

Interest Rates and Monetary Policy

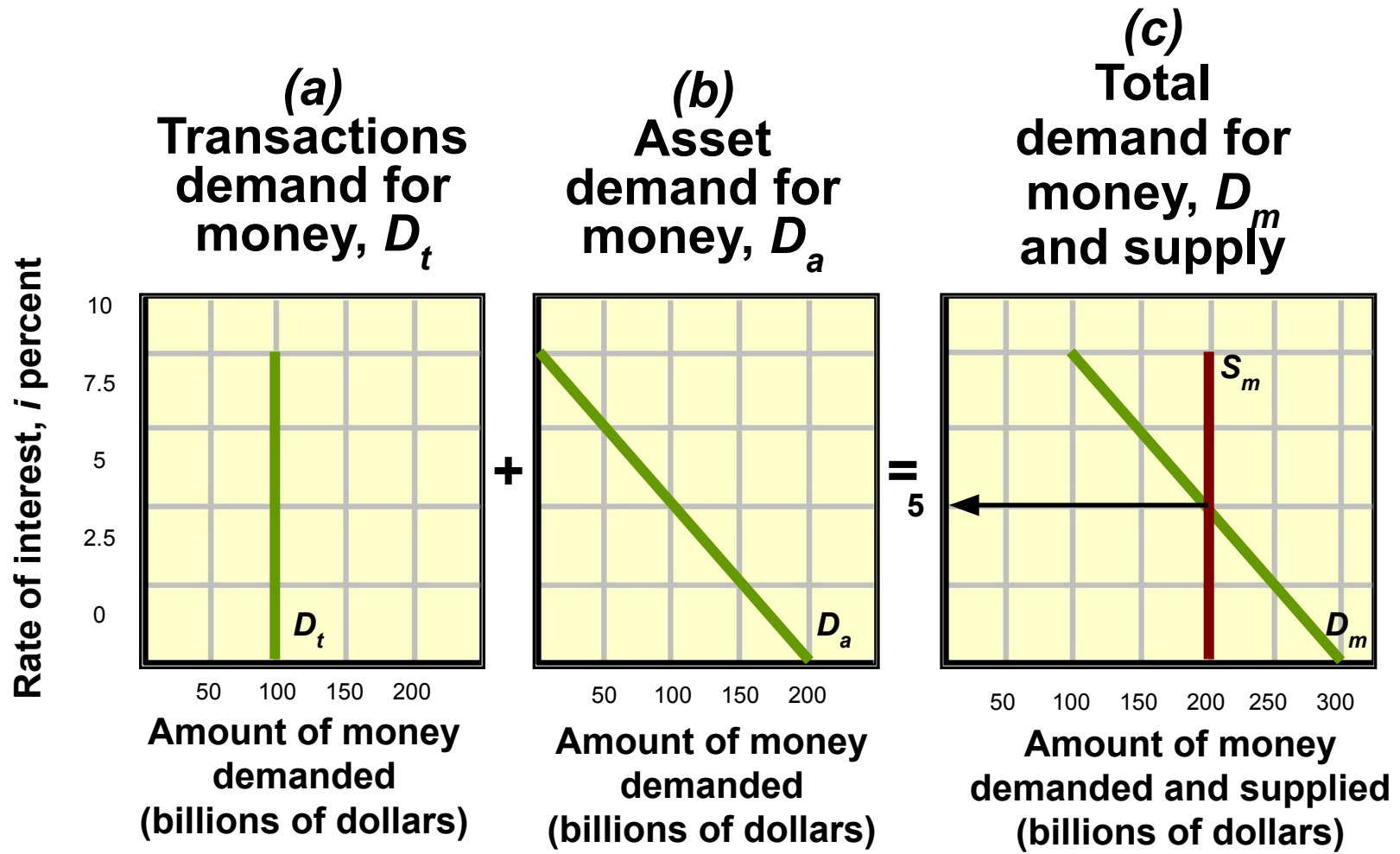
Interest Rates

- The price paid for the use of money
- Many different interest rates
- Speak as if only one interest rate
- Determined by the money supply and money demand

Demand for Money

- Why hold money?
- Transactions demand, D_t
 - Determined by nominal GDP
 - Independent of the interest rate
- Asset demand, D_a
 - Money as a store of value
 - Varies inversely with the interest rate
- Total money demand, D

Demand for Money



Federal Reserve Balance Sheet

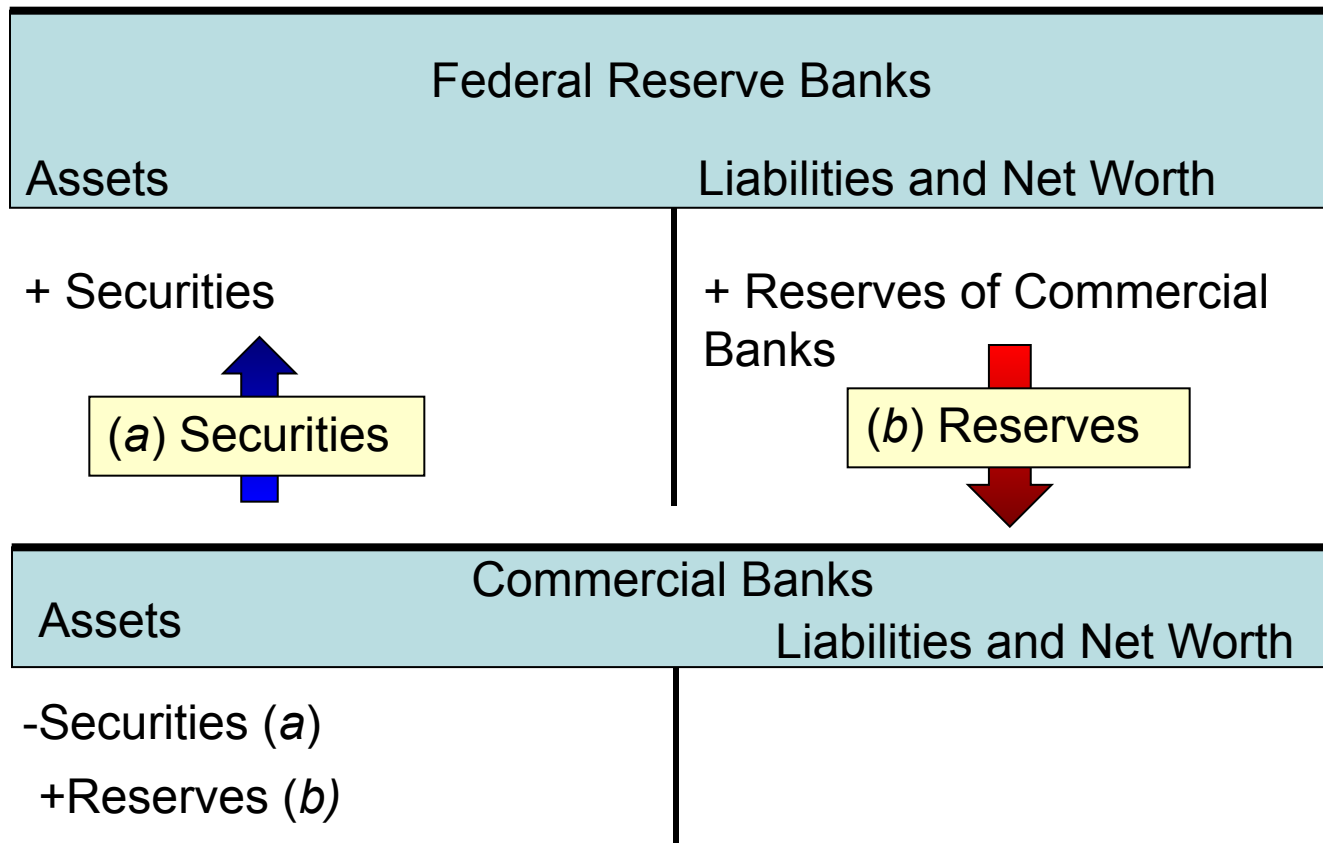
- Assets
 - Securities
 - Loans to commercial banks
- Liabilities
 - Reserves of commercial banks
 - Treasury deposits
 - Federal Reserve Notes outstanding

Tools of Monetary Policy

- Open market operations
 - Buying and selling of government securities (or bonds)
 - Commercial banks and the general public
 - Used to influence the money supply
- When the Fed sells securities, commercial bank reserves are reduced

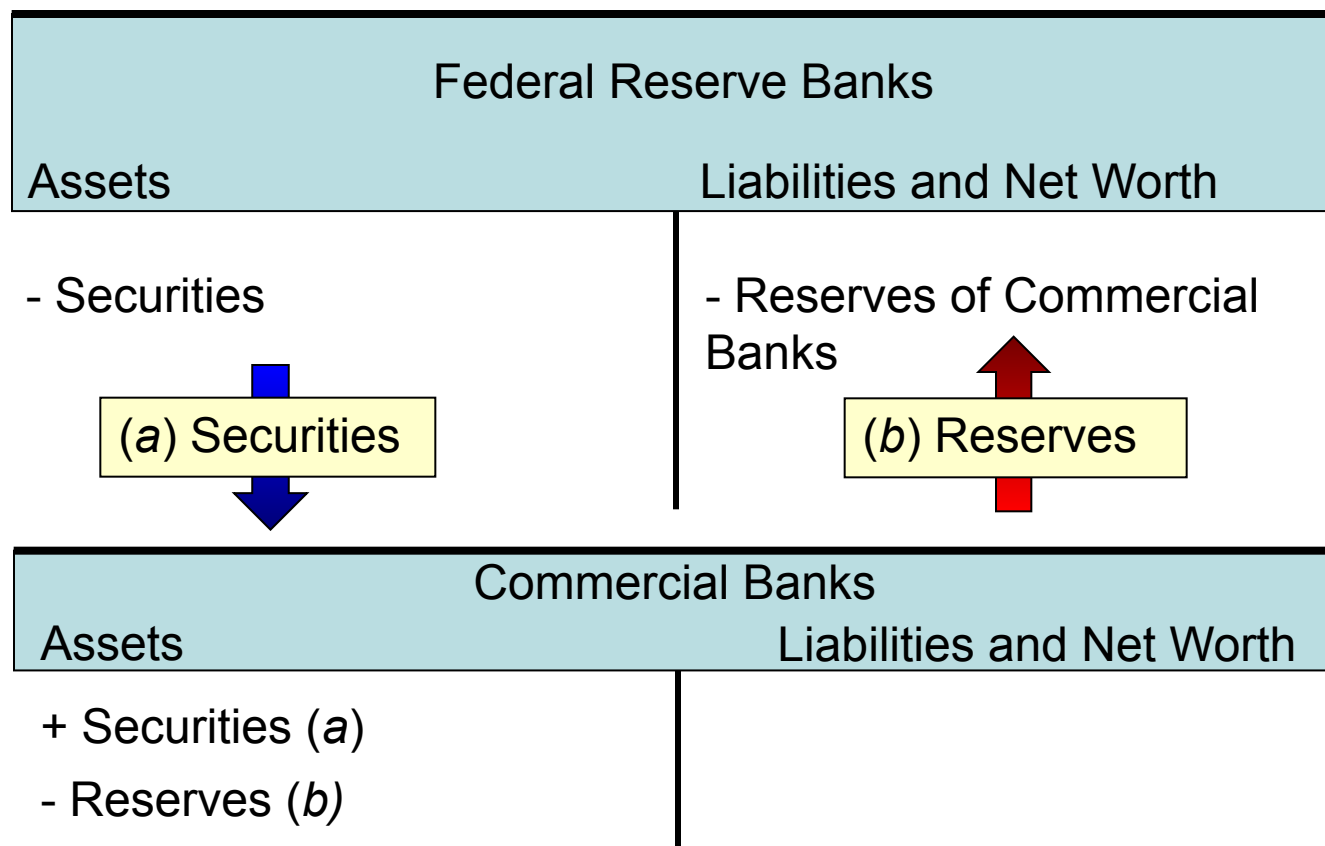
Tools of Monetary Policy

- Fed buys bonds from commercial banks



Tools of Monetary Policy

- Fed sells bonds to commercial banks



Tools of Monetary Policy

- The reserve ratio
 - Changes the money multiplier
- The discount rate
 - The Fed as lender of last resort
 - Short term loans
- Term auction facility
 - Introduced December 2007
 - Banks bid for the right to borrow

Tools of Monetary Policy

- Open market operations are the most important
- Reserve ratio last changed in 1992
- Discount rate was a passive tool
- Term auction facility is new
 - Guaranteed amount lent by the Fed
 - Anonymous

The Federal Funds Rate

- Rate charged by banks on overnight loans
- Targeted by the Federal Reserve
- FOMC conducts open market operations to achieve the target
- Demand curve for Federal funds
- Supply curve for Federal funds

Monetary Policy

- Expansionary monetary policy
 - Economy faces a recession
 - Lower target for Federal funds rate
 - Fed buys securities
 - Expanded money supply
 - Downward pressure on other interest rates

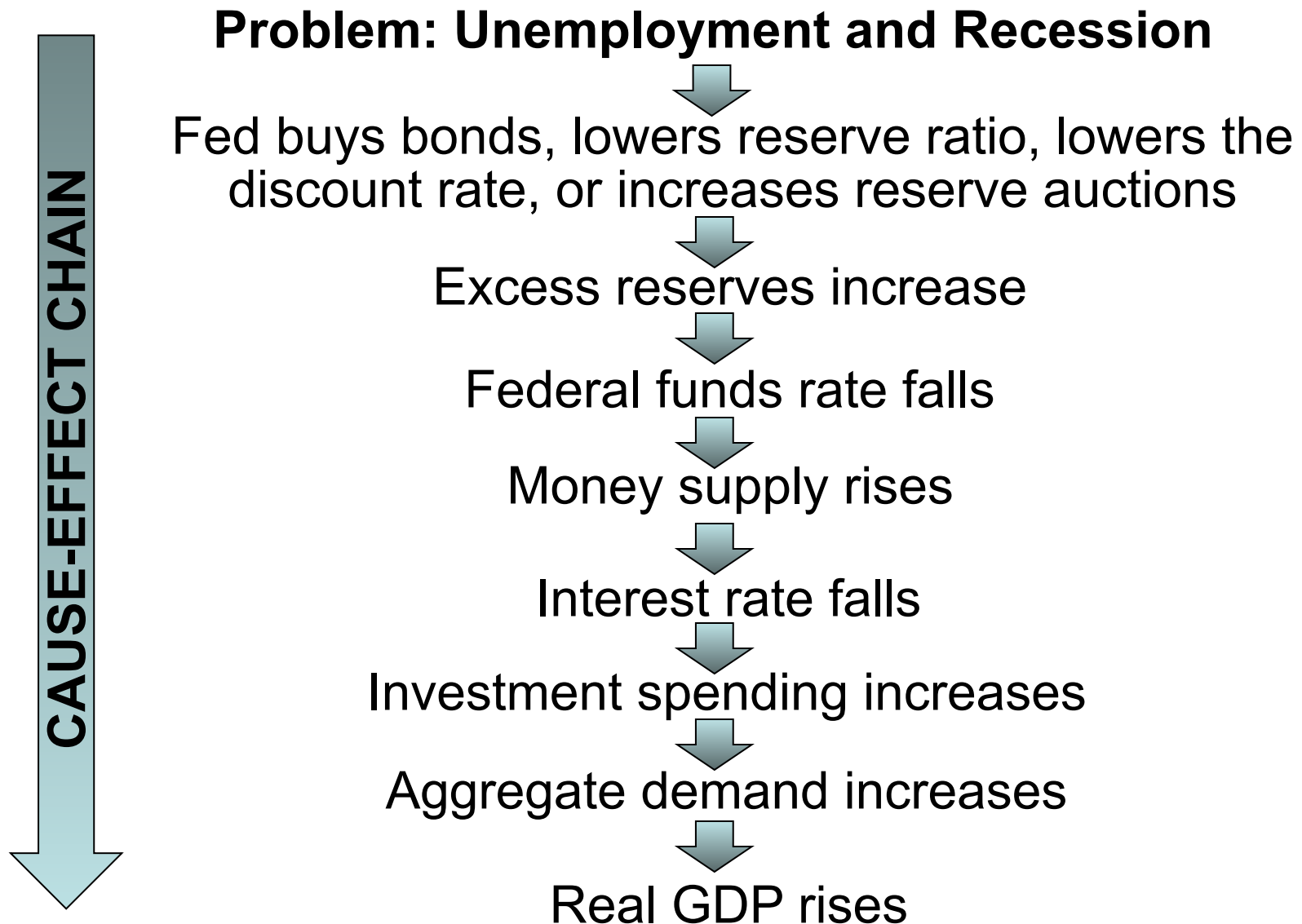
Monetary Policy

- Restrictive monetary policy
 - Periods of rising inflation
 - Increases Federal funds rate
 - Increases money supply
 - Increases other interest rates

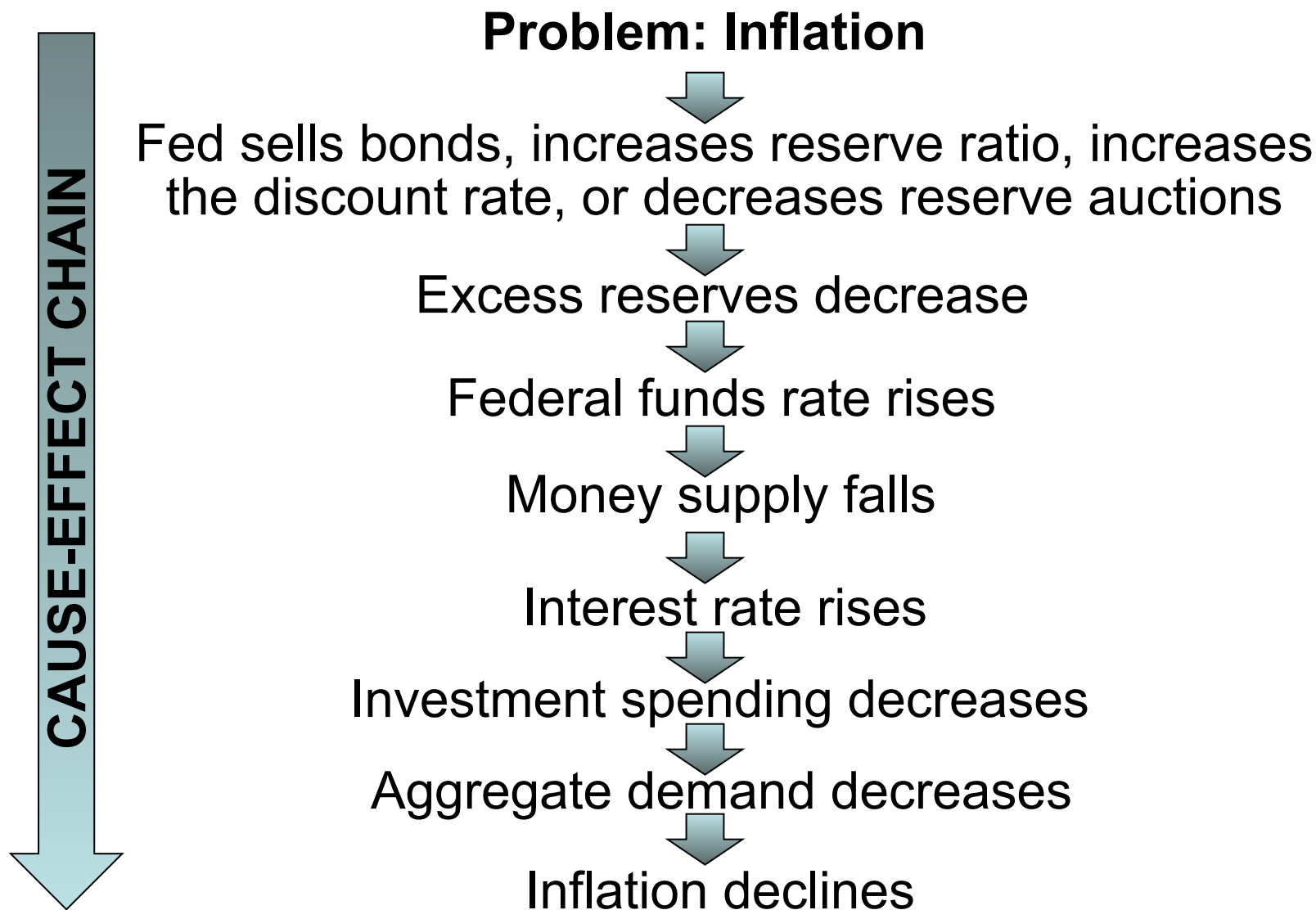
Taylor Rule

- Rule of thumb for tracking actual monetary policy
- Fed has 2% target inflation rate
- If real GDP = potential GDP and inflation is 2%, then targeted Federal funds rate is 4%
- Target varies as inflation and real GDP vary

Expansionary Monetary Policy



Restrictive Monetary Policy



Evaluation and Issues

- Advantages over fiscal policy
 - Speed and flexibility
 - Isolation from political pressure
 - Monetary policy is more subtle than fiscal policy

Problems and Complications

- Lags
 - Recognition and operational
 - Cyclical asymmetry
 - Liquidity trap