

Survey of

PROFESSIONAL FORECASTERS

Federal Reserve Bank
of Philadelphia

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FOURTH QUARTER 1999

Forecasters See Stronger Growth in 2000

The U.S. economy will expand at an annual rate of 3.7 percent in 1999's fourth quarter and at an annual rate of 3.1 percent in 2000, according to 43 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The forecasters see growth slipping a bit in the first quarter of 2000, to 2.3 percent, but rebounding from that rate over the following three quarters. Although the survey's current forecasts for growth in real GDP are stronger than those of the last survey, a direct comparison is somewhat clouded by the BEA's comprehensive revision, in October, of the national income and product accounts (NIPA), which boosted the measurement of average growth in real GDP over the last 20 years.

Anticipating that the forecasts might be affected by the revision, we asked the forecasters to make a qualitative comparison of their current forecast over the next five quarters with that of three months ago. Thirty-eight forecasters answered the question, and 20 (53 percent) said that, on the basis of economic fundamentals, their current outlook is stronger than that of three months ago; three forecasters indicated that their current forecast is weaker; and 15 (39 percent) said their current forecast is about the same as that of three months ago. On average, these results suggest a *slightly stronger* outlook for real growth over the near term. Indeed, the current forecasts for the rate of unemployment, a measure of economic health not directly affected by the October revision, are slightly lower than those of the last survey. The forecasters now predict the unemployment rate will average 4.2 percent in 1999 and 4.3 percent in 2000, down from 4.3 percent and 4.4 percent, respectively, in the last survey.

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

	Real GDP (%)		Unemployment Rate (%)	
	Previous	New	Previous	New
<i>Quarterly data:</i>				
1999: Q4	3.0	3.7	4.3	4.1
2000: Q1	1.9	2.3	4.4	4.2
Q2	2.8	3.0	4.4	4.2
Q3	2.5	3.0	4.4	4.2
Q4	N.A.	3.4	N.A.	4.3
<i>Annual average data:</i>				
1999	3.8	3.8	4.3	4.2
2000	2.6	3.1	4.4	4.3

Forecasters Raise Long-Run Growth Estimate in Light of NIPA Revision

In response to a special question about the effect of the NIPA revision on their estimates of long-run growth, 37 forecasters indicated that they are boosting such estimates—but by a small amount. Prior to the revision, the forecasters estimated long-run growth at an annual rate of 2.88 percent. This estimate was revised upward, to 3.10 percent, after the revision, indicating that the forecasters are boosting their estimate of long-run growth by about 0.2 percentage points.

Short-Term Expectations for Inflation Remain Contained

The forecasters expect that inflation, as measured by the Consumer Price Index on a fourth-quarter-over-fourth-quarter basis, will average 2.50 percent in 1999 and 2000. These forecasts are a bit higher than those of the last survey: Previously, the forecasters expected CPI inflation to average 2.30 percent in 1999 and 2.40 percent in 2000. Measured by the GDP price index on a year-over-year basis, inflation is expected to average 1.40 percent in 1999, unchanged from the previous survey's estimate, and 1.70 percent in 2000, down 0.1 percentage points from the previous survey. Since the October NIPA revision affected the GDP price index, we asked the forecasters to make a qualitative comparison between their current short-term forecast for GDP inflation and their forecast of three months ago. Twenty-two (58 percent) forecasters indicated that the threat of higher near-term inflation is about the same now as it was in the last survey, while roughly equal numbers indicated that the threat is higher (9 forecasters) or lower (7 forecasters). On balance, the October revision seems not to have had a big effect on the forecasters' prediction for near-term GDP inflation.

Long-Term Expectations for Inflation Are Steady

Long-term expectations for inflation, as measured by the 10-year average rate of change in the CPI, are holding steady at 2.50 percent, the same rate expected in each of the last two surveys. The middle range of forecasts is 2.20 percent to 2.50 percent.

Lower Risk of a Negative Quarter Is Seen

The forecasters are cutting the chances assigned to a negative quarter in each of the next four quarters compared with the chances assigned previously. The forecasters see a 2 percent chance of a negative current quarter, down from 7 percent in the previous survey. Notably, the chance of a negative first quarter in 2000 has fallen from 25 percent in the previous survey to 18 percent in this survey, as the following table shows.

Risk of a Negative Quarter (%)

	<i>Previous Survey</i>	<i>New Survey</i>
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Quarterly data:

1999: Q4	7	2
2000: Q1	25	18
Q2	18	14
Q3	17	14
Q4	N.A.	16

The Federal Reserve Bank of Philadelphia thanks the following forecasters for their participation in this survey over the past year:

Maureen Allyn, Scudder Kemper Investments; **Robert Barr** and **David Berson**, Fannie Mae; **Jason Benderly**, Benderly Economics, Inc.; **Brian A. Bethune**, Caterpillar, Inc.; **David M. Blitzer**, Ph.D., Standard & Poor's; **Joel Brest** and **Brian O'Connor**, Marketview Publishing Corp.; **Robert Chandross**, Republic National Bank of New York; **Chase Securities, Inc.**; **William Cheney** and **Michael Fenollosa**, John Hancock Life Insurance Co.; **Gary L. Ciminero**, Independent Economic Advisory; **Michael Cosgrove**, The Econoclast; **Louis Crandall**, Wrightson Associates; **William C. Dudley** and **Edward F. McKelvey**, Goldman Sachs; **Michael R. Englund**, Standard & Poor's MMS; **Brian Fabbri**, Paribas; **Gerard F. Fuda**, Independent Economist; **James M. Goldberg**, Trust Company of the West; **Tracy Herrick**, Jefferies & Co., Inc.; **Andrew Hodge** and **Kurt E. Karl**, Primark-WEFA; **William B. Hummer**, Wayne Hummer Investments, LLC.; **Saul Hymans**, **Joan Crary**, and **Janet Wolfe**, RSQE, The University of Michigan; **Frederick L. Joutz**, Benchmark Forecasts and George Washington University; **Dr. Irwin Kellner**, Hofstra University & CBS MarketWatch; **Allan R. Leslie**, Economic Consultant; **John Lonski**, Moody's Investors Service; **Macroeconomic Advisers, LLC**; **John J. McAuley**, Wilkinson Boyd Capital Markets, Inc.; **James P. Meil**, Eaton Corporation; **Joel L. Naroff**, Naroff Economic Advisors; **Michael P. Niemira**, Bank of Tokyo-Mitsubishi, Ltd.; **Elliott Platt**, Donaldson, Lufkin & Jenrette; **Fred Rafeld**, Ashland University; **Donald Ratajczak**, Georgia State University; **Dick Rippe**, Prudential Securities; **Timothy E. Rogers**, Thomson Global Markets; **Donna M. Scheck**, Honeywell, Inc.; **David F. Seiders** and **Stanley F. Duobinis**, National Association of Home Builders; **Dr. Constantine Soras**, Bell Atlantic; **Bruce Steinberg**, Merrill Lynch; **Lea Tyler**, Oxford Economics USA, Inc.; **Robert O. Welk**, RowTek Economics; **Albert M. Wojnilower**, Monitor-Clipper Partners; **Jay N. Woodworth**, Woodworth Holdings, Ltd.; **Richard Yamarone**, Argus Research Corp.; **Mark Zandi**, RFA.

This is a partial list of participants. We also thank those who wish to remain anonymous.

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 Research Department's Publications Desk at (215) 574-6428. This 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/page.asp?page=profforecasting>.

**SURVEY OF PROFESSIONAL FORECASTERS
MAJOR MACROECONOMIC INDICATORS, 1999-2000**

	1999				2000				FORECAST				ANNUAL AVERAGE	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	1999	2000	1999	2000	
PERCENT GROWTH AT ANNUAL RATES														
1. REAL GDP (BILLIONS, CHAIN WEIGHTED)	3.7	2.3	3.0	3.0	3.4	3.4	3.0	3.0	3.4	3.8	3.1	3.1	3.1	
2. GDP PRICE INDEX (1996=100)	1.6	1.8	1.7	1.7	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.7	1.7	
3. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	5.5	4.2	4.7	5.5	4.9	4.9	5.5	5.5	4.9	5.3	4.9	4.9	4.9	
4. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	2.5	2.5	2.5	2.5	2.6	2.6	2.5	2.5	2.6	2.5	2.5	2.5	2.5	
VARIABLES IN LEVELS														
5. UNEMPLOYMENT RATE (PERCENT)	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.3	4.2	4.2	4.3	4.3	
6. 3-MONTH TREASURY BILL RATE (PERCENT)	4.9	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	
7. 10-YEAR TREASURY BOND YIELD (PERCENT)	6.0	6.0	6.1	6.1	6.2	6.2	6.2	6.2	6.2	5.6	5.6	6.1	6.1	

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

NOTES : THE FIGURES ON EACH LINE ARE MEDIANS OF 43 INDIVIDUAL FORECASTS. NA = NOT APPLICABLE.

SURVEY OF PROFESSIONAL FORECASTERS

Fourth 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 Oct. 29; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before November 13.

TABLE ONE

MAJOR MACROECONOMIC INDICATORS, 1999-2000 MEDIAN OF FORECASTER PREDICTIONS									
	NUMBER OF FORE- CASTERS	ACTUAL 1999 Q3	1999 Q4	FORECASTS 2000			ACTUAL 1998 Q4	FORECAST 1999 Q3	FORECAST 2000
				Q1	Q2	Q3			
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	35	9276.3	9401.3	9498.5	9609.0	9739.0	9857.2	8759.9	9222.7
2. GDP PRICE INDEX (1996=100)	39	104.38	104.80	105.26	105.71	106.20	106.70	102.86	104.30
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	24	N.A.	590.0	598.3	604.8	609.4	612.0	541.7	581.5
4. UNEMPLOYMENT RATE (PERCENT)	42	4.2	4.1	4.2	4.2	4.2	4.3	4.5	4.2
5. INDUSTRIAL PRODUCTION (1992=100)	34	135.2	136.3	137.0	138.0	138.6	139.7	131.4	134.6
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	37	1.66	1.60	1.58	1.55	1.55	1.54	1.62	1.66
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	40	2.6	2.5	2.5	2.5	2.5	2.6	1.5	2.5
8. 3-MONTH TREASURY BILL RATE (PERCENT)	37	4.65	4.90	5.05	5.08	5.10	5.12	4.78	4.62
9. AAA CORPORATE BOND YIELD (PERCENT)	32	7.33	7.40	7.39	7.38	7.36	7.38	6.53	7.02
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	35	5.88	6.00	6.02	6.10	6.15	6.15	5.26	5.60

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

TABLE ONE CONTINUED

**MAJOR MACROECONOMIC INDICATORS, 1999-2000
MEDIANS OF FORECASTER PREDICTIONS**

	NUMBER OF FORE- CASTERS	ACTUAL 1999 Q3	1999 Q4	FORECASTS 2000			ACTUAL 1998	FORECAST 1999	FORECAST 2000
				Q1	Q2	Q3			
11. REAL GDP (BILLIONS, CHAIN WEIGHTED)	43	8882.6	8964.5	9014.6	9082.5	9148.9	9225.5	8516.3	8840.0
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS, CHAIN WEIGHTED)	35	6025.1	6074.2	6114.3	6158.6	6206.4	6250.2	5698.6	5989.2
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	35	1245.4	1265.0	1285.2	1307.0	1328.4	1349.0	1122.5	1224.6
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	34	372.7	369.5	366.6	363.5	363.8	364.0	350.2	373.7
15. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	32	538.3	540.0	541.0	542.2	544.0	545.0	526.1	536.0
16. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	32	993.4	998.9	1005.3	1011.3	1017.3	1022.6	953.9	990.1
17. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	35	28.1	48.8	32.2	35.0	37.0	35.0	74.3	36.0
18. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	35	-343.0	-350.0	-357.0	-361.5	-359.2	-353.4	-215.1	-324.1
								-359.4	

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

TABLE TWO

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

	NUMBER OF FORE- CASTERS	Q3 1999 TO Q4 1999	Q4 1999 TO Q1 2000	Q1 2000 TO Q2 2000	Q2 2000 TO Q3 2000	Q3 2000 TO Q4 2000	Q4 2000 TO 1999	1998 TO 1999	1999 TO 2000
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	35	5.5	4.2	4.7	5.5	4.9	5.3	4.9	
2. GDP PRICE INDEX (1996=100)	39	1.6	1.8	1.7	1.9	1.9	1.4	1.7	
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	24	1.2	5.8	4.4	3.0	1.7	7.3	4.4	
4. UNEMPLOYMENT RATE (PERCENT)	42	-0.1	0.1	0.0	0.0	0.1	-0.3	0.1	
5. INDUSTRIAL PRODUCTION (1992=100)	34	3.2	2.1	3.0	1.8	3.2	2.4	2.9	
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	37	-13.1	-6.1	-6.2	0.0	-3.6	2.7	-6.7	
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	40	0.0	0.0	0.0	0.0	0.1	1.0	0.0	
8. 3-MONTH TREASURY BILL RATE (PERCENT)	37	0.25	0.15	0.03	0.02	0.02	-0.16	0.48	
9. AAA CORPORATE BOND YIELD (PERCENT)	32	0.07	-0.01	-0.02	-0.02	0.02	0.49	0.30	
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	35	0.12	0.02	0.08	0.05	0.00	0.34	0.50	

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 1999.

TABLE TWO CONTINUED

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

NUMBER OF FORE- CASTERS	Q3 TO 1999	Q4 TO 1999	Q1 TO 2000	Q2 TO 2000	Q3 TO 2000	1998 TO 1999
	Q4 1999	Q1 2000	Q2 2000	Q3 2000	Q4 2000	1999 TO 2000
11. REAL GDP (BILLIONS, CHAIN WEIGHTED)	43	3.7	2.3	3.0	3.0	3.8
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS, CHAIN WEIGHTED)	35	3.3	2.7	2.9	3.1	3.1
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	35	6.4	6.5	7.0	6.7	5.1
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	34	-3.4	-3.1	-3.4	0.4	3.2
15. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	32	1.2	0.8	0.9	1.3	7.4
16. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	32	2.2	2.6	2.4	2.1	-2.4
17. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	35	20.7	-16.6	2.8	2.0	3.8
18. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	35	-7.0	-7.0	-4.5	2.3	-3.0
					5.8	-109.0
						-35.3

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, FOURTH QUARTER 1999.

TABLE THREE
ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	NUMBER OF FORECASTERS			
	Q3 1999 TO Q4 1999	Q4 1999 TO Q1 2000	Q1 2000 TO Q2 2000	Q2 2000 TO Q3 2000
10 OR LESS	37	18	22	17
11 TO 20	1	3	8	14
21 TO 30	0	10	5	5
31 TO 40	0	4	3	2
41 TO 50	0	3	0	0
51 TO 60	0	0	0	0
61 TO 70	0	0	0	0
71 TO 80	0	0	0	0
81 TO 90	0	0	0	0
91 AND OVER	0	0	0	0
NOT REPORTING	5	5	5	5
MEDIAN PROBABILITY	0	16	10	13
MEAN PROBABILITY	2	18	14	16

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 38.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH 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	0.06	0.17
5.0 TO 5.9	0.72	1.24
4.0 TO 4.9	22.37	11.55
3.0 TO 3.9	72.27	36.44
2.0 TO 2.9	4.27	35.84
1.0 TO 1.9	0.28	10.74
0.0 TO 0.9	0.01	2.35
-1.0 TO -0.1	0.01	1.26
-2.0 TO -1.1	0.01	0.22
LESS THAN -2.0	0.19	0.19

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

	1998-1999	1999-2000
8.0 OR MORE	0.01	0.03
7.0 TO 7.9	0.01	0.03
6.0 TO 6.9	0.01	0.03
5.0 TO 5.9	0.01	0.11
4.0 TO 4.9	0.01	1.40
3.0 TO 3.9	0.74	8.63
2.0 TO 2.9	10.88	28.87
1.0 TO 1.9	82.00	52.68
0.0 TO 0.9	6.34	7.68
WILL DECLINE	0.01	0.53

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 38.

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

TABLE FIVE
LONG-TERM (10 YEAR) FORECASTS

SERIES: CPI INFLATION RATE	
STATISTIC	
MINIMUM	1.200
LOWER QUARTILE	2.200
MEDIAN	2.500
UPPER QUARTILE	2.500
MAXIMUM	3.500
MEAN	2.405
STD. DEV.	0.410
N	40
MISSING	3

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