

# Survey of Professional Forecasters

November 30, 1992

## Economic Research Department

### FOURTH QUARTER 1992

#### Real Outlook Holds Steady as the Inflation Outlook Continues to Improve

Current prospects for economic growth are about the same as they were three months ago, according to 40 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The forecasters continue to see the economy growing at 1.8 percent in 1992--despite unexpectedly high growth in the third quarter--and at 2.6 percent in 1993, up one-tenth of a percent from three months ago. The unemployment rate forecast for 1992 remains unchanged at 7.4 percent, and in 1993 the rate is projected to fall to 7.1 percent, one-tenth of a percent higher than was projected three months ago.

As in the previous survey, the forecasters see continuing improvement on the short-term inflation front. The median CPI inflation rate forecasts for 1992 and 1993 are currently 2.9 and 3.2 percent, both down by 0.2 percentage points since the last survey.

The forecasters have also lowered their interest-rate projections, particularly for short-term rates in 1993. The three-month Treasury-bill rate is seen averaging 3.3 percent in 1993, down from 3.7 percent in the previous survey. The 10-year Treasury-bond rate is currently forecast to average 6.8 percent in 1993, down 0.2 percentage points from the previous forecast.

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

	<i>Real GDP</i>		<i>CPI Inflation</i>		<i>10-yr. T-Bond Rate</i>	
	<i>Previous</i>	<i>New</i>	<i>Previous</i>	<i>New</i>	<i>Previous</i>	<i>New</i>
<i>Quarterly data:</i>						
1992: Q4	2.4	1.9	3.3	3.1	6.8	6.7
1993: Q1	3.2	2.4	3.2	3.1	6.8	6.7
Q2	2.3	2.8	3.4	3.2	7.0	6.8
Q3	2.8	3.3	3.4	3.3	7.1	6.8
Q4	N.A.	3.3	N.A.	3.4	N.A.	6.9
<i>Annual average data:</i>						
1992	1.8	1.8	3.1	2.9	7.0	7.0
1993	2.5	2.6	3.4	3.2	7.0	6.8



### **The Long-Term Inflation Outlook Improves as Well**

The median forecast for the average inflation rate (based on the Consumer Price Index) for the next 10 years dropped to 3.6 percent, compared with 3.75 percent in the previous survey. Half of the forecasts are in the 3 to 4 percent range. Since the fourth quarter 1991 survey, forecasters have revised downward their long-term inflation expectations by 0.4 percentage points.

### **Low, and Decreasing, Risk of Another Negative Quarter**

There remains only a slight chance that real GDP growth will be negative in any of the quarters for which the forecasts were made. And those probabilities are a bit lower than in the previous forecast, as the following table shows:

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

	<i>Third Quarter 1992 Survey</i>	<i>Fourth Quarter 1992 Survey</i>
1992: Q4	16%	12%
1993: Q1	13	11
Q2	12	11
Q3	11	10
Q4	N.A.	10

### **Post-Election Fiscal Policy Assumptions**

A number of forecasters have revised their fiscal policy assumptions based on this year's presidential election results. Slightly more than half see an increase in spending relative to their pre-election assumptions, although opinions on the size of the increase are fairly diverse. On the revenue side, some forecasters also expect an investment tax credit as well as an increase in personal income tax rates.

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.

For further information about the Survey of Professional Forecasters, contact:

Dean Croushore  
Research Officer and Economist  
Federal Reserve Bank of Philadelphia  
Ten Independence Mall  
Philadelphia, PA 19106  
(215) 574-3809

SURVEY OF PROFESSIONAL FORECASTERS  
MAJOR MACROECONOMIC INDICATORS, 1992-93

	1992	1993			ANNUAL	
	Q4	Q1	Q2	Q3	Q4	AVERAGE
	FORECAST					
<b>PERCENT GROWTH AT ANNUAL RATES</b>						
1. REAL GDP (BILLIONS OF 1987 DOLLARS)	1.9	2.4	2.8	3.3	3.3	1.8
2. GDP IMPLICIT PRICE DEFLATOR (1987=100)	2.7	2.6	2.6	2.8	2.8	2.6
3. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	4.7	5.2	5.6	5.7	5.8	4.6
4. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	3.1	3.1	3.2	3.3	3.4	2.9
<b>VARIABLES IN LEVELS</b>						
5. UNEMPLOYMENT RATE (PERCENT)	7.5	7.4	7.2	7.1	6.9	7.4
6. 3-MONTH TREASURY BILL RATE (PERCENT)	3.0	3.0	3.2	3.3	3.5	3.4
7. 10-YEAR TREASURY BOND YIELD (PERCENT)	6.7	6.7	6.8	6.8	6.9	7.0

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1992.

NOTES: THE FIGURES ON EACH LINE ARE MEDIANS OF 40 INDIVIDUAL FORECASTS. NA = NOT APPLICABLE.  
FOR THE GDP IMPLICIT PRICE DEFLATOR 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**

**Fourth Quarter 1992**

**Tables**

TABLE ONE

MAJOR MACROECONOMIC INDICATORS, 1992-93  
 MEDIAN OF FORECASTER PREDICTIONS

NUMBER OF FORE- CASTERS	ACTUAL 1992 Q3	FORECASTS 1993				ACTUAL 1991	FORECAST 1992	FORECAST 1993
		FORECASTS						
		Q4	Q1	Q2	Q3			
39	5967.1	6035.8	6112.4	6195.6	6282.5	6371.5	5936.4	6247.8
39	121.2	122.0	122.8	123.6	124.4	125.3	120.9	124.1
19	N.A.	240.0	250.1	256.6	265.0	274.8	234.3	260.3
39	7.6	7.5	7.4	7.2	7.1	6.9	7.4	7.1
37	108.9	109.4	110.2	111.2	112.4	113.7	108.5	111.9
37	1.20	1.26	1.28	1.32	1.35	1.37	1.21	1.33
39	2.6	3.1	3.1	3.2	3.3	3.4	3.0	3.2
37	3.08	3.00	3.00	3.20	3.30	3.50	3.40	3.30
34	7.98	8.09	8.04	8.09	8.03	8.01	8.16	8.10
35	6.62	6.70	6.70	6.76	6.76	6.90	7.00	6.80

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1992.

TABLE ONE CONTINUED

MAJOR MACROECONOMIC INDICATORS, 1992-93  
MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORE- CASTERS	ACTUAL 1992 Q3	FORECASTS 1993				ACTUAL 1991	FORECAST 1992	FORECAST 1993	
			Q4	Q1	Q2	Q3				Q4
11. REAL GDP (BILLIONS OF 1987 DOLLARS)	40	4924.5	4947.5	4977.1	5012.1	5052.5	5094.1	4821.0	4909.2	5035.6
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS OF 1987 DOLLARS)	40	3316.1	3335.1	3354.8	3372.0	3395.2	3416.3	3240.8	3307.3	3385.4
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	40	515.1	519.0	525.0	531.9	540.5	550.5	500.2	511.0	538.0
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	39	191.4	195.5	200.0	203.8	206.3	209.2	170.2	190.9	205.4
15. FEDERAL GOVERNMENT PURCHASES (BILLIONS OF 1987 DOLLARS)	38	376.7	374.2	371.5	370.0	370.6	370.2	388.3	374.6	370.5
16. STATE AND LOCAL GOVT PURCHASES (BILLIONS OF 1987 DOLLARS)	38	562.1	564.0	566.2	568.7	571.6	574.5	552.7	562.3	570.3
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS OF 1987 DOLLARS)	39	14.7	8.9	10.1	12.3	15.0	19.1	-9.3	4.7	13.6
18. NET EXPORTS (BILLIONS OF 1987 DOLLARS)	40	-51.5	-52.2	-52.6	-53.0	-52.3	-54.2	-21.8	-42.2	-53.7

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1992.

TABLE TWO

MAJOR MACROECONOMIC INDICATORS, 1992-93  
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE- CASTERS	Q3 92		Q4 92		Q1 93		Q2 93		Q3 93		Q3 93		1991 TO 1992		1992 TO 1993	
		TO Q4 92	TO Q1 93	TO Q1 93	TO Q2 93	TO Q3 93	TO Q4 93	TO Q4 93	TO Q4 93	TO Q4 93							
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	39	4.7	5.2	5.6	5.6	5.7	5.8	5.8	5.8	5.8	5.8	5.8	5.8	4.6	5.2		
2. GDP IMPLICIT PRICE DEFLATOR (1987=100)	39	2.7	2.6	2.6	2.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.6	2.6		
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	19	16.5	17.9	10.8	10.8	13.8	15.6	15.6	15.6	15.6	15.6	15.6	15.6	11.2	11.1		
4. UNEMPLOYMENT RATE (PERCENT)	39	-.1	-.1	-.2	-.2	-.1	-.2	-.2	-.2	-.2	-.2	-.2	-.2	.6	-.3		
5. INDUSTRIAL PRODUCTION (1987=100)	37	1.8	3.0	3.7	3.7	4.4	4.7	4.7	4.7	4.7	4.7	4.7	4.7	1.3	3.1		
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	37	22.4	6.5	12.8	12.8	8.1	6.4	6.4	6.4	6.4	6.4	6.4	6.4	19.8	9.1		
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	39	.5	.0	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	-.1	.2		
8. 3-MONTH TREASURY BILL RATE (PERCENT)	37	-.08	.00	.20	.20	.10	.20	.20	.20	.20	.20	.20	.20	-1.98	-.10		
9. AAA CORPORATE BOND YIELD (PERCENT)	34	.11	-.05	.05	.05	-.06	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.61	-.06		
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	35	.08	.00	.06	.06	.00	.14	.14	.14	.14	.14	.14	.14	-.86	-.20		

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, FOURTH QUARTER 1992.

TABLE TWO CONTINUED

MAJOR MACROECONOMIC INDICATORS, 1992-93  
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE- CASTERS	Q3 92		Q4 92		Q1 93		Q2 93		Q3 93		Q4 93		1991 TO 1992		1992 TO 1993			
		TO	4	TO	4	TO	1	TO	2	TO	3	TO	4	TO	1991	TO	1992	TO	1993
11. REAL GDP (BILLIONS OF 1987 DOLLARS)	40	1.9	2.4	2.4	2.8	2.8	2.8	3.3	3.3	3.3	3.3	3.3	3.3	1.8	1.8	2.6	2.6		
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS OF 1987 DOLLARS)	40	2.3	2.4	2.4	2.1	2.1	2.1	2.8	2.8	2.5	2.5	2.5	2.5	2.1	2.1	2.4	2.4		
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	40	3.1	4.7	4.7	5.3	5.3	5.3	6.7	6.7	7.6	7.6	7.6	7.6	2.2	2.2	5.3	5.3		
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	39	8.8	9.5	9.5	7.8	7.8	7.8	5.0	5.0	5.7	5.7	5.7	5.7	12.2	12.2	7.6	7.6		
15. FEDERAL GOVERNMENT PURCHASES (BILLIONS OF 1987 DOLLARS)	38	-2.6	-2.9	-2.9	-1.6	-1.6	-1.6	.7	.7	-.5	-.5	-.5	-.5	-3.5	-3.5	-1.1	-1.1		
16. STATE AND LOCAL GOVT PURCHASES (BILLIONS OF 1987 DOLLARS)	38	1.4	1.5	1.5	1.8	1.8	1.8	2.0	2.0	2.1	2.1	2.1	2.1	1.7	1.7	1.4	1.4		
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS OF 1987 DOLLARS)	39	-5.8	1.2	1.2	2.2	2.2	2.2	2.7	2.7	4.1	4.1	4.1	4.1	14.0	14.0	8.9	8.9		
18. NET EXPORTS (BILLIONS OF 1987 DOLLARS)	40	-.7	-.4	-.4	-.5	-.5	-.5	.8	.8	-1.9	-1.9	-1.9	-1.9	-20.4	-20.4	-11.5	-11.5		

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 1992.

TABLE THREE

ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	Q3 92		Q4 92		Q1 93		Q2 93		Q3 93		Q4 93	
	TO	Q4 92	Q1 93	Q2 93	Q3 93	Q4 93	TO	Q1 93	Q2 93	Q3 93	Q4 93	TO
10 OR LESS	21	21	23	27	26							
11 TO 20	10	14	12	8	8							
21 TO 30	6	2	1	1	2							
31 TO 40	0	0	1	1	0							
41 TO 50	0	0	0	0	1							
51 TO 60	0	0	0	0	0							
61 TO 70	0	0	0	0	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	3	3	3	3	3							
MEDIAN PROBABILITY	10	10	10	10	10							
MEAN PROBABILITY	12	11	11	10	10							

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 37.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1992.

TABLE FOUR

MEAN PROBABILITY OF CHANGES IN GDP AND PRICES  
1991-92 AND 1992-93

MEAN PROBABILITY ATTACHED TO POSSIBLE  
PERCENT CHANGES IN REAL GDP:

	1991-92	1992-93
6.0 OR MORE	.03	.45
5.0 TO 5.9	.08	1.49
4.0 TO 4.9	.28	4.97
3.0 TO 3.9	2.08	23.34
2.0 TO 2.9	24.22	45.45
1.0 TO 1.9	66.28	18.47
0.0 TO 0.9	6.34	4.34
-1.0 TO -0.1	.46	.85
-2.0 TO -1.1	.16	.35
LESS THAN -2.0	.07	.30

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

	1991-92	1992-93
8.0 OR MORE	.02	.05
7.0 TO 7.9	.02	.14
6.0 TO 6.9	.02	.52
5.0 TO 5.9	.16	1.70
4.0 TO 4.9	1.08	9.18
3.0 TO 3.9	16.68	31.51
2.0 TO 2.9	77.01	44.35
1.0 TO 1.9	4.36	10.09
0.0 TO 0.9	.22	1.79
WILL DECLINE	.43	3.26

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 38.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1992.

TABLE FIVE  
LONG-TERM (10 YEAR) FORECASTS

SERIES: CPI INFLATION RATE	
STATISTIC	
MINIMUM	2.000
LOWER QUARTILE	3.000
MEDIAN	3.600
UPPER QUARTILE	4.025
MAXIMUM	5.500
MEAN	3.641
STD. DEV.	.811
N	34
MISSING	6

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1992.