



# **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

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Investigation # 9:
Fiscal Policy:
Can Congress Diagnose and
Treat an Ailing Economy?

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Investigation #9: Fiscal Policy:
Can Congress Diagnose and
Treat an Ailing Economy?

### Introduction

This investigation examines the use of fiscal policy in regulating the performance of the national economy. The investigation begins with a brief reading that discusses the nature, objectives, and the tools of fiscal policy. The investigation provides a set of four visuals focusing on fiscal policy, which can be used to reinforce the reading. The investigation also includes a set of exercises in applied fiscal policy analysis. Students examine three cases using the data set in Table 1, and one case using current data retrieved from Internet websites. The use of actual economic performance data helps students understand that the full story of fiscal policy is far from simple.

In completing the cases, students are to (1) describe the state of the economy, (2) describe a general stabilization policy appropriate to the situation in the economy, and (3) recommend a fiscal policy appropriate to the economy.

### **Student Comprehension**

The investigation engages students in both economic analysis and policy recommendations related to three cases using actual data, plus a fourth case on the most recent quarter in the economy. In the process, students are asked to address the following:

- What is the state of the economy?
- What general stabilization policy should be recommended?
- What fiscal policy measures should be recommended?

### **Concepts**

Production, Employment, and Purchasing Power
Targets for Economic Performance
Consumption
Investment
Government Expenditures
Net Exports
Aggregate Demand
Fiscal Policy Measures



### **Objectives**

After completing this part of the investigation, students will be able to

- Write a reasonable analysis of the state of the economy for a given quarter.
- Identify and recommend a stabilization policy given the state of the economy.
- Recommend specific fiscal policies given the state of the economy.
- Use the Internet to analyze the macroeconomy for the most recent quarter, and recommend appropriate policies.

### **Economic Principles**

Fiscal policies are used to influence aggregate demand — consumption, investment, government spending, and net exports. **Expansionary fiscal policy** increases aggregate demand; **contractionary fiscal policy** decreases aggregate demand.

### Investigation

### **Description**

This investigation begins with students reviewing **Reading #1 – Fiscal Policy, Aggregate Demand, and Output: A Summary.** The reading is merely a summary of these concepts, and is not intended to substitute for previous instruction. Students are challenged to investigate three cases using the data in Table 1. If the class has Internet access, a fourth case asks students to investigate the data on the economy's performance for the most recent quarter. The investigation concludes with a performance assessment centering on an additional case analysis.

**Time Required:** 75 minutes (or longer, depending on how cases are assigned)

**Technology:** Case 4 of this investigation requires Internet access to retrieve recent data on the performance of the economy.

### **Materials**

Reading #1	Fiscal Policy, Aggregate Demand, and Output: A Summary
Table #1	Production, Unemployment, and Purchasing Power
	in the United States Economy, 2000-2003
Visual #1	Fiscal Policy
Visual #2	Neutral Fiscal Policy
Visual #3	Expansionary Fiscal Policy
Visual #4	Contractionary Fiscal Policy
Activity #1	Applied Fiscal Policy: Cases 1-4
Assessment #1	Summary, Diagnosis, and Policy Prescription for the Economy



### **Procedure**

- 1. This investigation assumes that students have had instruction in fiscal policy measures. If not, it is appropriate to take sufficient time to teach students these measures before engaging in this part of the investigation.
- 2. Distribute Reading #1 Fiscal Policy, Aggregate Demand, and Output: A Summary, and have each student read it. Take time to clarify with students the various fiscal policy measures and their potential effects on production, employment, and purchasing power. You will also want to review the performance targets in these three areas. (These were examined in Investigation #6 Performance of the National Economy.)
- 3. If your time is limited, you may wish to form groups of four or five students and assign each group one case from Cases #1 #3. Be sure all three cases are assigned. If you have more time available, assign each student or pairs of students to work on all three cases.
- 4. On Cases #1 #3, students are to write down their analysis of the state of the economy, their general stabilization policy recommendations, and their specific fiscal policy recommendations. Announce that students will be asked to report on their results.
- 5. For **Case #4**, it is recommended that students do their own Internet research. If Internet access is not available, you could provide the data from an Internet search of the most recent quarter, using the sites recommended.
- 6. You can make the investigation in **Case #4** a performance assessment activity. You may wish to use the following rubric:
  - 4 points Thorough, accurate analysis with outstanding recommendation
  - 3 points Mostly complete analysis with sound recommendations
  - 2 points Partially complete analysis with partially justified recommendations
  - 1 point Incomplete analysis with weak recommendations;
  - 0 points Did not complete the assignment
- 7. Distribute Assessment #1 Summary, Diagnosis, and Policy Prescription for the Economy, to the students. Assign a recent quarter for analysis that students have not studied, and have them complete the forms contained in the assessment.

### Closure

Students report on their case investigations, case by case. Check student answers against the keys provided for Cases #1 - #3.



### Fiscal Policy, Aggregate Demand, and Output: A Summary

With passage of the Employment Act of 1946, the federal government assumed the responsibility for maintaining stability in the national economy. Stability, as defined in the Act, is the condition in which the economy is operating at maximum sustainable production and employment with prices relatively stable.

Fiscal policy, implemented by the President and Congress, is the use of taxing policy and/or spending policy to promote economic stability. The two policy tools are taxes and government spending at the federal level. Fiscal policy affects the performance of the economy through changes in total spending, or aggregate demand, in the economy. This is seen in the aggregate supply-aggregate demand equation in which:

$$GDP = AD = C + I + G + Xn$$

where

- GDP is Gross Domestic Product,
- AD is aggregate demand or total spending comprised of
  - o C, consumption spending by households;
  - o I, investment spending by business firms;
  - o G, government spending by all levels of government; and
  - Xn, net exports (exports minus imports), representing foreign spending on domestically produced goods and services.

Consumption (C) accounts for about 70 percent of aggregate demand. Although smaller in percentage terms, business investment (I) and government expenditures (G) are also powerful components of aggregate demand. Federal tax policy (increasing or decreasing taxes) has a clear impact on AD and GDP through the C and I channels. And federal spending policy (increasing or decreasing spending) affects AD and GDP directly through the G channel and residually through the C and I channels.

In general, the President and Congress have a menu of three forms of fiscal policy from which to choose. These are neutral policy, expansionary policy, and contractionary policy. The condition of the economy determines which policy is appropriate.

**Neutral Policy.** A neutral fiscal policy is one in which federal spending is set at a level equal to federal tax revenue. This is a balanced budget fiscal policy. In this case, the injection of federal government spending (G) into the aggregate demand spending stream (AD) just offsets the federal tax drain from the total spending stream, leaving production (GDP), employment, and prices at their approximate current levels. The neutral fiscal policy is appropriate in an economy functioning at high levels of production and employment with stable prices. That is, the economy is stable.



### Investigation #9 – Reading #1, page 2

**Expansionary Policy.** An expansionary fiscal policy is one in which federal spending is greater than federal tax revenue. This is a budget deficit fiscal policy. In this instance, the injection of federal government spending (G) into the aggregate demand spending stream (AD) is greater than the federal tax drain from the total spending stream, stimulating increased production (GDP), employment, and prices in the economy. An expansionary fiscal policy is appropriate in an economy in a period of recession in which the economic system is functioning in a sluggish manner at low levels of production and employment, and perhaps falling prices.

Contractionary Policy. A contractionary fiscal policy is one in which federal spending is less than federal tax revenue. This is a budget surplus fiscal policy. In this case, the injection of federal government spending (G) into the aggregate demand spending stream (AD) is less than the federal tax drain from the total spending stream, resulting in decreased production (GDP), employment, and prices in the economy. The contractionary fiscal policy is appropriate in an economy in a period of inflation in which the economic system is functioning in an overheated manner at too high levels of production, employment, and rapidly rising prices.

The federal budget – that is, the taxing and spending policy of the government – can be expected at any time to have a profound effect on the performance of the economy. For this reason the fiscal impacts of budget policy must be continuously monitored and incorporated into policy formation. However, discretionary fiscal policy does have a timing limitation. Implementation of discretionary policy requires action by Congress and the President, which, under the best of circumstances, takes time. And, once implemented, it takes more time to realize the effects of discretionary fiscal changes. Because of this limitation, policymakers rely mainly on discretionary monetary policy to regulate the performance of the economy over the short-term. Monetary policy can be implemented quickly and on a daily basis through open market operations. Monetary policy is the subject of **Investigation #10 - Monetary Policy:** Can the Federal Reserve Diagnose and Treat an Ailing Economy.



### **Fiscal Policy**

- Fiscal policy is taxing and spending policy implemented by the President and Congress to regulate the performance of the national economy.
- The goals of fiscal policy are to
  - maintain maximum sustainable production and employment in the national economy and
  - 2) maintain stable prices in the national economy.
- The tools of fiscal policy are
  - taxation by the federal government and
  - 2) spending by the federal government.



### **Neutral Fiscal Policy**

- A neutral fiscal policy is one in which federal spending is set at a level equal to federal tax revenue. It is called a balanced budget fiscal policy.
- In a neutral fiscal policy, the injection of spending into aggregate demand is equal to the tax revenue drain from the total spending stream. This policy leaves production, employment, and prices at their approximate current levels.
- This policy is appropriate in a stable or moderate growth economy. That is, one functioning at high levels of production and employment, with stable prices.



### **Expansionary Fiscal Policy**

- An expansionary fiscal policy is one in which federal spending is set at a level greater than federal tax revenue. It is called a deficit budget fiscal policy.
- In an expansionary fiscal policy, the injection of spending into aggregate demand is greater than the tax revenue drain from the total spending stream. This policy stimulates increased production, employment, and prices in the economy.
- This policy is appropriate in an economy in a recession a system functioning in a sluggish manner at low levels of production and employment, and perhaps falling prices.



### **Contractionary Fiscal Policy**

- A contractionary fiscal policy is one in which federal spending is set at a level less than federal tax revenue. It is called a surplus budget fiscal policy.
- In a contractionary fiscal policy, the injection of spending into aggregate demand is less than the tax revenue drain from the total spending stream. This policy decreases growth in production, employment, and prices in the economy.
- This policy is appropriate in an inflationary economy a system functioning in an overheated manner at excessively high levels of production and employment, and rapidly rising prices.

### **Applied Fiscal Policy**

**Directions:** These activities consist of cases of applied fiscal policy. Students are instructed to (1) analyze data for the economy in a given time period, (2) identify the state of the economy, and (3) recommend fiscal policies appropriate to the problem in the economy. The following list shows the set of cases included in this investigation.

Case 1: Stable Economy

Case 2: Recession

Case 3: Unemployment Recession

Case 4: Most Recent Quarter

### Investigation #9 – Activity #1, Case 1, page 1

### Case 1

### **Student Handout**

**Directions:** Examine the information on the performance of the economy provided in Table 1 for the second quarter of 2000, and write short answers to the following diagnosis and policy questions.

Diagn	osis and Policy Questions
1.	What is the state of this economy? Explain.
2.	What general stabilization policy should be applied to move the economy toward the state of relative stability? Explain.
3.	What specific fiscal policy would you recommend to move the economy toward the state of relative stability? Explain.

TABLE 1
Production, Unemployment, and Purchasing Power in the United States Economy, 2000-2003

YEAR.MONTH/ QUARTER	GDPN*	GDPR*	GDPC*	CVLF†	UNEM†	UNER†	CPIA‡	CPIC‡
2000.01				142,283	5,674	4.0	169.3	3.6
2000.02				142,423	5,786	4.1	169.9	4.3
2000.03/Q1	9,649.5	9,097.4	2.6	142,391	5,713	4.0	171.0	7.8
2000.04	.,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		142,795	5,483	3.8	170.9	-0.7
2000.05				142,349	5,773	4.1	171.2	2.1
2000.06/Q2	9,820.7	9,205.7	4.8	142,624	5,671	4.0	172.3	7.7
2000.07	3,020.	3,200.	1.0	142,252	5,763	4.1	172.7	2.8
2000.08				142,508	5,864	4.1	172.7	0.0
2000.09/Q3	9,874.8	9,218.7	0.6	142,554	5,645	4.0	173.6	6.3
2000.10	3,071.0	3,210.7	0.0	142,636	5,559	3.9	173.9	2.1
2000.11				142,965	5,676	4.0	174.2	2.1
2000.11 2000.12/Q4	9,953.6	9,243.8	1.1	143,279	5,659	3.9	174.6	2.8
2001.01	3,333.0	3,243.0	1.1	143,797	5,951	4.1	175.6	6.9
2001.01				143,638	5,990	4.2	176.0	2.7
2001.02 2001.03/Q1	10,028.1	9,229.9	-0.6	143,871	6,108	4.2	176.0	0.0
2001.03/Q1	10,020.1	9,229.9	-0.0	143,624	6,271	4.4	176.5	3.4
2001.04				143,280	6,244	4.4	177.4	6.1
2001.05 2001.06/Q2	10,049.9	9,193.1	-1.6	143,200	6,5244	4.4	177.4	3.4
	10,049.9	9,193.1	-1.0	143,616	6,610	4.6	177.5	-2.7
2001.07				•	7,075	4.9		
2001.08	10 007 7	0 106 4	0 3	143,331	•		177.5	0.0 4.1
2001.09/Q3	10,097.7	9,186.4	-0.3	144,042	7,183	5.0	178.1	
2001.10				144,128	7 <b>,</b> 758	5.4	177.6	-3.4
2001.11	10 150 0	0 040 0	0 7	144,296	8,078	5.6	177.4	-1.4
2001.12/Q4	10,152.9	9,248.8	2.7	144,379	8,312	5.8	177.3	-0.7
2002.01				143,826	8,035	5.6	177.6	2.0
2002.02	40 040 4		= 0	144,510	8,060	5.6	177.9	2.0
2002.03/Q1	10,313.1	9,363.2	5.0	144,367	8,224	5.7	178.5	4.0
2002.04				144,763	8,567	5.9	179.3	5.4
2002.05				144,911	8,424	5.8	179.5	1.3
2002.06/Q2	10,376.9	9,392.4	1.3	144,852	8,469	5.8	179.8	2.0
2002.07				144,786	8,443	5.8	180.1	2.0
2002.08				145,123	8,366	5.8	180.5	2.7
2002.09/Q3	10,506.2	9,485.6	4.0	145,634	8,321	5.7	180.9	2.7
2002.10				145,393	8,405	5.8	181.2	2.0
2002.11				145,180	8,637	5.9	181.4	1.3
2002.12/Q4	10.588.8	9,518.2	1.4	145,150	8,711	6.0	181.6	1.3
2003.01				145,838	8,302	5.7	182.2	4.0
2003.02				145,857	8,450	5.8	183.3	7.2
2003.03/Q1	10,688.4	9,552.0	1.4	145 <b>,</b> 793	8,445	5.8	183.9	3.9
2003.04				146,473	8,786	6.0	183.3	-3.9
2003.05				146,485	8,998	6.1	183.3	0.0
2003.06/Q2	10,802.7	9,629.4	3.3	147,096	9,358	6.4	183.6	2.0
2003.07				146,540	9.062	6.2	183.9	2.0
2003.08				146,530	8,905	6.1	184.5	3.9
2003.09/Q3	11,063.4	9,821.2	8.2	146,545	8,973	6.1	185.0	3.3
2003.10				146,793	8,779	6.0	185.0	0.0
2003.11				147,277	8,653	5.9	184.5	-3.2
2003.12/Q4	11,252.3	10,599.2	4.1	146,878	8,398	5.7	184.3	-1.3

\*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 period, based on chained 1996 dollars. All production data are seasonally adjusted annual rates.

 $\mbox{tCVLF = Civilian labor force, thousands of persons 16 years of age and over;} \label{eq:cvlf} \mbox{UNEM = Unemployment, thousands of persons 16 years of age and over;} \label{eq:cvlf}$ 

and UNER = Unemployment rate, unemployment as a percent of the civilian labor force.

‡CPIA = Consumer Price Index, all urban consumers, all items, seasonally adjusted, 1982-84 =

100; and CPIC = Consumer Price Index, percent change over preceding month annualized.

All labor force and unemployment figures are seasonally adjusted.

### **ANSWER KEY-Case 1**

**Directions:** Examine the information on the performance of the economy provided in Table 1 for the second quarter of 2000, and write short answers to the following diagnosis and policy questions.

### **Diagnosis and Policy Questions**

1. What is the state of this economy? Explain.

**Answer:** In this quarter, real production is growing at an attractive rate of 4.8 percent with unemployment rates at desired levels around 4 percent. However, there is some inflationary pressure in the economy, with average prices increasing to a spike of 7.7 percent in June, the final month of the quarter. So the economy might be nearing a state of inflation.

2. What general stabilization policy should be applied to move the economy toward the state of relative stability? Explain.

**Answer:** This situation calls for a neutral, status quo, stabilization policy. The June price spike of 7.7 percent suggests the possibility of some inflationary pressure in the economy, but only subsequent data will reveal whether there is an inflation problem in need of correction. Policy should be determined by clear trends in the data, not spikes. A spike may or may not suggest a clear trend in the data.

3. What specific fiscal policy would you recommend to move the economy toward the state of relative stability? Explain.

**Answer:** In this situation, it would be appropriate for fiscal authorities to move toward a status quo, neutral, fiscal policy. A balanced budget in which federal expenditures are equal to tax revenues will tend to keep the economy in its state of stability.

### Case 2

### **Student Handout**

**Directions**: Examine the information on the performance of the economy provided in Table 1 for the third quarter of 2001, and write short answers to the following diagnosis and policy questions.

D	iagnosis	and	<b>Policy</b>	Questions
_		***	1 0110,	A arearrans

1.	What is the state of this economy? Explain.
2.	What general stabilization policy should be applied to move the economy toward the
	state of relative stability? Explain.
3.	What specific fiscal policy would you recommend to move the economy toward the state of relative stability? Explain.

TABLE 1
Production, Unemployment, and Purchasing Power
In the United States Economy, 2000-2003

GDPN* 9,649.5	GDPR*9,097.4	GDPC*	CVLF† 142,283	UNEM†	UNER†	CPIA‡	CPIC‡
9,649.5	9,097.4		142,283				
9,649.5	9,097.4			5,674	4.0	169.3	3.6
9,649.5	9,097.4		142,423	5,786	4.1	169.9	4.3
	-,	2.6	142,391	5,713	4.0	171.0	7.8
			142 <b>,</b> 795	5,483	3.8	170.9	-0.7
			142,349	5,773	4.1	171.2	2.1
9,820.7	9,205.7	4.8	142,624	5,671	4.0	172.3	7.7
			•				2.8
							0.0
9,874.8	9,218.7	0.6					6.3
							2.1
			142 <b>,</b> 965	5 <b>,</b> 676	4.0	174.2	2.1
9,953.6	9,243.8	1.1	143,279	5 <b>,</b> 659	3.9	174.6	2.8
			143 <b>,</b> 797	5 <b>,</b> 951		175.6	6.9
			143,638	5,990	4.2	176.0	2.7
10,028.1	9,229.9	-0.6	143,871	6,108	4.2	176.0	0.0
			143,624	6,271	4.4	176.5	3.4
			143,280	6,244	4.4	177.4	6.1
10,049.9	9,193.1	-1.6	143,395	6,526	4.6	177.9	3.4
			143,616	6,610	4.6	177.5	-2.7
			143,331	7,075	4.9	177.5	0.0
10,097.7	9,186.4	-0.3	144,042	7,183	5.0	178.1	4.1
			144,128	7,758	5.4	177.6	-3.4
			144,296	8,078	5.6	177.4	-1.4
10,152.9	9,248.8	2.7	144,379	8,312	5.8	177.3	-0.7
			143,826	8,035	5.6	177.6	2.0
			144,510	8,060	5.6	177.9	2.0
10,313.1	9,363.2	5.0	144,367	8,224	5.7	178.5	4.0
			144,763	8,567	5.9	179.3	5.4
			144,911	8,424	5.8	179.5	1.3
10,376.9	9,392.4	1.3	144,852	8,469	5.8	179.8	2.0
			144,786	8,443	5.8	180.1	2.0
			145,123	8,366	5.8	180.5	2.7
10,506.2	9,485.6	4.0	145,634	8,321	5.7	180.9	2.7
			145,393	8,405	5.8	181.2	2.0
			145,180	8,637	5.9	181.4	1.3
10.588.8	9,518.2	1.4					1.3
	•						4.0
							7.2
10,688.4	9,552.0	1.4					3.9
,,	-,						-3.9
			•				0.0
10.802.7	9.629.4	3.3					2.0
,	3, 323.1	· · ·	•				2.0
							3.9
11.063 4	9-821-2	8 2					3.3
11,000.4	J, UZI.Z	0.2	•				0.0
							-3.2
11.252 3	10.599 2	4 1					-1.3
	10,028.1 10,049.9 10,097.7 10,152.9 10,313.1 10,376.9	9,953.6 9,243.8  10,028.1 9,229.9  10,049.9 9,193.1  10,097.7 9,186.4  10,152.9 9,248.8  10,313.1 9,363.2  10,376.9 9,392.4  10,506.2 9,485.6  10.588.8 9,518.2  10,688.4 9,552.0  10,802.7 9,629.4  11,063.4 9,821.2	9,953.6 9,243.8 1.1  10,028.1 9,229.9 -0.6  10,049.9 9,193.1 -1.6  10,097.7 9,186.4 -0.3  10,152.9 9,248.8 2.7  10,313.1 9,363.2 5.0  10,376.9 9,392.4 1.3  10,506.2 9,485.6 4.0  10.588.8 9,518.2 1.4  10,688.4 9,552.0 1.4  10,802.7 9,629.4 3.3  11,063.4 9,821.2 8.2	142,636 142,965 9,953.6 9,243.8 1.1 143,279 143,797 143,638 10,028.1 9,229.9 -0.6 143,871 143,624 143,280 10,049.9 9,193.1 -1.6 143,335 10,097.7 9,186.4 -0.3 144,042 144,128 144,296 10,152.9 9,248.8 2.7 144,379 143,826 144,510 10,313.1 9,363.2 5.0 144,367 144,763 144,763 144,763 10,506.2 9,485.6 4.0 145,634 145,123 10,506.2 9,485.6 4.0 145,634 145,838 145,837 10,688.4 9,552.0 1.4 145,793 146,473 146,473 146,473 146,473 146,485 10,802.7 9,629.4 3.3 147,096 146,530 11,063.4 9,821.2 8.2 146,545 146,793 147,277	9,874.8 9,218.7 0.6 142,508 5,864 9,874.8 9,218.7 0.6 142,554 5,645 142,636 5,559 142,965 5,676 9,953.6 9,243.8 1.1 143,797 5,951 143,638 5,990 10,028.1 9,229.9 -0.6 143,871 6,108 143,624 6,271 143,280 6,244 10,049.9 9,193.1 -1.6 143,331 7,075 10,097.7 9,186.4 -0.3 144,042 7,183 144,128 7,758 144,296 8,078 10,152.9 9,248.8 2.7 144,379 8,312 10,313.1 9,363.2 5.0 144,367 8,224 10,376.9 9,392.4 1.3 144,852 8,669 10,376.9 9,392.4 1.3 144,852 8,669 10,506.2 9,485.6 4.0 145,634 8,221 10,506.2 9,485.6 4.0 145,634 8,221 10,506.2 9,485.6 4.0 145,634 8,221 145,839 8,405 10,588.8 9,518.2 1.4 145,150 8,711 145,838 8,302 145,857 8,450 10,688.4 9,552.0 1.4 145,793 8,445 10,688.4 9,552.0 1.4 145,793 8,445 146,473 8,786 146,473 8,786 146,473 8,786 146,473 8,786 146,473 8,786 146,485 8,998 10,802.7 9,629.4 3.3 147,096 9,358 146,540 9,062 146,530 8,905 11,063.4 9,821.2 8.2 146,545 8,973 146,793 8,779 147,277 8,653	9,874.8 9,218.7 0.6 142,554 5,645 4.0 142,636 5,559 3.9 142,965 5,676 4.0 142,636 5,559 3.9 142,965 5,676 4.0 142,636 5,559 3.9 142,965 5,676 4.0 143,797 5,951 4.1 143,638 5,990 4.2 10,028.1 9,229.9 -0.6 143,871 6,108 4.2 143,624 6,271 4.4 143,280 6,244 4.4 10,049.9 9,193.1 -1.6 143,395 6,526 4.6 143,616 6,610 4.6 143,616 6,610 4.6 143,331 7,075 4.9 10,097.7 9,186.4 -0.3 144,042 7,183 5.0 144,128 7,758 5.4 144,296 8,078 5.6 144,128 7,758 5.4 144,296 8,078 5.6 144,510 8,060 5.6 144,510 8,060 5.6 144,510 8,060 5.6 144,510 8,060 5.6 144,763 8,567 5.9 144,911 8,424 5.8 144,763 8,567 5.9 144,911 8,424 5.8 144,763 8,567 5.9 144,911 8,424 5.8 144,763 8,567 5.9 144,911 8,424 5.8 145,123 8,366 5.8 145,123 8,366 5.8 145,123 8,366 5.8 145,123 8,366 5.8 145,123 8,366 5.8 145,123 8,366 5.8 145,180 8,637 5.9 145,838 8,302 5.7 145,837 8,450 5.8 145,180 8,637 5.9 145,837 8,450 5.8 145,180 8,637 5.9 145,837 8,450 5.8 145,180 8,637 5.9 145,837 8,450 5.8 145,180 8,637 5.9 145,837 8,450 5.8 145,180 8,637 5.9 145,837 8,450 5.8 145,180 8,637 5.9 145,837 8,450 5.8 145,180 8,637 5.9 145,837 8,450 5.8 145,180 8,637 5.9 145,837 8,450 5.8 146,473 8,786 6.0 146,473 8,786 6.0 146,473 8,786 6.0 146,540 9,062 6.2 146,530 8,905 6.1 11,063.4 9,821.2 8.2 146,530 8,905 6.1 11,063.4 9,821.2 8.2 146,530 8,905 6.1 140,634 8,937 9,600 147,277 8,653 5.9	9,874.8       9,218.7       0.6       142,558       5,864       4.1       172.7         9,874.8       9,218.7       0.6       142,636       5,559       3.9       173.9         142,636       5,559       3.9       173.9         142,965       5,676       4.0       174.2         9,953.6       9,243.8       1.1       143,779       5,659       3.9       174.6         143,638       5,990       4.2       176.0         10,028.1       9,229.9       -0.6       143,871       6,108       4.2       176.0         10,049.9       9,193.1       -1.6       143,280       6,244       4.4       177.4         10,097.7       9,186.4       -0.3       144,042       7,183       5.0       177.9         10,097.7       9,186.4       -0.3       144,042       7,183       5.0       177.6         10,152.9       9,248.8       2.7       144,379       8,312       5.8       177.3         10,313.1       9,363.2       5.0       144,379       8,060       5.6       177.6         10,376.9       9,392.4       1.3       144,962       8,078       5.6       177.8         10,506.2

\*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 period, based on chained 1996 dollars. All production data are seasonally adjusted annual rates.

 $<sup>\</sup>texttt{†CVLF} = \texttt{Civilian labor force}, \texttt{thousands of persons 16 years of age and over};$  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 seasonally adjusted.

<sup>‡</sup>CPIA = Consumer Price Index, all urban consumers, all items, seasonally adjusted, 1982-84 =

<sup>100;</sup> and CPIC = Consumer Price Index, percent change over preceding month annualized.

### **ANSWER KEY- Case 2**

**Directions**: Examine the information on the performance of the economy provided in Table 1 for the third quarter of 2001, and write short answers to the following diagnosis and policy questions.

### **Diagnosis and Policy Questions**

1. What is the state of this economy? Explain.

**Answer:** In this quarter, real production continues to decrease for the third consecutive quarter, with unemployment increasing to the 5 percent level, and inflation largely under control, although showing a somewhat troubling 4.1 percent gain in average prices in September. The economy thus appears to be in something of a state of recession, although there may be some inflationary pressures present also.

2. What general stabilization policy should be applied to move the economy toward the state of relative stability? Explain.

**Answer:** This situation calls for a moderately expansionary stabilization policy. Increasing aggregate demand will provide the stimulus necessary to increase production and employment. However, policymakers should keep an eye out for evidence of worsening inflation and be prepared to respond to adverse developments.

3. What specific fiscal policy would you recommend to move the economy toward the state of relative stability? Explain.

**Answer:** The fiscal policy measures appropriate to this situation would be to decrease taxes and/or increase government spending. A federal budget deficit can be expected to provide the needed stimulus to aggregate demand. These fiscal measures, however, can be expected to take some time to implement and take effect in the economy.

# Case 3 Student Handout

**Directions**: Examine the information on the performance of the economy provided in Table 1 for the third quarter of 2002, and write short answers to the following diagnosis and policy questions.

Diagn	nosis and Policy Questions
1.	What is the state of this economy? Explain.
2.	What general stabilization policy should be applied to move the economy toward the state of relative stability? Explain.
3.	What specific fiscal policy would you recommend to move the economy toward the state of relative stability? Explain.

TABLE 1
Production, Unemployment, and Purchasing Power in the United States Economy, 2000-2003

YEAR.MONTH/ QUARTER	GDPN*	GDPR*	GDPC*	CVLF†	UNEM†	UNER†	CPIA‡	CPIC
2000.01				142,283	5,674	4.0	169.3	3.6
2000.02				142,423	5,786	4.1	169.9	4.3
2000.03/Q1	9,649.5	9,097.4	2.6	142,391	5,713	4.0	171.0	7.8
2000.04				142,795	5,483	3.8	170.9	-0.7
2000.05				142,349	5,773	4.1	171.2	2.1
2000.06/Q2	9,820.7	9,205.7	4.8	142,624	5,671	4.0	172.3	7.7
2000.07				142,252	5,763	4.1	172.7	2.8
2000.08				142,508	5,864	4.1	172.7	0.0
2000.09/Q3	9,874.8	9,218.7	0.6	142,554	5,645	4.0	173.6	6.3
2000.10				142,636	5,559	3.9	173.9	2.1
2000.11				142,965	5,676	4.0	174.2	2.1
2000.12/Q4	9,953.6	9,243.8	1.1	143,279	5,659	3.9	174.6	2.8
2001.01				143,797	5,951	4.1	175.6	6.9
2001.02				143,638	5,990	4.2	176.0	2.7
2001.03/Q1	10,028.1	9,229.9	-0.6	143,871	6,108	4.2	176.0	0.0
2001.04				143,624	6,271	4.4	176.5	3.4
2001.05				143,280	6,244	4.4	177.4	6.1
2001.06/Q2	10,049.9	9,193.1	-1.6	143,395	6,526	4.6	177.9	3.4
2001.07				143,616	6,610	4.6	177.5	-2.7
2001.08				143,331	7,075	4.9	177.5	0.0
2001.09/Q3	10,097.7	9,186.4	-0.3	144,042	7,183	5.0	178.1	4.1
2001.10				144,128	7 <b>,</b> 758	5.4	177.6	-3.4
2001.11				144,296	8,078	5.6	177.4	-1.4
2001.12/Q4	10,152.9	9,248.8	2.7	144,379	8,312	5.8	177.3	-0.7
2002.01				143,826	8,035	5.6	177.6	2.0
2002.02				144,510	8,060	5.6	177.9	2.0
2002.03/Q1	10,313.1	9,363.2	5.0	144,367	8,224	5.7	178.5	4.0
2002.04				144,763	8,567	5.9	179.3	5.4
2002.05				144,911	8,424	5.8	179.5	1.3
2002.06/Q2	10,376.9	9,392.4	1.3	144,852	8,469	5.8	179.8	2.0
2002.07				144,786	8,443	5.8	180.1	2.0
2002.08				145,123	8,366	5.8	180.5	2.7
2002.09/Q3	10,506.2	9,485.6	4.0	145,634	8,321	5.7	180.9	2.7
2002.10				145 <b>,</b> 393	8,405	5.8	181.2	2.0
2002.11				145,180	8 <b>,</b> 637	5.9	181.4	1.3
2002.12/Q4	10.588.8	9,518.2	1.4	145,150	8,711	6.0	181.6	1.3
2003.01				145,838	8,302	5.7	182.2	4.0
2003.02				145 <b>,</b> 857	8,450	5.8	183.3	7.2
2003.03/Q1	10,688.4	9,552.0	1.4	145 <b>,</b> 793	8,445	5.8	183.9	3.9
2003.04				146,473	8,786	6.0	183.3	-3.9
2003.05				146,485	8,998	6.1	183.3	0.0
2003.06/Q2	10,802.7	9,629.4	3.3	147,096	9,358	6.4	183.6	2.0
2003.07				146,540	9.062	6.2	183.9	2.0
2003.08				146,530	8,905	6.1	184.5	3.9
2003.09/Q3	11,063.4	9,821.2	8.2	146,545	8,973	6.1	185.0	3.3
2003.10				146,793	8,779	6.0	185.0	0.0
2003.11				147,277	8,653	5.9	184.5	-3.2
2003.12/Q4	11,252.3	10,599.2	4.1	146,878	8,398	5.7	184.3	-1.3

<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 period, 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 for

and UNER = Unemployment rate, unemployment as a percent of the civilian labor force. All labor force and unemployment figures are seasonally adjusted.

<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 month annualized.

### **ANSWER KEY-Case 3**

**Directions**: Examine the information on the performance of the economy provided in Table 1 for the third quarter of 2002, and write short answers to the following diagnosis and policy questions.

### **Diagnosis and Policy Questions**

1. What is the state of this economy? Explain.

**Answer:** In this quarter, real production grew at a healthy 4 percent rate, with unemployment continuing in the upper 5 percent range, and inflation staying below the 3 percent level. The economy here appears to be in something of an unemployment recession. Job creation is not keeping pace with the number of workers entering the labor force.

2. What general stabilization policy should be applied to move the economy toward the state of relative stability? Explain.

**Answer:** This situation calls for a moderately expansionary stabilization policy. Increasing aggregate demand will provide the stimulus necessary to decrease unemployment. However, policymakers should keep an eye out for evidence of worsening inflation and be prepared to respond to adverse developments.

3. What specific fiscal policy would you recommend to move the economy toward the state of relative stability? Explain.

**Answer:** The fiscal policy measures appropriate to this situation would be to decrease taxes and/or increase government spending. A federal budget deficit can be expected to provide the needed stimulus to aggregate demand. These fiscal measures, however, can be expected to take some time to implement and take effect in the economy.

### - Activity #1, Case 4, page 1

### Case 4

### **Student Handout**

**Directions**: Use the Internet to obtain data on production, employment, and purchasing power for the U.S. economy's most recent quarter. These data are available at the websites of the Bureau of Economic Analysis, U.S. Department of Commerce (www.bea.doc.gov), and the Bureau of Labor Statistics, U.S. Department of Labor (www.bls.gov/home.htm).

Analyze the data and then prepare a memo for presentation at the next meetings of the President's Council of Economic Advisors and the Joint Economic Committee of Congress. Your memo should include

- 1) an analysis of the state of the economy, and
- 2) a statement on the fiscal policy you are recommending for the current situation, including justifications for each policy action included in your recommendation.

### **ANSWER KEY-Case 4**

**Directions**: Use the Internet to obtain data on production, employment, and purchasing power for the U.S. economy's most recent quarter. These data are available at the websites of the Bureau of Economic Analysis, U.S. Department of Commerce (www.bea.doc.gov), and the Bureau of Labor Statistics, U.S. Department of Labor (www.bls.gov/home.htm).

Analyze the data and then prepare a memo for presentation at the next meetings of the President's Council of Economic Advisors and the Joint Economic Committee of Congress. Your memo should include

- 1) an analysis of the state of the economy, and
- 2) a statement on the fiscal policy you are recommending for the current situation, including justifications for each policy action included in your recommendation.

### **Answer:**

Memo for meetings of the President's Council of Economic Advisors and the Joint Economic Committee of Congress containing the following:

- 1. An analysis of the state of the economy
- 2. Fiscal policy recommendation(s) with justification(s)

### Summary, Diagnosis, and Prescription for the Economy

**Directions:** Select a recent quarter for analysis that students have not studied. Ask students to complete a case analysis as they did in class. Completion of the case involves completing the Summary of Economic Performance and Diagnosis and Policy Prescription forms that follow.

### **Summary of Economic Performance** Student Handout

**Directions:** Complete the following Summary of Economic Performance for the quarter you have been assigned.

Production:
Employment:
Purchasing Power:

## **Diagnosis and Policy Prescription Student Handout**

**Directions:** Complete the following Diagnosis and Policy Prescription for the quarter you have been assigned.

1.	What is the state of this economy? Explain.
2.	What general stabilization policy should be applied to move the economy toward the state of relative stability? Explain.
3.	What specific fiscal policy measures can be expected to move the economy toward the state of relative stability? Explain.

### **Sources/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: www.bea.doc.gov/bea/dn/home/gdp.htm.

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

U.S. Department of Labor, Bureau of Labor Statistics, Labor Force Statistics from the *Current Population Survey*, November 28, 2003, given at the following website: www.bls.gov/data/.

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

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index – All Urban Consumers," November 29, 2003, given at the following website: <a href="http://data.bls.gov">http://data.bls.gov</a>.

### **Fiscal Policy Source**

Mankiw, N. Gregory. *Principles of Macroeconomics* (3rd Edition; Mason, Ohio: Thomson/South-Western, 2004).

