### SUMMARY

This is a sequence of three lessons modified for students with special needs to accompany a visit to the Museum and Learning Center at the Federal Reserve Bank of New York. Lesson 1 is designed to be done before students visit the Museum, to provide context for what the students will learn. Students complete Lesson 2 during their visit, and Lesson 3 summarizes the visit and asks students to reflect on their learning.

The lessons use exhibits at the Bank, as well as free resources from throughout the Federal Reserve System.

#### **GRADE LEVEL**

9-12

## TIME REQUIRED

Three 45-minute class periods

## **COMPELLING QUESTION**

Why do people trust their money?

### SUPPORTING QUESTIONS

- 1. What do strength and stability in the financial system look like?
- 2. How does the Federal Reserve System support a strong and stable financial system?
- 3. How is the Federal Reserve System a reflection of the nation's desire for a sound financial system?



### **OBJECTIVES**

#### **Supporting Question 1**

- State the importance of a sound financial system
- Explain the ramifications of a possible collapse of the financial system

#### **Supporting Question 2**

- State the two goals of monetary policy
- Analyze the methods used by the Fed to promote strength, stability, and security

#### **Supporting Question 3**

- Compare and contrast previous central banks created by the United States
- Assess the Fed's ability to provide safety, security, and strength to the financial system

#### MATERIALS

- Banking Basics pamphlet<sup>1</sup>
- Worksheet 1: Zimbabwe Currency
- Worksheet 2: Quote Analysis
- Worksheet 3: Guided Notes Liberty Street Blog (The Panic of 1907)<sup>2</sup>
- Worksheet 4A: Financial System Poster
- Worksheet 4B: Financial System Song
- Worksheet 5: Fed Poster Reflection
- Worksheet 6: First and Second Banks of the United States
- Worksheet 7: Build the Fed
- Worksheet 8: Fed Reflection
- Worksheet A: Discount Window
- Worksheet B: CAMELS
- Worksheet C: Bedrock Samples
- Worksheet D: Fortran Disks
- Worksheet E: Guastavino Ceilings
- Worksheet F: Federal Reserve Notes
- Basic art supplies (pencils, markers, etc.)

<sup>&</sup>lt;sup>2</sup>http://libertystreeteconomics.newyorkfed.org/2016/11/the-final-crisis-chronicle-the-panic-of-1907-and-thebirth-of-the-fed.html



<sup>&</sup>lt;sup>1</sup>Available via free PDF download from the Federal Reserve Bank of Boston

<sup>(</sup>https://www.bostonfed.org/publications/economic-education/banking-basics.aspx)

## PROCEDURES

#### **Supporting Question 1**

What do strength and stability in the financial system look like?

# **LESSON 1 OBJECTIVES**

Students will be able to...

- State the importance of a sound financial system
- Explain the consequences of a possible collapse of the financial system
- Begin the lesson by removing a paper bill from your pocket and offering it to a student. Ask if the student would accept the bill. (*The student will likely say that they would*.) Ask the student why. (*Answer will likely be related to the idea that money has value, is accepted, etc.*) Explain to students that throughout the country, whether it is paper money or electronic transactions, people are accepting transactions like this, and very rarely stop to think about why the system is working, or what trust they are putting in the financial system.
- 2. Explain to students that they will visit the Federal Reserve Bank of New York. Their visit is part of a larger examination in which, over the next few days, students will attempt to answer the compelling question: **Why do people trust their money?**
- 3. Display Worksheet 1: Zimbabwe Currency. Ask students to compare this picture to the type of money they normally see, or the money that was offered earlier. (Students will respond that it is for a very large sum.) As a follow-up, ask students what problems they would encounter using this money? (Answers will vary. Students respond that when everything is this expensive, it becomes difficult to make basic economic transactions. Also, it can be hard to keep track of spending or to write checks. Finally, some students may comment that if prices are this high, wages must rise to keep up.) Guide students to the understanding that without a stable monetary system, it becomes difficult for an economy to prosper.
- 4. Distribute Worksheet 2: Quote Analysis. Remind students of their impending visit to the Fed, and divide students into three groups. To set the stage, display the quote by Daniel Webster: "A sound currency is an essential and indispensable security to the fruits of industry and enterprise." Go over the bolded words in the word box with students to make sure students understand those words. Instruct them to draw pictures or symbols to explain their specific part of the quote box.
  - a. Group A will draw the "sound currency" part of the quote. [Stability]
  - b. Group B will examine the "indispensable security" part of the quote. [Security]
  - c. Group C will examine the "fruits of industry and enterprise" part of the quote. [Strength]



- 5. Allow students time to complete assignments. Have students share and explain their drawings with the class. At the bottom of *Worksheet 2*, have students summarize and restate the quote in their own words.
- 6. Debrief, making sure that students understand how the financial system as currently constructed provides stability, security, and strength. Ask students to reflect on why these things are important. (Answers will vary, but students will likely talk about economic growth, the security of knowing that their money is safe, the convenience that the system provides, etc.)
- 7. Using the discussion from above, ask students the counterfactual: what happens if the financial system does *not* have strength, stability, and security? At the bottom of *Worksheet 2*, ask students to make a prediction on the bottom of their worksheet.
- 8. Distribute *Worksheet 3: Guided Notes Liberty Street Blog (The Panic of 1907)* [abridged and modified]. Using guided notes, students read and take notes about a financial crisis before the creation of the Federal Reserve System.
- 9. Allow students time to read and take notes. Go over bolded words with students according to their reading levels, if necessary. Debrief, using the suggested guiding questions below to check for student understanding.
  - a. What caused the bank run? When people heard of the failed attempt at gaining control of the United Copper Company, depositors rushed to the banks connected to this failed attempt and withdrew their money. There was "blind, unreasoning fear" which caused the bank run.
  - b. What did the New York Clearing House do to help these banks? The New York Clearing House provided emergency funds/credit/loans to banks.
  - c. What happened to the economy as a result of the Panic of 1907? GDP decreased by almost 10% and a recession occurred that lasted until 1908.
  - d. The Panic of 1907 convinced Congress that the country needed...? The Panic of 1907 convinced Congress that the country needed a solution to improve and stabilize the monetary system and economy. Private bankers were the ones helping these banks, so Congress felt that a centralized government authority could help banks and provide stability to the financial system.
- 10. Have students compare their prediction about the financial system from Step 7 to the real-world example they just read about. Give students a moment to reflect on their prediction, using the questions on the bottom of *Worksheet 3*.
- 11. Note: For the assessment, you may give students the option of either creating a poster (Worksheet 4A) or a song (Worksheet 4B).



- Assessment: Distribute *Worksheet 4A: Financial System Poster*. Tell students to imagine that they are a newspaper editor in 1907, and the crash is happening all around them. They want to convince readers that the financial system needs to be stronger, more secure, and more stable. Students should create a poster or advertisement that will run in their newspaper which, using visuals and limited text, conveys the need for a strong, secure, and stable financial system. Students should answer the questions at the bottom to explain the reasoning behind their choices.
- Assessment: Distribute *Worksheet 4B: Financial System Song*. Tell students to imagine that they are a singer in 1907, and the crash is happening all around them. They want to convince people that the financial system needs to be stronger, more secure, and more stable. Students should create a short song or jingle that has a catchy tune and is no longer than a minute, with lyrics that sing about symbols and convey the need for a strong, secure, and stable financial system. Students should answer the questions at the bottom to explain the reasoning behind their choices.

#### **Supporting Question 2**

How does the Federal Reserve System support a strong and stable financial system?

## Lesson 2 Objectives

Students will be able to...

- State the two goals of monetary policy (dual mandate)
- Analyze the methods used by the Fed to promote strength, stability, and security
- When students arrive, explain that today they will learn about the Federal Reserve Bank of New York. Ask students to recall from yesterday the role of banks and the consequences of an economic collapse. (Students should answer how banks provide security for their money, fund businesses, and that when the financial system collapses it leads to economic recessions.) Remind students of the quote from Daniel Webster; the concepts of strength, stability, and security will be important throughout the day.
- 2. Distribute a *Worksheet* to each of the students. Explain that during the course of the day students should be looking for the particular artifact on which they are going to become an expert. Explain that each artifact represents something about the Federal Reserve System, and how the system tries to accomplish the goals of Daniel Webster (strength, stability, security).





- a. Worksheet A: Discount Window
- b. Worksheet B: CAMELS
- c. Worksheet C: Bedrock Samples
- d. Worksheet D: Fortran Disks
- e. Worksheet E: Guastavino Ceilings
- f. Worksheet F: Federal Reserve Notes
- 3. Students complete the museum tour. Questions on each *Worksheet* also scaffold students to understand how each artifact relates to the dual mandate (stable prices and maximum employment).
- 4. Assessment: Students should examine the posters promoting the Federal Reserve in the museum. Using *Worksheet 5*, students compare the poster they see at the museum with the poster they created the previous day, focusing on the message and design of these posters and how they convey the mood after the Panic of 1907. If students created a song, students should compare their song lyrics and message to the posters at the museum.

#### **Supporting Question 3**

How is the Federal Reserve System a reflection of the nation's desire for a sound financial system?

## **Lesson 3 Objectives**

Students will...

- Compare and contrast previous central banks created by the United States
- Assess the Fed's ability to provide safety, security, and strength to the financial system
- 1. Begin the lesson by reminding students of the Daniel Webster quote from the first day, which has framed our compelling question: Why do people trust their money? Ask students to give examples of strength, security, and stability that they have learned about in the past two lessons. (Answers will come from the various artifacts the students saw at the museum, such as CAMELS being a symbol of financial security, the Reserve Notes representing the strength of each regional Bank, etc.) Remind students of the museum exhibit about the creation of the First and Second Banks of the United States. Explain that today students will compare and contrast the Federal Reserve System with those institutions in order to see how views on financial systems have evolved.



- Distribute Worksheet 6: First and Second Banks of the United States. Have students watch <u>The First Bank of the United States</u>.<sup>3</sup> Replay if necessary. Allow them time to fill in the Venn diagrams. Then have students watch <u>The Second Bank of the United States</u>.<sup>4</sup> Replay if necessary. Allow them time to fill in the Venn diagram. Potential student responses are below.
  - a. First Bank of the United States
    - i. Why was it formed?

Alexander Hamilton believed that the new country needed a national bank for the federal government to finance its American Revolutionary War debts, create a more uniform paper currency, and expand the availability of credit nationwide.

ii. What were the objections to the Bank?

Jefferson said that Constitution did not grant Congress power to establish a Bank and so the Bank would be unconstitutional. There were many who believed that farming was the "beating heart" of America and feared that the Bank would favor the wealthy and speculators. They also believed that the Bank would mean there would be too much power in too few hands which would lead to favoritism and corruption.

iii. How did the Bank work?

The Bank was owned partly by the federal government and partly by private investors. This was the government's bank and received the government's revenues, held its deposits, and made its payments. The Bank acted as the fiscal agent of the U.S. government, selling bonds and interacting with foreign governments. It also made loans to citizens and businesses.

iv. Why did it close?

Opponents of the Bank never gave up their fight, and still believed that the Bank was unconstitutional and harmful to ordinary Americans. When the Bank's charter was up for renewal, its opponents had control of Congress and decided not to renew the charter.

- b. Second Bank of the United States
  - i. Why was it formed?

<sup>&</sup>lt;sup>4</sup> Clip from Philadelphia Fed: <u>https://www.youtube.com/watch?v=hRsVC7v44cM</u>



<sup>&</sup>lt;sup>3</sup> Clip from Philadelphia Fed: <u>https://www.youtube.com/watch?v=gTS4kuWT9IE&t=5s</u>

After the War of 1812, the U.S. again found itself heavily in debt. The government's financial situation was very difficult. In 1816 President James Madison signed a bill authorizing the Second Bank of the U.S.

ii. How did the Bank work?

The Second Bank was similar to the First Bank. It was a banker to businesses and individuals; it was the federal government's fiscal agent<sup>5</sup> receiving its revenues, holding its deposits and making its payments. It also helped finance westward expansion.

iii. Why did it close?

When Andrew Jackson became president, he distrusted the Second Bank. Jackson had a bad financial experience and he opposed the Second Bank. In 1836, the bank's charter expired and it was not renewed.

3. Group Assessment: Explain to students that the legacies of these central banks have influenced the system we use today. Remind students of their trip to the Federal Reserve Bank of New York, and their examination of artifacts. Create groups of six students, such that each group has a student with a different artifact (*Worksheets A-F*). Using *Worksheet 7: Build the Fed*, students act as a "Fed architect" and build a complete picture of the Federal Reserve System. Give students the option of either creating a group poster or writing and performing a song. Have the groups share what they've created, explaining their interpretation of each of the artifacts and how they all fit together. Students should justify their choices.

<sup>&</sup>lt;sup>5</sup> A fiscal agent is an organization such as a bank that manages financial matters for another party.





## WORKSHEET 1

Zimbabwe Currency<sup>6</sup>



<sup>6</sup> Image credit: http://www.cnn.com/2016/05/06/africa/zimbabwe-trillion-dollar-note/index.html



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WORKSHEET 2 Quote Analysis "A sound currency is an and indispensable secur fruits of industry and enter - Daniel Webster	rity to the	Currency: syste Indispensable: Security: some Fruits: result or	omic activity and production services
<b>Group A:</b> Draw	Group B: [	able	<b>Group C:</b> Draw "fruits of
"sound currency"	"indispens		industry and
[Stability]	security" [		enterprise" [Strength]

### Summarize

What is Daniel Webster trying to say?

**Prediction:** What happens if the financial system does *not* have strength, stability, and security?



## WORKSHEET 3

Guided Notes Liberty Street Blog (The Panic Of 1907)

## "Panic—Sheer Blind, Unreasoning Fear"

On October 16, 1907 there was a failed attempt to [take complete control of the] United Copper Company. When news of the failed [attempt to take over the entire copper market] broke out, depositors [withdrew all of their money from] more than a dozen banks that were rumored to be connected to the failed attempt. <u>There was "blind, unreasoning fear" from the people who rushed to the banks to withdraw their money</u>. This caused a **bank run**.<sup>7</sup> <u>The New York Clearing House, a [group] of private banks that acted like a central bank...provided emergency loans to help these banks out.</u>

- 1. What caused a bank run?
- 2. What did the New York Clearing House do to help these banks?

## Guided Notes Liberty Street Blog (The Panic Of 1907)

As the panic continued into the week of October 21, J. P. Morgan gathered a small team of bankers to help out banks that had good records and could pay their debts. Knickerbocker Trust, the second-largest bank in the country, was first to apply. After examining Knickerbocker's records, Morgan refused to lend them money and help them out. Knickerbocker Trust shut down on October 22... The

<sup>&</sup>lt;sup>7</sup> A bank run is when a large number of bank customers withdraw their money because they're worried that the bank will lose their money



panic of 1907 had severe **repercussions**<sup>8</sup> and <u>GDP</u><sup>9</sup> decreased more than 10%. <u>The **recession**<sup>10</sup> that began in May persisted until June 1908</u>. The severity of the 1907 panic (and the many panics before it) convinced Congress that the <u>country needed a solution to improve and **stabilize**<sup>11</sup> the monetary system and <u>economy</u>.</u>

- 3. What happened to the economy as a result of the Panic of 1907?
- 4. The Panic of 1907 convinced Congress that the country needed...?
- 5. Compare your prediction from *Worksheet 2* to what actually happened in 1907. In a paragraph, answer the following:
  - a. How accurate was your prediction?
  - b. What information did you use to make your prediction?

<sup>&</sup>lt;sup>8</sup> Widespread and unexpected consequences

<sup>&</sup>lt;sup>9</sup> GDP: Gross Domestic Product is the total value of all goods and services produced in one country. Increases in GDP show economic decline.

<sup>&</sup>lt;sup>10</sup> A recession is when the economy stops growing and when production goods and services declines for a certain length of time

<sup>&</sup>lt;sup>11</sup> To make stable; to make unlikely to change or fail

## WORKSHEET 4A

#### **Financial System Poster**

You are a newspaper editor in 1907. Customers are lined up outside banks to withdraw their money, and there is a sense of panic. Bankers, farmers, laborers<sup>12</sup>...banks affect so many people. There is concern that the money they put in the vault yesterday won't be there tomorrow.

Task: Create a poster/cartoon/advertisement to convince people that the financial system needs to be stronger, more secure, and more stable.



Your poster should include the following:

- Big, bold visuals/pictures that draw attention
- Clear in meaning
- Choose symbols (at least two) that show your message
- Limited amount of text. Your readers are scared and don't want to read a wordy editorial; you need to catch their attention!
- State the message of the importance of a strong, secure, stable financial system

Reflection: Why did you choose the symbols that you did? How do they convey the message of strength, stability, and security?

<sup>&</sup>lt;sup>12</sup> workers

## WORKSHEET 4B

#### **Financial System Song**

You are a singer in a band in1907. You notice that customers are lined up outside banks to withdraw their money, and there is a sense of panic. Bankers, farmers, laborers<sup>13</sup>...banks affect so many people. There is concern that the money they put in the vault yesterday won't be there tomorrow.

Task: You and your band must create a jingle or short song to convince people that the financial system needs to be stronger, more secure, and more stable.



Your song should include the following:

- Catchy lyrics and tune that draw attention
- Clear in meaning
- Sing about symbols (at least two) that show your message
- Song length should not be longer than a minute but needs to have at least 6 verses. Your readers are scared and don't want to hear a long song; you need to catch their attention!
- State the message of the importance of a strong, secure, stable financial system

Reflection: Why did you write and sing about the symbols that you did? How do they convey the message of strength, stability, and security?

<sup>&</sup>lt;sup>13</sup> workers





## **WORKSHEET 5**



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## **WORKSHEET 6**

#### First and Second Banks of the United States

**Directions:** Fill in the Venn diagram as you watch the video clips about the First and Second Banks of the United States. Make sure you include:

- why the banks were formed
- why people objected to them
- how the banks worked
- why they closed



**Reflection:** How did the history of these two Banks influence the structure and functions of the Federal Reserve System?



## WORKSHEET 7

#### Fed Architect

During your visit to the Federal Reserve Bank of New York, you examined an artifact and used it as a guide to learn about how the Federal Reserve System is designed to provide strength, security, and stability to the financial system.

In groups, create either a poster or a song that:

- Creatively incorporates all of the artifacts from your group
- Shows the ways the Federal Reserve System maintains the strength, stability, and security of the financial system.



## WORKSHEET A

Your artifact is...THE DISCOUNT WINDOW! Somewhere in the museum, be on the lookout for the DISCOUNT WINDOW. What is this item?

Draw the object:

How does this item remind you of:

- Strength:
- Stability:
- Security:

Reflection: Why did you choose the symbols that you did? How do they convey the message of strength, stability, and security?



## WORKSHEET B

Your artifact is...CAMELS! Somewhere in the museum, be on the lookout for CAMELS. What is this item?

Draw the object:

How does this item remind you of:

- Strength:
- Stability:
- Security:

How does this object relate to the Fed's dual mandate?

- Stable prices:
- Maximum employment:



# WORKSHEET C

Your artifact is...BEDROCK SAMPLES! Somewhere in the museum, be on the lookout for BEDROCK SAMPLES. What is this item?

Draw the object:

How does this item remind you of:

- Strength:
- Stability:
- Security:

How does this object relate to the Fed's dual mandate?

- Stable prices:
- Maximum employment:



## WORKSHEET D

Your artifact is...FORTRAN DISKS! Somewhere in the museum, be on the lookout for FORTRAN DISKS. What is this item?

Draw the object:

How does this item remind you of:

- Strength:
- Stability:
- Security:

How does this object relate to the Fed's dual mandate?

- Stable prices:
- Maximum employment:



## **WORKSHEET E**

Your artifact is...GUASTAVINO CEILINGS! Somewhere in the museum, be on the lookout for GUASTAVINO CEILINGS. What is this item?

Draw the object:

How does this item remind you of:

- Strength:
- Stability:
- Security:

How does this object relate to the Fed's dual mandate?

- Stable prices:
- Maximum employment:



## WORKSHEET F

Your artifact is...MONEY (AKA FEDERAL RESERVE NOTES)! Somewhere in the museum, be on the lookout for FEDERAL RESERVE NOTES. What is this item?

Draw the object:

How does this item remind you of:

- Strength:
- Stability:
- Security:

How does this object relate to the Fed's dual mandate?

- Stable prices:
- Maximum employment:

