# The Federal Reserve System

North Central Texas
Council of Governments

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Development
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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:

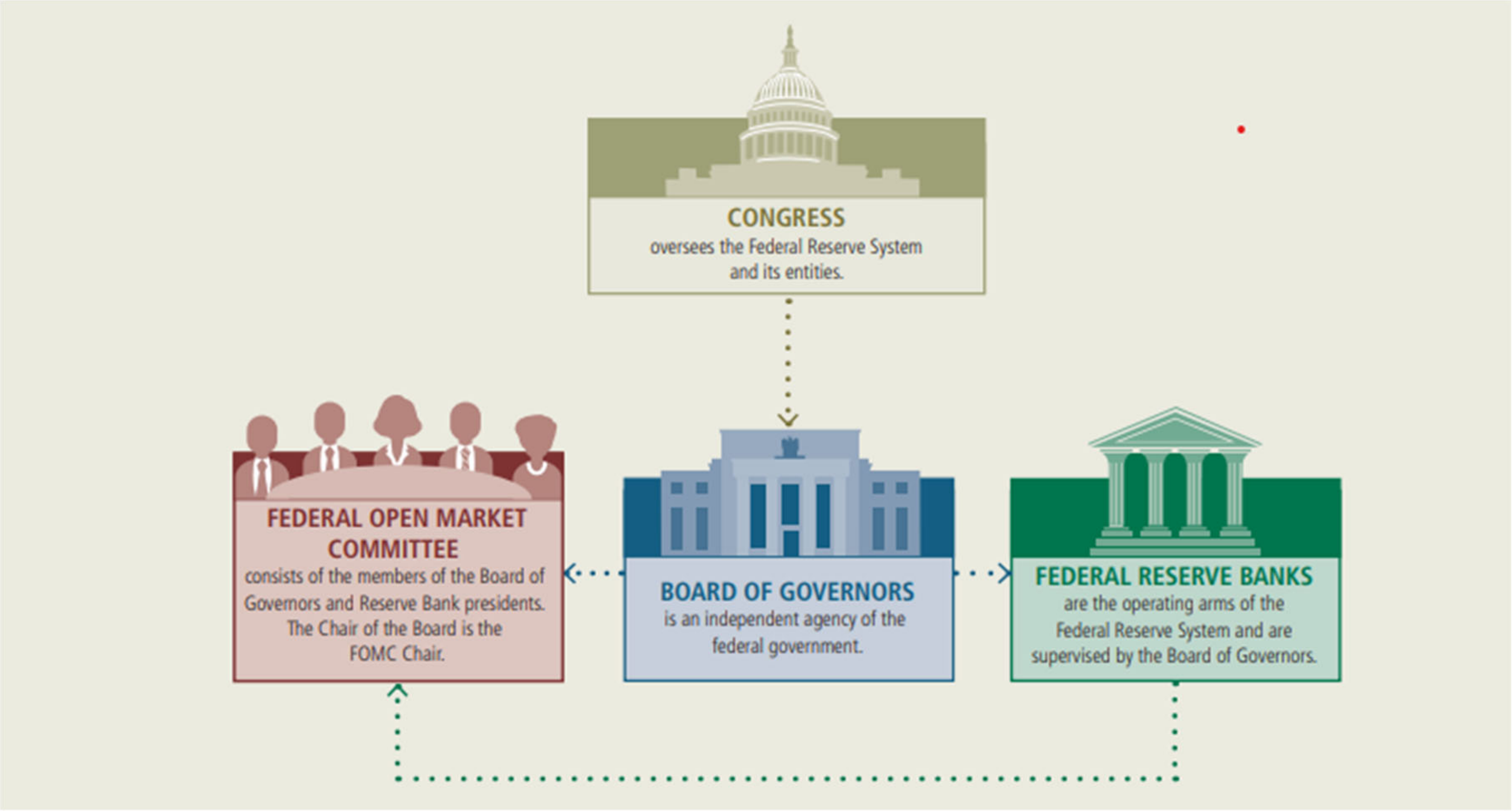
(1) Open Market Operations - buying or selling national debt,

(2) Discount Rate – Interest rate charged to commercial banks and institutions when they borrow from a regional FED bank.

(3) Reserve Requirement – amount of funds depository institutions hold in reserves against deposits.

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

# Congress Provides Oversight



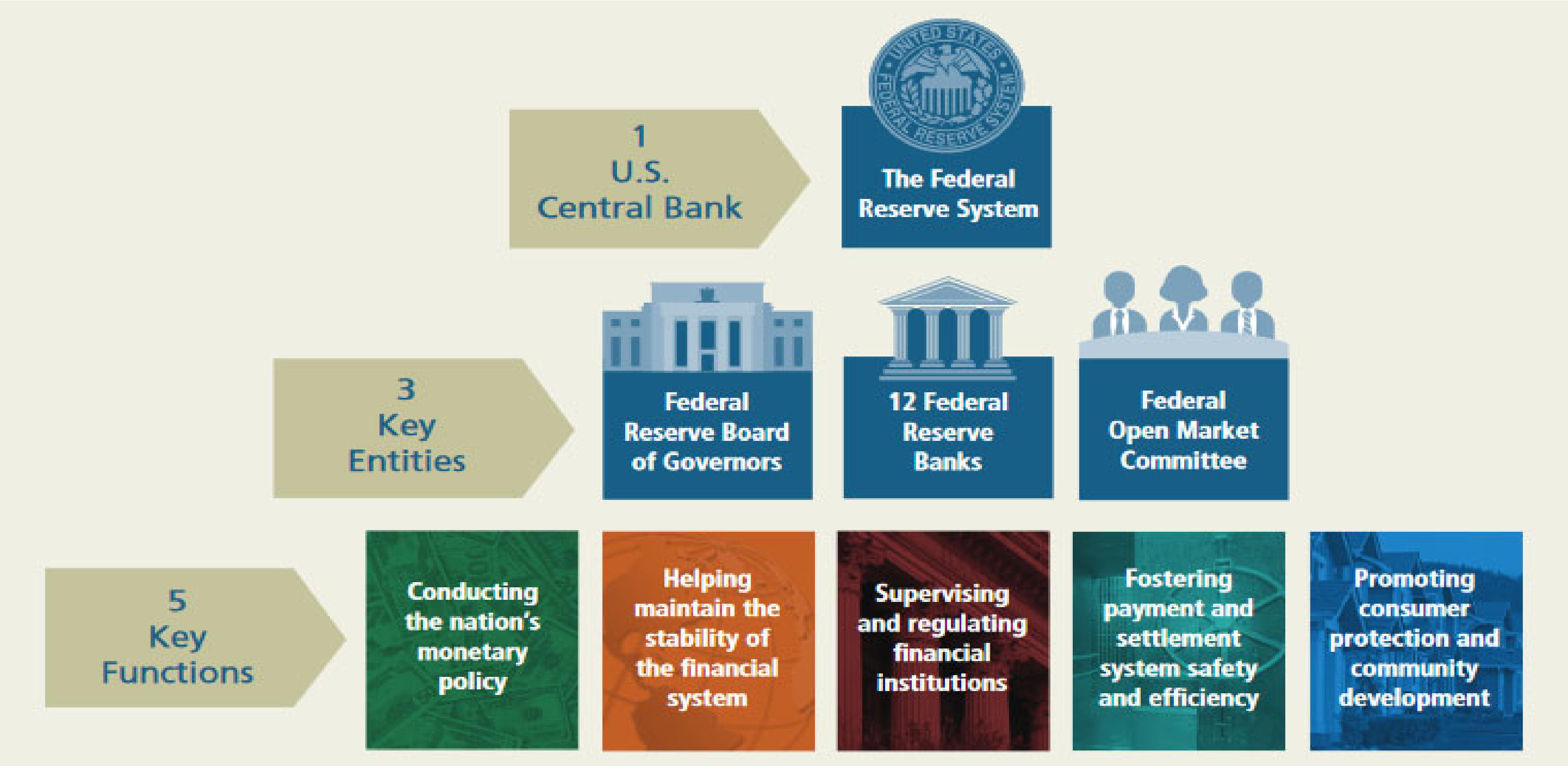
**CONGRESS**
oversees the Federal Reserve System and its entities.

**FEDERAL OPEN MARKET COMMITTEE**
consists of the members of the Board of Governors and Reserve Bank presidents. The Chair of the Board is the FOMC Chair.

**BOARD OF GOVERNORS**
is an independent agency of the federal government.

**FEDERAL RESERVE BANKS**
are the operating arms of the Federal Reserve System and are supervised by the Board of Governors.

# The Federal Reserve



1 U.S. Central Bank

The Federal Reserve System

3 Key Entities

Federal Reserve Board of Governors

12 Federal Reserve Banks

Federal Open Market Committee

5 Key Functions

Conducting the nation's monetary policy

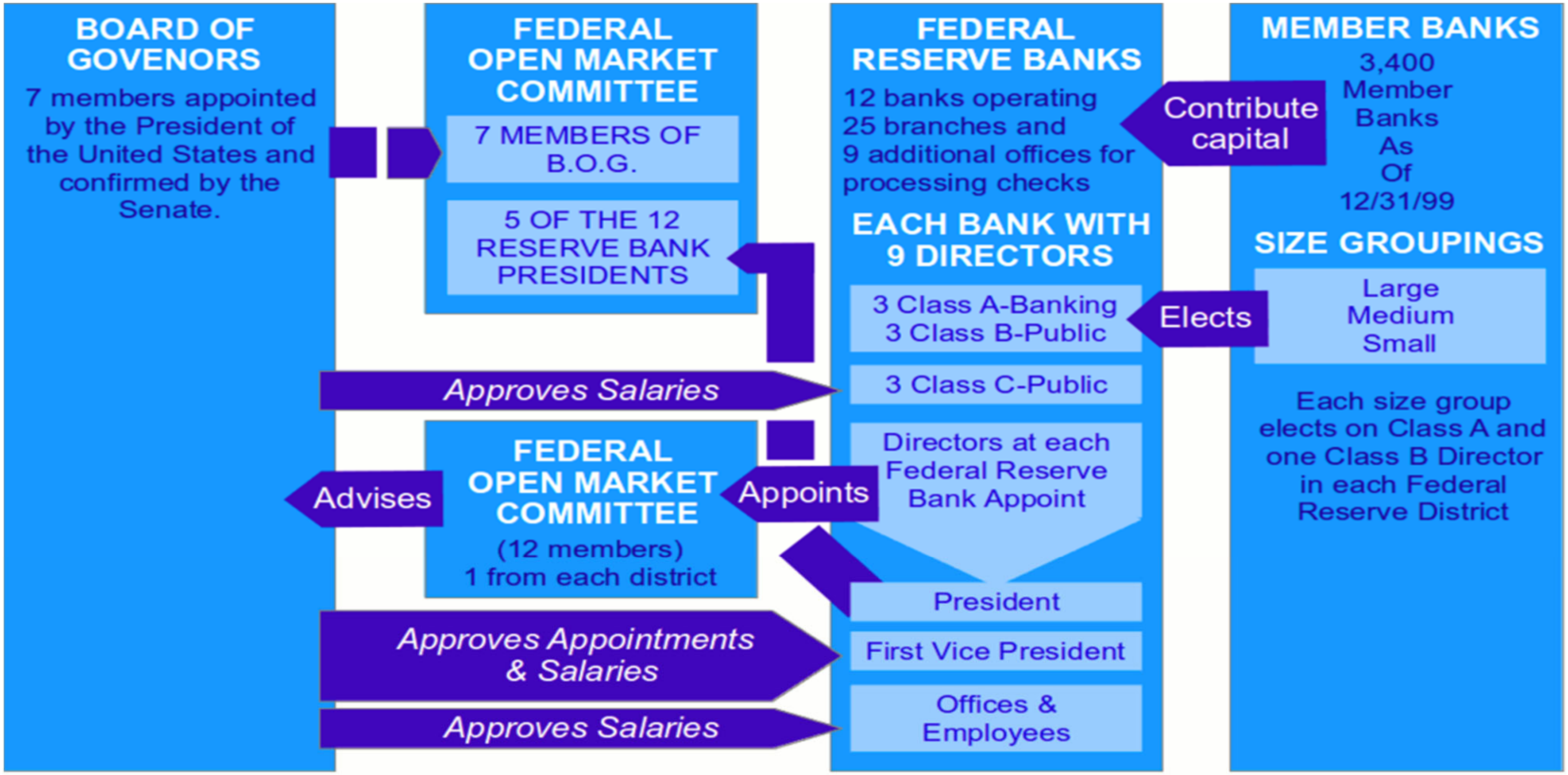
Helping maintain the stability of the financial system

Supervising and regulating financial institutions

Fostering payment and settlement system safety and efficiency

Promoting consumer protection and community development

# The FED Structure



**BOARD OF GOVENORS**

7 members appointed by the President of the United States and confirmed by the Senate.

**FEDERAL OPEN MARKET COMMITTEE**

7 MEMBERS OF B.O.G.

5 OF THE 12 RESERVE BANK PRESIDENTS

*Approves Salaries*

Advises

**FEDERAL OPEN MARKET COMMITTEE**

(12 members)
1 from each district

Appoints

*Approves Appointments & Salaries*

*Approves Salaries*

**FEDERAL RESERVE BANKS**

12 banks operating 25 branches and 9 additional offices for processing checks

**EACH BANK WITH 9 DIRECTORS**

3 Class A-Banking
3 Class B-Public

3 Class C-Public

Directors at each Federal Reserve Bank Appoint

President

First Vice President

Offices & Employees

Contribute capital

Elects

**MEMBER BANKS**

3,400 Member Banks As Of 12/31/99

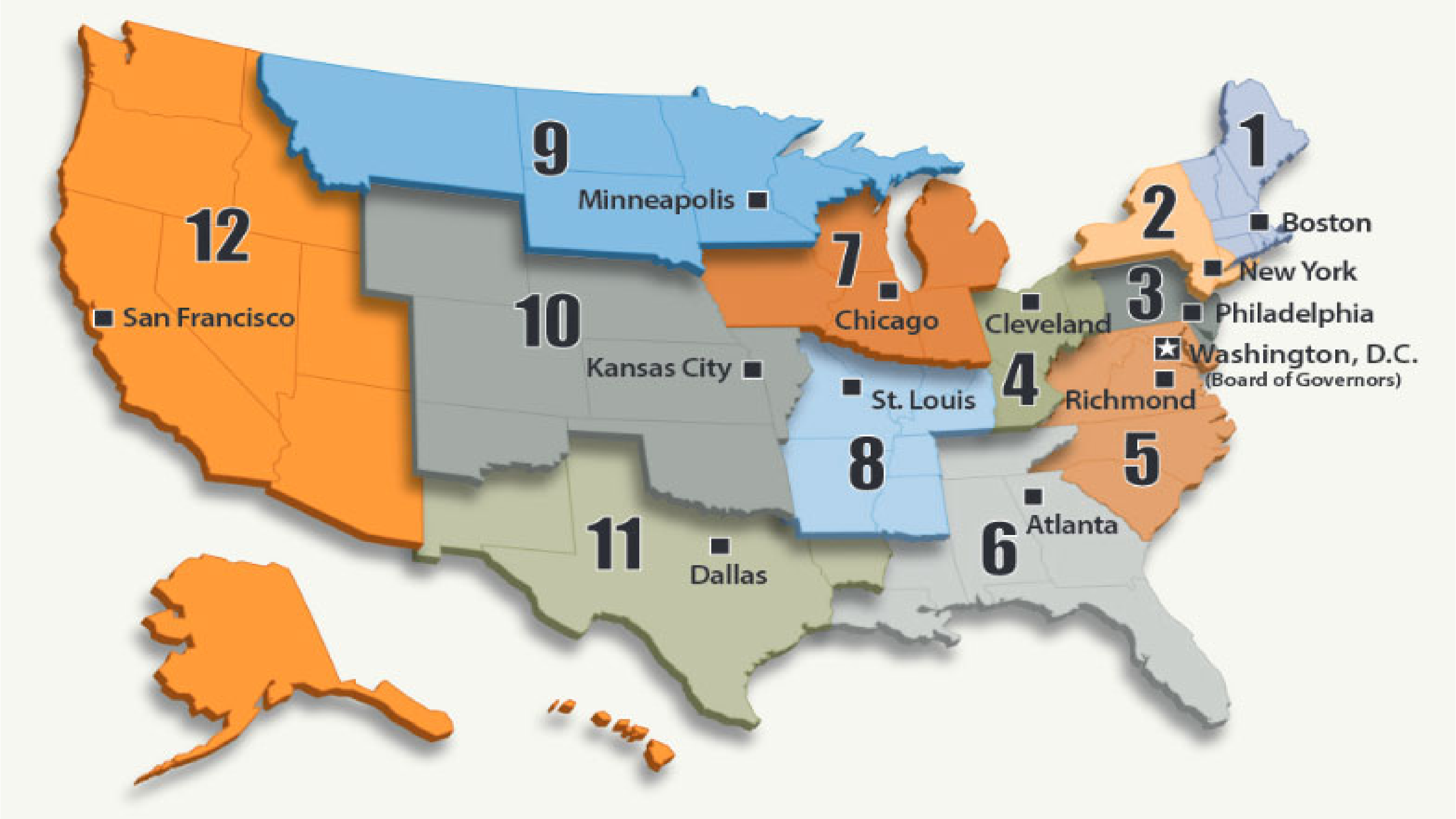
**SIZE GROUPINGS**

Large
Medium
Small

Each size group elects on Class A and one Class B Director in each Federal Reserve District

*Source: Board of Governors of the Federal Reserve System*

# Federal Reserve’s 12 Districts


1
Boston
2
New York
3
Philadelphia
Washington, D.C.
(Board of Governors)
4
Cleveland
5
Richmond
6
Atlanta
7
Chicago
8
St. Louis
9
Minneapolis
10
Kansas City
11
Dallas
12
San Francisco

# 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. **Supervises & 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. Conduction Monetary Policy

- Monetary policy is the Fed's actions, as a central bank, to achieve maximum employment and stable prices in the United States. The Fed conducts monetary policy through a variety of tools, including using interest rates and open market purchases and sales of securities, to manage financial conditions in the United States. This impacts overall financial conditions like longer-term interest rates, stock prices, exchange value of the dollar and the cost of many other assets. Ultimately, these financial conditions affect U.S. spending, investment, production, employment and inflation.

https://www.frbservices.org/news/fed360/issues/091521/fed-facts-the-fed-explained-detailing-the-functions-of-the-federal-reserve

# 2. Promoting Financial Stability

- A financial system is “stable” when financial institutions and markets remain resilient, even under extreme economic pressures and volatility. Introduced after the 2007-09 market crisis, the Dodd-Frank Act requires that the Fed and other financial regulatory agencies study large, complex financial institutions for risks. This is known as a “macroprudential” approach to supervision and regulation, and ultimately helps safeguard financial markets and the broader economy.

https://www.frbservices.org/news/fed360/issues/091521/fed-facts-the-fed-explained-detailing-the-functions-of-the-federal-reserve

# 3. Supervising and Regulating Institutions

- In addition to its macroprudential role, the Fed also promotes the safety and soundness of individual financial institutions and their impact on the broader financial system. This includes establishing specific guidelines governing the formation, operations, activities and acquisitions of financial institutions. The Fed is the primary federal supervisor of state-chartered banks that have chosen to join the Federal Reserve System, while state banks that are not Federal Reserve System members are supervised by the Federal Deposit Insurance Corporation.

https://www.frbservices.org/news/fed360/issues/091521/fed-facts-the-fed-explained-detailing-the-functions-of-the-federal-reserve

# 4. Fostering Payment/Settlement System

- The Fed performs several key functions within the U.S. payment system to help keep cash, check and electronic transactions moving through the U.S. economy for consumers and businesses. The functions of the Fed in this space include providing services to depository institutions and the U.S. federal government, regulating certain aspects of the payment system and analyzing the system to identify and implement improvements. These services support U.S. financial markets and private-sector clearing, payment and settlement arrangements.

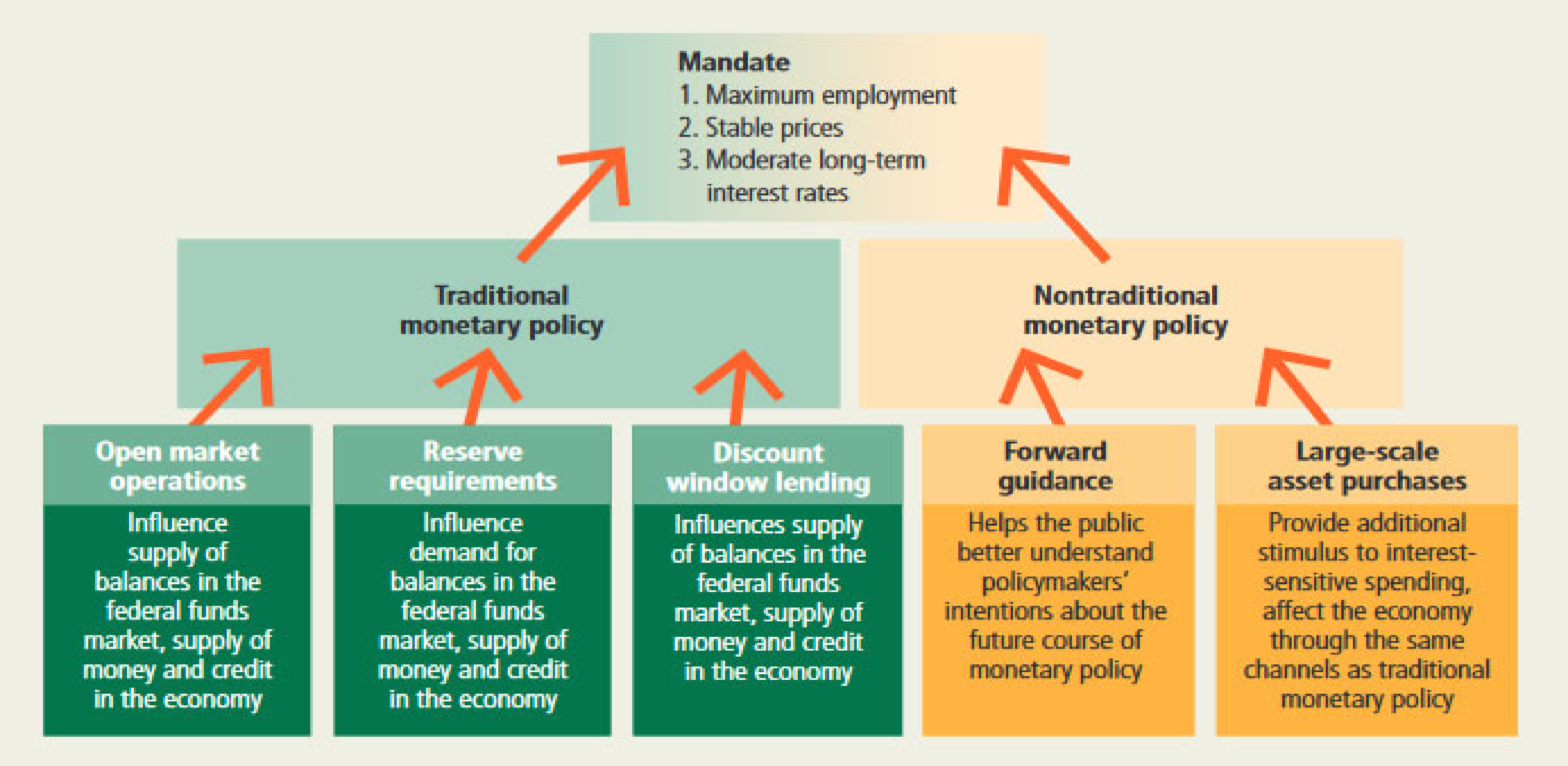
https://www.frbservices.org/news/fed360/issues/091521/fed-facts-the-fed-explained-detailing-the-functions-of-the-federal-reserve

# 5. Promoting Consumer Protection and Community Development

- The Fed advances supervision, community reinvestment and research to better understand impacts of financial services policies and practices on consumers and communities. The Fed’s research in this space also helps inform policy decisions and their effect on businesses and consumers. Engaging with key stakeholders is another way to identify emerging issues and implement policies to advance community reinvestment and consumer protection.

https://www.frbservices.org/news/fed360/issues/091521/fed-facts-the-fed-explained-detailing-the-functions-of-the-federal-reserve

# Fed’s Statutory Mandate



**Mandate**

1. Maximum employment
2. Stable prices
3. Moderate long-term interest rates

**Traditional monetary policy**

**Nontraditional monetary policy**

**Open market operations**

Influence supply of balances in the federal funds market, supply of money and credit in the economy

**Reserve requirements**

Influence demand for balances in the federal funds market, supply of money and credit in the economy

**Discount window lending**

Influences supply of balances in the federal funds market, supply of money and credit in the economy

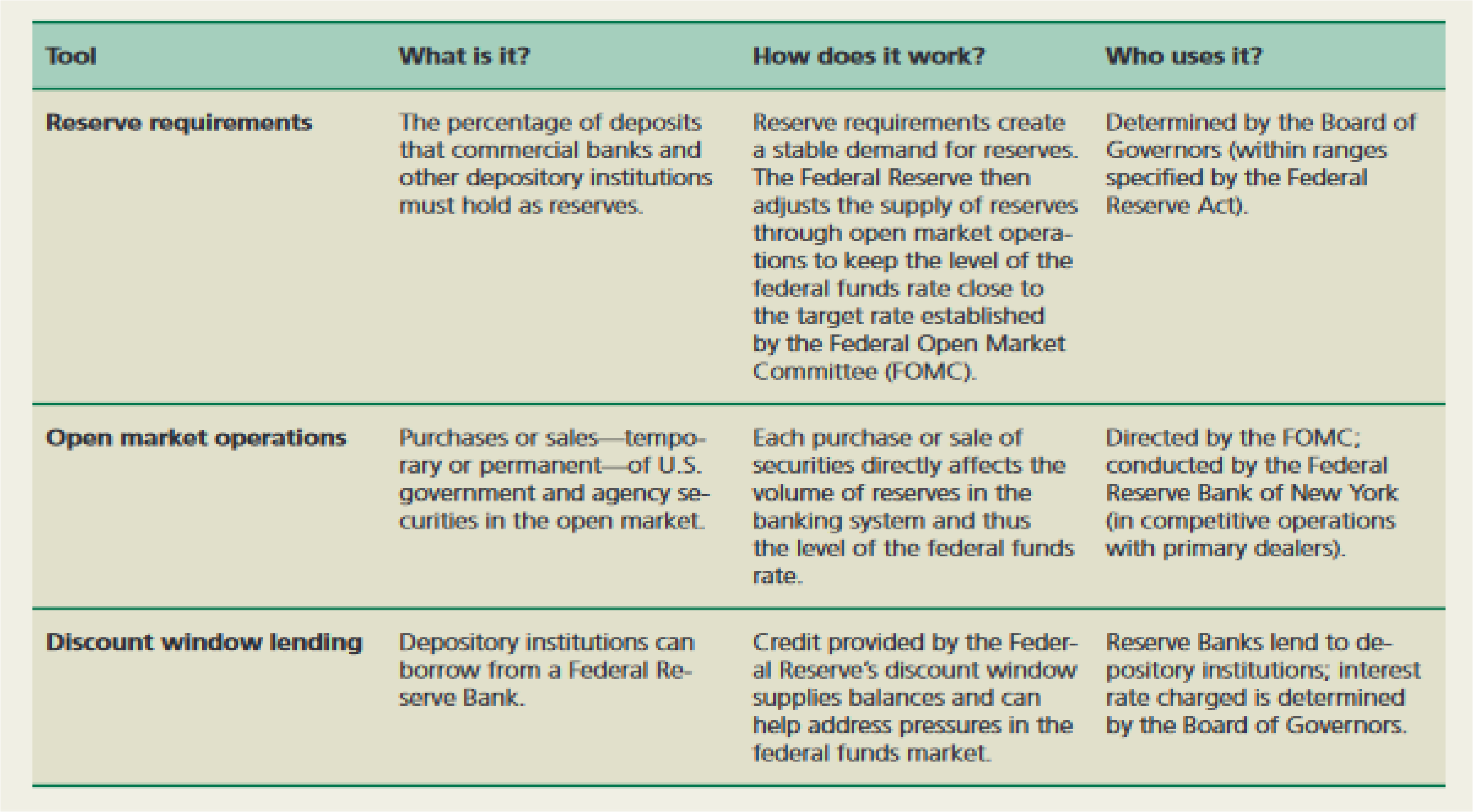
**Forward guidance**

Helps the public better understand policymakers’ intentions about the future course of monetary policy

**Large-scale asset purchases**

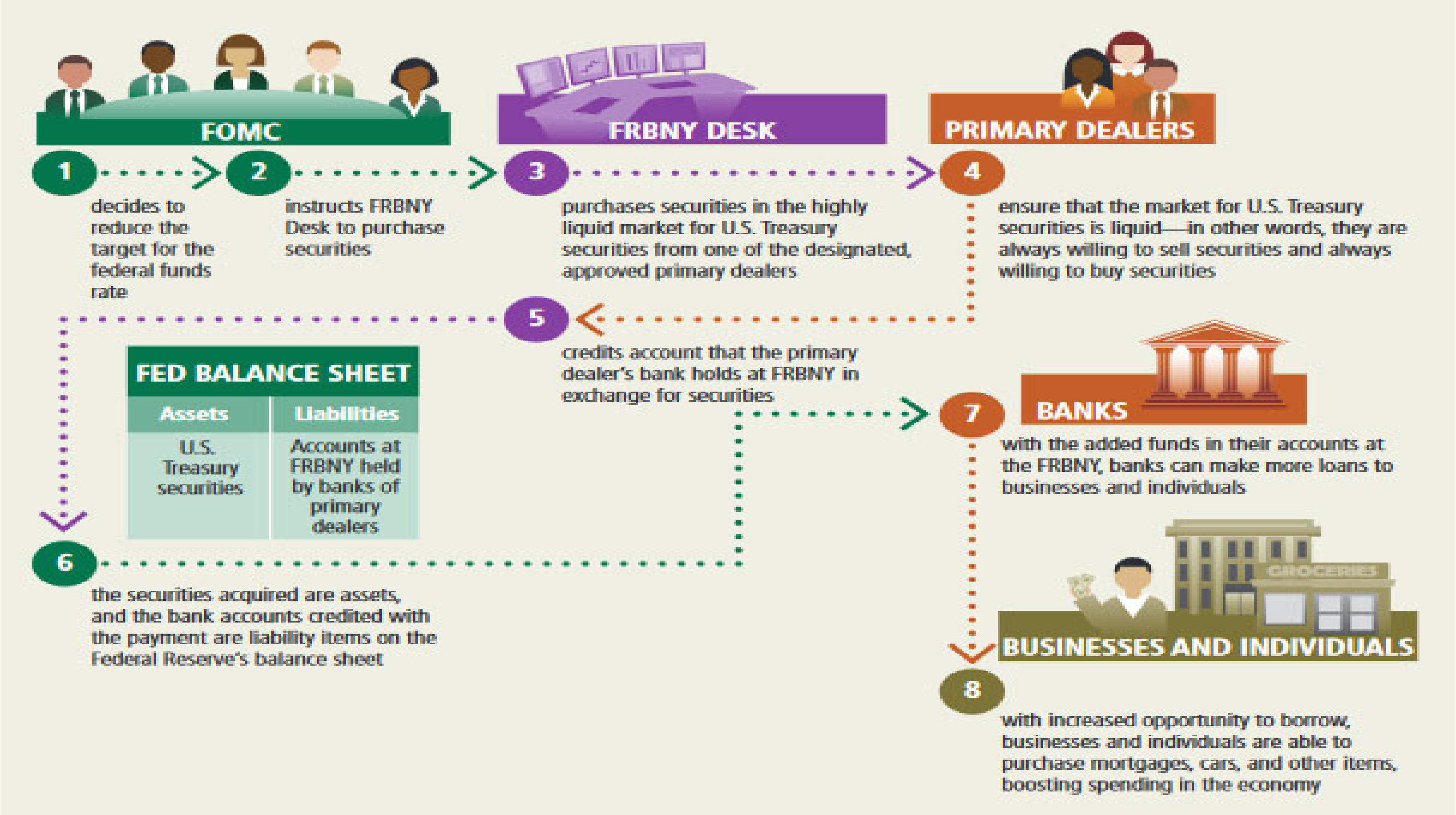
Provide additional stimulus to interest-sensitive spending, affect the economy through the same channels as traditional monetary policy

# 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. |

# Open Market Operations (OMO)



FOMC

1 decides to reduce the target for the federal funds rate

2 instructs FRBNY Desk to purchase securities

FRBNY DESK

3 purchases securities in the highly liquid market for U.S. Treasury securities from one of the designated, approved primary dealers

PRIMARY DEALERS

4 ensure that the market for U.S. Treasury securities is liquid—in other words, they are always willing to sell securities and always willing to buy securities

5 credits account that the primary dealer's bank holds at FRBNY in exchange for securities

FED BALANCE SHEET

| Assets | Liabilities |
|---|---|
| U.S. Treasury securities | Accounts at FRBNY held by banks of primary dealers |

6 the securities acquired are assets, and the bank accounts credited with the payment are liability items on the Federal Reserve's balance sheet

BANKS

7 with the added funds in their accounts at the FRBNY, banks can make more loans to businesses and individuals

BUSINESSES AND INDIVIDUALS

8 with increased opportunity to borrow, businesses and individuals are able to purchase mortgages, cars, and other items, boosting spending in the economy

# 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

- Fed Buys:
  - 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.

- Fed Sells:
  - 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

# Other Monetary Policy Tools

- 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

# 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

- **Case of Deflation**
  - Compared to inflation, deflation is usually hard to control. During deflationary periods, central banks reduce their policy rates to as low as zero. The economy, therefore, cannot be stimulated beyond this point. We've recently seen cases in which central banks have even opted for negative rates.
- **Case of Banks Decreasing the Money They Lend**
  - Sometimes when the money supply rises, banks can have excess reserves, making the short-term rates decrease. This is mostly a result of the business environment.
- **Uncertainty About How the Economy Reacts to Expansionary and Contractionary Policy**
  - Uncertainty about the effect of a policy puts the economy and prices on a complicated path. Some economies might over or underreact to central bank policies. It is imperative to note that economists often disagree on the policies central banks should use.
  - Every attempt of central banks to manipulate the supply of money within an economy does not always work. This is due to their lack of capacity to control the deposits households and corporations make in commercial banks.

https://analystprep.com/cfa-level-1-exam/economics/limitations-monetary-policy/

# Limitations of Monetary Policy

- **Liquidity Trap**
  - A liquidity trap is when interest rates are close to zero and savings rates are high, rendering monetary policy ineffective. In a liquidity trap, consumers choose to avoid purchasing treasury securities and keep their funds in savings because of the prevailing belief that interest rates will soon rise. A rise in interest rates will cause a decrement in bond prices.
- **Case of the Government Reducing the Money Supply**
  - If a government decreases the money supply, for example, with higher taxes, individuals would expect low future inflation. This could render an expansionary monetary policy ineffective.
- **Bond Market Vigilantes**
  - Vigilantes are individuals who participate in the bond market, which can reduce their demand for long-term bonds, thus raising their yields. The rise in yields can easily make it difficult for any expansionary monetary policy to be effective.

https://analystprep.com/cfa-level-1-exam/economics/limitations-monetary-policy/

# 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

https://analystprep.com/cfa-level-1-exam/economics/limitations-monetary-policy/

# FedNow Service

- FedNow Service went live on July 20, 2023
- It is available to depository institutions in the United States and enables individuals and businesses to send instant payments through their depository institution accounts.
- Enables individuals and businesses to send and receive payments within seconds at any time of the day, on any day of the year, so that the receiver of a payment can use the funds immediately.
- The service provides interbank clearing and settlement that enables funds to be transferred from the account of a sender to the account of a receiver in near real-time and at any time, any day of the year.
- The FedNow Service is designed to maintain uninterrupted 24x7x365 processing with security features to support payment integrity and data security.
- The service has a 24-hour business day each day of the week, including weekends and holidays.

# BRICS

- Brazil, Russia, India, China, and South Africa (Saudi Arabia most recently).
- BRICS refers to certain emerging market countries that seek to establish deeper ties and cooperation between member nations on economic expansion, including trade.
- The countries act as a counterbalance to traditional Western influence. They seek to depend on each other to build growing influence in the world.
- 25 countries are scheduled to join in 2024.
- The potential departure from a US dollar-based trading system by these countries could have significant implications on the US economy.

# FED Information Tools

- FED
  - Federal Reserve Board – Home
- FED Dallas
  - Federal Reserve Bank of Dallas - Dallasfed.org
- FED Economic Charts
  - U.S. Economic Activity - Dallas Fed
- FRASER (Digital library of U.S. economic, financial, and banking history—particularly the history of the Federal Reserve System).
    - FRASER | Discover Economic History | St. Louis Fed (stlouisfed.org)
- FED Policy Tools
  - Federal Reserve Board - Policy Tools
- FedNow
  - Federal Reserve Board - FedNow® Service