

Topics for Today

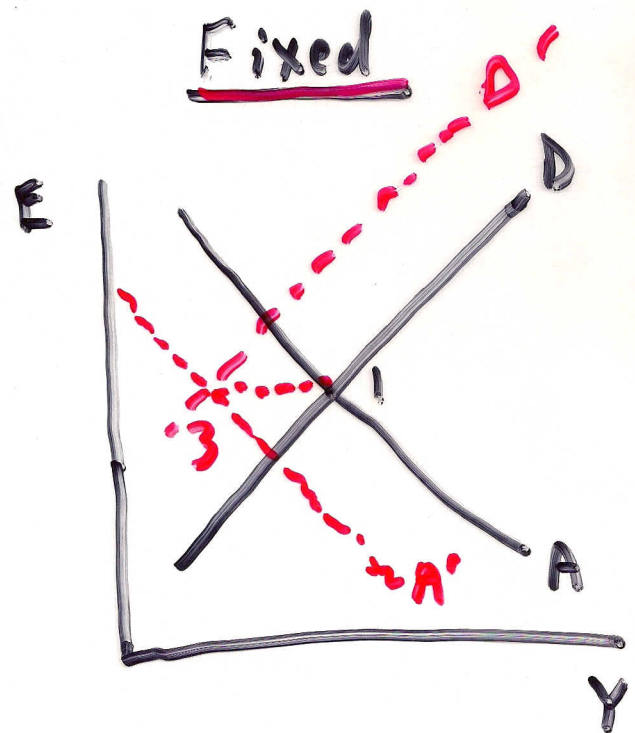
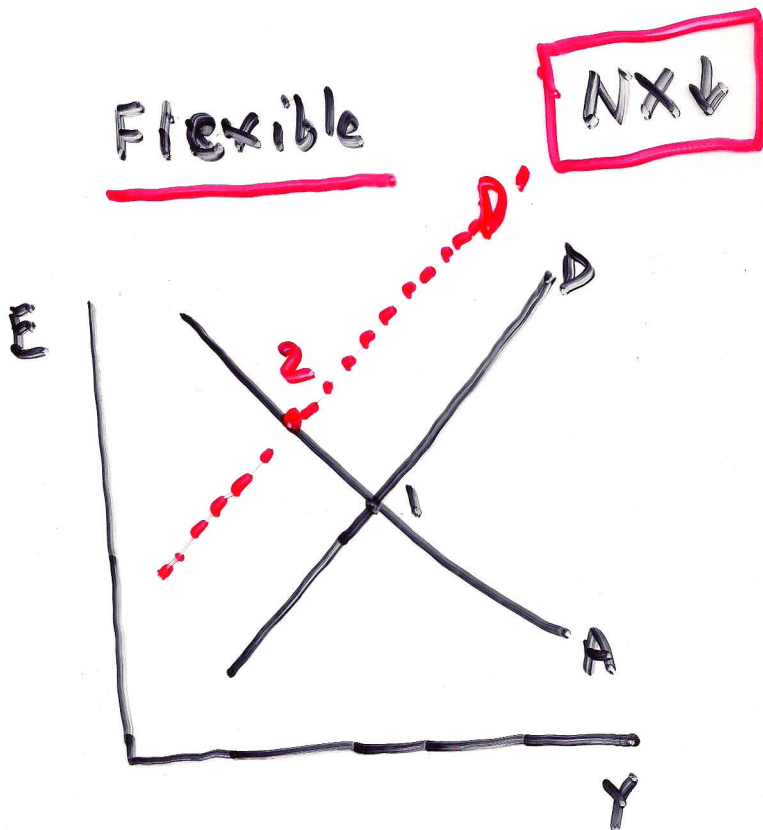
- ① Fixed vs. Flexible Exchange Rates
- ② International Policy Transmission
- ③ Policy Coordination Failures

Arguments in Favor of Flexible Rates

① Monetary Policy Autonomy

② Symmetry

③ Ex. Rate Changes act as "shock absorbers"
(for real shocks)



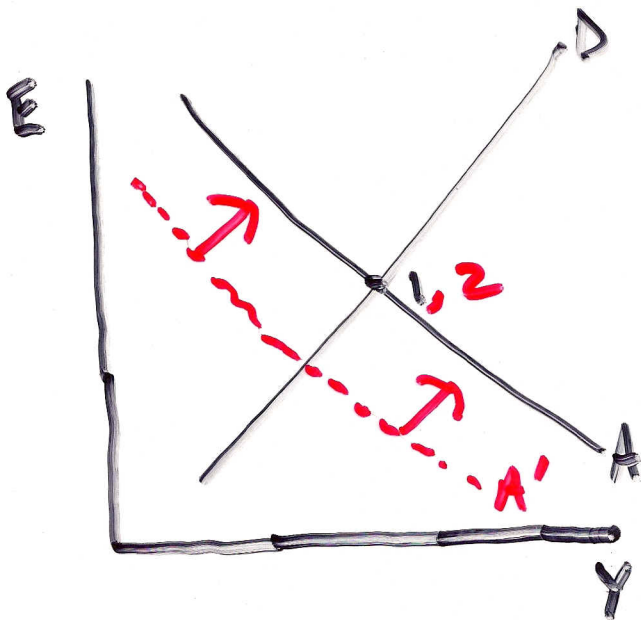
Arguments in Favor of Fixed Rates

① Policy Discipline. Avoids excessive money growth and inflation

② Promotes foreign trade and investment

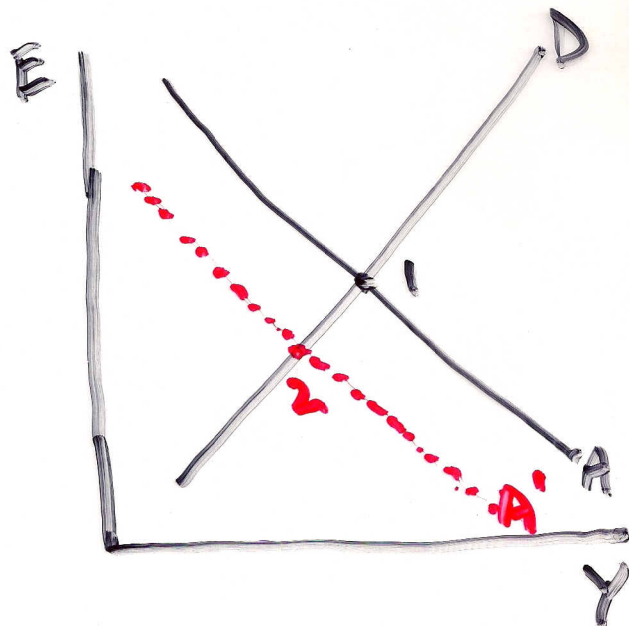
③ Fixed ex. rates act as a "shock absorber"
(for domestic monetary shocks)

Fixed



$M_d \uparrow$

Flexible



Punch-Line

- ① If most shocks are real (i.e., shift DD) then flexible rates are better (i.e., lead to more stable output).
- ② If most shocks are due to domestic monetary factors, then fixed rates are better.
- ③ If foreign monetary shocks are important, then flexible rates are better (they insulate you from foreign price level changes).

International Macro Policy Transmission

	Flexible	Fixed
Monetary Policy	Negative Transmission $M \uparrow \Rightarrow E \downarrow \uparrow$ $\Rightarrow NX \uparrow$ $\Rightarrow Y \uparrow, Y^* \downarrow$	Positive Transmission $M \uparrow \Rightarrow M^* \uparrow$ $R, R^* \downarrow$ $\Rightarrow Y \uparrow, Y^* \uparrow$
Fiscal Policy	Positive Transmission $G \uparrow \Rightarrow E \downarrow$ $\Rightarrow NX \downarrow$ $\Rightarrow Y^* \uparrow$ Only partial crowding out $Y \uparrow$	Negative Transmission $G \uparrow \Rightarrow AD \uparrow$ $\Rightarrow Y \uparrow$ $\Rightarrow R \uparrow$ $\Rightarrow M \uparrow, M^* \downarrow$ $R^* \uparrow \text{ and } M^* \downarrow$ $\Rightarrow Y^* \downarrow$

Policy Coordination Failures

Consider the following situation:

- 1.) There are 2 countries. Each wants to reduce inflation.
- 2.) Due to nominal rigidities, reducing inflation causes unemployment to rise (temporarily).
- 3.) Each country therefore wants to maximize $-\frac{\Delta\pi}{\Delta u}$ (i.e., the amount of inflation reduction per unit increase in unemployment).
- 4.) The countries policies affect each other through the exchange rate. In particular, a monetary contraction not only lowers inflation in the usual way (by reducing the rate of domestic price increase), but it also leads to an ex. rate appreciation, which lowers the price of imports.
- 5.) However, the ex. rate channel is only operative if the other country does not respond.

Here is an example,

FOREIGN

		FOREIGN	
		somewhat restrictive	very restrictive
HOME	somewhat restrictive	$\Delta \pi^* = -1$ $\Delta u^* = 1$ $\Delta \pi = -1$ $\Delta u = 1$	$\Delta \pi^* = -2$ $\Delta u^* = 1.75$ $\Delta \pi = 0$ $\Delta u = .5$
	very restrictive	$\Delta \pi^* = 0$ $\Delta u^* = .5$ $\Delta \pi = -2$ $\Delta u = 1.75$	$\Delta \pi^* = -1.25$ $\Delta u^* = 1.5$ $\Delta \pi = -1.25$ $\Delta u = 1.5$

Translated into payoffs [i.e., $-\Delta \pi / \Delta u$] this yields,

		FOREIGN	
		somewhat	very
HOME	somewhat restrictive	1	$8/7$
	very restrictive	$8/7$	$5/6$

Note: This game has the structure of a Prisoner's Dilemma. Very Restrictive is a dominant strategy, even though both countries would prefer the Somewhat Restrictive policy combination.

Intuition: Both countries will be tempted to deviate from the Somewhat Restrictive policy. Why? (1) If the Foreign country doesn't respond, then you get a big reduction in inflation (per unit of unemployment) due to a reduced cost of imports (2) If the Foreign country does respond, then you would be a fool not to respond yourself, since otherwise your currency depreciates, thus making import inflation worse.

Lesson: Countries should cooperate, either explicitly, through international agreements, or implicitly, via repeated play and "reputation" effects.