Achievable

AP MACROECONOMICS DUMP SHEET

Unit 3: National income and price determination

Aggregate demand (AD)

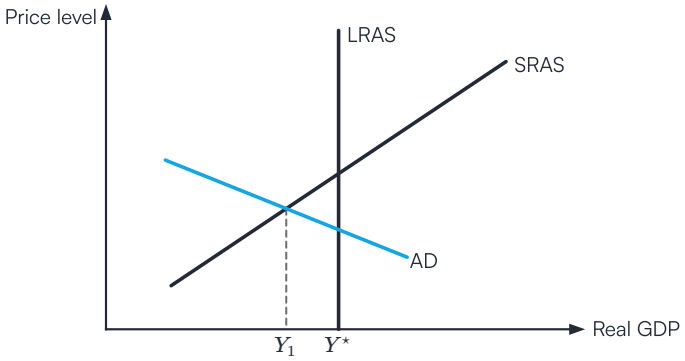
$$AD = C + I + G + NX$$

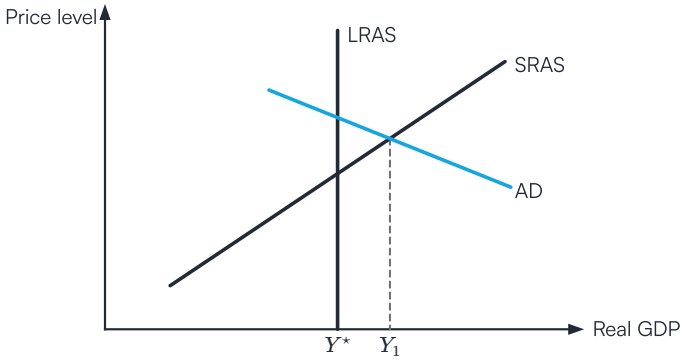
- **Slopes down:** wealth, interest rate and exchange rate effects
- A price level change is a movement along AD
- **Right:** wealth, confidence, G or foreign income ↑; household taxes or interest rates ↓
- **Left:** the reverse, or a stronger currency (NX ↓)

Aggregate supply

- **SRAS slopes up:** wages and other input prices are sticky
- **LRAS is vertical** at potential output $Y^\star$: unemployment at the natural rate, price level as expected
- **SRAS only:** temporary negative shock or higher expected inflation → left; temporary positive shock or lower expected inflation → right
- **LRAS and SRAS together:** technology, resources (labor, capital, natural resources), institutions. Increase → right

↔ Output gaps and self-adjustment





	Recessionary gap (left)	Inflationary gap (right)
Output	$Y < Y^\star$, unemployment above natural rate	$Y > Y^\star$, unemployment below natural rate
No policy	Wages and prices fall, SRAS right	Expected prices rise, SRAS left
Policy	Expansionary: AD right	Contractionary: AD left
End point	AD, SRAS and LRAS cross at $Y^\star$, unemployment at natural rate	AD, SRAS and LRAS cross at $Y^\star$, unemployment at natural rate

Shift	Price level	Real GDP
AD right	↑	↑
AD left	↓	↓

Shift	Price level	Real GDP
SRAS right	↓	↑
SRAS left	↑	↓

Multipliers

$$MPC + MPS = 1$$

$$\text{Spending multiplier} = \frac{1}{1 - MPC} = \frac{1}{MPS}$$

$$\text{Tax multiplier} = -\frac{MPC}{1 - MPC} = -\frac{MPC}{MPS}$$

$$\Delta Y = \text{multiplier} \times \text{initial change}$$

- $MPC = 0.75$: spending multiplier 4, tax multiplier −3
- Spending beats an equal tax cut, because part of the cut is saved
- **Balanced budget:** equal rises in G and T raise Y by that amount
- A $1 transfer works like a $1 tax cut

Fiscal policy

- **Expansionary:** G or transfers ↑, or taxes ↓. AD right, Y and price level ↑, unemployment ↓
- **Contractionary:** G or transfers ↓, or taxes ↑. AD left, Y and price level ↓, unemployment ↑
- **Automatic stabilizers** adjust without new law: progressive income taxes, unemployment benefits
- **Lags:** recognition, decision, implementation. Decision is fiscal policy's main weakness
- **Demand-pull inflation:** AD right. **Cost-push:** negative supply shock, SRAS left