

Survey of

PROFESSIONAL F O R E C A S T E R S

Federal Reserve Bank
of Philadelphia

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FOURTH QUARTER 1998

Forecasters Expect a First-Half Slowdown Accompanied by Gains on the Short-Term Inflation Front

A slowdown in the growth of U.S. real GDP over the first half of 1999 is in the cards, according to 33 forecasters surveyed by the Federal Reserve Bank of Philadelphia. On the heels of an expectation that real GDP will grow at an annual rate of 2.4 percent in the current quarter, the forecasters expect growth to decelerate to 1.7 percent in each of the first two quarters of 1999. This represents a sizable downward revision to their expectations in the last survey, in which the forecasters expected growth of 2.3 percent and 2.1 percent, respectively, over the same periods. The forecasters expect growth to rebound to 2.1 percent in each of the last two quarters of 1999, and, for the year as a whole, real GDP is expected to expand at a rate of 2.1 percent, down from 2.3 percent previously.

Sizable revisions to the short-term inflation outlook accompany the GDP projections. The forecasters have cut their estimate of inflation, as measured by the CPI, for the current quarter from 2.4 percent in the last survey to 1.9 percent in the present survey. Over the four quarters of 1999, CPI inflation will average 2.3 percent, down from 2.5 percent in last quarter's survey. Similar revisions characterize the outlook for a broader measure of inflation, based on the GDP price index. Measured by this index, current-quarter inflation is expected to average 1.4 percent, down from the previous expectation of 1.7 percent. The forecasters expect GDP inflation to average 1.6 percent in 1999. This represents a downward revision of 0.3 percentage points from the forecasters' prior expectation of 1.9 percent.

The forecasters expect the rate of unemployment to average 0.1 percentage points higher over the next few quarters than they expected previously. In the current quarter, the forecasters expect the unemployment rate to be 4.6 percent, up from 4.5 percent previously; over 1999, they expect the rate to average 4.8 percent, up from 4.7 percent in the last 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
<i>Quarterly data:</i>						
1998: Q4	3.1	2.4	2.4	1.9	1.7	1.4
1999: Q1	2.3	1.7	2.5	2.2	1.9	1.6
Q2	2.1	1.7	2.5	2.3	2.2	2.0
Q3	2.5	2.1	2.5	2.4	2.3	1.9
Q4	N.A.	2.1	N.A.	2.4	N.A.	1.9
<i>Annual average data:</i>						
1998	3.4	3.6	1.7	1.6	1.1	1.0
1999	2.3	2.1	2.5	2.3	1.9	1.6

Forecasters Cut the Risk of a Negative Current Quarter

The forecasters are assigning only a 6 percent chance to the possibility that current-quarter growth in real GDP will be negative. This represents a reduction of 7 percentage points from the rate they assigned in last quarter's survey. As the following table shows, the risk of a negative quarter rises over the following three quarters, to 21 percent in the third quarter, but these risks are about the same as those assigned in the previous survey.

<i>Risk of a Negative Quarter (%)</i>			
	<i>Previous Survey</i>	<i>New Survey</i>	
<i>Quarterly data:</i>			
1998: Q4	13	6	
1999: Q1	18	16	
Q2	19	20	
Q3	19	21	
Q4	N.A.	20	

Unchanged Long-Term Expectations for Inflation

Despite the revisions incorporated into the current outlook for GDP and near-term inflation, the forecasters see little reason to change their long-term expectations for inflation, as measured by the average rate of growth in the CPI over the next 10 years. The forecasters expect that rate to average 2.50 percent, the same rate expected in each of the last two surveys.

New Paths for Interest Rates Are Expected

The forecasters are incorporating into their current projections heavily revised expectations for interest rates over the next five quarters. Short-term rates, as measured by the rate on three-month Treasury bills, are expected to average 4.3 percent in the current quarter, down markedly from 5.0 percent in the previous survey. The short rate is expected to decline to 4.1 percent in 1999's second quarter before bouncing back to 4.2 percent in the third quarter, where it is expected to hold steady through the remainder of the year. Previously, the forecasters expected the short-term rate to rise gradually over the same period. For 1999 as a whole, the forecasters expect short-term rates to average 4.2 percent, down substantially from their previous expectation of 5.1 percent.

Likewise, the forecasters see long-term rates over the next five quarters at levels much lower than those expected in the last survey. Currently, the rate on 10-year Treasury bonds is expected to average 5.3 percent in 1998 and to fall to 4.9 percent in 1999. Previously, the forecasters thought the long rate would average 5.6 percent in 1998 and rise to 5.8 percent in 1999.

The following table compares interest rate forecasts in the current survey with those from three months ago.

	<i>3-Month Rate (%)</i>		<i>10-Year Rate (%)</i>	
	<i>Previous</i>	<i>New</i>	<i>Previous</i>	<i>New</i>
<i>Quarterly data:</i>				
1998: Q4	5.0	4.3	5.6	4.7
1999: Q1	5.1	4.2	5.7	4.7
Q2	5.1	4.1	5.7	4.8
Q3	5.2	4.2	5.8	4.9
Q4	N.A.	4.2	N.A.	5.1
<i>Annual average data:</i>				
1998	5.0	4.8	5.6	5.3
1999	5.1	4.2	5.8	4.9

Only Minor Effects Are Expected from the Year-2000 Conversion

In response to a question about the macroeconomic effect on growth in 1999 and 2000 of the year-2000 conversion problem, 29 of 33 forecasters indicated that they expect such an effect. For 1999, although the range of responses varied from -1.0 to 0.5 percentage points, the average response was just 0.1 percentage points, indicating that, on average, the forecasters expect real GDP growth to be a mere 0.1 percentage points higher in 1999 as a result of the year-2000 conversion. For real GDP growth in 2000, the responses varied from -1.0 to 0.4 percentage points, and the average response was -0.3 percentage points, indicating that the forecasters expect real GDP growth to be 0.3 percentage points lower in 2000 as a result of the conversion.

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>.

SURVEY OF PROFESSIONAL FORECASTERS
MAJOR MACROECONOMIC INDICATORS, 1998-99

	1998 Q4	1999 Q1	Q2	Q3	Q4	FORECAST	1998	1999 ANNUAL AVERAGE
PERCENT GROWTH AT ANNUAL RATES								
1. REAL GDP (BILLIONS, CHAIN WEIGHTED)	2.4	1.7	1.7	2.1	2.1	2.1	3.6	2.1
2. GDP PRICE INDEX (1992=100)	1.4	1.6	2.0	1.9	1.9	1.0	1.0	1.6
3. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	3.9	3.8	3.4	3.9	3.9	4.7	4.7	3.8
4. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	1.9	2.2	2.3	2.4	2.4	1.6	1.6	2.3
VARIABLES IN LEVELS								
5. UNEMPLOYMENT RATE (PERCENT)	4.6	4.7	4.7	4.8	4.9	4.9	4.5	4.8
6. 3-MONTH TREASURY BILL RATE (PERCENT)	4.3	4.2	4.1	4.2	4.2	4.2	4.8	4.2
7. 10-YEAR TREASURY BOND YIELD (PERCENT)	4.7	4.7	4.8	4.9	5.1	5.3	4.9	

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1998.

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

SURVEY OF PROFESSIONAL FORECASTERS

Fourth Quarter 1998

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 Nov. 2; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before November 14.

TABLE ONE

**MAJOR MACROECONOMIC INDICATORS, 1998-99
MEDIAN OF FORECASTER PREDICTIONS**

	NUMBER OF FORE- CASTERS	ACTUAL 1998 Q3	1998 Q4	FORECASTS 1999				ACTUAL 1997	FORECAST 1998	FORECAST 1999
				Q1	Q2	Q3	Q4			
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	31	8526.5	8609.1	8689.8	8762.0	8846.0	8931.2	8110.9	8489.8	8813.8
2. GDP PRICE INDEX (1992=100)	32	112.80	113.20	113.66	114.22	114.75	115.29	111.57	112.70	114.54
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	25	N.A.	487.0	488.0	487.3	489.0	493.0	488.3	483.0	486.8
4. UNEMPLOYMENT RATE (PERCENT)	33	4.5	4.6	4.7	4.7	4.8	4.9	5.0	4.5	4.8
5. INDUSTRIAL PRODUCTION (1987=100)	31	128.2	128.9	129.5	129.9	130.7	131.2	124.4	128.3	130.5
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	31	1.63	1.58	1.51	1.50	1.48	1.46	1.47	1.59	1.48
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	33	1.8	1.9	2.2	2.3	2.4	2.4	1.9	1.6	2.3
8. 3-MONTH TREASURY BILL RATE (PERCENT)	32	4.82	4.27	4.20	4.11	4.20	4.16	5.06	4.79	4.16
9. AAA CORPORATE BOND YIELD (PERCENT)	30	6.49	6.27	6.20	6.06	6.10	6.26	7.26	6.53	6.13
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	29	5.20	4.70	4.74	4.75	4.95	5.10	6.35	5.28	4.90

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1998.

TABLE ONE CONTINUED

MAJOR MACROECONOMIC INDICATORS, 1998-99
MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORE- CASTERS	ACTUAL 1998	FORECASTS 1999				ACTUAL 1997	FORECAST 1998	FORECAST 1999
			Q4	Q1	Q2	Q3			
11. REAL GDP (BILLIONS, CHAIN WEIGHTED)	33	7559.5	7605.3	7637.0	7668.9	7708.2	7747.6	7269.8	7531.5
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS, CHAIN WEIGHTED)	33	5179.3	5223.0	5251.6	5278.7	5307.8	5341.9	4913.5	5146.9
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	33	958.1	975.9	985.9	1000.8	1010.9	1025.4	859.4	957.0
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	32	314.3	317.2	316.7	315.7	313.1	312.8	282.8	309.6
15. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	30	452.1	452.3	452.0	452.1	452.4	452.6	458.0	451.0
16. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	30	847.5	851.8	856.4	860.6	865.1	868.8	827.1	844.4
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS, CHAIN WEIGHTED)	33	57.2	48.0	45.0	40.0	40.0	37.0	63.2	58.7
18. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	32	-262.5	-274.9	-291.0	-299.4	-305.1	-300.9	-136.1	-245.6
								-299.0	

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1998.

TABLE TWO

**MAJOR MACROECONOMIC INDICATORS, 1998-99
PERCENTAGE CHANGES AT ANNUAL RATES**

	NUMBER OF FORE- CASTERS	Q3 98	Q4 TO 98	Q1 TO 99	Q2 TO 99	Q3 TO 99	Q4 TO 99	Q3 99	Q4 99	1997	1998
		Q4 98	Q1 99	Q2 99	Q3 99	Q4 99	Q4 99	Q4 99	Q4 99	TO 1998	TO 1999
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	31	3.9	3.8	3.4	3.9	3.9	4.7	4.7	4.7	3.8	
2. GDP PRICE INDEX (1992=100)	32	1.4	1.6	2.0	1.9	1.9	1.0	1.0	1.0	1.6	
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	25	6.0	.8	-.6	1.4	3.3	-1.1	-1.1	-1.1	.8	
4. UNEMPLOYMENT RATE (PERCENT)	33	.1	.1	.0	.1	.1	-.5	-.5	-.5	.3	
5. INDUSTRIAL PRODUCTION (1987=100)	31	2.2	1.9	1.1	2.6	1.5	3.1	3.1	3.1	1.7	
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	31	-12.1	-16.6	-2.6	-6.5	-2.9	7.8	7.8	7.8	-6.9	
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	33	.1	.3	.1	.1	.0	-.3	-.3	-.3	.7	
8. 3-MONTH TREASURY BILL RATE (PERCENT)	32	-.55	-.07	-.09	.09	-.04	-.27	-.27	-.27	-.63	
9. AAA CORPORATE BOND YIELD (PERCENT)	30	-.22	-.07	-.14	-.04	.16	-.73	-.73	-.73	-.40	
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	29	-.50	.04	.01	.20	.15	-1.07	-1.07	-1.07	-.38	

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 1998.

TABLE TWO CONTINUED

MAJOR MACROECONOMIC INDICATORS, 1998-99
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE- CASTERS	Q3 98	Q4 98	Q1 99	Q2 99	Q3 99	Q4 99	1997 TO 1998	1998 TO 1999
11. REAL GDP (BILLIONS, CHAIN WEIGHTED)	33	2.4	1.7	1.7	2.1	2.1	3.6	2.1	
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS, CHAIN WEIGHTED)	33	3.4	2.2	2.1	2.2	2.6	4.8	2.9	
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	33	7.6	4.2	6.2	4.1	5.8	11.4	5.3	
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	32	3.7	-.6	-1.3	-3.3	-.3	9.5	1.4	
15. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	30	.1	-.2	-.0	.3	.2	-1.5	.2	
16. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	30	2.0	2.2	2.0	2.1	1.7	2.1	2.2	
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS, CHAIN WEIGHTED)	33	-9.2	-3.0	-5.0	.0	-3.0	-4.5	-16.7	
18. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	32	-12.4	-16.1	-8.4	-3.7	2.3	-109.5	-53.3	

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, FOURTH QUARTER 1998.

TABLE THREE
ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	NUMBER OF FORECASTERS									
	Q3 TO Q4	98 TO 98	Q4 TO Q1	98 TO 99	Q1 TO Q2	99 TO 99	Q2 TO Q3	99 TO 99	Q3 TO Q4	99 TO 99
10 OR LESS	24	15	10	10	10	10	10	10	10	10
11 TO 20	4	5	9	10	8					
21 TO 30	1	6	5	5	3	7				
31 TO 40	0	2	3	4	2					
41 TO 50	0	1	1	1	1	2				
51 TO 60	0	0	1	1	1	0				
61 TO 70	0	0	0	0	0	0				
71 TO 80	0	0	0	0	0	0				
81 TO 90	0	0	0	0	0	0				
91 AND OVER	0	0	0	0	0	0				
NOT REPORTING	4	4	4	4	4	4				
MEDIAN PROBABILITY	5	10	20	20	20	20				
MEAN PROBABILITY	6	16	20	21	20	20				

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 29.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1998.

TABLE FOUR

**MEAN PROBABILITY OF CHANGES IN GDP AND PRICES
1997-98 AND 1998-99**

		1997-98	1998-99
6.0 OR MORE		.07	.11
5.0 TO 5.9		.50	.29
4.0 TO 4.9		.04	1.61
3.0 TO 3.9		.82	13.65
2.0 TO 2.9		.92	34.98
1.0 TO 1.9		1.68	30.62
0.0 TO 0.9		.21	11.68
-1.0 TO -0.1		.14	5.82
-2.0 TO -1.1		.07	.96
LESS THAN -2.0		.04	.29

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

		1997-98	1998-99
8.0 OR MORE		.07	.07
7.0 TO 7.9		.11	.11
6.0 TO 6.9		.15	.14
5.0 TO 5.9		.19	.25
4.0 TO 4.9		.22	1.21
3.0 TO 3.9		.20	8.96
2.0 TO 2.9		.578	20.00
1.0 TO 1.9		.6170	49.54
0.0 TO 0.9		.2852	17.89
WILL DECLINE		1.26	1.82

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 28.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1998.

TABLE FIVE

LONG-TERM (10 YEAR) FORECASTS

SERIES: CPI INFLATION RATE	
STATISTIC	
MINIMUM	2.000
LOWER QUARTILE	2.175
MEDIAN	2.500
UPPER QUARTILE	2.900
MAXIMUM	3.500
MEAN	2.530
STD. DEV.	.420
N	30
MISSING	3

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FOURTH QUARTER 1998.