Survey of
PROFESSIONAL
FORECASTERS

Federal Reserve Bank
of Philadelphia

Release Date: February 22, 1999

FIRST QUARTER 1999

Forecasters Backtrack on Their Expectations for a First-Half Slowdown; Short-Term Inflation Expectations Continue to Slide

Real GDP will grow at an annual rate of 2.85 percent over the first half of the year, a sharp increase over last quarter's estimate, according to 33 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The forecasters now expect growth at an annual rate of 3.0 percent in the current quarter and 2.7 percent in the second quarter. In last quarter's survey, the forecasters expected substantially slower growth of 1.7 percent in each of the first two quarters of 1999. For the year as a whole, the forecasters expect growth at a rate of 3.2 percent, up noticeably from their previous estimate of 2.1 percent. In 2000, the forecasters expect real GDP to grow at a rate of 2.3 percent, just slightly below their new estimate of the economy's long-run growth potential of 2.5 percent.

Rosier prospects for real GDP are driving downward the forecasts for the nation's unemployment rate. Currently, the forecasters expect that rate to hold steady at 4.4 percent in each of the first two quarters of 1999, down from last survey's estimate of 4.7 percent over each of the same two quarters. Although the forecasters expect a slight uptick in the rate, to 4.5 percent in each of the last two quarters of 1999, these current forecasts remain about 0.35 percentage points below those from the last survey.

The forecasters continue to forecast improvement on the near-term inflation front. Measured by the consumer price index, inflation is expected to average 2.0 percent in 1999, down from 2.3 percent in the previous survey and 2.5 percent in the third-quarter survey. Similar revisions characterize the outlook for inflation, as measured by the GDP chain-weighted price index. The forecasters see this measure averaging 1.2 percent in 1999, down from 1.6 percent previously and 1.9 percent in the third-quarter survey.

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

	Real GDP (%)		*CPI Inflation (%)*		*GDP Inflation (%)*	
	Previous	*New*	*Previous*	*New*	*Previous*	*New*
Quarterly data:						
1999: Q1	1.7	3.0	2.2	1.9	1.6	1.2
Q2	1.7	2.7	2.3	2.0	2.0	1.3
Q3	2.1	1.9	2.4	2.2	1.9	1.7
Q4	2.1	2.4	2.4	2.3	1.9	1.8
2000: Q1	N.A.	2.4	N.A.	2.3	N.A.	1.3
Annual average data:						
1999	2.1	3.2	2.3	2.0	1.6	1.2
2000	N.A.	2.3	N.A.	2.3	N.A.	1.6

Short-Term Interest Rates Are Seen Holding Steady

The forecasters expect short-term interest rates to remain unchanged over the next two years. The current forecast calls for the short-term rate, as measured by the rate on three-month Treasury bills, to hold steady at 4.4 percent over each of the next five quarters. On an annual average basis, the rate is expected to be 4.4 percent through 2000. In contrast, long-term rates, as measured by the rate on 10-year Treasury bonds, are expected to rise slightly over the next five quarters, from 4.8 percent in the current quarter to 5.1 percent in the first quarter of 2000. For the year, the 10-year rate is expected to average 4.9 percent, the same rate expected in last quarter's survey.

Forecasters Cut the Chance Assigned to a Negative Quarter in 1999

A lower chance of a negative quarter in 1999 accompanies the forecasters' outlook for improved growth and inflation prospects. The forecasters are assigning a mere 3 percent chance to a negative current quarter, down from 16 percent in the previous survey. There is a rising chance of a negative quarter throughout the remainder of the year, though these chances remain noticeably below those assigned in last quarter's survey, as the following table shows.

	Risk of a Negative Quarter (%)	
	Previous Survey	*New Survey*
Quarterly data:		
1999: Q1	16	3
Q2	20	8
Q3	21	12
Q4	20	15
2000: Q1	N.A.	27

Further Evidence That Minimal Effects Are Expected From the Year-2000 Conversion

The current survey is the first to include forecasts for the year 2000, and in analyzing the survey responses, we paid particular attention to any evidence that might indicate that the forecasters, on average, are anticipating adverse year-2000 effects. In last quarter's survey, the responses to a special question on the year-2000 conversion problem indicated that, on average, the forecasters expected real GDP growth to be just 0.3 percentage points lower in 2000 as a result of the conversion. In the current survey, the preceding table shows that the chance assigned to a negative quarter rises from 15 percent in the fourth quarter of 1999 to 27 percent in the first quarter of 2000. We investigated this jump by analyzing the individual responses to this question and found that several forecasters are assigning a large chance—around 50 percent—to a decline in first-quarter real GDP because they see a buildup in fourth-quarter 1999 inventories, followed by a big decline in the quarter after. Despite the increased risk that real output will decline in the first quarter of the year 2000, the survey's forecast for real GDP growth is 2.4 percent, so there is little evidence to suggest that the forecasters, on average, are worried about large adverse effects from the year-2000 conversion.

Forecasters Cut Expectations for Long-Term Inflation

The forecasters are cutting their expectation for long-term inflation, as measured by the 10-year average rate of change in the CPI, to 2.3 percent. In last quarter's survey, the forecasters expected long-term inflation to average 2.5 percent. This downward revision of 0.2 percentage points coincides with a planned change in the methodology that the BLS will be using to construct the CPI, starting with the release of January 1999 data. The BLS has announced that the new index-construction methodology—known formally as the geometric mean estimator—is expected to reduce the annual rate of increase in the CPI approximately 0.2 percentage points per year.

Unchanged Expectations for 10-Year Average Real GDP and Productivity Growth

Participants in first-quarter surveys are asked to provide long-term forecasts for an expanded set of variables, including real GDP growth, productivity growth, and returns to equities and bonds. Despite several years of strong growth in real GDP and productivity, the forecasts are virtually unchanged from those in last year's first-quarter survey. The forecasters currently expect real GDP and productivity to grow at annual rates of 2.5 percent and 1.55 percent, respectively, over the next 10 years. Previously, the forecasts called for growth of 2.5 percent for real GDP and 1.5 percent for productivity.

Currently, the forecasters expect equities, as measured by the S&P 500 index, to return 8.0 percent over the next 10 years, down from 9.0 percent in last year's first-quarter survey. Three-month Treasury bills are expected to return 4.5 percent to investors and 10-year Treasury bonds 5.5 percent, both down 0.5 percentage points from previous expectations.

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, Assistant Vice President and Economist, Federal Reserve Bank of Philadelphia,
Ten Independence Mall, Philadelphia, PA 19106 (215) 574-3809 email: dean.croushore@phil.frb.org

To subscribe to the survey, contact the Research Department's 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/spfpage.html.

FEDERAL RESERVE BANK OF PHILADELPHIA

SURVEY OF PROFESSIONAL FORECASTERS
MAJOR MACROECONOMIC INDICATORS, 1999-2000

	1999 Q1	Q2	Q3	Q4	2000 Q1	ANNUAL AVERAGE 1999	ANNUAL AVERAGE 2000
	FORECAST						
PERCENT GROWTH AT ANNUAL RATES							
1. REAL GDP (BILLIONS, CHAIN WEIGHTED)	3.0	2.7	1.9	2.4	2.4	3.2	2.3
2. GDP PRICE INDEX (1992=100)	1.2	1.3	1.7	1.8	1.3	1.2	1.6
3. GROSS DOMESTIC PRODUCT (GDP) ($ BILLIONS)	4.3	4.0	4.0	4.1	4.0	4.5	3.9
4. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	1.9	2.0	2.2	2.3	2.3	2.0	2.3
VARIABLES IN LEVELS							
5. UNEMPLOYMENT RATE (PERCENT)	4.4	4.4	4.5	4.5	4.6	4.5	4.7
6. 3-MONTH TREASURY BILL RATE (PERCENT)	4.4	4.4	4.4	4.4	4.4	4.4	4.4
7. 10-YEAR TREASURY BOND YIELD (PERCENT)	4.8	4.9	4.9	5.1	5.1	4.9	5.2

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1999.

NOTES: THE FIGURES ON EACH LINE ARE MEDIANS OF 33 INDIVIDUAL FORECASTS. NA = NOT APPLICABLE.

SURVEY OF PROFESSIONAL FORECASTERS

First Quarter 1999

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 Feb. 1; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before February 16.

TABLE ONE

MAJOR MACROECONOMIC INDICATORS, 1999-2000
MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORE-CASTERS	ACTUAL 1998 Q4	FORECASTS 1999 Q1	Q2	Q3	Q4	2000 Q1	ACTUAL 1998	FORECAST 1999	FORECAST 2000
1. GROSS DOMESTIC PRODUCT (GDP) ($ BILLIONS)	31	8672.8	8765.0	8850.9	8938.0	9027.8	9115.9	8508.9	8894.0	9244.0
2. GDP PRICE INDEX (1992=100)	33	113.09	113.43	113.80	114.29	114.80	115.18	112.71	114.09	115.88
3. CORPORATE PROFITS AFTER TAXES ($ BILLIONS)	24	N.A.	486.8	485.6	485.3	488.0	485.4	N.A.	487.1	490.0
4. UNEMPLOYMENT RATE (PERCENT)	33	4.4	4.4	4.4	4.5	4.5	4.6	4.5	4.5	4.7
5. INDUSTRIAL PRODUCTION (1992=100)	32	132.6	133.4	134.0	134.8	135.4	136.1	131.5	134.4	137.5
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	32	1.69	1.64	1.60	1.57	1.55	1.53	1.62	1.59	1.50
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	32	1.9	1.9	2.0	2.2	2.3	2.3	1.5	2.0	2.3
8. 3-MONTH TREASURY BILL RATE (PERCENT)	32	4.25	4.39	4.40	4.41	4.39	4.40	4.78	4.39	4.43
9. AAA CORPORATE BOND YIELD (PERCENT)	31	6.33	6.31	6.33	6.36	6.35	6.40	6.53	6.39	6.50
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	29	4.67	4.81	4.91	4.95	5.10	5.10	5.26	4.92	5.20

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1999.

TABLE ONE CONTINUED

MAJOR MACROECONOMIC INDICATORS, 1999-2000
MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORE-CASTERS	ACTUAL 1998 Q4	FORECASTS 1999 Q1	Q2	Q3	Q4	2000 Q1	ACTUAL 1998	FORECAST 1999	FORECAST 2000
11. REAL GDP (BILLIONS, CHAIN WEIGHTED)	33	7670.0	7726.9	7777.9	7815.2	7861.7	7908.5	7549.9	7791.5	7972.8
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS, CHAIN WEIGHTED)	32	5237.8	5283.5	5323.0	5359.8	5396.2	5422.5	5151.2	5341.6	5464.7
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	32	996.5	1016.4	1033.1	1048.7	1061.4	1077.3	961.8	1038.8	1086.0
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	32	324.2	330.0	328.5	328.5	326.5	324.3	312.1	328.3	323.6
15. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	31	461.2	461.2	461.2	461.2	461.2	462.3	453.5	461.2	462.9
16. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	31	851.7	856.3	861.0	865.1	870.3	873.0	844.3	863.4	880.1
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS, CHAIN WEIGHTED)	32	48.9	50.3	50.0	50.0	51.0	37.7	58.5	50.2	37.0
18. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	33	-262.9	-280.0	-291.4	-302.0	-310.0	-306.0	-241.4	-296.0	-300.3

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1999.

TABLE TWO

MAJOR MACROECONOMIC INDICATORS, 1999-2000
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE-CASTERS	Q4 1998 TO Q1 1999	Q1 1999 TO Q2 1999	Q2 1999 TO Q3 1999	Q3 1999 TO Q4 1999	Q4 1999 TO Q1 2000	1998 TO 1999	1999 TO 2000
1. GROSS DOMESTIC PRODUCT (GDP) ($ BILLIONS)	31	4.3	4.0	4.0	4.1	4.0	4.5	3.9
2. GDP PRICE INDEX (1992=100)	33	1.2	1.3	1.7	1.8	1.3	1.2	1.6
3. CORPORATE PROFITS AFTER TAXES ($ BILLIONS)	24	3.7	-1.0	-0.3	2.3	-2.1	1.3	0.6
4. UNEMPLOYMENT RATE (PERCENT)	33	0.0	0.0	0.1	0.0	0.1	0.0	0.2
5. INDUSTRIAL PRODUCTION (1992=100)	32	2.3	2.1	2.3	1.8	2.0	2.2	2.3
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	32	-10.7	-10.1	-7.5	-5.3	-5.8	-1.5	-5.5
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	32	0.0	0.1	0.2	0.0	0.0	0.5	0.3
8. 3-MONTH TREASURY BILL RATE (PERCENT)	32	0.14	0.01	0.01	-0.02	0.01	-0.39	0.04
9. AAA CORPORATE BOND YIELD (PERCENT)	31	-0.02	0.02	0.03	-0.01	0.05	-0.14	0.11
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	29	0.14	0.10	0.04	0.15	0.00	-0.34	0.28

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 1999.

TABLE TWO CONTINUED

MAJOR MACROECONOMIC INDICATORS, 1999-2000
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE-CASTERS	Q4 1998 TO Q1 1999	Q1 1999 TO Q2 1999	Q2 1999 TO Q3 1999	Q3 1999 TO Q4 1999	Q4 1999 TO Q1 2000	1998 TO 1999	1999 TO 2000
11. REAL GDP (BILLIONS, CHAIN WEIGHTED)	33	3.0	2.7	1.9	2.4	2.4	3.2	2.3
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS, CHAIN WEIGHTED)	32	3.5	3.0	2.8	2.7	2.0	3.7	2.3
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	32	8.2	6.7	6.2	4.9	6.1	8.0	4.5
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	32	7.4	-1.8	0.0	-2.5	-2.7	5.2	-1.4
15. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	31	0.0	0.0	0.0	0.0	0.9	1.7	0.4
16. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	31	2.2	2.2	1.9	2.4	1.3	2.3	1.9
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS, CHAIN WEIGHTED)	32	1.3	-0.3	0.0	1.0	-13.3	-8.3	-13.1
18. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	33	-17.1	-11.4	-10.6	-8.0	4.0	-54.6	-4.3

NOTE: FIGURES FOR BUSINESS 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 1999.

TABLE THREE

ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	Q4 1998 TO Q1 1999	Q1 1999 TO Q2 1999	Q2 1999 TO Q3 1999	Q3 1999 TO Q4 1999	Q4 1999 TO Q1 2000
	NUMBER OF FORECASTERS				
10 OR LESS	27	25	17	12	6
11 TO 20	3	4	11	13	8
21 TO 30	0	1	2	3	6
31 TO 40	0	0	0	2	5
41 TO 50	0	0	0	0	3
51 TO 60	0	0	0	0	2
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	0	5	10	15	28
MEAN PROBABILITY	3	8	12	15	27

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 30.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1999.

TABLE FOUR

MEAN PROBABILITY OF CHANGES IN GDP AND PRICES
1998-1999 AND 1999-2000

MEAN PROBABILITY ATTACHED TO POSSIBLE
PERCENT CHANGES IN REAL GDP:

	1998-1999	1999-2000
6.0 OR MORE	0.13	0.14
5.0 TO 5.9	1.23	1.18
4.0 TO 4.9	10.27	4.39
3.0 TO 3.9	38.20	19.36
2.0 TO 2.9	30.33	29.68
1.0 TO 1.9	13.27	24.25
0.0 TO 0.9	4.07	12.86
-1.0 TO -0.1	1.93	5.86
-2.0 TO -1.1	0.40	1.82
LESS THAN -2.0	0.17	0.46

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

	1998-1999	1999-2000
8.0 OR MORE	0.03	0.03
7.0 TO 7.9	0.07	0.07
6.0 TO 6.9	0.10	0.10
5.0 TO 5.9	0.30	0.48
4.0 TO 4.9	0.87	1.93
3.0 TO 3.9	4.13	8.62
2.0 TO 2.9	17.97	28.90
1.0 TO 1.9	51.00	39.69
0.0 TO 0.9	22.93	17.48
WILL DECLINE	2.60	2.69

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 30.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1999.

TABLE FIVE

LONG-TERM (10 YEAR) FORECASTS

SERIES: CPI INFLATION RATE	
STATISTIC	
MINIMUM	1.500
LOWER QUARTILE	2.000
MEDIAN	2.300
UPPER QUARTILE	2.500
MAXIMUM	3.500
MEAN	2.379
STD. DEV.	0.456
N	31
MISSING	2

SERIES: REAL GDP GROWTH RATE	
STATISTIC	
MINIMUM	1.900
LOWER QUARTILE	2.400
MEDIAN	2.500
UPPER QUARTILE	2.800
MAXIMUM	3.500
MEAN	2.624
STD. DEV.	0.344
N	31
MISSING	2

SERIES: PRODUCTIVITY GROWTH	
STATISTIC	
MINIMUM	0.700
LOWER QUARTILE	1.475
MEDIAN	1.550
UPPER QUARTILE	2.000
MAXIMUM	3.500
MEAN	1.665
STD. DEV.	0.527
N	30
MISSING	3

SERIES: STOCK RETURNS (S&P 500)	
STATISTIC	
MINIMUM	2.000
LOWER QUARTILE	7.000
MEDIAN	8.000
UPPER QUARTILE	10.750
MAXIMUM	12.000
MEAN	8.379
STD. DEV.	2.631
N	24
MISSING	9

SERIES: BOND RETURNS (10-YEAR)	
STATISTIC	
MINIMUM	4.900
LOWER QUARTILE	5.000
MEDIAN	5.500
UPPER QUARTILE	5.887
MAXIMUM	7.000
MEAN	5.525
STD. DEV.	0.538
N	28
MISSING	5

SERIES: BILL RETURNS (3-MONTH)	
STATISTIC	
MINIMUM	2.800
LOWER QUARTILE	4.100
MEDIAN	4.500
UPPER QUARTILE	4.900
MAXIMUM	5.000
MEAN	4.376
STD. DEV.	0.561
N	29
MISSING	4

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1999.