¶ 6.1

ECON 130 B Lecture 6

Policy, Debt, and the Open Economy



At a glance: Fiscal & monetary policy, deficits & debt, trade, and exchange rates.

§6.2



Fiscal Policy

Monetary Policy



Can governments & central banks soften recessions and cool booms?



Deficits & Debt

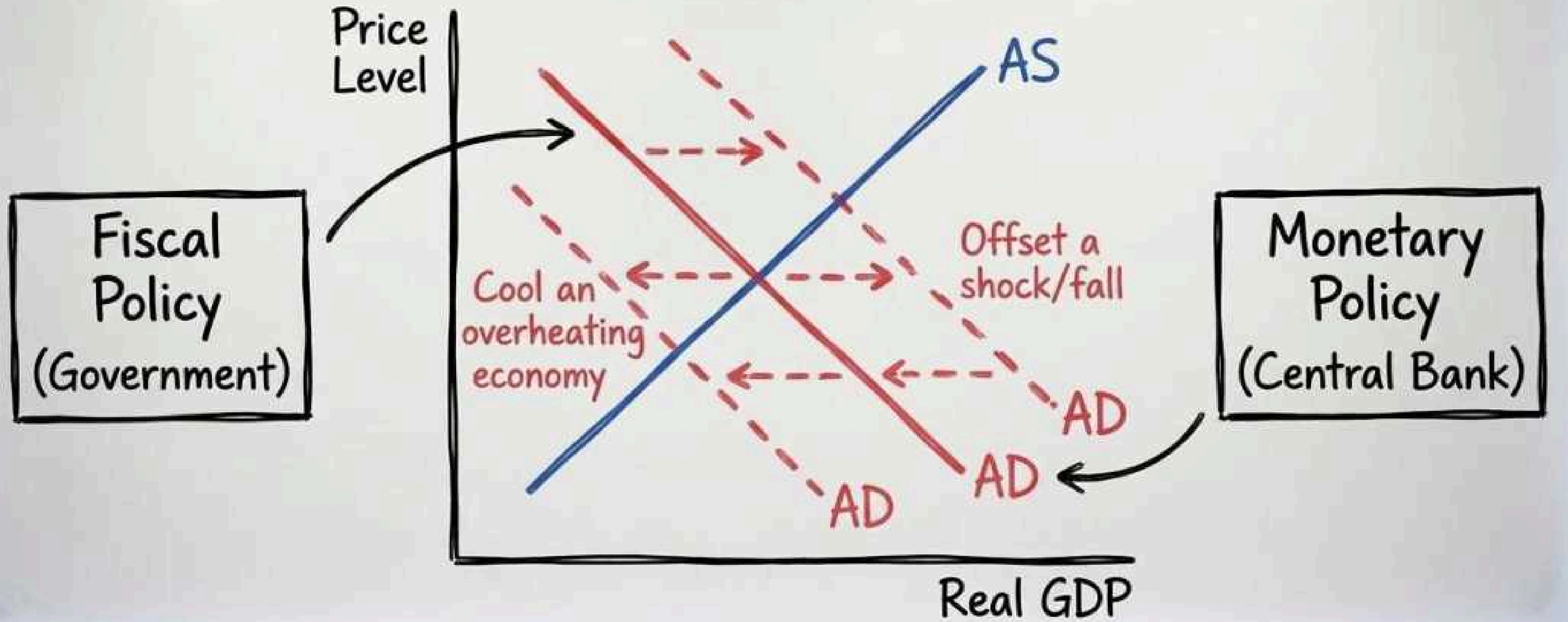
Trade & Exchange



Concluding with a retrospective across the whole course.

Stabilization policy tries to move aggregate demand to offset shocks.

¶ 6.3



¶ 6.4



"Governments should spend when private spending fails."
– Concept originated during the Great Depression

The Dual Levers of Fiscal Policy (Government Purchases & Taxes)

	1	2
Expansionary (Fight Recession)	↑ Raise Purchases	↓ Cut Taxes (Leaves households with more to spend)
Contractionary (Cool Boom)	↓ Cut Purchases	↑ Raise Taxes

The Multiplier Effect

¶ 6.5

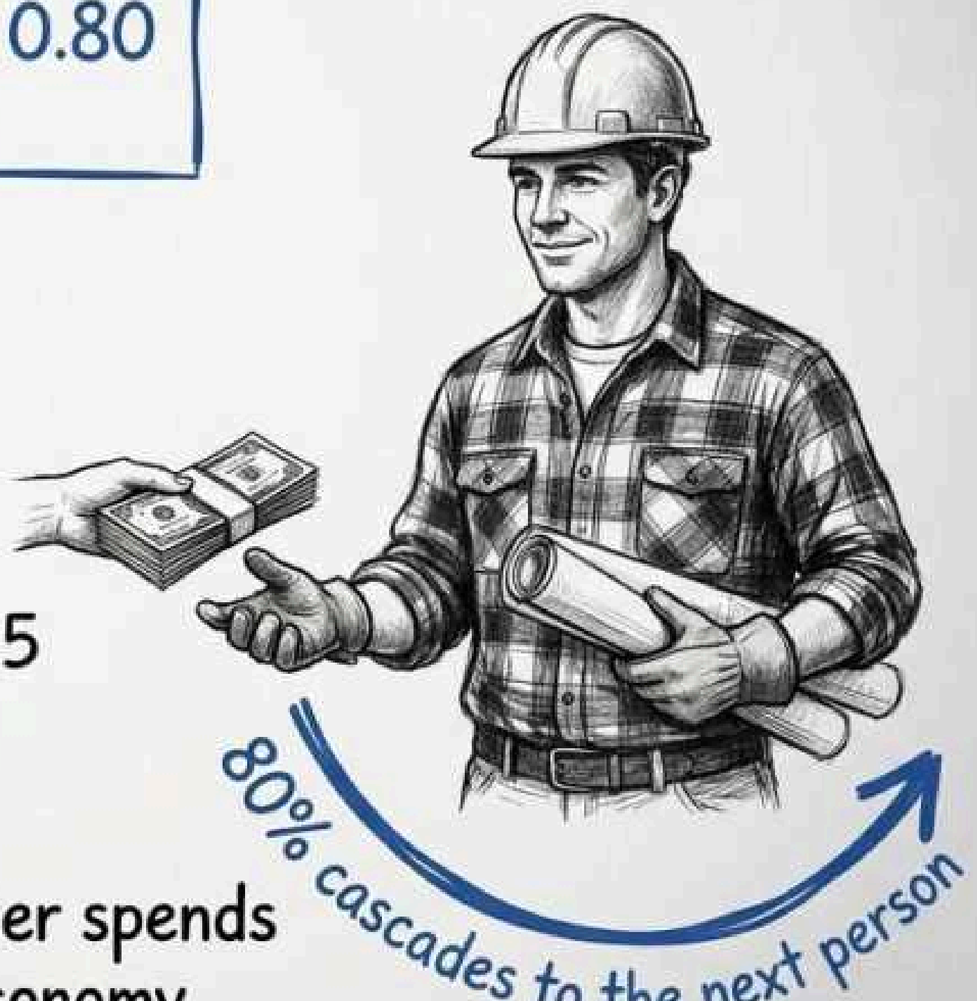
Marginal Propensity to Consume (MPC) = 0.80
(People spend 80¢ of every extra dollar)

Step 1: $\text{Multiplier} = \frac{1}{1 - \text{MPC}}$

Step 2: $\frac{1}{1 - 0.8} = \frac{1}{0.2} = 5$

Application: \$20B (New Government Spending) × 5

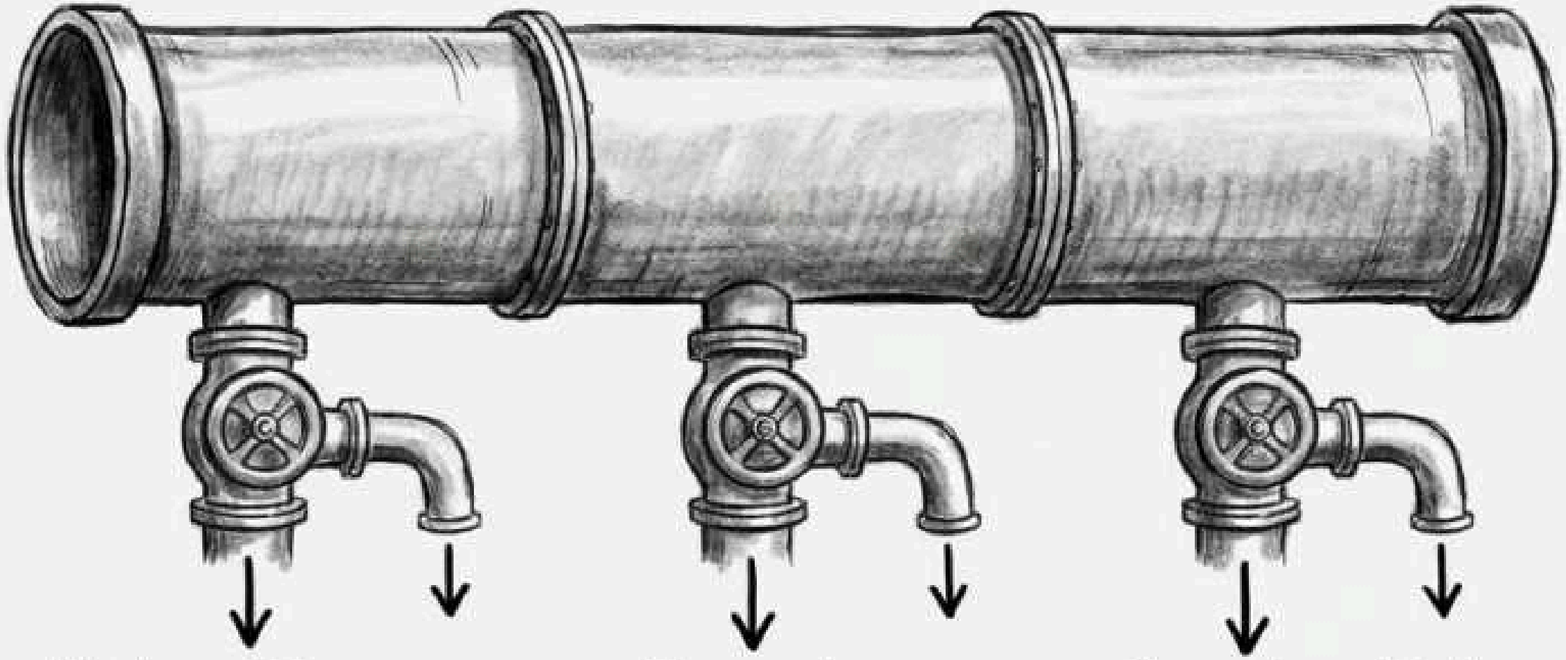
= **\$100B** (New Output)



When the government pays a builder, the builder spends part of the income, cascading through the economy.

Limits to the Multiplier

¶6.6

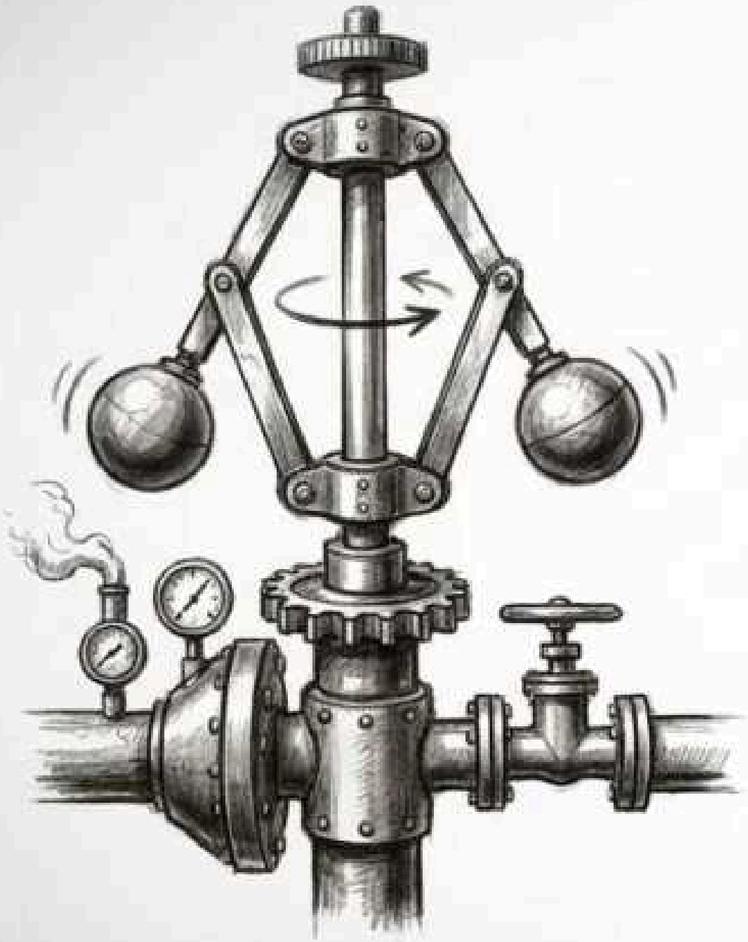


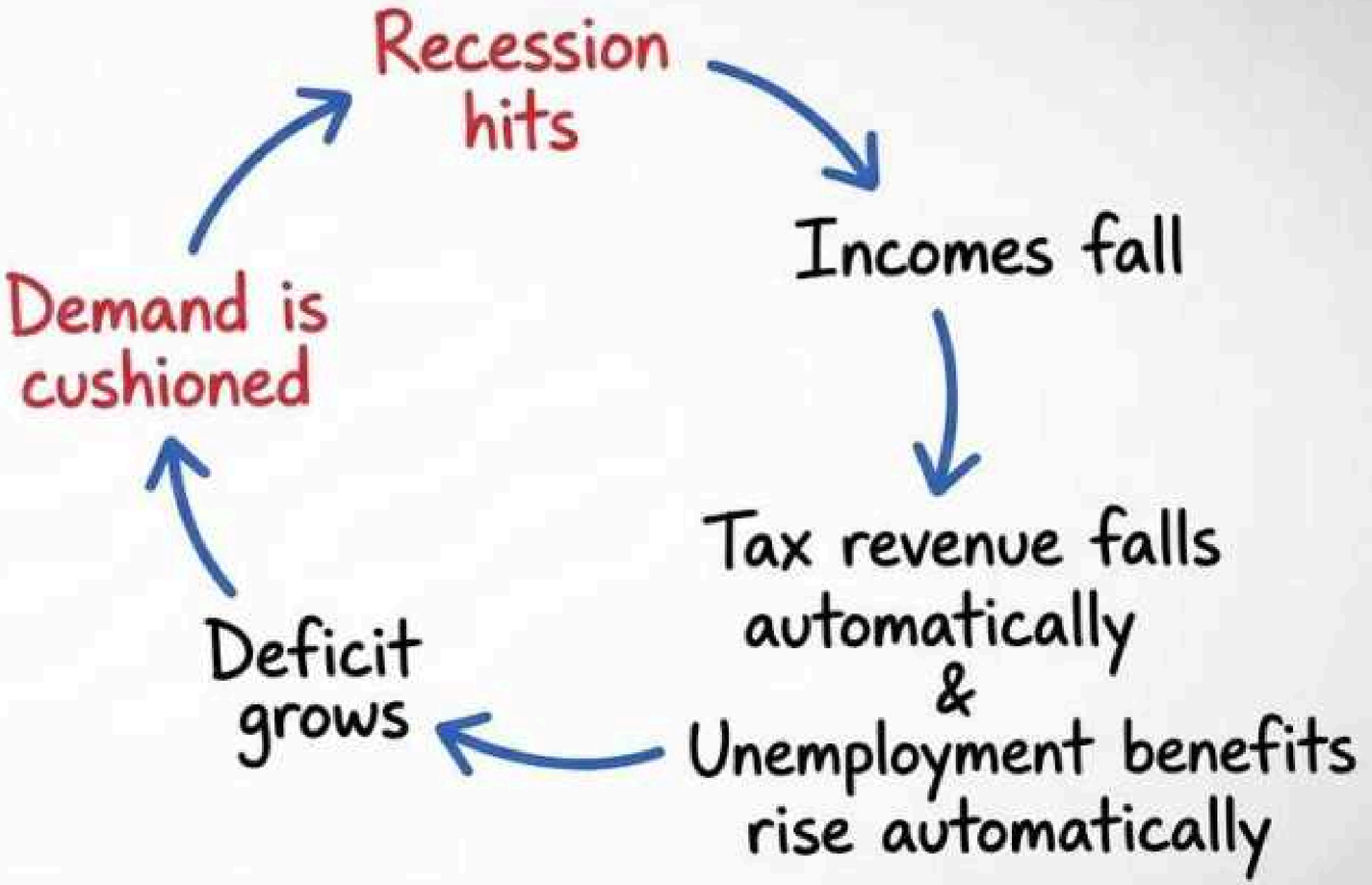
Real-world multipliers are much smaller than 5, often between 0.5 and 2.0.

✳ Tax cuts are usually thought to have smaller multipliers than direct spending.

Automatic Stabilizers (No Vote Required)

¶6.7

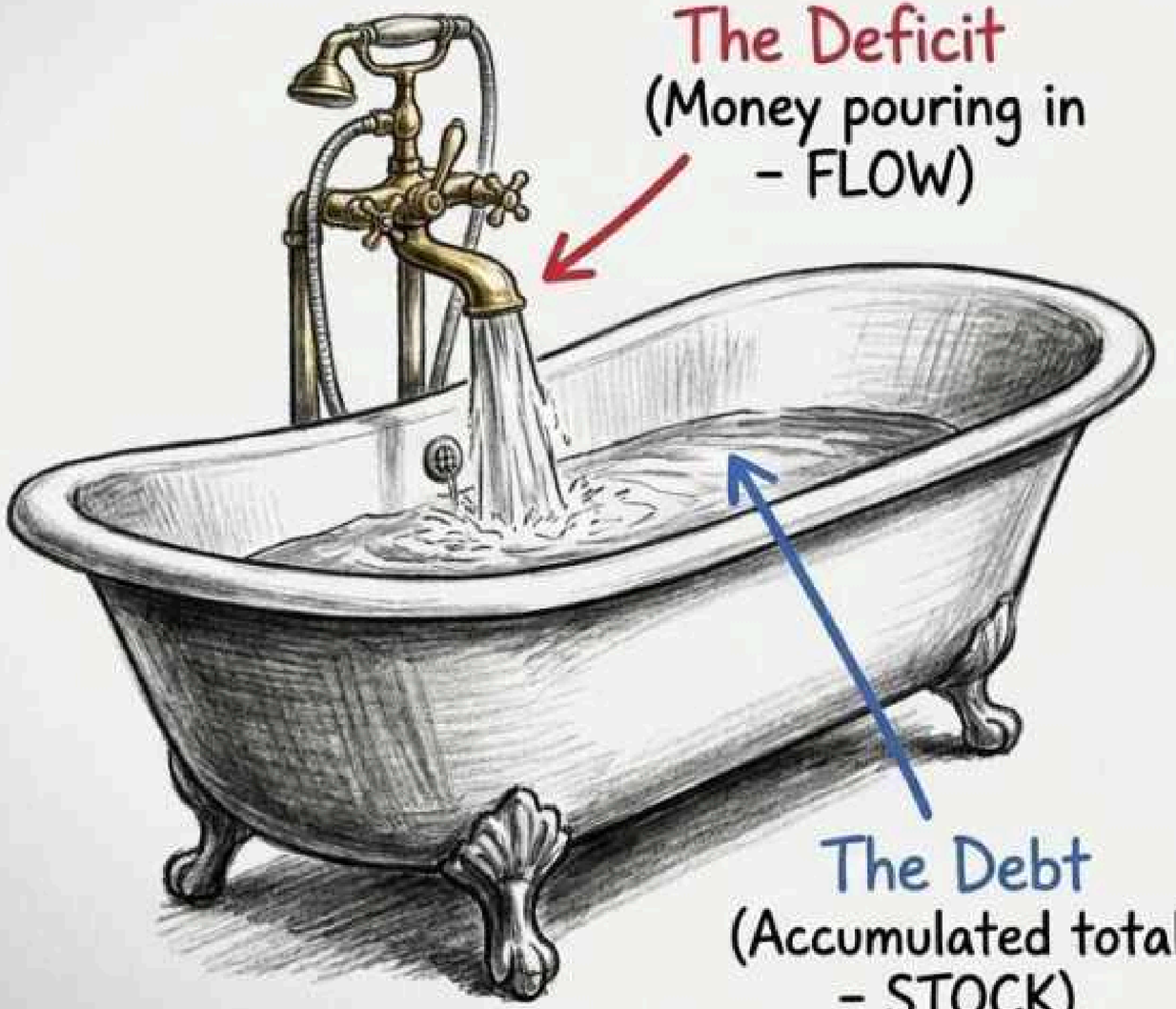




In a boom, the opposite occurs. These stabilizers are quick and reliable features of the budget that respond to the cycle on their own.

Deficits vs. Debt

¶6.8



Key Metric: Debt Relative to GDP

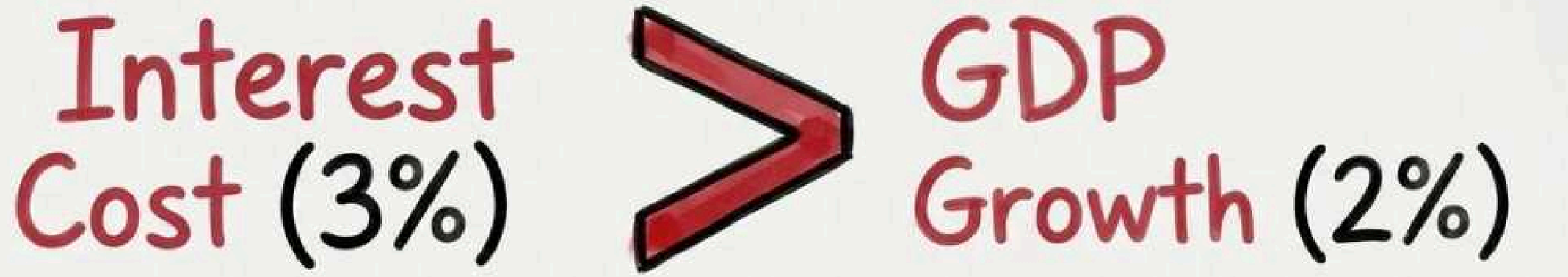
- If GDP grows faster than Debt
  → Ratio falls (even with continued borrowing).
- If Interest rate > Growth rate
  → Ratio climbs (unless government runs a surplus).

Takeaway: What matters is the debt relative to GDP.

Debt Arithmetic

¶6.9

Scenario: A country has debt equal to 100% of GDP.



The debt ratio will rise unless the government runs a primary surplus before interest of ~1% of GDP.

The arithmetic shows why high debt makes budgets rigid, and why markets watch it.

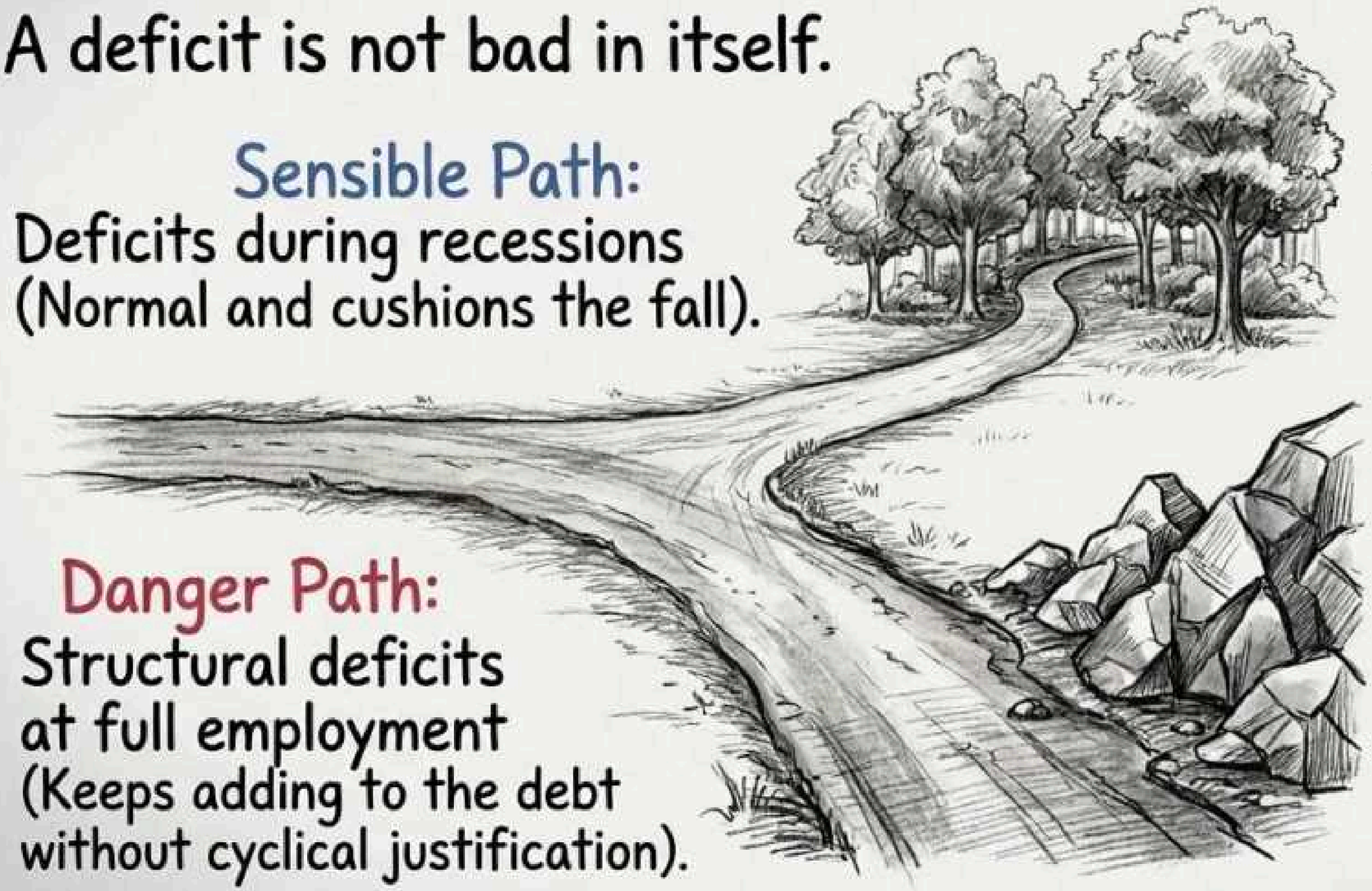
Evaluating Deficits

§6.10

A deficit is not bad in itself.

Sensible Path:

Deficits during recessions
(Normal and cushions the fall).



Danger Path:

Structural deficits
at full employment
(Keeps adding to the debt
without cyclical justification).

Risk Matrix for Borrowing
In Own Currency: Can print money to pay, but risks Inflation.
In Foreign Currency: Cannot print to pay, risks Default.

Monetary Policy Transmission

¶6.11

Step 1: Fed lowers target for the federal funds rate.

Step 2: Borrowing becomes cheaper across the economy.

Step 3: Firms invest more;
housels buy more houses and cars.





Step 4: Lower rate weakens the currency ⇒ Net exports rise.

Result: Aggregate demand shifts right, output and prices rise.

(Note: Raising the rate works in reverse.)

Speed and Lags

¶6.12

Day 1:
Action is fast.



Because of the lag, central banks must look ahead and set rates based on forecasts, not today's figures.

Lag: Effects are slow.



A committee changes rates in a day without legislation.

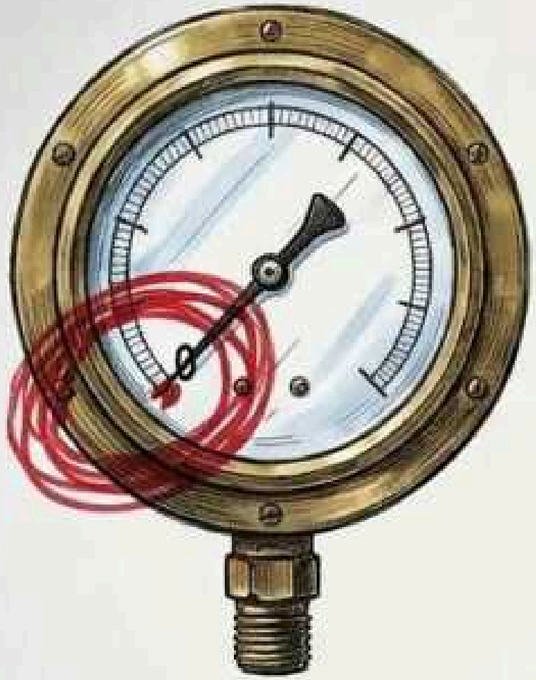
Full economic impact takes a year or more.

Their words matter too: statements about future policy move markets.



The Limits of Monetary Policy

¶6.13



Limit 1: The Zero Lower Bound.
Interest rates cannot fall much below zero.

Even at near-zero in 2008, the economy remained weak.

New Tools: Central banks turned to Quantitative Easing (QE) and Forward Guidance.

Limit 2: The Liquidity Trap.
Cheap money does not by itself persuade people to borrow.



Opening the Economy

¶6.14

Moving from a closed economy to one that buys and sells goods and assets abroad.

Net Exports (NX) = Exports - Imports

Imports > Exports = Trade Deficit
Exports > Imports = Trade Surplus

Trade does not just move goods; it also moves financial capital across borders.



The Key Macroeconomic Identity

¶ 6.15

1. S (National Saving) = I (Domestic Investment) + NCO (Net Capital Outflow)
2. NCO always equals NX (Net Exports)
3. **S − I = NX**

Lecture 1 Example Proof:

Given: GDP = 1200 | C = 700 | G = 250

Therefore: S = 250

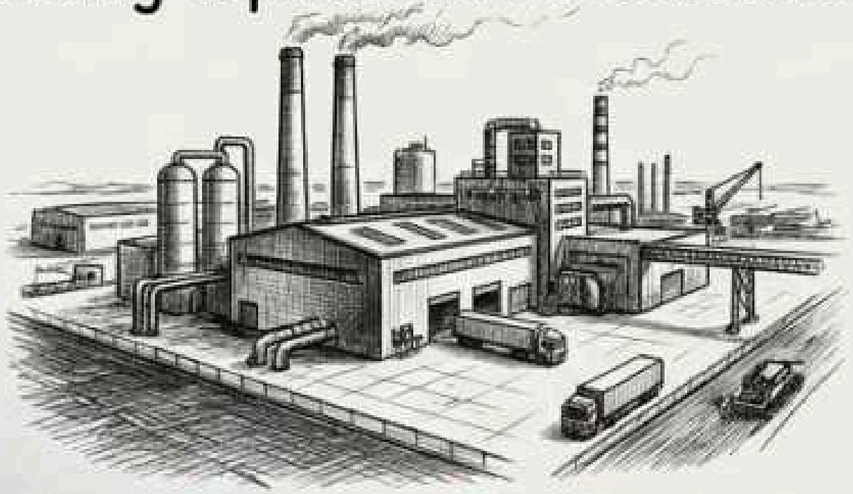
Given: I = 200

$$S(250) - I(200) = NX(50)$$

Demystifying the Trade Deficit

¶6.16

A trade deficit simply means a country invests more than it saves. The difference is borrowed from foreigners who buy its assets.

Is the deficit bad?	
Productive Borrowing	Unproductive Borrowing
Building capital and infrastructure.	Borrowing purely to consume.
	
Verdict: Can pay off in the long run.	Verdict: Cannot be sustained indefinitely.

Exchange Rates (The price of one currency in terms of another)

¶ 6.17

Scenario A (Base)

$1 = 150¥

A 6,000¥ item costs $40.



Scenario B (Depreciation)

↓

$1 falls to 120¥

The same 6,000¥ item now costs $50.

A falling currency (Depreciation) makes exports cheaper abroad and imports dearer at home. A rising currency (Appreciation) does the reverse.

What Moves Exchange Rates?

¶ 6.18



Scale Forces

- Upward Pressure (Appreciation): Higher interest rates attract foreign funds.
- Downward Pressure (Depreciation): Higher home inflation lowers currency value.

Core Concept: Purchasing Power Parity (PPP) - Over the long run, the same goods should cost about the same in both countries.

Policy Choices: Countries can float their exchange rate, or fix it to another currency (provides stability, but limits own monetary policy).

Course Retrospective

¶ 6.19

ECON 130 B

Measurement
(Output, prices, jobs are measured with care but imperfectly).

Short Run
(Shifts in supply/demand cause booms/recessions; policy softens but cannot abolish them).

Growth
(Productivity stems from capital, skills, ideas, and good institutions).

Long Run
(Central bank controls money supply and long-term inflation).

Funding
(Saving and a sound financial system fund investment).

The Final Question

¶6.20

Inflation

Trade

Debt

Interest Rates





Pick one current economic debate:

1. Which model from this course helps you see it most clearly?
2. What facts would you need to know to decide whom to believe?
3. What part of the disagreement is about values rather than facts?

¶ 6.21

Thank you for taking Economics 130 B.

Questions or feedback: garyanderson@mail.grokbot.com
X: @garyanderson

