

# Survey of Professional Forecasters

August 30, 1993

## Economic Research Division

### THIRD QUARTER 1993

#### Forecasters See Weaker Growth, Improved Inflation Outlook over the Near Term

Current prospects for economic growth through 1993 and into 1994 are weaker now than they were just three months ago, according to 35 forecasters surveyed by the Federal Reserve Bank of Philadelphia. After lower than expected growth in the second quarter, the forecasters have reduced their projections for real GDP growth to 2.4 percent in 1993, down 0.6 percentage points from the second-quarter survey. In 1994, the economy is expected to expand at a 2.8 percent rate, down from 3.0 percent in the last survey. Despite the weaker GDP outlook, the forecasters continue to see the civilian unemployment rate decreasing gradually, averaging 6.9 percent in 1993 and 6.6 percent in 1994, virtually unchanged from three months ago.

Inflation, as measured by the CPI, is expected to average 3.1 percent in 1993 and 3.2 percent in 1994, both lower than the 3.4 percent forecast in the previous survey. Over the next five quarters, the forecasters see inflation reaching 3.3 percent in the fourth quarter of this year and leveling off at that rate through the third quarter of 1994.

Weaker growth and lower inflation over 1993 and 1994 will be accompanied by lower interest rates, particularly long-term rates, according to the forecasters. The median forecast currently calls for the 10-year Treasury-bond rate to average 6.0 percent in 1993 and to hold steady at that level in 1994, down from 6.2 percent and 6.3 percent, respectively, in the last survey.

The following table compares median forecasts for selected variables from the current survey with those from three months ago:

	Real GDP		CPI Inflation		10-yr. T-Bond Yield	
	Previous	New	Previous	New	Previous	New
<i>Quarterly data:</i>						
1993: Q3	3.3	3.1	3.2	2.7	6.1	5.8
Q4	3.3	3.2	3.3	3.3	6.2	5.8
1994: Q1	3.1	2.7	3.5	3.3	6.3	6.0
Q2	2.6	2.9	3.5	3.3	6.3	6.0
Q3	N.A.	3.0	N.A.	3.3	N.A.	6.0
<i>Annual average data:</i>						
1993	3.0	2.4	3.4	3.1	6.2	6.0
1994	3.0	2.8	3.4	3.2	6.3	6.0



FEDERAL  
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### **Long-Term Inflation Outlook Unchanged**

Forecasters see the inflation rate (based on the Consumer Price Index) for the next 10 years averaging 3.45 percent, unchanged from three months ago. The middle range of the forecasts run from 3.0 percent to 3.8 percent.

### **Lower Risk of a Negative Quarter**

The mean probabilities of a decline in real GDP over the next five quarters are lower than previously forecast. The following table summarizes the results:

#### **Mean Probability of a Decline in Real GDP**

	<i>Third Quarter 1993 Survey</i>	<i>Fourth Quarter 1993 Survey</i>
1993: Q4	10.0	3.0
1994: Q1	14.0	8.0
Q2	16.0	13.0
Q3	15.0	13.0
Q4	N.A.	13.0

The Philadelphia Fed's Survey of Professional Forecasters was formerly conducted by the American Statistical Association (ASA) and the National Bureau of Economic Research (NBER) and was known as the ASA/NBER survey. The survey, which began in 1968, is conducted each quarter. The Federal Reserve Bank of Philadelphia, in cooperation with the NBER, assumed responsibility for the survey in June 1990.

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**SURVEY OF PROFESSIONAL FORECASTERS  
MAJOR MACROECONOMIC INDICATORS, 1993-94**

	1993				1994		ANNUAL AVERAGE	
	Q3	Q4	Q1	Q2	Q3	FORECAST	1993	1994
<b>PERCENT GROWTH AT ANNUAL RATES</b>								
1. REAL GDP (BILLIONS OF 1987 DOLLARS)	3.1	3.2	2.7	2.9	3.0	2.4	2.8	
2. GDP IMPLICIT PRICE DEFULATOR (1987=100)	2.6	2.9	3.2	3.2	2.9	2.9	N.A.	
3. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	6.1	5.9	6.1	5.5	6.0	5.2	5.8	
4. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	2.7	3.3	3.3	3.3	3.3	3.1	3.2	
<b>VARIABLES IN LEVELS</b>								
5. UNEMPLOYMENT RATE (PERCENT)	6.9	6.8	6.7	6.6	6.5	6.9	6.6	
6. 3-MONTH TREASURY BILL RATE (PERCENT)	3.0	3.1	3.3	3.3	3.5	3.0	3.4	
7. 10-YEAR TREASURY BOND YIELD (PERCENT)	5.8	5.8	6.0	6.0	6.0	6.0	6.0	

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 1993.

NOTES: THE FIGURES ON EACH LINE ARE MEDIANS OF 35 INDIVIDUAL FORECASTS. NA = NOT APPLICABLE.  
FOR THE GDP IMPLICIT PRICE DEFULATOR AND CONSUMER PRICE INDEX, THE ANNUAL AVERAGE IS THE PERCENT CHANGE IN THE  
FOURTH QUARTER INDEX LEVEL FROM THE FOURTH QUARTER INDEX LEVEL OF THE PREVIOUS YEAR.

**SURVEY OF PROFESSIONAL FORECASTERS**

**Third Quarter 1993**

**Tables**

**Note:** Data in these tables listed as "actual" are the data that were available to the forecasters when they were sent the survey questionnaire on Aug. 2; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before Aug. 19.

TABLE ONE

**MAJOR MACROECONOMIC INDICATORS, 1993-94  
MEDIAN OF FORECASTER PREDICTIONS**

	NUMBER OF FORE- CASTERS	ACTUAL 1993 Q2	FORECASTS				ACTUAL 1992	FORECAST 1993	FORECAST 1994	
			1993		Q1	Q2				
			Q3	Q4	Q3	—				
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	35	6206.9	6300.0	6390.8	6486.1	6573.0	6669.6	5950.7	6263.0	6627.5
2. GDP IMPLICIT PRICE DEFULATOR (1987=100)	35	123.7	124.5	125.4	126.4	127.4	128.3	120.9	124.2	127.8
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	26	N.A.	259.0	265.0	270.5	272.7	278.0	231.4	254.9	274.6
4. UNEMPLOYMENT RATE (PERCENT)	35	7.0	6.9	6.8	6.7	6.6	6.5	7.4	6.9	6.6
5. INDUSTRIAL PRODUCTION (1987=100)	32	110.3	111.0	112.1	113.0	114.0	115.0	106.5	110.8	114.4
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	31	1.24	1.28	1.31	1.33	1.35	1.38	1.20	1.25	1.35
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	34	2.2	2.7	3.3	3.3	3.3	3.3	2.9	3.1	3.2
8. 3-MONTH TREASURY BILL RATE (PERCENT)	34	2.97	3.02	3.09	3.25	3.30	3.50	3.43	3.02	3.40
9. AAA CORPORATE BOND YIELD (PERCENT)	28	7.41	7.20	7.30	7.35	7.35	7.35	8.14	7.40	7.34
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	32	5.99	5.75	5.85	6.00	6.00	6.02	7.01	6.00	6.01

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 1993.

TABLE ONE CONTINUED

**MAJOR MACROECONOMIC INDICATORS, 1993-94  
MEDIAN OF FORECASTER PREDICTIONS**

	NUMBER OF FORE- CASTERS	ACTUAL 1993 Q3	FORECASTS				ACTUAL 1992 1993	FORECAST 1993 1994	
			1994		Q1	Q2			
			Q4	—	—	Q4			
11. REAL GDP (BILLIONS OF 1987 DOLLARS)	34	5138.0	5182.4	5219.3	5251.4	5290.2	5326.1	4986.3	5125.9
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS OF 1987 DOLLARS)	34	3467.9	3494.9	3517.0	3540.4	3565.2	3588.6	3341.8	3449.1
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	34	593.3	603.6	613.0	620.2	631.1	641.0	529.2	585.9
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	34	211.2	216.1	219.2	222.0	224.8	226.9	197.1	211.1
15. FEDERAL GOVERNMENT PURCHASES (BILLIONS OF 1987 DOLLARS)	32	353.8	352.4	349.8	348.3	348.3	346.9	373.0	355.8
16. STATE AND LOCAL GOVT PURCHASES (BILLIONS OF 1987 DOLLARS)	32	584.6	587.1	589.0	591.8	594.4	596.7	572.2	581.9
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS OF 1987 DOLLARS)	33	7.3	12.3	15.0	17.8	17.0	19.0	6.5	15.4
18. NET EXPORTS (BILLIONS OF 1987 DOLLARS)	34	-80.1	-83.1	-84.3	-87.5	-87.8	-86.9	-33.6	-74.6
								-87.0	

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1993.

TABLE TWO

**MAJOR MACROECONOMIC INDICATORS, 1993-94**  
**PERCENTAGE CHANGES AT ANNUAL RATES**

	NUMBER OF FORE- CASTERS	Q2 '93 TO Q3 '93	Q3 '93 TO Q4 '93	Q4 '93 TO Q1 '94	Q1 '94 TO Q2 '94	Q2 '94 TO Q3 '94	Q3 '94 TO 1993	1992 TO 1993	1993 TO 1994
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	35	6.1	5.9	6.1	5.5	6.0	5.2	5.8	
2. GDP IMPLICIT PRICE DEFULATOR (1987=100)	35	2.6	2.9	3.2	3.2	2.9	2.7	2.9	
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	26	10.9	9.6	8.6	3.3	8.0	10.2	7.7	
4. UNEMPLOYMENT RATE (PERCENT)	35	-.1	-.1	-.1	-.1	-.1	-.5	-.3	
5. INDUSTRIAL PRODUCTION (1987=100)	32	2.6	4.2	3.1	3.6	3.7	4.0	3.3	
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	31	13.2	11.1	5.0	6.3	9.7	3.7	8.4	
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	34	-.5	-.6	.0	.0	.0	.2	.1	
8. 3-MONTH TREASURY BILL RATE (PERCENT)	34	-.05	.07	.16	.05	.20	-.41	.38	
9. AAA CORPORATE BOND YIELD (PERCENT)	28	-.21	.10	.05	.00	.00	-.74	-.06	
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	32	-.24	.10	.15	.00	.02	-1.01	.01	

NOTE: FIGURES FOR UNEMPLOYMENT RATE, PERCENT CHANGE IN CONSUMER PRICE INDEX, TREASURY BILL RATE, AAA CORPORATE BOND YIELD, AND 10-YEAR TREASURY BOND YIELD ARE CHANGES IN THESE RATES, IN PERCENTAGE POINTS.  
 ALL OTHERS ARE PERCENTAGE CHANGES AT ANNUAL RATES.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 1993.

TABLE TWO CONTINUED

**MAJOR MACROECONOMIC INDICATORS, 1993-94**  
**PERCENTAGE CHANGES AT ANNUAL RATES**

	NUMBER OF FORE- CASTERS	Q3 TO Q4	Q3 TO Q4	Q1 TO Q2	Q1 TO Q2	Q2 TO Q3	Q2 TO Q3	Q3 TO Q4	Q3 TO Q4	1992 TO 1993	1993 TO 1994
11. REAL GDP (BILLIONS OF 1987 DOLLARS)	34	3.5	2.9	2.5	3.0	2.7	2.7	2.8	2.8	2.8	2.8
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS OF 1987 DOLLARS)	34	3.1	2.6	2.7	2.8	2.7	2.7	3.2	3.2	3.0	
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	34	7.2	6.3	4.8	7.2	6.4	10.7	7.2			
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	34	9.6	5.9	5.1	5.3	3.7	7.1	5.8			
15. FEDERAL GOVERNMENT PURCHASES (BILLIONS OF 1987 DOLLARS)	32	-1.5	-2.9	-1.7	.0	-1.6	-4.6	-2.0			
16. STATE AND LOCAL GOVT PURCHASES (BILLIONS OF 1987 DOLLARS)	32	1.7	1.4	1.9	1.8	1.5	1.7	2.0			
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS OF 1987 DOLLARS)	33	5.0	2.7	2.8	-.8	2.0	8.9	2.8			
18. NET EXPORTS (BILLIONS OF 1987 DOLLARS)	34	-3.0	-1.3	-3.2	-.3	.9	-41.0	-12.4			

NOTE: FIGURES FOR BUSINESS INVENTORIES AND NET EXPORTS ARE CHANGES IN BILLIONS OF 1987 DOLLARS.  
 ALL OTHERS ARE PERCENTAGE CHANGES AT ANNUAL RATES.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1993.

TABLE THREE

## ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	NUMBER OF FORECASTERS					
	Q2 TO Q3	Q3 TO Q4	Q4 TO Q1	Q1 TO Q2	Q2 TO Q3	Q3 TO Q4
10 OR LESS	28	26	19	17	16	
11 TO 20	5	6	9	7	12	
21 TO 30	1	2	5	8	5	
31 TO 40	0	0	0	1	1	
41 TO 50	0	0	0	0	0	
51 TO 60	0	0	1	0	0	
61 TO 70	0	0	0	1	0	
71 TO 80	0	0	0	0	0	
81 TO 90	0	0	0	0	0	
91 AND OVER	0	0	0	0	0	
NOT REPORTING	1	1	1	1	1	
MEDIAN PROBABILITY	5	10	10	13	14	
MEAN PROBABILITY	7	10	14	16	15	

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 34.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 1993.

TABLE FOUR

MEAN PROBABILITY OF CHANGES IN GDP AND PRICES  
1992-93 AND 1993-94

MEAN PROBABILITY ATTACHED TO POSSIBLE  
PERCENT CHANGES IN REAL GDP:

	1992-93	1993-94
6.0 OR MORE	.00	.25
5.0 TO 5.9	.16	1.69
4.0 TO 4.9	.56	8.96
3.0 TO 3.9	18.04	31.22
2.0 TO 2.9	78.21	44.95
1.0 TO 1.9	2.34	10.65
0.0 TO 0.9	.53	1.72
-1.0 TO -0.1	.16	.50
-2.0 TO -1.1	.00	.06
LESS THAN -2.0	.00	.00

MEAN PROBABILITY ATTACHED TO POSSIBLE  
PERCENT CHANGES IN GDP IMPLICIT PRICE DEFULATOR:

	1992-93	1993-94
8.0 OR MORE	.00	.06
7.0 TO 7.9	.00	.16
6.0 TO 6.9	.06	.31
5.0 TO 5.9	.63	2.03
4.0 TO 4.9	3.66	8.09
3.0 TO 3.9	16.13	32.09
2.0 TO 2.9	75.97	47.56
1.0 TO 1.9	3.09	8.66
0.0 TO 0.9	.31	.84
WILL DECLINE	.16	.19

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 32.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1993.

TABLE FIVE  
LONG-TERM (10 YEAR) FORECASTS

SERIES: CPI INFLATION RATE	
STATISTIC	
MINIMUM	2.250
LOWER QUARTILE	3.000
MEDIAN	3.450
UPPER QUARTILE	3.500
MAXIMUM	5.000
MEAN	3.334
STD. DEV.	.554
N	34
MISSING	1

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 1993.