

## FORECASTS 1974

Each year the Federal Reserve Bank of Richmond compiles forecasts of the economy's performance in the coming year. This year the principal forecasting problem has been the extent and duration of the petroleum embargo. Our forecasts of the economy's performance in 1974 are all beclouded by energy considerations. The energy shortfall, projected by various forecasters to range between 1% and 3% million barrels of oil per day, has had a substantial impact on what was the standard forecast before the Arab embargo.

Prior to the Arab oil embargo most business and academic forecasters were predicting a rate of growth of GNP of 7.4-8.6 percent and a rate of increase in the implicit deflator (the price index for items included in GNP) of 5.0 percent, resulting in 2.4-3.5 percent real growth in the economy. After the petroleum shortage became known, the projected rate of growth of current dollar GNP was not changed significantly, but the predicted rate of price increase was raised to the 6.5-7.0 percent range. Thus, current forecasts are calling for a considerably lower increase in the rate of growth of real GNP-around 1.2 percent.

Energy considerations also induced the seers to forecast a higher average unemployment rate for 1974 than was forecast before the embargo. The consensus now is for a 5.5 percent average unemployment rate in 1974 as opposed to a 5 percent rate before the embargo.

The forecasts published after the embargo had varied assumptions regarding the petroleum shortfall and the length of the Arab boycott, so these considerations add another large measure of uncertainty to the already difficult problem of forecasting the year-ahead performance of the economy. At the time their forecasts were published, many of the forecasters had no clear conception of the extent of the shortfall. Moreover, since there was no scientific way to project the length and strength of the Arab embargo, the forecasts were necessarily more subjective than in past years.

Last year the forecasters underestimated the actual GNP total for 1973 by almost \$27 billion. The previous year they underestimated the GNP total by more than \$11 billion. Three years ago they did considerably better, overestimating GNP by only \$3 billion. The additional uncertainty in the economic outlook introduced by energy shortages, however, may have reduced the probability of an accurate 1974 forecast from small to nil.

It might be desirable to begin the discussion of the forecasts by noting that a recession is predicted by almost all of the forecasters during the coming year. The average unemployment rate, 4.9 percent in 1973, is expected to increase by approximately 0.6 percentage points. The rate of real growth is expected to slow from 5.9 percent to 1.2 percent; and industrial production, which increased almost 9 percent in 1973, will increase only 1.1 percent in 1974. Corporate profits before taxes, after turning in a stellar performance and increasing 30 percent in 1973, are expected to fall between 7 and 10 percent in 1974.

On the other hand, most seers are expecting recovery from the recession to have begun by the second half of 1974. The consensus of our quarterly predictions is for real GNP to fall \$0.9 billion in the first quarter and \$0.5 billion in the second, but to rise \$4.0 billion in the third, and \$5.6 billion in the fourth quarter. Thus, the forecasters place much store in the basic resiliency of the U. S. economy. Most of them, also, expect the oil embargo to be over by mid-year 1974 although some expect it to last throughout 1974.

This article attempts to convey the general tone and pattern of some 50 forecasts received by the Research Department of this Bank. Not all of them are comprehensive forecasts, and some incorporate estimates of future behavior of only a few key economic indicators. The consensus is drawn this year only from those forecasts published after the imposition of the Arab oil embargo. Moreover, since there were varying assumptions in the individual forecasts regarding the duration of the embargo, the general tone and pattern may not necessarily be based upon

the more accurate energy assumptions, but only the most prevalent. This Bank publishes also a *Business Forecasts* booklet, which is a compilation of representative business forecasts with names and details of the various estimates. No summary article can begin to be as informative as the actual forecasts themselves, so serious readers are urged to look at the individual forecasts in more detail in *Business Forecasts 1974*.

*The views and opinions set forth in this article are those of the various forecasters. No agreement or endorsement by this Bank is implied.*

**1973 Forecasts in Perspective** The consensus forecast for 1973 GNP, published in last February's *Monthly Review*, was \$1,261.5 billion, a projected increase of 9.5 percent over 1972. The forecasts ranged from a low of \$1,250.0 billion to a high of \$1,269.7 billion. After allowing for price rises, the growth of real GNP was predicted to account for about one-third of the 9.5 percent rise. Latest estimates by the Department of Commerce indicate a 1973 GNP total of \$1,288.2 billion, which is \$26.7 billion higher than the consensus forecast of business and academic economists and \$18 billion higher than any forecast collected last year. In 1972, the forecasters also underestimated GNP, but by only \$11 billion. This \$26.7 billion error is one of the largest misses in recent memory, and the error is almost solely attributable to underestimating the increase in

#### RESULTS FOR 1973 AND TYPICAL FORECAST FOR 1974

	Unit or Base	Preliminary 1973	Forecast 1974*	Percentage Change	
				1972/1973	1973/1974
Gross national product .....	\$ billions	1,288.2	1,386.1	11.5	7.6
Personal consumption expenditures .....	\$ billions	805.0	861.4	10.8	7.0
Durables .....	\$ billions	131.1	131.6	11.7	0.4
Nondurables .....	\$ billions	336.3	361.8	12.1	7.6
Services .....	\$ billions	337.6	367.3	9.2	8.8
Gross private domestic investment .....	\$ billions	201.5	211.2	13.0	4.8
Business fixed .....	\$ billions	136.0	151.4	15.1	11.3
Residential structures .....	\$ billions	58.0	52.1	7.4	-10.2
Change in business inventories .....	\$ billions	7.4	9.0	—	—
Government purchases .....	\$ billions	277.2	305.2	8.7	10.1
Net exports .....	\$ billions	4.6	5.0	—	—
Gross national product (1958 dollars) .....	\$ billions	837.3	847.3	5.9	1.2
Plant and equipment expenditures .....	\$ billions	99.95	110.9	13.0	11.0
Corporate profits before taxes .....	\$ billions	127.5	122.4	30.1	-4.0
Private housing starts .....	millions	2.04	1.65	-13.4	-19.0
Automobile sales .....	millions	11.44	9.7	4.6	-15.5
Rate of unemployment .....	percent	4.9	5.5	—	—
Industrial production index .....	1967=100	125.4	126.8	8.9	1.1
Wholesale price index .....	1967=100	135.5	146.7	13.8	8.3
Consumer price index .....	1967=100	133.1	142.2	6.2	6.8
Implicit price deflator .....	1958=100	153.9	163.7	5.3	6.4

\*Figures are constructed from the typical percentage change forecast for 1974. All forecasts used for the consensus were made after the oil embargo.

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prices. The implicit price deflator had been estimated to increase 3.3 percent, but that measure of prices of goods and services included in GNP actually rose 5.3 percent. Thus, real GNP was predicted rather accurately to total \$837.1 billion, and it actually amounted to \$837.3 billion.

The largest underestimate of the rate of price increase thus accounted for almost all of the \$26.7 billion underestimate for 1973 GNP. In 1972, forecasters predicted a 3.2 percent rate of increase in the deflator, which actually rose 3.0 percent, but they had not anticipated Phases I and II of the President's price control program. Most observers would agree that if it were not for the price and wage controls, the rate of price increase in 1972 would have exceeded 3.2 percent. In any event, with the exception of the 1972 forecasting performance, the predictors have exhibited a definite tendency to underestimate the rate of price increase in recent years.

The consensus of quarter-by-quarter forecasts for 1973 was for current dollar GNP to rise by approximately \$29.9 billion in the first quarter, \$26.2 billion in the second quarter, \$24.5 billion in the third quarter, and \$23.9 billion in the fourth. The realized increases came to \$43.3 billion, \$29.5 billion, \$32.5 billion, and \$29.5 billion for the four quarters, respectively. The quarterly predictions of the implicit GNP deflator were for increases of 4.1 percent, 3.2 percent, 3.5 percent, and 3.7 percent. For the four 1973 quarters, the implicit deflator actually rose at annual rates of 6.1 percent, 7.4 percent, 7.0 percent, and 7.9 percent during the year.

The consensus 1973 forecast projected personal consumption expenditures for the year at \$784.6 billion. As might have been expected from the underestimation of the rate of price increase, current estimates place personal consumption expenditures much higher, at \$805.0 billion. Gross private domestic investment, on the other hand, was predicted quite accurately, at \$201.5 billion. Thus, considering price increases, real investment spending in 1973 did not come up to the forecasters' expectations. Of the components of investment spending, the forecasters underestimated residential construction expenditures by \$4 billion but overestimated the investment in business inventories by almost the same amount. As usual, the forecasters were very close to the mark on government purchases of goods and services, underestimating them by only \$0.5 billion.

The forecasters also underestimated, but by a substantial margin, the net exports turnaround in 1973. Net exports in 1972 had exerted a \$4.6 billion drag-but the actual figure showed a surplus of exports over imports of \$4.6 billion. Not one of last

year's forecasters expected so large a recovery in the balance of trade in 1973.

Consistent with the forecasters' accuracy on predicting the rate of real growth of GNP, however, was their accurate prediction of the rate of unemployment. The unemployment rate, estimated to average 5.0 percent in 1973, actually averaged 4.9 percent.

In other areas, the 1973 forecasters underestimated the index of industrial production. The index rose 8.9 percent for the year, against a forecast of a 7.0 percent gain. Corporate profits before taxes were also substantially underestimated. Predicted to increase 12.8 percent, profits actually rose by a whopping 30.1 percent for the year, to \$127.5 billion. The consumer price index, like the implicit price deflator for GNP, was substantially underestimated. Consumer prices were expected to increase 3.4 percent; they actually rose 6.2 percent.

#### 1974 FORECASTS IN BRIEF

**Gross National Product** Forecasts for 1974 current dollar GNP center around \$1,386.1 billion. This typical forecast represents an approximate 7.6 percent yearly gain, which is considerably less than the 11.5 percent increase registered in 1972, again primarily because of the expected energy shortfall. Prices, on the other hand, are expected to increase by 6.4 percent and thus to account for approximately five-sixths of the rise in GNP this year. GNP measured in constant dollars, or real GNP, is expected to increase only 1.2 percent in 1974, compared to almost a 6 percent rise in 1973. Estimates for increases in current dollar GNP ranged from a low of 5.6 percent to a high of 9.3 percent. The typical quarterly estimates indicate that GNP should increase \$19.8 billion in the first quarter of 1974 and \$19.0 billion in the second. The economy is then expected to recover, and the increases in the third and fourth quarters are expected to be \$24.5 billion and \$28.1 billion, respectively.

Personal consumption expenditures are expected to total \$861.4 billion for 1974, up 7.0 percent from 1973. Forecasters estimate that expenditures for durable goods will remain approximately constant, showing an increase of only 0.4 percent for 1974, while expenditures for nondurables and services will increase 7.6 percent and 8.8 percent, respectively. The large slowing in the rate of expansion of durable goods expenditures is expected to stem primarily from a slowdown in automobile purchases, which are again related to energy considerations. The increases in nondurables and services expenditures are expected to reflect mostly price increases.

Government purchases of goods and services are projected to total \$305.2 billion. This estimate represents a 10.1 percent increase, which is somewhat larger than the 8.7 percent gain of 1973. The 1974 forecasts range from increases of 8.6 to 11.6 percent.

Gross private domestic investment is expected to rise by about 4.8 percent in 1974. This estimate also represents a considerable slowing from the 13.0 percent 1973 pace. Much of the slowdown, however, can be attributed to residential construction, which is expected to continue its pullback from the record 1972 pace. Expenditures for residential construction, in fact, are expected to decline 10.2 percent from the 1973 level, even though price increases are expected for housing. Business fixed investment is only expected to slow moderately from its 15.1 percent 1973 pace to an 11.3 percent rate of increase in 1974. Many forecasters expect energy considerations to cause considerable investment expenditures in the automotive and petroleum industries and in the utilities, which will at least partially offset possible pullbacks elsewhere. The forecasters, however, were probably less consistent in their investment forecasts than in any other aggregate. The predictions for residential structures range from a 22.5 percent decline to a 2.7 percent decline. Those for business fixed investment range from increases of 7.4 percent to 13.4 percent. And investment in business inventories, which had a consensus of sorts of \$9.0 billion, had a range of forecasts from -\$3.0 billion to \$10.3 billion.

**Industrial Production** The typical forecast for the Federal Reserve index of industrial production (1967=100) is 126.8, an increase of 1.1 percent, which is substantially less than the 8.9 percent gain in 1973. Anticipated gains are in production of machinery ; declines are in the production of automobiles and, to some extent, steel.

**Housing** The construction industry is expected to continue its slowing from the record 1972 pace. Private housing starts, which totaled 2.38 million in 1972 and slowed to 2.04 million in 1973, are expected to total 1.65 million units in 1974. An anticipated decline in the demand for vacation homes explains a substantial portion of the expected housing decline, although continued expectations of high mortgage rates and other financing difficulties lead the forecasters to predict a decline in the number of primary dwellings started in 1974.

**Corporate Profits** The consensus forecast indicates that this year should be slightly less profitable for corporations than 1973, with pretax corporate profits expected to decline 4.0 percent to \$122.4

#### TYPICAL \* QUARTERLY FORECAST FOR 1974

Quarter-by-Quarter Changes in Billions of Dollars  
Unless Otherwise Noted

	I	II	III	IV
Gross National Product	19.8	19.0	24.5	28.1
Personal Consumption Expenditures	12.0	14.8	15.4	17.0
Gross Private Domestic Investment	-0.2	1.3	3.0	4.9
Net Exports	-0.5	-1.0	0.1	-0.4
Government Purchases	8.0	7.0	7.5	8.3
Gross National Product (1958 dollars)	-0.9	-0.5	4.0	5.6
Implicit Price Deflator†	6.3	5.8	4.9	4.8
Rate of Unemployment (%)	5.1	5.5	5.7	5.8

† Percentage changes at annual rates.

\* Median.

billion. Considering their other forecasts, however, an expected decline of only 4.0 percent in profits from the record \$127.5 billion registered in 1973 means that forecasters expect businesses to continue what is a relatively good profit performance by historical standards. Corporate profits before taxes, after all, increased over 30 percent in 1973. The most pessimistic forecaster expects a 10.8 percent profit decline: the most optimistic a 2.7 percent fall.

**Unemployment** Most forecasters are predicting an increase in the rate of unemployment for 1974. The typical forecast for the year is around 5.5 percent, which is 0.6 percentage points above the 4.9 percent average for 1973. The forecasters expect the unemployment rate to increase to a 5.8 percent average for the fourth quarter of 1974, with the largest jump from 5.1 percent to 5.5 percent coming during the second quarter.

**Prices** This year the forecast indicates an increase in the rate of advance of prices. The implicit GNP deflator, which rose 5.3 percent in 1973, is expected to increase 6.4 percent. The consumer price index is also expected to increase more rapidly, 6.8 percent compared to 6.2 percent in 1973. The wholesale price index, on the other hand, is expected to rise by 8.3 percent, which is considerably less than the 13.8 percent rate of advance registered in 1973.

**Net Exports** The nation's trade position, which showed a \$4.6 billion surplus in 1973, is expected to remain close to the same level (\$5.0 billion) in 1974. Most of the forecasters, however, were not expecting the increase in crude oil prices to be as

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large as they now appear to be. If that information had been available to them at the time that they made their forecasts, it would undoubtedly have affected to some extent their forecasts for 1974 net exports. The estimates for net exports ranged between \$2.5 and \$9.7 billion.

**Quarter-by-Quarter Forecasts** Fifteen forecasters made quarter-by-quarter forecasts for 1974. As indicated by the accompanying table, these forecasters generally expected the economy to slow in the first half of the year and to recover during the second. Recovery was predicted to come about because of an end to the Arab oil boycott and because the automobile industry, having converted more of their facilities to the production of smaller cars, would experience a recovery in sales from first half levels. To illustrate the diversity of the quarterly estimates, however, the typical forecast for real GNP in the first quarter, a decline of \$0.9 billion, was drawn from forecasts that ranged from a decline of \$7.4 billion to a rise of \$2.6 billion. Six of the fifteen forecasters predicted two consecutive quarters of negative growth in real GNP, which is considered by many to be a sufficient condition for defining a recession. Three of the fifteen predicted positive growth rates for real GNP in all of the 1974 quarters. Only one expected to see a declining real GNP for as long as three consecutive quarters in 1974.

**Summary** Forecasters this year have had a particularly difficult problem put before them. In addition to their normal difficulties in coming up with an accurate forecast of the economy's performance in the coming year, they have had to guess at the very political question of the Arab oil embargo and the

prices expected to be announced by what amounts to a foreign oil cartel. The announcement of the embargo and the subsequent estimate of a substantial petroleum shortfall from projected demands led the consensus forecast for real GNP to be reduced from one of a growth of somewhat less than 3.0 percent, to an increase of only 1.2 percent. The energy considerations also changed the prediction for the rate of price increase from 5.0 percent to 6.4 percent. Since most of the forecasters expected the oil boycott to last until mid-year 1974, any change in the duration of the embargo could substantially affect their predictions.

Those forecasters who predicted a recession in 1974 apparently expect to see, at worst, one of mild proportions that will have what are by historical standards, relatively minor effects upon business profits and the unemployment rate. The price effect of the expected petroleum shortage, however, is another matter. The combination of price rises in petroleum products and certain nondurables with the large number of workers covered by contracts scheduled for re-negotiation in 1974 has led the forecasters to predict a substantial rate of price increase in 1974.

Thus, if the forecasters are correct, and the 1974 economy is one in which rising unemployment combines with rising prices to yield a growth in real GNP of only 1.2 percent, the year will be discouraging indeed. But again, if the forecasters are correct about recovery beginning in the second half and a slowing in the rate of price increase in the second half, the stage will be set for a much better economic performance in 1975.

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