EE312 Macroeconomics, 2/2020 (Sec. 046401/ Sicha)
Topic 3. the Core AD-AS Framework

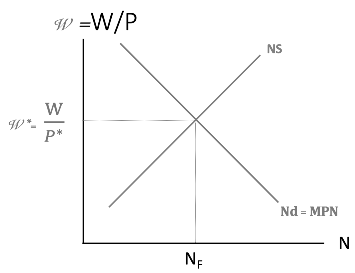
1. IS-LM

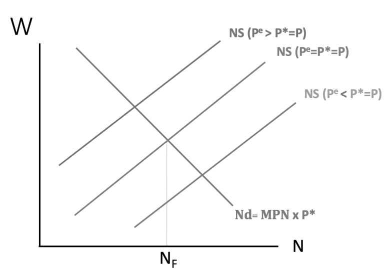
LM	IS
Derivation: $Y \uparrow \Rightarrow M^d \uparrow \Rightarrow r \uparrow$	**Derivation:** $r \uparrow \Rightarrow I \downarrow \Rightarrow DAE \downarrow \Rightarrow Y \downarrow$
Slope of LM : High ε_Y^{Md} , LM is steep. High ε_r^{Md}, LM is	**Slope of IS :** High MPC, IS is flat. High ε_r^{I}, 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

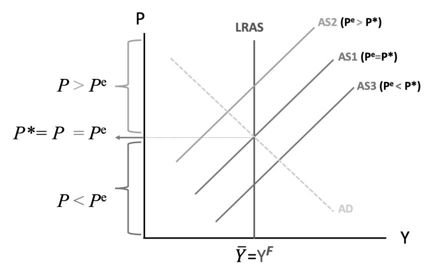
2. Aggregate Demand :

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

3. Aggregate Supply and Labor Market

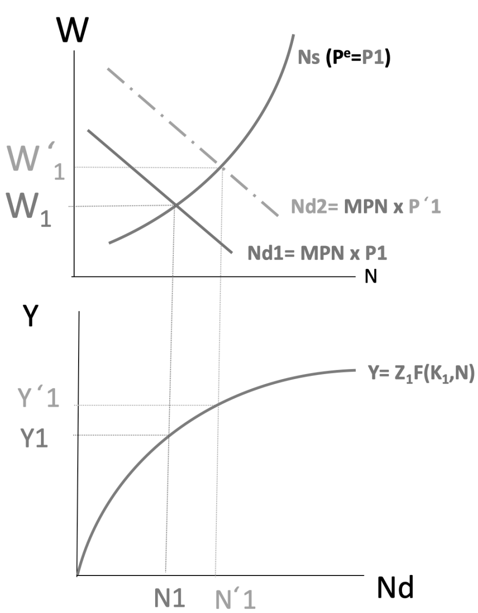




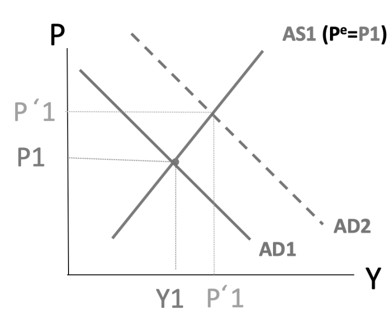


- In the long-run, "fully flexible adjustment in labor market", the equilibrium employment is the level so called "full employment". LRAS is vertical at Y_F.
- In the short-run, market has nominal frictions and incomplete adjustment. $Y = \bar{Y} + \alpha(P - P^e)$
- Sticky Price Model : $P = sP^e +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

4. Medium Run Adjustment and Self Correcting Mechanism



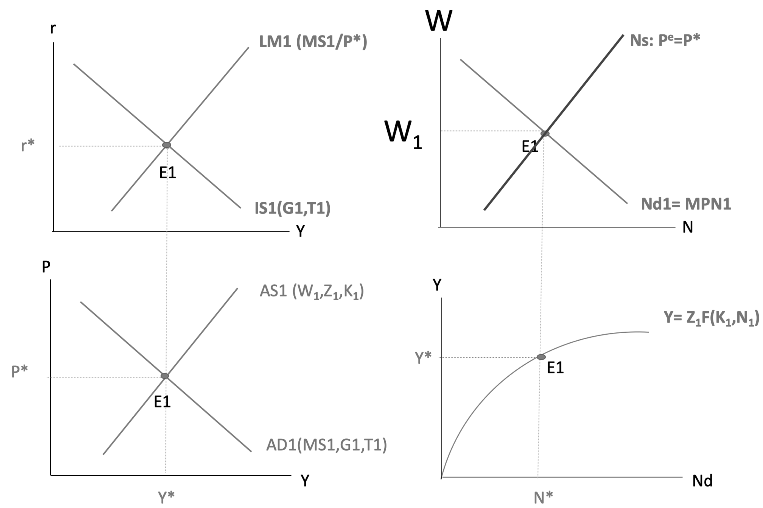
Suppose workers miscalculate the prices; they underestimate the price. Producers calculate the price correctly.



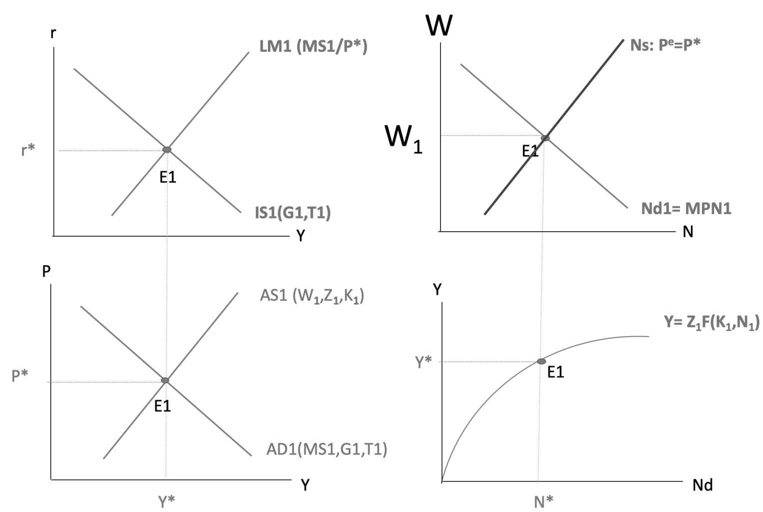
- Swift Adjustment : "New Classical" economist $\Rightarrow$ No policy needed
- Slow Adjustment : "Keynesian or New Keynesian" economist $\Rightarrow$ Policy might be welfare-improving

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

- Monetary policy



- Fiscal policy



- Productivity Shocks