The Agricultural Outlook: Can Recent Income Gains Be Maintained?

By Marvin Duncan

Farm income levels during 1979 have been very favorable, enabling farmers to retain and add to their 1978 income gains. However, the likelihood that farmers and ranchers will enjoy similar increases in income during 1980 seem remote at this time. This article highlights agricultural developments during the past year and suggests the probable outcomes for production, prices, and income during 1980.

Strong prices for livestock during the first half of 1979 added substantially to cash receipts from farm marketings. And, although livestock prices declined somewhat in the second half of the year, they continued well above year-earlier levels, posting a nearly 20 per cent annual gain over 1978. This was true even though both pork and poultry prices declined substantially during 1979.

Crop producers during 1979 experienced the unusual, but welcome, situation of strong prices combined with record or near record production levels for major crops. Record feed grain and soybean production, along with the second largest wheat crop on record, swelled supplies at a time when strong export and domestic demand raised commodity prices above year-earlier levels. Consequently, crop receipts are expected to increase substantially in 1979 for the first time since 1974.

As a result, gross farm income in 1979 (in current dollars) is expected to set a new yearly record. The rise in gross farm income over the past two years follows several years of rather slow growth. Although farm production expenses in 1979 were up substantially, net farm income is expected to increase about 10 per cent above 1978, because of substantial increases in cash receipts to farmers. Thus, 1979 net farm income would be the second largest on record (Chart 1).

The events of 1979 can serve as indicators for the 1980 farm outlook. Favorable weather and increased wheat and feed grain plantings in the United States next year suggest the probability of record or near record crops. Normal production weather in major producing areas of the world could cut back on export demand for U.S. crops during the latter part of 1980. Thus, despite expected price strength through mid-1980, grain prices in the second half of the year could average below 1979 levels. Possible record large meat supplies in 1980 and softer consumer demand because of a slowing economy could erode cash receipts from livestock marketings. Farm production expenses will continue to rise at uncomfortably high rates in 1980. Thus, the stage could be set for a reduction in net farm income of about 15 to 20 per cent from 1979 levels.

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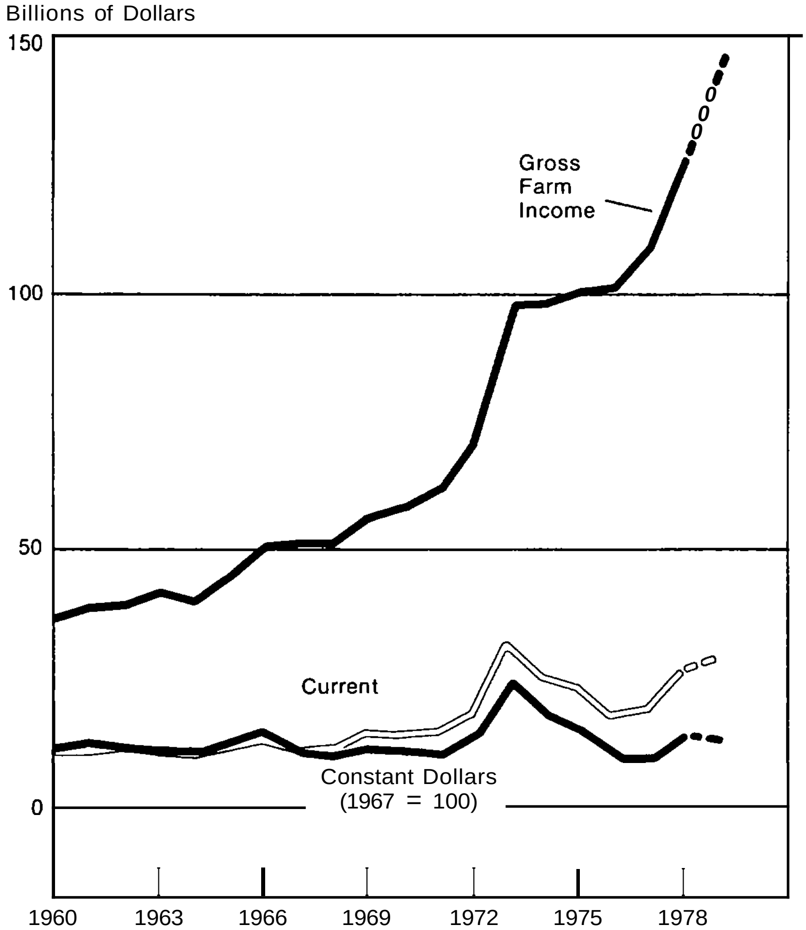
1979 HIGHLIGHTS

Farm prices improved rapidly during the early months of 1979, with the Index of Prices Received increasing 10.8 per cent during the first quarter. However, those rapid increases were not sustained throughout the year. By November, the Index of Prices Received by Farmers was 9.7 per cent above year-earlier levels. The Index of Prices Paid by Farmers also increased rapidly during the early part of 1979, up 7.5 per cent in the first quarter. That increase was due primarily to higher feeder cattle and energy prices. By November, the Index of Prices Paid was 13.8 per cent above year-earlier levels. Thus, farmers have seen a return this year to a distressingly common pattern in which prices paid for production items increased more rapidly than farm product prices.

Net farm income in 1979 is expected to reach the second highest level on record. Buoyed by

Chart 1
FARM INCOME TRENDS



SOURCE: U.S. Department of Agriculture.

substantial increases in gross farm income—to a new record of about $145 billion--operator's net income is expected to reach $31 billion. Cash receipts from farm marketings are expected to reach $129 billion, an increase of 16 per cent above 1978 and a welcome contrast to the anemic annual average increases of less than $2 billion from 1973 to 1977. Government payments to farmers dropped to about one-third of the $3 billion in 1978. Production expenses, paced by higher costs for most input items-especially feeder cattle, energy, and short-term interest rates—increased about 16 per cent to $114 billion.

Crops

Favorable weather in 1979 enabled farmers to turn in near record and record levels of production, even with acreage set-asides in effect and a delayed spring planting season. Farmers harvested the second largest wheat crop ever: 2.1 billion bushels. A record crop of feed grain was also produced—229 million metric tons—with a record corn output of 7.6 billion bushels accounting for over 80 per cent that amount. Finally, a new record for soybean production of 2.2 billion bushels was established.

Demand for all grain crops was surprisingly strong during 1979, despite large supplies. Crop shortfalls in South America added to export demand for U.S. soybeans. The USSR commitment to increase livestock production in light of crop shortfalls added substantially to demand for U.S. feed grains and food grains, as well as for soybeans. A large and growing domestic feed use base in the U.S. commanded the major proportion of available feed and oil seed crops. Moreover, growing world population and income levels generally stimulated export demand for farm products. Consequently, 1979 was a year of unusually favorable crop prices coupled with large supplies.

Livestock

Rebuilding of the U.S. cattle herd has resulted in sharply reduced nonfed slaughter and reductions in the numbers of fed cattle slaughtered. For the first nine months of 1979, numbers of cattle slaughtered were off substantially, but somewhat heavier slaughter weights for beef animals held the production of beef to a decline of 11 per cent in that period. Shortfalls in beef output have been more than offset by increased pork and poultry production during the first nine months of 1979. As a consequence, total meat supplies for the first three quarters of 1979 were up about 2 per cent from year-earlier levels.

Income and employment growth in 1979 supported a strong demand for food products. Although some concern has been expressed about the level of demand and consequent price for meat late in the year, generally strong consumer demand kept prices above levels that might have been expected in light of large total supplies.

The Farmer-Owned Grain Reserve

The farmer-owned grain reserve received a useful test this year. Concern had been expressed about how increasing reserve stocks could be released at the end of the three-year contracts without unduly depressing farm commodity prices. The reserve can properly be credited with some of the price strength which grain crops exhibited in 1978 and early 1979, as grain entering the reserve had the effect of reducing market supplies. The reduction in world grain output this year demonstrated that these reserves can also temper grain price increases, as the market price at which wheat and feed grains could be sold without penalty from the reserve was reached. About 169 million bushels of wheat and 201 million bushels of corn were sold from the reserve by the end of October. While grain prices did increase significantly this year, neither wheat nor corn prices rose high enough to trigger a call for repayment of Commodity Credit Corporation (CCC) loans on the stored grain (Table 1). On balance, the reserve's usefulness in cushioning the price impact of supply changes has been demonstrated. Grain prices were successfully supported in periods of oversupply, and price increases were tempered in periods of sharply increased demand. If, during the 1980s, excess demand is more frequently a problem than is excess supply, the release and call prices for grain in the reserve may need to be adjusted to permit somewhat higher prices before triggering removal from the reserve.

THE OUTLOOK FOR 1980: DEMAND AND SUPPLY

The prospective demand for agricultural products during 1980 is characterized by more than the usual amount of uncertainty. Record volumes of U.S. food and feed grain exports are likely in 1980. However, normal crops around the world could decrease the quantities of U.S. grains required in the latter half of next year, even though over the decade of the '80s the recent strong growth in export sales can be expected to continue. On the other hand, production problems with the 1980 world crop could be a strong stimulus to grain prices in

Table 1
FARMER-OWNED RESERVE: STATUS ON OCTOBER 31,1979

	Release*		Call†		Quantity in the Reserve		Quantity Redeemed
Commodity	Price*	Date	Price	Date	Originally	Oct. 31	Oct. 31
					Million Bushels		
Wheat	$3.29	May 16	$4.11	–	411	242	169
Feed Grains							
Barley	2.04	June 5	2.28	June 26	41	32	9
Corn	2.50	Oct. 3	2.80	–	739	538	201
Oats	1.29	Sept. 20	1.44	–	43	31	12
					Million Hundredweight		
Sorghum	4.24	§	4.75	–	43	26	17

SOURCE: U.S. Department of Agriculture.

'Release means farmers may repay CCC price support loans and redeem or sell grain without penalty, but are not required to do so.

†Call means farmers must repay loans 30 days after notification, unless extended because commercial storage or adequate transportation is not available. Assessments to determine extensions are made for each county.

‡Prices are per bushel except for sorghum, which are per hundredweight. Release price levels are 125 per cent of loan rates for the feed grains and 140 per cent of the loan rate for wheat. Call price levels are 140 per cent of the loan rates for the feed grains and 175 per cent of the loan rate for wheat.

§Sorghum release was ended November 1, 1979.

view of high world use rates and reduced grain stocks. Thus, the stage may be set for greater-than-usual uncertainty and price volatility.

Domestic demand for grain crops appears to be favorable. Wheat utilization may be relatively stable, as usual. But with a large and growing feed use base for feed grains and oil seed crops, demand for them should continue strong in the U.S. during 1980.

Less certain is the domestic demand for meat products. If, as is suggested by the accompanying business and financial outlook article, the economy moves to a substantially lower economic growth path during 1980, consumer demand for meat might falter and be reflected in lower livestock prices. Feed grain and oil seed crop prices would also be adversely affected by falling prices for livestock.

The supply of grain products in 1980 is likely to be abundant. Also. the supply of meat next year will probably exceed that of 1979 by a narrow margin. Higher production of major processing vegetables can be expected to result in increased supplies of canned and frozen vegetables in 1980. Milk production will probably slightly exceed the 1979 output, with the larger increases in output occurring during the first half of 1980. While abundant total food production appears likely, the usual qualifications with respect to weather and farmer responses to new price developments must be noted.

Exports

Rapid agricultural export growth in recent years has been a major factor in supporting farm product prices. The value of agricultural exports has increased by over four-fold since 1971. Export demand in 1979 has been particularly strong. having received additional support from crop shortfalls in the USSR. Total USSR grain production in 1979 is estimated to be down about one-fourth from 1978. That shortfall has affected fiscal 1979 exports and will have a substantial impact in fiscal 1980 as well.[1] Agricultural exports during fiscal 1979 amounted to about $32 billion, with an agricultural trade surplus of about $16 billion (Chart 2). Export volume of major commodities increased somewhat during the year as well.

Export growth in fiscal 1980 will be stimulated by USSR purchases of as much as 25 million metric tons (MMT) of food and feed grains from the United States. Moreover, an expected reduction in world grain stocks during 1979-80 should increase world trade of wheat, course grains. and rice. The value of U.S. exports could increase by up to 20 per cent in fiscal 1980 as a result of 1979 crop shortfalls and increased demand for animal feedstuffs. However, favorable 1980 world production could slow export demand somewhat by the end of the fiscal year. Animal product exports are expected to increase as well. Consequently, agricultural exportsvalue may reach $38 billion with a trade surplus of about $20 billion. A critical determinant in reaching the upper range of export value will be the ability of the U.S. transportation and handling system to move record levels of export volume to ocean ports in a prompt and dependable manner.

THE OUTLOOK FOR CROPS

A number of uncertainties surround the outlook for 1980 crop production and pricing. Most obvious is the weather. The hard red winter wheat crop in the U.S. Southern Plains was planted under unusually dry conditions this fall. Rain and snow since seeding have partially alleviated the dry conditions. but the wheat stand will not be as vigorous as desired

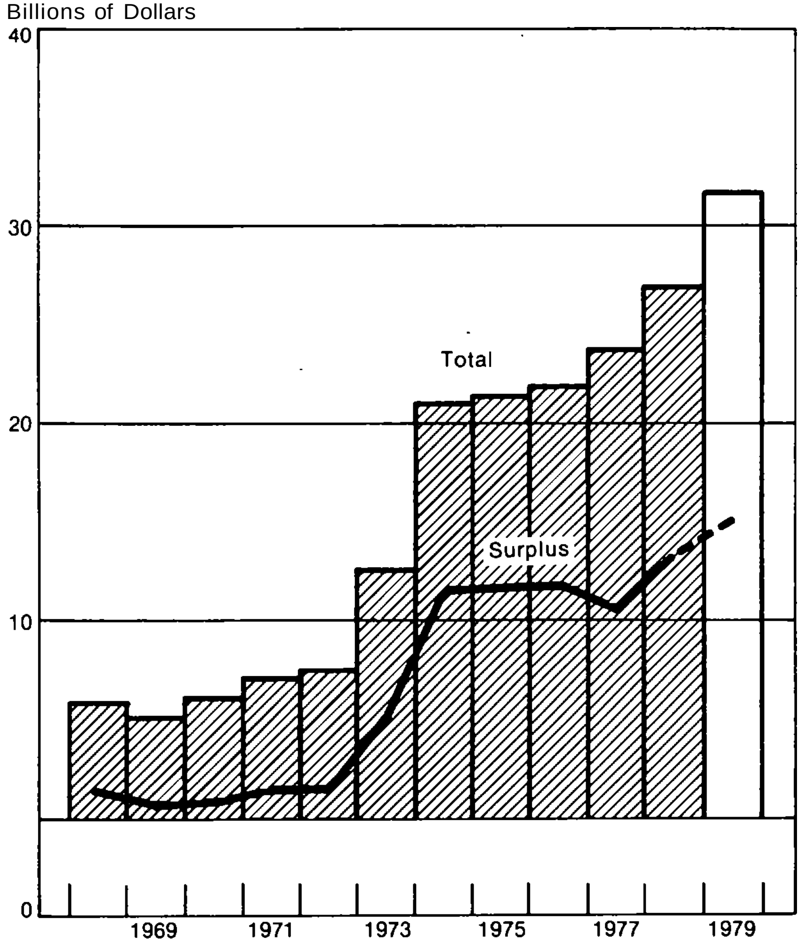
[1] Fiscal year refers to the business year of the U.S. Government and runs from October 1 to September 30.

going into the winter. Weather will affect the output levels in other major grain producing areas, and any increased concern about weather conditions will increase price volatility in 1980.

Consumer demand for meat products will determine, in part, the price of feed grains and oil seed crops. Marketly slower economic growth during 1980 in the U.S., Japan, and Western Europe could tend to depress prices for these commodities.

Producers of wheat and feed 'grains in 1980 will not be required to place part of their acreage in a set-aside program to qualify for CCC grain loans and target price payments. Evidence of tightening world grain supplies and domestic anti-inflation considerations are apparently behind this U.S. Department of

Chart 2
U.S. AGRICULTURAL EXPORTS AND THE SURPLUS FROM AGRICULTURAL TRADE



SOURCE: U.S. Department of Agriculture.

Agriculture (USDA) decision. The decision means that producers can plant wheat or feed grains up to the limit of what was permitted for planting and set-aside acres in **1979.** For **1980,** national program acreages (NPA) for corn, sorghum, and barley are **82.1** million acres, **13.9** million acres, and **7.9** million acres, respectively. For wheat the NPA is **70** million acres.

A few changes, in addition to no set-aside acres, are in prospect for wheat and feed grain producers in **1980.** The CCC loan rate has been increased to $2.50 per bushel for wheat, thus resulting in an increase in both the release and call prices for grain in the farmer-owned reserve. CCC loan rates for corn will be unchanged in **1980** at **$2** per bushel, as will reserve release and call prices. For both wheat and corn, **1980** target prices revert to somewhat lower levels determined by the formulas specified in present farm legislation, unless Congress raises them with new legislation.

With no set-aside requirements, many producers will likely plant fence-row-to-fence-row, even though that could have adverse price implications. Total wheat acres for **1980** may turn out to be as high as **79** million acres. In addition to more total planted acres, switching of acreage among crops will occur. For example, corn acreage may expand at the expense of soybean acreage. Cotton and sorghum acreage may also decline.

Finally, the amount of wheat and feed grains from the **1978** and **1979** crop entering the three-year farmer-owned reserve program will affect free market supplies of these crops, and hence market prices. About **1.6** to **1.8** billion bushels of **1978** and **1979** corn are eligible for reserve entry, as are about **1.2** billion bushels of wheat from the same years. Additionally, decisions to broaden the range between the release price of grain in the reserve and the call price would tend to slow sales of grain from the reserve and provide room for additional price strength after the release price was **reached.**[2]

Crop supplies will be abundant during the **1979-80** marketing year. With the exception of soybeans, large carryover stocks were on hand at the beginning of the new marketing year. To these stocks were added record and near record **1979** production (Table **2).** Normally, such large stocks would bear heavily on market prices. Happily for producers, record export demand for wheat and feed grains coupled with strong and growing domestic demand for feed grains has kept prices well above last year's levels. In the case of soybeans, an expected doubling of carryover levels and sharply higher world production is weighing on prices.

The average farm level prices for wheat, corn, and sorghum in the United States during the **1979-80** marketing year are expected to exceed the **$2.94, $2.20,** and **$2.00** per bushel averages of the previous marketing year. Based on present supply and **demand** relationships, it appears reasonable to expect average prices to be in the range of **$3.60** to $3.90 for wheat, **$2.25** to **$2.55** for corn, and **$2.15** to **$2.40** for sorghum. For soybeans, average prices may be in the range of **$5.75** to **$6.50** per bushel. compared to **$6.75** last year. There will be no target price payments to producers of wheat and feed grains this year, since average commodity prices during the early part of the marketing year will exceed target price levels.

THE OUTLOOK FOR LIVESTOCK

Livestock production will apparently be adequate to provide total meat supplies next year a little larger than in **1979.** In fact. through the summer of **1980,** total meat supplies may be of record size. The supplies

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2 The *release price* is the price at or above which grain may be redeemed—CCC loans repaid—without penalty. The *call price* is the price at which the CCC calls for repayment of the loans on grain in the reserve grain.

will consist of less beef, less lamb, less poultry, and markedly more pork than in 1979. Consequently, livestock prices will be very sensitive to consumer demand. Should the economy move to a significantly lower economic growth path in 1980, livestock prices could suffer.

The current cattle cycle has apparently bottomed out this year, and the yearend cattle inventory will likely post a 1 to 2 million head gain over the 111 million head of last year. Buildup of the cattle numbers on the upside of the cycle may occur in two stages. Traditional cattlemen will likely increase inventory numbers rather quickly. But new entrants, outside investors, and those who have shifted farming operations to other crops and livestock may return more slowly because of the high cost of breeding stock, high interest rates, limited credit, and the narrowed margin of profit in cattle.

Data for the 23 major feeding states indicate numbers of cattle on feed October 1 are down 13 per cent from a year earlier. Furthermore, third quarter placements were down substantially, by 19 per cent, from the large placements of a year earlier. Thus, beef production will likely continue to decline into the second quarter of 1980. However, 1980 output may be nearly equal to 1979 levels. Losses on fed cattle being marketed in recent months, coupled with higher production costs, have caused some feeders to delay refilling lots in hopes of better fat cattle prices, lower feeder cattle prices, or lower feeding costs. Consequently, choice steer prices may average in the range of $67-70 per hundredweight during the first half of 1980 and a few dollars higher in the last half. Yearling feeder prices in 1980, not expected to exceed 1979 average prices, may average in the low-to-mid $80 per hundredweight range.

Table 2
BALANCE SHEET FOR MAJOR CROPS
(Millions of Bushels or Tons)

	Corn (bu) Marketing Year Oct. 1-Sept. 30		All Feed Grains (tons) Marketing Year*		Soybeans (bu) Marketing Year Sept. 1-Aug. 31		Wheat (bu) Marketing Year June 1-May 31	
	1978-79	1979-80†	1978-79	1979-80	1978-79	1979-80	1978-79	1979-80
Supply								
Beginning Carryover	1,104	1,285	41.2	45.8	161	173	1,177	925
Production and Imports	7,083	7,586	217.6	229.6	1,870	2,236	1,800	2,116
Total	8,187	8,872	258.8	275.4	2,031	2,409	2,977	3,041
Demand								
Domestic	4,769	4,940	152.8	156.9	1,105	1,184	858	790
Exports	2,133	2,500	60.2	71.1	753	825	1,194	1,400
Total	6,902	7,440	213.0	228.0	1,858	2,009	2,052	2,190
Ending Carryover	1,285	1,432	45.8	47.4	173	400	925	851

SOURCE: U.S. Department of Agriculture.
*Marketing Year begins October 1 for corn and grain sorghum, July 1 for barley and oats.
†Preliminary USDA estimates as of November 1979.

Pork producers gave evidence in the September government survey of increased marketings and farrowings. In that report, producers indicated planned winter farrowings of 10 per cent above year-earlier levels. If these farrowing intentions are carried through, the fall and the winter crops will both be of record size—assuring record pork supplies through the summer of 1980. Such action probably means barrow and gilt prices in the low-to-mid $30 per hundredweight range for the first half of the year. If not already begun, producers will likely begin to cut back on production increases in the first quarter of 1980, and by the fourth quarter improvement in slaughter hog prices will likely be noted. The yearly average price per hundredweight in the mid-to-upper $30 range will be below the estimated average of $42 for 1979, however.

FOOD PRICES—WILL THEY MODERATE?

Rapidly rising farm prices, as a result of meat, fresh fruit, and vegetable price increases, were primarily responsible for retail food prices increasing at a 17.7 per cent annual rate during the first quarter of 1979. Despite moderation in farm price increases during the last three quarters of the year, retail food prices will still average about 11 per cent higher than in 1978. Higher farm product prices will account for about 40 per cent of the yearly increase, with transportation, processing, and marketing charges adding another 50 per cent. Price increases for imported food add the final 10 per cent.

Farm level prices will not likely increase as much in 1980 as in 1979. Some farm product prices, such as meat, will fall during much of the year, reflecting declines in hog and poultry prices. Under a favorable weather forecast, the farm value of food may rise only about 1 per cent in 1980. Serious weather problems in important farming areas of this country or elsewhere. however, could cause the farm value of food to increase up to 10 per cent next year. On balance, if price inflation is reduced in 1980 and if the increase in the farm-to-retail price spread can be reduced below 1979 levels, retail food price increases will moderate.

Thus, food price increases will likely be in the 7 to 11 per cent range for 1980. It is more likely that food price increases will be in the top half of that range than in the bottom half.

The pattern of price increases will differ from 1979. however. Larger supplies of pork and poultry, as well as some slackening in consumer demand, will moderate food price increases in the first half of 1980. Declining meat output and faster economic growth suggest more rapid food price increases during the second half of the year. Finally, the level of price inflation in the economy will be the major determinant of food price increases during 1980. Almost three-fourths of the expected price increase will result from higher food marketing costs.

WHY LOWER FARM INCOME?

The outlook for 1980 farm income is particularly clouded. Supply and demand factors affecting income early in the year seem to be in reasonably clear focus. However, a number of important supply factors later in the year are unknown at this time. How large will the Southern Hemisphere crops, especially soybeans, be? What will be the size of the U.S. winter wheat crop? Will there be favorable weather across the Northern Hemisphere in 1980? How soon will poultry and pork production turn down?

But supply isn't the only unknown. The growth path of the U.S. and other industrial economies in 1980 will have significant impacts on demand for farm products. Until the economy's 1980 growth path is known with more clarity, it is not possible to forecast demand with precision. U.S. consumer demand for meat products will be adversely affected by rising unemployment and falling incomes. The level of price inflation and money-supply growth during 1980 will also affect farm product prices. Nonetheless, cash receipts from farm marketings in 1980 should be at least as large as the record high levels of 1979.

Production expenses are expected to increase in 1980 by about as much as the general rate of price inflation. Fuel expenses will probably increase by about a third, or possibly more. Fertilizer prices, after declining since 1975, have begun to increase and will likely rise by 15 per cent or more. Pesticide prices, farm equipment costs, and farm labor wage rates are all expected to increase substantially in 1980, as well.

Since net farm income represents an increasingly narrow residual between gross income and production expenses, relatively small changes in production, product prices, or production expenses have a magnified impact on net income. For reasons already discussed, the possible range of net farm income is very wide in 1980—$20 to $30 billion—with the most likely outcome centered on $25 billion. There is probably a greater chance that net farm income will be above the mid-point of the range, however. Nonetheless, this is a substantial decline from the 1979 level. The expected decrease in net farm income will fall primarily on cattle feeders, broiler producers, and pork producers. To a lesser extent, producers of soybeans, cotton, fruits, and vegetables will also feel the decline. Income levels for food and feed grain producers, ranchers, and dairy farmers may not be seriously reduced.

CONCLUSION

Farmers have come to expect government action to buoy farm income in election years. However, in 1980, concern over inflation in Congress and around the country would seem to make it unlikely that any sizeable legislative program would be undertaken to ease the impact to farmers of lower net income. It seems unlikely that net farm income will undergo the sharp reduction experienced in 1977. Nonetheless, a substantial retrenchment appears likely. Crop shortfalls in major producing countries or unexpected moderation in production cost increases could favorably alter that outlook, however.