



The Ultimate Unit 5 Cheat Sheet

Everything you need to know the Phillips curve, money growth and inflation, the federal budget, and economic growth

Fiscal & Monetary Policy

When both fiscal and monetary policy are implemented simultaneously, these combinations of actions have different impacts of RIR

	RGDP	PL	UE	RIR
Cont. Fiscal	↓	↓	↑	↑
Exp. Fiscal	↑	↑	↓	↓
Cont. Monetary	↓	↓	↑	↑
Exp. Monetary	↑	↑	↓	↓

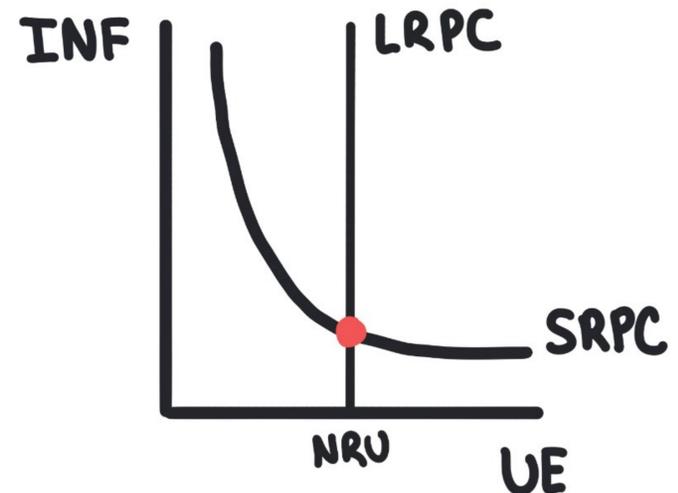
Phillips Curve

Phillips Curve: A model that illustrates the relationship between inflation and unemployment.

- SRPC shows an inverse relationship between inflation and unemployment in the short-run
- LRPC shows NO relationship between inflation and unemployment in the long-run

AD-AS & Phillips Curve Connection

Any change in the AD-AS model has a direct, predictable impact on the Phillips Curve.



Shifts to Aggregate Demand



Movement **ALONG** the SRPC

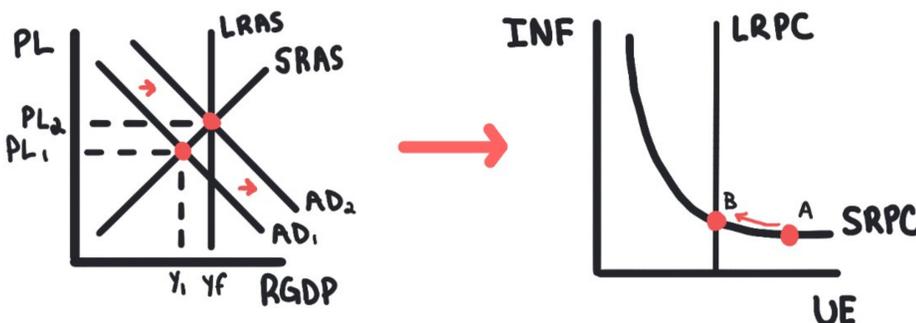
Shifts to Short-Run Aggregate Supply



Shift of the SRPC (in the opposite direction of the SRAS shift)

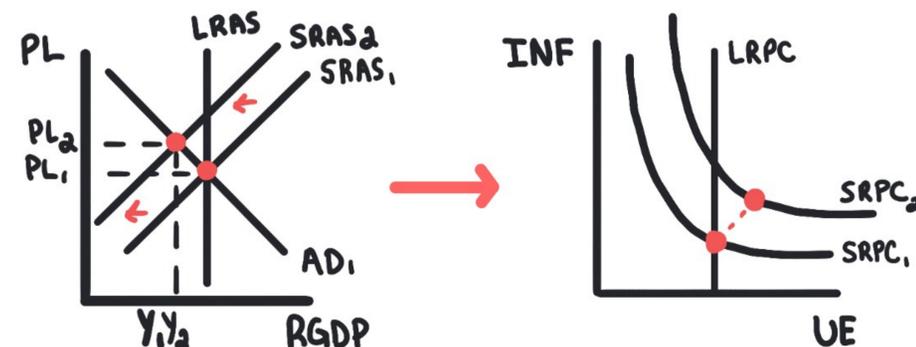
Scenario 1

The government uses expansionary fiscal policy to close a recessionary gap



Scenario 2

The economy experiences a negative supply shock



Knowledge Check

Check your answers at apdojo.com/ultimateCramSheet/answer-keys

a. If the economy is currently at an inflationary gap, describe the resulting long-run adjustment on the Phillips Curve

b. The government increases deficit spending while the Fed simultaneously increases the Required Reserve Ratio. What is the impact on RIR?

New grid

Country	Nominal GDP	Real GDP	Money Supply
Country A	\$600	\$500	\$150
Country B	\$1200	\$1100	\$300

c. Find Country B's velocity of money:

d. Country A's population grew from 15 in the previous year to 20 currently. What is Country A's real GDP per capita?

Money Growth & Inflation

If the money supply grows faster than real GDP, you get inflation. In the long run, velocity and real output are relatively stable, so $\Delta M = \Delta P$

$$M \times V = P \times Y$$

M: Money Supply
V: Velocity of Money
P: Price Level
Y: Output (RGDP)

- Both sides of the equation are equal to NGDP
- An increase in the Money Supply must cause an increase in either Price Level or Output. Output tends to remain constant in the long-run, so an increase in Money Supply leads to an increase in Price Level

Velocity of Money: The average number of times a unit of money (e.g., a dollar) is spent on final goods and services in a year.

- often assumed to be relatively stable

Deficits & National Debt

Federal Budget: An annual plan outlining the government's expected revenues (taxes) and expenditures (outlays).

Budget Deficit: When government outlays (spending) exceed tax revenue in a given year. (Outlays > Revenue)

Budget Surplus: When tax revenue exceeds government outlays (spending) in a given year. (Revenue > Outlays)

Balanced Budget: When government outlays (spending) are equal to tax revenue in a given year. (Outlays = Revenue)

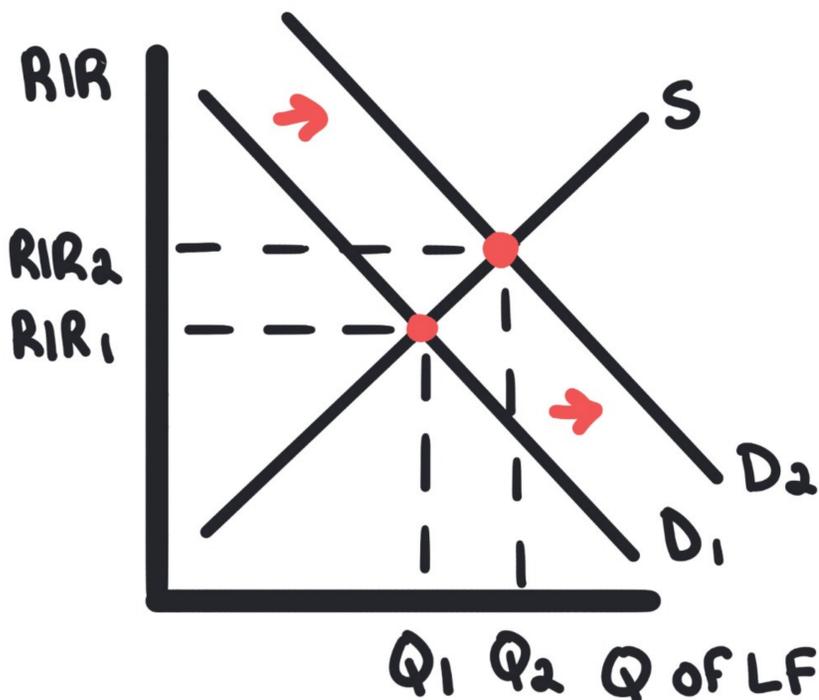
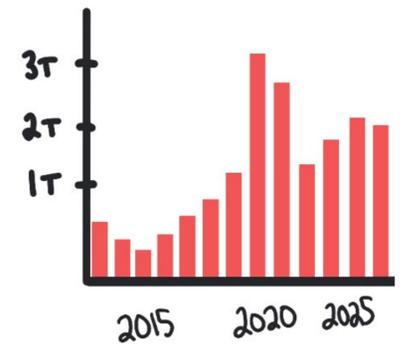
National Debt: The total accumulation of a country's past budget deficits that have not yet been paid back, plus outstanding interest.

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US NATIONAL DEBT
(at the time this cheat sheet was made)

check <https://www.usdebtclock.org/> to see the current US Debt

US BUDGET DEFICITS



Crowding Out

The Crowding Out Effect:

This occurs when the government runs a budget deficit and must borrow money to cover its spending

Step 1: The government enters the Loanable Funds market as a borrower, increasing the Demand for Loanable Funds

Step 2: RIR increase

Step 3: Higher RIR make it more expensive for businesses to borrow for factories and equipment, causing Private Investment to decrease

Result: AD increases by less than initially expected and long-term economic growth may slow down due to the crowding out and a diminished capital stock.

Capital Stock: the total accumulation of physical capital—tools, machinery, equipment, and structures—used to produce goods and services.

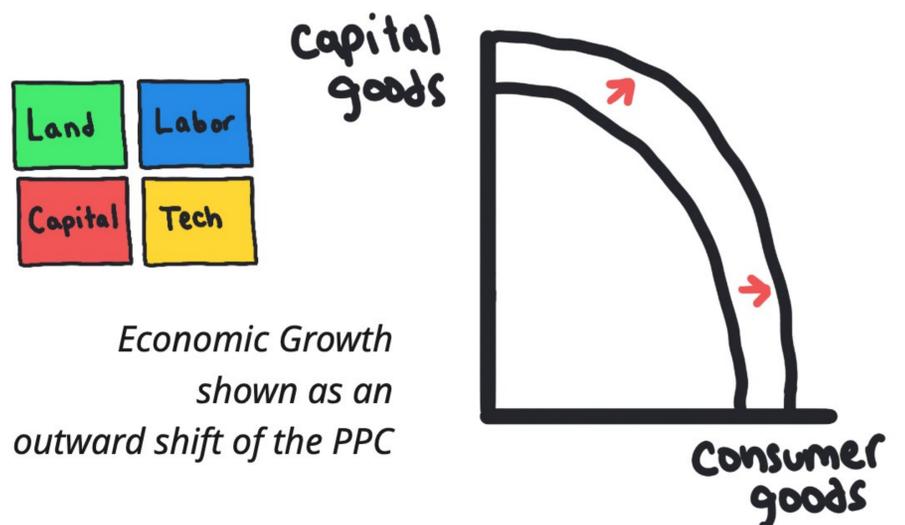
Economic Growth

Economic Growth: A sustained increase in an economy's potential output (real GDP) or real GDP per capita over time.

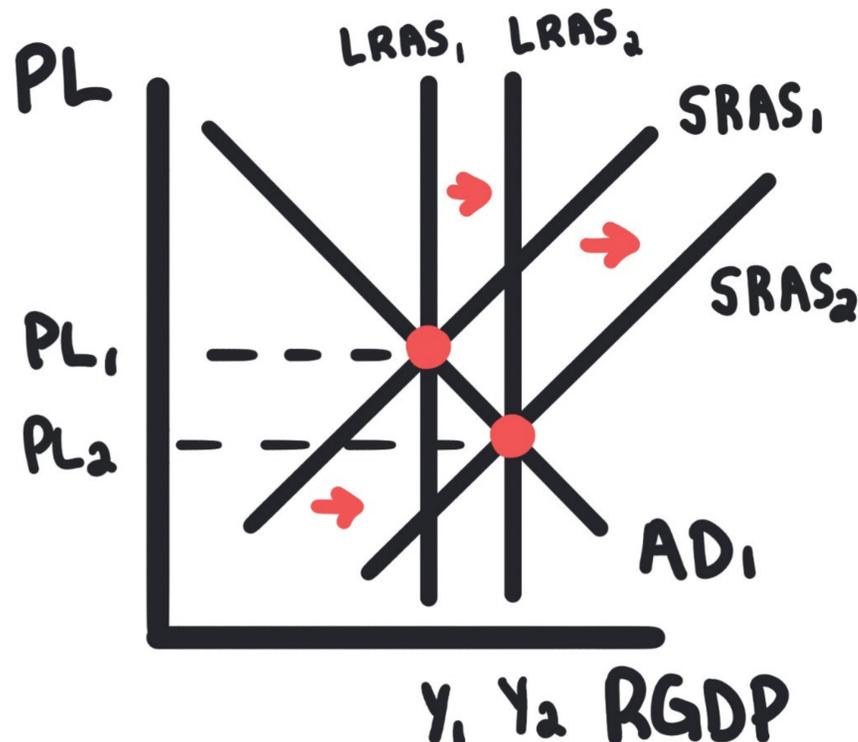
- **RDGP Per Capita** = Real GDP / Population

Sources of Economic Growth:

- Increase in Physical Capital: increased capital stock (eg. more machines, more factories)
- Increase in Human Capital: better education or worker skills
- Advancements in Technology
- Increase in quantity / quality of natural resources or labor



Economic Growth shown as an outward shift of the PPC



Public Policy & Economic Growth

Supply-Side Economics: A school of thought that advocates for government policies focused on increasing aggregate supply (LRAS) to achieve long-run growth, rather than focusing primarily on aggregate demand.

Promoting Physical Capital Development:

Done through government policy that encourages capital formation to promote long-run economic growth

- Investment (I) tax credits, low corporate taxes, direct government investment in infrastructure

Promoting Human Capital Development:

Government policies aimed at increasing the knowledge, skills, and health of the workforce to promote long-run economic growth.

- Government spending on public education, job training programs, public healthcare funding, or provision of student loans