The Federal Reserve System

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Monetary System Timeline

- 1913 - The Federal Reserve Act was signed.
- 1914 - The 12 Regional Reserve Banks opened.
- 1920s – OMO began as a monetary tool.
- 1933 – Glass-Steagall passes creating the FDIC.
- 1935 – FOMC created.
- 1971 – Gold standard ends.
- 1980 – Monetary Control Act passes creating the current Federal Reserve structure.

http://www.federalreserveeducation.org/about-the-fed/history/

General Rate Influences

Long-term rates are most influenced by inflation *expectations*

Short-term rates are most influenced by Monetary policy (Fed policy changes)

The US monetary policy employs three major tools:

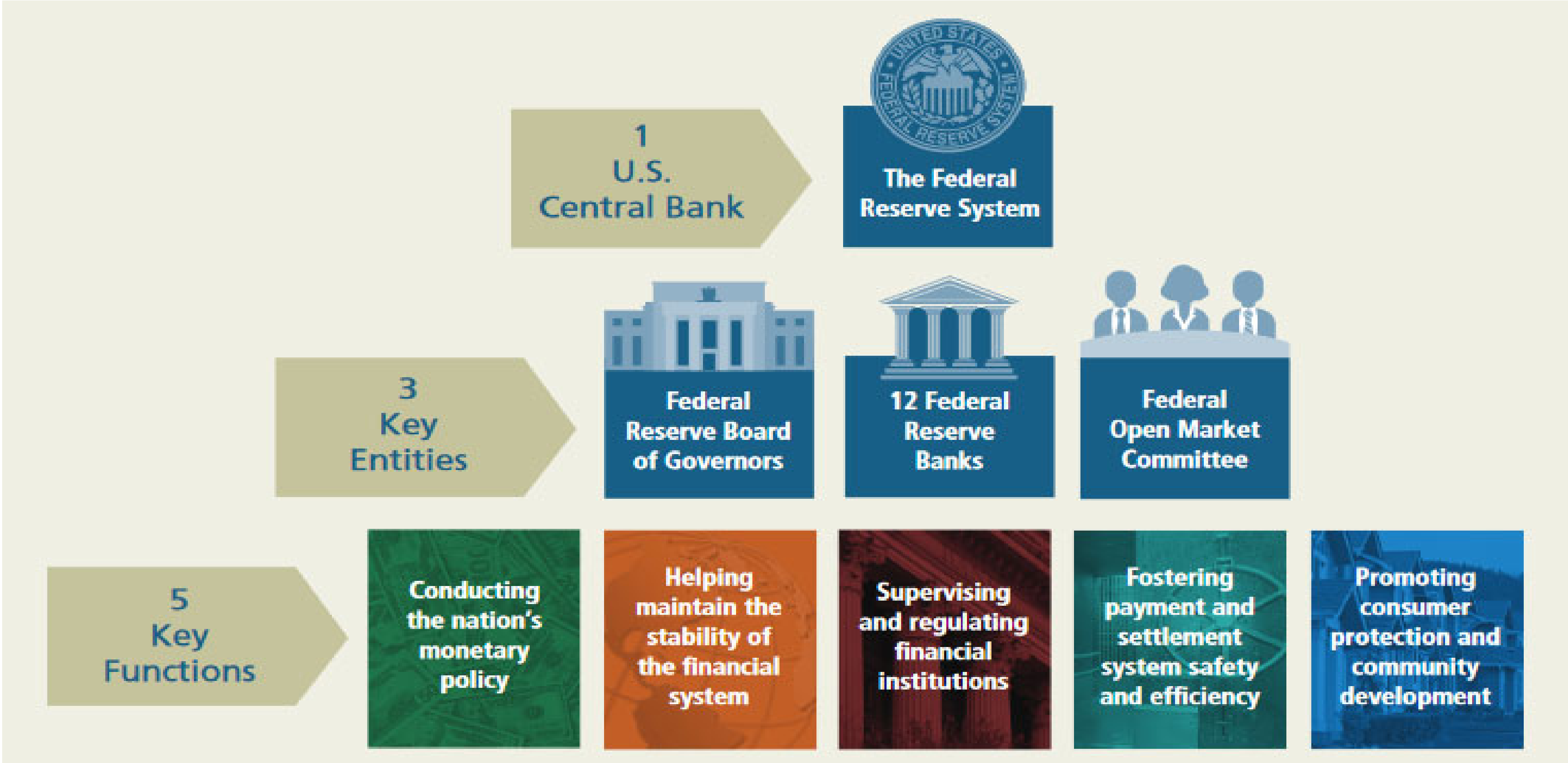
(1) buying or selling national debt,

(2) changing credit restrictions, and

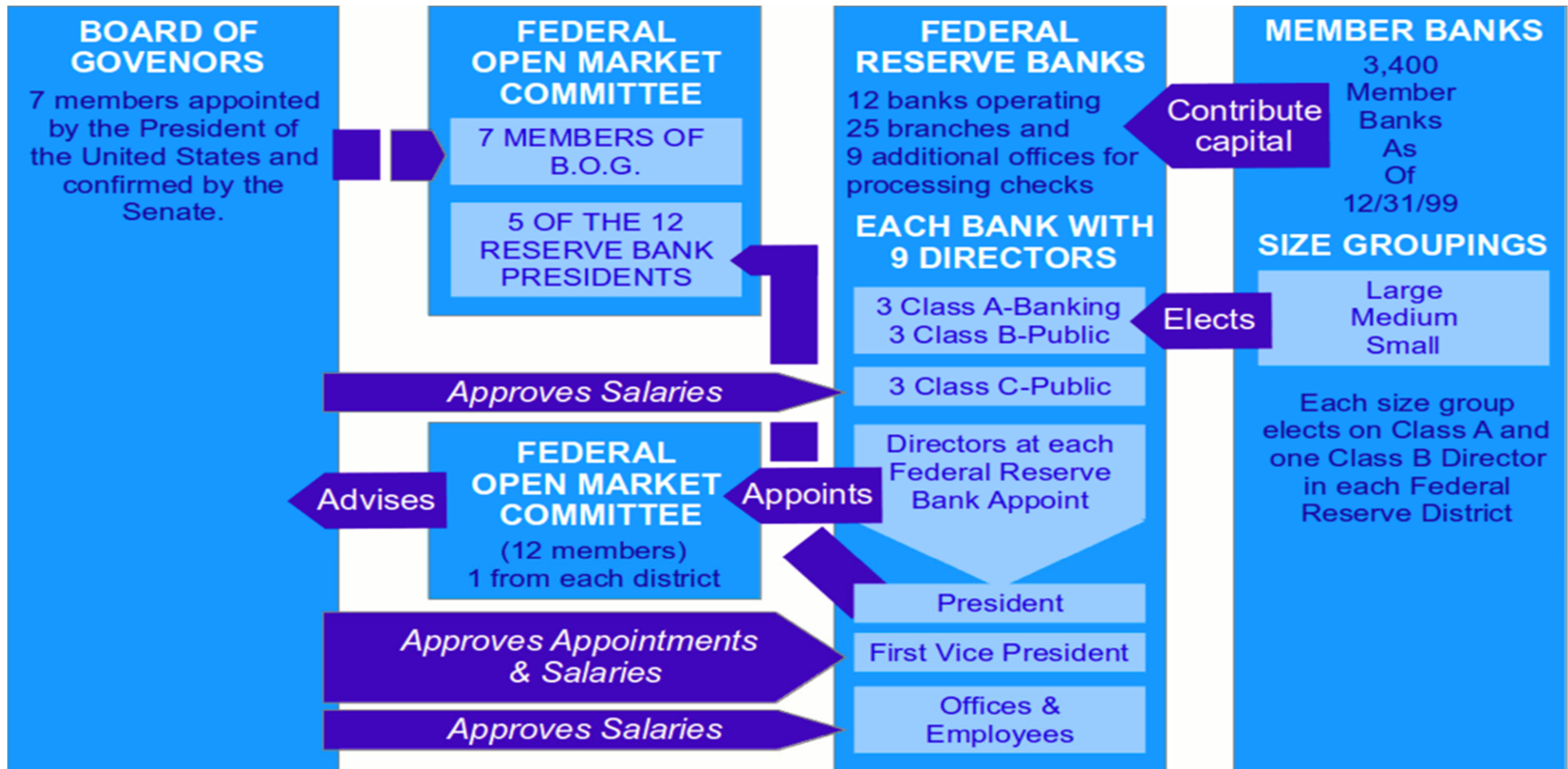
(3) changing the interest rates by changing reserve requirements and several others.

http://www.businessdictionary.com/definition/monetary-policy.html

The Federal Reserve



The FED Structure



FED’s 5 Key Functions

1. **Conducts the nation’s monetary policy** to promote maximum employment, stable prices, and moderate long-term interest rates in the U.S. economy;

2. **Promotes the stability of the financial system** and seeks to minimize and contain systemic risks through active monitoring and engagement in the U.S. and abroad;

3. **Promotes the safety and soundness of individual financial institutions** and monitors their impact on the financial system as a whole;

4. **Fosters payment and settlement system safety and efficiency** through services to the banking industry and the U.S. government that facilitate U.S.-dollar transactions and payments; and

5. **Promotes consumer protection and community development** through consumer-focused supervision and examination, research and analysis of emerging consumer issues and trends, community economic development activities, and the administration of consumer laws and regulations.

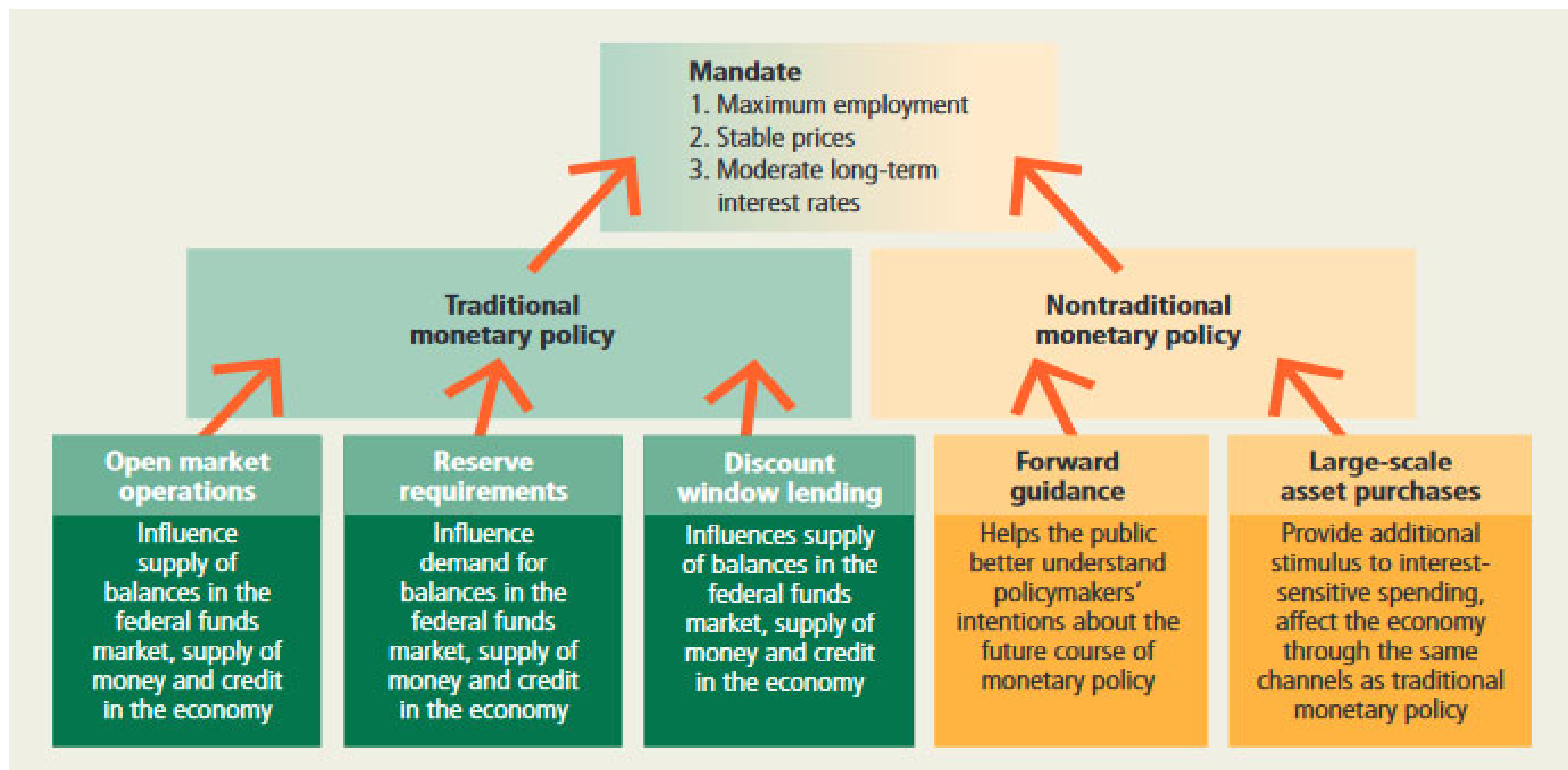
1. Conduct Monetary Policy

- It is the Federal Reserve's actions, as a central bank, to achieve three goals specified by Congress:
  - maximum employment;
  - stable prices; and
  - moderate long-term interest rates in the United States
- The Federal Reserve conducts the nation's monetary policy by managing the level of short-term interest rates and influencing the availability and cost of credit in the economy.
  - Typically by raising or lowering its target for the federal funds rate.
- Monetary policy directly affects interest rates; it indirectly affects stock prices, wealth, and currency exchange rates.

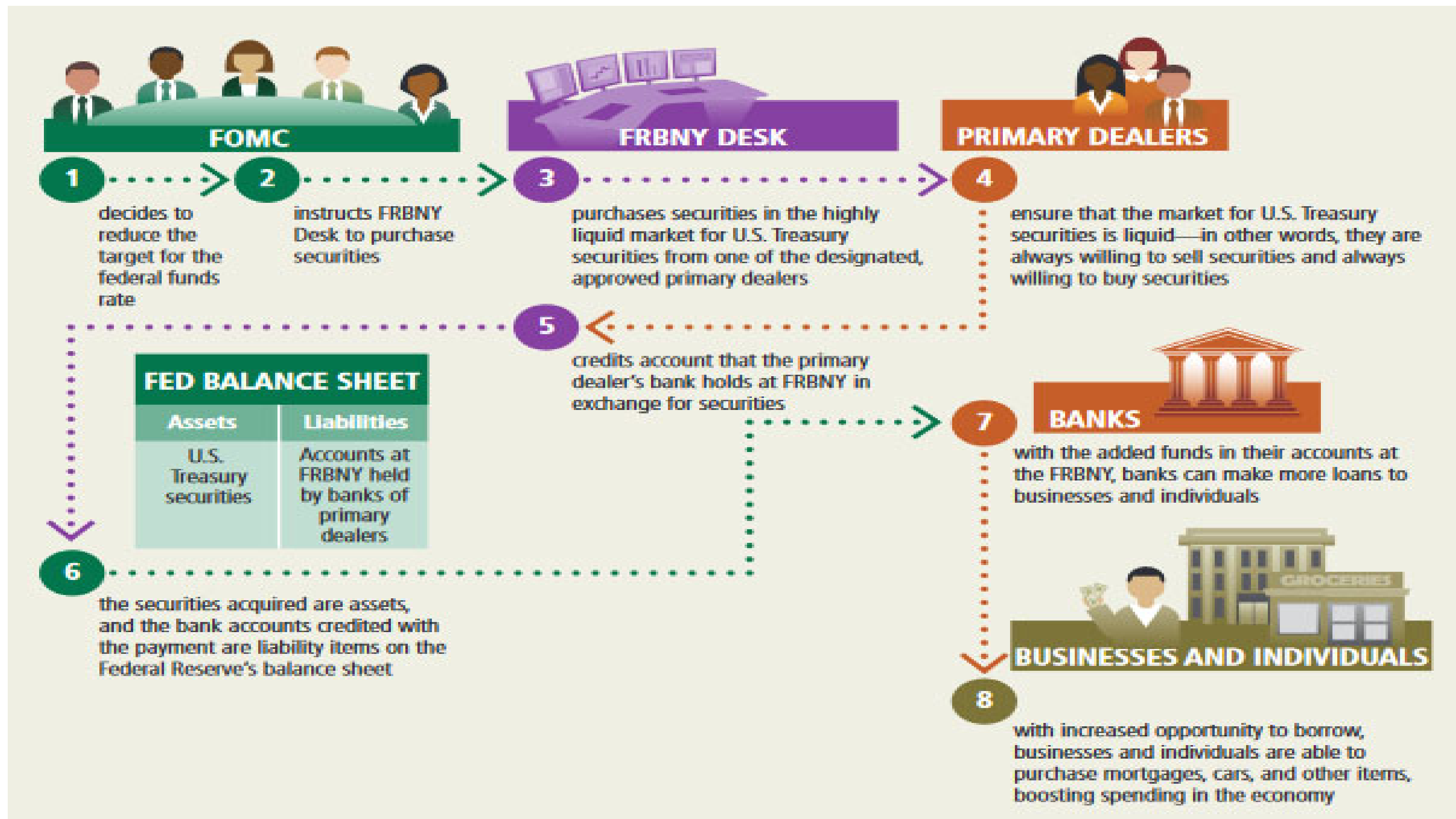
Conducting Monetary Policy

- **What Is the Federal Funds Rate?**
- Federal funds rate is the target interest rate set by the Federal Open Market Committee (FOMC) at which commercial banks borrow and lend their excess reserves to each other overnight.
- Federal funds rate is the target interest rate set by the FOMC.
- FOMC sets a target federal funds rate eight times a year, based on prevailing economic conditions.
- The federal funds rate can influence short-term rates on consumer loans and credit cards as well as impact the stock market.

Fed's Statutory Mandate



Open Market Operations (OMO)



Traditional Monetary Policy Tools

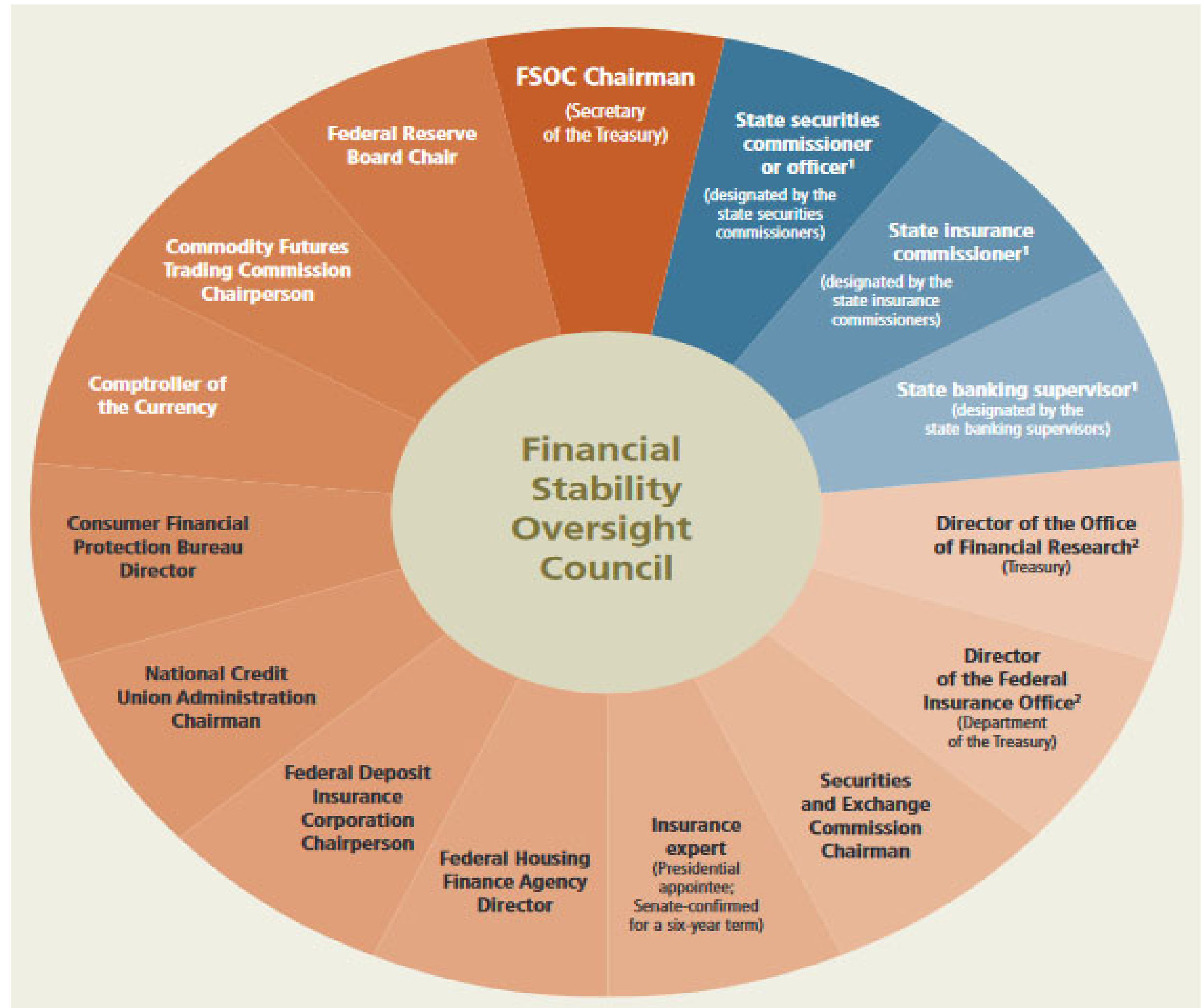
Tool	What is it?	How does it work?	Who uses it?
Reserve requirements	The percentage of deposits that commercial banks and other depository institutions must hold as reserves.	Reserve requirements create a stable demand for reserves. The Federal Reserve then adjusts the supply of reserves through open market operations to keep the level of the federal funds rate close to the target rate established by the Federal Open Market Committee (FOMC).	Determined by the Board of Governors (within ranges specified by the Federal Reserve Act).
Open market operations	Purchases or sales—temporary or permanent—of U.S. government and agency securities in the open market.	Each purchase or sale of securities directly affects the volume of reserves in the banking system and thus the level of the federal funds rate.	Directed by the FOMC; conducted by the Federal Reserve Bank of New York (in competitive operations with primary dealers).
Discount window lending	Depository institutions can borrow from a Federal Reserve Bank.	Credit provided by the Federal Reserve's discount window supplies balances and can help address pressures in the federal funds market.	Reserve Banks lend to depository institutions; interest rate charged is determined by the Board of Governors.

Financial Stability Oversight Council - FSOC

As established under the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Council provides, for the first time, comprehensive monitoring of the stability of our nation's financial system.

The Council is charged with identifying risks to the financial stability of the United States; promoting market discipline; and responding to emerging risks to the stability of the United States' financial system.

The Council consists of 10 voting members and 5 nonvoting members and brings together the expertise of federal financial regulators, state regulators, and an independent insurance expert appointed by the President.



Federal Reserve's 12 Districts

Monetary Policy Tools

- Open Market Operations
- Discount Window and Discount Rate
- Reserve Requirements
- Interest on Required Reserve Balances and Excess Balances
- Overnight Reverse Repurchase Agreement Facility
- Term Deposit Facility
- Commercial Paper Funding Facility
- Paycheck Protection Program Liquidity Facility
- Central Bank Liquidity Swaps
- Temporary Foreign and International Monetary Authorities (FIMA) Repo Facility

Open Market Operations

To raise the fed funds rate:

- NY Fed *sells* T-notes to large member banks
- The bank pays through a reduction in reserves
- Less reserves in the system = Fed funds rise

To lower the fed funds rate:

- NY Fed *buys* T-notes from large member banks
- The Fed pays by increasing bank reserves
- More reserves in the system = Lower funds rate

- <u>Fed Buys:</u>
  - Injects reserves into the banking system.
  - Increases the money supply.
  - Increases the demand for government securities in the secondary market.
  - Increases the price of government securities.
  - Decreases short-term interest rates.

- <u>Fed Sells:</u>
  - Drains reserves from the banking system.
  - Decreases the money supply.
  - Increases the supply of government securities in the secondary market.
  - Decreases the price of government securities.
  - Increases short-term interest rates.

Discount Window / Discount Rate

The **discount window** plays an important role in supporting the liquidity and stability of the banking system and the effective implementation of monetary policy. By providing ready access to funding, the discount window helps depository institutions manage their liquidity risks efficiently and avoid actions that have negative consequences for their customers, such as withdrawing credit during times of market stress. Thus, the discount window supports the smooth flow of credit to households and businesses.

The **discount rate** is the interest rate charged to commercial banks and other depository institutions on loans they receive from their regional Federal Reserve Bank's lending facility—the discount window. The Federal Reserve Banks offer three types of credit to depository institutions: primary credit, secondary credit, and seasonal credit, each with its own interest rate. All discount window loans are fully secured.

Reserve Requirement

- Amount of physical funds that depository institutions are required to hold in reserve against deposits in bank accounts.
- Determines how much money banks can create through loans and investments.
- Set by the Board of Governors, the reserve requirement is usually around 10%. Excess reserves are held either as vault cash or in accounts with the district Federal Reserve Bank.
- Current Reserve Requirement level is 0%
  - effective March 26, 2020

Interest on Required Reserve/Excess Balances

- IORR – Interest on Required Reserves
- IOER – Interest on Excess Reserves

- The Federal Reserve Banks pay interest on required reserve balances and on excess reserve balances.

- Current Rate for both is .10%

Overnight Reverse Repurchase Agreement Facility

- (FOMC) indicated that it intended to use an overnight reverse repurchase agreement (ON RRP) facility as needed as a supplementary policy tool to help control the federal funds rate and keep it in the target range set by the FOMC.

- When the Federal Reserve conducts an overnight RRP, it sells a security to an eligible counterparty and simultaneously agrees to buy the security back the next day. This transaction does not affect the size of the System Open Market Account (SOMA) portfolio, but there is a reduction in reserve balances on the liability side of the Federal Reserve's balance sheet and a corresponding increase in reverse repo obligations while the trade is outstanding.

Term Deposit Facility

- Term deposits facilitate the implementation of monetary policy by providing an additional tool by which the Federal Reserve can manage the aggregate quantity of reserve balances held by depository institutions.
- Funds placed in term deposits are removed from the reserve accounts of participating institutions for the life of the term deposit and thereby drain reserve balances from the banking system.
- Reserve Banks offer term deposits through the Term Deposit Facility (TDF), and all institutions that are eligible to receive earnings on their balances at Reserve Banks may participate in the term deposit program.

Commercial Paper Funding Facility

- Supports the flow of credit to households and businesses.
- Commercial paper markets directly finance a wide range of economic activity, supplying credit and funding for auto loans and mortgages as well as liquidity to meet the operational needs of a range of companies.
- By ensuring the smooth functioning of this market, particularly in times of strain, the Federal Reserve provided credit that supported families, businesses, and jobs across the economy.

Paycheck Protection Program Liquidity Facility

- To bolster the effectiveness of the Small Business Administration's Paycheck Protection Program (PPP), the Federal Reserve is supplying liquidity to participating financial institutions through term financing backed by PPP loans to small businesses.
- The PPP provides loans to small businesses so that they can keep their workers on the payroll.
- The Paycheck Protection Program Liquidity Facility (PPPLF) will extend credit to eligible financial institutions that originate PPP loans, taking the loans as collateral at face value.

Central Bank Liquidity Swaps

- The Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, the Federal Reserve, and the Swiss National Bank have taken coordinated action to enhance the provision of liquidity via the standing U.S. dollar liquidity swap line arrangements.
- In addition, the Federal Reserve has established temporary dollar liquidity swap lines with nine additional foreign central banks.
- These facilities serve as an important liquidity backstop to ease strains in global funding markets, thereby helping to mitigate the effects of such strains on the supply of credit to households and businesses, both domestically and abroad.

Temporary Foreign and International Monetary Authorities (FIMA) Repo Facility

- The Federal Reserve established a temporary repurchase agreement facility for foreign and international monetary authorities (FIMA Repo Facility) to help support the smooth functioning of financial markets, including the U.S. Treasury market, and thus maintain the supply of credit to U.S. households and businesses.
- The FIMA Repo Facility will allow FIMA account holders, which consist of central banks and other international monetary authorities with accounts at the Federal Reserve Bank of New York, to enter into repurchase agreements with the Federal Reserve.
- In these transactions, FIMA account holders temporarily exchange their U.S. Treasury securities held with the Federal Reserve for U.S. dollars, which can then be made available to institutions in their jurisdictions

Limitations of Monetary Policy

- Fed doesn't have up-to-the minute information
- Less-than-perfect understanding of the way the economy works
- This is further complicated by:
  - Impact of technology/productivity
  - Integration of global economies
  - Interrelationship with U.S. equity markets

Historical FED Tools

- Quantitative Easing
  - Increases the supply of money when rates are low. Promotes inflation and hurts confidence. Difficult to gauge how much.
- Operation Twist (now ended)
  - Buying bonds to pay off longer higher rates bonds. Refinancing.
- Bond Buying
  - Stimulating the economy through bond purchasing
- ZIRP – Zero interest rate policy
- NIRP – Negative interest rate policy