Alternate Lesson 1 with Primary Sources: Measuring the Great Depression

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Standards and Benchmarks (see page 35)

Lesson Description
This lesson describes how we measure the economy’s health with tools such as gross domestic product (GDP), the unemployment rate, and the consumer price index (CPI). Developing an understanding of these concepts is critical to understanding the magnitude of the economic problems during the Great Depression. This lesson also illustrates the differences between these modern economic measurements and the measurements available at the time through primary source materials from FRASER®, the Federal Reserve Bank of St. Louis digital library of economic history. Students work in groups to examine excerpts from primary source documents and create relevant definitions of economics concepts in their own words. In an optional extension, students may read and answer questions on an essay that provides an overview of how economists understand the Great Depression.

Grade Level
9-12

Concepts
Consumer price index (CPI) Nominal gross domestic product (GDP)
Deflation Prices
Depression Production
Economic indicators Real gross domestic product (real GDP)
Employment Recession
Inflation Unemployment
Objectives

Students will
• discover change and continuity in economic indicators between the Great Depression and today;
• use primary source documents to interpret historical economic measures and understand the economy during the Great Depression;
• define production, unemployment, GDP, prices, and CPI;
• explain that GDP measures production and CPI measures changes in the price level;
• recognize how economists use appropriate data to evaluate the unemployment rate, inflation, total production, and economic growth in the economy; and,
• if the (optional) Extension is used, review and describe commonly accepted causes of the Great Depression.

Compelling Question

How do we measure the economy?

Time Required

50 minutes

Materials

NOTE: (All handouts may be distributed in electronic folders.)

• Visuals A1.1 to A1.4
• Handout A1.1, one copy for each student
• Handout A1.2, one or two copies of the individual group page(s) for each of five groups
• Handout A1.3, one copy for each student
• Handout A1.3 Answer Key for the teacher
• One sheet of blank paper (8.5” × 11” or a large sticky note) for each of five groups to sketch on
• Markers or colored pencils for students to use for sketching
• Optional: Handout A1.4, one copy for each student
• Optional: Handout A1.5, one copy for each student
• Optional: Handout A1.5 Answer Key for the teacher
Measuring the Great Depression

Procedure
1. Begin the lesson by discussing the following:
   • Why is the Great Depression called great? (Answers will vary but may include that It was super big or that it affected a lot of people.)
   • How do you measure how great or big something is? (Answers will vary but may include counting or using a scale, a ruler, a measuring tape, a timer, or some other measuring device.)

2. Tell the students that for any of those measurements to be used successfully, everyone has to agree that the measurement is accurate and the right measure to use. It’s also important to use a measurement that is meaningful. If we measured the building or the height of everyone in the class using fathoms or microns, we probably wouldn’t have a very good idea of what that meant, even if our measurement was accurate. During the Great Depression, people had a hard time figuring out how big and bad the situation was because they didn’t have the kinds of measurements we now use to figure out how the economy is doing.

3. Show Visual A1.1: Historical Economic Data. Explain that in the 1920s and 1930s, government and businesses were collecting measurements (data) like those pictured. Businesspeople, politicians, and economists were not sure what to measure or how to put the measurements together in useful ways to tell the story of what was happening in the economy. Discuss the following:
   • What are the types of things that are being measured? (Answers will vary but should include things such as production, consumption, prices, and sales.)
   • What can you tell about the economy from what’s pictured? (Answers will vary but may include not much or that some things are getting better and some things are getting worse.)

4. Explain that all of these different indicators were attempts to measure production and prices for the whole economy. Along with employment and unemployment, these measurements are examples of economic indicators, which show the health of an economy. Most of the ways that we measure these things today hadn’t been invented yet, so they were doing the best they could do was analyze the economy with the data that they had.


6. Arrange the class into five groups. Explain that the students will participate in an activity to help them get a clearer picture of what the Great Depression looked like.

7. Assign each group one concept pair (from the concepts on Handout A1.1) and distribute the corresponding group page from Handout A1.2. For example, assign one group the employment and unemployment pair and give them Handout A1.2: Group 1—Employment and Unemployment. Also give each group a piece of blank paper and some markers or colored pencils.

NOTE: To help with group assignments if necessary, the vocabulary pairs in the following activity are scaffolded, least difficult to most difficult.
8. Explain the directions as follows:

- Take 3-5 minutes to read your paired economic concepts and discuss with your group what the words mean. You are to each write definitions in your own words on your own handout for your two words.

- Next, review your group’s handout. Each handout includes a “Primary Source Snapshot.” The snapshot includes a short snippet from a document that would have been familiar to people studying the economy during the Great Depression. Review the snapshot to try to understand how people in that era might have understood the paired economic concepts.

- Take 5 minutes to discuss your group’s assigned concepts and come up with a way to sketch (draw) the concept pair to help you explain and remember those concepts. Later you will share your concept pair, sketch, and primary document with classmates in jigsaw fashion. (If students need an example, suggest that “economic indicators” could be depicted as a report card: Just as all the grades together show how a student is doing academically, using different economic indicators together helps show how the economy is doing as a whole.)

- All group members should contribute ideas, but it is ok if only one or two students actually draw the sketch.

9. After students work for 10 minutes, invite each group to report on their concept pair. Tell the students that they should each write their own definitions for every term on their own handout as they listen to their classmates’ reports. Each group should:

- read the definitions of their concept pair from Handout A1.1;
- tell the class what their primary source snapshot is;
- explain the definitions of their concept pair in their own words;
- show their sketch; and
- explain how the sketch, primary source, and their own definitions fit together.

10. Once all groups have presented, have the students return to their seats. Discuss the following:

- What connections did you see among the concepts? (Answers will vary but should note connections among inflation/deflation and the consumer price index [CPI]/price; employment and production; and gross domestic product [GDP] and unemployment and recession/depression.)

11. Return to Visual A1.1. Discuss the following:

- Can you determine inflation or deflation from this primary source data? (Answers will vary but should reflect that neither inflation nor deflation can be determined, because there was not a set group of items measured.)
• Can you determine unemployment or production trends from this primary source data? (No; like their counterparts in the Great Depression, they provide pieces of information but not a clear picture of the economy.)

12. Show Visual A1.2: Unemployment Rate for the United States, January 1948–January 2020. Explain that this and the other two graphs they’ll be looking at show modern economic indicators used today to determine how healthy the economy is.

NOTE: On the FRED® graphs on Visuals A1.2 to A1.4, the link in the note will take you to the online version of the graph.

13. Explain that before the 1940s, there was no reliable standardized measurement of unemployment in the United States. Before and during the Great Depression, institutions like the U.S. Bureau of Labor Statistics (BLS) could only gather data about certain kinds of jobs, such as factory jobs, and only in larger cities. That data gathering started in 1915, but the statistical methods and the size of the data gathering could only give a clear picture after World War II. Because the government can’t easily count every person who has a job, unemployment is now measured by household surveys, which weren’t possible to do regularly in eras without telephones or computers.

14. Discuss the following with Group 1:
• How does this graph compare with your primary document? (Answers will vary but may include the following: The document has no chart. It does mention a nationwide survey of families and persons receiving relief to try and figure out how many people were unemployed. Monthly employment and unemployment data like we have today were not collected yet.)

15. Show Visual A1.3: Consumer Price Index for All Urban Consumers: U.S. City Average, January 1913–January 2020. Explain that this measurement of prices across the country is one of the primary indicators of inflation (and sometimes deflation) in the United States. Explain that prices are relatively easy to measure, but deciding what to measure is often difficult. The BLS started gathering price data in the late nineteenth century but only began publishing price indexes every six months starting in 1921. Those early indexes were based on prices and shopping habits of “White wage-earner families.”¹ Statisticians working on the CPI during the Great Depression significantly reworked the way they gathered data; beginning in the mid-1930s, prices and spending for more kinds of households in more cities were included in the data.²

16. Ask the students to look at their primary source documents and identify which groups have a connection among their concept pairs, their primary source documents, and this CPI graph. (Groups 2, 3, and 4)

17. Discuss the following with Group 2:
   - What are your two economic concepts? (Inflation and deflation)
   - What is the connection among inflation, deflation, and CPI? (Answers will vary but should include the following: CPI measures prices across the country and is one of the main indicators used to measure inflation and deflation across the country. Using a price index to compare price levels allows for comparison of the real change in prices without inflation or deflation distorting those prices.)

18. Discuss the following with Group 3:
   - What are your two economic concepts? (CPI and price)
   - Compare and contrasts your primary source document with Visual A1.3. (Answers will vary but should include the following: Both are looking at cost of living. Visual A1.3 is a graph, but their document is a letter about how the items on which prices were collected were out of date.)
   - Ask Group 3 to assist the rest of the class in writing definitions for price and CPI in their own words.

19. Discuss the following with Group 4:
   - What are your two economic concepts? (Recession and depression)
   - What connection do you see between your concepts and the CPI graph? (The graph shows recessions.)
   - Ask Group 4 to help the rest of the class create definitions in their own words for recession and depression.
   - After reading your primary source snapshot, what can you share with the class about depression and the business cycle? (The term depression was used for what today we would call a recession: a decrease or downturn in economic activity.)

20. Tell the students to look at their Handout A1.1 to see if they have written definitions in their own words for all concept pairs except those for Group 5? If they have not, they should do it now. They may check with a neighbor to make sure they both understand. If they have a question about a term, they may ask it of someone in the group whose term it is. Allow a few minutes for students to work.
21. Display Visual A1.4: Real and Nominal GDP for the United States, January 1929–January 2020. Explain that this is a graph of one of the best measurements we have for the economy as a whole. We now have GDP data going back all the way to 1929; but researchers, led by economist Simon Kuznets, only published the first version of this economic indicator in 1934 as part of an effort to get a clearer picture of the economic situation of the time. GDP was not used as the official measure of economic output until 1991. The numbers you see on this graph for the years before 1991 are extrapolated from available data.

22. Discuss the following with Group 5:
   - What are your two economic concepts? *(Production and GDP)*
   - Define your terms in your own words. *(Answers will vary but should include that production uses resources and intermediate goods [goods used to make other goods or services] to create final goods and services. GDP is the value of all final goods and services produced in an economy in a given year. They may note that intermediate goods are not counted in GDP—to avoid double counting.)*
   - What is the difference between real and nominal GDP? *(Nominal GDP includes inflation, and real GDP removes inflation from GDP.)*
   - Which color on the graph shows real GDP? *(Blue)*
   - What do the shaded areas indicate? *(U.S. recessions, as labeled on the bottom of the graph)*
   - What trend do you see when you look closely at the recession bars between 1940 and 1950? *(Real GDP declines during recessions.)*
   - Look for that trend in real GDP within all the gray bars (recessions). Based on the concepts we’ve reviewed, why do you think real GDP declines during a recession? *(Answers will vary but may include that during a recession, production is down, fewer people are working, and fewer people are buying goods and services.)*

23. Explain that even though they may be able to find data for GDP, CPI, unemployment, and many other economic indicators going back to or even before the Great Depression, that does not mean the data they are looking at were available to people living at that time. Today, we can look at data for all these years because economists later pieced together lots of information after the fact to produce a consistent series showing patterns or trends over time. Discuss the following:
   - How are these graphs similar to and different from those on Visual A1.1? *(Answers will vary but may include the following: They are similar because both sets of graphs mention production, prices, and unemployment. They are different because the old data do not show clear trends like the modern data do.)*
24. Optional: Show the following videos explaining the three modern indicators:

Closure

25. Discuss the following:
   - How has the way we measure the economy changed since the Great Depression? (New measures have been invented to better show what is going on in the economy.)
   - How did the primary source snapshots help you understand how the economy was measured during the Great Depression? (Answer will vary but may include the following: Detailed data like we have today were not collected yet. Some measures used were out of date. People didn’t know what to measure—or how to measure it—to get the whole picture.)
   - What new measures have been invented since the Great Depression? (GDP, CPI, and the unemployment rate)
   - What is production, in economics terms? (Production is the process of using resources and intermediate goods to make goods and provide services.)
   - What does GDP measure? (All final goods and services produced in an economy in a given year)
   - What is the economic definition of price? (A price is the amount of money, determined by the interaction of buyers and sellers, that a buyer must pay to acquire a good, service, or resource.)
   - What does CPI measure? (Changes in the price level of a set market basket of goods and services)
   - What does the unemployment rate measure, and what doesn’t it measure? (Unemployment measures people “in the labor force” that don’t have jobs. To be considered part of the unemployed U.S. labor force, a person in the United States must be at least 16 years old and actively looking for work. The unemployment rate doesn’t measure people not in the labor force that don’t have jobs.)
   - What do these new measures tell us about the economy? (GDP tells us the amount of goods and services produced within the country during a year. CPI tells us the change in the price level, letting us know if there is inflation or deflation. The unemployment rate
tells us the percentage of people over 16 years old who do not have a job but are actively looking for work.)

- What do economists do with economic indicators such as GDP, unemployment, and CPI? (They evaluate the overall health of the economy, much like a doctor checking the blood pressure, heart rate, and temperature of a patient.)

Assessment

26. Distribute a copy of Handout A1.3: Data Assessment to each student. Allow time for students to work, and then review their answers using Handout A1.3: Data Assessment—Answer Key.

(Optional) Extension

Visual A1.1: Historical Economic Data

**MONTHLY BUSINESS INDICATORS, 1923–1930**

[Graph showing various economic indicators such as manufacturing production, automobile production, lumber production, cotton consumption, and others, with index numbers for each year from 1923 to 1929.]


NOTE: Shaded areas indicate recessions.

SOURCE: BLS via FRED®, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/UNRATE.

NOTE: Shaded areas indicate recessions.

SOURCE: BLS via FRED®, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CPIAUCNS.

NOTE: Shaded areas indicate recessions.
### Handout A1.1: Economic Concepts (page 1 of 3)

<table>
<thead>
<tr>
<th>Concept Pair</th>
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</tr>
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<tbody>
<tr>
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<td></td>
</tr>
<tr>
<td><strong>Unemployment</strong> statistics measure people in the labor force that don’t have jobs but are actively looking for work. Not everyone without a job is unemployed. For example, children, retirees, people who don’t want to have a job, and full-time students without jobs aren’t considered unemployed because they’re not counted as part of the labor force.</td>
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</table>

**[Group 1]**

| Inflation | is a general, sustained upward movement of prices for goods and services in an economy. In other words, prices, on average, are going up—even if some goods and services might be cheaper. Inflation is commonly measured by the change in a price index. |
| An *index* is a special kind of statistic in which what’s measured is compared with a base number (usually for a given year) to show the difference between the base number and the other measurement(s). |
| **Deflation** is the opposite of inflation. Deflation is a general, sustained downward movement of prices for goods and services in an economy. In other words, prices, on average, are going down—even if some goods and services might be more expensive. |

**[Group 2]**
### Handout A1.1: Economic Concepts (page 2 of 3)

<table>
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<tbody>
<tr>
<td><strong>The consumer price index (CPI)</strong> is a measure of average prices paid by urban consumers for a market basket of consumer goods and services. The measure of average prices is called the price level.</td>
<td><strong>In Your Own Words</strong></td>
</tr>
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<td>An index is a special kind of statistic in which what’s measured is compared with a base number (usually for a given year) to show the difference between the base number and the other measurement(s).</td>
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<td>Using a price index to compare price levels allows for comparison of the real change in average prices without inflation or deflation distorting those prices.</td>
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<td>A market basket is a representative sample of the kinds of things people buy. A price index uses a market basket so researchers don’t have to check the prices for every single thing that’s for sale.</td>
<td></td>
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<td>A price is the amount of money, determined by the interaction of buyers and sellers, that a buyer must pay to acquire a good, service, or resource. Prices are influenced by lots of factors, including how many potential buyers there are, how much the buyers are willing and able to pay, how much it costs to make the thing for sale, and how much of the thing the sellers are willing and able to sell at a given price.</td>
<td><strong>[Group 3]</strong></td>
</tr>
<tr>
<td><strong>An economic recession</strong> is a significant decline in general economic activity extending over a period of time. Modern economists in the United States usually say that a recession must be a decline spread across the economy (not just one or two areas or industries) and last more than a few months. They look for evidence of a recession in real GDP, incomes, employment, industrial production, and sales.</td>
<td></td>
</tr>
<tr>
<td>There is no agreed-upon technical definition for what makes a depression different from a recession. Depression is usually used to describe a severe and long-lasting economic downturn that is worse and deeper than a recession. Many people point to the depth, duration, and dispersion of an economic downturn to determine whether or not it’s a depression. In other words, how bad it is, how long it lasts, and how many parts of the economy it affects.</td>
<td><strong>[Group 4]</strong></td>
</tr>
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</table>
# Handout A1.1: Economic Concepts (page 3 of 3)

<table>
<thead>
<tr>
<th>Concept Pair</th>
<th>In Your Own Words</th>
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<tbody>
<tr>
<td><strong>In economics, production</strong> is the process of using resources and intermediate goods to make goods and provide services. <strong>Resources</strong> include raw materials such as steel and farmland. <strong>Intermediate goods</strong> are things that are created from resources and then go into another product. For example, a car engine is an intermediate good: It goes into a new car that someone can buy. Economists measure all production—all the economic activity—with <strong>gross domestic product (GDP)</strong>. GDP represents the total value of all final goods and services produced in an economy in a given year. In other words, how much is all the production worth if we count it all up? GDP tells us. If the total doesn’t take inflation into account, it's called <strong>nominal GDP</strong>. If the total is adjusted for inflation, it's called <strong>real GDP</strong>. <strong>Gross</strong> is an accounting term that means the measurement doesn’t take depreciation into account. <strong>Domestic</strong> means the goods and services produced within the given country, such as the United States.</td>
<td>[Group 5]</td>
</tr>
</tbody>
</table>
Handout A1.2: Group 1—Employment and Unemployment

Employment statistics measure how many people in the labor force have jobs. To be considered part of the U.S. labor force, a person in the United States must be at least 16 years old and have a job or be unemployed.

Unemployment statistics measure people in the labor force that don’t have jobs but are actively looking for work.

Not everyone without a job is unemployed. For example, children, retirees, people who don’t want to have a job, and full-time students without jobs aren’t considered unemployed because they’re not counted as part of the labor force.

Primary Source Snapshot

This excerpt is from the introduction to the Federal Emergency Relief Administration (FERA) report “Unemployment Relief Census: October 1933, United States Summary” published in May 1934, seven months after that census. FERA was closed in 1935, and its functions became part of the Works Progress Administration and the Social Security Administration. The report counted only “families receiving public unemployment relief during the month of October 1933” (p. iiii). Relief was the word used for public support programs such as food and housing assistance.

This excerpt is from the cover letter in the published report that was sent to the U.S. Congress. Monthly employment and unemployment statistics like those we use today didn’t start until 1940.

Excerpt Text

LETTER OF TRANSMITTAL

FEDERAL EMERGENCY RELIEF ADMINISTRATION


SIR: I transmit herewith the final report covering the Unemployment Relief Census secured in the Nation-wide survey of all families and persons receiving relief from public funds during October 1933.

The information contained in this report gives, for the first time, reliable facts relating to the families receiving relief and should prove of great value in determining relief policies.

Handout A1.2: Group 2—Inflation and Deflation

Inflation is a general, sustained upward movement of prices for goods and services in an economy. In other words, prices, on average, are going up—even if some goods and services might be cheaper. Inflation is commonly measured by the change in a price index.

An index is a special kind of statistic in which what’s measured is compared with a base number (usually for a given year) to show the difference between the base number and the other measurement(s).

Deflation is the opposite of inflation. Deflation is a general, sustained downward movement of prices for goods and services in an economy. In other words, prices, on average, are going down—even if some goods and services might be more expensive.

Primary Source Snapshot
This excerpt is from a U.S. Bureau of Labor Statistics Bulletin published in August 1929.

Excerpt Text

Table 1.—PER CENT OF INCREASE IN RETAIL PRICES OF 22 ARTICLES OF FOOD IN 1928 COMPARED WITH 1913

<table>
<thead>
<tr>
<th>Article</th>
<th>Per cent of increase compared with 1913</th>
<th>Article</th>
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<th>Article</th>
<th>Per cent of increase compared with 1913</th>
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<tbody>
<tr>
<td>Ham</td>
<td>96.7</td>
<td>Pork chops</td>
<td>65.7</td>
<td>Butter</td>
<td>47.5</td>
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<tr>
<td>Round steak</td>
<td>88.3</td>
<td>Coffee</td>
<td>65.1</td>
<td>Tea</td>
<td>42.3</td>
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<tr>
<td>Sirloin steak</td>
<td>88.2</td>
<td>Flour</td>
<td>63.6</td>
<td>Eggs</td>
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<tr>
<td>Rib roast</td>
<td>76.8</td>
<td>Bacon</td>
<td>63.0</td>
<td>Sugar</td>
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<tr>
<td>Corn meal</td>
<td>76.7</td>
<td>Bread</td>
<td>62.5</td>
<td>Lard</td>
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<td>Hens</td>
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<td>Rice</td>
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<tr>
<td>Chuck roast</td>
<td>74.4</td>
<td>Potatoes</td>
<td>58.8</td>
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<tr>
<td>Cheese</td>
<td>74.2</td>
<td>Plate beef</td>
<td>57.0</td>
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Handout A1.2: Group 3—Prices and CPI

The **consumer price index (CPI)** is a measure of average prices paid by urban consumers for a market basket of consumer goods and services. The measure of average prices is called the price level.

An **index** is a special kind of statistic in which what’s measured is compared with a base number (usually for a given year) to show the difference between the base number and the other measurement(s).

Using a **price index** to compare price levels allows for comparison of the real change in average prices without inflation or deflation distorting those prices.

A **market basket** is a representative sample of the kinds of things people buy. A price index uses a market basket so researchers don’t have to check the prices for every single thing that’s for sale.

A **price** is the amount of money, determined by the interaction of buyers and sellers, that a buyer must pay to acquire a good, service, or resource. Prices are influenced by lots of factors, including how many potential buyers there are, how much the buyers are willing and able to pay, how much it costs to make the thing for sale, and how much of the thing the sellers are willing and able to sell at a given price.

**Primary Source Snapshot**

This excerpt is from a memo from Aryness Joy to E.A. Goldenweiser on March 18, 1933, about the measured decline in the cost of living according to the statistics from the U.S. Bureau of Labor Statistics. Joy was an economics researcher for the Federal Reserve, and Goldenweiser was the director of the division of research and statistics.

Excerpt Text

The Bureau’s present index is based upon an antiquated budget study made 15 years ago—in 1918. Since that time the things we buy have changed enormously, yet the list of commodities on which prices are collected has changed only when market conditions made particular commodities obsolete. There is no better evidence of the obsolete character of the budget of 1918 than the list of articles for which the Bureau collected prices as late as 1923. They include two quotations on men’s high shoes, and for the ladies, prices for nine different kinds of muslin underwear—which surely cannot be bought at any price today—cotton stockings only, two quotations on high shoes, and one on serge by the yard. It is to be hoped that these items have been replaced by modern low shoes and the silk stockings and silk and rayon underwear of 1933, and it is probable that most of them have been.

An economic **recession** is a significant decline in general economic activity extending over a period of time. Modern economists in the United States usually say that a recession must be a decline spread across the economy (not just one or two areas or industries) and last more than a few months. They look for evidence of a recession in real GDP, incomes, employment, industrial production, and sales.

There is no agreed-upon technical definition for what makes a **depression** different from a recession. Depression is usually used to describe a severe and long-lasting economic downturn that is worse and deeper than a recession. Many people point to the **depth**, **duration**, and **dispersion** of an economic downturn to determine whether or not it’s a depression. In other words, how bad it is, how long it lasts, and how many parts of the economy it affects.

**Primary Source Snapshot**

This excerpt is from Wesley Clair Mitchell’s book *Business Cycles* published in 1913. Mitchell was a leading economic authority on the topics of recession and depression. The rise of economic activity and the corresponding decline is called the **business cycle**.

What we now call a recession might have more commonly been called a depression in earlier decades. Our definition of recession was invented around 1929, and what people in the 1930s called “recession” is closer to what we now call a contraction—the decreasing of economic activity in an economic downturn.

**Excerpt Text**

Now the recurrent phrase presented by economic activity, wherever it is dominated by the quest of profits, grow out of and grow into each other. An incipient revival of activity, for example, develops into full prosperity, prosperity gradually breeds a crisis, the crisis merges into depression, depression becomes deeper for a while, but ultimately engenders a fresh revival of activity, which is the beginning of another cycle. A theory of business cycles must therefore be a descriptive analysis of the cumulative changes by which one set of business conditions transforms itself into another set.

Handout A1.2: Group 5—Production and GDP (page 1 of 2)

In economics, production is the process of using resources and intermediate goods to make goods and provide services.

Resources include raw materials such as steel and farmland.

Intermediate goods are things that are created from resources and then go into another product. For example, a car engine is an intermediate good: It goes into a new car that someone can buy.

Economists measure all production—all the economic activity—with gross domestic product (GDP). GDP represents the total value of all final goods and services produced in an economy in a given year. In other words, how much is all the production worth if we count it all up? GDP tells us. If the total doesn’t take inflation into account, it’s called nominal GDP. If the total is adjusted for inflation, it’s called real GDP.

Gross is an accounting term that means the measurement doesn’t take depreciation into account.

Domestic means the goods and services produced within the given country, such as the United States.

Primary Source Snapshot
This excerpt is from the congressional report National Income, 1929-1932, published in 1934. It shows the difficulty that the researchers led by economist Simon Kuznets had in finding the data needed to create their estimate of total U.S. economic activity.

Excerpt Text
The method followed and sources of data employed in deriving each of the numerous items composing the national total are described concisely in appendix A. As may be seen at a glance, a list of the most important sources would include all the recent censuses, especially those of Agriculture (1929), Mining (1929), Manufacturing (1929 and 1931), Distribution (1929), Construction (1929), Occupations (1929 and 1919), Electrical Industries (1927 and 1932), Education (1930); the reports on Statistics of Income of the Internal Revenue Office, supplemented by special tabulations requested for the purpose of this report; the annual reports of the Comptroller of the Currency and the Federal Reserve Board’s reports on member bank expenditures; the reports on Receipts and Expenditures of the Federal Government, as well as the annual volumes of the Financial Statistics of Citizens; the Bureau of Labor Statistics indexes of employment and pay rolls in a number of industries; the Department of Agriculture estimates and supporting data on income from agriculture; the reports of the Interstate Commerce Commission on railroads and other public utilities accounting to it; State data on employment and compensation, especially those of Pennsylvania, New York, and Ohio; and a multitude of other sources too numerous to mention.

For some of the constituent parts of the total, indicated in the classifications above, the available data are abundant and reliable; for others both direct and indirect information is quite scanty and the resulting estimate is subject to a wide margin of error. It is of importance to note the area of the national economy in which formidable difficulties were encountered for lack of precise data.


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Handout A1.2: Group 5—Production and GDP (page 2 of 2)

Industries (1927 and 1932), Education (1930); the reports on Statistics of Income of the Internal Revenue Office, supplemented by special tabulations requested for the purpose of this report; the annual reports of the Comptroller of the Currency and the Federal Reserve Board’s reports on member bank expenditures; the reports on Receipts and Expenditures of the Federal Government, as well as the annual volumes of the Financial Statistics of States and Financial Statistics of Cities; the Bureau of Labor Statistics indexes of employment and pay rolls in a number of industries; the Department of Agriculture estimates and supporting data on income from agriculture; the reports of the Interstate Commerce Commission on railroads and other public utilities accounting to it; State data on employment and compensation, especially those of Pennsylvania, New York, and Ohio; and a multitude of other sources too numerous to mention.

For some of the constituent parts of the total, indicated in the classifications above, the available data are abundant and reliable; for others both direct and indirect information is quite scanty and the resulting estimate is subject to a wide margin of error. It is of importance to note the areas of the national economy in which formidable difficulties were encountered for lack of precise data:
Handout A1.3: Data Assessment (page 1 of 4)

Name ________________________________________

Directions: Look at the graphs below and answer the questions.

1. In the GDP graph, the shaded areas indicate
   a. production.
   b. consumption.
   c. recessions.
   d. depressions.

2. “Real” in this chart means that the data have been adjusted to account for
   a. inflation or deflation.
   b. production or consumption.
   c. epression or recession.
   d. goods or services.
3. According to the title of this CPI graph, prices for which consumers are included?
   a. All rural consumers in the United States
   b. All urban and rural consumers in the United States but not consumers in the suburbs
   c. All urban consumers in the United States
   d. All consumers in the United States

4. Data for this CPI graph are available starting in approximately what year?
   a. 1900
   b. 1913
   c. 1920
   d. 1929
5. In what year does the measurement of the national unemployment rate in this graph start?
   a. 1913
   b. 1929
   c. 1948
   d. 1950

6. According to the unemployment rate graph, approximately how high was the unemployment rate during the Great Depression?
   a. 4 percent
   b. 8 percent
   c. 11 percent
   d. The graph does not show this data.
7. The two graphs below are taken from official government statistical publications published during major economic crises. The first is from the *Survey of Current Business* for October 1930, about a year into the Great Depression. The second is from the *CPI Detailed Report* for December 2008, about a year into the Great Recession. In two to three sentences, explain how these two graphs illustrate the difference in how the economy is understood in the twenty-first century compared with how it was understood during the Great Depression.

**WHOLESALE PRICES FOR SPECIFIED COMMODITIES**


**CPI-U 12-Month Changes, 1996 to Present**

NOTE: “CPI-U” is another name for “CPI for All Urban Consumers.”

Handout A1.3: Data Assessment—Answer Key

1. In the GDP graph, the shaded areas indicate
   a. production.
   b. consumption.
   c. recessions.
   d. depressions.

2. “Real” in this chart means that the data have been adjusted to account for
   a. inflation or deflation.
   b. production or consumption.
   c. depression or recession.
   d. goods or services.

3. According to the title of this CPI graph, prices for which consumers are included?
   a. All rural consumers in the United States
   b. All urban and rural consumers in the United States but not consumers in the suburbs
   c. All urban consumers in the United States
   d. All consumers in the United States

4. Data for this CPI graph are available starting in approximately what year?
   a. 1900
   b. 1913
   c. 1920
   d. 1929

5. In what year does the measurement of the national unemployment rate in this graph start?
   a. 1913
   b. 1929
   c. 1948
   d. 1950

6. According to the unemployment rate graph, approximately how high was the unemployment rate during the Great Depression?
   a. 4 percent
   b. 8 percent
   c. 11 percent
   d. The graph does not show this data.

7. In two to three sentences, explain how these two graphs illustrate the difference in how the economy is understood in the twenty-first century compared with how it was understood during the Great Depression. (Answers will vary but should include that modern CPI data offer a single measure of the economy, while the Great Depression data have many different measures of the economy.)
Handout A1.4: “The Great Depression: An Overview” (page 1 of 5)

This essay was published as part of the Great Depression curriculum in 2007. Although some of the data have changed and Federal Reserve policy has continued to evolve, the text is presented in its original form.

The Great Depression: An Overview
by David C. Wheelock

Why should students learn about the Great Depression? Our grandparents and great-grandparents lived through these tough times, but you may think that you should focus on more recent episodes in American life. In this essay, I hope to convince you that the Great Depression is worthy of your interest and deserves attention in economics, social studies, and history courses.

One reason to study the Great Depression is that it was by far the worst economic catastrophe of the 20th century and, perhaps, the worst in our nation’s history. Between 1929 and 1933, the quantity of goods and services produced in the United States fell by one-third, the unemployment rate soared to 25 percent of the labor force, the stock market lost 80 percent of its value and some 7,000 banks failed.

At the store, the price of chicken fell from 38 cents a pound to 12 cents, the price of eggs dropped from 50 cents a dozen to just over 13 cents, and the price of gasoline fell from 10 cents a gallon to less than a nickel. Still, many families went hungry, and few could afford to own a car.

Another reason to study the Great Depression is that the sheer magnitude of the economic collapse—and the fact that it involved every aspect of our economy and every region of our country—makes this event a great vehicle for teaching important economic concepts. You can learn about inflation and deflation, Gross Domestic Product (GDP), and unemployment by comparing the Depression with more recent experiences. Further, the Great Depression shows the important roles that money, banks and the stock market play in our economy.

A third reason to study the Great Depression is that it dramatically changed the role of government, especially the federal government, in our nation’s economy. Before the Great Depression, federal government spending accounted for less than 3 percent of GDP. By 1939, federal outlays exceeded 10 percent of GDP. (At present, federal spending accounts for about 20 percent of GDP.) The Great Depression also brought us the Federal Deposit Insurance Corp. (FDIC), regulation of securities markets, the birth of the Social Security System, and the first national minimum wage.

What Caused the Great Depression?

Economists continue to study the Great Depression because they still disagree on what caused it. Many theories have been advanced over the years, but there remains no single, universally agreed-upon explanation as to why the Depression happened or why the economy eventually recovered.

The 1929 stock market crash often comes to mind first when people think about the Great Depression. The crash destroyed considerable wealth. Perhaps even more important, the crash sparked doubts about the health of the economy, which led consumers and firms to pull back on their spending,
Measuring the Great Depression

especially on big-ticket items like cars and appliances. However, as big as it was, the stock market crash alone did not cause the Great Depression.

Some economists point a finger at protectionist trade policies and the collapse of international trade. The Smoot-Hawley tariff of 1930 dramatically increased the cost of imported goods and led to retaliatory actions by the United States' major trading partners. The Great Depression was a worldwide phenomenon, and the collapse of international trade was even greater than the collapse of world output of goods and services. Still, like the stock market crash, protectionist trade policies alone did not cause the Great Depression.

Other experts offer different explanations for the Great Depression. Some historians have called the Depression an inevitable failure of capitalism. Others blame the Depression on the “excesses” of the 1920s: excessive production of commodities, excessive building, excessive financial speculation or an excessively skewed distribution of income and wealth. None of these explanations has held up very well over time.

One explanation that has stood the test of time focuses on the collapse of the U.S. banking system and resulting contraction of the nation’s money stock. Economists Milton Friedman and Anna Schwartz make a strong case that a falling money stock caused the sharp decline in output and prices in the economy.2

As the money stock fell, spending on goods and services declined, which in turn caused firms to cut prices and output and to lay off workers. The resulting decline in incomes made it harder for borrowers to repay loans. Defaults and bankruptcies soared, creating a vicious spiral in which more banks failed; the money stock contracted further; and output, prices, and employment continued to decline.3

Money, Banking, and Deflation

Money makes the economy function. Money evolved thousands of years ago because barter—the direct trading of goods or services for other goods or services—simply didn’t work. A modern economy could not function without money, and economies tend to break down when the quantity or value of money changes suddenly or dramatically. Print too much money, and its value declines—that is, prices rise (inflation). Shrink the money stock, on the other hand, and the value of money rises—that is, prices fall (deflation).

In modern economies, bank deposits—not coins or currency—comprise the lion’s share of the money stock. Bank deposits are created when banks make loans, and deposits contract when customers repay loans. The amount of loans that banks can make, and hence the quantity of deposits that are created, is determined partly by regulations on the amount of reserves that banks must hold against their deposits and partly by the business judgment of bankers.

In the United States, bank reserves consist of the cash that banks hold in their vaults and the deposits they keep at Federal Reserve banks. Reserves earn little or no interest, so banks don’t like to hold too much of them. On the other hand, if banks hold too few reserves, they risk getting caught short in the event of unexpected deposit withdrawals.
In the 1930s, the United States was on the gold standard, meaning that the U.S. government would exchange dollars for gold at a fixed price. Commercial banks, as well as Federal Reserve banks, held a portion of their reserves in the form of gold coin and bullion, as required by law.

An increase in gold reserves, which might come from domestic mining or inflows of gold from abroad, would enable banks to increase their lending and, as a result, would tend to inflate the money stock. A decrease in reserves, on the other hand, would tend to contract the money stock. For example, large withdrawals of cash or gold from banks could reduce bank reserves to the point that banks would have to contract their outstanding loans, which would further reduce deposits and shrink the money stock.

The money stock fell during the Great Depression primarily because of banking panics. Banking systems rely on the confidence of depositors that they will be able to access their funds in banks whenever they need them. If that confidence is shaken—perhaps by the failure of an important bank or large commercial firm—people will rush to withdraw their deposits to avoid losing their funds if their own bank fails.

Because banks hold only a fraction of the value of their customers’ deposits in the form of reserves, a sudden, unexpected attempt to convert deposits into cash can leave banks short of reserves. Ordinarily, banks can borrow extra reserves from other banks or from the Federal Reserve. However, borrowing from other banks becomes extremely expensive or even impossible when depositors make demands on all banks. During the Great Depression, many banks could not or would not borrow from the Federal Reserve because they either lacked acceptable collateral or did not belong to the Federal Reserve System.

Starting in 1930, a series of banking panics rocked the U.S. financial system. As depositors pulled funds out of banks, banks lost reserves and had to contract their loans and deposits, which reduced the nation’s money stock. The monetary contraction, as well as the financial chaos associated with the failure of large numbers of banks, caused the economy to collapse.

Less money and increased borrowing costs reduced spending on goods and services, which caused firms to cut back on production, cut prices, and lay off workers. Falling prices and incomes, in turn, led to even more economic distress. Deflation increased the real burden of debt and left many firms and households with too little income to repay their loans. Bankruptcies and defaults increased, which caused thousands of banks to fail. In each year from 1930 to 1933, more than 1,000 U.S. banks closed.

Banking panics are pretty much a thing of the past, thanks to federal deposit insurance. Widespread failures of banks and savings institutions during the 1980s did not cause depositors to panic, which limited withdrawals from the banking system and prevented serious reverberations throughout the economy.

**Recovery**

The monetary hemorrhage experienced during the Great Depression finally ended when President Franklin D. Roosevelt declared a national bank holiday just one day after he took office in March.
1933. Roosevelt ordered all banks closed, including the Federal Reserve banks. He permitted them to reopen only after each bank received a government license. Meanwhile, the federal government set up a temporary system of federal deposit insurance and followed up a year later by creating the Federal Deposit Insurance Corporation (FDIC) and a permanent deposit insurance system.

Roosevelt’s policies restored confidence in the banking system, and money poured back into the banks. The money stock began to expand, which fueled increased spending and production as well as rising prices. Economic recovery was slow, but at least the bottom had been reached and the corner turned.

History books often credit Roosevelt’s New Deal for leading the economic recovery from the Great Depression. Under the New Deal, the government put in place many programs of relief and recovery that employed thousands of people and made direct cash grants or loans to individuals, firms, and local governments. However, at least in the first few years of the New Deal, federal government spending did not increase substantially.

Furthermore, some aspects of the New Deal may even have hampered recovery. For example, some economists believe that the National Recovery Act (NRA) may have slowed the recovery by encouraging the formation of industrial cartels, which limited competition and may have discouraged employment. Others note that some New Deal agricultural programs perversely discouraged production and reduced the demand for farm labor. Still, by restoring confidence in the financial system and in the U.S. economy as a whole, Roosevelt’s policies undoubtedly did much to spark the economic recovery.

Could It Happen Again?

That’s the big question. As economists have learned more and more about the importance of monetary and banking forces in both the contraction and recovery phases of the Great Depression, they have recognized the importance of sound macroeconomic policies in ensuring a strong economy. The Great Depression was not a failure of capitalism or of markets, but rather a result of misguided government policies—specifically, the Federal Reserve allowing the money stock to collapse as panics engulfed the banking system. If the Fed had stepped up to the plate and ensured that banks had ample reserves to meet their customers’ withdrawal demands, the money stock would not have declined, and the economy probably would not have sharply contracted.

Although the Fed could not by law directly lend to banks that did not belong to the Federal Reserve System, the Fed could have purchased securities in the open market and flooded the banking system with reserves. Since the Great Depression, the Federal Reserve has responded faster to shocks that have threatened the banking and payments system.

The Great Depression also demonstrated the importance of price stability. Deflation was an important cause of falling incomes and financial distress, as households and firms found it increasingly difficult to repay debts. Because debt contracts almost always specify repayment of a fixed-dollar sum, deflation increases the real cost of a given nominal debt.

Thus, deflation often leads to increases in loan defaults and bankruptcies, which in turn raise the number of bank failures and produces further declines in income, output and employment. Price
stability is now widely accepted as the paramount goal for monetary policy because fluctuations in the price level—whether deflation or inflation—can cause financial instability and hinder economic growth.

It is unlikely that doctors will ever find a cure for the common cold. Similarly, it is unlikely that economists will ever find a remedy for the negative effects of the business cycle. From time to time, shocks will hit the economy and will cause output and employment to fluctuate. However, the Great Depression has taught us that sound economic policies will help ensure that ordinary fluctuations in output and employment do not grow into major economic catastrophes.

Economist David C. Wheelock was an assistant vice president at the Federal Reserve Bank of St. Louis when this essay was written. He is now group vice president and deputy director of research at the Bank.

NOTE: Federal Reserve policy on reserves has changed since this essay was written. For more information on the current policy, see the following: Ihrig, Jane and Wolla, Scott. “The Fed’s New Monetary Policy Tools.” Federal Reserve Bank of St. Louis Page One Economics®: Econ Primer, August 2020; https://research.stlouisfed.org/publications/page1-econ/2020/08/03/the-feds-new-monetary-policy-tools.

1 In 1929, federal outlays totaled $3.1 billion (Economic Report of the President); GDP totaled $108.1 billion (Gordon, Robert J. Gordon. Macroeconomics. 8th ed. Addison-Wesley, 2000).


3 Federal Reserve Chairman Ben Bernanke wrote an important article showing that banking panics contributed to the nation’s economic collapse not only by reducing the money stock, but also by increasing the costs of borrowing and lending: Bernanke. Ben S. “Nonmonetary Effects of the Financial Crisis in Propagation of the Great Depression.” American Economic Review, June 1983, 73(3), pp. 257-76.

4 Before 1980, only banks that were members of the Federal Reserve System could borrow directly from Federal Reserve Banks.
Handout A1.5: Questions on “The Great Depression: An Overview

Directions: Read “The Great Depression: An Overview” by David Wheelock (Handout A1.4) and then answer the following close reading questions.

1. Why do we study the Great Depression?

2. What are common causes given for the Great Depression?

3. Economists Milton Friedman and Anna Schwartz made a case for a specific cause of the Great Depression. What did they determine caused the Great Depression?

4. Explain the vicious spiral of a declining money stock during the Great Depression.

5. Assess the actions taken by the Federal Reserve during the Great Depression.

6. What impact did deflation have on firms and households?
Handout A1.5: Questions on “The Great Depression: An Overview”—Answer Key

Directions: Read “The Great Depression: An Overview” by David Wheelock (Handout A1.4) and then answer the following close reading questions.

1. Why do we study the Great Depression?
   
   Answers will vary but should include that it was the largest economic collapse in the United States and involved all regions and parts of the economy.

2. What are common causes given for the Great Depression?
   
   Answers may include the 1929 stock market crash; doubts about the economy; trade policy including the Smoot-Hawley tariff of 1930; excessive production, building, and financial speculation; or an excessively skewed distribution of income and wealth.

3. Economists Milton Friedman and Anna Schwartz made a case for a specific cause of the Great Depression. What did they determine caused the Great Depression?
   
   They said that a falling money stock caused the sharp decline in output and prices in the economy.

4. Explain the vicious spiral of a declining money stock during the Great Depression.
   
   Spending on goods and services fell, firms cut prices to sell more, and firms laid off workers. Workers could not buy goods and services, because they did not have a job. Borrowers did not have money to repay loans and defaulted. Bankruptcies soared and banks failed.

5. Assess the actions taken by the Federal Reserve during the Great Depression.
   
   Answers will vary but should include that the Federal Reserve did not lend to banks in need if they lacked acceptable collateral or did not belong to the Federal Reserve System. Many of those banks failed and triggered a continued wave of bank failures. The Federal Reserve made things worse.

6. What impact did deflation have on firms and households?
   
   Answers will vary but should include that consumers had less income available to repay loans, which caused more defaults, bankruptcies, and failures of businesses and banks.
Standards and Benchmarks
C3 Framework for Social Studies

Standards History: Change, Continuity, and Context
Benchmark D2.His.1.6-8. Analyze connections among events and developments in broader historical contexts.
Benchmark D2.His.1.9-12. Evaluate how historical events and developments were shaped by unique circumstances of time & place as well as broader historical contexts.
Benchmark D2.His.2.6-8. Classify series of historical events and developments as examples of change and/or continuity.
Benchmark D2.His.2.9-12. Analyze change and continuity in historical eras.

History: Causation and Argumentation
Benchmark D2.His.15.6-8. Evaluate the relative influence of various causes of events and developments in the past
Benchmark D2.His.15.9-12. Distinguish between long-term causes and triggering events in developing a historical argument
Benchmark D2.His.16.6-8. Organize applicable evidence into a coherent argument about the past.
Benchmark D2.His.16.9-12. Integrate evidence from multiple relevant historical sources and interpretations into a reasoned argument about the past.

Economics: The National Economy
Benchmark D2.Eco.11.6-8. Use appropriate data to evaluate the state of employment, unemployment, inflation, total production, income, and economic growth in the economy.
Benchmark D2.Eco.11.9-12. Use economic indicators to analyze the current and future state of the economy.
Benchmark D2.Eco.12.6-8. Explain how inflation, deflation, and unemployment affect different groups.
Benchmark D2.Eco.12.9-12. Evaluate the selection of monetary and fiscal policies in a variety of economic conditions.

National Standards in Economics
Standard 18: A nation’s overall levels of income, employment and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies and others in the economy.

Benchmark 1, Grade 8: Gross Domestic Product (GDP) is a basic measure of a nation’s economic output and income. It is the total market value, measured in dollars, of all final goods and services produced in the economy in a year.