

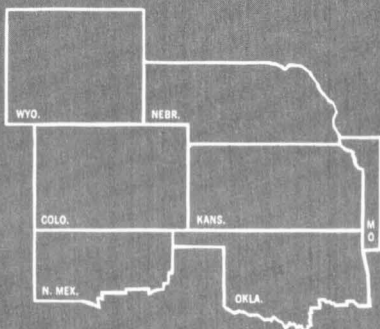


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THE 1968 AGRICULTURAL OUTLOOK

By Gene L. Swackhamer

AN OVERALL VIEW

ALTHOUGH 1968 gross farm receipts may show a modest gain over last year, net farm income is likely to fall below the level of 1967. Income gains from favorable livestock prices are likely to be offset primarily by lower crop income from a larger volume of marketings at relatively low prices. The farm income picture should improve as the year advances. Since developments in the general economy influence agriculture, the assumptions and conclusions of the accompanying article on the business outlook should be kept in mind.

Demand for farm products is expected to continue strong, reflecting the needs of a growing population, continued expansion of personal incomes, and favorable foreign demand. The supply of farm products is expected to remain abundant on the strength of larger grain carryovers, high crop yields, and continued high levels of livestock production. With favorable weather, fruit and vegetable production could rebound substantially from levels of the previous year.

Farm numbers will continue to decline as increasing costs put added pressure on farm incomes and off-farm employment alternatives remain good. Consolidation of farm units to achieve maximum productive efficiency from available technology will continue. As a consequence of these changes, average income per farm is expected to advance as a larger proportion of farms enters the commercial-agriculture classification.

A better understanding of world food supplies and needs will add some stability to farm

prices in contrast to the wide speculative fluctuations of some recent years. Federal programs will seek to achieve a supply-demand balance without increasing the burden of extensive commodity carryovers.

The cost of food to consumers is likely to remain relatively high, even though food in the United States will remain a bargain compared with food expense in most nations. As the costs of production, harvesting, transporting, and processing continue to advance, and with consumers demanding more convenience services, food prices will become even less responsive to changes in farm commodity prices.

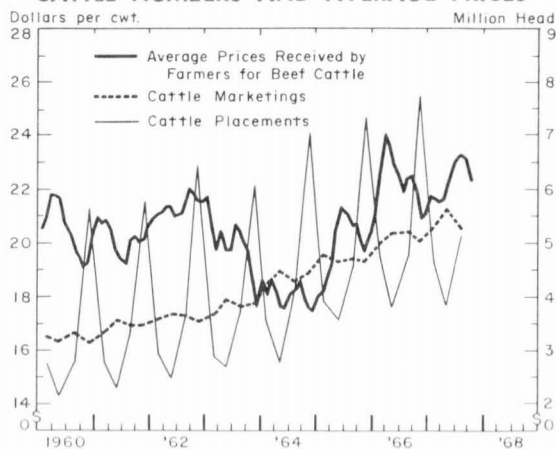
Agriculture will continue to demand more nonfarm capital inputs. Credit needs of agriculture are likely to continue expanding at an 8 to 10 per cent annual rate—placing additional strain on country banks to maintain services as the farm population declines and bank deposits grow at a more modest rate than loan demands.

A LOOK AT THE PAST YEAR

In general, the forecast of agricultural conditions made in late 1966 for 1967 was correct. But the year was not without some significant surprises, starting with the February revision of cattle numbers. A revision was not unexpected, but the direction and magnitude of change which increased numbers caused a reappraisal of views concerning the current position of the cattle cycle. Instead of being on the downside of the cycle with substantial herd rebuilding in prospect, the revised numbers indicated that the cattle inventory did peak in 1965 as thought, but that the inventory was higher

Chart 1

CATTLE NUMBERS AND AVERAGE PRICES



SOURCE: U. S. Department of Agriculture.

and the rate of decline less (108.9 to 108.5 million head from 1966 to 1967) than originally believed.

Cattle on feed in 1967 were up an average of only 3 per cent nationally compared with a 10 per cent average increase from 1965 to 1966. Although cattle marketings have risen steadily in this decade (Chart 1), recent-year prices received at the farm level have improved.

Hog slaughter in the 1967 calendar year exceeded the 8 to 10 per cent increase estimated in the agricultural outlook a year ago. In the first nine months of 1967, commercial hog slaughter exceeded year-earlier levels by 14 per cent. These marketings reflected a 12 per cent increase in the June to November 1966 pig crop. In June 1967, the United States Department of Agriculture (USDA) reported that the December 1966 to May 1967 pig crop was smaller than expected. In view of the heavy fall marketings, however, it is likely that the winter pig crop was more than 1 per cent larger than the preceding year.

Crop supplies increased in 1967 as expected, but price weakness was greater than anticipated. The 10 per cent drop in farm prices from September 1966 to April 1967 was accounted for largely by lower crop prices—particularly

citrus—as farm supplies increased, but also reflected declining speculative demand as the world food-population problem became more clearly perceived.

Primarily as a result of these major developments, gross farm receipts remained near the 1966 record high, while net farm income declined somewhat more than expected as higher production costs exceeded changes in gross receipts. Although the index of farm output rose to 118 (1957-59 = 100) in 1967, compared with 113 in 1966 and 115 in 1965, the income contribution of increased volume was about offset by lower farm prices than prevailed in 1966. Farm production expenses, on the other hand, advanced by nearly 4 per cent from a year earlier. Realized net farm income, although below the near-record level of \$16.4 billion in 1966, was the second highest level achieved in nearly 20 years.

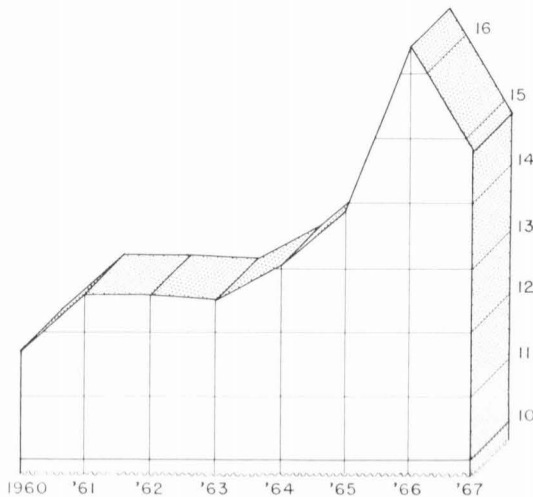
THE AGRICULTURAL ECONOMY AHEAD

Demand Strong

The demand for food products is expected to remain strong in 1968. Food expenditures likely will approach \$100 billion—increasing at a faster rate than in the past year. Increased total civilian food consumption will result from near-record per capita food consumption, a steady growth in population, strong consumer demand, and plentiful food product supplies. Higher retail food prices and increased purchases of relatively high-priced foods will contribute substantially to the rise in food expenditures. Increased sales by both retail food stores and restaurants are anticipated as both population and personal incomes continue to advance.

Consumers probably will spend slightly less than 18 per cent of their disposable incomes for food in 1968—averaging nearly \$500 per capita. Per capita food consumption of animal products is likely to remain high, while consumption of crop products remains nearly

Chart 2
REALIZED NET FARM INCOME
 (Billions of dollars)



SOURCE: U. S. Department of Agriculture.

stable. Growth in total food consumption may again equal the 2 per cent rate of 1967.

The domestic demand for feed grains is likely to strengthen slightly as lower feed grain prices and an abundant supply encourage more grain feeding of livestock. Demand for other nonfood commodities also is expected to remain strong. Cotton continues to benefit from the general improvement in economic activity and from military needs. Tobacco shows strength behind record domestic consumption and good export demands.

Supplies Increase

With few exceptions—most notably cotton—crop production increased in 1967 over 1966. The cotton crop of slightly more than 8 million bales was the smallest since 1921. Feed grain, food grain, and oilseed production are all above year-ago levels. Feed grain production may total 176 million tons—nearly 12 per cent more than 1966. Production of 52 million tons of food grains is 17 per cent above 1966 and up 27 per cent from the 1961-65

average. Oilseed output is expected to exceed the last crop year by 3 per cent and rise nearly 18 per cent above average.

In view of these substantial improvements in crop supplies, several implications become apparent. First, relatively lower farm prices can be expected in much of the 1968 marketing year. Increased acreage of field crops and a generally favorable growing season resulted in greater production than was anticipated. Although the need to stabilize declining carryover stocks of some important feed and food grains was apparent, 1967 production appears to have more than accomplished this goal. The October 1, 1967, feed grain carryover of 37 million tons—although the lowest in several years—was replenished adequately by the 176 million tons of 1967 production.

A second implication of the increased supply of feed grains is that a continued high level of livestock feeding can be expected. The number of grain-consuming animal units rose to a post-war high of 178 million units during the October 1966 to October 1967 feed grain marketing year—up 8 million from 1965-66. Because dairy numbers and hog farrowings are expected to decline somewhat, while beef, broiler, and turkey numbers may remain nearly the same, only a slight change in feed grain utilization is expected during this marketing year. More favorable feed-price ratios—but with fewer animal units—may lead to feed grain utilization of from 164 to 167 million tons. Larger food and feed grain supplies also are expected to result in more favorable terms of trade with foreign nations.

Citrus production in the October 1967 to October 1968 crop year is estimated to be well below the 1966-67 level, but still above average. Noncitrus fruit tonnage may fall as much as 14 per cent below both the 1966-67 and average production levels. As the October 1966 to October 1967 record citrus crop gives way to the drought- and hurricane-reduced 1967-68 production, fruit prices can be ex-

pected to rise for both domestic and export consumption.

Foreign Trade Good

In fiscal 1967 (July 1, 1966, to June 30, 1967), exports of agricultural products continued to advance—rising 1 per cent above the preceding fiscal year. This rate of increase, however, was disappointingly lower than the 10 per cent rate of increase in 1966—especially in view of the lower level of farm prices that prevailed over much of the export year. Most of the export weakness came in the final quarters of the export year when grain prices were lowest, but animal product and dairy product exports continued to decline for the second consecutive year. Part of the slowdown in exports can be attributed to our relatively high commodity prices early in the 1967 fiscal year, to larger world production, and to a drop in the level of economic activity among major trading nations.

Foreign trade prospects for the 1968 fiscal year look encouraging. Improving economic conditions abroad and rising incomes are expected to strengthen export markets. In addition, the United States is in an improved export position with abundant supplies and more competitive prices. This is especially true for feed grains where exports are expected to show improvement from the decline of the past fiscal year. Although rising domestic production in the European Economic Community (EEC) will again be an export obstacle, growth in total world demand will benefit American agriculture. Continued export strength is expected for soybeans, cotton, tobacco, and rice. Wheat also may rebound from its decline of last year—approaching an export level of nearly 750 million bushels.

Although the Kennedy Round of the General Agreement on Tariffs and Trade has been reviewed with mixed opinions, the overall export position of the United States does not appear to have been weakened in the give-and-take

of negotiations. In fruit and vegetable trade, we granted concessions on about 62 per cent of our 1964 (base) import trade and received concessions on about 58 per cent of our exports. More than one third of all agricultural trade modifications granted by the United States was on fruits and vegetables.

In livestock and livestock product trade, the United States received concessions on \$152 million out of \$157 million of 1964 exports. Most of these concessions were duty cuts by four principal customers—the EEC, Japan, Canada, and the United Kingdom. Variety meats and tallow accounted for 70 per cent of the concession exports. Concessions were granted by the United States on about \$221 million—or one fourth—of 1964 livestock and meat product imports. Most of the concessions were made on pork and specialty meat preparations. Few concessions were made on fresh, chilled, or frozen beef and veal or feeder cattle.

The International Grains Agreement, developed basically as a two-part program—wheat trade and food aid—also has met with mixed reaction. Perhaps its most controversial aspect is the effect of minimum and maximum wheat exchange prices on future world production. Some have viewed with alarm the impact that higher minimum wheat export prices will have on trade both currently and in the future.

LIVESTOCK PRODUCTION TO STABILIZE

In the first six months of 1967, meat supplies were substantially above 1966 levels. Beef and veal production was up 5 per cent as cattle slaughter rose 2 per cent and slaughter weights averaged 16 pounds per head above year-earlier levels. Increased steer and heifer slaughter more than offset a 12 per cent decline in cow slaughter. During the same six-month period, pork production rose 15 per cent, lamb and mutton production was up 2 per cent, and poultry production increased 16 per cent. As a result of these increases, commercial production of red meat and poultry totaled 21 bil-

lion pounds—an increase of 10 per cent over the first six months of 1966.

During the second half of 1967, red meat production returned to near 1966 output. However, in contrast to year-earlier levels, production was contracting rather than expanding. Although pork production continued to exceed 1966 levels into the late months of last year, the margin fell sharply.

Cattle slaughter after midyear was below comparable year-earlier levels. Slaughter weights for all grades in August approached year-earlier levels—adding some strength to fed cattle prices. In the July-September quarter, fed cattle marketings were only 2 per cent above the corresponding quarter of 1966 and confirmed the July 1 intention report of feeders. The October 1 *Cattle on Feed* report showed a 2 per cent gain over 1966—which was lower than the six-state summer placement reports implied. In addition, all of the increase came from the two lighter-weight categories (which increased 13 per cent)—further suggesting winter slaughter not much different from year-earlier levels.

An earlier movement of lambs to market held summer slaughter higher than seasonally expected, but still 1 per cent below 1966, despite a 6 per cent smaller 1967 lamb crop. Because of the heavier summer marketings, fall and winter supplies were reduced.

Poultry production remained high throughout 1967 as a result of breeder flock buildup in response to a favorable level of broiler prices in 1965-66 and continued technological advances. Production is expected to increase more slowly in 1968, with output about the same as last year. Turkey production in 1967 rose to a record 126 million birds—about 8 per cent above 1966. Although consumption also rose spectacularly, production in 1968 is likely to remain about 1.8 billion pounds.

Beef. Optimism again has permeated the cattle industry—that is, the position many analysts forecast before the 1964 census num-

bers revision again seems eminent. The slight decline in inventory numbers from 109 million head in 1965 to 108.9 million head in 1966, then to 108.5 million head on January 1, 1967, is expected to continue. With beef slaughter in 1967 above 1966 levels, a 1 per cent smaller calf crop, continued heavy feeding of heifers, and further decline in dairy numbers, the January 1, 1968, cattle inventory may be about 108 million head.

In general, optimism stems from these conditions: (1) strengthening consumer demand as incomes rise, (2) anticipated profitable feeding ratios because of feed grain abundance, (3) expected declines in numbers on feed, (4) reductions in cow slaughter, and (5) less pork and poultry price competition. On the other hand, a decline in cow slaughter and the marketing of larger proportions of fed beef can be expected to encourage additional imports of processing beef.

The need for caution is still evident, especially in anticipating stronger fed cattle prices and profits. More abundant feed inevitably finds its way into livestock feeding. Timely fall rains encouraged holding feeders longer, which will result in the eventual feeding of larger cattle. If these cattle are marketed at heavier weights, as has often happened in the past, prices might be depressed again at times in 1968. The prospect of improved prices does not automatically guarantee the feeder a profit, even with lower feed costs. The likelihood of higher costs—other than feed—including higher-priced feeders, must be recognized in cattle feeding this year.

Hogs. Forecasting developments in the pork industry is especially risky this year. A structural change seems to be underway in the industry and considerable doubt exists as to how the production cycle might be changing. It is generally believed that there will be fewer in-and-out pork producers in the future, as investment considerations become more important relative to feed cost and market price con-

siderations. Hog feeding operations have grown in scale and have added stability to the production-marketing cycle. What remains in doubt for 1968 is the reliability of farrowing intentions. Production expanded from November 1965 through February 1967. Since March 1967, farrowings are believed to have declined modestly from year-earlier levels, reflecting a drop in the hog-corn ratio from 23.8 in December 1965 to 13.5 in April 1967. If September-November farrowings declined as expected, the fall pig crop soon to be marketed is likely to be near year-earlier levels. Complicating confidence in reported winter farrowing intentions, which will influence marketings during the last half of 1968, are these factors: (1) the widespread availability of feed and its impact on farrowings outside the Corn Belt, (2) the production incentive induced by reasonably stable winter hog prices, favorable feeding costs, and improved profits prospects, and (3) the implication of sow slaughter falling below year-earlier levels since midyear 1967. If entry into hog production is not as complicated as has frequently been suggested, 1968 hog production could again be upward bound temporarily.

Sheep and Lambs. In many respects, the price outlook is brightest for 1968 lamb markets; yet, the overall, long-run trend is one of declining per capita consumption as consumer tastes and preferences continue to swing toward beef and poultry. After a year in which lamb slaughter exceeded year-before figures, lower production is in store for 1968. A 6 per cent smaller lamb crop, more direct-to-packer movement off grass last fall, 38 per cent fewer shipments into Corn Belt states from May to August 1967, less price competition from other red meats, and, hopefully, avoidance of excessive slaughter weights, all should combine to make 1968 a good year.

Dairy. Some major changes continue to develop in the dairy industry. Almost paradoxically, cow numbers and aggregate production

continue to decline as support prices have consistently climbed. Because of higher retail prices for fluid milk and dairy products and a continuing trend away from animal fats, domestic consumption declined in 1967. Dairy exports continued to fall and imports increased in the first half of 1967 at an annual rate of 4.3 billion pounds. The rapid increase in imports reflected the impact of increased world production, relatively low U. S. milk output, and relatively high U. S. prices which encouraged imports. The import quota proclamation invoked in 1967 will probably remain in force throughout this year—holding imports to around 1 billion pounds milk equivalent.

Adjustments in the dairy industry reflect several considerations. Off-farm employment opportunities and alternative farm enterprises requiring less capital and labor for comparable returns continue to induce migration from dairy farming. Production per cow has continued to increase, however, so even with declining cow numbers, total milk production has ranged between 120-121 billion pounds during the past three years.

In 1968, the combination of favorable milk prices and expected lower feed costs are likely to slow the decline in dairy numbers. A modest increase in production might result from output per cow increasing enough to offset lower dairy numbers.

AN ABUNDANCE OF FEED AND FOOD GRAINS

The 1968 voluntary feed grain program will seek to improve farm prices by reducing total supplies. A target of 30 million diverted crop acres—ten million more than in 1967—has been announced. To achieve this goal, feed grain producers are being encouraged to voluntarily divert more than the minimum 20 per cent of their grain sorghum and corn base acreage required for price support participation. Farmers may divert up to 50 per cent of

their base acreage and receive diversion payments of 45 per cent of the total price support (loan rate plus support payment) times the projected yield for acreage over the required minimum. If the 1968 program is as successful as a similar program in 1966, production is likely to be reduced from 2 to 3 per cent below the record levels of the past year.

Wheat. The production potential of American farmers was again reconfirmed in 1967. In anticipation of the lowest wheat carryover in many years—and at a level considered less than adequate—the wheat acreage allotment was increased from 51.6 million acres in 1966 to 68.2 million acres in 1967. The reasons behind the increase were obvious: world production was not expected to be adequate for world needs, the U. S. carryover threatened to dip to under 400 million bushels by June 30, 1967, as 1966 production fell nearly 7 per cent below 1965, and another strong export year was expected. Not all of the 32 per cent average increase in acreage allotments was expected to be used. A surprisingly large 26 per cent was planted, however, and a good growing season thus produced a record 1.6-billion-bushel wheat crop—19 per cent above 1966 and 28 per cent above the 1961-65 average. The farm price of wheat has reflected the unexpectedly large record production and is expected to remain below the average \$1.63 per bushel received by farmers during the 1966-67 marketing year.

Projections for the 1967-68 wheat marketing year which began July 1, 1967, indicate that a 426-million-bushel carryover with a 1.6-billion-bushel crop, plus modest imports, will give a total supply slightly in excess of 2 billion bushels. If feeding of wheat increases to around 140 million bushels as expected, and if exports reach the 750-million-bushel goal, then total disappearance with stable domestic use will approach 1.5 billion bushels—leaving a 500-million-bushel carryover on June 30, 1968.

Feed Grains. Record-high production of 4.7 billion bushels of corn (14 per cent more than the 1966 crop and 25 per cent above the 1961-65 average) with record production of 775 million bushels of sorghum grain (8 per cent more than last year and 41 per cent above average), indicates how a record 176-million-ton feed grain crop materialized. With little change expected in the number of grain-consuming animal units in 1968 and only slight improvement in exports anticipated, a substantially larger end-of-marketing-year (October 1, 1968) carryover is in prospect. Because of record feed grain production levels, the marketing system is likely to undergo a severe test in 1968. Neither huge stocks nor chronically depressed farm prices are desired. With a reported sizable portion of the 1967 crop not eligible for support payments, cash market prices may not be able to climb much above support price levels. The Commodity Credit Corporation, with stocks of 21 million tons at midyear 1967—the smallest volume since 1952—is again likely to find reserves increasing.

Other Grains. Two other important crops also established new production records in 1967. Rice output was estimated at 89.4 million hundredweight—5 per cent above the previous record crop in 1966. Rice yield per harvested acre rose an amazing 17 per cent above the 1961-65 average and, during the 1967 crop and calendar year, the United States became the major world exporter of rice—shipping 1.7 million tons. Exports, even at higher prices, are expected to grow, since only about 4 per cent of the world production is available for trade.

Soybean production, at 985 million bushels, was 6 per cent above 1966. Both total supplies and carryover of soybeans for the 1968 season will be at record levels. Expected lower prices and a growing need for animal feeds will make soybeans more competitive with other oilseeds than they were in 1967.

The State of the Economy: Review and Preview

By Glenn H. Miller, Jr.

Review: 1966-67

BY VIRTUE OF its continuation through November 1967, the current economic expansion has become the longest business upswing in U. S. history—surpassing the length of the boom period that included World War II. From the first quarter of 1961 through the third quarter of 1967, total gross national product (GNP) rose by 57 per cent and total personal income increased by 55 per cent. But the 12-month period that put this expansion into the record books was not a smooth and uneventful one. Indeed, it had something of the nature of a “happening”—which may be defined as a set of discontinuous dramatic occurrences or events, featuring interaction between the audience and the actors. Therefore, a brief review of the performance of the economy from the third quarter of 1966 to the third quarter of 1967 is appropriate.

To set the stage properly, it is necessary to look back to mid-1965, when both the character and the extent of the U. S. commitment in Vietnam changed. That change in turn led to a rapid acceleration in the pace of economic

activity. The average quarterly increase in GNP, which had been about \$11.4 billion since mid-1963, became about \$16.8 billion for the period including the last two quarters of 1965 and the first quarter of 1966.

As economic policies of restraint took effect, the rate of expansion began to moderate and for the last three quarters of 1966 the average quarterly increase in GNP was about \$12.7 billion. Much of the monetary restraint fell on the residential construction industry, and the sharp decline in expenditure in this sector was one of the principal moderating influences on the growth of GNP. Investment in residential structures was \$6.1 billion lower for the fourth quarter of 1966 than for the first quarter of that year. Business fixed investment, on the other hand, continued to rise, and was \$4.5 billion higher in the fourth than in the first quarter of 1966. In an attempt to stem this growth, further fiscal restraint, in the form of the suspension of both the 7 per cent tax credit on investment in machinery and equipment, and the accelerated depreciation provisions on new buildings, was applied in October 1966. This action, along with monetary restraint, and the bottlenecks, increasing prices, and so on, that

are associated with boom conditions, did bring some moderation in business spending for fixed investment.

Another facet of the developing situation in 1965 and 1966 was the evolving pattern of change in business inventory investment. From 1961 through 1964, inventory accumulation occurred at a pace generally commensurate with the growth of output and sales. There was no excessive accumulation of stocks of goods and, at the same time, production for inventories contributed to the overall growth in industrial production and in GNP. In 1965 and 1966, however, inventory investment began to increase more rapidly, thus increasing the contribution to total expansion, but also creating stocks which appeared too large to manufacturers, wholesalers, and retailers. Inventory investment, which amounted to \$5.8 billion in 1964 and \$9.4 billion in 1965, rose from an annual rate of \$9.9 billion in the first quarter of 1966 to \$18.5 billion in the fourth quarter of that year. With the overall rate of economic advance slowing after the first quarter of 1966, such a rate of inventory accumulation was clearly excessive. As inventory-to-sales ratios rose, businessmen began to reverse their inventory policies. As a result, inventory investment declined from an annual rate of \$18.5 billion in the fourth quarter of 1966 to \$7.1 billion in the first quarter of 1967, and to a half-billion dollars in the second quarter of 1967. Such a sharp slowdown in inventory investment was inevitably a drag on overall economic growth.

The quick change in the rate of inventory accumulation from very high to very low was not the only drag on economic activity. Although the housing starts series reached a trough in October 1966, the recovery of the residential construction industry has taken some time. Industrial production fell nearly 3 per cent in the first six months of 1967, and business spending for plant and equipment declined in both the first and second quarters of the year.

Thus the early part of 1967 was characterized by an interlude of weakness in the economy. In the first quarter, GNP increased only \$4.2 billion, as investment in business inventories fell \$11.4 billion and business fixed investment declined by nearly a billion dollars. An actual decline in GNP was avoided primarily because total government purchases of goods and services—Federal, state, and local—increased \$8.7 billion and because consumer spending increased \$6.4 billion. In the second quarter, the inventory correction process continued and the rate of inventory investment dropped another \$6.6 billion. Business fixed investment again declined. Consumer spending was stronger in the second quarter, rising \$9.5 billion and, along with a more moderate rise in government purchases of goods and services, brought the overall increase in second quarter GNP to \$8.8 billion.

The importance of the inventory correction as a drag on overall economic advance in the first half of 1967 is emphasized by a comparison of the quarterly growth in total GNP with that in final sales. (Final sales is GNP minus inventory investment.) Although GNP rose only \$4.2 billion in the first quarter, final sales increased \$15.6 billion—in spite of a negative contribution from business fixed investment. In the second quarter, final sales again rose substantially—\$15.4 billion—while the reduced rate of inventory investment held GNP growth to \$8.8 billion.

Although this pause in the economic advance did not develop into a full-blown recession—as has often happened in the past when sizable inventory corrections have occurred—the concern of economic policymakers was shown by a shift to policies of greater ease. Monetary policy, which had begun to ease toward the end of 1966, continued to provide for a rapid expansion of bank credit in 1967. On the fiscal side, the investment tax credit and accelerated depreciation provisions were reinstated in May 1967. Yet even as these policy

steps were taken, and even as many current indicators remained sluggish, the feeling was strong among economic analysts and policymakers that the retardation in the economic advance would be only that, and no more. In fact, quite early in 1967 forecasts of a sharp increase in activity before year's end formed the basis for a policy prescription of more fiscal restraint before the beginning of 1968, with a 6 per cent surcharge on personal and corporate income tax liabilities, effective July 1, 1967, as the most important proposed instrument of restraint.

Improvements in housing, a turnaround in business fixed investment spending, and the likely end to the inventory drag were expected to combine with continued strength in government spending and in consumption to bring about rather sizable increases in GNP in the third and fourth quarters of 1967—increases of a magnitude that could begin to put serious pressure on the economy's resource base and hence on price levels. Third quarter GNP data appear to corroborate this outlook, as total GNP increased by \$16.1 billion. Business fixed investment did turn around as anticipated, and residential construction expenditures also rose. Inventory accumulation occurred at a more rapid rate than in the second quarter, and thereby again became a positive contributor to overall growth. The two sectors that, in the first two quarters, had given the most support to growth in final sales, and hence in GNP—personal consumption and government purchases of goods and services—made more modest contributions to the third quarter increase: \$5.6 billion and \$3.2 billion, respectively.

The events and occurrences in the U. S. economy's performance in the last quarter of 1966 and the first three quarters of 1967 do appear in retrospect both dramatic and, in many respects, discontinuous—although not unrelated. And the interactions that occurred between firms and households, analysts and

policymakers were of great significance for the performance. In short, the American people experienced an economic "happening."

Preview: 1968

MAJOR EXPENDITURE CATEGORIES

A general evaluation of the business outlook for 1968 may profitably be undertaken within the GNP framework, since GNP is a suitable measure of total economic activity. Such a discussion of the economy's major spending sectors, organized on a GNP component basis, is presented in the following section of this article. It is a basic assumption of the following survey that a program of fiscal restraint of the magnitude requested by the President in August 1967 will be effective very early in 1968.

Gross Private Domestic Investment

Business Fixed Investment. The importance of changes in business fixed investment to both the long-run growth and the short-run stability of the U. S. economy is well known. Annual increases of from 14 to 17 per cent in business spending for plant and equipment in the years 1964, 1965, and 1966 contributed a great deal to the economic expansion of that period. The estimated 2 per cent increase for 1967 is far below the growth of those years, and, although it appears that 1968 will show a larger increase than 1967, it almost certainly will not approach the very large gains of 1964-66.

According to the McGraw-Hill fall survey of preliminary capital spending plans, U. S. business tentatively plans to spend 5 per cent more on new plant and equipment in 1968 than it did in 1967. It should be emphasized that these plans are preliminary and subject to review and change in the light of changes in the overall economic situation and/or of changes in the positions of individual firms.

Although the planned increase is greater than the expected increase for 1967, it is still comparatively modest and business investment is

not likely to have the stimulative influence on economic activity in 1968 that it did in the 1964-66 period. Reduced capacity utilization rates, rising costs, and the possibility of a tax increase are among the elements at work toward restraint in the growth of business investment. On the other hand, output and sales are expected to be higher next year, as are profits, and these factors would contribute to further increases in business capital spending. It should be noted that, during periods of rapid economic expansion, the fall surveys of capital spending plans in the past have underestimated the extent of investment increases.

Business Inventory Investment. Spending for increases in inventories is the second kind of business investment expenditure. The rapid decline in the rate of accumulation of business inventories in 1966-67 already has been cited as a fundamental element of that economic "happening." The prospects for inventory investment in 1968 are quite different, in both character and magnitude. A more normal rate of increase for 1968 can be expected as final sales continue strong and as more usual inventory-sales ratios are reached, in spite of some expected decline in defense inventories. Inventory investment may well occur at a fairly rapid rate in the first half of the year—spurred by a rise in automobile stocks and by hedging against the possibility of a steel strike later in the year, but it is likely to go on at a more restrained rate in the second half.

Residential Construction. The price and availability of mortgage credit appear to be the most important factors determining the number of new housing starts in 1968, since the potential underlying demand for housing—based on demographic and income considerations—seems to be quite strong. If financing is available, the number of units begun should continue to increase. And even if starts should level off, residential construction expenditures will continue to rise for some time as the increasing number of structures begun in 1967

are brought to completion and as the average value per unit continues to rise.

Government Purchases of Goods and Services

Federal. Purchases of goods and services by the Federal Government, especially for military use, were an important element in the 1967 increase in GNP. But the quarterly increases in defense purchases have become progressively smaller since the first of the year. Although these outlays probably will continue to increase through 1968, the rate of increase probably will either level off or continue to decline. This projection is based on the recent leveling off of defense contracts and orders, and the assumption that it will continue, as well as on the knowledge that expenditure changes lag behind changes in contracts and orders. Federal nondefense purchases of goods and services have not grown very much in recent months, and are unlikely to do so in 1968.

State and Local. State and local purchases of goods and services appear to have captured one of the attributes of "Ol' Man River"—they just keep rolling along. Even though policy restraint may have some effect on them, these expenditures remain true to the oft-voiced description of them: one of the most easily projected components of GNP. State and local purchases probably will continue to grow in 1968 at close to the average quarterly rate achieved in recent years.

Net Exports

Net exports, by contrast with state and local purchases, are not easy to project. Because they make up the smallest major component of GNP, and because swings that are large in proportion to the size of the net export component are not large in relation to total GNP, little is lost by assigning net exports a "no-change" value when assessing the size of the overall change in economic activity.

Personal Consumption Expenditures

Nondurable Goods and Services. Although their growth is perhaps less inexorable than that of state and local purchases of goods and services, consumer expenditures for nondurable goods and for services have, over the recent past, shown a relatively stable pattern of growth. During the present expansion, consumer expenditures for services have grown each quarter and spending for nondurables has shown quarterly increases with but one exception. On a year-to-year basis since 1961, the percentage increase in spending on nondurable goods and services has been rising steadily. Together, these spending categories make up just under 80 per cent of disposable income. As disposable income maintains its rising course, further increases in consumer purchases of soft goods and services will continue to contribute to the overall expansion of economic activity.

Durable Goods. The volatility of consumers' purchases of durable goods stands in clear contrast with their pattern of spending for nondurables and services. Spending for automobiles and parts, along with purchases of furniture and household equipment, make up well over four-fifths of the total value of consumer durable goods sold. Purchases of such items are easily postponable and may vary widely over short periods. In late 1966 and in 1967, cautious behavior by consumers resulted in some such postponements, which were accompanied by relatively small increases in instalment debt and a substantial rise in the personal savings rate.

It seems likely that in 1968, even with the reduced rate of growth in disposable personal income that would be associated with a tax surcharge, consumer spending for durables will tend to be somewhat stronger. Surveys of consumer buying intentions reveal an inclination toward higher outlays. The high savings rates of the recent past have added to the liquidity

positions of potential purchasers of consumer goods. And the savings rate itself in 1968 may well begin to move back toward more normal levels.

Much, of course, depends on automobile sales, which industry sources expect to be very good for the 1968 model year. In addition, more than the usual proportion of 1968 model year sales are likely to occur in calendar 1968 as a result of the contract negotiations and strikes occurring in the last months of 1967. Resolution of these difficulties almost certainly will lead to increased activity in production and sales. Purchases of the second major category of durables—furniture and household equipment—will be influenced not only by the general considerations mentioned above but also by conditions in the homebuilding industry. Continued strong activity in the residential construction sector would be quite beneficial to sales of items such as major kitchen and laundry appliances and color television sets.

RESOURCE USE AND PRICES

All in all, the foregoing survey of behavior by the various spending categories in 1968 (with its assumption of fiscal restraint) results in the picture of a sizable increase in total economic activity, fairly evenly distributed among the several sectors of the economy. A situation such as that envisioned here would put some—but not extraordinary—additional pressure on the economy's resource base and hence on price levels. This specific problem will be examined briefly in the remainder of this article.

Changes in the unemployment rate and in the rate of capacity utilization in manufacturing are indicators of the degree of pressure of expanding economic activity on the resource base. The rate of manufacturing capacity use, which declined in late 1966 and 1967 as output fell, may be expected to recover somewhat in 1968. This conclusion is based on expectations of a moderate increase in capacity in 1968, and a

slightly more rapid rise in output. Continuing tightness in the labor market in 1968 is also a probability. Increases in the overall unemployment rate in the fall of 1967 were not fully reflected in the adult men-“breadwinner”-experienced worker classifications, where the prevailing low rates were approximately maintained and are likely to be maintained in 1968.

High rates of resource utilization usually are indicative of potential pressure on price levels. It seems unlikely that, even if a tax increase is enacted, 1968 will pass without a significant increase in the general price level. In the first place, increases in aggregate demand of the kind generally expected for 1968 will bring some additional upward pressure to bear on prices. Secondly, any demand-pull factors at work will be reinforced by some elements of cost-push pressure on prices that have already found their way into the system. Furthermore, a stronger demand situation will make possible the passing-through of cost increases into price rises; and additional wage-cost pressures may be generated by contract settlements in 1968 in several important industries.

Industrial prices reflect the costs of both materials inputs and labor inputs. The wholesale prices of industrial materials are likely to increase further in 1968. There are several elements involved in the labor costs situation. In the past year, unit labor costs rose sharply—both because of rapid gains in labor compensation payments and because slower growth in output reduced the rate of productivity increase. Larger output gains in 1968 should bring higher rates of productivity increase, thus tending to reduce the pace of increase in unit labor costs. But labor settlements in 1967 brought increased rates of gain in labor compensation (for example, in the rubber industry), capped by the important pattern-setting agreements in the automobile industry. With 1968 a year of further important contract terminations and negotiations (for example, in the steel industry), continued sizable compensation increases may be expected. With these wage-cost-push elements operative in an environment of rising aggregate demand and increasing pressure on the economy's resource base, a reasonable outlook is for significant increases in the general price level.

On Economic Forecasting

By Sheldon W. Stahl

FORECASTING IS defined as "calculating or predicting some future event or condition, usually as a result of rational study and analysis of available pertinent data." Economic forecasting, in particular, which attempts to predict the future course or level of economic activity, has become relatively commonplace. Despite the current abundance of forecasts, it should be noted that both the increased efforts in the field of economic forecasting and public awareness of these efforts and their results are of fairly recent origin. Although there may be general recognition that any kind of economic planning, whether by private business firms, governmental units, or consumers, involves making certain assumptions about the future, the analyses of business conditions made prior to the economic depression of the 1930's were confined largely to theoretical probings into the causes of cyclical change. Empirical evidence or data based on observation were not readily available, and the kinds of economic data which did exist were not very reliable. A consequence of this paucity of accurate and timely economic information was the absence of any major concerted activities in economic forecasting.

With the calamitous economic circumstances of the 1930's, World War II, and the

postwar problems of economic adjustment, increased attention was focused on the manner in which the economy worked and, as a corollary, the probable causes and effective controls of fluctuations in business activity. The development and publication of a formal system of national income and product accounts for the United States provided the economist with an important tool for research and analysis in the field of business conditions. Continual refinement of economic theory and the growth of econometrics, in which economic theory is integrated with mathematics and statistics, have added another dimension to economic forecasting.

With a growing volume of literature devoted to the subject, and at a time when the annual volume of short-term forecasts of the economy reaches peak levels, it is useful to look behind the actual forecasts themselves to view several fundamental questions related to economic forecasting. Despite the fact that the practice of forecasting has grown enormously in recent years, the forecasts are the end product of a variety of analytical approaches, rather than the result of a single technique. In this article, some of the more commonly used techniques in short-run aggregate economic forecasting will be discussed. Before proceeding to a discussion of methodology, however, consid-

eration will be given both to the objectives and the problems inherent in attempts to predict the future of the economy.

FORECASTING OBJECTIVES

While forecasts dealing with the future behavior of a specific industry, or of a particular sector of the economy, are of limited interest, those which deal with the general level of activity for the economy as a whole interest a much wider audience. For the private sector of the economy, such forecasts are indispensable as an aid in dealing with questions such as the magnitude and timing of new investment outlays, the probable terms of new collective bargaining agreements, consumer spending plans, and so on. In the case of governmental units, and especially at the Federal level, knowledge of the current and future state of business conditions is also of vital importance. The Employment Act of 1946 explicitly charges the Government with the responsibility for formulating and implementing public policies designed to promote stable economic growth and maximum purchasing power and employment. To insure the maximum likelihood of realizing these objectives, knowledge of the expected future course or behavior of the economy is needed so that public policy—monetary and fiscal—may be shaped and reshaped as evolving economic circumstances may dictate. Additionally, the progressive nature of much of the Federal tax structure means that the volume of tax receipts is highly dependent upon the level of aggregate economic activity. Any changes in the performance of the economy affect those receipts. Therefore, the whole budgeting process is related intimately to the reliability of forecasts of the overall level of economic activity.

From the preceding observations, two fundamental objectives of economic forecasting emerge. First, forecasting attempts to determine the direction of economic movement, especially the timing of any probable change

in direction. This function is frequently referred to as locating cyclical turning points. The second objective is to provide some estimate of the probable magnitude of any changes in the movement of the economy. Even though the objectives of forecasting are reasonably clear, some of the problems inherent in achieving those objectives make the task difficult.

A LOOK AT SOME OF THE PROBLEMS

Perhaps the most fundamental problem facing the economic forecaster is that which relates to the nature of the economy itself. The U. S. economy is decentralized; the decisions which determine the level and direction of overall economic activity spring from a myriad of sources, public and private. However, the sum of all the individual decisions made in such an economy may not necessarily add up to a definitive answer regarding the future path of the economy. The reason for this is that each individual decision which is made in the private or public sector of the economy relates to and is, in turn, affected by all other decisions. If the circumstances which underlie a given decision or set of decisions should change, or have been incorrectly anticipated by the decisionmakers, the aggregate outcome may be quite different than would be supposed by a simple summing-up process.

The notion of change suggests a second kind of problem for the forecaster. The U. S. economy is not only decentralized, it is highly dynamic as well. The constancy of change almost insures that the future behavior of economic activity cannot be predicted with unerring success. To be sure, there are many functional economic relationships and institutional arrangements which may be relatively constant or which change very slowly over time. One of the basic premises which underlies almost all efforts at forecasting is that there are certain continuities present in the

economy over time, and that the future is related partly to past behavior. It is also true that the economy is being subjected continually to change with new institutions evolving to replace older ones, and with new forces which affect the behavior of business activity being introduced at the same time older forces are receding or being withdrawn. The growth of collective bargaining, for example, and the emergence of large and powerful unions have brought about fundamental changes in the wage-bargaining process, as well as in the degree of flexibility of wages to differing levels of economic activity. The rapid growth of employment in the government sector of the economy relative to the goods-producing sector in recent years similarly has added an element of stability to overall employment levels. To a degree, this increased stability helps to insulate the total economy from the effects of a slowdown in activity in the private sector.

It was suggested earlier that knowledge of the future behavior of the economy was needed to allow for the shaping and reshaping of policy decisions, to maximize returns in the private sector, and to bring about desirable public goals such as the attainment of stable economic growth for the economy. This consideration raises a third problem for the forecaster: the effect of the forecast itself on the behavior of the economy. For example, assume the forecaster sees the period ahead as one which might be characterized by an unsustainably high level of aggregate demand with all the problems of resource availability and inflation attendant to such a situation. Once this forecast was made public, the result might be changes in private and public economic decisions with regard to spending, production, investment, and so on, which would alter the course of the economy's behavior and render the forecast invalid. Conversely, the forecast might be self-generating as people outbid each other in the market for the available resources and goods and services. Obviously, the more

influential the forecaster, the greater this problem tends to be. But it should be noted that, to the degree that the forecast causes changes to be made which serve to improve the economy's performance, the net cost to the forecaster becomes a net benefit to the economy as a whole. Few forecasts, however, thus far have achieved such import that alterations in business plans follow in their wake. In addition, few forecasts are offered without a host of qualifying assumptions accompanying them to cover a variety of situations which the forecaster must consider before making any meaningful judgment. This point will be developed further in discussing forecasting techniques.

Finally, it should be recognized that the behavior of the economy in any future period is determined by noneconomic as well as economic considerations. Changing demographic factors, social factors, or political factors all exert their impact on the economy; yet, economic forecasters have no special expertise in making judgments about these matters. Thus, the area within which the economic forecaster works is circumscribed by a number of constraints over which little control may be exercised. Within this area the forecaster attempts to make meaningful judgments about the future.

TECHNIQUES OF FORECASTING

Opinion Polls

Probably one of the most commonly used approaches to short-term forecasting involves the use of opinion polls. Simply stated, this technique involves questioning many people regarding their opinions of the probable course of business in the period ahead. Implicit in this approach is the notion that, while the opinion of one respondent may carry little weight, the opinions of many respondents added together may, in fact, provide substantive indications of the future path of the econ-

omy. The more responsible polls exercise considerable care in selecting the sample population to be surveyed, and include representatives of business and industry, government, and academic groups. However, these polls too often ask only for the respondents' appraisals of general business conditions rather than specific questions dealing with areas in which they may possess more intimate knowledge. In addition, to the extent that the individual assessments of the economic outlook are developed by using readily available or public sources of information, they do not represent an independent response, and averaging such responses fails to improve their analytical merits. Finally, even if such polls took account of all their inherent shortcomings, they would still only serve as very rough indicators of the future direction of movement of the economy, while supplying little or no information on the magnitudes of change involved.

The More Specific Survey

If the general opinion poll is not specific enough to be of value in assessing the economy's future performance, a more recent analytical tool is the survey designed to elicit specific information on future plans, commitments, or intentions of representatives of various sectors of the economy. Rather than focus attention on the respondents' attitudes about future business conditions for the whole economy, this type of survey requests specific information on the respondents' own areas of specialization. Growth of these newer types of surveys has paralleled the growth and refinement of statistical sampling procedures and improved methods for collecting and summarizing data.

Although the more specific survey possesses distinct advantages over the opinion poll approach discussed earlier, it relates only to various sectors of the economy rather than the whole economy. However, the various sectors are interrelated. The consequences of

spending decisions made in the consumer sector do have an impact on the investment and spending plans of the business sector. And both these sectors affect, and are in turn affected by, taxing and spending decisions made by various levels of government. Thus, the integration of survey results from the different components of the economy has enhanced the ability of short-term forecasters to more accurately judge the future.

One of the most well-known anticipations surveys is that conducted by the McGraw-Hill Publishing Company relating to business capital spending plans for new plant and equipment. At the Government level, the Department of Commerce and the Securities and Exchange Commission also survey business intentions to spend for new plant and equipment. For more than a decade the National Industrial Conference Board has surveyed capital appropriations of the 1,000 largest manufacturing corporations in an effort to gain advance knowledge about the course of capital spending. Most sizable companies prepare annual capital budgets which give indications of spending intentions. These intentions become actual expenditures by means of specific appropriations, and the Conference Board survey measures these appropriations as an added way to determine the expected magnitude of a key component of total investment spending.

In addition to surveying plant and equipment spending plans, the Department of Commerce regularly looks into manufacturers' sales and inventory expectations. The Bureau of the Census periodically examines consumers' spending plans, and perhaps the most well known of the consumers' surveys is the *Survey of Consumer Finances* conducted annually by the Survey Research Center of the University of Michigan. The latter survey attempts to measure the attitudes of consumers rather than the actual volume of consumer purchases which might be forthcoming in the period ahead. In this respect, it varies from surveys

of business plant and equipment spending or inventory spending plans.

One of the more important sources of information dealing with the spending plans of a major sector of the economy is not a survey in the same sense as those already discussed, but should be mentioned because of its extreme importance to overall economic activity. This is the Federal budget and the appropriations data issued by the Federal Government. The information contained in the budget, as well as the data on future spending plans or intentions which arise from specific surveys, are valuable additions to the forecaster's knowledge, but they are human decisions and are always subject to change. They should be considered only as an aid to forecasting rather than as a self-sufficient method.

The Leading Indicators Approach

Since economic forecasting has as its overall object the prediction of future levels of economic activity, any measure which can point out ahead of time what is going to happen to the economy would be most valuable to the forecaster. The earlier paragraphs which dealt with surveys or opinion polls noted that these were attempts to gain information about the future behavior of the economy through general or specific questions dealing with attitudes, intentions, or expectations regarding the period ahead. The leading indicators approach differs from this technique in that it makes inferences about the future of the economy on the basis of information dealing with the economy in the present. It does this by singling out and analyzing various measures of economic activity which move in the same fashion as does the overall economy, but which do so in advance of general economic activity.

This approach is an integral part of the business cycle concept of economic activity. It relates to the view that the U. S. economy has been characterized by recurring periods of rising economic activity followed by periods

of declining economic activity, and that this basic pattern of upswing and downswing is more or less a permanent characteristic of the economy. Because the leading indicators tend to move up or down in advance of the economy as a whole, observing or tracking their progress may provide insights into such questions as the probable direction of economic movement, its time dimension, and other considerations.

This technique evolved largely under the sponsorship of the National Bureau of Economic Research, with a pioneering effort by Wesley C. Mitchell and Arthur F. Burns which led to a study published in 1938 entitled "Statistical Indicators of Cyclical Revivals." This study suggested some 21 indicators which the authors felt would help to confirm an upswing in aggregate economic activity. The list included not only "leaders" but "coincident" indicators as well—that is, direct measures of aggregate economic activity or measures which move at roughly the same time as the overall economy. From that time, work on such indicators has continued and the efforts of the Bureau have resulted in an expanded set of leading and coincident indicators, as well as the addition of a group of "lagging" indicators to the basic series. The latter indicators usually reach turning points at some time after aggregate economic activity has turned up or down.

Since October 1961, the Bureau of the Census, in its monthly publication "Business Cycle Developments," has published data on various economic time series including updated information on all of the National Bureau's leading, coincident, and lagging indicators. Examples of the leading series—now numbering 36—include data on average hours of production workers in manufacturing, manufacturers' new orders for durable goods, housing starts, corporate profits after taxes, and the index of stock prices of 500 common stocks. The 25 coincident indicators include nonagricultural

employment, industrial production, current dollar gross national product (GNP), and retail sales. Included among the 11 lagging indicators are plant and equipment spending, unit labor costs, and instalment credit.

Within the framework of business cycle analysis, the indicators approach provides the forecaster with a means of making judgments about the movement of the economy. Using this frame of reference, analysts may study and interpret the behavior of the various time series insofar as they may shed light on the current state of the business cycle. Once the judgment has been made about the current stage of the business cycle and its relative rate of change, based on the performance of the indicators to date, further conclusions may be drawn about the remaining life and magnitude of the upswing or downswing on the basis of the various indicators' present and past relationship to the business cycle. To the degree that the business cycles framework accurately describes the behavior of the economy, the indicators approach is an invaluable tool in probing the future. However, to the extent the economy's performance over time departs from the business cycle reference frame, at best it may prove to be an unfruitful exercise, and at worst a misleading venture. In any event, by recognizing the bounds within which this kind of approach may be pursued, the forecaster may acquire another important analytical tool.

Model Building

In a very real sense, the model building approach to short-term economic forecasting represents the logical synthesis of all the techniques which have been discussed in this article, as well as many other approaches which were not included. It involves the construction of an analytical vehicle which reduces the real world to a simplified model. It omits enough detail so that the model is workable and understandable, while at the same time it re-

tains enough meaningful variables so that it can provide substantive answers to the real world questions it is attempting to solve. Model building incorporates lead-lag relationships between economic variables which have persisted over time; it makes use of attitude surveys and surveys of anticipation such as those referred to earlier for inventories or for new plant and equipment. It is comprehensive and is carried on in terms of the components of the GNP, using time-series data and mathematical and statistical tools to generate quantitative estimates of the GNP and its components at some future period.

If the preceding remarks suggest that model building must inevitably result in the best estimates of the future performance of the economy, this inference should be drawn only after certain precautionary observations have been made regarding the inherent capabilities of the model. Although this technique demands a certain discipline from its practitioners by forcing them to tightly organize in a logical and consistent fashion their judgments about how the economy functions, it should be recognized that a model can tell us nothing about the future that has not been previously fed into it. Because the results derive almost wholly from the assumptions or judgments about significant economic variables and their functional relationships over time, they will be no more valid nor useful in predicting the future than was the original intellectual process used in developing the model.

There is also an inherent danger that a model which lacks flexibility may fail to perform successfully in an economic environment characterized by rapid change. Explanatory variables and functional relationships, which pertained in an earlier period, may become less pertinent in explaining the behavior of the economy in the near-term future. It is at this point that the element of judgment plays a key role. Not only must the model builder be aware of what forces have shaped the econ-

omy's performance up to the present, he must appraise and continually reappraise the changes in economic institutions, and in functional relationships between economic variables over time to assure that the data which are fed into the model are significant and relate to the real world he is attempting to describe. In an economy such as ours, this is no small task.

A FINAL NOTE

The subject of economic forecasting is one which deserves far more consideration than could be given in this article. Although the objectives of forecasting may be readily discerned, the problems which confront those who would judge the future are numerous and not

easily disposed of. The techniques discussed here, as well as those which were not discussed, represent attempts to introduce qualified judgments about the future in the place of existing uncertainty. The model building approach to economic forecasting has much to commend it, especially the rigor and discipline it imposes upon those who would utilize this technique. It has obvious limitations, however. Despite the fact that it represents the furthest advance in the field of forecasting—an effort to integrate the better parts of the other techniques of forecasting with quantitative methods—much additional work remains to be done. For the foreseeable future, economic forecasting is likely to remain neither an art nor a science, but an amalgam of both.