## A PERSISTENT BUT GRADUAL EXPANSION

William E. Cullison

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The economy will continue to expand in 1977, and "the pause" will pause, at least for the year. That, at least, is the general conclusion reached by leading business and academic economists who have published forecasts for the 1977 economy.

Each year the Federal Reserve Bank of Richmond compiles various forecasts of the economy's performance for the coming year. This year many of the forecasters based their forecasts on the following assumptions:

- 1. Higher oil prices;
- 2. Good harvests resulting in lower grain prices;
- 3. Continued availability of money for home financing;
- 4. An "accomodative" monetary policy.

Many also assumed that any fiscal stimulus that may be introduced by the Carter administration would not be felt in 1977. On the basis of these assumptions, the forecasters expect approximately a 5.0 percent rate of real growth for GNP. This slightly lower rate is expected to be accompanied by a 5.4 percent increase in prices and a 7.1 percent unemployment rate.

Last year the consensus prediction was remarkably close to the target for the year as a whole. The consensus was in error, however, on the path of the expansion during the course of the year. Last year's forecasters did not anticipate the so-called "pause" or "lull" in the economy's growth. This lull, which many observers believe began in June, persisted, some think, through October. There is some question about the dating of the pause, since different indicators suggest different dates. For example, the unemployment rate, which reached a low of 7.3 percent in May and began to move up sharply until July and slowly thereafter, suggests that the economy could still be in the growth pause. The reliability of the unemployment rate as an economic indicator has been questioned, however, because of the extraordinarily large increase in the civilian labor force in 1976. Employment increased at a good pace until June, and after a pause, apparently resumed its longterm normal growth path in November. The index of industrial production increased until August, when it began a decline that lasted until October. In November, however, the index turned up again.

This year the forecasters expect steady, though moderate, expansion. Although the growth in 1977 is expected to be balanced with no sectors declining, the outlook appears to be brightest for residential construction, and especially for single-family dwellings, where conditions are expected to be much improved. Even for multi-family dwellings the seers expect considerable improvement.

This article attempts to convey the general tone and pattern of some 40 forecasts received by the Research Department of this Bank. Not all of these forecasts are comprehensive, and some incorporate estimates of future behavior of only a few key economic indicators. The consensus of the annual forecasts may differ from the consensus drawn from the quarterly forecasts, since different forecasters were applying their skills. Also, since there were varying assumptions in the individual forecasts regarding events in 1977, the general tone and pattern may not necessarily be based upon the more realistic assumptions but only those most prevalent.

This Bank also publishes the booklet Business Forecasts 1977, which is a compilation of representative business forecasts with names and details of the various estimates. No summary article can ever be as informative as the actual forecasts themselves. Serious readers are urged to look at the individual forecasts in more detail in Business Forecasts 1977.

#### **1976 FORECASTS IN PERSPECTIVE**

The consensus forecast for 1976 GNP, published in last year's January/February *Economic Review*, predicted an increase of 12 percent over 1975. The rates of increase forecast ranged from 9.0 percent to 13.4 percent. Using the revised 1975 GNP total of \$1,516.3 billion, the consensus forecast for 1976 GNP would have been \$1,698.3 billion and the range from \$1,652.8 billion to \$1,719.5 billion. Increasing prices were expected to account for 5.6 percent of the gain in GNP, so GNP measured in constant dollars, or real GNP, was expected to rise 6 percent.

Current estimates by the U. S. Department of

Commerce indicate that GNP in 1976 actually increased 11.6 percent. Prices, however, increased at a somewhat slower rate than anticipated, so preliminary estimates put the increase in real GNP around 6 percent—quite close to the amount of increase predicted by the consensus of last year's forecasters.

The forecasters expected the unemployment rate to average 7.8 percent for the year. At present, preliminary estimates indicate an average of 7.7 percent.

As with the aggregate figure, the forecasters also predicted the components of GNP more accurately than in past years. Personal consumption spending was forecast to increase 11.0 percent, very close to the actual 10.8 percent rate of increase.

				Percentage Change		
		Unit or Base	Preliminary 1976*	Forecast 1977**	1975/ 1976	19 <b>7</b> 6/ 1977
Gross national product	\$	billions	1692.4	1880.2	11.6	11.1
Personal consumption expenditures	\$	billions	1078.6	1192.2	10.8	10.5
Durables	\$	billions	156.3	175.4	18.7	12.2
Nondurables	\$	billions	440.3	479.9	7.6	9.0
Services	•		482.0	536.9	11.5	11.4
Gross private domestic investment			241.2	281.5	31.3	16.7
Business fixed			160.0	183.7	8.8	14.8
Residential structures	•		67.8	82.5	32.4	21.7
Change in business inventories	\$	billions	13.4	15.3		
Government purchases	\$	billions	365.8	399.8	7.9	9.3
Net exports	\$	billions	6.9	6.7		
Gross national product (1972 dollars)	\$	billions	1265.0	1328.3	6.2	5.0
Plant and equipment expenditures	\$	billions	121.2e	137.2	7.5	13.2
Corporate profits before taxes	\$	billions	148.0 <sup>e</sup>	167.2	29.3	13.0
Private housing starts		millions	1.6	1.8	34.5	16.9
Automobile sales (domestic)		millions	8.6	9.1	16.6	6.0
Rate of unemployment		percent	7.7	7.1	<del></del>	
Industrial production index		1967 = 100	129.8	138.2	10.2	6.5
Wholesale price index		1967=100	182.9	192.2	4.6	5.1
Consumer price index		1967 = 100	170.5	180.6	5.8	5.9
Implicit price deflator		1972=100	133.8	141.0	5.1	5.4

\*Data available as of January 24, 1977.

\*\*Figures are constructed from the typical percentage change forecast for 1977.

eEstimated.

The components of consumption spending, however, were predicted less accurately. Consumer purchases of durable goods, estimated to increase 15 percent, actually rose 18.7 percent. In contrast to the underestimate of consumer durables, purchases of nondurables were overestimated, the actual rate of increase, 7.6 percent, being 3.1 percentage points below the forecast rate of increase. Consumption spending for services was forecast to increase only 10.1 percent, so its actual 11.5 percent increase combined with the underestimate of durable purchases acted to offset the overestimate of nondurable expenditures. As a result of these offsetting errors, the 11 percent expected increase in aggregate consumption turned out to be, quite fortuitously, close to the actual 10.8 percent figure.

The forecasters expected a large increase in gross private domestic investment from its depressed 1975 level, but not as large as the 31.3 percent rise that actually materialized. Their major error was in underestimating business inventory investment by \$5.8 billion. By contrast, residential construction and business fixed investment spending were predicted fairly accurately. Residential construction, predicted to increase 33.3 percent, actually rose 32.4 percent; and business fixed investment, projected to rise 10.3 percent, actually rose 8.8 percent. When combined, those figures resulted in a predicted 28.4 percent increase in aggregate gross private domestic investment, and that prediction, as noted earlier, was well below the figure realized.

Net exports, which the forecasters always find difficult to estimate accurately, was underestimated by only \$1.9 billion last year. By historical standards, that is a relatively small error. As for the last major component of GNP, namely government purchases of goods and services, the forecasts centered around a rate of increase of 8.7 percent. Actual government spending is now thought to have risen 7.9 percent.

All in all, the last year's forecasters did remarkably well in predicting average levels and rates of change on key economic variables for the year. They anticipated the recovery quite well, and their numbers for the year as a whole were closer to the mark than they have been in any previous year since this Bank has been gathering these data.

The consensus of the quarter-by-quarter forecasts for 1976 had current dollar GNP rising \$41.8 billion in the first quarter, \$46.7 billion in the second quarter, \$46.0 billion in the third quarter, and \$50.5 billion in the fourth. The realized quarterly increases were \$48.0 billion, \$39.0 billion, \$34.6 billion, and \$38.7 billion. For real GNP, the consensus forecast called for quarterly increases of \$16.3 billion, \$18.2 billion, \$18.1 billion, and \$19.7 billion. The realized numbers for the first three quarters, respectively, were \$27.1 billion, \$13.7 billion, and \$12.2 billion, while the preliminary number for the fourth quarter is now placed at \$9.3 billion.

The forecasters, then, exhibited considerably less prescience about the quarterly path of the economy than they did about average figures for the year as a whole. They expected relatively constant growth in 1976, with the largest increase in GNP coming in the fourth quarter. Instead, the economy experienced its largest growth in the first quarter, with the rate tapering off in the second, third, and fourth quarters. In defense of the forecasters, however, it should be noted that the large growth of GNP in the first quarter stemmed from hard-to-forecast inventory stimulus with real inventory investment increasing \$15.9 billion. Likewise, much of the slowdowns in real GNP in the second and fourth guarters came from inventory adjustments. Excluding these unexpected and hard-to-predict inventory swings, the forecasters came much closer to anticipating actual developments.

The limits of forecasting prescience were equally apparent in the discrepancy between actual and predicted quarter-by-quarter behavior of the unemployment rate. The unemployment rate was expected to decline gradually throughout the bicentennial year, averaging 7.4 percent in the fourth quarter. Instead, the unemployment rate surprised almost everyone by dropping sharply in the first quarter—from 8.5 percent in the fourth quarter of 1975 to 7.6 percent; continuing its fall, as expected, to 7.4 percent in the second quarter; but rising sharply to 7.8 percent in the third quarter; and continuing that rise into the fourth, when it averaged close to 8 percent.

Thus, although those who forecast the quarter-byquarter performance of the economy expected the unemployment rate to average 7.75 percent for the year (close to the actual 7.7 percent average rate), they thought that the end-of-the-year unemployment figures would be substantially better than they actually were.

Regarding profits and production, the forecasts for 1976 underestimated the recovery of both. Before-tax corporate profits were predicted to rise 22.5 percent; most observers now think they increased about 30 percent. The index of industrial production rose 10.2 percent against a predicted increase of 9.3 percent.

As with the implicit price deflator, the forecasters overestimated the rise in the consumer price index. Consumer prices were expected to rise 6.5 percent, but current figures indicate a rise of 5.8 percent.

#### **1977 FORECASTS IN BRIEF**

Gross National Product Forecasts for 1977 current dollar GNP center around \$1,880.2 billion. This consensus forecast indicates an approximate 11.1 percent yearly gain, about the same as the 11.6 percent increase apparently registered in 1976. Prices are expected to increase only 5.4 percent. GNP measured in constant dollars, or real GNP, is projected to rise 5 percent in 1977, considerably less than the 6.2 percent increase registered in 1976. Estimates for increases in current dollar GNP range from 6.8 percent to 12 percent, but the great majority lie between 11.0 percent and 11.5 percent. The concensus of quarterly estimates indicates an expansion of an essentially constant rate throughout the year. It calls for increases of \$45.3 billion in the first quarter of 1977, \$50.9 billion in the second, \$52.1 billion in the third, and \$54.0 billion in the fourth.

Personal consumption expenditures are expected to total \$1,192.2 billion for 1977, up 10.5 percent from 1976. The estimates for consumption spending range from an increase of 8.8 percent to an increase of 11.0 percent. Forecasters estimate that expenditures for durable goods will rise 12.2 percent for the year, while expenditures for nondurables and services are projected to advance 9.0 percent and 11.4 percent, respectively. The expansion in durable goods expenditures is expected to stem primarily from sales of appliances, furniture, and automobiles as a result of generally improving consumer confidence, a continued housing recovery, relatively strong demand for automobiles, and rising real disposable incomes.

Government purchases of goods and services are projected to total \$399.8 billion. This estimate represents a 9.3 percent increase over 1976, somewhat larger than the 7.9 percent gain of the previous year. The 1977 forecasts for government purchases range from increases of 8.2 percent to 11.0 percent.

Gross private domestic investment is expected to rise by 16.7 percent in 1977, following a 31.3 percent increase in 1976. Inventory rebuilding is expected to continue at about the 1976 level, although without the large quarter-by-quarter fluctuations that characterized 1976. Residential construction, however, will be the leading sector if the projectors are correct. It is expected to increase by 21.7 percent in 1977. Business fixed investment spending will be another source of strength. That sector is expected to register a 14.8 percent gain. The array of forecasts this year, as is usually the case, diverge more from the consensus in the investment area than in any other. Expectations for residential construction increases

### TYPICAL\* QUARTERLY FORECASTS FOR 1977

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

	I	II	<u> 111</u>	IV					
Gross National Product	45.3	50.9	52.1	54.0					
Personal Consumption Expenditures	27.0	31.2	31.0	30.1					
Gross Private Domestic Investment	9.8	10.7	12.0	11.7					
Net Exports <sup>†</sup>	4.5	4.0	3.2	3.0					
Government Purchases	7.7	8.4	9.4	11.8					
Gross National Product (1972 Dollars)	17.0	18.7	18.0	18.0					
Implicit Price Deflator‡	5.2	5.6	5.6	б.4					
Rate of Unemployment(%);	7.7	7.4	7.2	6.9					
*Median. †Actual estimate. ‡Percentage changes at annual rates.									

range from 13.6 percent to 27.5 percent. For business fixed investment, estimated increases range between 11.9 percent and 16.7 percent. Forecasts for investment in business inventories, for which the consensus was \$15.3 billion, range from \$14.0 billion to \$21.0 billion.

Industrial Production The typical forecast for the Federal Reserve index of industrial production (1967 = 100) in 1977 is 138.2, an increase of 6.5 percent. This prediction calls for more moderate expansion than in 1976, when the index increased 10.2 percent. From a longer-term viewpoint, even if the projected increase for 1977 is realized, the index will still be only 6.5 percent above its 1973 level.

Housing The construction industry is expected to continue its recovery from the very low levels of 1974 and 1975. Activity in this sector, however, is still expected to be below the 1971-1973 pace. Private housing starts-which totaled over 2 million in 1971, 1972, and 1973: 1.3 million in 1974; 1.2 million in 1975; and 1.6 million in 1976-are expected to total 1.8 million units in 1977. According to preliminary estimates, however, housing starts closed 1976 at an average annual rate of 1.8 million in November and December, so the predicted number for 1977 represents no improvement over the year-end 1976 rate. Forecasters expect the recovery to be limited mainly to single-family dwellings. Home financing is expected to be available, and the inventory of unsold houses on hand has been reduced during 1976. High current prices for new homes, however, continue to limit sales, and some builders have not yet recovered from past difficulties.

**Corporate Profits** All the forecasters expect a better pretax profit figure than was realized last year. The most pessimistic forecaster expects a 9.6 percent profit increase; the most optimistic a 19.5 percent rise. The consensus forecast calls for an increase in pretax profits of about 13 percent, to \$166.8 billion. This would follow a gain of approximately 29 percent in 1976. Hence, corporate profits are expected to continue their rebound from their generally poor performance in 1974 and 1975.

**Unemployment** Most forecasters are predicting a decline in the rate of unemployment during 1977. The typical forecast for the year's average is around 7.1 percent. This will be only 0.6 percentage points below the 1976 average, but considering that the unemployment rate at year-end 1976 stood around 8.0 percent, a 7.1 percent average for 1977 indicates the seers expect employment growth finally to outpace labor force expansion and reduce the unemployment rate.

**Prices** This year the forecast indicates that the rate of price increase will level out at about last year's rate. The implicit GNP deflator, which rose 10.0 percent in 1974; an estimated 9.3 percent in 1975; and an estimated 5.1 percent in 1976; is expected to increase only 5.4 percent in 1977. The consumer price index is expected to average 180.6. 5.9 percent higher than the 1976 average. The wholesale price index is expected to increase at a lower rate than the other indexes, 5.1 percent, but moderately faster than the 4.6 percent rate of advance registered in 1976. Current expectations are for a far better year, of course, than 1975, which had a

9.2 percent increase, and 1974, when wholesale prices rose 18.9 percent.

Net Exports The nation's trade position, measured on a National Income Accounts basis, was approximately \$6.9 billion in surplus in 1976 and is expected to stay at approximately the same level in 1977. The forecasters expect imports to continue to increase as consumer spending picks up, but they also foresee an increase in exports, since they expect recovery abroad. The estimates for net exports varied between -\$1.6 billion and +\$10.0 billion.

Quarter-by-Quarter Forecasts Fifteen forecasters made quarter-by-quarter forecasts for 1977. As indicated by the accompanying table, the forecasters generally expect growth of \$17-\$19 billion (measured in 1972 dollars) per quarter throughout the year. Translated into percentages and annualized, the expected median growth rates are 5.4 percent, 5.9 percent, 5.6 percent, and 5.5 percent for the four quarters, respectively.

These rates are median forecasts, however, and there is considerable variation among the forecasters. The forecasts for increases in real GNP in the first quarter range from \$12.5 billion to \$19.5 billion; second quarter expectations range from increases of \$14.8 billion to \$21.5 billion; third quarter from \$16.0 billion to \$26.4 billion; and the fourth from \$13.9 billion to \$21.0 billion.

If the median forecasts are realized, the 6.9 percent unemployment rate for the fourth quarter will be a considerable improvement over the present unemployment rate. It is, however, above the announced policy target of the new administration. There was considerable difference of opinion among the forecasters about the fourth quarter unemployment rate, however, and the estimates ranged from 6.5 percent to 7.1 percent.

# BUSINESS FORECASTS 1977

The Federal Reserve Bank of Richmond is pleased to announce the publication of *Business Forecasts 1977*, a compilation of representative business forecasts with names and details of estimates for the coming year. Publication is scheduled for February 16, 1977. Due to the energy crisis, however, there may be some delay. Requests for the booklet will be filled as soon as it becomes available. It may be obtained free of charge by writing to Bank and Public Relations, Federal Reserve Bank of Richmond, P. O. Box 27622, Richmond, Virginia 23261.