Monetary Policy Tools 16.3

- **What is the process of money creation?**
- **What three tools does the Federal Reserve use to change the money supply?**
- **Why are some tools of monetary policy favored over others?**

Money Creation

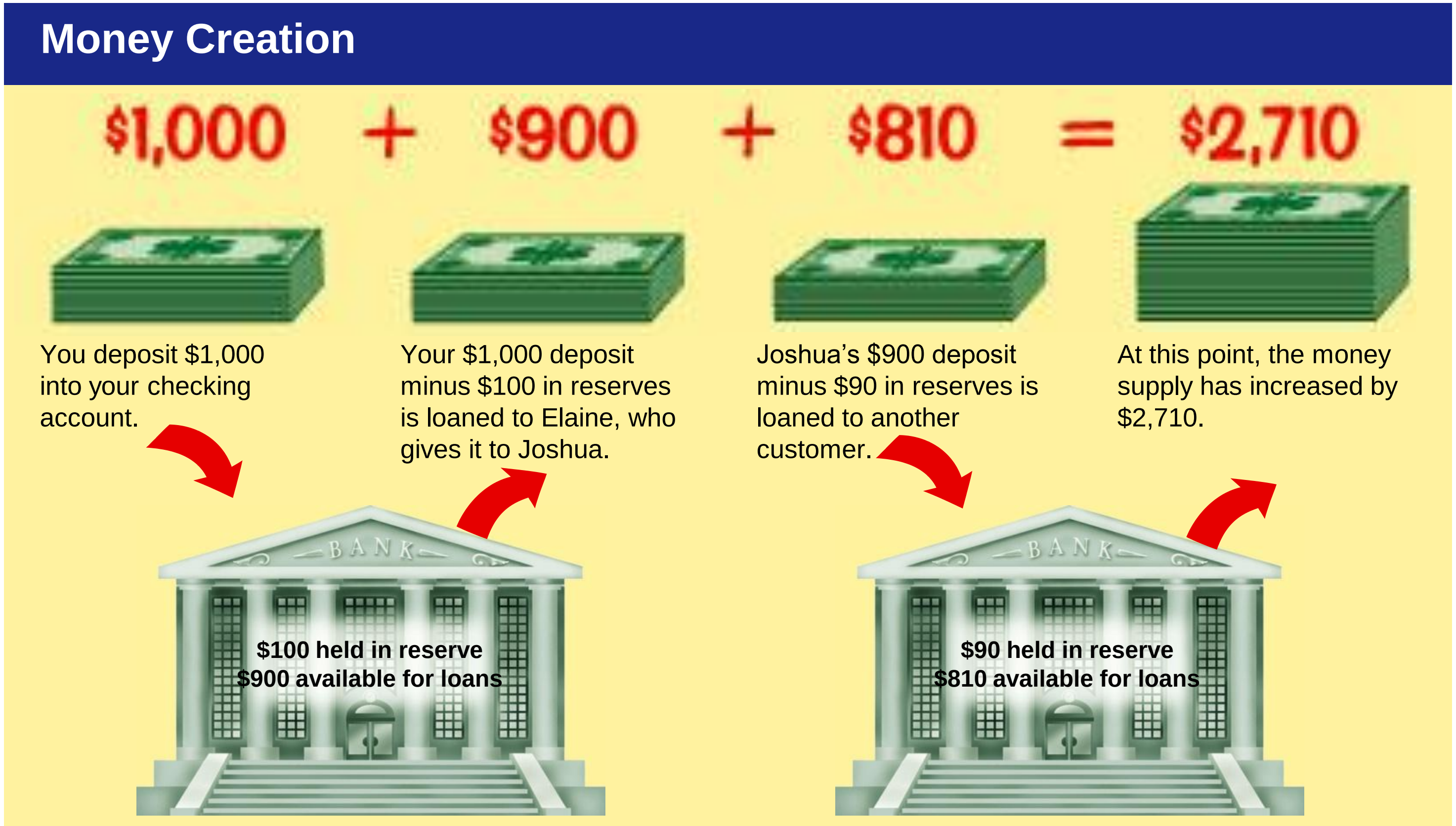
How Banks Create Money

- Assume that you have deposited $1,000 dollars in your checking account. The bank doesn't keep all of your money, but rather lends out some of it to businesses and other people.
- The portion of your original $1,000 that the bank needs to keep on hand, or not loan out, is called the **required reserve ratio (RRR)**. The RRR is set by the Fed.
- As the bank lends a portion of your money to businesses and consumers, they too may deposit some of it. Banks then continue to lend out portions of that money, although you still have $1,000 in your checking account. Hence, more money enters circulation.

Money creation is the process by which money enters into circulation.

The Money Creation Process

To determine how much money is actually created by a deposit, we use the money multiplier formula. The money multiplier formula is calculated as 1/RRR.



Reserve Requirements

The Fed has three tools available to adjust the money supply of the nation. The first tool is adjusting the required reserve ratio.

Reducing Reserve Requirements

- **A reduction of the RRR would free up reserves for banks, allowing them to make more loans.**
- **A RRR reduction would also increase the money multiplier. Both of these effects would lead to a substantial increase in the money supply.**

Increasing Reserve Requirements

- **Even a slight increase in the RRR would require banks to hold more money in reserve, shrinking the money supply.**
- **This method is not used often because it would cause too much disruption in the banking system.**

Discount Rate

The **discount rate** is the interest rate that banks pay to borrow money from the Fed.

Reducing the Discount Rate

- If the Fed wants to encourage banks to loan out more of their money, it may reduce the discount rate, making it easier or cheaper for banks to borrow money if their reserves fall too low.
- Reducing the discount rate causes banks to lend out more money, which leads to an increase in the money supply.

Increasing the Discount Rate

- If the Fed wants to discourage banks from loaning out more of their money, it may make it more expensive to borrow money if their reserves fall too low.
- Increasing the discount rate causes banks to lend out less money, which leads to a decrease in the money supply.

Open Market Operations

The most important monetary tool is open market operations. Open market operations are the buying and selling of government securities to alter the money supply.

Bond Purchases

- **In order to increase the money supply, the Federal Reserve Bank of New York buys government securities on the open market.**
- **The bonds are purchased with money drawn from Fed funds. When this money is deposited in the bank of the bond seller, the money supply increases.**

Bond Sales

- **When the Fed sells bonds, it takes money out of the money supply.**
- **When bond dealers buy bonds they write a check and give it to the Fed. The Fed processes the check, and the money is taken out of circulation.**

Section 3 Assessment

1. The required reserve ratio is the ratio of
   - (a) deposits to reserves required of banks by the Federal Reserve.
   - (b) accounts to customers required of banks by the Federal Reserve.
   - (c) reserves to deposits required of banks by the Federal Reserve.
   - (d) paper currency to coins required of banks by the Federal Reserve.
2. All of the following will increase the money supply except
   - (a) increasing the required reserve ratio
   - (b) bond purchases by the Fed
   - (c) reducing the required reserve ratio
   - (d) reducing the discount rate

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Monetary Policy and Macroeconomic Stabilization 16.4

- How does monetary policy work?
- What problems exist involving monetary policy timing and lags?
- How can predictions about the length of a business cycle affect monetary policy?
- What are the expansionary and contractionary tools of fiscal and monetary policy?

How Monetary Policy Works

Monetarism is the belief that the money supply is the most important factor in macroeconomic performance.

The Money Supply and Interest Rates

- The market for money is like any other, and therefore the price for money — the interest rate – is high when the money supply is low and is low when the money supply is large.

Interest Rates and Spending

- If the Fed adopts an **easy money policy**, it will increase the money supply. This will lower interest rates and increase spending. This causes the economy to expand.
- If the Fed adopts a **tight money policy**, it will decrease the money supply. This will push interest rates up and will decrease spending.

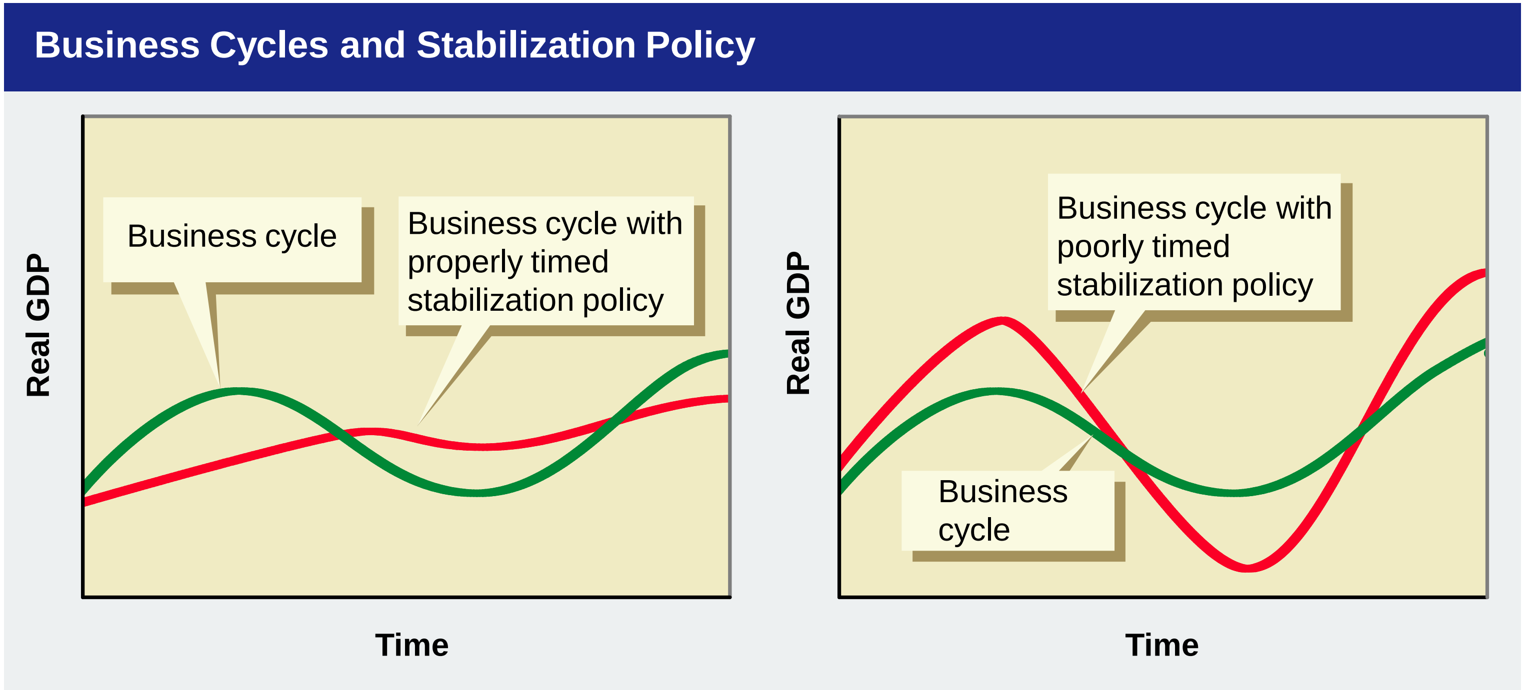
The Problem of Timing

Good Timing

- Properly timed economic policy will minimize inflation at the peak of the business cycle and the effects of recessions in the troughs.

Bad Timing

- If stabilization policy is not timed properly, it can actually make the business cycle worse.



Policy Lags

Policy lags are problems experienced in the timing of macroeconomic policy. There are two types:

Inside Lags

- An **inside lag** is a delay in implementing monetary policy.
- Inside lags are caused by the time it actually takes to identify a shift in the business cycle.

Outside Lags

- **Outside lags** are the time it takes for monetary policy to take affect once enacted.

Anticipating the Business Cycle

The Federal Reserve must not only react to current trends, but also must anticipate changes in the economy.

Monetary Policy and Inflation

- **Expansionary policies enacted at the wrong time can push inflation even higher.**
- **If the current phase of the business cycle is anticipated to be short, policymakers may choose to let the cycle fix itself. If a recession is expected to last for years, most economists will favor a more active monetary policy.**

How Quickly Does the Economy Self-Correct?

- **Economists disagree about how quickly an economy can self-correct. Estimates range from two to six years.**
- **Since the economy may take quite a long time to recover on its own, there is time for policymakers to guide the economy back to stable levels of output and prices.**

Fiscal and Monetary Policy Tools

The federal government and the Federal Reserve both have tools to influence the nation's economy.

Fiscal and Monetary Policy Tools		
	Fiscal policy tools	**Monetary policy tools**
Expansionary tools	1. increasing government spending 2. cutting taxes	1. open market operations: bond purchases 2. decreasing the discount rate 3. decreasing reserve requirements
Contractionary tools	1. decreasing government spending 2. raising taxes	1. open market operations: bond sales 2. increasing the discount rate 3. increasing reserve requirements

Section 4 Assessment

1. Monetarism is

   (a) the time it takes to enact monetary policy.

   (b) the belief that the money supply means little to macroeconomic performance.

   (c) the time it takes for monetary policy to take affect.

   (d) the belief that the money supply is the most important factor in macroeconomic performance.

2. Tight money policies aim to

   (a) increase the money supply and expand the economy.

   (b) decrease the money supply and expand the economy.

   (c) decrease the money supply and slow the economy.

   (d) increase the money supply and slow the economy.

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