Monetary Theory and Policy

Chapter 16: The Conduct of Monetary Policy: Strategy and Tactics

The Price Stability Goal and the Nominal Anchor

- Over the past few decades, policy makers throughout the world have become increasingly aware of the social and economic costs of inflation and more concerned with maintaining a stable price level as a goal of economic policy.
- The role of a nominal anchor: a nominal variable, such as the inflation rate or the money supply, which ties down the price level to achieve price stability
- The time-inconsistency problem

Other Goals of Monetary Policy

- Five other goals are continually mentioned by central bank officials when they discuss the objectives of monetary policy:
  - High employment and output stability
  - Economic growth
  - Stability of financial markets
  - Interest-rate stability
  - Stability in foreign exchange markets

Should Price Stability Be the Primary Goal of Monetary Policy?

- Hierarchical Versus Dual Mandates:
  - **Hierarchical mandates** put the goal of price stability first, and then say that as long as it is achieved other goals can be pursued
  - **Dual mandates** are aimed to achieve two coequal objectives: price stability and maximum employment (output stability)
- Price Stability as the Primary, Long-Run Goal of Monetary Policy
  - Either type of mandate is acceptable as long as it operates to make price stability the primary goal in the long run but not the short run.

Monetary Targeting I

- United States
  - Fed began to announce publicly targets for money supply growth in 1975.
  - Paul Volker (1979) focused more in nonborrowed reserves
  - Greenspan announced in July 1993 that the Fed would not use any monetary aggregates as a guide for conducting monetary policy

Monetary Targeting II

- Japan
  - In 1978 the Bank of Japan began to announce “forecasts” for M2 + CDs
  - Bank of Japan’s monetary performance was much better than the Fed’s during 1978-1987.
  - In 1989 the Bank of Japan switched to a tighter monetary policy and was partially blamed for the “lost decade”

Monetary Targeting III

- Germany
  - The Bundesbank focused on “central bank money” in the early 1970s.
  - A monetary targeting regime can restrain inflation in the longer run, even when targets are missed.
  - The reason of the relative success despite missing targets relies on clearly stated monetary policy objectives and central bank engagement in communication with the public.

Monetary Targeting

- Flexible, transparent, accountable
- Advantages
  - Almost immediate signals help fix inflation expectations and produce less inflation
  - Almost immediate accountability
- Disadvantages
  - Must be a strong and reliable relationship between the goal variable and the targeted monetary aggregate

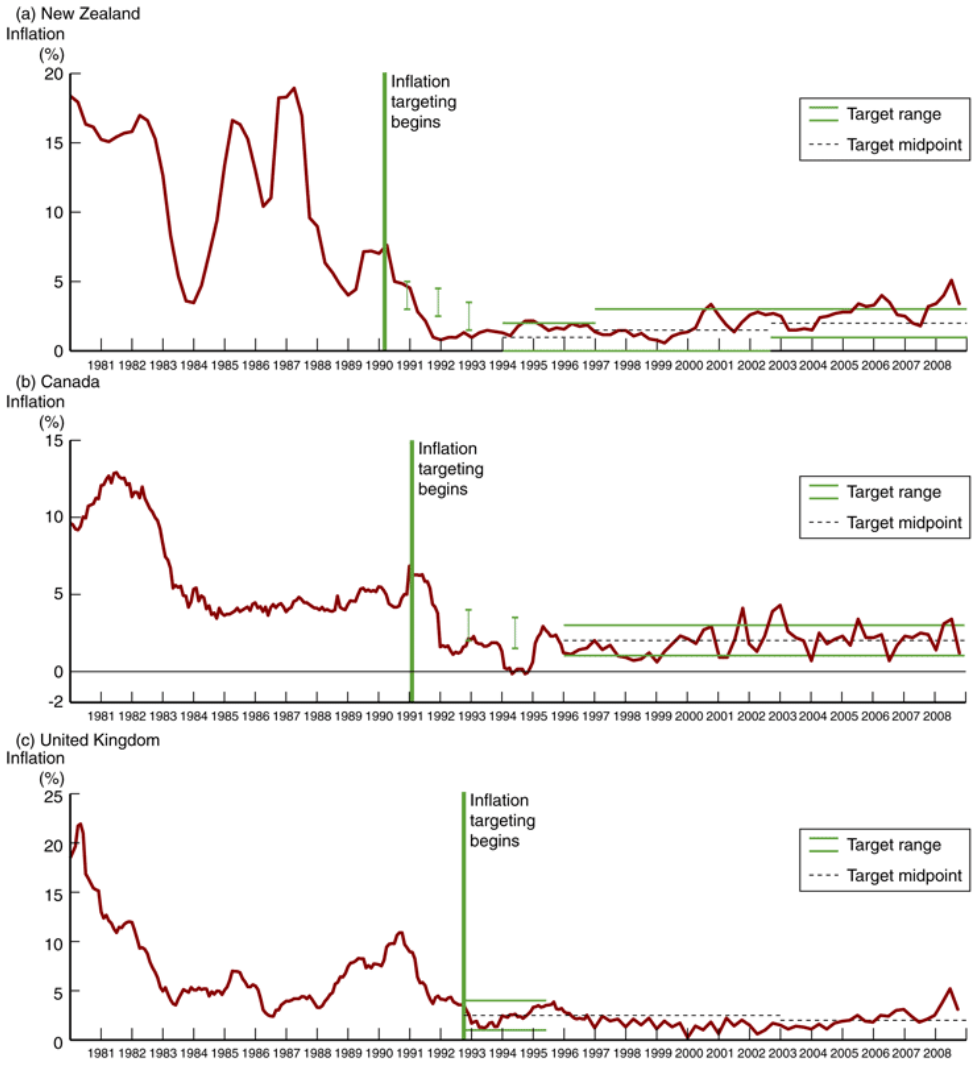
Inflation Targeting I

- Public announcement of medium-term numerical target for inflation
- Institutional commitment to price stability as the primary, long-run goal of monetary policy and a commitment to achieve the inflation goal
- Information-inclusive approach in which many variables are used in making decisions
- Increased accountability of the central bank

Inflation Targeting II

- New Zealand (effective in 1990)
  - Inflation was brought down and remained within the target most of the time.
  - Growth has generally been high and unemployment has come down significantly
- Canada (1991)
  - Inflation decreased since then, some costs in term of unemployment
- United Kingdom (1992)
  - Inflation has been close to its target.
  - Growth has been strong and unemployment has been decreasing.

FIGURE 1 Inflation Rates and Inflation Targets for New Zealand, Canada, and the United Kingdom, 1980–2008



Source: Ben S. Bernanke, Thomas Laubach, Frederic S. Mishkin, and Adam S. Poson, *Inflation Targeting: Lessons from the International Experience* (Princeton: Princeton University Press, 1999), updates from the same sources, and www.rbnz.govt .nz/statistics/econind/a3/ha3.xls.

Inflation Targeting III

- Advantages
  - Does not rely on one variable to achieve target
  - Easily understood
  - Reduces potential of falling in time-inconsistency trap
  - Stresses transparency and accountability
- Disadvantages
  - Delayed signaling
  - Too much rigidity
  - Potential for increased output fluctuations
  - Low economic growth during disinflation

The Evolution of the Federal Reserve's Monetary Policy Strategy

- The United States has achieved excellent macroeconomic performance (including low and stable inflation) until the onset of the global financial crisis without using an explicit nominal anchor such as an inflation target.
- History:
  - Fed began to announce publicly targets for money supply growth in 1975
  - Paul Volker (1979) focused more in nonborrowed reserves
  - Greenspan announced in July 1993 that the Fed would not use any monetary aggregates as a guide for conducting monetary policy

The Evolution of the Federal Reserve's Monetary Policy Strategy

- There is no explicit nominal anchor in the form of an overriding concern for the Fed.
- Forward looking behavior and periodic "preemptive strikes"
- The goal is to prevent inflation from getting started.

The Evolution of the Federal Reserve's Monetary Policy Strategy

- Advantages
  - Uses many sources of information
  - Demonstrated success
- Disadvantages
  - Lack of accountability
  - Inconsistent with democratic principles

The Fed's "Just Do It" Monetary Policy Strategy

- Advantages of the Fed's "Just Do It" Approach:
  - forward-looking behavior and stress on price stability also help to discourage overly expansionary monetary policy, thereby ameliorating the time-inconsistency problem

- Disadvantages of the Fed's "Just Do It" Approach:
  - lack of transparency; strong dependence on the preferences, skills, and trustworthiness of the individuals in charge of the central bank

Lessons for Monetary Policy Strategy from the Global Financial Crisis

- Developments in the financial sector have a far greater impact on economic activity than was earlier realized.
- The zero-lower-bound on interest rates can be a serious problem.
- The cost of cleaning up after a financial crisis is very high.
- Price and output stability do not ensure financial stability.

Lessons for Monetary Policy Strategy from the Global Financial Crisis

- How should Central banks respond to asset price bubbles?
  - Asset-price bubble: pronounced increase in asset prices that depart from fundamental values, which eventually burst.
- Types of asset-price bubbles
  - Credit-driven bubbles
    - Subprime financial crisis
  - Bubbles driven solely by irrational exuberance

Should central banks respond to bubbles?

- Strong argument for not responding to bubbles driven by irrational exuberance
- Bubbles are easier to identify when asset prices and credit are increasing rapidly at the same time.
- Monetary policy should not be used to prick bubbles.

Should central banks respond to bubbles?

- Macropudential policy: regulatory policy to affect what is happening in credit markets in the aggregate.
- Monetary policy: Central banks and other regulators should not have a laissez-faire attitude and let credit-driven bubbles proceed without any reaction.

Tactics: Choosing the Policy Instrument

- Tools
  - Open market operation
  - Reserve requirements
  - Discount rate
- Policy instrument (operating instrument)
  - Reserve aggregates
  - Interest rates
  - May be linked to an intermediate target
- Interest-rate and aggregate targets are incompatible (must chose one or the other).

FIGURE 2 Linkages Between Central Bank Tools, Policy Instruments, Intermediate Targets, and Goals of Monetary Policy

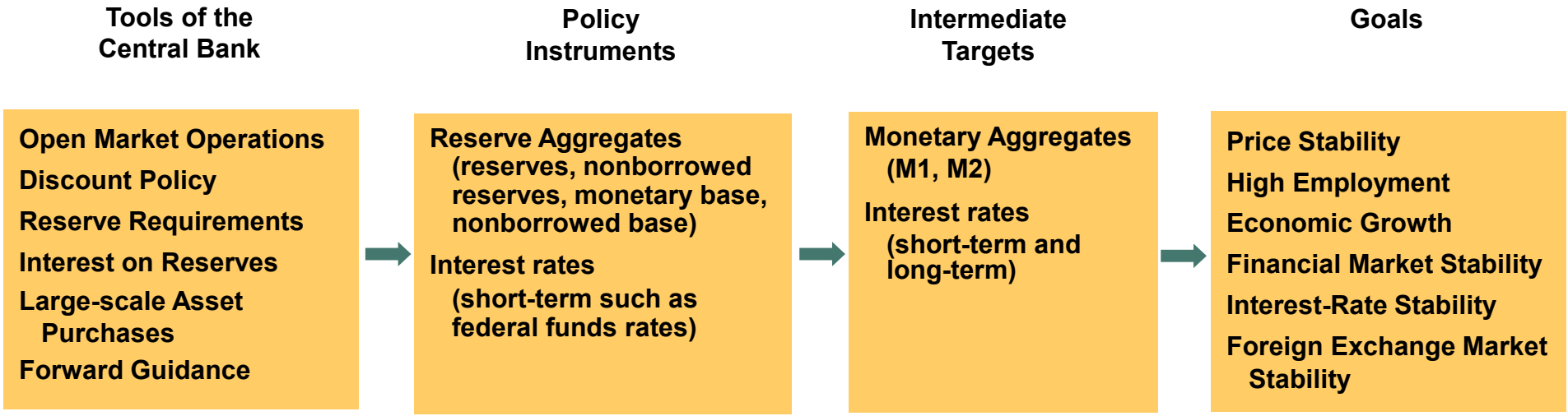
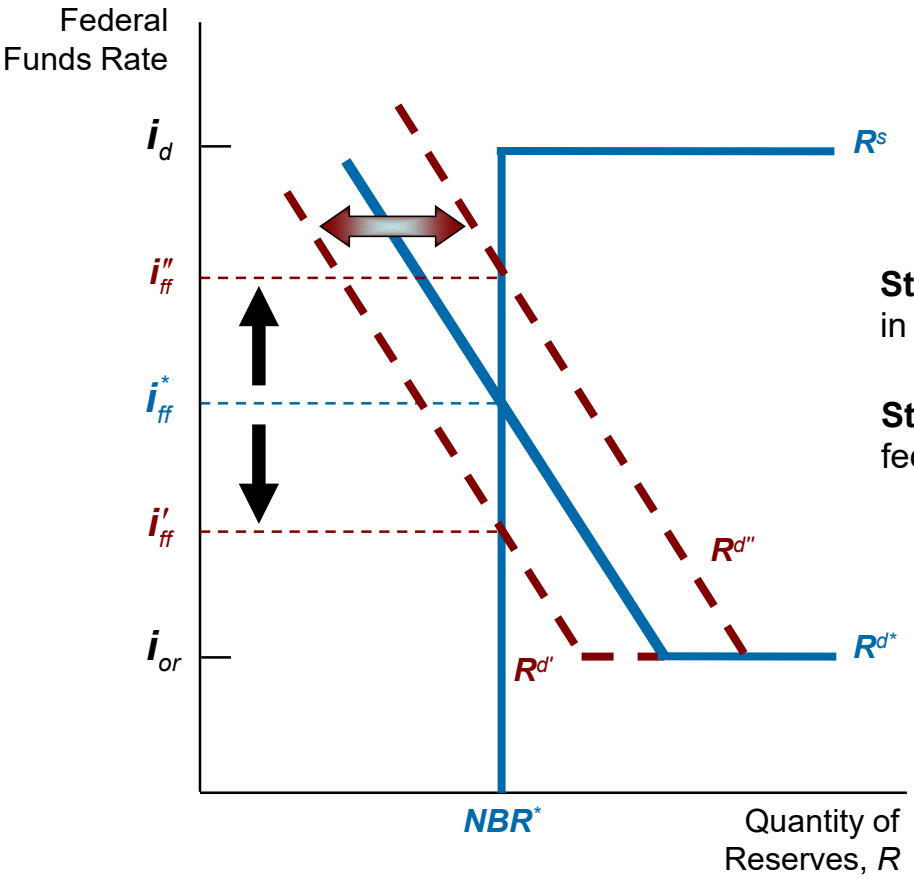


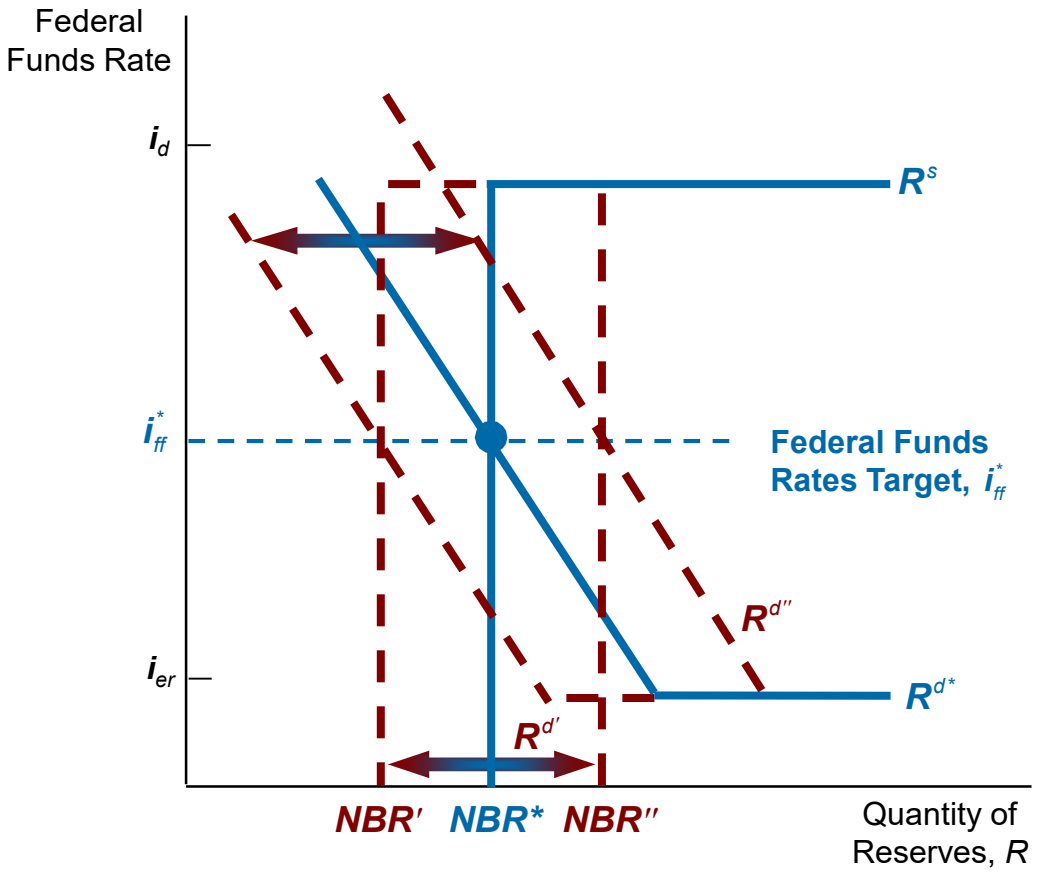
Figure 3 Result of Targeting on Nonborrowed Reserves



Step 1. A rightward or leftward shift in the demand curve for reserves …

Step 2. leads to fluctuations in the federal funds rate between i'_{ff} and i''_{ff}.

Figure 4 Result of Targeting on the Federal Funds Rate



Step 1. A rightward or leftward shift in the demand curve for reserves…

Step 2. lead the central bank to shift the supply curve of reserves so that the federal rate does not change…

Step 3. with the result that non-borrowed reserves fluctuate between NBR'_{ff} and NBR''_{ff}.

Criteria for Choosing the Policy Instrument

- Observability and measurability
- Controllability
- Predictable effect on goals

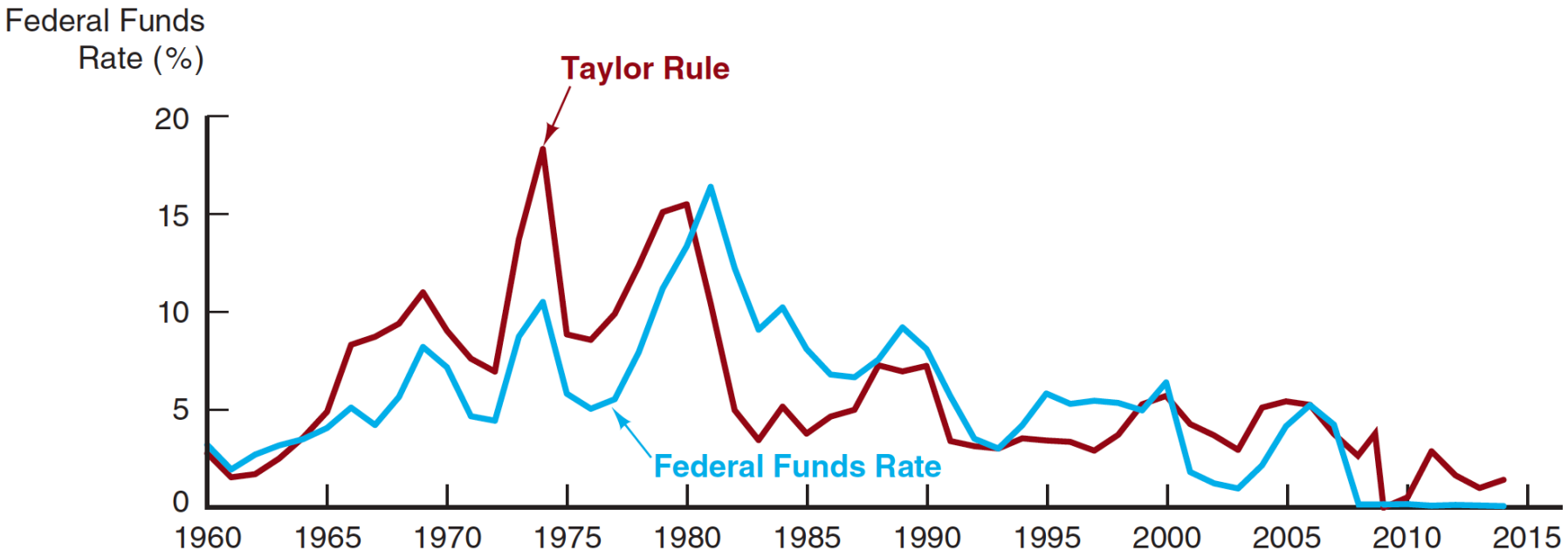
The Taylor Rule and the Phillips Curve

- The Taylor Rule

$$\text{Federal funds rate target} =$$
$$\text{inflation rate} + \text{equilibrium real fed funds rate}$$
$$+1/2\ (\text{inflation gap}) + 1/2\ (\text{output gap})$$

- An inflation gap and an output gap
  - Stabilizing real output is an important concern
  - Output gap is an indicator of future inflation as shown by Phillips curve
- Balance between unemployment and inflation

Figure 5 The Taylor Rule for the Federal Funds Rate, 1970–2014



Source: Federal Reserve Bank of St. Louis, FRED database: http://research.stlouisfed.org/fred2/.