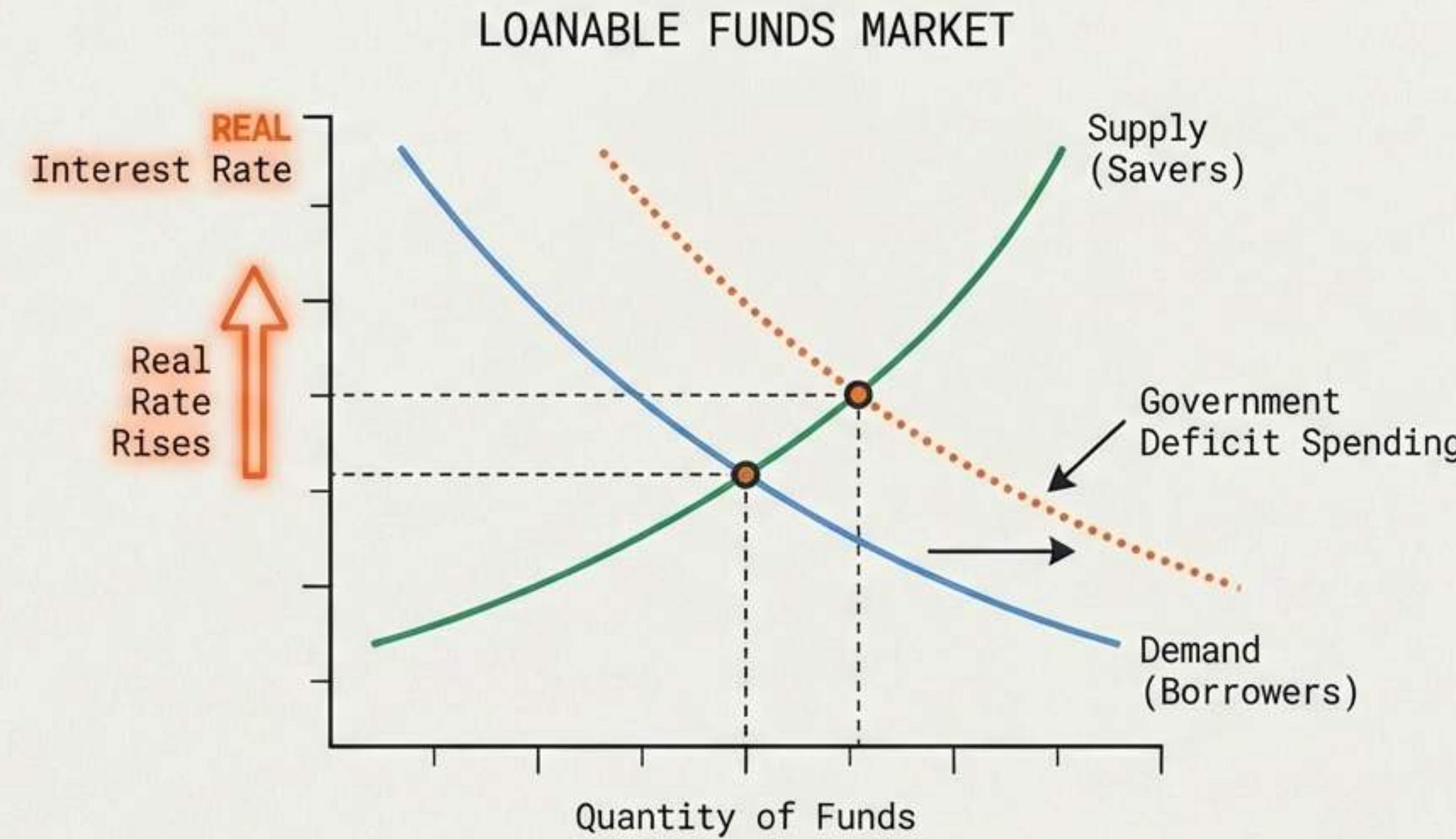


Supply Determines Price

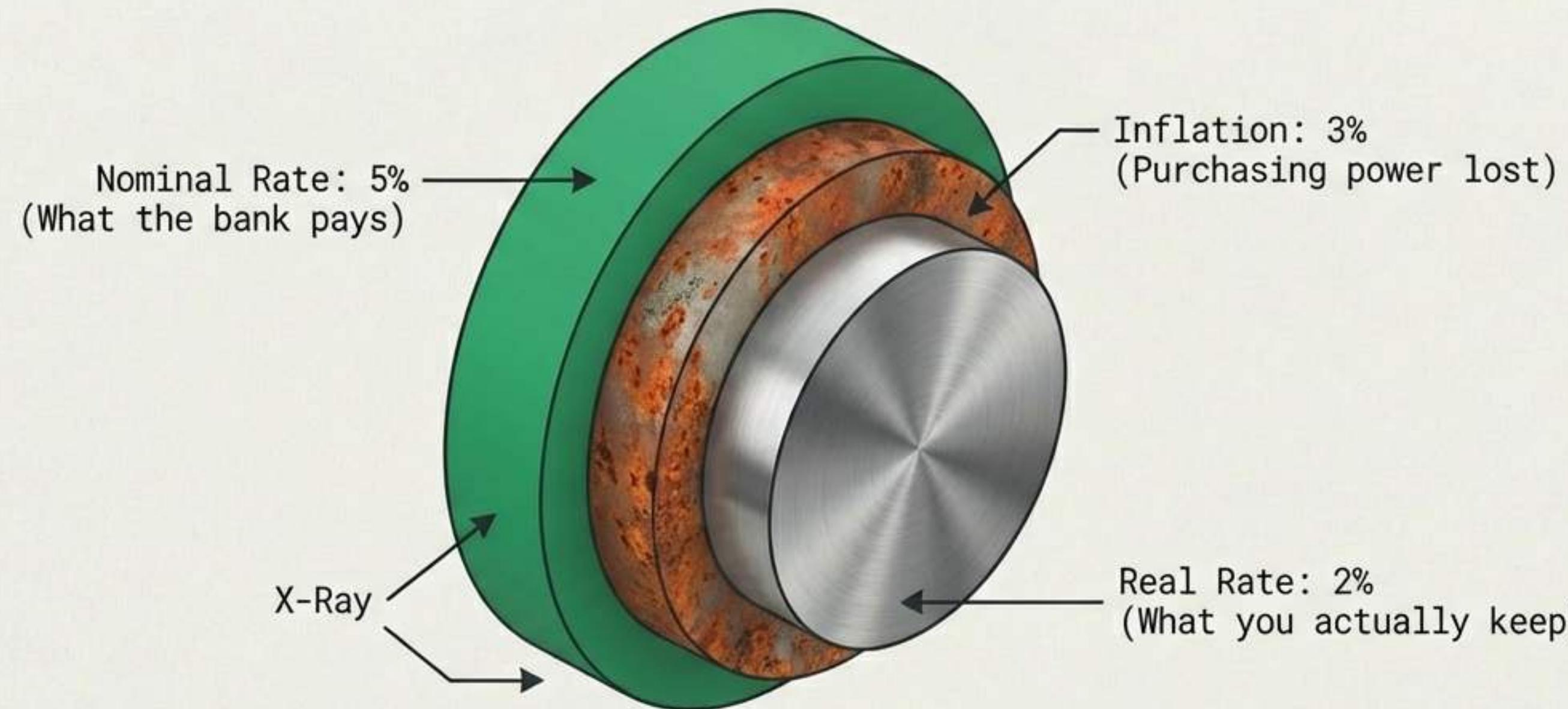
THE MONEY MARKET



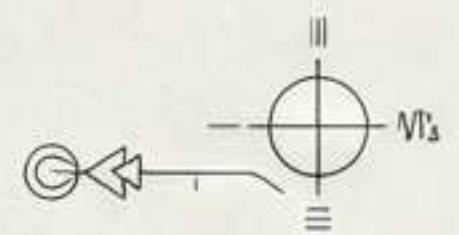
Savers vs. Borrowers



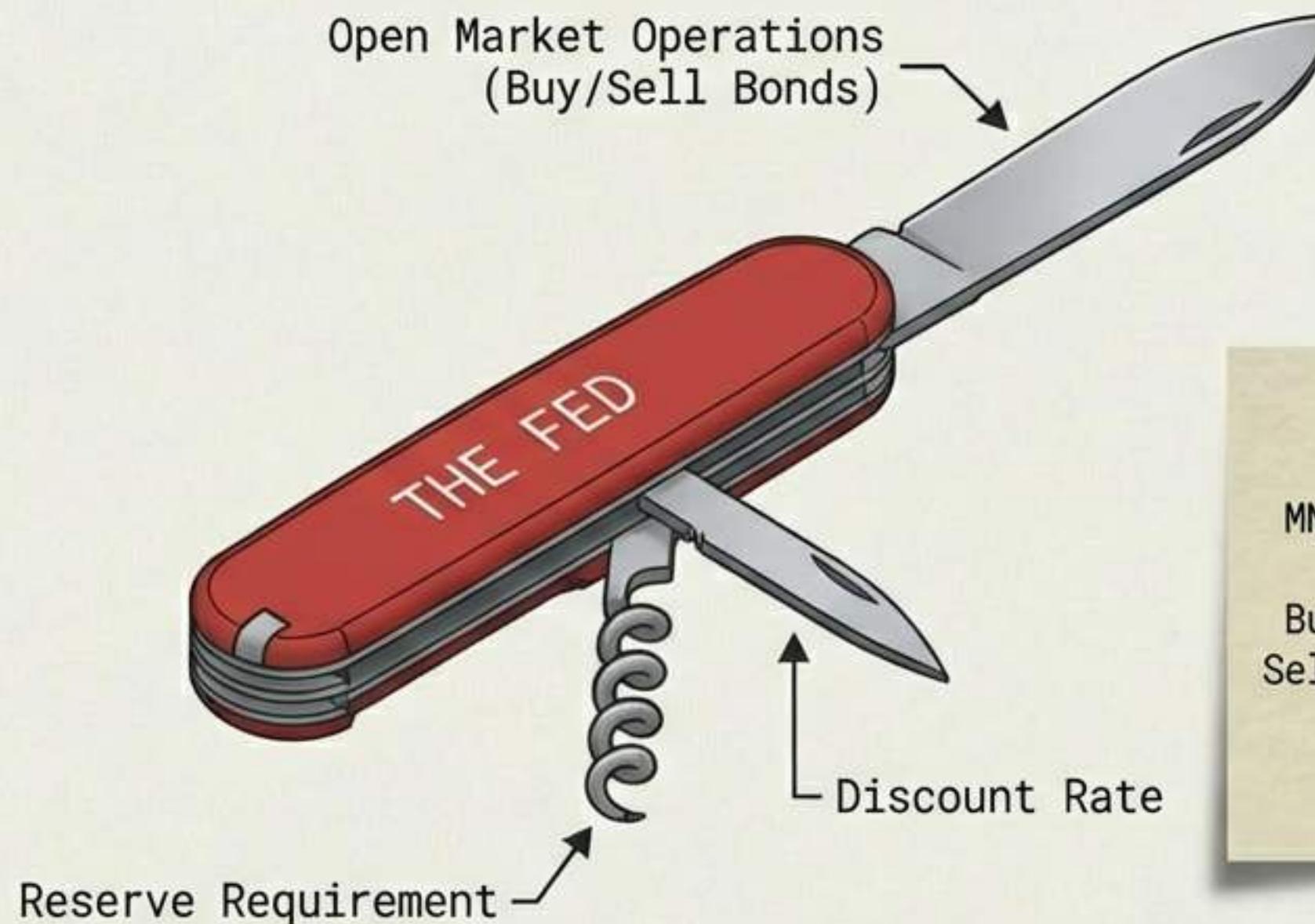
The Fisher Effect



$$\text{Real Interest Rate} = \text{Nominal Rate} - \text{Inflation Rate}$$



How the Fed Steers the Ship

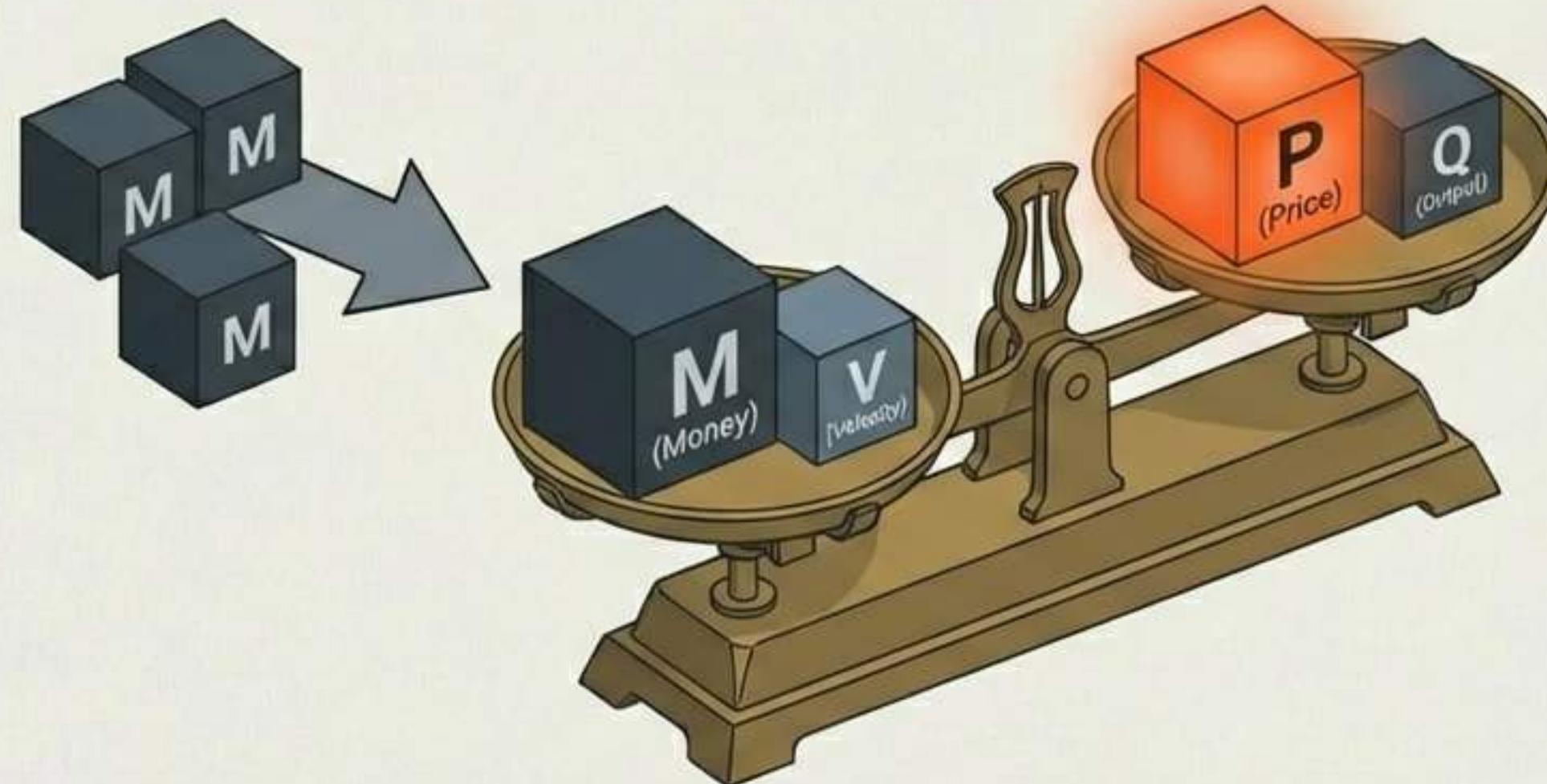


MNEMONIC: Buy-Big / Sell-Small

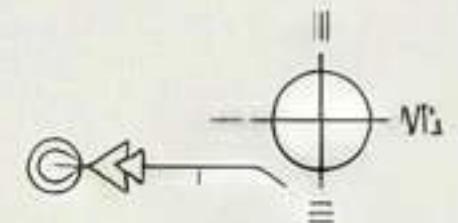
Buy Bonds = Money Supply Bigger
Sell Bonds = Money Supply Smaller

The Inflation Equation

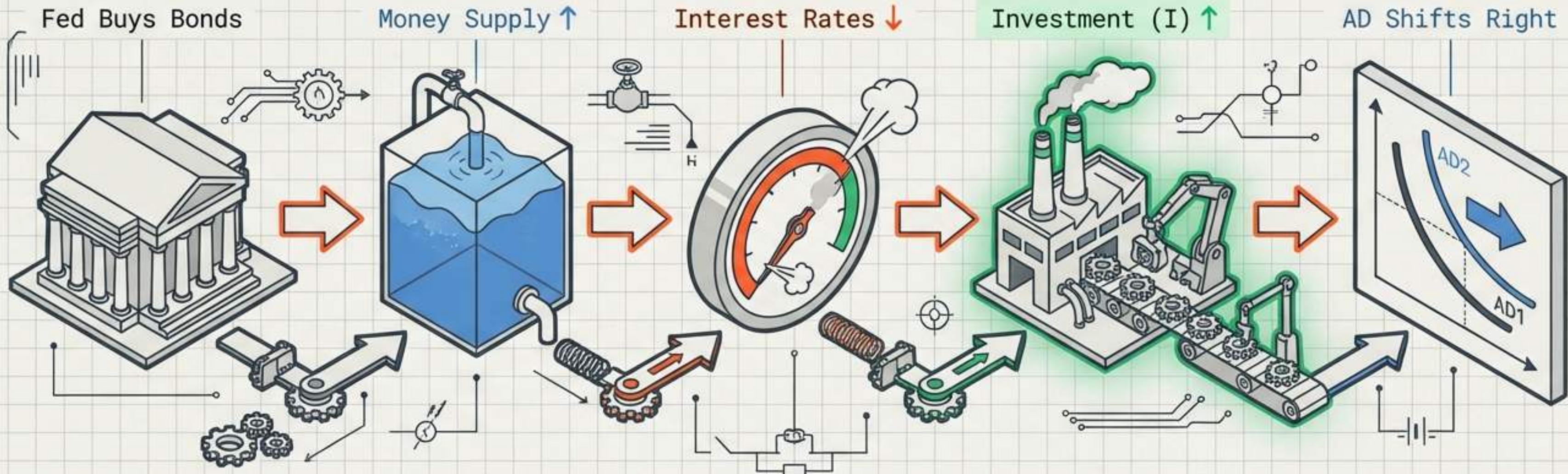
$$M \times V = P \times Q$$



If V and Q are sticky, increasing M only raises P .

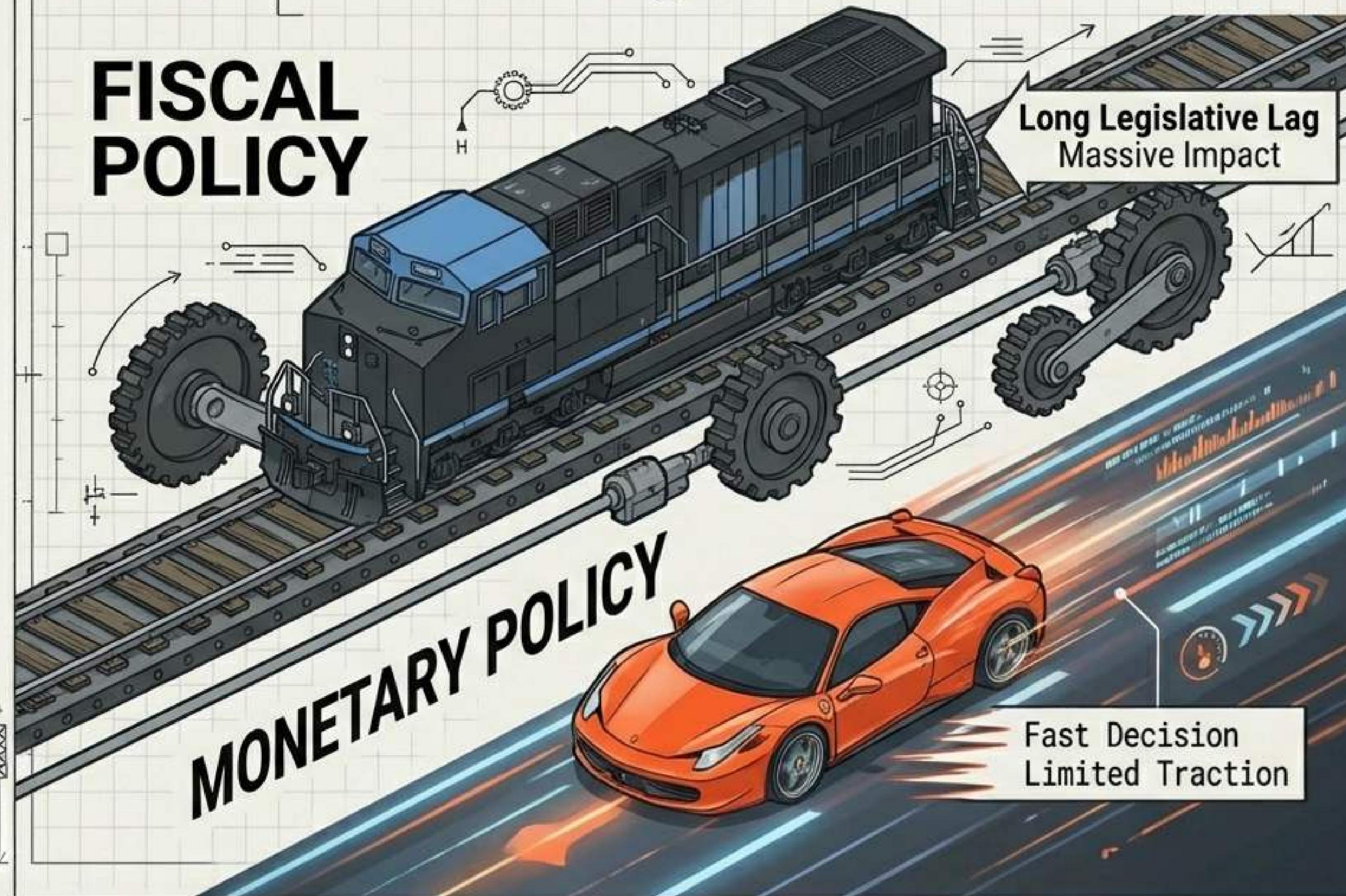


From the Fed to the Factory Floor



The Freight Train vs. The Ferrari

**FISCAL
POLICY**



Lags to Know:

1. Recognition Lag
2. Legislative Lag
3. Implementation Lag



Lags to Know:

1. Recognition Lag
2. Legislative Lag
3. Implementation Lag



The Central Bank Thermostat

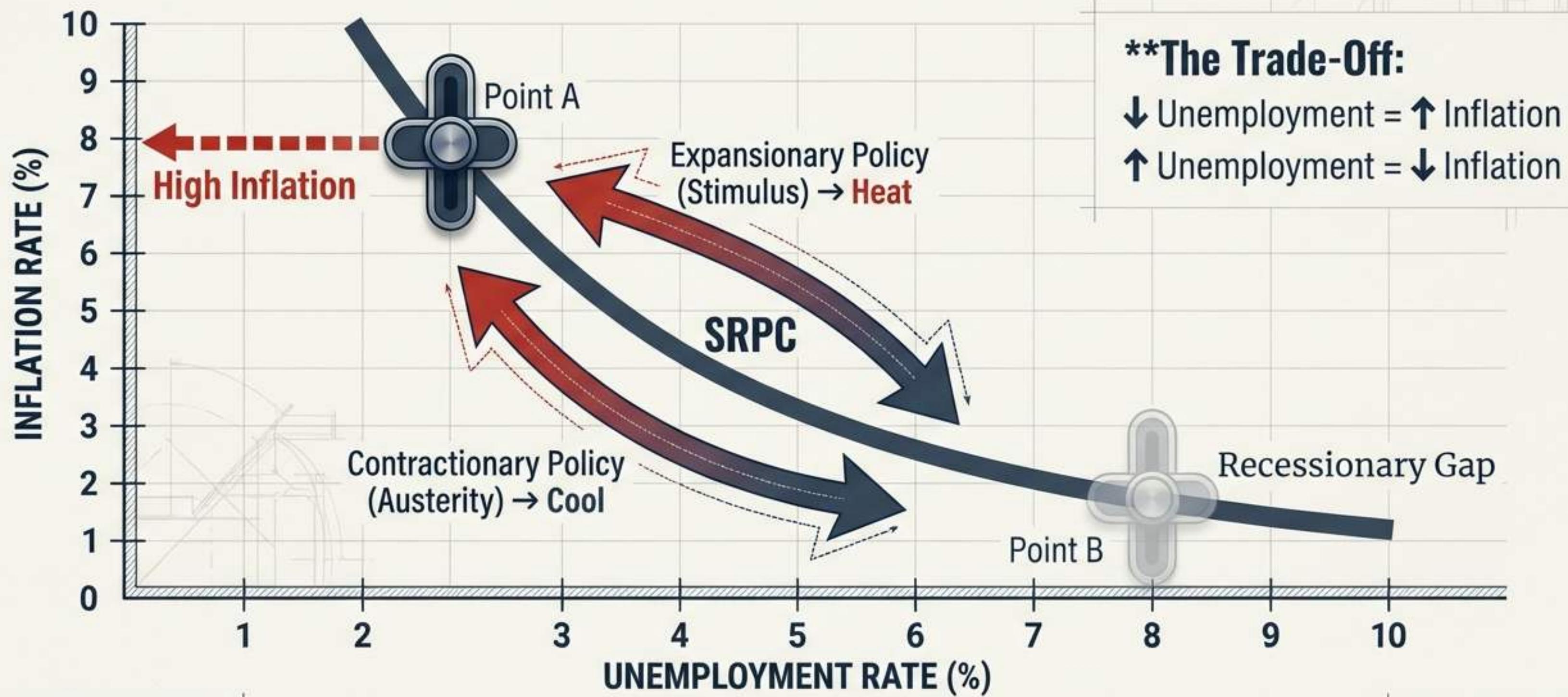


The Cost of Low Unemployment



THE COST OF LOW UNEMPLOYMENT

Short-Run Phillips Curve (SRPC)

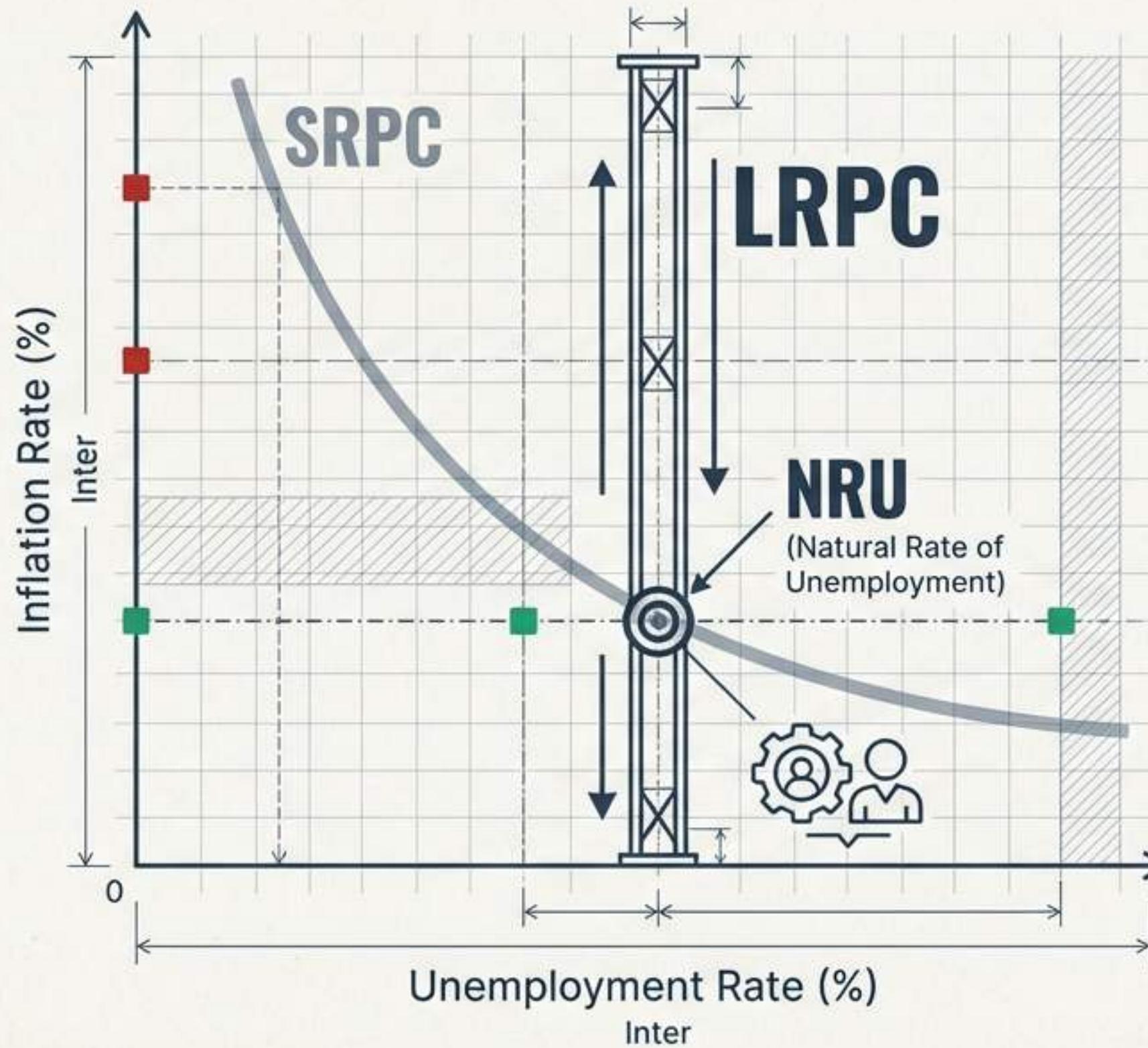


THE TRADE-OFF DISAPPEARS (LONG RUN)

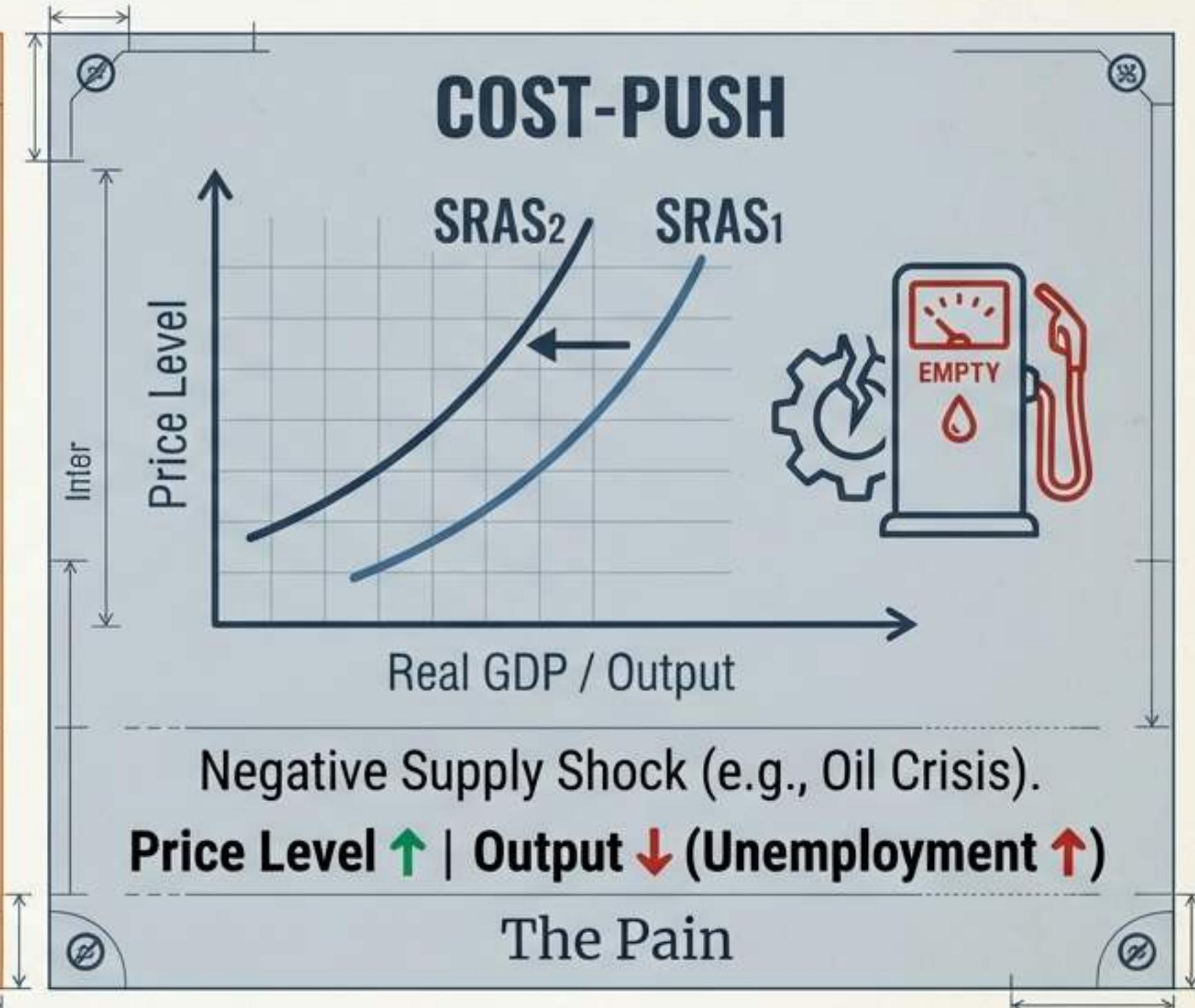
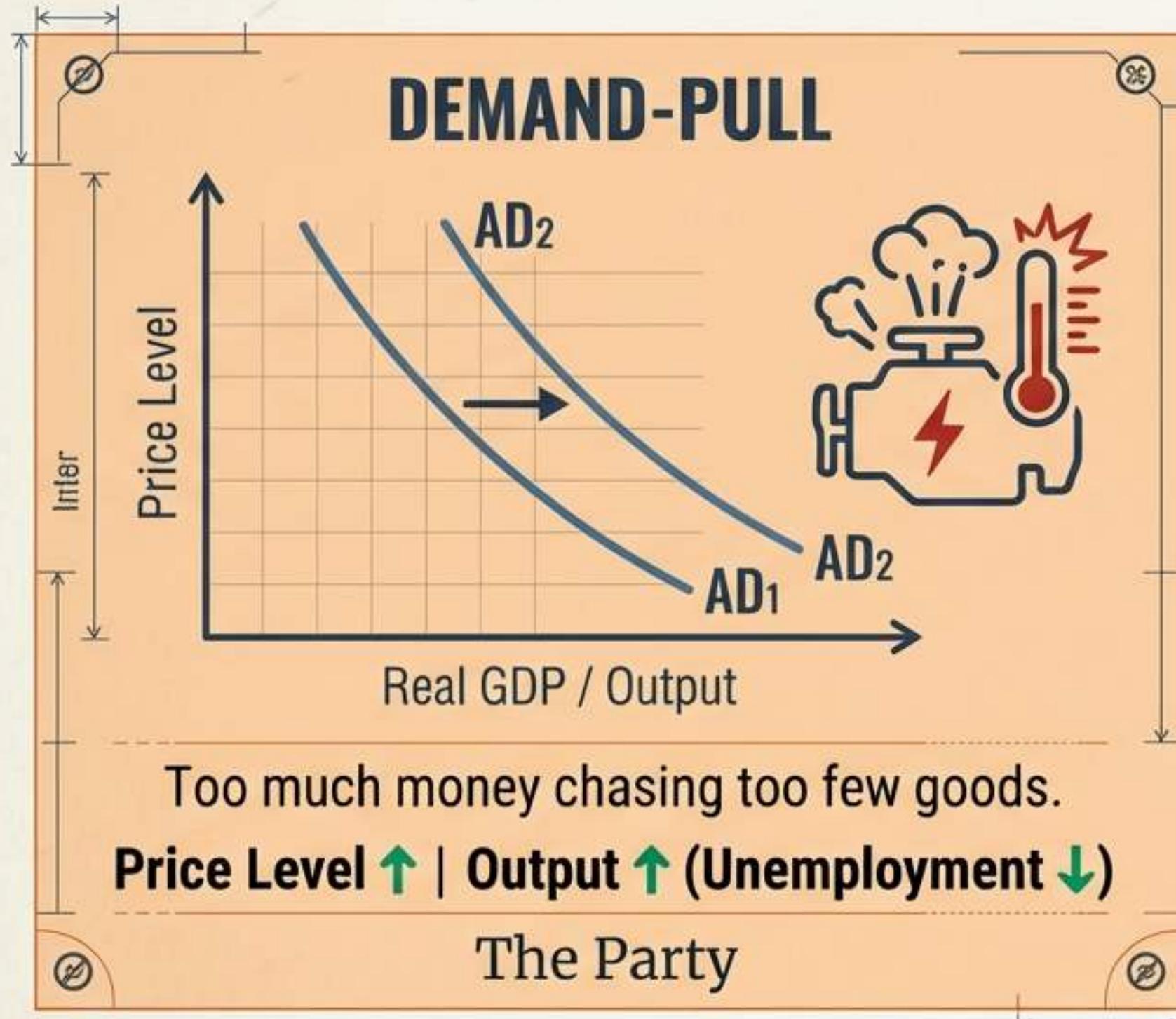
KEY CONCEPT BOX

The Anchor: 

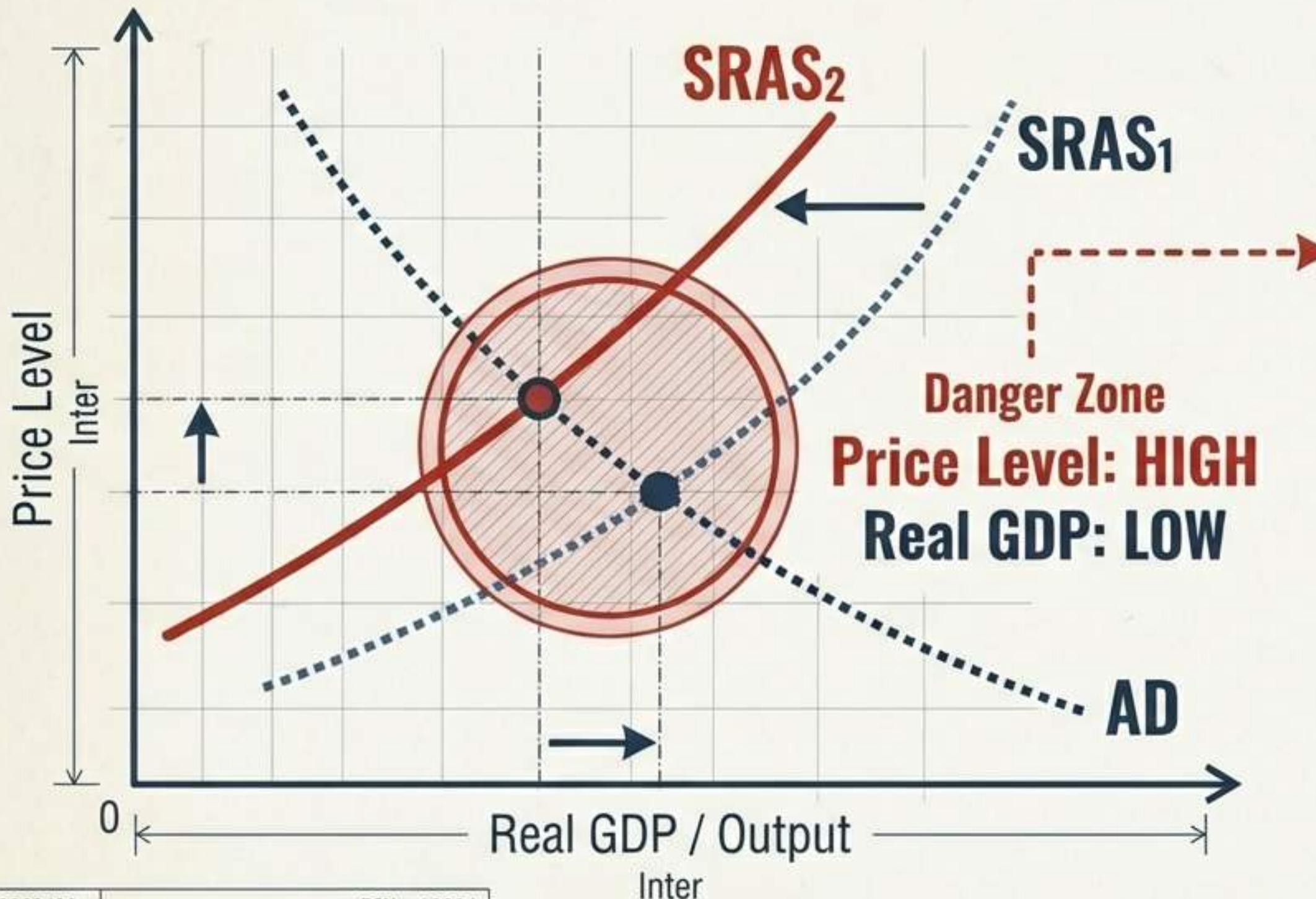
No matter how high inflation goes, the economy returns to the Natural Rate (Frictional + Structural). 



NOT ALL INFLATION IS CREATED EQUAL



STAGFLATION: THE POLICY NIGHTMARE

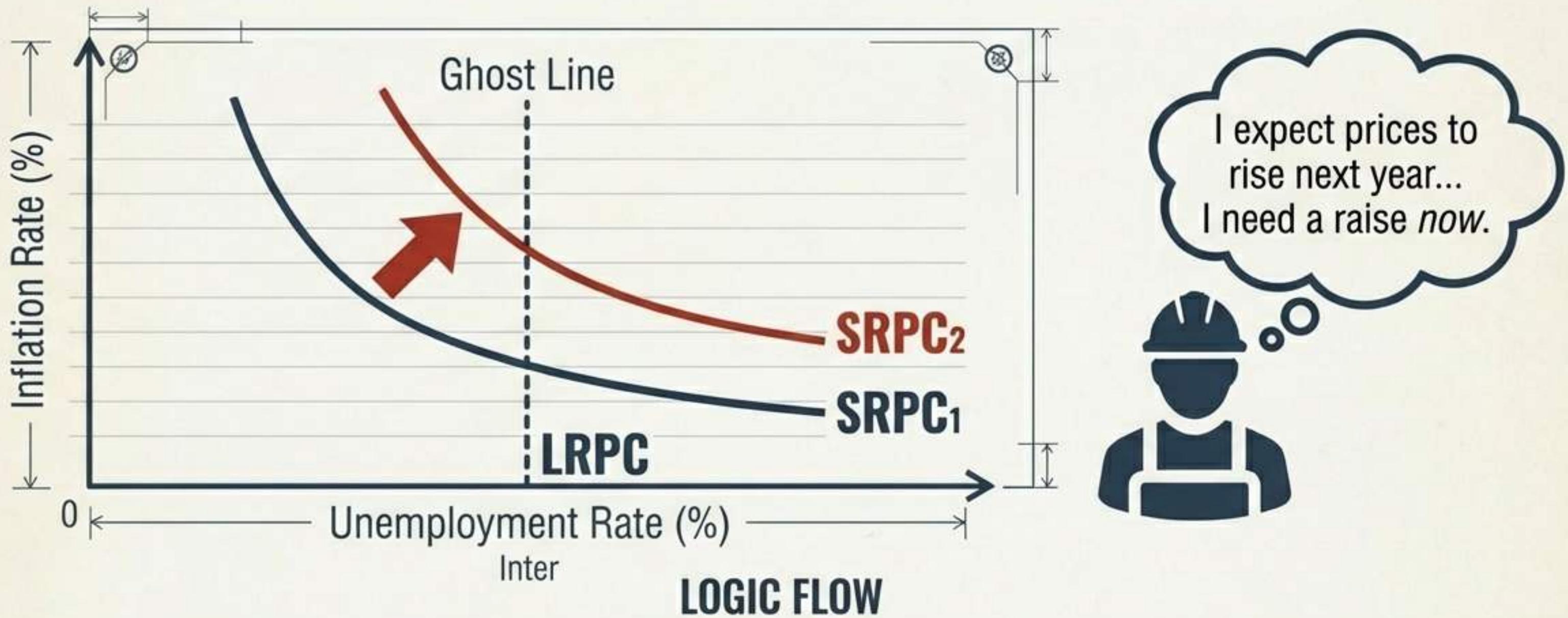


The Policymaker's Bind:

- **Fight Inflation?**
(Contractionary)
→ Kills more jobs.
- **Fight Unemployment?**
(Expansionary)
→ Spikes inflation.

Result: STUCK

WHEN EXPECTATIONS BECOME REALITY



Step 1: Public expects higher inflation.

TSP: 2263433

ZCN: 10965

Step 2: Workers demand higher nominal wages.

LOGIC FLOW

Step 3: Costs rise, shifting SRPC Up/Right.



Result: Same unemployment, higher inflation.



CHOOSING THE WEAPON: FISCAL VS. MONETARY



FISCAL POLICY

Controller:
Congress & President

Tools:

- G (Government Spending)
- T (Taxes)

The Cost: Deficits & Debt.

Side Effect: **Crowding Out**

(Gov borrows → Rates ↑ → Inv ↓)

Speed: Slow (Political Lags).

TSP: 2263433

ZCN: 10964

MACROECONOMIC BLUEPRINTS | VOL. 2



MONETARY POLICY

Controller:
The Central Bank (Fed)

Tools:

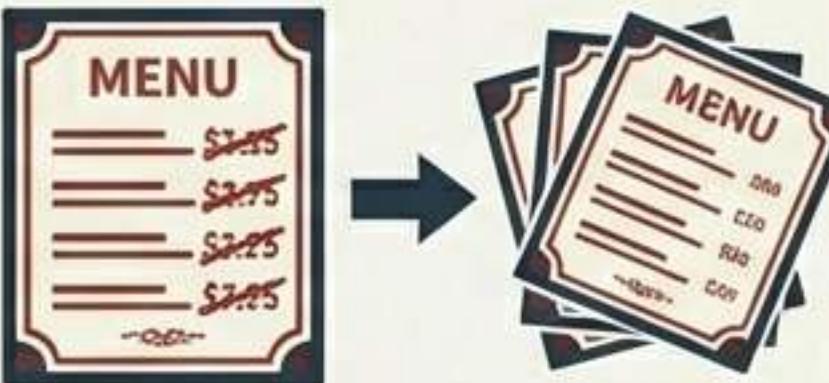
- Open Market Operations
- Discount Rate / Reserve Req

The Cost: Blunt Instrument.

Speed: Fast implementation.

WHY WE FIGHT INFLATION

Menu Costs



Resources wasted changing listed prices.

Shoe-Leather Costs



Time/effort wasted reducing cash holdings.

Loss of Certainty



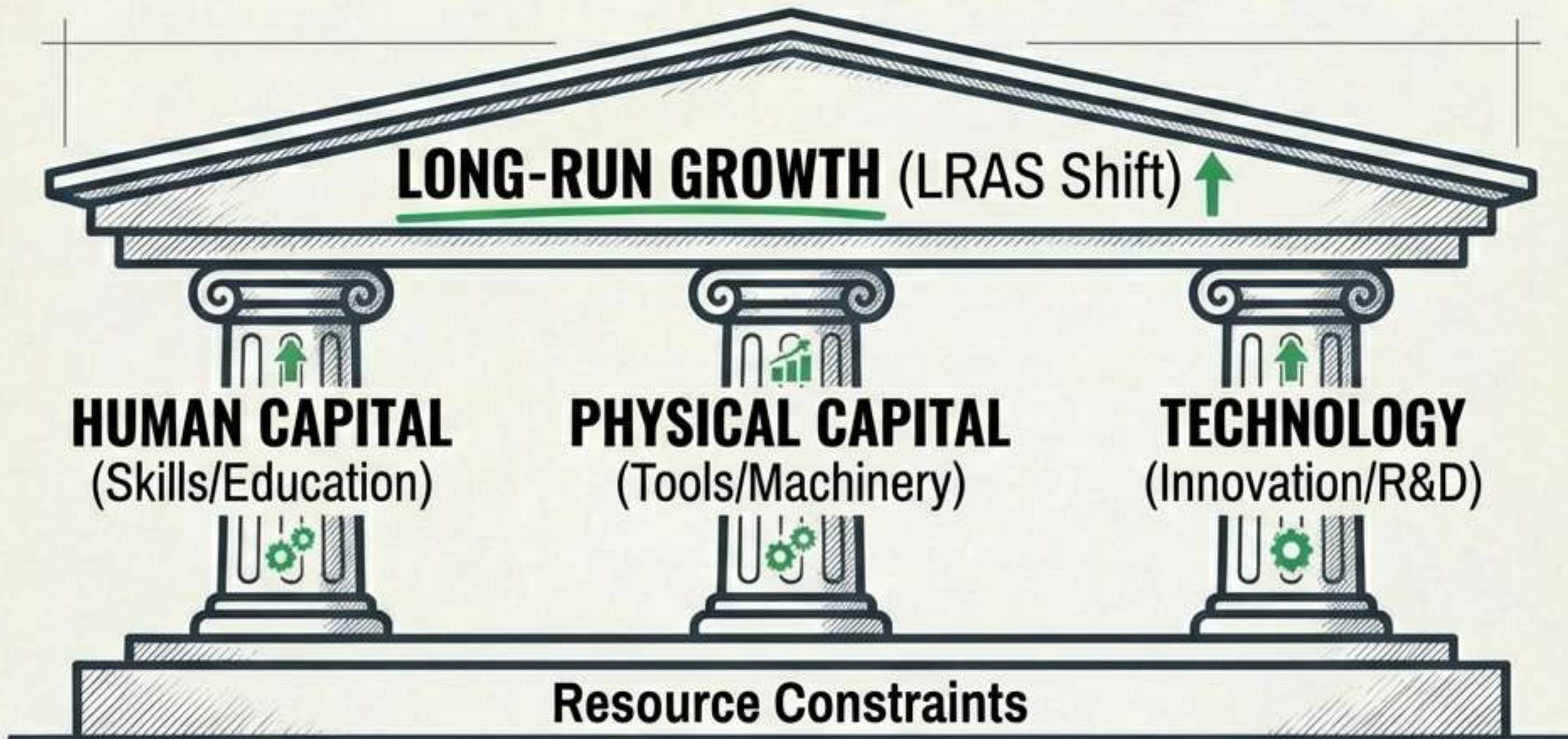
Difficulty in long-term planning.

Redistribution



Unexpected inflation helps borrowers, hurts lenders.

PILLARS OF PROSPERITY: SHIFTING THE LIMIT



Short Run:

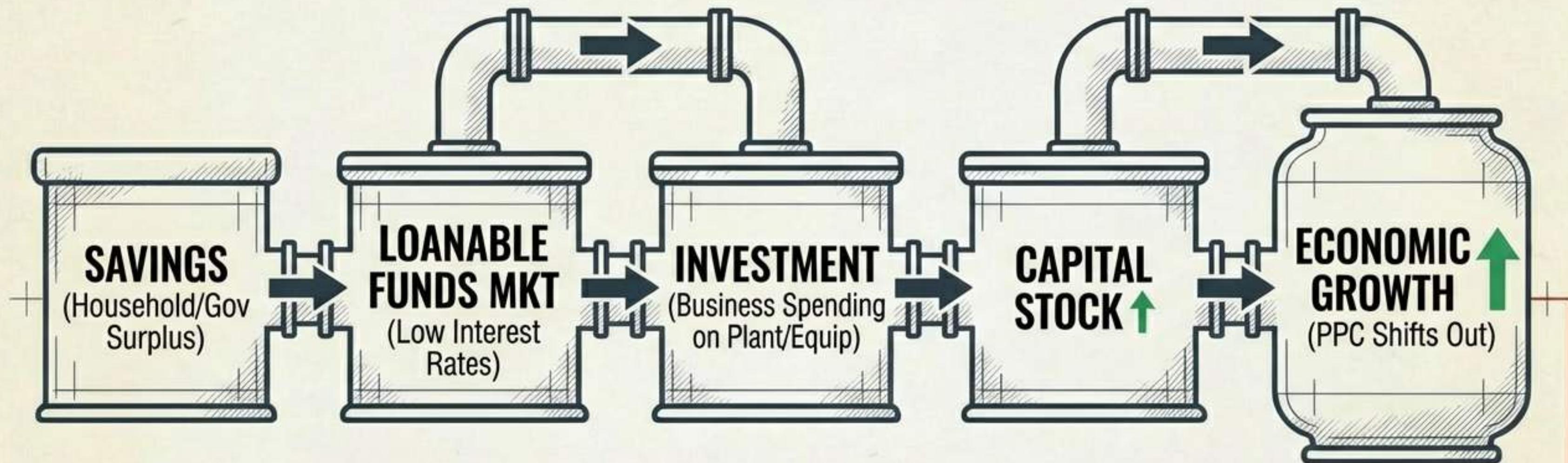
Utilizing existing resources (Reallocation).

Long Run:

Creating NEW capacity (Moving the curve).



THE ENGINE OF GROWTH: CAPITAL ACCUMULATION



THE LEAKAGE: CROWDING OUT

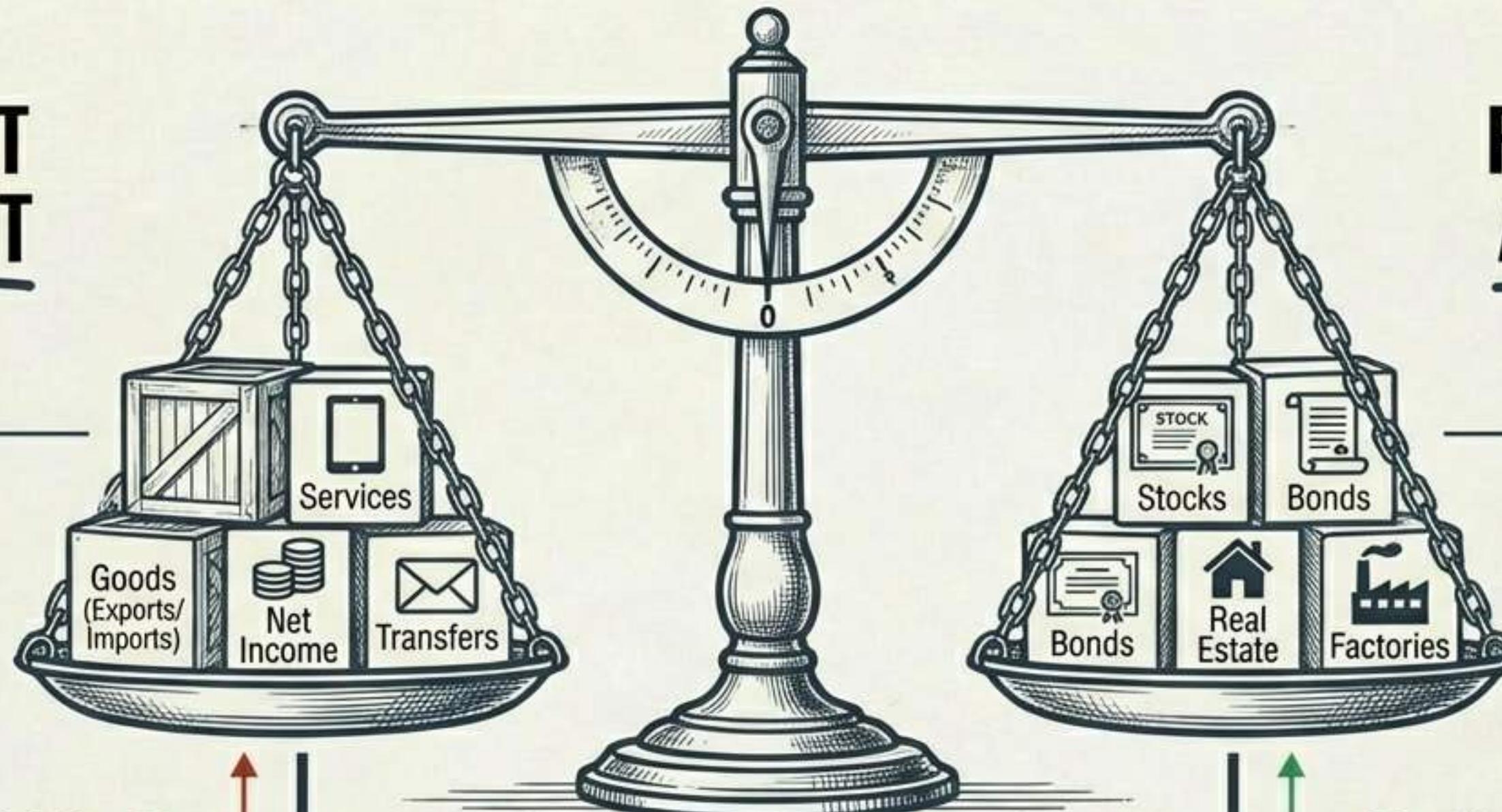
Gov Deficits → Interest Rates ↑ → Investment ↓



THE GLOBAL LEDGER: BALANCE OF PAYMENTS

CURRENT ACCOUNT

FINANCIAL ACCOUNT



Trade Deficit?
(Buying more than selling)



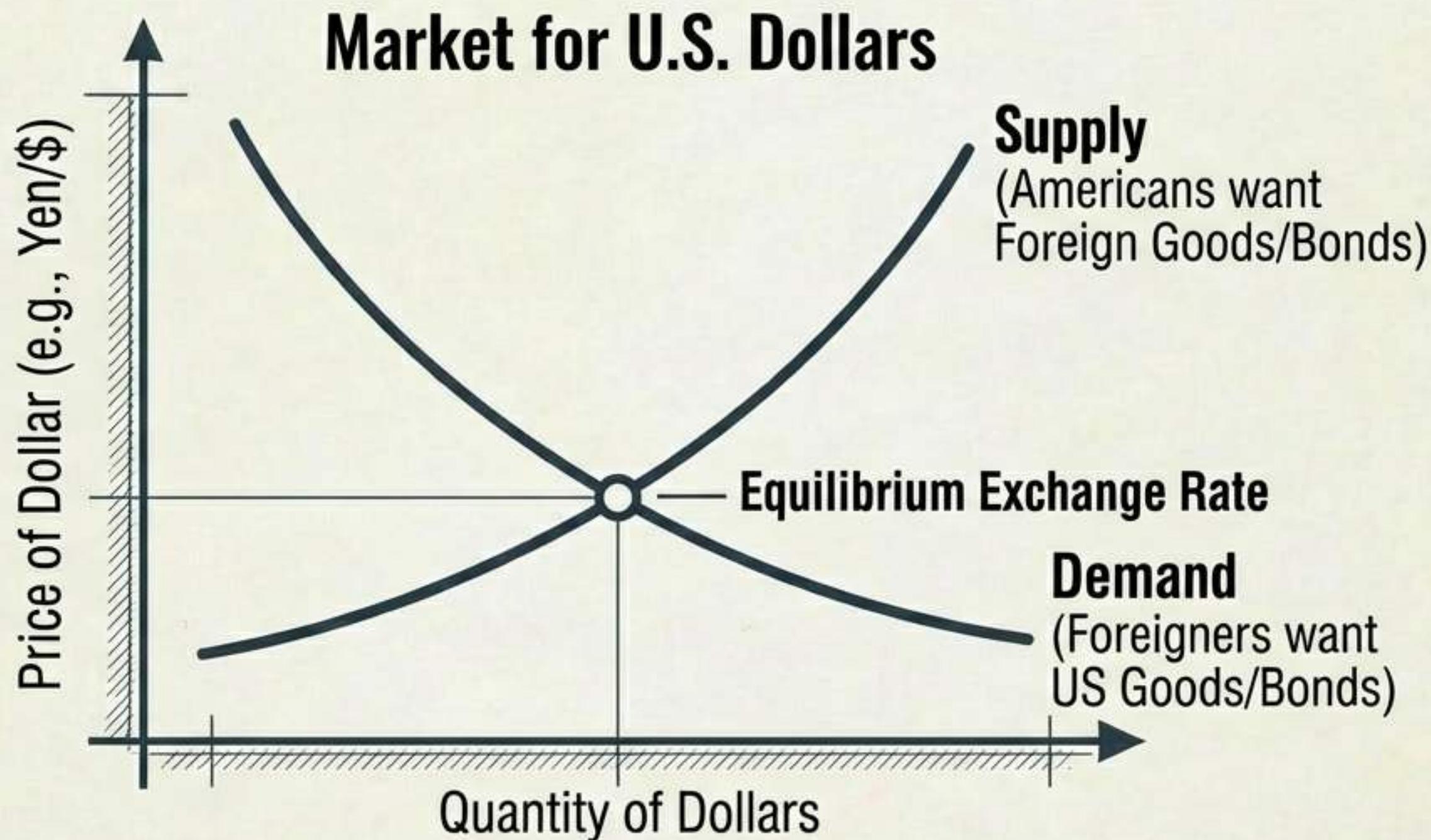
Financial Surplus?
(Selling assets to pay for it)

$$CA + FA = 0$$

← Dollars Out = Dollars In →



EVERYTHING HAS A PRICE (EVEN MONEY)



TSP: 2269403

ZCN: 10566

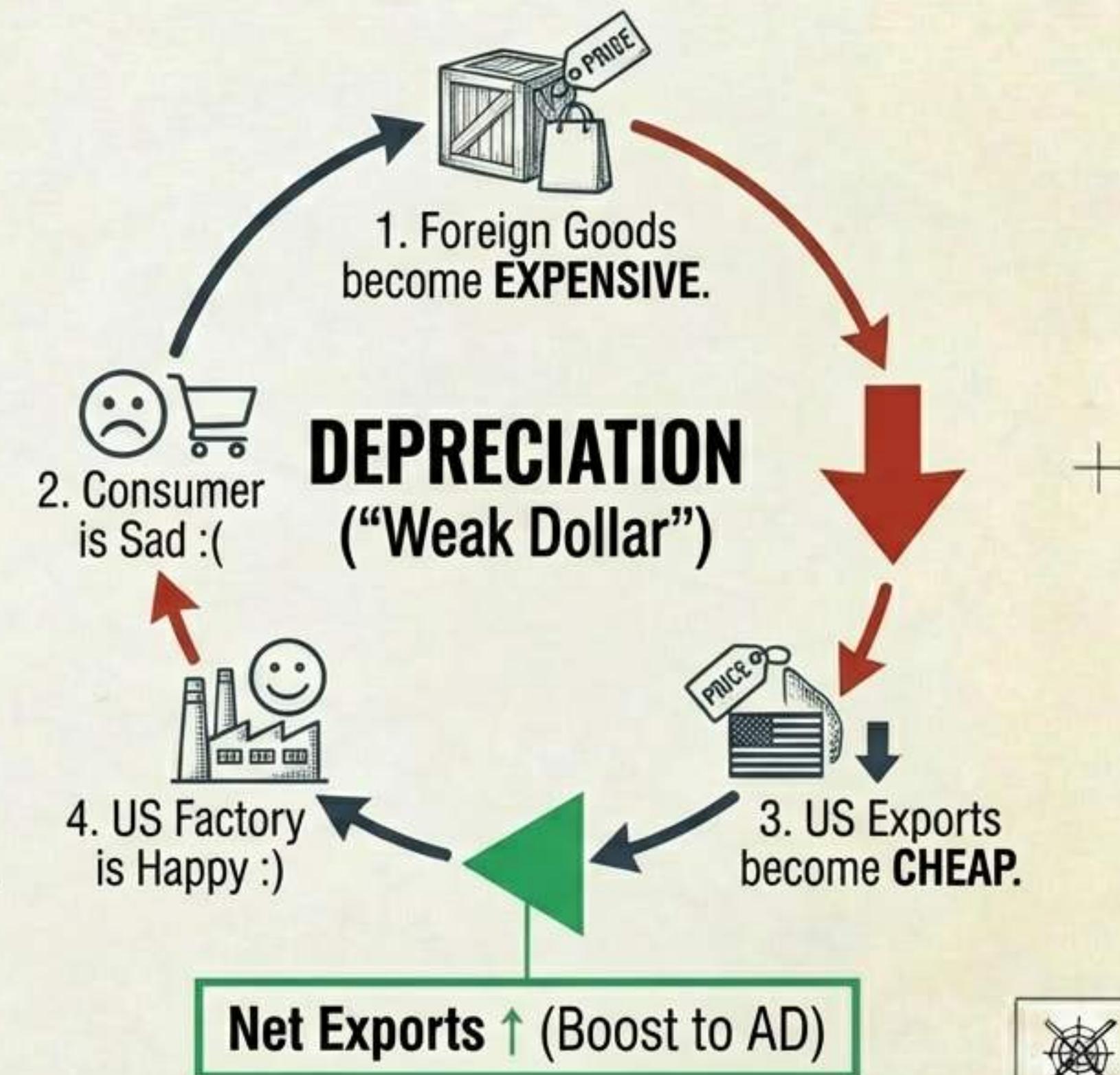
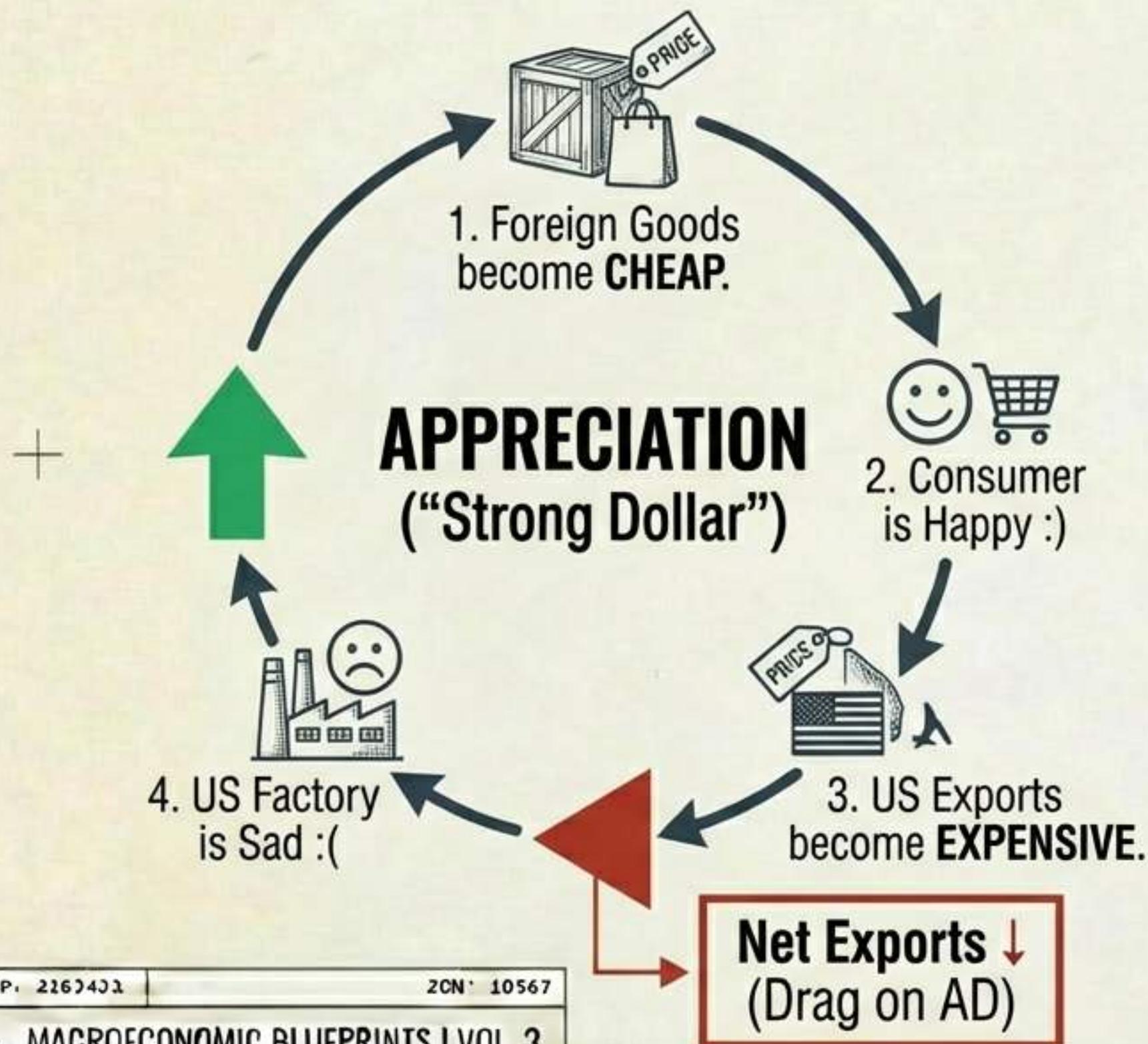
MACROECONOMIC BLUEPRINTS | VOL. 2

Primary Shifter: **Interest Rates** (Investors chase the highest return).



NotebookLM

THE DOUBLE-EDGED SWORD OF CURRENCY VALUE



DOMINO EFFECT: CONNECTING RATES TO TRADE



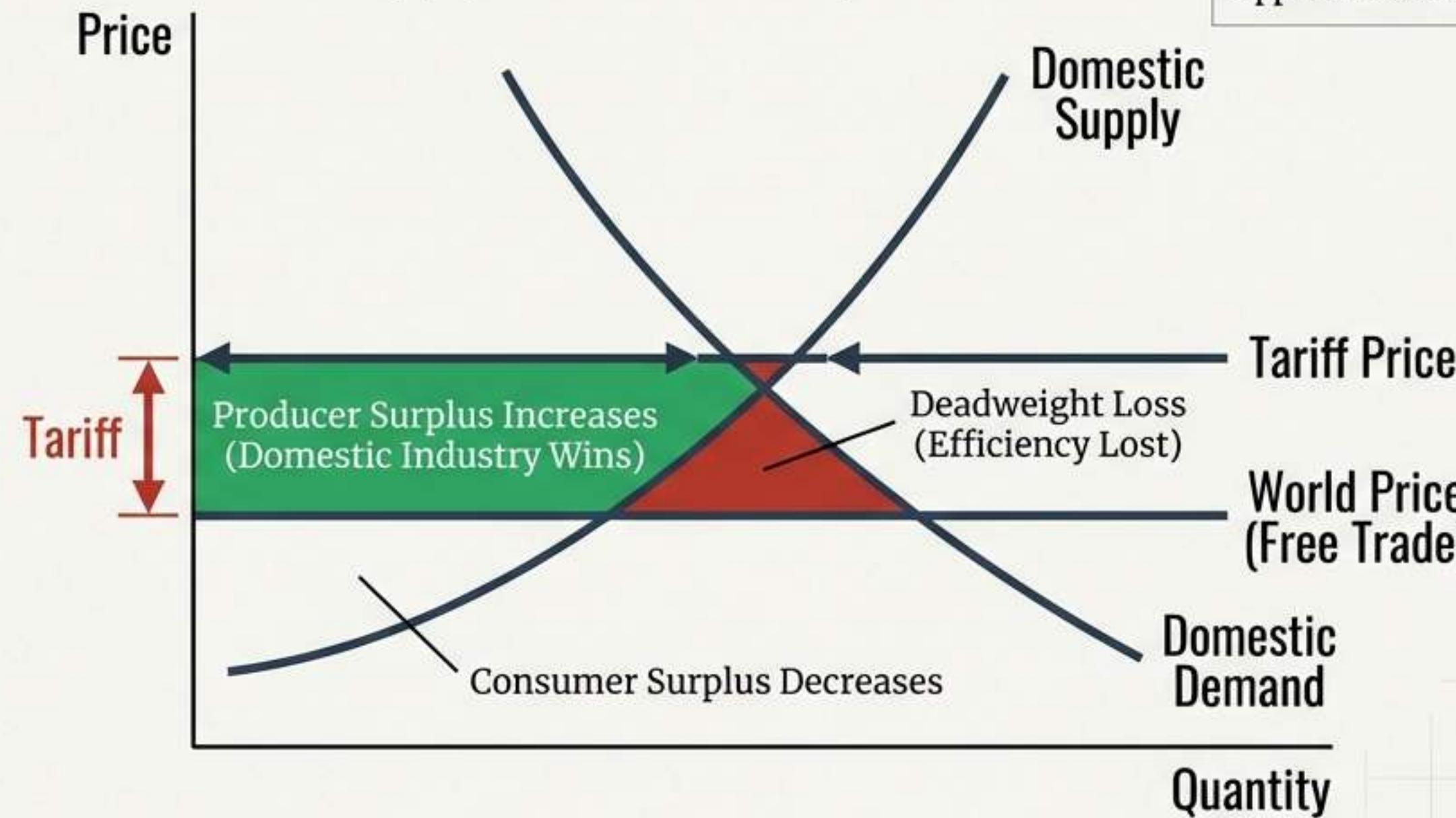
HIGH Rates =	LOW Rates =
HIGH Rates = STRONG Currency	LOW Rates = WEAK Currency



TRADE BARRIERS: TARIFFS & QUOTAS

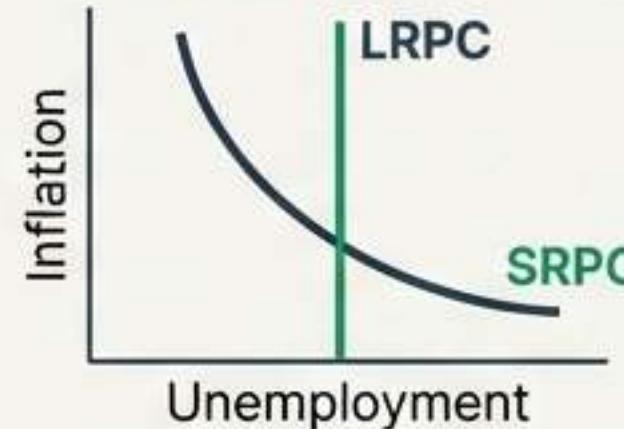
Supply/Demand for Imported Steel

Unintended Consequence: Currency Appreciation can hurt other export sectors.



THE MACRO MASTER KEY

THE TRADE-OFF



Short Run = Trade-off. Long Run = Vertical.

THE EXCHANGE



Capital chases high rates.

FORMULAS

$$\text{Unemp Rate: } \frac{\text{Unemployed}}{\text{Labor Force}} \times 100$$

$$\text{CPI: } \frac{\text{Current Basket}}{\text{Base Basket}} \times 100$$

Real Interest: Nominal Rate – Inflation Rate

CRUCIAL REMINDERS

!**Crowding Out:** Deficits kill Investment.

Sticky Wages: Short Run.

Flexible Wages: Long Run.