

Survey of Professional Forecasters

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Economic Research Division

SECOND QUARTER 1994

Output and Inflation Outlook Holds Steady; Interest Rate Forecasts Are Higher

Prospects for output growth are little changed from three months ago, according to 35 forecasters surveyed by the Federal Reserve Bank of Philadelphia. Real GDP growth is expected to average 3.6 percent this year and 2.7 percent in 1995. The economists anticipate a gradual decline in the unemployment rate over the next five quarters, from 6.4 percent in the current quarter to 6.1 percent by this time next year.

Inflation, as measured by the Consumer Price Index, will increase over the remainder of this year and hold steady at 3.3 percent for the first half of 1995. The quarterly forecasts are unchanged from the previous survey. The CPI is expected to average 2.9 percent growth in 1994, down 0.2 percentage points from three months ago. For 1995, inflation is expected to average 3.2 percent, unchanged from last quarter's survey.

The economists are revising their interest rate forecasts. Currently, short-term rates are seen averaging 4.0 percent in 1994 and 4.6 percent in 1995, compared with 3.5 percent and 3.8 percent in the last survey. The forecasters see the three-month Treasury-bill rate steadily increasing from its current-quarter level of 4.0 percent to 4.6 percent in the second quarter of 1995. Forecasts of long-term interest rates are also being revised upward. The 10-year Treasury bond is currently expected to yield 6.8 percent in 1994 and 6.7 percent in 1995, up 0.9 and 0.7 from the previous survey.

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

	Real GDP		CPI Inflation		3-month T-Bill Yield	
	Previous	New	Previous	New	Previous	New
Quarterly data:						
1994: Q2	3.3	3.7	3.1	3.1	3.4	4.0
Q3	2.7	3.1	3.2	3.2	3.5	4.2
Q4	3.1	2.8	3.3	3.3	3.7	4.4
1995: Q1	2.4	2.5	3.3	3.3	3.7	4.5
Q2	N.A.	2.3	N.A.	3.3	N.A.	4.6
Annual average data:						
1994	3.5	3.6	3.1	2.9	3.5	4.0
1995	2.6	2.7	3.2	3.2	3.8	4.6



Long-Term Inflation Expectations Are Stable

Expectations of long-term inflation remain little changed for the third consecutive survey. The forecasters see inflation (based on the Consumer Price Index) averaging 3.5 percent over the next 10 years. The middle half of the forecasts are in the 3.0 to 3.7 percent range. The following table shows long-term inflation expectations from the current and four previous surveys:

10-Year CPI Inflation Expectations

1993:	Q2	3.70
	Q3	3.45
	Q4	3.45
1994:	Q1	3.45
	Q2	3.50

Low but Increasing Risk of a Negative Quarter

The mean probability of a decline in real GDP is expected to rise gradually from 3 percent to 14 percent over the next five quarters. The forecasters see a slightly lower risk for mid-1994; however, for the end of the year and into 1995, the risk of negative growth is somewhat higher than it was three months ago. The following table compares the results from the current survey with those from three months ago:

Mean Probability of a Decline in Real GDP

	<i>Previous</i>	<i>New</i>
1994: Q2	4.0	3.0
Q3	7.0	6.0
Q4	7.0	9.0
1995: Q1	10.0	13.0
Q2	N.A.	14.0

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, 1994-95**

	1994				1995		ANNUAL AVERAGE	
	Q2	Q3	Q4	Q1	Q2	1994	1995	
	FORECAST							
PERCENT GROWTH AT ANNUAL RATES								
1. REAL GDP (BILLIONS OF 1987 DOLLARS)	3.7	3.1	2.8	2.5	2.3	3.6	2.7	
2. GDP IMPLICIT PRICE DEFULATOR (1987=100)	2.7	2.7	2.9	2.8	3.1	2.7	N.A.	
3. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	6.6	5.9	5.8	5.5	5.4	6.0	5.7	
4. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	3.1	3.2	3.3	3.3	3.3	2.9	3.2	
VARIABLES IN LEVELS								
5. UNEMPLOYMENT RATE (PERCENT)	6.4	6.4	6.2	6.1	6.1	6.4	6.1	
6. 3-MONTH TREASURY BILL RATE (PERCENT)	4.0	4.2	4.4	4.5	4.6	4.0	4.6	
7. 10-YEAR TREASURY BOND YIELD (PERCENT)	7.1	7.0	6.8	6.7	6.8	6.8	6.7	

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, SECOND QUARTER 1994.

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

Second Quarter 1994

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 Apr. 29; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before May 18.

TABLE ONE

**MAJOR MACROECONOMIC INDICATORS, 1994-95
MEDIAN OF FORECASTER PREDICTIONS**

NUMBER OF FORE- CASTERS	ACTUAL 1994 Q1	FORECASTS				ACTUAL 1993 Q2	FORECAST 1994 Q2	FORECAST 1995 Q2			
		1994		1995							
		Q2	Q3	Q4	Q1						
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	34	6609.4	6716.3	6813.7	6910.7	7004.2	7096.9	6377.9	6760.6		
2. GDP IMPLICIT PRICE DEFULATOR (1987=100)	34	125.7	126.5	127.4	128.3	129.2	130.2	124.2	127.0		
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	26	N.A.	306.3	314.2	316.8	320.8	325.5	275.4	307.0		
4. UNEMPLOYMENT RATE (PERCENT)	34	6.6	6.4	6.4	6.2	6.1	6.1	N.A.	6.4		
5. INDUSTRIAL PRODUCTION (1987=100)	32	115.0	116.2	117.4	118.2	119.1	119.9	110.9	116.7		
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	32	1.35	1.41	1.39	1.38	1.38	1.37	1.29	1.39		
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	34	2.1	3.1	3.2	3.3	3.3	3.3	2.7	3.2		
8. 3-MONTH TREASURY BILL RATE (PERCENT)	35	3.24	3.95	4.20	4.36	4.50	4.55	3.00	3.95		
9. AAA CORPORATE BOND YIELD (PERCENT)	28	7.16	7.90	7.98	7.80	7.80	7.81	7.22	7.73		
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	31	6.07	7.08	7.00	6.85	6.72	6.80	5.87	6.76		

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, SECOND QUARTER 1994.

TABLE ONE CONTINUED

	NUMBER OF FORE- CASTERS	ACTUAL 1994 Q1	FORECASTS				ACTUAL 1993	FORECAST 1994	FORECAST 1995		
			1994		1995	Q1	Q2				
			Q2	Q3	Q4						
11. REAL GDP (BILLIONS OF 1987 DOLLARS)	35	5259.0	5307.0	5347.5	5384.9	5418.4	5449.7	5136.0	5323.3	5464.6	
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS OF 1987 DOLLARS)	35	3539.8	3567.7	3591.6	3615.6	3636.8	3659.0	3453.2	3578.2	3668.4	
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	35	634.1	649.7	661.8	673.3	683.2	691.9	591.8	654.1	695.8	
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	35	232.2	235.8	238.6	239.9	240.3	239.4	214.2	236.3	239.7	
15. FEDERAL GOVERNMENT PURCHASES (BILLIONS OF 1987 DOLLARS)	34	338.0	340.5	339.1	338.3	335.4	335.0	354.9	338.6	337.0	
16. STATE AND LOCAL GOVT PURCHASES (BILLIONS OF 1987 DOLLARS)	33	588.9	594.0	597.4	600.3	603.2	606.3	584.0	595.2	607.7	
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS OF 1987 DOLLARS)	34	30.5	21.5	19.6	21.3	20.8	20.1	14.3	22.2	19.2	
18. NET EXPORTS (BILLIONS OF 1987 DOLLARS)	34	-104.2	-105.3	-105.5	-106.6	-108.0	-107.0	-76.5	-105.2	-107.0	

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, SECOND QUARTER 1994.

TABLE TWO

MAJOR MACROECONOMIC INDICATORS, 1994-95
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE- CASTERS	Q1 '94 TO Q2 '94	Q2 '94 TO Q3 '94	Q3 '94 TO Q4 '94	Q4 '94 TO Q1 '95	Q1 '95 TO Q2 '95	Q2 '95 TO 1994	1994 TO 1995
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	34	6.6	5.9	5.8	5.5	5.4	6.0	5.7
2. GDP IMPLICIT PRICE DEFULATOR (1987=100)	34	2.7	2.7	2.9	2.8	3.1	2.3	2.8
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	26	15.3	10.8	3.3	5.2	6.0	11.5	6.4
4. UNEMPLOYMENT RATE (PERCENT)	34	-.2	.0	-.2	-.1	.0	N.A.	-.3
5. INDUSTRIAL PRODUCTION (1987=100)	32	4.2	4.1	2.8	3.1	2.7	5.2	3.1
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	32	17.8	-4.1	-2.8	-1.3	-1.7	7.5	.0
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	34	1.0	.1	.1	.0	.0	.1	.4
8. 3-MONTH TREASURY BILL RATE (PERCENT)	35	.71	.25	.16	.14	.05	.95	.62
9. AAA CORPORATE BOND YIELD (PERCENT)	28	.74	-.08	-.18	.00	.01	.51	.08
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	31	1.01	-.08	-.15	-.13	.07	.89	-.09

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, SECOND QUARTER 1994.

TABLE TWO CONTINUED

MAJOR MACROECONOMIC INDICATORS, 1994-95
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE- CASTERS	Q1 94 TO Q2 94	Q2 94 TO Q3 94	Q3 94 TO Q4 94	Q4 94 TO Q1 95	Q1 95 TO Q2 95	1993 TO 1994
11. REAL GDP (BILLIONS OF 1987 DOLLARS)	35	3.7	3.1	2.8	2.5	2.3	3.6
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS OF 1987 DOLLARS)	35	3.2	2.7	2.7	2.4	2.5	3.6
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	35	10.2	7.7	7.1	6.0	5.2	10.5
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	35	6.3	4.8	2.1	.7	-1.5	10.3
15. FEDERAL GOVERNMENT PURCHASES (BILLIONS OF 1987 DOLLARS)	34	3.0	-1.6	-1.0	-3.3	-.5	-4.6
16. STATE AND LOCAL GOVT PURCHASES (BILLIONS OF 1987 DOLLARS)	33	3.5	2.3	2.0	1.9	2.1	1.9
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS OF 1987 DOLLARS)	34	-9.0	-1.8	1.6	-.5	-.7	7.9
18. NET EXPORTS (BILLIONS OF 1987 DOLLARS)	34	-1.1	-.2	-1.1	-1.4	1.0	-28.7
							-1.8

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, SECOND QUARTER 1994.

TABLE THREE

ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	NUMBER OF FORECASTERS				
	Q1 TO Q2	94 TO 94	Q2 TO Q3	94 TO 94	Q4 TO Q1
10 OR LESS	31	28	25	17	14
11 TO 20	1	3	6	12	13
21 TO 30	0	2	1	3	4
31 TO 40	1	0	1	1	2
41 TO 50	0	0	0	0	0
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	2	2	2	2	2
MEDIAN PROBABILITY	0	5	10	10	15
MEAN PROBABILITY	3	6	9	13	14

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 33.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, SECOND QUARTER 1994.

TABLE FOUR

**MEAN PROBABILITY OF CHANGES IN GDP AND PRICES
1993-94 AND 1994-95**

**MEAN PROBABILITY ATTACHED TO POSSIBLE
PERCENT CHANGES IN REAL GDP:**

	1993-94	1994-95
6.0 OR MORE	.81	.42
5.0 TO 5.9	2.59	2.03
4.0 TO 4.9	16.95	9.85
3.0 TO 3.9	56.53	30.85
2.0 TO 2.9	17.45	37.16
1.0 TO 1.9	3.50	13.94
0.0 TO 0.9	1.53	4.16
-1.0 TO -0.1	.38	1.11
-2.0 TO -1.1	.17	.34
LESS THAN -2.0	.08	.13

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

	1993-94	1994-95
8.0 OR MORE	.03	.06
7.0 TO 7.9	.22	.11
6.0 TO 6.9	.28	1.00
5.0 TO 5.9	1.16	2.52
4.0 TO 4.9	3.94	11.19
3.0 TO 3.9	21.28	34.16
2.0 TO 2.9	59.38	41.52
1.0 TO 1.9	12.41	8.19
0.0 TO 0.9	1.28	1.16
WILL DECLINE	.03	.08

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 32.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, SECOND QUARTER 1994.

TABLE FIVE
LONG-TERM (10 YEAR) FORECASTS

SERIES: CPI INFLATION RATE	
STATISTIC	
MINIMUM	2.500
LOWER QUARTILE	3.000
MEDIAN	3.500
UPPER QUARTILE	3.725
MAXIMUM	5.500
MEAN	3.457
STD. DEV.	.566
N	30
MISSING	5

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, SECOND QUARTER 1994.