# FORECASTS 1984

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The views and opinions in this article are those of the various forecasters, and should not be attributed to this Bank or to the Federal Reserve System.

Above-average real growth and moderate inflation are predicted for 1984 by economic forecasters, according to a survey of forecasts collected for this Bank's Business Forecasts 1984. Summaries of the forecasts are presented in tables I and II.

The forecasts this year show a remarkable degree of optimism and unanimity. Real gross national product (GNP) is expected to grow by 4.3 percent in 1984, as shown in table I. That rate of growth would be above the postwar trend rate, 3.4 percent,

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#### Table I

### MEDIAN QUARTERLY CHANGES FORECAST FOR 1984

Percentage Changes at Annual Rates Unless Otherwise Noted

	4Q 82- Forecast 1984*			4Q 83-		
	4Q 83	l	11	111	IV	4Q 84
Gross national product	10.4	9.5	9.2	9.7	9.6	9.5
Personal consumption expenditures	9.1	8.4	8.1	8.6	8.1	8.3
Durables	17.1	11.3	9.2	10.8	9.7	10.3
Nondurables	6.8	7.4	7.3	7.6	7.4	7.4
Services	8.8	8.3	8.6	8.5	8.6	8.5
Gross private domestic investment Fixed investment:	40.4	9.2	12.3	16.4	15.7	13.4
Nonresidential	10.2	11.7	11.0	12.0	11.8	11.6
Residential	45.5	5.8	8.0	14.0	10.7	9.6
Change in business inventories <sup>a</sup>	17.7°	19.8	21.6	28.0	33.6	
Net exports <sup>a</sup>	— 32.6°	- 24.8	- 25.0	- 25.5	- 25.0	
Government purchases	3.2	12.0	9.4	9.3	11.1	10.4
Federal	- 1.3	18.7	12.0	10.7	14.1	13.8
State and local	6.4	7.8	7.7	8.2	8.2	8.0
Gross national product (1972 dollars)	6.1	4.5	4.1	4.4	4.0	4.3
Corporate profits after taxes		12.9	13.8	14.8	16.6	14.5
Private housing starts	34.1	4.9	8.5	11.6	- 4.0	5.1
Domestic automobile sales	20.9	11.3	16.4	5.3	6.8	9.9
Rate of unemployment <sup>b</sup>	8.4°	8.3	8.1	7.9	7.8	•
Industrial production index	15.3	7.0	5.2	5.3	5.1	5.7
Consumer price index	3.3	4.8	4.9	5.4	5.5	5.2
Producer price index	1.9	5.2	5.4	5.0	5.5	5.3
GNP implicit price deflator	4.1	4.7	4.7	4.8	5.5	4.9

\* Median quarterly percentage change forecast for each quarter for each category, incorporating 27 forecasts.

\* Quarterly levels, billions of dollars at annual rates.

<sup>b</sup> Quarterly levels, percent.

<sup>c</sup> Level, 4Q 1983.

and would indicate generally rising incomes, production, and employment. The projected growth in expenditure shown in table I is not confined to any one sector : consumer spending is projected to rise by 8.3 percent, business fixed investment by 11.6 percent, residential investment by 9.6 percent, and government spending by 10.4 percent.

Only moderate increases in inflation are expected in 1984. Consumer prices are expected to rise by 5.2 percent, and producer prices by 5.3 percent. These rates, although significantly higher than in 1983, would nevertheless remain well below the high rates experienced in the late seventies.

In short, while the economy is not expected to repeat precisely its extraordinary performance of 1983, a better than average year is expected. Before placing too much confidence in that exact scenario, however, it is useful to examine the record of forecast accuracy. As table III indicates, economic activity in recent years has not been predicted very well.

For example, consider the projection for real economic conditions during 1983. Although most forecasters expected a moderate recovery from the recession that began in mid-1981, economic activity in fact advanced at an extremely rapid pace. Industrial production rose 15.3 percent, more than twice the 7.2 percent forecast. The rate of unemployment averaged 8.4 percent in the fourth quarter, well below the predicted value of 9.7 percent. And real GNP growth was 6.1 percent, as opposed to 3.9 percent forecast.

Forecasters also erred the previous year by predicting moderate real growth for 1982 (that is, a 2.8 percent increase in real GNP). Actually, real GNP

## Table II MEDIAN ANNUAL AVERAGES FORECAST FOR 1984

				Percentage Change		
4	Base Unit or	Preliminary 1983*	Forecast 1984**	Preliminary 1983/1982	Forecast 1984/1983	
Gross national product	\$ billions	3,309.5	3,644.1	7.7	10.1	
Personal consumption expenditures	\$ billions	2,158.6	2,352.3	8.4	9.0	
Durables	\$ billions	178.6	315.1	13.9	13.1	
Nondurables	\$ billions	804.3	869.0	5.7	8.0	
Services	\$ billions	1,075.7	1,168.2	9.1	8.6	
Gross private domestic investment Fixed investment:	\$ billions	471.3	562.7	13.7	19.4	
Nonresidential	\$ billions	347.7	388.7	- 0.2	11.8	
Residential	\$ billions	130.5	150.1	43.9	15.0	
Change in business inventories	\$ billions	- 6.9	24.1	· —	-	
Net Exports	\$ billions	- 10.6	- 25.4	-	-	
Government purchases	\$ billions	690.2	754.5	6.3	9.3	
Federal	\$ billions	275.2	304.6	6.4	10.7	
State and local	🕛 💲 billions	415.0	449.9	6.3	8.4	
Gross national product (1972 dollars)	\$ billions	1,534.8	1,614.6	3.3	5.2	
Private housing starts	thousands	1,703.0	1,723.0	60.4	1.2	
Domestic automobile sales	millions	6.8	7.7	17.2	13.2	
Rate of unemployment	percent	9.6	8.1	-	-	
Industrial production index	1967 = 100	147.7	161.7	6.6	9.5	
Consumer price index	1967 = 100	298.4	313.0	3.2	4.9	
Producer price index	1967 = 100	285.2	298.0	1.6	4.5	
GNP implicit price deflator	1972 = 100	215.6	225.7	4.2	4.7	

\* Data available as of January 1984.

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\*\* These data are constructed using preliminary 1983 data and the median annual percentage change forecast for each category, incorporating 42 forecasts.

fell by 1.7 percent. Also, forecasters missed the dramatic fall in inflation in 1982. Whereas producer prices only rose 1.5 percent and consumer prices rose 4.5 percent, predicted values were 7.7 percent and 7.4 percent, respectively.

Thus while it may be encouraging to note that most forecasters expect economic expansion in 1984 without a dramatic increase in inflation, it would not be surprising if actual outcomes were to differ from their predictions. Forecasts are based on historical economic data that contain only a limited amount of information about future economic conditions. Even that limited information can be rendered irrelevant by political shifts and other factors that are difficult to predict. Therefore, rather than placing complete confidence in an economic forecast, readers should treat it as useful but imperfect information. Like french fries, popcorn, or Margaritas, economic forecasts are best when taken with several grains of salt.

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Real Gi	Real GNP (Percent Change)		Inflation Rate (GNP Deflator)			Treasury Bill Rate		
Actual	Predicted	Error	Actual	Predicted	Error	Actual	Predicted	Error
4.7	3.8	0.9	4.7	3.6	1.1			
7.0	5.6	1.4	4.3	3.2	1.1			0
4.3	6.0	1. <b>7</b>	7.0	3.3	3.7			
- 2.7	1.2	3.9	10.1	5.5	4.6	7.3	6.0	1.3
2.2	-0.6	2.8	7.7	7.1	0.6	<b>5.7</b> <sup>°</sup>	7.1	1.4
4.4	6.0	1.6	4.7	5.4	0.7	4.7	7.1	2.4
5.8	5.0	0.8	6.1	5.7	0.4	6.1	5.8	0.3
5.3	4.2	1.1	8.5	5.9	2.6	8.7	6.5	2.2
1.7	1.5	0.2	8.1	7.1	1.0	11.8	8.1	3.7
- 0.3	-0.8	0.5	9.8	8.2	1.6	13.7	8.6	5.1
0.9	2.4	1.5	8.9	9.1	0.2	11.8	10.8	1.0
- 1.7	2.8	4.5	4.4	7.1	2.7	8.0	11.2	3.2
6.1	3.9	2.2	4.1	5.4	1.3	8.8	8.1	0.7
		1.8			1.7			2.1
	Actual 4.7 7.0 4.3 - 2.7 2.2 4.4 5.8 5.3 1.7 - 0.3 0.9 - 1.7	Actual Predicted   4.7 3.8   7.0 5.6   4.3 6.0   -2.7 1.2   2.2 -0.6   4.4 6.0   5.8 5.0   5.3 4.2   1.7 1.5   -0.3 -0.8   0.9 2.4   -1.7 2.8	ActualPredictedError $4.7$ $3.8$ $0.9$ $7.0$ $5.6$ $1.4$ $4.3$ $6.0$ $1.7$ $-2.7$ $1.2$ $3.9$ $2.2$ $-0.6$ $2.8$ $4.4$ $6.0$ $1.6$ $5.8$ $5.0$ $0.8$ $5.3$ $4.2$ $1.1$ $1.7$ $1.5$ $0.2$ $-0.3$ $-0.8$ $0.5$ $0.9$ $2.4$ $1.5$ $-1.7$ $2.8$ $4.5$ $6.1$ $3.9$ $2.2$	ActualPredictedErrorActual $4.7$ $3.8$ $0.9$ $4.7$ $7.0$ $5.6$ $1.4$ $4.3$ $4.3$ $6.0$ $1.7$ $7.0$ $-2.7$ $1.2$ $3.9$ $10.1$ $2.2$ $-0.6$ $2.8$ $7.7$ $4.4$ $6.0$ $1.6$ $4.7$ $5.8$ $5.0$ $0.8$ $6.1$ $5.3$ $4.2$ $1.1$ $8.5$ $1.7$ $1.5$ $0.2$ $8.1$ $-0.3$ $-0.8$ $0.5$ $9.8$ $0.9$ $2.4$ $1.5$ $8.9$ $-1.7$ $2.8$ $4.5$ $4.4$ $6.1$ $3.9$ $2.2$ $4.1$	ActualPredictedErrorActualPredicted $4.7$ $3.8$ $0.9$ $4.7$ $3.6$ $7.0$ $5.6$ $1.4$ $4.3$ $3.2$ $4.3$ $6.0$ $1.7$ $7.0$ $3.3$ $-2.7$ $1.2$ $3.9$ $10.1$ $5.5$ $2.2$ $-0.6$ $2.8$ $7.7$ $7.1$ $4.4$ $6.0$ $1.6$ $4.7$ $5.4$ $5.8$ $5.0$ $0.8$ $6.1$ $5.7$ $5.3$ $4.2$ $1.1$ $8.5$ $5.9$ $1.7$ $1.5$ $0.2$ $8.1$ $7.1$ $-0.3$ $-0.8$ $0.5$ $9.8$ $8.2$ $0.9$ $2.4$ $1.5$ $8.9$ $9.1$ $-1.7$ $2.8$ $4.5$ $4.4$ $7.1$ $6.1$ $3.9$ $2.2$ $4.1$ $5.4$	ActualPredictedErrorActualPredictedError $4.7$ $3.8$ $0.9$ $4.7$ $3.6$ $1.1$ $7.0$ $5.6$ $1.4$ $4.3$ $3.2$ $1.1$ $4.3$ $6.0$ $1.7$ $7.0$ $3.3$ $3.7$ $-2.7$ $1.2$ $3.9$ $10.1$ $5.5$ $4.6$ $2.2$ $-0.6$ $2.8$ $7.7$ $7.1$ $0.6$ $4.4$ $6.0$ $1.6$ $4.7$ $5.4$ $0.7$ $5.8$ $5.0$ $0.8$ $6.1$ $5.7$ $0.4$ $5.3$ $4.2$ $1.1$ $8.5$ $5.9$ $2.6$ $1.7$ $1.5$ $0.2$ $8.1$ $7.1$ $1.0$ $-0.3$ $-0.8$ $0.5$ $9.8$ $8.2$ $1.6$ $0.9$ $2.4$ $1.5$ $8.9$ $9.1$ $0.2$ $-1.7$ $2.8$ $4.5$ $4.4$ $7.1$ $2.7$ $6.1$ $3.9$ $2.2$ $4.1$ $5.4$ $1.3$	ActualPredictedErrorActualPredictedErrorActual $4.7$ $3.8$ $0.9$ $4.7$ $3.6$ $1.1$ $7.0$ $5.6$ $1.4$ $4.3$ $3.2$ $1.1$ $4.3$ $6.0$ $1.7$ $7.0$ $3.3$ $3.7$ $-2.7$ $1.2$ $3.9$ $10.1$ $5.5$ $4.6$ $7.3$ $2.2$ $-0.6$ $2.8$ $7.7$ $7.1$ $0.6$ $5.7$ $4.4$ $6.0$ $1.6$ $4.7$ $5.4$ $0.7$ $4.7$ $5.8$ $5.0$ $0.8$ $6.1$ $5.7$ $0.4$ $6.1$ $5.3$ $4.2$ $1.1$ $8.5$ $5.9$ $2.6$ $8.7$ $1.7$ $1.5$ $0.2$ $8.1$ $7.1$ $1.0$ $11.8$ $-0.3$ $-0.8$ $0.5$ $9.8$ $8.2$ $1.6$ $13.7$ $0.9$ $2.4$ $1.5$ $8.9$ $9.1$ $0.2$ $11.8$ $-1.7$ $2.8$ $4.5$ $4.4$ $7.1$ $2.7$ $8.0$ $6.1$ $3.9$ $2.2$ $4.1$ $5.4$ $1.3$ $8.8$	ActualPredictedErrorActualPredictedErrorActualPredicted $4.7$ $3.8$ $0.9$ $4.7$ $3.6$ $1.1$ $7.0$ $5.6$ $1.4$ $4.3$ $3.2$ $1.1$ $4.3$ $6.0$ $1.7$ $7.0$ $3.3$ $3.7$ $-2.7$ $1.2$ $3.9$ $10.1$ $5.5$ $4.6$ $7.3$ $6.0$ $2.2$ $-0.6$ $2.8$ $7.7$ $7.1$ $0.6$ $5.7$ $7.1$ $4.4$ $6.0$ $1.6$ $4.7$ $5.4$ $0.7$ $4.7$ $7.1$ $5.8$ $5.0$ $0.8$ $6.1$ $5.7$ $0.4$ $6.1$ $5.8$ $5.3$ $4.2$ $1.1$ $8.5$ $5.9$ $2.6$ $8.7$ $6.5$ $1.7$ $1.5$ $0.2$ $8.1$ $7.1$ $1.0$ $11.8$ $8.1$ $-0.3$ $-0.8$ $0.5$ $9.8$ $8.2$ $1.6$ $13.7$ $8.6$ $0.9$ $2.4$ $1.5$ $8.9$ $9.1$ $0.2$ $11.8$ $10.8$ $-1.7$ $2.8$ $4.5$ $4.4$ $7.1$ $2.7$ $8.0$ $11.2$ $6.1$ $3.9$ $2.2$ $4.1$ $5.4$ $1.3$ $8.8$ $8.1$

Table III							
ТН	E RECORD	OF	MEDIAN	FORECASTS			

Note: Predictions are from Business Forecasts, published annually by the Federal Reserve Bank of Richmond. The error is the absolute value of the difference between predicted and actual values. Real growth and inflation are from the fourth quarter of the previous year to the fourth quarter of the stated year. The Treasury bill rate is the average value of three-month bills in the fourth quarter.