

Survey of Professional Forecasters

February 26, 1992

Economic Research Department

FIRST QUARTER 1992

The Recovery Is Coming

According to 40 economic forecasters surveyed by the Federal Reserve Bank of Philadelphia, the economic recovery is on its way. The forecasters see real GDP barely rising in the first quarter of 1992, increasing substantially in the second quarter, and rising even faster (more than 3 percent at an annual rate) in the second half of the year. Along with the recovery will come a decline in the unemployment rate, after it peaks at a quarterly average of 7.1 percent in the first quarter of 1992. The unemployment rate will decline to 6.7 percent by the end of the year.

Despite the recovery, the forecasters don't foresee a resurgence of inflation. The GDP implicit price deflator is seen rising 3.0 percent during 1992, while the Consumer Price Index is forecast to increase 3.3 percent in 1992.

According to the forecasters, interest rates will be at their lowest in the first quarter of 1992. The forecast calls for the three-month Treasury-bill rate to bottom out at 3.8 percent in the first quarter, then to rise gradually to 4.5 percent over the next year as the economy recovers. The forecast for the 10-year Treasury-bond rate is similar, with a trough at 7.3 percent in the first quarter, rising slightly to 7.6 percent by early 1993.

Substantial Risk of Another Negative Quarter

Despite their optimism concerning the recovery, there remains a substantial risk that the first quarter and perhaps even the second quarter of 1992 will show declines in real GDP. The probability that GDP will decline in the first quarter is 43 percent; for the second quarter, it is 25 percent. So doubts about the recovery are much stronger than indicated in the past two surveys, as the following chart shows:

Mean Probability of a Decline in Real GDP	Third Quarter 1991 Survey	Fourth Quarter 1991 Survey	First Quarter 1992 Survey
1992: Q1	17	26	43
Q2	15	15	25
Q3	15	13	13
Q4	NA	11	10
1993: Q1	NA	NA	9



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Long-Term Expected Inflation Declines

The median forecast of the average inflation rate (for the Consumer Price Index) over the next 10 years fell to 3.7 percent in this survey, down from 4.0 percent in the survey taken in the fourth quarter of 1991. Half of the forecasts were in the interval of 3.4 to 4.0 percent.

New Long-Term Forecasts

For the first time, the forecasters were asked to provide 10-year forecasts for various macroeconomic variables. The real GDP growth rate is seen averaging 2.5 percent, with productivity growth of 1.5 percent. In financial markets, stocks are expected to provide a 10 percent return, 10-year Treasury bonds are seen averaging 7.5 percent, and three-month Treasury bills are forecast to provide a return of 5.0 percent.

Other Variables

After declining in the first quarter of 1992, industrial production will rebound through the rest of the year. Housing starts are expected to grow faster than 15 percent through 1992. Net exports will weaken for most of the year before strengthening at year-end. After the first quarter of 1992, inventory growth is forecast to contribute to stronger GDP growth as well. The only area of the economy in which weakness is expected to persist is in federal government purchases.

Assumptions About Domestic Policy and International Events

The forecasters expressed a wide range of opinions about fiscal policy, some assuming it would have virtually no impact in 1992, and others believing that a tax package that could be as large of 0.5 percent of GDP is likely. For monetary policy, the forecasters see some potential for further easing in the first half of the year, but they expect some tightening as the economy rebounds in the second half. The forecasters are nearly unanimous in their opinion that the dollar will strengthen this year. They expect oil prices to remain fairly stable or perhaps to drop slightly.

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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SURVEY OF PROFESSIONAL FORECASTERS
MAJOR MACROECONOMIC INDICATORS, 1992-93

	1992				1993		ANNUAL AVERAGE
	Q1	Q2	Q3	Q4	Q1	1992	
	FORECAST						
PERCENT GROWTH AT ANNUAL RATES							
1. REAL GDP (BILLIONS OF 1987 DOLLARS)	0.6	2.3	3.1	3.2	2.8	1.5	3.0
2. GDP IMPLICIT PRICE DEFULATOR (1987=100)	2.9	3.0	3.0	3.1	3.9	3.0	NA
3. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	3.5	5.4	6.4	6.3	6.0	4.3	6.2
4. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	3.0	3.2	3.4	3.5	3.5	3.3	NA
VARIABLES IN LEVELS							
5. UNEMPLOYMENT RATE (PERCENT)	7.1	7.1	6.9	6.7	6.6	7.0	6.4
6. 3-MONTH TREASURY BILL RATE (PERCENT)	3.8	3.9	4.0	4.3	4.5	4.0	4.9
7. 10-YEAR TREASURY BOND YIELD (PERCENT)	7.3	7.3	7.4	7.5	7.6	7.3	7.7

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1992.

NOTES: THE FIGURES ON EACH LINE ARE MEDIANs OF 40 INDIVIDUAL FORECASTS.

NA = NOT APPLICABLE.

FOR THE GDP IMPLICIT PRICE DEFULATOR AND CONSUMER PRICE INDEX, THE ANNUAL AVERAGE IS THE PERCENT CHANGE IN THE FOURTH QUARTER INDEX LEVEL FROM THE FOURTH QUARTER INDEX LEVEL OF THE PREVIOUS YEAR.

SURVEY OF PROFESSIONAL FORECASTERS

First Quarter 1992

Tables

TABLE ONE

**MAJOR MACROECONOMIC INDICATORS, 1992-93
MEDIAN OF FORECASTER PREDICTIONS**

	NUMBER OF FORE- CASTERS	ACTUAL 1991 Q4	FORECASTS				ACTUAL 1991	FORECAST 1992	FORECAST 1993
			1992	Q1	Q2	Q3	Q4		
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	38	5736.6	5785.6	5862.3	5953.5	6044.6	6133.0	5671.8	5917.1
2. GDP IMPLICIT PRICE DEFULATOR (1987=100)	39	117.9	118.7	119.6	120.5	121.4	122.6	117.0	120.1
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	34	NA	188.4	194.6	204.0	209.8	214.3	NA	203.0
4. UNEMPLOYMENT RATE (PERCENT)	40	7.0	7.1	7.1	6.9	6.7	6.6	6.8	7.0
5. INDUSTRIAL PRODUCTION (1987=100)	38	108.0	107.9	108.6	109.9	111.4	112.5	107.1	109.5
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	37	1.09	1.13	1.18	1.22	1.28	1.28	1.01	1.20
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	39	3.2	3.0	3.2	3.4	3.5	3.5	2.9	3.1
8. 3-MONTH TREASURY BILL RATE (PERCENT)	39	4.54	3.85	3.90	4.00	4.25	4.50	5.38	4.00
9. AAA CORPORATE BOND YIELD (PERCENT)	36	8.45	8.23	8.20	8.31	8.40	8.49	8.77	8.30
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	37	7.35	7.25	7.25	7.40	7.50	7.57	7.86	7.33
									7.70

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1992.

TABLE ONE CONTINUED

**MAJOR MACROECONOMIC INDICATORS, 1992-93
MEDIAN OF FORECASTER PREDICTIONS**

	NUMBER OF FORE- CASTERS	ACTUAL 1991 Q4	FORECASTS				ACTUAL 1991 Q1	FORECAST 1992 1991	FORECAST 1993 1993	
			1992 Q1	Q2	Q3	Q4				
11. REAL GDP (BILLIONS OF 1987 DOLLARS)	39	4866.3	4873.7	4901.6	4938.7	4978.0	5012.0	4848.4	4923.0	5070.0
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS OF 1987 DOLLARS)	38	3262.2	3272.0	3289.1	3310.9	3333.8	3351.2	3256.7	3302.6	3393.6
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	38	506.9	505.0	507.4	512.7	518.5	525.0	512.7	510.6	539.0
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	38	181.0	184.1	188.5	193.0	197.0	199.4	175.1	190.9	202.4
15. FEDERAL GOVERNMENT PURCHASES (BILLIONS OF 1987 DOLLARS)	36	370.2	370.7	368.5	369.3	366.4	364.7	384.8	368.9	362.3
16. STATE AND LOCAL GOVT PURCHASES (BILLIONS OF 1987 DOLLARS)	36	551.7	552.3	553.9	555.1	557.4	560.0	551.9	555.0	564.7
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS OF 1987 DOLLARS)	38	2.7	-3.8	3.0	6.7	13.2	15.0	-15.1	4.1	18.0
18. NET EXPORTS (BILLIONS OF 1987 DOLLARS)	38	-8.3	-9.9	-10.8	-13.0	-12.4	-10.6	-17.6	-11.4	-8.7

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1992.

TABLE TWO

	MAJOR MACROECONOMIC INDICATORS, 1992-93							
	NUMBER OF FORE- CASTERS	Q4 91 Q1 92	Q1 92 Q2 92	Q2 92 Q3 92	Q3 92 Q4 92	Q4 92 Q1 93	1991 TO 1992	1992 TO 1993
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	38	3.5	5.4	6.4	6.3	6.0	4.3	6.2
2. GDP IMPLICIT PRICE DEFULATOR (1987=100)	39	2.9	3.0	3.0	3.1	3.9	2.6	3.2
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	34	2.5	13.7	20.8	11.8	8.9	8.6	13.3
4. UNEMPLOYMENT RATE (PERCENT)	40	.1	.0	-.2	-.2	-.1	.2	-.6
5. INDUSTRIAL PRODUCTION (1987=100)	38	-.2	2.6	4.8	5.3	4.2	2.2	4.2
6. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	37	15.9	18.9	15.4	18.5	1.3	18.3	8.7
7. CONSUMER PRICE INDEX (CPI-U) (ANNUAL RATE)	39	-.2	.2	-.2	.1	.0	.2	-.4
8. 3-MONTH TREASURY BILL RATE (PERCENT)	39	-.69	.05	.10	.25	.25	-1.38	.90
9. AAA CORPORATE BOND YIELD (PERCENT)	36	-.22	-.03	.11	.09	.09	-.47	.20
10. 10-YEAR TREASURY BOND YIELD (PERCENT)	37	-.10	.00	.15	.10	.07	-.53	.37

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 1992.

TABLE TWO CONTINUED

	MAJOR MACROECONOMIC INDICATORS, 1992-93							
	NUMBER OF FORE- CASTERS	Q4 91 10 92	Q1 92 10 92	Q2 92 10 92	Q3 92 10 92	Q4 92 10 92	1991 TO 1992	1992 TO 1993
11. REAL GDP (BILLIONS OF 1987 DOLLARS)	39	.6	2.3	3.1	3.2	2.8	1.5	3.0
12. TOTAL CONSUMPTION EXPENDITURES (BILLIONS OF 1987 DOLLARS)	38	1.2	2.1	2.7	2.8	2.1	1.4	2.8
13. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	38	-1.5	1.8	4.3	4.6	5.2	-.4	5.6
14. RESIDENTIAL FIXED INVESTMENT (BILLIONS OF 1987 DOLLARS)	38	6.9	10.0	9.9	8.6	5.0	9.0	6.0
15. FEDERAL GOVERNMENT PURCHASES (BILLIONS OF 1987 DOLLARS)	36	.5	-2.3	.9	-3.2	-1.8	-4.1	-1.8
16. STATE AND LOCAL GOVT PURCHASES (BILLIONS OF 1987 DOLLARS)	36	.4	1.2	.8	1.7	1.9	.6	1.7
17. CHANGE IN BUSINESS INVENTORIES (BILLIONS OF 1987 DOLLARS)	38	-6.4	6.7	3.7	6.5	1.8	19.2	13.9
18. NET EXPORTS (BILLIONS OF 1987 DOLLARS)	38	-1.6	-.9	-2.2	.6	1.8	6.2	2.7

NOTE: FIGURES FOR BUSINESS INVENTORIES AND NET EXPORTS ARE CHANGES IN BILLIONS OF 1987 DOLLARS.
 ALL OTHERS ARE PERCENTAGE CHANGES AT ANNUAL RATES.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1992.

TABLE THREE
ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	NUMBER OF FORECASTERS					
	Q4 TO Q1	91 TO Q2	Q1 TO Q2	Q2 TO Q3	Q3 TO Q4	Q4 TO Q1
10 OR LESS	3	8	22	26	27	
11 TO 20	5	9	10	9	7	
21 TO 30	5	13	6	3	4	
31 TO 40	9	5	0	0	0	
41 TO 50	7	2	0	0	0	
51 TO 60	0	0	0	0	0	
61 TO 70	5	1	0	0	0	
71 TO 80	2	0	0	0	0	
81 TO 90	2	0	0	0	0	
91 AND OVER	0	0	0	0	0	
NOT REPORTING	2	2	2	2	2	
MEDIAN PROBABILITY	40	25	10	10	7	
MEAN PROBABILITY	43	25	13	10	9	

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 38.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1992.

TABLE FOUR
MEAN PROBABILITY OF CHANGES IN GDP AND PRICES
1991-92 AND 1992-93

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

	1991-92	1992-93
6.0 OR MORE	.31	.69
5.0 TO 5.9	.61	1.89
4.0 TO 4.9	2.36	8.06
3.0 TO 3.9	8.92	23.26
2.0 TO 2.9	24.36	39.29
1.0 TO 1.9	43.92	18.60
0.0 TO 0.9	15.44	5.83
-1.0 TO -0.1	3.03	1.77
-2.0 TO -1.1	.86	.43
LESS THAN -2.0	.19	.20

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

	1991-92	1992-93
8.0 OR MORE	.00	.03
7.0 TO 7.9	.03	.17
6.0 TO 6.9	.47	1.00
5.0 TO 5.9	1.53	3.11
4.0 TO 4.9	9.53	17.63
3.0 TO 3.9	35.28	41.14
2.0 TO 2.9	39.92	28.77
1.0 TO 1.9	11.78	7.37
0.0 TO 0.9	1.44	.77
WILL DECLINE	.03	.00

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 36.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1992.

TABLE 5
LONG-TERM (10-YEAR) FORECASTS

SERIES: CPI INFLATION RATE		SERIES: REAL GDP GROWTH RATE		SERIES: PRODUCTIVITY GROWTH	
STATISTIC		STATISTIC		STATISTIC	
MINIMUM	2.500	MINIMUM	2.000	MINIMUM	1.000
LOWER QUARTILE	3.425	LOWER QUARTILE	2.300	LOWER QUARTILE	1.250
MEDIAN	3.675	MEDIAN	2.500	MEDIAN	1.500
UPPER QUARTILE	4.000	UPPER QUARTILE	2.875	UPPER QUARTILE	2.000
MAXIMUM	6.500	MAXIMUM	4.500	MAXIMUM	3.000
MEAN	3.781	MEAN	2.612	MEAN	1.640
STD. DEV.	.812	STD. DEV.	.462	STD. DEV.	.546
N	36	N	36	N	31
MISSING	4	MISSING	4	MISSING	9
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SERIES: BOND RETURNS (10-YEAR)		SERIES: BILL RETURNS (3-MONTH)		SERIES: STOCK RETURNS (S&P 500)	
STATISTIC		STATISTIC		STATISTIC	
MINIMUM	5.000	MINIMUM	3.500	MINIMUM	5.000
LOWER QUARTILE	7.000	LOWER QUARTILE	4.500	LOWER QUARTILE	7.975
MEDIAN	7.500	MEDIAN	5.000	MEDIAN	10.000
UPPER QUARTILE	8.000	UPPER QUARTILE	6.000	UPPER QUARTILE	11.200
MAXIMUM	10.000	MAXIMUM	6.700	MAXIMUM	15.000
MEAN	7.442	MEAN	5.158	MEAN	9.608
STD. DEV.	.922	STD. DEV.	.970	STD. DEV.	2.212
N	32	N	33	N	26
MISSING	8	MISSING	7	MISSING	14
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SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA, SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 1992.