

Survey of

PROFESSIONAL FORECASTERS

Federal Reserve Bank
of Philadelphia

Release Date: August 26, 1997

THIRD QUARTER 1997

Forecasters Expect Stronger Near-Term Real GDP Growth, Lower Inflation, and a Lower Unemployment Rate

The outlook for real GDP growth over the third and fourth quarters looks stronger now than it did just three months ago, according to 37 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The forecasters now expect real GDP to grow at an annual rate of 2.7 percent over the second-half of the year, up from their earlier estimate of 2.4 percent. Growth will average 2.6 percent in the third quarter and 2.8 percent in the fourth quarter. On a year-over-year basis, the forecasters expect real GDP to grow at a rate of 3.4 percent in 1997 and 2.5 percent in 1998. Previously, the forecasters expected growth of 3.6 percent in 1997 and 2.1 percent in 1998.

The forecasters expect a lower inflation rate to accompany the improved growth prospects. Inflation, as measured by the Consumer Price Index, will average 2.2 percent in the third quarter, down sharply from the previous forecast of 2.8 percent. CPI inflation will average 2.3 percent in 1997 and 2.8 percent in 1998, down from 2.7 percent and 3.0 percent, respectively, in the last survey. Measured by the rate of change in the GDP chain-weighted price index, inflation is expected to average 2.0 percent in the third quarter, down from 2.4 percent in the previous survey, and 2.1 percent for the year.

The forecasters are revising downward their expectations for the unemployment rate. They now expect the unemployment rate to average 4.8 percent in the third quarter, down from 5.1 percent in the previous survey. The forecasters see the unemployment rate rising to 5.0 percent in the first quarter of 1998 and holding steady at that level over the remainder of the year. The unemployment rate is expected to average 5.0 percent in 1997 and 1998, down from 5.1 percent and 5.3 percent in 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		GDP Price Index Inflation	
	Previous	New	Previous	New	Previous	New
<i>Quarterly data:</i>						
1997: Q3	2.5	2.6	2.8	2.2	2.4	2.0
Q4	2.3	2.8	3.0	2.8	2.6	2.4
1998: Q1	2.1	2.6	3.1	2.7	2.4	2.4
Q2	1.9	2.4	3.1	3.0	2.3	2.5
Q3	N.A.	2.0	N.A.	2.9	N.A.	2.5
<i>Annual average data:</i>						
1997	3.6	3.4	2.7	2.3	2.3	2.1
1998	2.1	2.5	3.0	2.8	2.5	2.5

Forecasters Are Revising Downward Their Expectations of Short- and Long-Term Interest Rates

As the following table shows, the forecasters now expect the rate on three-month Treasury bills to average 5.1 percent in 1997 and 5.2 percent in 1998, down from 5.3 percent in the previous survey. Long-term rates, as measured by the rate on 10-year Treasury bonds, will average 6.5 percent in 1997, down from 6.8 percent in the previous survey, and 6.4 percent in 1998, down from 6.6 percent.

<i>Short- and Long-Term Interest Rate Forecasts</i>				
	<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>				
1997: Q3	5.5	5.1	6.8	6.4
Q4	5.5	5.3	6.8	6.5
1998: Q1	5.5	5.4	6.8	6.5
Q2	5.4	5.3	6.7	6.5
Q3	N.A.	5.2	N.A.	6.4
<i>Annual average data:</i>				
1997	5.3	5.1	6.8	6.5
1998	5.3	5.2	6.6	6.4

Risk of a Negative Quarter Is Lower

The forecasters think that the chance that real GDP will decline in any of the next four quarters is lower than they thought in last quarter's survey. They are now assigning a 4 percent chance to a decline in third-quarter real GDP, down from 11 percent in the previous survey. Although the risk rises over the following three quarters, it remains below that assigned in the previous survey, as the following table shows.

Mean Probability of a Decline in Real GDP

	<i>Previous</i>	<i>New</i>
1997:Q3	11.0	4.0
:Q4	13.0	8.0
1998:Q1	20.0	13.0
:Q2	23.0	17.0
:Q3	N.A.	20.0

Long-Term Inflation Expectations Bounce Back

The forecasters are revising upward their expectations for long-term inflation. They now expect inflation, as measured by the Consumer Price Index, to average 3.0 percent over the next 10 years. In last quarter's survey, the forecasters expected a long-term inflation rate of 2.85 percent, which represented a downward revision from their expectation of 3.0 percent in the six surveys prior to last quarter's survey.

Forecasters Cut Their Estimate of the Natural Rate of Unemployment

In this survey the participants provided information on their use of the concept of the natural rate of unemployment—the rate of unemployment that occurs when the economy reaches equilibrium—in producing their forecasts. Twenty-two of 37 forecasters report that they use the natural rate concept. Their average estimate of the natural rate of unemployment is 5.25 percent, with a middle range of estimates of 5.0 percent to 5.5 percent. In last year's third-quarter survey, 24 of 42 forecasters reported using the natural rate concept, and the average estimate of the natural rate was 5.57 percent.

Forecasters Emphasize the Role of Foreign Competition in Keeping Inflation Low

In answer to a special question about why inflation has been surprisingly low, the forecasters think the most important reason is that foreign competition is preventing domestic firms from raising prices, a pressure that wasn't present in past expansions. Another important reason is that special factors, such as the value of the dollar, have kept inflation from rising recently, but when the effect of these factors wears off, inflation may start to rise. Elements that are somewhat less important include the impression that many forecasts are based on the notion that inflation tends to rise in an expansion and that supply-side factors are more important in this expansion than in past expansions. The least important determinant, according to the forecasters, is the possibility that monetary policy has been tighter in this expansion than in past ones, a factor that isn't incorporated into many models of inflation.

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, 1997-98**

	Q3	1997	Q4	Q1	1998		ANNUAL AVERAGE					
					Q2	Q3	1997	1998				
PERCENT GROWTH AT ANNUAL RATES												
FORECAST												
1. REAL GDP (BILLIONS, CHAIN WEIGHTED)	2.6	2.8	2.6	2.4	2.0	3.4	2.5	2.5				
2. GDP PRICE INDEX (1992=100)	2.0	2.4	2.4	2.5	2.5	2.1	2.5	2.5				
3. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	5.0	4.9	4.9	4.7	4.9	5.6	4.8	4.8				
4. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	2.2	2.8	2.7	3.0	2.9	2.3	2.8	2.8				
VARIABLES IN LEVELS												
5. UNEMPLOYMENT RATE (PERCENT)	4.8	4.9	5.0	5.0	5.0	5.0	5.0	5.0				
6. 3-MONTH TREASURY BILL RATE (PERCENT)	5.1	5.3	5.4	5.3	5.2	5.1	5.2	5.2				
7. 10-YEAR TREASURY BOND YIELD (PERCENT)	6.4	6.5	6.5	6.5	6.4	6.5	6.4	6.4				

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 1997.

NOTES: THE FIGURES ON EACH LINE ARE MEDIANS OF 37 INDIVIDUAL FORECASTS. NA = NOT APPLICABLE.

SURVEY OF PROFESSIONAL FORECASTERS

Third Quarter 1997

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

TABLE ONE

**MAJOR MACROECONOMIC INDICATORS, 1997-98
MEDIAN OF FORECASTER PREDICTIONS**

	NUMBER OF FORE- CASTERS	FORECASTS				ACTUAL 1996	FORECAST 1997	FORECAST 1998
		1997 Q2	Q3	Q4	1998			
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	34	8004.8	8103.1	8200.7	8300.0	8395.3	8497.0	8636.0
2. GDP PRICE INDEX (1992=100)	33	112.17	112.73	113.40	114.07	114.79	115.49	116.22
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	26	N.A.	476.9	486.5	489.3	492.3	496.8	447.6
4. UNEMPLOYMENT RATE (PERCENT)	36	4.9	4.8	4.9	5.0	5.0	5.4	5.0
5. INDUSTRIAL PRODUCTION (1987=100)	34	119.6	120.5	121.5	122.3	123.1	124.0	115.2
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	35	1.44	1.42	1.41	1.40	1.38	1.39	1.48
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	35	1.1	2.2	2.8	2.7	3.0	2.9	3.2
8. 3-MONTH TREASURY BILL RATE (PERCENT)	37	5.05	5.10	5.25	5.37	5.25	5.19	5.01
9. AAA CORPORATE BOND YIELD (PERCENT)	34	7.57	7.28	7.40	7.42	7.40	7.35	7.37
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	36	6.70	6.39	6.50	6.53	6.51	6.36	6.44
							6.50	6.39

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 1997.

TABLE ONE CONTINUED

**MAJOR MACROECONOMIC INDICATORS, 1997-98
MEDIAN OF FORECASTER PREDICTIONS**

	NUMBER OF FORE- CASTERS	ACTUAL 1997		1997		FORECASTS 1998		ACTUAL 1996		FORECAST 1997		FORECAST 1998	
		Q2	Q3	Q4	—	Q1	Q2	Q3	—	—	—	—	—
11. REAL GDP (BILLIONS, CHAIN WEIGHTED)	37	7139.7	7185.0	7235.0	7281.0	7323.6	7360.1	6928.4	7166.0	7343.0	—	—	—
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS, CHAIN WEIGHTED)	36	4827.9	4866.1	4902.0	4931.9	4962.4	4990.1	4714.1	4853.7	4975.6	—	—	—
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	36	837.8	855.0	868.5	881.9	894.2	903.0	771.7	842.8	899.1	—	—	—
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	36	277.1	278.9	279.4	281.4	283.3	283.8	272.1	277.0	283.5	—	—	—
15. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	35	462.0	459.7	457.9	457.1	457.9	457.0	464.2	458.5	457.7	—	—	—
16. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	35	810.4	815.2	820.0	824.0	827.8	831.3	793.7	813.0	828.0	—	—	—
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS, CHAIN WEIGHTED)	36	66.8	54.3	43.6	40.0	39.9	37.9	25.0	57.8	37.0	—	—	—
18. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	37	-147.9	-145.2	-140.3	-145.0	-139.6	-136.1	-114.4	-141.0	-137.6	—	—	—

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 1997.

TABLE TWO

MAJOR MACROECONOMIC INDICATORS, 1997-98
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE- CASTERS	Q2 '97 TO Q3 '97	Q3 '97 TO Q4 '97	Q4 '97 TO Q1 '98	Q1 '98 TO Q2 '98	Q2 '98 TO Q3 '98	Q3 '98 TO 1997	1996 TO 1997	1997 TO 1998
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	34	5.0	4.9	4.9	4.7	4.9	5.6	4.8	
2. GDP PRICE INDEX (1992=100)	33	2.0	2.4	2.4	2.5	2.5	2.1	2.5	
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	26	5.0	8.3	2.3	2.5	3.7	5.7	5.2	
4. UNEMPLOYMENT RATE (PERCENT)	36	-.1	.1	.1	.0	.0	-.4	.0	
5. INDUSTRIAL PRODUCTION (1987=100)	34	3.0	3.4	2.7	2.8	2.8	4.2	2.8	
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	35	-5.4	-2.8	-2.8	-5.0	3.8	-2.8	-2.5	
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	35	1.1	.6	-.1	.3	-.1	-.9	.4	
8. 3-MONTH TREASURY BILL RATE (PERCENT)	37	.05	.15	.12	-.12	-.06	.12	.07	
9. AAA CORPORATE BOND YIELD (PERCENT)	34	-.30	.13	.02	-.02	-.05	.05	-.07	
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	36	-.31	.11	.03	-.02	-.15	.06	-.11	

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, THIRD QUARTER 1997.

TABLE TWO CONTINUED

MAJOR MACROECONOMIC INDICATORS, 1997-98
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORE- CASTERS	Q2 97 TO Q3 97	Q3 97 TO Q4 97	Q4 97 TO Q1 98	Q1 98 TO Q2 98	Q2 98 TO Q3 98	Q3 98 TO 1997	1996 TO 1998	1997
11. REAL GDP (BILLIONS, CHAIN WEIGHTED)	37	2.6	2.8	2.6	2.4	2.0	3.4	2.5	
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS, CHAIN WEIGHTED)	36	3.2	3.0	2.5	2.5	2.3	3.0	2.5	
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	36	8.5	6.4	6.3	5.7	4.0	9.2	6.7	
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	36	2.6	.7	3.0	2.8	.6	1.8	2.3	
15. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	35	-2.0	-1.5	-.7	.7	-.8	-1.2	-.2	
16. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	35	2.4	2.4	2.0	1.9	1.7	2.4	1.8	
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS, CHAIN WEIGHTED)	36	-12.5	-10.8	-3.6	-.1	-2.0	32.8	-20.8	
18. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	37	2.7	4.9	-4.7	5.4	3.6	-26.6	3.4	

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, THIRD QUARTER 1997.

TABLE THREE
ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	NUMBER OF FORECASTERS					
	Q2 97 TO Q3 97	Q3 97 TO Q4 97	Q4 97 TO Q1 98	Q1 98 TO Q2 98	Q2 98 TO Q3 98	
10 OR LESS	33	32	21	14	11	
11 TO 20	1	2	11	13	9	
21 TO 30	1	0	2	7	10	
31 TO 40	0	1	1	0	4	
41 TO 50	0	0	0	1	1	
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	1	6	10	15	20	
MEAN PROBABILITY	4	8	13	17	20	

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 35.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 1997.

TABLE FOUR

**MEAN PROBABILITY OF CHANGES IN GDP AND PRICES
1996-97 AND 1997-98**

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

	1996-97	1997-98
6.0 OR MORE	.25	.53
5.0 TO 5.9	.96	1.15
4.0 TO 4.9	10.19	4.98
3.0 TO 3.9	58.01	20.94
2.0 TO 2.9	24.87	42.49
1.0 TO 1.9	4.76	22.08
0.0 TO 0.9	.60	5.56
-1.0 TO -0.1	.23	1.54
-2.0 TO -1.1	.07	.37
LESS THAN -2.0	.06	.36

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

	1996-97	1997-98
8.0 OR MORE	.03	.04
7.0 TO 7.9	.06	.16
6.0 TO 6.9	.09	.31
5.0 TO 5.9	.28	.91
4.0 TO 4.9	3.26	5.48
3.0 TO 3.9	10.48	19.50
2.0 TO 2.9	52.97	48.06
1.0 TO 1.9	30.81	23.22
0.0 TO 0.9	1.65	2.16
WILL DECLINE	.37	.16

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 36.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER '97.

TABLE FIVE
LONG-TERM (10 YEAR) FORECASTS

SERIES: CPI INFLATION RATE	
STATISTIC	
MINIMUM	2.000
LOWER QUARTILE	2.500
MEDIAN	3.000
UPPER QUARTILE	3.150
MAXIMUM	4.000
MEAN	2.888
STD. DEV.	.428
N	33
MISSING	4

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 1997.