Economics

Monetary Policy

Exam Focus

- Roles of central banks
- Monetary policy tools
- Neutral interest rate
- Policy limitations
- Relationship between fiscal and monetary policy

Roles of a Central Bank

- Formulation and application of monetary policy
- Monopoly supplier of currency
- Banker to central government and banking system
- Lender of last resort
- Regulator of payment system
- Supervisor of banking system

Monetary Policy

- *Monetary policy* refers to the activities of central banks aimed at controlling quantity of money in the economy
- Main objective is price stability
- Other objectives may include the following:
  - Maintaining full employment, output, and confidence in the system

Monetary Policy Tools

- **Policy rate**: interest rate central banks charge banks for borrowed reserves (U.S. sets a target for Fed funds rate, rate that banks charge each other for short-term loans)
- Increasing interbank lending rate decreases bank lending and the money supply

Monetary Policy Tools

Open market operations: *most often used*

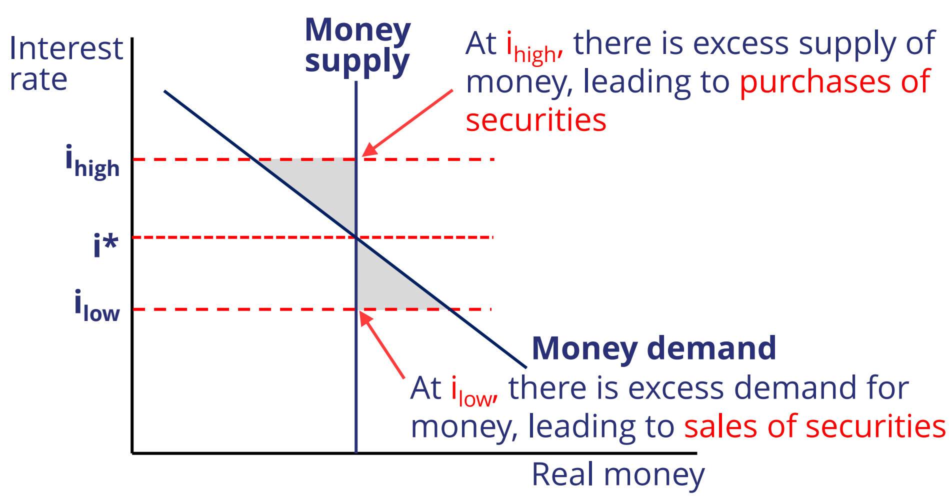
- Central bank buys or sells government securities to increase or decrease money supply

- In recent years, central banks have purchased other debt securities by creating money, referred to as *quantitative easing*

Required reserve ratio: *seldom changed*

- Lower reserve ratio increases funds banks have to make loans

Equilibrium in the Money Market



Monetary Policy: Example

Monetary policy is *least likely* to include:

A. setting an inflation rate target.

B. changing an official interest rate.

C. enacting a transfer payment program.

-1

The Transmission Mechanism

Monetary policy affects the economy through **four interrelated channels**: lending rates, asset prices, expectations, and exchange rates.

When a central bank buys securities

- Bank reserves increase
- Interbank lending rates decrease
- Short-term and long-term lending rates decrease
- Businesses and consumers increase purchases
- Domestic currency depreciates, exports increase

Overall, aggregate demand increases, increasing real GDP, employment, and inflation

Transmission Mechanism: Example 1

Which is the *most* accurate statement regarding central banks and monetary policy?

A. Central bank activities are typically intended to maintain price stability.

B. Monetary policies work through the economy via four independent channels.

C. Commercial and interbank interest rates move inversely to official interest rates.

Central bank activities are typically intended to .
is not correct because the of monetary policy are
not

-1

Transmission Mechanism: Example 2

An increase in a central bank's policy rate might be expected to reduce inflationary pressures by:

A. reducing consumer demand.

B. reducing the foreign exchange value of the currency.

C. driving up asset prices leading to an increase in personal sector wealth.

If an increase in the central bank's policy rate is successfully transmitted through the money markets to other parts of the financial sector,
might decline as the rate of on and other . This
decline in should, all other things being equal and among
other effects, lead to a reduction in upward pressure on .

-1

The Neutral Interest Rate

Neutral interest rate = trend growth rate of <u>real</u> GDP + target inflation rate

Policy rate > neutral rate: <u>contractionary</u>

Policy rate < neutral rate: <u>expansionary</u>

Neutral Interest Rate: Example

If an economy's trend GDP growth rate is 3 percent and its central bank has a 2 percent inflation target, which policy rate is *most consistent* with an expansionary monetary policy?

A. 4 percent.

B. 5 percent.

C. 6 percent.

The neutral rate of interest, which in this example is percent, is considered to be that rate of interest that neither spurs on nor slows down the underlying economy. As such, when they are the neutral rate, monetary policy is expansionary.

-1

Limitations of Monetary Policy

- Inflation caused by supply-side shocks (cost push)
- Issues with transmission mechanism
  - Market participants expectations
  - Bond market vigilantes
  - Liquidity trap

Relationship: Fiscal and Monetary Policy

Policy	Expansionary Fiscal	Contractionary Fiscal
Expansionary monetary	Highly expansionary. Growing private and public sectors.	Lower interest rates increases private sector. Contractionary fiscal policy reduces public sector.
Contractionary monetary	Increase in government spending and interest rates. Public sector growing proportion of national income.	Decreasing output and increasing interest rates. Both public and private sectors reduced.

Fiscal & Monetary Interaction: Example

If fiscal policy is easy and monetary policy tight, then:

A. interest rates would tend to fall, reinforcing the fiscal policy stance.

B. the government sector would tend to shrink as a proportion of total GDP.

C. the government sector would tend to expand as a proportion of total GDP.

With a tight monetary policy, real interest rates should and private sector activity, which could be at least partially offset by an in via the loosening of fiscal policy. The net effect, however, would be an expansion in the size of the sector relative to the sector.

-1

Solutions

Monetary Policy: Example

Monetary policy is *least likely* to include:

A. setting an inflation rate target.

B. changing an official interest rate.

C. enacting a transfer payment program.

Transfer payment programs represent fiscal, not monetary, policy.

Transmission Mechanism: Example 1

Which is the *most* accurate statement regarding central banks and monetary policy?

A. Central bank activities are typically intended to maintain price stability.

B. Monetary policies work through the economy via four independent channels.

C. Commercial and interbank interest rates move inversely to official interest rates.

Central bank activities are typically intended to maintain price stability.
B is not correct because the transmission channels of monetary policy are not independent.

Transmission Mechanism: Example 2

An increase in a central bank's policy rate might be expected to reduce inflationary pressures by:

A. reducing consumer demand.

B. reducing the foreign exchange value of the currency.

C. driving up asset prices leading to an increase in personal sector wealth.

If an increase in the central bank's policy rate is successfully transmitted through the money markets to other parts of the financial sector, consumer demand might decline as the rate of interest on mortgages and other credit rises. This decline in consumer demand should, all other things being equal and among other effects, lead to a reduction in upward pressure on consumer prices.

Neutral Interest Rate: Example

If an economy's trend GDP growth rate is 3 percent and its central bank has a 2 percent inflation target, which policy rate is *most consistent* with an expansionary monetary policy?

A. 4 percent.

B. 5 percent.

C. 6 percent.

The neutral rate of interest, which in this example is 5 percent, is considered to be that rate of interest that neither spurs on nor slows down the underlying economy. As such, when they are below the neutral rate, monetary policy is expansionary.

Fiscal & Monetary Interaction: Example

If fiscal policy is easy and monetary policy tight, then:

A. interest rates would tend to fall, reinforcing the fiscal policy stance.

B. the government sector would tend to shrink as a proportion of total GDP.

C. the government sector would tend to expand as a proportion of total GDP.

With a tight monetary policy, real interest rates should rise and reduce private sector activity, which could be at least partially offset by an expansion in government activity via the loosening of fiscal policy. The net effect, however, would be an expansion in the size of the public sector relative to the private sector.