



# Macroeconomics Ultimate Cheat Sheet

<u>Formulas</u>	<u>Key Relationships</u> (↑ or ↓)
Labor Participation Rate = $\frac{\text{People in labor force}}{\text{Working age population}}$	1. ↑ Demand → Equilibrium price ↑
Unemployment rate = $\frac{\# \text{ people unemployed}}{\# \text{ people in labor force}}$	2. ↑ Supply → Equilibrium price ↓
% Change in GDP = $\frac{\text{Old GDP} - \text{New GDP}}{\text{Old GDP}} \times 100$	3. ↑ Consumer Spending → Real GDP ↑
Consumer Price Index = $\frac{\text{Basket in given year} \times 100}{\text{Basket in base year}}$	4. ↑ Interest rates → Investment ↓
GDP deflator = $\frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$	5. ↑ Inflation → Real wages ↓
Expenditure Approach = $C + I + G + (X-M)$	6. ↑ Aggregate demand → Price level ↑
Income Approach = $\text{Wages} + \text{Rent} + \text{Interest} + \text{Profit}$	7. ↑ SR Aggregate supply → Price level ↓
MPS = $1 - \text{MPC}$	8. ↑ Government Spending → Real GDP ↑
Spending Multiplier = $\frac{1}{\text{MPS}}$	9. ↑ Taxes → Disposable income ↓
Tax Multiplier = $-\frac{\text{MPC}}{\text{MPS}} = \frac{1}{\text{MPS}} \text{ or } -1$	10. ↑ MPC → Spending Multiplier ↑
Money Multiplier = $\frac{1}{\text{RR}}$	11. ↑ Interest Rates → Bond prices ↓
Real Interest Rate = $\text{Nominal rate} - \text{expected inflation}$	12. ↑ Money Supply → Nominal interest rates ↓
Quantity Theory of Money: $M \times V = P \times Y$	13. ↑ Reserve requirement → Money supply ↓
	14. ↑ Discount rate → Money supply ↓
	15. ↑ Fed buys bonds → Money supply ↑
	16. ↑ Inflation → Real interest rates ↓
	17. ↑ Deficit spending → Real interest rates ↑
	18. ↑ Capital stock → Economic growth ↑
	19. ↑ Appreciation → Net exports ↓
	20. ↑ Interest rates → Net capital inflow ↑

## Things to Remember

Comparative advantage- A country makes a good at a lower opportunity cost than another country

Investment- This refers to business spending on physical capital, never personal investing

Full employment- When there is only frictional and structural unemployment. No cyclical unemployment

Long-run self-adjustment- When there is a positive or negative output gap the SRAS will eventually shift

Fiscal policy- Changing government spending and/or taxes. This shifts aggregate demand

Monetary policy- Changing the money supply to affect interest rates. This shifts aggregate demand

Open Market Operations- Central bank buys or sells bonds, increasing or decreasing the money supply

Crowding Out- Deficit spending leads to higher real interest rates and less investment and growth

Capital Inflow- High interest rates decrease domestic investment but attract more financial capital

*Thanks for watching my videos. Good luck on your exam!- Jacob Clifford*



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## Essential Graphs

