Survey of
PROFESSIONAL
FORECASTERS

Federal Reserve Bank
of Philadelphia

Release Date: February 22, 2002

FIRST QUARTER 2002

Forecasters See the Economy Poised to Rebound

The U.S. economy will rebound sooner rather than later, according to 35 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The forecasters expect stronger growth over the next three quarters than they projected in the survey of three months ago, but some of that upward revision will come at the expense of slower growth at year's end. In the current quarter, the forecasters expect real GDP to grow at an annual rate of 1.4 percent, slower than the economy's long-run potential rate of growth, but up markedly from their previous forecast of 0.1 percent. Over the middle of the year, growth is expected to accelerate to 2.6 percent in the second quarter and to 3.9 percent in the third quarter, up from 2.4 percent and 3.6 percent, respectively, in the last survey. However, growth in the fourth quarter will slow to 3.2 percent, marking a downward revision from 4.0 percent in the last survey. For the year as a whole, the forecasters expect real GDP to grow at an annual rate of 1.4 percent (on a year-over-year basis), up from 0.8 percent previously. In 2003, the forecasters predict real GDP will grow at an annual rate of 3.5 percent.

Despite some revisions to the timing of growth over the next year, the current projection for the unemployment rate is similar to that of the previous survey. Currently, the forecasters predict the unemployment rate will peak at 6.0 percent in the middle of the year before falling gradually to 5.7 percent in the first quarter of next year. The unemployment rate will average 6.0 percent in 2002, the same rate projected previously, and 5.5 percent in 2003.

Downward revisions to the forecasts for CPI inflation accompany the outlook for output and unemployment. In 2002, the forecasters now predict CPI inflation will average 2.0 percent (on a fourth-quarter over fourth-quarter basis), down a bit from their previous forecast of 2.2 percent. CPI inflation will climb to 2.5 percent in 2003.

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

	Real GDP (%)		*Unemployment Rate (%)*		*CPI Inflation (%)*	
	Previous	*New*	*Previous*	*New*	*Previous*	*New*
Quarterly data:						
2002: Q1	0.1	1.4	5.9	5.8	1.9	1.4
Q2	2.4	2.6	6.0	6.0	2.1	2.0
Q3	3.6	3.9	6.1	6.0	2.2	2.1
Q4	4.0	3.2	5.9	5.9	2.5	2.3
2003: Q1	N.A.	3.4	N.A.	5.7	N.A.	2.4
Annual average data:						
2002	0.8	1.4	6.0	6.0	2.2	2.0
2003	N.A.	3.5	N.A.	5.5	N.A.	2.5

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Short-Term Interest Rates Are Seen Rising at a Slower Pace

An interesting pattern of revisions characterizes the current outlook for interest rates. The forecasters expect the rate on three-month Treasury bills to rise from 1.7 percent in the current quarter to 2.5 percent in the fourth quarter of this year. These forecasts stand below the levels predicted in the last survey. Interestingly, in the last survey, the forecasters also projected that the short rate would rise, but at a much faster pace than they now predict—from 1.8 percent in the current quarter to 3.1 percent in the fourth quarter. For the year as a whole, the rate on three-month Treasury bills will average 2.0 percent, down from a prediction of 2.3 percent in the last survey. In contrast, long-term rates (as measured by the rate on 10-year Treasury bonds) will average 5.2 percent in 2002, an increase over the previous prediction of 4.6 percent, as the following table shows.

	3-Month Rate (%)		*10-Year Rate (%)*	
	Previous	*New*	*Previous*	*New*
Quarterly data:				
2002: Q1	1.8	1.7	4.3	5.0
Q2	2.0	1.8	4.5	5.1
Q3	2.4	2.1	4.7	5.2
Q4	3.1	2.5	5.0	5.3
2003: Q1	N.A.	3.0	N.A.	5.4
Annual average data:				
2002	2.3	2.0	4.6	5.2
2003	N.A.	3.5	N.A.	5.5

Forecasters Cut the Risk of a Negative First Quarter

A reduced chance of a fall in real GDP in the first quarter accompanies the forecasters' upward revision to that quarter's rate of growth. Currently, the forecasters peg the chance that the economy will contract in the first quarter at one in three (33 percent), marking a downward revision from their estimate of about one in two (49 percent) in the last survey, as shown in the table below.

	Risk of a Negative Quarter (%)	
	Previous Survey	*New Survey*
Quarterly data:		
2002: Q1	49	33
Q2	27	29
Q3	18	20
Q4	16	14
2003: Q1	N.A.	13

Little Change in Expectations for Long-Term Inflation
The survey's measure of the expectation for long-term inflation stands at about the same level reported in the previous survey. In the current survey, that expectation (measured by the annual average rate of change in the CPI over the next 10 years) is 2.50 percent, down just slightly from 2.55 percent in the last survey.

Forecasters Ratchet Down Their Estimates for Long-Term Growth
In first-quarter surveys, we ask the forecasters to provide long-term forecasts for an expanded set of economic variables, including growth in real GDP and productivity and returns on financial assets. As the table below shows, the forecasters are reducing their estimates for long-term growth in real GDP and productivity. Currently, the forecasters expect real GDP to grow at an annual rate of 3.00 percent over the next 10 years, down from their estimate of 3.30 percent in the first-quarter survey of 2001. That downward revision reflects a cut in the forecasters' estimate of the long-run rate of growth in productivity (defined as the rate of change in output per hour of labor input), which now stands at 2.10 percent, down from 2.50 percent previously. On the financial asset side, the forecasters estimate that equities (as measured by the S&P 500) will return an annual average 7.00 percent over the next 10 years, down from 7.50 percent previously. Ten-year Treasury bonds are expected to return 5.50 percent, on average, over the next 10 years, and three-month Treasury bills will return 3.75 percent over the same period.

Long-Term (10-year) Forecasts (%)

	First-Quarter 2001 Survey	*Current Survey*
Real GDP Growth	3.30	3.00
Productivity Growth	2.50	2.10
Stock Returns (S&P 500)	7.50	7.00
Bond Returns (10-Year)	5.50	5.50
Bill Returns (3-Month)	4.50	3.75

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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To subscribe to the survey, contact the Publications Desk at (215) 574-6428. This three-page writeup contains partial results of the survey. More detailed tables are available. These tables can be accessed on the Internet at: http://www.phil.frb.org/econ/spf/index.html.

SURVEY OF PROFESSIONAL FORECASTERS
MAJOR MACROECONOMIC INDICATORS, 2002-2003

	2002 Q1	Q2	Q3	Q4	2003 Q1	ANNUAL AVERAGE 2002	ANNUAL AVERAGE 2003
	FORECAST						
PERCENT GROWTH AT ANNUAL RATES							
1. REAL GDP (BILLIONS, CHAIN WEIGHTED)	1.4	2.6	3.9	3.2	3.4	1.4	3.5
2. GDP PRICE INDEX (1996=100)	1.7	1.5	1.6	1.8	2.2	1.4	1.9
3. GROSS DOMESTIC PRODUCT (GDP) ($ BILLIONS)	3.6	4.0	5.3	5.3	5.7	3.0	5.5
4. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	1.4	2.0	2.1	2.3	2.4	2.0	2.5
VARIABLES IN LEVELS							
5. UNEMPLOYMENT RATE (PERCENT)	5.8	6.0	6.0	5.9	5.7	6.0	5.5
6. 3-MONTH TREASURY BILL RATE (PERCENT)	1.7	1.8	2.1	2.5	3.0	2.0	3.5
7. 10-YEAR TREASURY BOND YIELD (PERCENT)	5.0	5.1	5.2	5.3	5.4	5.2	5.5

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2002.

NOTES: THE FIGURES ON EACH LINE ARE MEDIANS OF 35 INDIVIDUAL FORECASTS. NA = NOT APPLICABLE.

SURVEY OF PROFESSIONAL FORECASTERS

First Quarter 2002

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 January 30; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before February 12.

TABLE ONE

MAJOR MACROECONOMIC INDICATORS, 2002-2003
MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORE-CASTERS	ACTUAL 2001 Q4	FORECASTS 2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1	ACTUAL 2001	FORECAST 2002	FORECAST 2003
1. GROSS DOMESTIC PRODUCT (GDP) ($ BILLIONS)	34	10221.6	10311.5	10414.2	10549.0	10686.6	10836.4	10197.7	10502.0	11078.1
2. GDP PRICE INDEX (1996=100)	34	109.74	110.19	110.60	111.04	111.54	112.16	109.36	110.90	113.05
3. CORPORATE PROFITS AFTER TAXES ($ BILLIONS)	21	N.A.	474.0	492.8	511.9	527.3	549.7	N.A.	511.0	576.7
4. UNEMPLOYMENT RATE (PERCENT)	34	5.6	5.8	6.0	6.0	5.9	5.7	4.8	6.0	5.5
5. INDUSTRIAL PRODUCTION (1992=100)	34	137.0	136.8	138.0	139.6	141.5	142.8	140.4	139.2	146.0
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	34	1.57	1.56	1.56	1.57	1.58	1.59	1.60	1.57	1.59
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	33	-0.4	1.4	2.0	2.1	2.3	2.4	1.9	2.0	2.5
8. 3-MONTH TREASURY BILL RATE (PERCENT)	33	1.91	1.70	1.80	2.10	2.45	2.95	3.39	2.03	3.46
9. AAA CORPORATE BOND YIELD (PERCENT)	30	6.92	6.70	6.78	6.74	6.82	6.93	7.08	6.80	6.99
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	34	4.77	5.02	5.11	5.20	5.27	5.40	5.02	5.20	5.52

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2002.

TABLE ONE CONTINUED

MAJOR MACROECONOMIC INDICATORS, 2002-2003
MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORE-CASTERS	ACTUAL 2001 Q4	FORECASTS 2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1	ACTUAL 2001	FORECAST 2002	FORECAST 2003
11. REAL GDP (BILLIONS, CHAIN WEIGHTED)	35	9315.6	9348.6	9409.8	9500.2	9576.2	9655.5	9325.5	9456.4	9785.9
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS, CHAIN WEIGHTED)	33	6528.4	6518.6	6551.2	6601.7	6645.1	6698.3	6447.3	6569.8	6781.3
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	33	1248.4	1231.2	1230.8	1238.0	1258.3	1275.8	1308.8	1243.4	1311.5
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	33	374.2	373.5	374.3	375.0	375.1	378.2	376.5	375.0	383.2
15. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	33	572.5	578.3	585.1	588.6	593.6	598.7	559.7	586.6	605.3
16. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	32	1087.0	1091.1	1095.8	1100.9	1106.6	1111.4	1067.2	1098.5	1121.2
17. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	34	-120.6	-41.8	-3.7	15.1	28.3	35.0	-62.0	-3.5	36.5
18. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	34	-432.6	-440.2	-452.1	-462.0	-467.8	-481.0	-413.7	-455.0	-489.3

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2002.

TABLE TWO

MAJOR MACROECONOMIC INDICATORS, 2002-2003
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE-CASTERS	Q4 2001 TO Q1 2002	Q1 2002 TO Q2 2002	Q2 2002 TO Q3 2002	Q3 2002 TO Q4 2002	Q4 2002 TO Q1 2003	2001 TO 2002	2002 TO 2003
1. GROSS DOMESTIC PRODUCT (GDP) ($ BILLIONS)	34	3.6	4.0	5.3	5.3	5.7	3.0	5.5
2. GDP PRICE INDEX (1996=100)	34	1.7	1.5	1.6	1.8	2.2	1.4	1.9
3. CORPORATE PROFITS AFTER TAXES ($ BILLIONS)	21	5.0	16.8	16.4	12.7	18.1	3.6	12.8
4. UNEMPLOYMENT RATE (PERCENT)	34	0.2	0.2	0.0	-0.1	-0.2	1.2	-0.5
5. INDUSTRIAL PRODUCTION (1992=100)	34	-0.6	3.6	4.9	5.6	3.6	-0.9	4.9
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	34	-2.6	0.5	0.9	3.8	2.4	-2.4	1.9
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	33	1.8	0.6	0.1	0.2	0.1	0.1	0.5
8. 3-MONTH TREASURY BILL RATE (PERCENT)	33	-0.21	0.10	0.30	0.35	0.50	-1.37	1.43
9. AAA CORPORATE BOND YIELD (PERCENT)	30	-0.22	0.08	-0.04	0.09	0.11	-0.28	0.19
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	34	0.25	0.09	0.09	0.07	0.13	0.18	0.32

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, FIRST QUARTER 2002.

TABLE TWO CONTINUED

MAJOR MACROECONOMIC INDICATORS, 2002-2003
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE-CASTERS	Q4 2001 TO Q1 2002	Q1 2002 TO Q2 2002	Q2 2002 TO Q3 2002	Q3 2002 TO Q4 2002	Q4 2002 TO Q1 2003	2001 TO 2002	2002 TO 2003
11. REAL GDP (BILLIONS, CHAIN WEIGHTED)	35	1.4	2.6	3.9	3.2	3.4	1.4	3.5
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS, CHAIN WEIGHTED)	33	-0.6	2.0	3.1	2.7	3.2	1.9	3.2
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	33	-5.4	-0.1	2.4	6.7	5.7	-5.0	5.5
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	33	-0.7	0.9	0.8	0.1	3.4	-0.4	2.2
15. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	33	4.1	4.8	2.4	3.4	3.5	4.8	3.2
16. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	32	1.5	1.8	1.9	2.1	1.8	2.9	2.1
17. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	34	78.8	38.0	18.8	13.1	6.8	58.5	40.0
18. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	34	-7.6	-11.9	-9.9	-5.8	-13.3	-41.3	-34.3

NOTE: FIGURES FOR PRIVATE INVENTORIES AND NET EXPORTS ARE CHANGES IN BILLIONS OF CHAIN-WEIGHTED DOLLARS.
ALL OTHERS ARE PERCENTAGE CHANGES AT ANNUAL RATES.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2002.

TABLE THREE

ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	Q4 2001 TO Q1 2002	Q1 2002 TO Q2 2002	Q2 2002 TO Q3 2002	Q3 2002 TO Q4 2002	Q4 2002 TO Q1 2003
	NUMBER OF FORECASTERS				
10 OR LESS	8	6	10	16	19
11 TO 20	4	7	12	10	7
21 TO 30	4	7	5	4	5
31 TO 40	5	5	3	2	1
41 TO 50	7	4	2	0	0
51 TO 60	0	1	0	0	0
61 TO 70	1	0	0	0	0
71 TO 80	2	2	0	0	0
81 TO 90	1	0	0	0	0
91 AND OVER	0	0	0	0	0
NOT REPORTING	3	3	3	3	3
MEDIAN PROBABILITY	33	30	20	13	10
MEAN PROBABILITY	33	29	20	14	13

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 32.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2002.

TABLE FOUR

MEAN PROBABILITY OF CHANGES IN GDP AND PRICES
2001-2002 AND 2002-2003

MEAN PROBABILITY ATTACHED TO POSSIBLE
PERCENT CHANGES IN REAL GDP:

	2001-2002	2002-2003
6.0 OR MORE	0.17	0.88
5.0 TO 5.9	0.39	2.87
4.0 TO 4.9	1.27	12.97
3.0 TO 3.9	7.88	34.47
2.0 TO 2.9	20.10	27.57
1.0 TO 1.9	36.97	14.57
0.0 TO 0.9	21.38	4.28
-1.0 TO -0.1	8.48	1.21
-2.0 TO -1.1	2.95	0.84
LESS THAN -2.0	0.41	0.36

MEAN PROBABILITY ATTACHED TO POSSIBLE
PERCENT CHANGES IN GDP PRICE INDEX:

	2001-2002	2002-2003
8.0 OR MORE	0.03	0.07
7.0 TO 7.9	0.03	0.20
6.0 TO 6.9	0.07	0.40
5.0 TO 5.9	0.22	0.76
4.0 TO 4.9	1.57	2.80
3.0 TO 3.9	7.07	13.85
2.0 TO 2.9	23.88	39.15
1.0 TO 1.9	50.09	32.54
0.0 TO 0.9	15.22	7.84
WILL DECLINE	1.80	2.38

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 31.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2002.

TABLE FIVE

LONG-TERM (10 YEAR) FORECASTS

SERIES: CPI INFLATION RATE	
STATISTIC	
MINIMUM	1.800
LOWER QUARTILE	2.325
MEDIAN	2.500
UPPER QUARTILE	2.850
MAXIMUM	3.500
MEAN	2.589
STD. DEV.	0.377
N	33
MISSING	2

SERIES: REAL GDP GROWTH RATE	
STATISTIC	
MINIMUM	2.500
LOWER QUARTILE	2.950
MEDIAN	3.000
UPPER QUARTILE	3.225
MAXIMUM	3.800
MEAN	3.074
STD. DEV.	0.334
N	33
MISSING	2

SERIES: PRODUCTIVITY GROWTH	
STATISTIC	
MINIMUM	1.300
LOWER QUARTILE	2.000
MEDIAN	2.100
UPPER QUARTILE	2.600
MAXIMUM	3.500
MEAN	2.226
STD. DEV.	0.479
N	33
MISSING	2

SERIES: STOCK RETURNS (S&P 500)	
STATISTIC	
MINIMUM	3.000
LOWER QUARTILE	6.750
MEDIAN	7.000
UPPER QUARTILE	8.250
MAXIMUM	10.000
MEAN	7.271
STD. DEV.	1.458
N	29
MISSING	6

SERIES: BOND RETURNS (10-YEAR)	
STATISTIC	
MINIMUM	4.500
LOWER QUARTILE	5.000
MEDIAN	5.500
UPPER QUARTILE	6.000
MAXIMUM	7.300
MEAN	5.512
STD. DEV.	0.662
N	33
MISSING	2

SERIES: BILL RETURNS (3-MONTH)	
STATISTIC	
MINIMUM	1.300
LOWER QUARTILE	3.000
MEDIAN	3.750
UPPER QUARTILE	4.425
MAXIMUM	5.500
MEAN	3.716
STD. DEV.	0.870
N	32
MISSING	3

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2002.