



# **Economic Investigations:**There Is More to the Story

"Economic Investigations: There Is More to the Story" was a National Science Foundation funded project, which began in September 2003. The Social Science Education Consortium (SSEC) of Boulder, Colorado, was the grantee agency. James Davis, Executive Director of the SSEC, was the project director, and Donald Wentworth, Professor Emeritus of Pacific Lutheran University, was project co-director.

The overall project goal was to help students achieve a deeper understanding of puzzling economics questions so they could explain and provide thorough, supported, and justifiable accounts of economic phenomena, facts, and data. Three objectives guided project development:

- Create a classroom laboratory orientation for the investigations similar to those students would encounter in a laboratory science course.
- Develop quantitative skills in students—more so than they would acquire in a standard high school economics course.
- Focus the investigations on intriguing economics questions to spark student and teacher interest.

### The Investigations

Twelve investigations were created by teams of economics curriculum materials developers and high school economics teachers. The titles of each investigation identify its content area followed by the main question addressed in the investigation. The investigation titles are:

#### Microeconomic Investigations

- 1. Women's Wages: Do Women Earn Less Money Than Men?
- 2. Organ Transplants: Where Are the Missing Kidneys?
- 3. Minimum Wage: Does Raising the Rate Help Younger Workers?
- 4. Poverty: How Can a Family Be in Poverty and Not Be Poor?
- 5. Health Care: Who Should Pay the Cost?

#### **Macroeconomic Investigations**

- 6. Performance of the National Economy: How Do We Measure the Economy's Health?
- 7. Inflation: Are Higher Prices the Only Problem?
- 8. Employment and Unemployment: How Can Both Rates Rise at the Same Time?
- 9. Fiscal Policy: Can Congress Diagnose and Treat an Ailing Economy?
- 10. Monetary Policy: Can the Federal Reserve Diagnose and Treat an Ailing Economy?

#### **International Investigations**

- 11. African-U.S. Trade: What's in It for Africa?
- 12. Imports: Does American Employment Decline Because of International Trade?



#### **Investigation and Field Test Results**

The investigations were field-tested by high school teachers in the spring semesters of 2004 and 2006. Field test locations included Jefferson County Colorado; Milwaukee, Wisconsin; Sioux Falls, South Dakota; Scottsdale/Mesa, Arizona; and Plano, Texas. Based on this field test, the investigations were found to promote deeper student understanding of economic issues through the use of effective instructional methods. Students acknowledged that they learned a great deal from the investigations and teachers stated they would recommend the investigations to other teachers.

#### Cooperative Publishing Agreement

The Social Science Education Consortium has transferred the copyright of these investigations to JA Worldwide. JA Worldwide is making them available to teachers by posting them on the JA Worldwide website (www.ja.org) and distributing them in CD-ROM format. The investigations also will be posted on the SSEC website (www.socialscience-ed.org). Ultimately, the investigations will support the revised Junior Achievement high school program, JA Economics.

#### **Authorship and Consultants**

The project was fortunate to have an excellent group of authors and consultants. These individuals are listed below.

#### Colorado Development Team

Laura Burrow, Jefferson County Public Schools James Davis, Social Science Education Consortium Lewis Karstensson, University of Nevada, Las Vegas

#### Washington Development Team

Penny Brunken, Sioux Falls (SD) Public Schools Donald Wentworth, Professor Emeritus, Pacific Lutheran University

### Wisconsin Development Team

Thomas Fugate, Homestead High School, Mequon, WI Mark Schug, University of Wisconsin-Milwaukee

The economics consultant to the project was Norris Peterson, Professor of Economics, Pacific Lutheran University, Tacoma, Washington.

The project evaluator was William Walstad, Professor of Economics, University of Nebraska, Lincoln.

Nancy Baldrica, Excelsior, Minnesota, served in an editorial and desktop-publishing capacity on the project.



#### Field-Test Teachers

Below are the teachers who completed field tests during the second year of the project.

#### Arizona

Amy Willis, coordinator, Arizona Council of Economic Education Dan Korzec, St. Johns High School, St. Johns, AZ Bridget Olson, Mesa High School, Mesa, AZ Debbie Henney, Highland High School, Gilbert, AZ John Kessler, Goodyear, AZ

#### Colorado

Tracey Boychuk, Pomona High School, Arvada, CO Laura Burrow, Bear Creek High School, Lakewood, CO

#### South Dakota

Penny Brunken, Roosevelt High School, Sioux Falls, SD Jeanette Remily, Britton-Hecla High School, Britton, SD Kellie Schultz, Washington High School, Sioux Falls, SD Erika Vont, Akron-Westfield High School, Akron, IA

#### **Texas**

Julie Meek, Plano East Senior High School, Plano, TX

#### Wisconsin

Tom Fugate, Homestead High School, Mequon, WI Mark Cywinski, Brown Deer High School, Brown Deer, WI Andy Bosley, Homestead High School, Mequon, WI

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Investigation # 6:
Performance of the
National Economy:
How Do We Measure
the Economy's Health?

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**Investigation #6:** 

Performance of the National Economy:
How Do We Measure the Economy's Health?

#### Introduction

This investigation focuses on measuring the performance of the United States economy. It goes well beyond what students might learn from print or television media and tells much of the rest of the story. Students begin with the reading *The Measurement of Economic Performance*. This text summarizes the Employment Act of 1946 and defines the principal measures of economic performance, a set of performance targets, and the states of economic performance. The Employment Act of 1946 established the legal foundation for the national stabilization policy. The principal measures of economic performance include Gross Domestic Product, the unemployment rate, and the Consumer Price Index. The performance targets define the intended performance of the economy.

The states of economic performance suggest the various conditions of the national economy in recent times. The reading is then followed by an exercise involving the exploration of the performance of the U.S. economy from 1950 to 2000, with respect to production, unemployment, and prices. This historical analysis is intended to provide some insights into how economists and policymakers are inclined to look at the performance of the national economy and how the economy has performed in recent times.

An optional performance assessment activity is included. It also should be noted that this investigation is the foundation for two subsequent investigations: Investigation #9, focusing on fiscal policy; and Investigation #10, focusing on monetary policy.

#### **Student Comprehension**

This investigation helps students clarify economic performance measures, including the following:

- The meaning of percentage changes in Gross Domestic Product
- How the labor force is measured
- The meaning of employment and unemployment
- How inflation is measured
- The meaning of a percentage change in the Consumer Price Index
- The difference between nominal and real Gross Domestic Product
- Targets of economic performance with respect to production, employment, and purchasing power
- The states of economic performance in recent years



#### Concepts

Nominal Gross Domestic Product
Real Gross Domestic Product
Percentage Changes
Civilian Labor Force
Employment and Unemployment
Consumer Price Index
Economic Stability
Economic Instability
Recession
Inflation
Inflationary Recession

#### **Objectives**

After completing this investigation, students will be able to

- Analyze time series data sets.
- Distinguish between nominal and real GDP.
- Identify percentage changes.
- Define employment and unemployment.
- Describe the meaning of the Consumer Price Index.
- Describe the meaning of stabilization policy targets.
- Analyze time series data sets with economic performance targets in mind.
- Determine whether economic performance targets were met during a decade.
- Identify whether the U.S. economy was stable or unstable during a decade.
- Summarize their analysis of the five decades of economic performance.
- Explain their reasoning about whether the economy was stable or unstable during the period 1950–1999.

#### **Economic Principles**

The Employment Act of 1946 was enacted to promote maximum employment, production, and purchasing power. The Act placed the federal government in the role of enacting national stabilization policy to achieve these goals. Students are introduced to the principal time series data used to measure production, employment, and purchasing power in the national economy. Students also are introduced to the various states of performance in the economy (stability, recession, inflation, inflationary recession), defined with reference to selected targets of economic performance.



#### Investigation

#### **Description**

This investigation begins with students reading in pairs (Reading #1 - The Measurement of Economic Performance). As they read, students are asked to identify the data presented in the data set in Table 1 - Production, Unemployment, and Purchasing Power in the United States Economy, 1950-2000. Following the reading, students engage in an exercise in which they explore the performance of the national economy over the period from 1950 to 2000. Each of five groups is assigned a decade to analyze (e.g., 1950-59, 1960-69). Each group will complete a table for their assigned decade indicating the number of years the economy failed to meet performance targets and whether the economy was stable or unstable in each year of the decade. The small-group analyses are then combined into a master table for the 50-year period 1950 to 1999. This part of the investigation concludes with students doing an activity on the frequency of stability/instability of the economy. Students then explain their reasoning for their own conclusions about economic stability/instability during the 50-year period.

An optional performance assessment activity also is included for distribution prior to the students' participation in the investigation.

**Time Required:** Two 60-minute periods (120 minutes)

**Technology:** This investigation includes an optional Internet data-search activity.

#### **Materials:**

| Reading #1    | The Measurement of Economic Performance                    |
|---------------|--|
| Table #1      | Production, Unemployment, and Purchasing Power             |
|               | in the United States Economy, 1950-2000                    |
| Assessment #1 | (Optional) Performance Assessment                          |
| Visual #1     | (Optional) Rubric-Visual Presentation                      |
| Activity #1.1 | Economic Stability and Instability                         |
|               | in the United States Economy                               |
| Activity #1.2 | Table F, Stability and Instability                         |
|               | in the Economy, 1950-1999                                  |
| Activity #1.3 | Incidence of Problems in Production, Unemployment,         |
|               | and Inflation in the Economy                               |
| Activity #1.4 | Incidence of Stability and Instability in the Economy      |
| Activity #1.5 | Frequency of Stability and Instability in the U.S. Economy |
| Assessment #2 | Performance Assessment Essay                               |
|               |  |



#### Procedure

- 1. Announce that this investigation is designed to enable students to read and understand historical data related to the performance of the economy. In doing so, students will come to understand much more about the economy than they would learn in a newspaper article or hear on a television newscast.
- 2. Students may have learned about the Employment Act of 1946 and the reasons for the Act. However, as a pre-reading introduction, provide some background. Be sure that students understand that they will be examining historical data (1950-2000) related to the Act—measures of production, employment, and purchasing power.
- 3. Distribute copies of Reading #1 The Measurement of Economic Performance, and Table #1 Production, Unemployment, and Purchasing Power in the United States Economy, 1950-2000, to each student.
- 4. Pair off students, making an effort to partner strong-reading students with weak-reading students. You may wish to post these questions on the board to help guide students' reading:
  - What are the goals of the Employment Act of 1946?
  - How is production measured?
  - How is unemployment measured?
  - How is purchasing power measured?
  - What targets of economic performance were selected for analysis in this investigation?
  - What is the state of economic stability?
  - What is the state of economic instability?
  - What is the state of recession?
  - What is the state of inflation?
  - What is the state of inflationary recession?
- 5. Tell students to stop from time to time in their reading to identify the data for production, unemployment, and purchasing power cited in the text.
- 6. When students have completed their reading, take time to review the questions listed in Procedure #4 (above) and clarify any questions students may have.
- 7. (Optional) Distribute **Assessment #1 Performance Assessment.** Show students **Visual #1 Rubric–Visual Presentation** to establish how students will be assessed on their visual presentation. Divide students into pairs or small groups to complete the activity.
- 8. Form five workgroups of students. Distribute materials for **Activity #1.1 Economic Stability and Instability in the United States Economy** to each group. Provide sufficient blank activity pages, Tables A through E, for each of the five decades: 1950-59, 1960-69, 1970-79, 1980-89, and 1990-99. Allow each group time to complete the information for its assigned decade. Each group should make a copy of its decade's results to give to other groups.



- 9. Distribute Activity #1.2, Table F Stability and Instability in the Economy, 1950-1999. Each group can begin entering its data on this page. In roundrobin fashion, have groups share their decade-data page, so each group can enter its data on the 1950 to 1999 table.
- 10. Decide whether you want to have students stay in their decade workgroups or work individually for the remaining parts of Activity #1.
- Distribute Activity #1.3 Incidence of Problems in Production,
   Unemployment, and Inflation in the Economy, and Activity #1.4
   Incidence of Stability and Instability in the Economy. Complete these two activities using the data in Table F.
- 12. Distribute Activity #1.5 Frequency of Stability and Instability in the U.S. Economy. Complete this activity using the data from Activity #1.3 and Activity #1.4.
- 13. (Optional) Distribute the **Performance Assessment Essay, Assessment #2**, for students to complete (p. 48). (An acceptable answer is found on p. 49.)



#### Closure

Since the major goal of this investigation is for students to read and understand historical data, ask them the following questions:

• What is the difference between nominal Gross Domestic Product and real Gross Domestic Product?

**Answer:** Nominal GDP measures output in current prices, so it reflects what is happening to prices, as well as output, over time. Real GDP measures output in prices of a base year and, therefore, shows what is happening to output over time with prices held constant. If prices increase at a more rapid rate than output in a given year, nominal GDP will increase, while real GDP will decrease, as occurred in 1991.

• If you had to summarize what happened to real Gross Domestic Product between 1950 and 2000, what would you say?

**Answer:** With few exceptions (e.g., 1958, 1982), the real Gross Domestic Product increased from year to year. Some of the largest increases occurred in 1950 (8.7%), 1951 (7.6%), 1959 (7.2%), and 1984 (7.3%). In more recent years (1996-2000), the average increase was 4%.

• Looking back at the unemployment data, what are some of the three-year periods when unemployment was lowest/highest?

**Answer:** In 1951-53, unemployment was about 3%; similarly, it was slightly more than 4% in 1998-2000. In the period 1975-77, unemployment averaged 7.8%; in the period 1981-83, unemployment averaged 9%.

Looking back at the inflation data, what are some of the time periods when inflation was the lowest?

**Answer:** Between 1959 and 1965, inflation averaged slightly more than 1%. In the 10-year period between 1991 and 2000, inflation averaged 2.8%.

• **Open-ended question:** Were the selected targets of economic performance used in this analysis reasonable? Why or why not? What targets would you select if you were in charge of determining the national stabilization policy?

#### **Optional Internet Search Activity**

Tell students that the U.S. government has a responsibility to track all data related to economic performance. Encourage students to explore the U.S. Department of Commerce website at www.bea.doc.gov/bea/dn/home/gdp.htm.They should pay particular attention to "Current-dollar and 'real' GDP, 1929-2002, XLS" and "Percent change from preceding period, XLS" on the website.



#### The Measurement of Economic Performance

The Great Depression of the 1930s caused elected officials and economic policymakers to rethink the role of the federal government in the economy. At the end of World War II, Congress passed the Employment Act of 1946.

#### **Employment Act of 1946**

This act was a legislative mandate to authorize the federal government to assume responsibility for promoting economic stability. In part, the Act reads:

The Congress hereby declares that it is the continuing policy and responsibility of the Federal Government to use all practicable means consistent with its needs and obligations and other essential considerations of national policy, with assistance and cooperation of industry, agriculture, labor and state and local governments to coordinate and utilize its plans, functions, and resources for the purpose of creating and maintaining, in a manner calculated to foster and promote free competitive enterprise and the general welfare, conditions under which there will be afforded useful employment opportunities, including self-employment, for those able, willing, and seeking to work and *to promote maximum employment*, *production*, *and purchasing power*.

Thus, the federal government, assumed responsibility for promoting the stability of the national economy, and "stability" was defined as maintaining maximum production, employment, and purchasing power.

#### **Economic Performance Measures**

How do we analyze the performance of the economy in the three areas of production, employment, and purchasing power? First, we must look at selected time series—data covering a period of time—pertinent to each of these areas. These time series are the principal indicators of the economy's performance.

The economy's performance time series for production, employment, and purchasing power over the half-century from 1950 to 2000 are presented in the data set in *Table #1 – Production, Unemployment, and purchasing Power in the United States Economy, 1950-2000.* 

#### **Production**

Gross Domestic Product (GDP) is the commonly used measure of economic performance, with respect to overall production. This information is provided in Table #1, where three production time series are shown. Examine the data set as you read along. Note that a thousand billion is one trillion.



**Nominal Gross Domestic Product (GDPN):** A measure of production in current prices. GDPN is presented in billions of current dollars. GDPN in the year 2000, measured in 2000 prices, was \$9,824.6 billion. The United States economy produced approximately \$9.8 trillion worth of new goods and services, measured in current dollars, in the year 2000.

**Real Gross Domestic Product (GDPR):** A measure of production in constant dollars or prices of a base year. GDPR is presented here in billions of 1996 dollars. GDPR in the year 2000, measured in 1996 prices, was \$9,191.4 billion. The United States economy produced approximately \$9.2 trillion worth of new goods and services, measured in 1996 dollars (the base year), in the year 2000.

Real GDP, rather than nominal GDP, is used to determine the performance of the economy on the production front, because the latter is not always a reliable indicator of what real production is doing. For example, GDPN increased every year over the previous year in the period from 1950 to 2000. And yet, GDPR decreased in seven of the fifty-one years, that is, in 1954, 1958, 1974, 1975, 1980, 1982, and in 1991. What accounts for the difference? While GDPN, measured in current dollars, is indicating what is happening to production and prices over time, GDPR, measured in dollars of a base year, is showing what is happening to production alone, since the output is measured in dollars of a given year, or constant dollars.

**Percent Change in Real Gross Domestic Product (GDPC):** A measure of the rate of growth in real production for a given year. GDPC in the year 2000 was 3.8 percent. Real production of new goods and services in the year 2000 (\$9,191.4) was approximately 3.8 percent higher than it was in 1999 (\$8,859.0). GDPC provides the rate of growth in real production from year to year.

#### Unemployment

The unemployment rate is commonly used to measure the economy's performance with respect to overall employment. Unemployment information is provided in Table #1, where three time series are shown.

**Civilian Labor Force (CVLF):** The pool of labor, either working or seeking work, in the nation's labor markets. CVLF is presented here in thousands of people, ages 16 years and older. There were nearly 141 million people in the civilian labor force in the year 2000.

**Unemployment (UNEM):** The subset of the Civilian Labor Force, representing people who are **unemployed and seeking work**. UNEM is also presented in thousands of people, ages 16 years and older. The number of unemployed in the year 2000 averaged nearly 5.7 million people.



#### **Investigation #6, Reading #1, page 3**

**Unemployment Rate (UNER):** The ratio of unemployment to the civilian labor force. UNER is the percent of the civilian labor force that is unemployed. In the year 2000, the unemployment rate was 4 percent. That is, the number of unemployed people (UNEM = 5,655 thousand) was 4 percent of the number of people in the Civilian Labor Force (CVLF = 140,863 thousand). [5,655/140,863 = .04 or 4%]

#### **Purchasing Power**

The rate of change in the Consumer Price Index (referred to as CPI by the news media) is commonly used to measure the economy's performance with respect to purchasing power. The Consumer Price Index information is provided in Table #1, where two time series are shown.

Consumer Price Index (CPIA): A measure of the average price of a market basket of selected goods and services commonly purchased by the typical urban consumer. CPIA includes all the items in the Consumer Price Index for urban consumers where 1982-84 = 100, or where the 1982-84 prices establish the index base of 100 according to the *Economic Report of the President*. The Consumer Price Index for the year 2000 was 172.2. This means that the price of the market basket of goods and services was 172.2 percent of the basket's price in the 1982-84 period; a market basket of consumer goods that had a price of \$100 in the 1982-84 period cost \$172.20 in the year 2000.

**Percent Change in the Consumer Price Index (CPIC):** A measure of price stability and purchasing power stability in the economy. Purchasing power is inversely related to prices. (As overall prices increase, purchasing power of income decreases.) CPIC is the year-to-year percent change in the Consumer Price Index (CPIA). On average, consumer prices were 3.4 percent higher in the year 2000 relative to 1999. Or, the Consumer Price Index for 2000 (CPIA = 172.2) was 3.4 percent higher than in 1999 (CPIA = 166.6). This variable is a measure of inflation (general price increases) or deflation (general price decreases) in the economy.

#### **Targets of Economic Performance**

Monitoring the performance of the economy involves comparing the actual performance of the economy against a set of targets of intended performance, with respect to production, employment, and purchasing power. There is no fixed set of economic performance targets that policymakers have established. In fact, specific targets are a matter of some considerable debate among economists and policymakers. The following policy targets are offered up as more-or-less reasonable estimates of standards against which the economy's performance can be compared. These targets will be the basis for your initial analysis of the performance of the economy using the time series in Table #1.

**Production:** In the area of production, we are interested in growing real output over time. So for purposes of our analysis of production, the target is to maintain positive growth in real



#### Investigation #6, Reading #1, page 4

Gross Domestic Product in any given period of time. In Table #1, such growth is indicated by a GDPC > 0 for any given year.

**Employment:** In the area of employment, we are interested in maintaining high levels of employment, allowing for some incidence of unavoidable frictional unemployment—unemployment due to workers being in transition from one job to another. Our target in the area of employment is to maintain an unemployment rate at or below the 5 percent level. In Table #1, such an unemployment rate is indicated by a UNER  $\leq$  5 percent for any given year.

**Purchasing Power:** In the area of purchasing power, we are interested in maintaining stable prices, that is, neither inflation nor deflation in average price levels. Our target in the area of purchasing power is to maintain average annual price increases at levels equal to or less than 3 percent. In Table #1, such an average price level change is indicated by a CPIC  $\leq$  3 percent for any given year.

#### **States of Economic Performance**

Economists and policymakers often refer to various conditions of economic performance or states of economic performance. The national economy sometimes performs in a stable manner and, at other times, in an unstable manner. When it is unstable, it can be in a state of recession, a state of inflation, or a state of inflationary recession (sometimes referred to as "stagflation"). Each of these states is defined with reference to the targets of economic performance. Let us look at each of these states of economic performance.

**Economic Stability:** The condition in the economy when all three economic performance targets are met. This is a condition where there is positive growth in real Gross Domestic Product, the unemployment rate is at or below 5 percent, and average annual price increases are equal to or less than 3 percent.

**Economic Instability:** The condition in the economy when one or more of the three economic performance targets is not met. There are three forms of economic instability that have been part of the U.S. economic experience in the period 1950 –2000.

- Recession: The condition in the economy marked by a lack of growth in real GDP and/or an unemployment rate in excess of 5 percent. In Table #1, the economy is in a recession when GDPC ≤ 0 percent and/or UNER > 5 percent.
- **Inflation:** The condition in the economy marked by average prices rising in excess of 3 percent per year. In Table #1, inflation is a problem when CPIC > 3 percent.
- Inflationary Recession: A condition in the economy marked by a lack of growth in real GDP and/or an unemployment rate in excess of 5 percent <u>and</u> average prices rising in excess of 3 percent. In Table #1, GDPC ≤ 0 percent and/or UNER > 5 percent <u>and</u> CPIC > 3 percent.





In this investigation, you will analyze the economic data for the decade 1950 through 1959 to determine whether the economy was in a state of stability or one of the forms of instability; recession, inflation, or inflationary recession. Then you will compile the results for the other four decades and find out how the U.S. economy performed over the last half of the twentieth century.



Table 1
Production, Unemployment, and Purchasing Power in the United States Economy, 1950-2000

| YEAR | GDPN*   | GDPR*   | GDPC* | CVLF†           | UNEM†          | UNER† | CPIA‡ | CPIC‡ |
|------|---------|---------|-------|-----------------|----------------|-------|-------|-------|
| 1950 | 294.3   | 1,686.6 | 8.7   | 62,208          | 3,288          | 5.3   | 24.1  | 1.3   |
| 1951 | 339.5   | 1,815.1 | 7.6   | 62,138          | 1,883          | 3.0   | 26.0  | 7.9   |
| 1952 | 358.6   | 1,887.3 | 4.0   | 63,015          | 1,834          | 2.9   | 26.5  | 1.9   |
| 1953 | 379.9   | 1,973.9 | 4.6   | 63,643          | 3,532          | 5.5   | 26.7  | 0.8   |
| 1954 | 381.1   | 1,960.5 | -0.7  | 63,643          | 3,532          | 5.5   | 26.9  | 0.7   |
| 1955 | 415.2   | 2,099.5 | 7.1   | 65,023          | 2,852          | 4.4   | 26.8  | -0.4  |
| 1956 | 438.0   | 2,141.1 | 2.0   | 66,552          | 2,750          | 4.1   | 27.2  | 1.5   |
| 1957 | 461.5   | 2,183.9 | 2.0   | 66,929          | 2,859          | 4.3   | 28.1  | 3.3   |
| 1958 | 467.9   | 2,162.8 | -1.0  | 67,639          | 4,602          | 6.8   | 28.9  | 2.8   |
| 1959 | 507.4   | 2,319.0 | 7.2   | 68,369          | 3,740          | 5.5   | 29.1  | 0.7   |
| 1960 | 527.4   | 2,376.7 | 2.5   | 69,628          | 3,852          | 5.5   | 29.6  | 1.7   |
| 1961 | 545.7   | 2,432.0 | 2.3   | 70,459          | 4,714          | 6.7   | 29.9  | 1.0   |
| 1962 | 586.5   | 2,578.9 | 6.0   | 70,614          | 3,911          | 5.5   | 30.2  | 1.0   |
| 1963 | 618.7   | 2,690.4 | 4.3   | 71,833          | 4,070          | 5.7   | 30.6  | 1.3   |
| 1964 | 664.4   | 2,846.5 | 5.8   | 73,091          | 3,786          | 5.2   | 31.0  | 1.3   |
| 1965 | 720.1   | 3,028.5 | 6.4   | 74,455          | 3,366          | 4.5   | 31.5  | 1.6   |
| 1966 | 789.3   | 3,227.5 | 6.6   | 75 <b>,</b> 770 | 2,875          | 3.8   | 32.4  | 2.9   |
| 1967 | 834.1   | 3,308.3 | 2.5   | 77,347          | 2,975          | 3.8   | 33.4  | 3.1   |
| 1968 | 911.5   | 3,466.1 | 4.8   | 78,737          | 2,817          | 3.6   | 34.8  | 4.2   |
| 1969 | 985.3   | 3,571.4 | 3.0   | 80,734          | 2,832          | 3.5   | 36.7  | 5.5   |
| 1970 | 1,039.7 | 3,578.0 | 0.2   | 82,771          | 4,093          | 4.9   | 38.8  | 5.7   |
| 1971 | 1,128.6 | 3,697.7 | 3.3   | 84,382          | 5,016          | 5.9   | 40.5  | 4.4   |
| 1972 | 1,240.4 | 3,898.4 | 5.4   | 87,034          | 4,882          | 5.6   | 41.8  | 3.2   |
| 1973 | 1,385.5 | 4,123.4 | 5.8   | 89,429          | 4,365          | 4.9   | 44.4  | 6.2   |
| 1974 | 1,501.0 | 4,099.0 | -0.6  | 91,949          | 5,156          | 5.6   | 49.3  | 11.0  |
| 1975 | 1,635.2 | 4,084.4 | -0.4  | 93 <b>,</b> 775 | 7,929          | 8.5   | 53.8  | 9.1   |
| 1976 | 1,823.9 | 4,311.7 | 5.6   | 96 <b>,</b> 158 | 7,406          | 7.7   | 56.9  | 5.8   |
| 1977 | 2,031.4 | 4,511.8 | 4.6   | 99,009          | 6,991          | 7.1   | 60.6  | 6.5   |
| 1978 | 2,295.9 | 4,760.6 | 5.5   | 102,251         | 6,202          | 6.1   | 65.2  | 7.6   |
| 1979 | 2,566.4 | 4,912.1 | 3.2   | 104,962         | 6,137          | 5.8   | 72.6  | 11.3  |
| 1980 | 2,795.6 | 4,900.9 | -0.2  | 106,940         | 7,637          | 7.1   | 82.4  | 13.5  |
| 1981 | 3,131.3 | 5,021.0 | 2.5   | 108,670         | 8,273          | 7.6   | 90.9  | 10.3  |
| 1982 | 3,259.2 | 4,919.3 | -2.0  | 110,204         | 10,678         | 9.7   | 96.5  | 6.2   |
| 1983 | 3,534.9 | 5,132.3 | 4.3   | 111,550         | 10,717         | 9.6   | 99.6  | 3.2   |
| 1984 | 3,932.7 | 5,505.2 | 7.3   | 113,544         | 8 <b>,</b> 539 | 7.5   | 103.9 | 4.3   |
| 1985 | 4,213.0 | 5,717.1 | 3.8   | 115,461         | 8,312          | 7.2   | 107.6 | 3.6   |
| 1986 | 4,452.9 | 5,912.4 | 3.4   | 117,834         | 8,237          | 7.0   | 109.6 | 1.9   |
| 1987 | 4,742.5 | 6,113.3 | 3.4   | 119,865         | 7,425          | 6.2   | 113.6 | 3.6   |
| 1988 | 5,108.3 | 6,368.4 | 4.2   | 121,669         | 6,701          | 5.5   | 118.3 | 4.1   |
| 1989 | 5,489.1 | 6,591.8 | 3.5   | 123,869         | 6 <b>,</b> 528 | 5.3   | 124.0 | 4.8   |
| 1990 | 5,803.2 | 6,707.9 | 1.8   | 125,840         | 7,047          | 5.6   | 130.7 | 5.4   |
| 1991 | 5,986.2 | 6,676.4 | -0.5  | 126,346         | 8,628          | 6.8   | 136.2 | 4.2   |
| 1992 | 6,318.9 | 6,880.0 | 3.0   | 128,105         | 9,613          | 7.5   | 140.3 | 3.0   |
| 1993 | 6,642.3 | 7,062.6 | 2.7   | 129,200         | 8,940          | 6.9   | 144.5 | 3.0   |
| 1994 | 7,054.3 | 7,347.7 | 4.0   | 131,056         | 7 <b>,</b> 996 | 6.1   | 148.2 | 2.6   |
| 1995 | 7,400.5 | 7,543.8 | 2.7   | 132,304         | 7,404          | 5.6   | 152.4 | 2.8   |
| 1996 | 7,813.2 | 7,813.2 | 3.6   | 133,943         | 7,236          | 5.4   | 156.9 | 3.0   |
| 1997 | 8,318.4 | 8,159.5 | 4.4   | 136,297         | 6 <b>,</b> 739 | 4.9   | 160.5 | 2.3   |
| 1998 | 8,781.5 | 8,508.9 | 4.3   | 137,673         | 6,210          | 4.5   | 163.0 | 1.6   |
| 1999 | 9,274.3 | 8,859.0 | 4.1   | 139,368         | 5,880          | 4.2   | 166.6 | 2.2   |
| 2000 | 9,824.6 | 9,191.4 | 3.8   | 140,863         | 5 <b>,</b> 655 | 4.0   | 172.2 | 3.4   |

<sup>\*</sup>GDPN = Nominal Gross Domestic Product in billions of current dollars; GDPR = Real Gross Domestic Product in billions of chained 1996 dollars; and GDPC = Gross Domestic Product, percent change from preceding year, based on chained 1996 dollars. All production data are seasonally adjusted annual rates.

<sup>†</sup>CVLF = Civilian labor force, thousands of persons 16 years of age and over; UNEM = Unemployment, thousands of persons 16 years of age and over; and UNER = Unemployment rate, unemployment as a percent of the civilian labor force. All labor force and unemployment figures are based on seasonally adjusted monthly data.

<sup>#</sup>CPIA = Consumer Price Index, all urban consumers, all items, seasonally adjusted, 1982-84 = 100; and CPIC = Consumer Price Index, percent change over preceding year.



### **Performance Assessment**

**Directions:** Select any 10-year time period between 1950 and 2000. Study the history of that period. Create a visual presentation that includes both historic and economic information that describes the period.



### RUBRIC – VISUAL PRESENTATION

| Histor                            | ic/Economic Elements         | Accuracy              | Presentation |
|-----------------------------------|------------------------------|-----------------------|--------------|
| 4 Points                          | Complete use in presentation | Fully accurate        | Outstanding  |
| 3 Points Many elements present    |                              | Mostly accurate       | Competent    |
| 2 Points                          | Some elements present        | Partially accurate    | Marginal     |
| 1 Point Very few elements present |                              | Little or no accuracy | Ineffective  |



Group 1 (1950-59) Student Handout

# **Economic Stability and Instability** in the United States Economy

**Directions:** This activity is intended to show the incidence of economic stability and instability in the United States economy in the last half of the 20th century. Do the following problems after you have completed **Reading #1** – **The Measurement of Economic Performance**. Use the data set in **Table #1** – **Production, Unemployment, and Purchasing Power in the United States Economy, 1950-2000** in your analysis. Use the following instructions to complete the table on the following page.

#### **Table Completion Instructions:**

- 1. Under the Production column, write an X for each year that the Percent Change in Real Gross Domestic Product (GDPC in Table #1) is equal to or less than zero (0.0).
- 2. Under the Unemployment column, write an X for each year that the Unemployment Rate (UNER in Table #1) exceeds 5.0 percent.
- 3. Under the Inflation column, write an X for each year that the Percent Change in the Consumer Price Index (CPIC in Table #1) exceeds 3.0 percent.
- 4. Under the State of the Economy column, note the state of the economy, where S = Stability, R = Recession, I = Inflation, and IR = Inflationary Recession.

**Directions:** Complete Table A below. Then answer the analysis questions using the data in this Table.

## Table A Stability and Instability in the Economy, 1950-59

#### **Stability Measures**

| Year | Production $(GDPC \le 0\%)$ | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|
|      |                             |                          |                       |                       |
| 1950 |                             |                          |                       |                       |
| 1951 |                             |                          |                       |                       |
| 1952 |                             |                          |                       |                       |
| 1953 |                             |                          |                       |                       |
| 1954 |                             |                          |                       |                       |
| 1955 |                             |                          |                       |                       |
| 1956 |                             |                          |                       |                       |
| 1957 |                             |                          |                       |                       |
| 1958 |                             |                          |                       |                       |
| 1959 |                             |                          |                       |                       |
|      |                             |                          |                       |                       |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

## **Group 1 Analysis Questions:**

|   | Ouring how many years in the decade of the 1950s was the economy a state of stability?            |
|---|---|
|   | Ouring how many years in the decade of the 1950s was the economy n some state of instability?     |
| F | How many years in recession?  |
| F | How many years in inflation?  |
| F | How many years in inflationary recession?   |
|   | Was the United States economy essentially stable or unstable during the decade of the 1950s? Why? |
|   |   |
|   |   |
|   |   |

Group 2 (1960-69) Student Handout

# **Economic Stability and Instability** in the United States Economy

**Directions:** This activity is intended to show the incidence of economic stability and instability in the United States economy in the last half of the 20th century. Do the following problems after you have completed **Reading #1 – The Measurement of Economic Performance**. Use the data set in **Table #1 – Production, Unemployment, and Purchasing Power in the United States Economy, 1950-2000** in your analysis. Use the following instructions to complete the table on the following page.

#### **Table Completion Instructions:**

- 1. Under the Production column, write an X for each year that the Percent Change in Real Gross Domestic Product (GDPC in Table #1) is equal to or less than zero (0.0).
- 2. Under the Unemployment column, write an X for each year that the Unemployment Rate (UNER in Table #1) exceeds 5.0 percent.
- 3. Under the Inflation column, write an X for each year that the Percent Change in the Consumer Price Index (CPIC in Table #1) exceeds 3.0 percent.

4. Under the State of the Economy column, note the state of the economy where S = Stability, R = Recession, I = Inflation, and IR = Inflationary Recession.

4

**Directions:** Complete Table B below. Then answer the analysis questions using the data in this Table

Table B
Stability and Instability in the Economy, 1960-69

#### Stability Measures

| Year | Production (GDPC $\leq$ 0%) | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|
|      |                             |                          |                       |                       |
| 1960 |                             |                          |                       |                       |
| 1961 |                             |                          |                       |                       |
| 1962 |                             |                          |                       |                       |
| 1963 |                             |                          |                       |                       |
| 1964 |                             |                          |                       |                       |
| 1965 |                             |                          |                       |                       |
| 1966 |                             |                          |                       |                       |
| 1967 |                             |                          |                       |                       |
| 1968 |                             |                          |                       |                       |
| 1969 |                             |                          |                       |                       |
|      |                             |                          |                       |                       |
|      |                             |                          |                       |                       |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

## **Group 2 Analysis Questions:**

|        | Ouring how many years in the decade of the 1960s was the economy a state of stability?           |
|--------|--|
|        | Ouring how many years in the decade of the 1960s was the economy a some state of instability?    |
| F      | How many years in recession?   |
| F      | Iow many years in inflation?   |
| F<br>- | How many years in inflationary recession?  |
|        | Vas the United States economy essentially stable or unstable uring the decade of the 1960s? Why? |
|        |  |
|        |  |
|        |  |

Group 3 (1970-79) Student Handout

# **Economic Stability and Instability** in the United States Economy

**Directions:** This activity is intended to show the incidence of economic stability and instability in the United States economy in the last half of the 20th century. Do the following problems after you have completed **Reading #1 – The Measurement of Economic Performance**. Use the data set in **Table #1 – Production, Unemployment, and Purchasing Power in the United States Economy, 1950-2000** in your analysis. Use the following instructions to complete the table on the following page.

#### **Table Completion Instructions:**

- 1. Under the Production column, write an X for each year that the Percent Change in Real Gross Domestic Product (GDPC in Table #1) is equal to or less than zero (0.0).
- 2. Under the Unemployment column, write an X for each year that the Unemployment Rate (UNER in Table #1) exceeds 5.0 percent.
- 3. Under the Inflation column, write an X for each year that the Percent Change in the Consumer Price Index (CPIC in Table #1) exceeds 3.0 percent.
- 4. Under the State of the Economy column, note the state of the economy where S = Stability, R = Recession, I = Inflation, and IR = Inflationary Recession.

**Directions:** Complete Table C below. Then answer the analysis questions using the data in this Table

## Table C Stability and Instability in the Economy, 1970-79

#### Stability Measures

| Year | Production $(GDPC \le 0\%)$ | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|
|      |                             |                          |                       |                       |
| 1970 |                             |                          |                       |                       |
| 1971 |                             |                          |                       |                       |
| 1972 |                             |                          |                       |                       |
| 1973 |                             |                          |                       |                       |
| 1974 |                             |                          |                       |                       |
| 1975 |                             |                          |                       |                       |
| 1976 |                             |                          |                       |                       |
| 1977 |                             |                          |                       |                       |
| 1978 |                             |                          |                       |                       |
| 1979 |                             |                          |                       |                       |
|      |                             |                          |                       |                       |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

## Investigation #6 – Activity #1.1, Group 3, page 3

### **Group 3 Analysis Questions:**

| ring how many years in the decade of the 1970s was the economy some state of instability?      |
|--|
| ow many years in recession?  |
| ow many years in inflation?  |
| ow many years in inflationary recession?   |
| as the United States economy essentially stable or unstable ring the decade of the 1970s? Why? |
|  |
|  |
|  |
|  |

Group 4 (1980-89) Student Handout

# **Economic Stability and Instability** in the United States Economy

**Directions:** This activity is intended to show the incidence of economic stability and instability in the United States economy in the last half of the 20th century. Do the following problems after you have completed **Reading #1 – The Measurement of Economic Performance.** Use the data set in **Table #1 – Production, Unemployment, and Purchasing Power in the United States Economy, 1950-2000** in your analysis. Use the following instructions to complete the table on the following page.

#### **Table Completion Instructions:**

- 1. Under the Production column, write an X for each year that the Percent Change in Real Gross Domestic Product (GDPC in Table #1) is equal to or less than zero (0.0).
- 2. Under the Unemployment column, write an X for each year that the Unemployment Rate (UNER in Table #1) exceeds 5.0 percent.
- 3. Under the Inflation column, write an X for each year that the Percent Change in the Consumer Price Index (CPIC in Table #1) exceeds 3.0 percent.
- 4. Under the State of the Economy column, note the state of the economy where S = Stability, R = Recession, I = Inflation, and IR = Inflationary Recession.

**Directions:** Complete Table D below. Then answer the analysis questions using the data in this Table

## Table D Stability and Instability in the Economy, 1980-89

#### Stability Measures

| Year | Production $(GDPC \le 0\%)$ | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|
|      |                             |                          |                       |                       |
| 1980 |                             |                          |                       |                       |
| 1981 |                             |                          |                       |                       |
| 1982 |                             |                          |                       |                       |
| 1983 |                             |                          |                       |                       |
| 1984 |                             |                          |                       |                       |
| 1985 |                             |                          |                       |                       |
| 1986 |                             |                          |                       |                       |
| 1987 |                             |                          |                       |                       |
| 1988 |                             |                          |                       |                       |
| 1989 |                             |                          |                       |                       |
|      |                             |                          |                       |                       |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

## **Group 4 Analysis Questions:**

|   | Ouring how many years in the decade of the 1980s was the economy n a state of stability?          |
|---|---|
|   | During how many years in the decade of the 1980s was the economy n some state of instability?     |
| F | How many years in recession?  |
| F | How many years in inflation?  |
| F | How many years in inflationary recession?   |
|   | Vas the United States economy essentially stable or unstable luring the decade of the 1980s? Why? |
|   |   |
|   |   |
|   |   |

Group 5 (1990-1999) Student Handout

## **Economic Stability and Instability** in the United States Economy

**Directions:** This activity is intended to show the incidence of economic stability and instability in the United States economy in the last half of the 20th century. Do the following problems after you have completed **Reading #1 – The Measurement of Economic Performance**. Use the data set in **Table #1 – Production, Unemployment, and Purchasing Power in the United States Economy, 1950-2000** in your analysis. Use the following instructions to complete the table on the following page.

#### **Table Completion Instructions:**

- 1. Under the Production column, write an X for each year that the Percent Change in Real Gross Domestic Product (GDPC in Table #1) is equal to or less than zero (0.0).
- 2. Under the Unemployment column, write an X for each year that the Unemployment Rate (UNER in Table #1) exceeds 5.0 percent.
- 3. Under the Inflation column, write an X for each year that the Percent Change in the Consumer Price Index (CPIC in Table #1) exceeds 3.0 percent.
- 4. Under the State of the Economy column, note the state of the economy where S = Stability, R = Recession, I = Inflation, and IR = Inflationary Recession.

**Directions:** Complete Table E below. Then answer the analysis questions using the data in this Table

Table E
Stability and Instability in the Economy, 1990-99

#### Stability Measures

| Year | Production (GDPC $\leq$ 0%) | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|
|      |                             |                          |                       |                       |
| 1990 |                             |                          |                       |                       |
| 1991 |                             |                          |                       |                       |
| 1992 |                             |                          |                       |                       |
| 1993 |                             |                          |                       |                       |
| 1994 |                             |                          |                       |                       |
| 1995 |                             |                          |                       |                       |
| 1996 |                             |                          |                       |                       |
| 1997 |                             |                          |                       |                       |
| 1998 |                             |                          |                       |                       |
| 1999 |                             |                          |                       |                       |
|      |                             |                          |                       |                       |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

## **Group 5 Analysis Questions:**

| ring how many years in the decade of the 1990s was the economy ome state of instability?     |
|--|
| w many years in recession?   |
| w many years in inflation?   |
| w many years in inflationary recession?  |
| s the United States economy essentially stable or unstable ing the decade of the 1990s? Why? |
|  |
|  |
|  |
|  |

#### Investigation #6 – Activity #1.2, All Groups, page 1

#### All Groups (1950-99)

#### **Student Handout**

**Directions:** Transfer the data in Tables A-E to Table F. Then use this completed table to answer the questions that follow.

Table F
Stability and Instability in the Economy, 1950-99

| Year | Production<br>(GDPC ≤ 0%) | Unemployment (UNER > 5%) | Inflation<br>(CPIC > 3%)              | State of the Economy* |
|------|---------------------------|--------------------------|---------------------------------------|-----------------------|
|      |                           |                          |                                       |                       |
| 1950 |                           |                          |                                       |                       |
| 1951 |                           |                          |                                       |                       |
| 1952 |                           |                          |                                       |                       |
| 1953 |                           |                          |                                       |                       |
| 1954 |                           |                          |                                       |                       |
| 1955 |                           |                          | · · · · · · · · · · · · · · · · · · · |                       |
| 1956 |                           |                          |                                       |                       |
| 1957 |                           |                          | <del></del>                           |                       |
| 1958 |                           |                          |                                       |                       |
| 1959 | <del></del>               |                          |                                       |                       |
|      |                           | <del></del>              | <del></del>                           |                       |
| 1960 |                           |                          |                                       |                       |
| 1961 |                           |                          |                                       |                       |
| 1962 |                           |                          |                                       |                       |
| 1963 |                           |                          |                                       |                       |
| 1964 |                           |                          |                                       |                       |
| 1965 |                           |                          |                                       |                       |

Investigation #6 – Activity #1.2, All Groups, page 2

| Year | Production<br>(GDPC ≤ 0%) | Unemployment (UNER > 5%) | Inflation<br>(CPIC > 3%) | State of the Economy* |
|------|---------------------------|--------------------------|--------------------------|-----------------------|
| 1066 |                           |                          |                          |                       |
| 1966 |                           |                          |                          |                       |
| 1967 |                           |                          |                          |                       |
| 1968 |                           |                          | <del></del>              | <del></del>           |
| 1969 |                           |                          |                          |                       |
| 1970 |                           |                          |                          |                       |
| 1971 |                           |                          |                          |                       |
| 1972 |                           |                          |                          |                       |
| 1973 |                           |                          |                          |                       |
| 1974 |                           |                          |                          |                       |
| 1975 |                           |                          |                          |                       |
| 1976 |                           |                          |                          |                       |
| 1977 |                           |                          |                          |                       |
| 1978 |                           |                          |                          |                       |
| 1979 |                           |                          |                          |                       |
| 1980 |                           |                          |                          |                       |
| 1981 |                           |                          |                          |                       |
| 1982 |                           |                          |                          |                       |
| 1983 |                           |                          |                          |                       |
| 1984 |                           |                          |                          |                       |
| 1985 |                           |                          |                          |                       |
| 1986 |                           |                          |                          |                       |
| 1987 |                           |                          |                          |                       |
| 1988 |                           |                          |                          |                       |
| 1989 |                           |                          |                          |                       |
| 1990 |                           |                          |                          |                       |

Investigation #6 – Activity #1.2, All Groups, page 3

| Year | Production $(GDPC \le 0\%)$ | Unemployment (UNER > 5%) | Inflation<br>(CPIC > 3%) | State of the Economy* |
|------|-----------------------------|--------------------------|--------------------------|-----------------------|
|      |                             |                          |                          |                       |
| 1991 |                             |                          |                          |                       |
| 1992 |                             |                          |                          |                       |
| 1993 |                             |                          |                          |                       |
| 1994 |                             |                          |                          |                       |
| 1995 |                             |                          |                          |                       |
| 1996 |                             |                          |                          |                       |
| 1997 |                             |                          |                          |                       |
| 1998 |                             |                          |                          |                       |
| 1999 |                             |                          |                          |                       |
|      |                             |                          |                          |                       |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

#### **All Groups (1950-99)**

#### **Student Handout**

## Incidence of Problems in Production, Unemployment, and Inflation in the Economy

**Directions:** Answer the questions below relating to the incidence of problems in production, unemployment, and inflation in the economy.

| Prod | uction   |
|------|--|
| 1.   | In how many of the 50 years was GDPC greater than 0 percent? |
|      | What percent of the time was the production target met?      |
| 2.   | In how many years was GDPC equal to or less than 0 percent?  |
|      | What percent of the time was the production target not met?  |
| Uner | nployment  |

3. In how many of the 50 years was UNER equal to or less than 5 percent?

What percent of the time was the unemployment target met?

4. In how many years was UNER greater than 5 percent?

What percent of the time was the unemployment target not met?

## Inflation

| Ir | n how many of the 50 years was CPIC equal to or less than 3 percent? |
|----|--|
| W  | That percent of the time was the inflation target met?               |
| Ir | n how many years was CPIC greater than 3 percent?                    |
| W  | That percent of the time was the inflation target not met?           |

#### All Groups (1950-99)

#### **Student Handout**

#### **Incidence of Stability and Instability in the Economy**

**Directions:** Answer the questions below relating to the incidence of stability and instability in the economy.

| In how many of the 50 years was the economy in a state of stability, with all three performance targets met?                    |
|---|
| What percent of the time was the economy in a state of stability?   |
| In how many of the 50 years was the economy in a state of instability, with one or more of the three performance targets unmet? |
| What percent of the time was the economy in a state of instability?   |
| In how many of the 50 years was the economy in a state of recession?  |
| What percent of the time was the economy in a state of recession?   |
| In how many of the 50 years was the economy in a state of inflation?  |
| What percent of the time was the economy in a state of inflation?   |
| In how many of the 50 years was the economy in a state of inflationary recession?   |
| What percent of the time was the economy in a state of inflationary recession?  |

All Groups (1950-99)

#### **Student Handout**

## Frequency of Stability and Instability in the U.S. Economy

**Directions:** Use your answers to the questions in Activity #2.1 to complete the table below. Then answer the analysis question following the table.

| State of the Economy   | Frequency         | Relative Frequency                            |
|--|-------------------|---|
|  | (Number of Years) | (Percent of Years)                            |
| <u>Stability</u>   |                   |   |
|  |                   |   |
| <b>Instability</b>   |                   |   |
|  |                   |   |
| Recession  |                   |   |
|  |                   |   |
| Inflation  |                   |   |
|  |                   |   |
| •  |                   |   |
| Recession  |                   |   |
|  |                   |   |
| Analysis Question: Given this analysis, would you say t in the half-century from 1950–1999 |                   | omy was essentially stable or unstable<br>ng. |
|  |                   |   |
|  |                   |   |
|  |                   |   |
|  |                   |   |

Table A
Stability and Instability in the Economy, 1950-59

#### Stability Measures

| Year | Production $(GDPC \le 0\%)$ | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|
| 1950 | -                           | X                        | -                     | R                     |
| 1951 | -                           | -                        | X                     | I                     |
| 1952 | -                           | -                        | -                     | S                     |
| 1953 | -                           | X                        | -                     | R                     |
| 1954 | X                           | X                        | -                     | R                     |
| 1955 | -                           | -                        | -                     | S                     |
| 1956 | -                           | -                        | -                     | S                     |
| 1957 | -                           | -                        | X                     | I                     |
| 1958 | X                           | X                        | -                     | R                     |
| 1959 | -                           | X                        | -                     | R                     |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

#### **Group 1 Analysis Questions:**

- 1. Stability = 3 years
- 2. Instability = 7 years
  Recession = 5 years
  Inflation = 2 years
  Inflationary Recession = 0 years
- 3. The economy was largely in a state of instability over the decade of the 1950s.

Table B
Stability and Instability in the Economy, 1960-69

#### **Stability Measures**

| Year | Production $(GDPC \le 0\%)$ | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |  |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|--|
| 1060 |                             | V                        |                       | D.                    |  |
| 1960 | -                           | X                        | -                     | R                     |  |
| 1961 | -                           | X                        | -                     | R                     |  |
| 1962 | -                           | X                        | -                     | R                     |  |
| 1963 | -                           | X                        | -                     | R                     |  |
| 1964 | -                           | X                        | -                     | R                     |  |
| 1965 | -                           | -                        | -                     | S                     |  |
| 1966 | -                           | -                        | -                     | S                     |  |
| 1967 | -                           | -                        | X                     | I                     |  |
| 1968 | -                           | -                        | X                     | I                     |  |
| 1969 | -                           | -                        | X                     | I                     |  |
|      |                             |                          |                       |                       |  |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

#### **Group 2 Analysis Questions:**

- 1. Stability = 2 years
- 2. Instability = 8 years
  Recession = 5 year
  Inflation = 3 years
  Inflationary Recession = 0 years
- 3. The economy was largely in a state of instability over the decade of the 1960s.

Table C
Stability and Instability in the Economy, 1970-79

#### Stability Measures

| Year | Production $(GDPC \le 0\%)$ | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|
|      |                             |                          |                       |                       |
| 1970 | -                           | -                        | X                     | I                     |
| 1971 | -                           | X                        | X                     | IR                    |
| 1972 | -                           | X                        | X                     | IR                    |
| 1973 | -                           | -                        | X                     | I                     |
| 1974 | X                           | X                        | X                     | IR                    |
| 1975 | X                           | X                        | X                     | IR                    |
| 1976 | -                           | X                        | X                     | IR                    |
| 1977 | -                           | X                        | X                     | IR                    |
| 1978 | -                           | X                        | X                     | IR                    |
| 1979 | -                           | X                        | X                     | IR                    |
|      |                             |                          |                       |                       |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

#### **Group 3 Analysis Questions:**

- 1. Stability = 0 years
- 2. Instability = 10 years
  Recession = 0 years
  Inflation = 2 years
  Inflationary Recession = 8 years
- 3. The economy was in a state of instability over the entire decade of the 1970s.

Table D
Stability and Instability in the Economy, 1980-89

#### **Stability Measures**

| Year | Production $(GDPC \le 0\%)$ | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |  |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|--|
| 1980 | X                           | X                        | X                     | IR                    |  |
| 1981 | -                           | X                        | X                     | IR                    |  |
| 1982 | X                           | X                        | X                     | IR                    |  |
| 1983 | -                           | X                        | X                     | IR                    |  |
| 1984 | -                           | X                        | X                     | IR                    |  |
| 1985 | -                           | X                        | X                     | IR                    |  |
| 1986 | -                           | X                        | -                     | R                     |  |
| 1987 | -                           | X                        | X                     | IR                    |  |
| 1988 | -                           | X                        | X                     | IR                    |  |
| 1989 | -                           | X                        | X                     | IR                    |  |
|      |                             |                          |                       |                       |  |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

#### **Group 4 Analysis Questions:**

- 1. Stability = 0 years
- 2. Instability = 10 years
  Recession = 1 year
  Inflation = 0 years
  Inflationary Recession = 9 years
- 3. The economy was in a state of instability over the entire decade of the 1980s.

Table E
Stability and Instability in the Economy, 1990-99

#### **Stability Measures**

| Year | Production $(GDPC \le 0\%)$ | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|
| 1000 |                             |                          |                       |                       |
| 1990 | -                           | X                        | X                     | IR                    |
| 1991 | X                           | X                        | X                     | IR                    |
| 1992 | -                           | X                        | -                     | R                     |
| 1993 | -                           | X                        | -                     | R                     |
| 1994 | -                           | X                        | -                     | R                     |
| 1995 | -                           | X                        | -                     | R                     |
| 1996 | -                           | X                        | -                     | R                     |
| 1997 | -                           | -                        | -                     | S                     |
| 1998 | -                           | -                        | -                     | S                     |
| 1999 | -                           | -                        | -                     | S                     |
|      |                             |                          |                       |                       |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

#### **Group 5 Analysis Questions:**

- 1. Stability = 3 years
- 2. Instability = 7 years
  Recession = 5 years
  Inflation = 0 years
  Inflationary Recession = 2 years
- 3. The economy was largely in a state of instability over the decade of the 1990s.

Table F Stability and Instability in the Economy, 1950-99

| YEAR | Production (GDPC $\leq$ 0%) | Unemployment (UNER > 5%) | Inflation (CPIC > 3%) | State of the Economy* |
|------|-----------------------------|--------------------------|-----------------------|-----------------------|
| 1950 | -                           | X                        | -                     | R                     |
| 1951 | -                           | -                        | X                     | I                     |
| 1952 | -                           | -                        | -                     | S                     |
| 1953 | -                           | X                        | _                     | R                     |
| 1954 | X                           | X                        | _                     | R                     |
| 1955 | -                           | -                        | _                     | S                     |
| 1956 | _                           | _                        | _                     | S                     |
| 1957 | _                           | -                        | X                     | I                     |
| 1958 | X                           | X                        | -                     | R                     |
| 1959 | -                           | X                        | _                     | R                     |
| 1960 | _                           | X                        | _                     | R                     |
| 1961 |                             | X                        | _                     | R                     |
| 1962 | -                           | X                        | -                     | R                     |
| 1963 | _                           | X                        | _                     | R                     |
| 1964 | -                           | X                        | -                     | R                     |
| 1965 | -                           | Λ<br>-                   | -                     | S                     |
|      | -                           | -                        |                       | 5                     |
| 1966 | -                           | -                        | -<br>V                | S                     |
| 1967 | =                           | -                        | X                     | I                     |
| 1968 | -                           | -                        | X                     | I                     |
| 1969 | -                           | -                        | X                     | I                     |
| 1970 | -                           | -                        | X                     | I                     |
| 1971 | -                           | X                        | X                     | IR                    |
| 1972 | -                           | X                        | X                     | IR                    |
| 1973 | -                           | -                        | X                     | I                     |
| 1974 | X                           | X                        | X                     | IR                    |
| 1975 | X                           | X                        | X                     | IR                    |
| 1976 | -                           | X                        | X                     | IR                    |
| 1977 | -                           | X                        | X                     | IR                    |
| 1978 | -                           | X                        | X                     | IR                    |
| 1979 | -                           | X                        | X                     | IR                    |
| 1980 | X                           | X                        | X                     | IR                    |
| 1981 | -                           | X                        | X                     | IR                    |
| 1982 | X                           | X                        | X                     | IR                    |
| 1983 | =                           | X                        | X                     | IR                    |
| 1984 | =                           | X                        | X                     | IR                    |
| 1985 | -                           | X                        | X                     | IR                    |
| 1986 | -                           | X                        | -                     | R                     |
| 1987 | -                           | X                        | X                     | IR                    |
| 1988 | _                           | X                        | X                     | IR                    |
| 1989 | _                           | X                        | X                     | IR<br>IR              |
| 1990 | _                           | X                        | X                     | IR                    |
| 1991 | X                           | X                        | X                     | IR<br>IR              |
| 1991 | A -                         | X                        | A -                   | R                     |
| 1992 | <del>-</del>                | X                        | -                     | R                     |
| 1993 | -                           | X                        | -                     | R                     |
| 1994 | -                           | X<br>X                   | -                     |                       |
|      | -                           |                          | -                     | R                     |
| 1996 | =                           | X                        | -                     | R                     |
| 1997 | -                           | -                        | -                     | S                     |
| 1998 | -                           | -                        | -                     | S                     |
| 1999 | -                           | -                        | -                     | S                     |

<sup>\*</sup>S = Relative Stability; R = Recession; I = Inflation; and IR = Inflationary Recession.

## Incidence of Problems in Production, Unemployment, and Inflation in the Economy

#### **Production**

- 1. GDPC was greater than 0 percent in 43 of the 50 years. The production target was met 86 percent of the time  $(43 \div 50)$ .
- 2. GDPC was equal to or less than 0 percent in 7 of the 50 years. The production target was not met 14 percent of the time  $(7 \div 50)$ .

#### Unemployment

- 3. UNER was equal to or less than 5 percent in 15 of the 50 years. The unemployment target was met 30 percent of the time  $(15 \div 50)$ .
- 4. UNER was greater than 5 percent in 35 of the 50 years. The unemployment target was not met 70 percent of the time  $(35 \div 50)$ .

#### Inflation

- 5. CPIC was equal to or less than 3 percent in 24 of the 50 years. The inflation target was met 48 percent of the time  $(24 \div 50)$ .
- 6. CPIC was greater than 3 percent in 26 of the 50 years. The inflation target was not met 52 percent of the time  $(26 \div 50)$ .

#### **Incidence of Stability and Instability in the Economy**

1. In how many of the 50 years was the economy in a state of stability with all three performance targets met?

**Answer:** 8 years

What percent of the time was the economy in a state of stability?

Answer: 16%

2. In how many of the 50 years was the economy in some state of instability with one or more of the three performance targets unmet?

**Answer:** 42 years

What percent of the time was the economy in some state of instability?

Answer: 84%

3. In how many of the 50 years was the economy in a state of recession?

**Answer:** 16 years

What percent of the time was the economy in a state of recession?

Answer: 32%

4. In how many of the 50 years was the economy in a state of inflation?

**Answer:** 7 years

What percent of the time was the economy in a state of inflation?

Answer: 14%

5. In how many of the 50 years was the economy in a state of inflationary recession?

Answer: 19 years

What percent of the time was the economy in a state of inflationary recession?

Answer: 38%

# Frequency of Stability and Instability in the U.S. Economy

|                      | Frequency         | Relative<br>Frequency |  |
|----------------------|-------------------|-----------------------|--|
| State of the Economy | (Number of Years) | (Percent of Years)    |  |
| Stability            | 8                 | 16%                   |  |
| Instability          | 42                | 84%                   |  |
| Recession            | 16                | 32%                   |  |
| Inflation            | 7                 | 14%                   |  |
| Inflationary         |                   |                       |  |
| Recession            | 19                | 38%                   |  |

#### **Analysis Question:**

Given this analysis, would you say the United States economy was essentially stable or unstable in the half-century from 1950 to 1999? Explain your reasoning.

**Answer:** This analysis suggests that the United States economy in the half-century from 1950 to 1999 was essentially unstable. It was prone to some form of instability 84 percent of the time. It experienced recession 32 percent of the time, inflation 14 percent of the time, and inflationary recession 38 percent of the time.

Performance Assessment Essay
Directions: Write a one-paragraph response to this question:

| "In view of your analysis, would you say that the United States economy was essential stable or unstable in the half-century from 1950 to 1999? Explain your reasoning." |
|--|
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### **ANSWER KEY**

## **Performance Assessment Essay**

**Directions:** Write a one-paragraph response to this question:

"In view of your analysis, would you say that the United States economy was essentially stable or unstable in the half-century from 1950 to 1999? Explain your reasoning."

**Answer:** Student responses should cite that the economy was subject to some form of instability 84 percent of the time. This included recession 32 percent of the time, inflation 14 percent of the time, and inflationary recession 38 percent of the time.

#### **Data Sources**

#### **Production Data in Table 1:**

U.S. Department of Commerce, Bureau of Economic Analysis, Current-dollar and real GDP, 1929-2002, XLS and Percent change from preceding period, XLS, November 25, 2003 given at the following website: <a href="https://www.bea.doc.gov/bea/dn/home/gdp.htm">www.bea.doc.gov/bea/dn/home/gdp.htm</a>.

#### **Unemployment Data in Table 1:**

Council of Economic Advisors, *Economic Report of the President* (Washington, D.C.: U.S. Government Printing Office, 2003), Table B-35, pp. 318-319.

#### **Purchasing Power Data in Table 1:**

Council of Economic Advisors, *Economic Report of the President* (Washington, D.C.: U.S. Government Printing Office, 1992), Table B-56, p. 361; Council of Economic Advisors, *Economic Report of the President* (Washington, D.C.: U.S. Government Printing Office, 2003), Tables B-60 and B-64, pp. 345, 350.

