

EE312 Macroeconomics, 2/2020 (Sec. 046401/ Sicha)

Topic 3. the Core AD-AS Framework

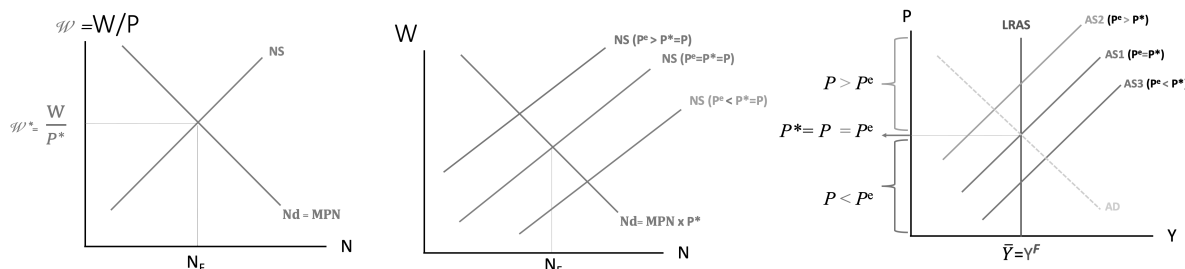
1. IS-LM

LM	IS
Derivation: $Y \uparrow \Rightarrow M^d \uparrow \Rightarrow r \uparrow$	Derivation: $r \uparrow \Rightarrow I \downarrow \Rightarrow DAE \downarrow \Rightarrow Y \downarrow$
Slope of LM : High $\varepsilon_Y^{M^d}$, LM is steep. High $\varepsilon_r^{M^d}$, LM is	Slope of IS : High MPC, IS is flat. High ε_r^I , IS is
Shift in LM Monetary Policy (Money Supply) Change in Money Demand for all Y, r	Shift in IS Fiscal Policy (G, T) Change in C, S, I for all Y, r

2. Aggregate Demand :

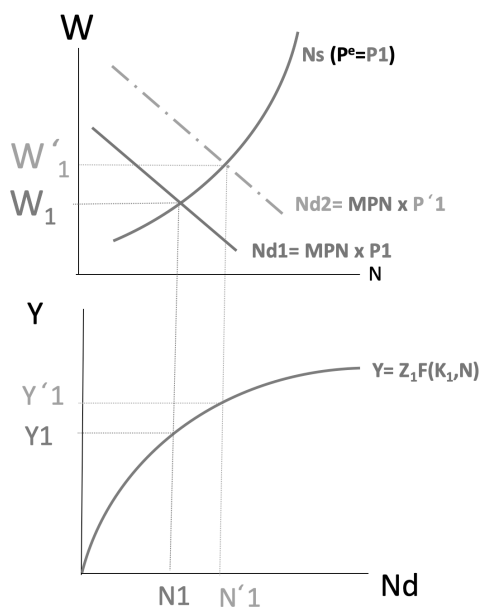
Price level $\uparrow \Rightarrow$ Real Money Supply $\left(\frac{MS}{P}\right) \downarrow \Rightarrow$ LM shifts to the left $\Rightarrow$ interest rate $\uparrow \Rightarrow$ AE $\downarrow \Rightarrow$ Output (Y) $\downarrow$

3. Aggregate Supply and Labor Market

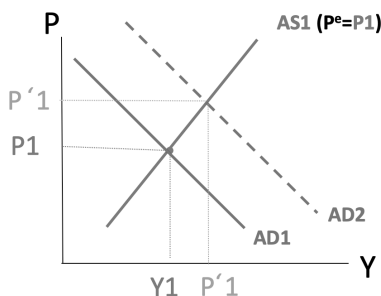


- In the long-run, “fully flexible adjustment in labor market”, the equilibrium employment is the level so called “full employment”. LRAS is vertical at Y_F .
- In the short-run, market has nominal frictions and incomplete adjustment. $Y = \bar{Y} + \alpha(P - P^e)$
- Sticky Price Model : $P = sP^e + (1 - s)[P + a(Y - \bar{Y})]$
- Output can be different from “natural rate of output” (Potential Output) when “expected price” is different from “price”.
- Sticky Wage Model : AS shift $\Leftarrow$ Productivity shocks/capital destruction, Monopoly power (mark-up power), Unionization

4. Medium Run Adjustment and Self Correcting Mechanism



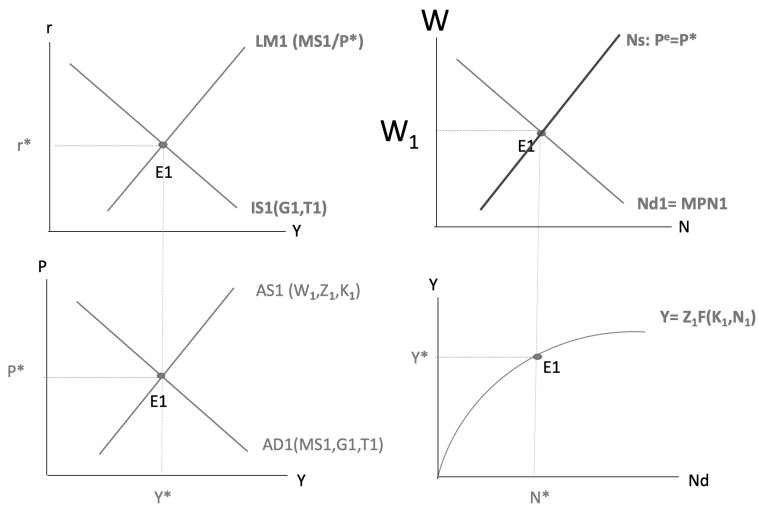
Suppose workers miscalculate the prices; they underestimate the price.
Producers calculate the price correctly.



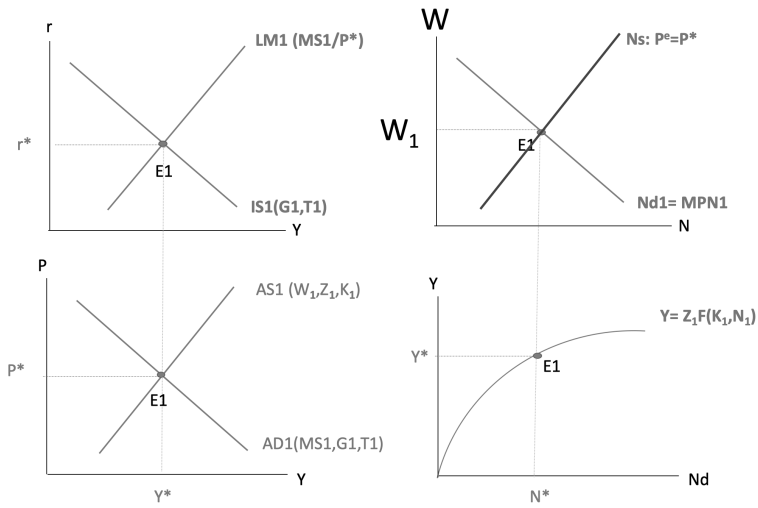
- Swift Adjustment : “New Classical” economist $\Rightarrow$ No policy needed
- Slow Adjustment : “Keynesian or New Keynesian” economist $\Rightarrow$ Policy might be welfare-improving

5. Business Cycle from AD-AS perspective : Supply Shocks, Demand Shocks, Policy Implication

• Monetary policy



• Fiscal policy



• Productivity Shocks

