Policy Preview

Chapter #9

Introduction

- Focus of this chapter is monetary policy
  - Examine how the central bank sets interest rates in order to control aggregate demand
- Begin with a "media level" description of the operation of central bank policy (*who, what, why, when, and how*)
  - Fundamentally, the central bank moves interest rates in response to deviations of output and inflation from desired levels → a notion that is summarized by the Taylor rule
- Finally, discuss how the central bank decides how much to move interest rates

The "Who" of Policy

- Although both fiscal and monetary policy can be used to fine tune the economy, as a practical matter, most short-run fine tuning is done with monetary policy
- The "who" of stabilization policy = central bank
  - In the U.S., the central bank is the Federal Reserve Bank
  - Formally, U.S. monetary policy is established by vote of the Fed's Open Market Committee (FOMC)
    - The chairman (Ben Bernanke) can typically swing that vote
    - In other countries, the formal decision making authority is vested solely in the governor of the central bank

The "What" of Policy

- What the Fed actually does is set a key interest rate in the economy → the federal funds rate
  - Raising interest rates tends to cool off the economy
  - Lowering interest rates tends to heat up the economy
- Lower interest rates encourage greater investment spending and greater spending on some consumption goods, thus increasing AD
  - Monetary policy works through AD
  - Monetary policy has little influence on AS

The "Why" of Policy

- Central banks choose short-run policy with two goals in mind:
  1. Maintain high economic activity
  2. Maintain low inflation rates

  → *An obvious conflict between these goals*

- Additional conflict between central bank's preferences and capabilities
  - Except at high inflation rates, boosting economic activity does much more to enhance economic welfare than does controlling inflation due to the different slopes of the SRAS and LRAS
  - Central banks focus on stabilizing economic activity around a sustainable goal (Y^*) and have moved toward *inflation targeting*

"When" Policy Is Made

- FOMC meets every six weeks and sets the federal funds rate
- Fed tries not to "surprise" markets
  - Sends advance signals of the likely future path of interest rates
    - At each meeting appropriate language is chosen to describe the Fed's thinking about the near future
    - Markets listen to these words closely and react to the signals that they send
- Current Fed chair Ben Bernanke has emphasized the need to increase such *transparency*

"How" Policy Is Implemented

- Fed "sets" the interest rate by buying or selling Treasury bills to lower or raise the interest rate
- The Fed buys Treasury bills with money it prints (electronically)
  - Lowering interest rates means increasing the money supply
  - The increased money supply results, eventually, in increased prices

Policy as a Rule

- When central bank sets the interest rate, makes a decision on the current economic situation
  - Useful to set that decision within the overall framework of a *monetary policy rule*
  - A general format of a monetary policy rule is:

$$i_t = r^* + \Pi_t + \alpha(\Pi_t - \Pi^*) + \beta\left(100 \times \frac{Y_t - Y_t^*}{Y_t^*}\right) \quad (1)$$

→ r^* is the real, "natural" rate of interest, corresponding to the real interest rate we would observe if the economy operating at the full employment level of output

→ Π^* is the Fed's target rate of inflation

Policy as a Rule

$$i_t = r^* + \Pi_t + \alpha(\Pi_t - \Pi^*) + \beta\left(100 \times \frac{Y_t - Y_t^*}{Y_t^*}\right)$$

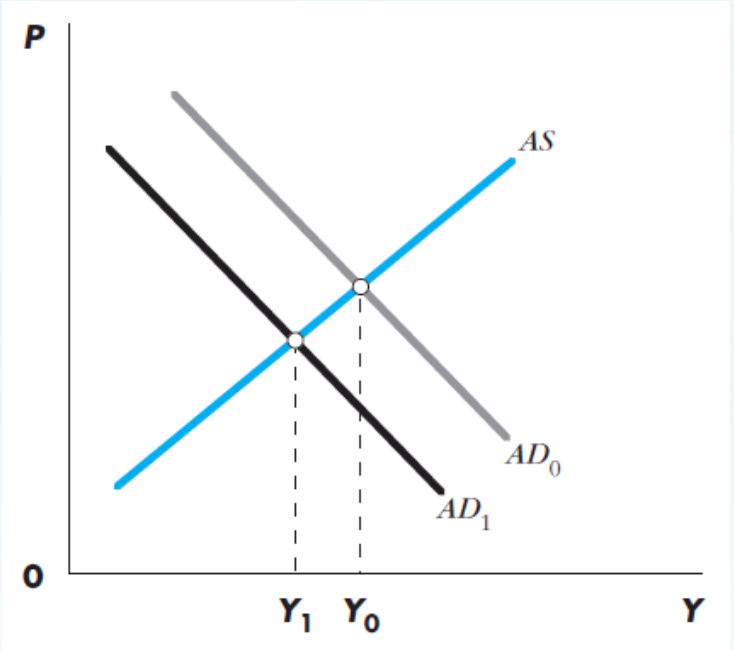
- If α and β are large, then the monetary rule dictates aggressive responses to excess inflation and to economic booms
- If α is large relative to β, then the monetary authority will respond much more aggressively to inflation than it will to the level of economic activity
- The case of β=0 corresponds to pure inflation targeting

Interest Rates and Aggregate Demand

- Higher interest rates raise the opportunity cost of purchasing goods for investment and consumption → reducing demand
- Ignoring all other elements that affect aggregate demand, we can write:

$$Y = C(i) + I(i) + G + NX = AD(i) \quad (2)$$

  - If the Fed raises interest rates, the AD curve shifts to the left
  - Higher interest rates lower prices, but also reduce economic activity



Calculating How to Hit the Target

- Steps taken by a policy maker are:
  - Determining where output and the price level should be (or employment and inflation)
  - Determining how much they need to shift AD or AS to hit those targets
  - Determining how large a policy change is required to move the AD or AS the necessary distance