# Agriculture in a World of Change



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# FINANCE OUTLOOK: GUARDED OPTIMISM

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The outlook is for limited growth in an otherwise healthy farm economy in 1991, as the impacts of recent developments here and abroad work through the farm sector. While most farm income measures attained record levels in 1990, factors coming into play late in the year indicate that U.S. farmers are likely to see slightly lower net incomes in 1991.

Cash receipts for crops are expected to increase in 1991, while steady livestock receipts are anticipated. Reduced direct Government payments and higher production expenses will overshadow the rise in cash receipts, resulting in net cash income below the record 1990 level. Net farm income is also expected to decline. Net farm income measures the value of agricultural production, plus direct Government payments, less all cash and noncash costs.

These income forecasts, coupled with other projected financial performance measures, point toward a slowing in the rate of growth of the farm economy. Equity growth is expected to slow in 1991, as land values are forecast to rise by a modest 2 to 4 percent. Farm borrowing is not expected to increase significantly as a result of a slight drop in income. Farm debt decreased by almost $60 billion during the last half of the 1980's. Today's farm sector is not saddled with the debt servicing requirements that compounded the effects of income declines in the early 1980's.

## Factors Influencing 1991 Farm Economy

The economic performance of the farm sector will continue to be affected by the U.S. economy and international developments. High global food grain levels dampen wheat prices and limit trade. Favorable weather throughout the Northern Hemisphere resulted in a 10-percent rise in world wheat production in 1990. Near record yields on greater harvested acreage increased U.S. production by 35 percent. In the U.S., stocks are rising and prices falling as former importers of U.S. wheat utilize their own domestic production.

Recent tensions in the Persian Gulf will contribute to higher fuel, fertilizer, and chemical prices for farmers in 1991. Wheat acreages are expected to decline 10 to 12 percent, but increased planted acres of other program commodities will contribute to higher production expenses. While energy markets are expected to stabilize by year-end 1991, the short-term downward pressure on economic growth rates for most developed economies could further reduce the demand for U.S. farm exports.

Domestic demand growth will partly depend on the performance of the U.S. economy. Forecasts of general economic conditions suggest that real domestic GNP growth will be slow through the end of 1991.

The bulk of direct Government payments to farmers in 1991 result from 1990 farm programs. The Food, Agriculture, Conservation, and Trade Act (FACT) of 1990, in conforming to provisions of the Omnibus Budget Reconciliation Act, is expected to lower direct Government payments. Less participation in commodity programs, lower advance deficiency payment rates, and the triple base provision contibute to the projected reduction in direct payments in 1991.

## Beyond 1991: FACT and GATT

Beyond responding to these short-run commodity and input market developments, the farm economy must anticipate a changing policy environment emerging under the new Farm Bill and GATT negotiations. Under FACT, farmers can expect lower Government payments in the future, as the sector contributes within the context of the federal budget deficit reduction package. However, farm program participants will have greater freedom in cropping choices on their 15-percent triple base acres and optional additional 10-percent "flex" acres.

Successful resolution of the GATT negotiations will ultimately mean lower barriers to trade, and greater access to international markets. However, current unresolved agricultural issues in the GATT talks reduce the likelihood of a trade agreement by the scheduled December 7 conclusion. In the long run, U.S. farmers are expected to benefit from more intense competition in less restricted foreign markets. However, the gains from trade will not reach producers of currently highly protected commodities.

U.S. farmers may reap future short term income gains if the GATT negotiations fail to yield an agreement by June 30, 1992. The 'snap-back' provisions of FACT provide for additional farm program support if an agreement has not been reached. All planned spending cuts for agriculture will be waived if an agreement has not been reached by June 30, 1993. These provisions are designed to ensure that the U.S. does not unilaterally reduce barriers.

## Cash Receipts Could Surpass $170 Billion

The record levels of crop and livestock sales anticipated in 1991 could increase cash receipts from 1 to 4 percent over 1990, boosting total sales to between $170 and $175 billion. Strong annual sales growth has been a driving force in the farm sector recovery since 1987. During this period, livestock receipts have maintained a relatively stable 52 to 54 percent of total sales; this relationship is projected to continue in 1991.

Record sales are forecast for 1991 despite stable to slightly declining farm commodity prices. Even though drifting downward, these prices remain favorable relative to recent historical levels. The overall price index for all farm products is currently expected to dip about 5 percent next year, with both crop and livestock prices showing the same relative declines. However, output of farm products is projected to grow 1 percent in 1991, on top of a 3- to 4-percent gain this year. Crops harvested in 1990 are likely to show a 5-percent gain over 1989, while livestock production is anticipated to grow 1 percent.

### Cattle and Hogs: Strong Receipts Through 1991

Livestock receipts are expected to match 1990's record level of $91 billion. Cattle prices are forecast to remain strong, averaging in the mid-$70's. With production increasing less than 2 percent, cash receipts for cattle and calves are likely to be up about 3 percent in 1991. Hog prices are expected to decline slightly, 3 to 4 percent below 1990's average price. Hog receipts are anticipated to hold firm in 1991, as the price decline is offset by 3- to 4-percent more marketings.

Poultry sales are likely to be up 10 to 15 percent next year. Prices for broilers and turkeys are projected to average about the same as this year, with production gaining 5 to 6 percent. Cash receipts for dairy products are expected to drop 10 percent next year, as production growth puts downward pressure on milk prices. Dairy receipts increased about 10 percent in 1989, and another 10-percent gain is anticipated for 1990.

### Record Crop Sales

Total crop receipts may exceed $80 billion in 1991, up $1 to $5 billion from the 1990 forecast. Pushed by low stocks and pulled by a strong livestock sector, feed grain sales could increase as much as $3 billion. Corn receipts are likely to be up 10 percent, while soybean receipts are expected to rise above $11 billion. Growth in fruit and vegetable marketings at stable prices in 1991 will mean higher sales.

- Corn production is expected to increase, if acreage reduction requirements decrease from 1990's 10 percent level. Some producers may opt not to participate in the Government program this year, expanding their planted acreage, and increasing their future base.

- Soybean prices, anticipated to be stable in 1991, could be dampened by large expected plantings on triple base acres.

As 1990 began, wheat appeared to be one of the strongest crop commodities. Low stockpiles had encouraged an increase in wheat program acres from 90 percent to 95 percent of base. Farmers were given an option of planting up to 105 percent of base to increase supplies. In 1990, harvested acres increased by 12 percent and yields rose by over 20 percent, resulting in a 35 percent increase in total production.

- Wheat prices fell throughout 1990, as the anticipated bumper crop was brought to harvest. Wheat receipts in 1990 are expected to drop 5 to 10 percent, as the price decline has more than offset the rise in production. Sales of wheat in 1991 are forecast down as much as $2 billion, with planted acreages declining and stocks holding the market price below the 1990 average.

## Direct Government Payments Drop

Direct payments to farmers are forecast to fall by 10 to 15 percent in 1991, with the reduction due mainly to the initial impact of FACT. Total payments, however, are largely derived from 1990 program participation and market conditions, so, to an extent, the decrease continues the post-financial crisis trend of lower Government payment contributions to farm income.

Government payments to farmers, including net Commodity Credit Corporation outlays, accounted for 10 percent of gross cash income in 1987. That proportion has dropped annually in the intervening recovery years. In 1990, Government payments are forecast to be about 5 percent of gross cash income.

- FACT is anticipated to reduce Government payments to farmers by $700 to $900 million in 1991. Most of this reduction is due to triple base acreage ineligibility for advance deficiency payments. The lowering of anticipated deficiency payments is expected to reduce program participation rates slightly.

## Manufactured Inputs Lead Farm Expense Rise

The $1 to $6 billion increase in gross cash income in 1991 will be accompanied by a $2 to $8 billion rise in cash expenses. The most noticeable farm cost increases can be attributed to the August oil price shock, which raised the 1990 fuel price index 10 to 15 percent over 1989. Despite forecasts of lower oil prices by the end of 1991, the fuel price index is anticipated to rise another 8 to 12 percent for the year. Prices of most production items are expected to drift upward, with the exception of feed and feeder livestock.

Total expenses are forecast to rise $4 to $9 billion in 1991. This 3- to 6-percent annual increase follows a 2-percent gain in 1990. Feed and feeder livestock expenditures are expected to increase less than 2 percent.

Oil- and energy-related manufactured inputs expenses are projected to show the greatest increase, adding $1 to $3 billion to total expenses. Farmer expenditures for manufactured inputs are likely to increase by 9 to 10 percent in 1991.

Interest expense is expected to remain between $14 to $15 billion, as debt levels stabilize and interest rates flatten. During the high debt and interest rate periods of the early 1980's, interest expenses were almost 16 percent of all production expenses. In 1991, interest expenses are forecast to be less than 10 percent of production expenditures.

## Net Income Squeezed by Rising Expenses

Gross cash income, which includes cash receipts, government payments, and farm-related income, is forecast to increase 1 to 3 percent in 1991. Farmers will feel a slight cost squeeze, as, with expenses rising more than incomes, net cash income is likely to drop 2 to 3 percent. With non-cash income and expense items accounted for, net farm income is projected to be down about 5 percent from 1990.

This decline in net farm income is not expected to signal the beginning of a new era of farm financial stress. While lower cash income means less progress, farmers have reduced debt levels and restructured their balance sheets in recent years. Individual farmers with high debt loads will be most sensitive to lower net income. However, most farmers are not likely to experience the major debt repayment problems that characterized the mid-80's.

## Net Income Remains Relatively High

Despite the decline forecast for 1991, net cash income and net farm income remain near record levels. When adjusted for inflation, both measures appear to be returning to the levels they maintained throughout the 1960's. While total real net income is at these historical norms, the number of U.S. farms has decreased by 35 percent. This suggests that U.S farm income is earned by fewer farms.

## Farm Asset Growth Negligible

The value of U.S. farm assets (excluding operator households) rose $24 billion during 1990, an increase of about 3 percent. Total assets are forecast to rise to $825 to $835 billion in 1991, as the rate of growth slows to less than 2 percent. These changes are relatively modest compared with recent years, which may reflect a stabilizing agricultural economy. The real value of farm assets is projected to decline in 1990 and in 1991, as the general rate of inflation is anticipated to exceed the growth in asset values.

Total farm real estate assets increased slightly less than $18 billion during 1990. This 3-percent rise in total farmland value suggests that record cash income levels did not dramatically increase investors' expectations of long-run profitability of farming. Current farmers also showed limited desire to bid up land prices in attempting to expand operations. The projected income dip in 1991 should result in an even more modest land value appreciation rate of 2 to 4 percent this year.

Nonreal estate asset values are forecast to rise by about $5 billion in 1991, led by relatively stable prices for slightly rising livestock inventories. The value of machinery on farms and financial assets are also projected to register slight nominal increases in 1991, while inventory values of crops and purchased inputs are not expected to change.

## Farm Debt Stable

Total farm debt is projected to increase only slightly during 1991. An increase would end a 7-year run of annual debt reductions. Due to the combined effects of strengthening land values and improving repayment capacity of farm borrowers, lenders are becoming less concerned with loan defaults arising from land value declines. Simultaneously, farmers are more willing and better able to incur debt to purchase land and replace machinery and equipment.

- With debt levels generally lower than in the early 1980's, farmers appear to be in a better financial position to withstand 1991's projected income dip. When income fell during the early 1980's, farmers had substantially higher debt servicing needs.

The traditional institutional farm lenders, the Farm Credit System (FCS) and commercial banks, are restoring loan portfolio quality by recruitment of selected borrowers. Commercial bank lending should rise by nearly $2 billion in 1991, as banks report adequate credit availability for qualified borrowers. Farm Credit System nonreal estate lending is projected to increase during 1991, while FCS real estate debt stabilizes.

## Farm Lender Shares Change

Even though total farm business debt is forecast to increase slightly during 1991, the loan portfolios of individual lenders may change dramatically. The decrease in debt held by Farmers Home Administration (FmHA) should be more than offset by increased loan volumes of other farm credit sources.

- As FmHA continues to resolve its problem loan portfolio, FmHA farm debt could fall by another $2 to $3 billion in 1991. On June 30, 1990, almost half of FmHA debt was owed by delinquent borrowers. Principal and interest payments delinquent more than 4 years totalled over $5 billion.

In recent years, banks have gained market share through aggressive pursuit of limited risk, high quality mid- to large-scale farming operations. In the process, banks have lured away many of the Farm Credit System's most desirable borrowers. As FCS restructuring and recovery continues, the System is becoming more aggressive in regaining market share.

- Commercial banks are expected to hold almost 36 percent of all farm debt by the end of 1991, while the Farm Credit System's share is anticipated to be less than 28 percent. This represents a reversal of 1984 market shares of these two lenders.

Life insurance company debt is projected to rise about 5 percent in 1991, as other real estate assets appear less desirable. Most of the increased lending activity will occur in the West and Southeast.

### Farm Equity Growth Slight

Farm equity is expected to be about $700 billion by the end of 1991, with growth for the year slowing to about 2 percent. For 1990, equity is estimated to increase almost 4 percent. With these growth rates lagging the general inflation rate, real ($1982) farm equity will decline slightly each year.

- The nominal farm equity increase projected for 1991 will mark the fifth consecutive year of equity growth. From a peak of $816 billion in 1980, farm equity declined over $280 billion by the end of 1986. About 60 percent of that equity 'loss' will have been 'recovered' by year-end 1991.

### Farm Sector Returns

Relatively high rates of return to farm equity and assets are expected to continue through 1991. The rate of return on equity from current income is expected to be 3 to 4 percent in 1991. Rates of return on equity and on assets are projected to continue the relatively favorable levels of recent years.

Other measures of financial performance reflect the anticipated slowing of the recovery process. While 1991 cash income should allow adequate funds for debt servicing, the aggregate farm debt-to-asset ratio continues to improve. Returns to operators, a residual income measure for farm businesses, is expected to fall slightly.

### Lender Loan Losses Decline

To a large extent, farm lenders were reluctant partners in the resolution of the financial crisis of the 1980's. Farm business debt has fallen from $193 billion at the beginning of 1984 to an estimated $134 billion at year-end 1990, a drop of almost $60 billion. Over $21 billion of this decline can be attributed to loan charge-offs taken by lenders during this period. The recovery of the late 1980's is also reflected in loan loss rates, as losses for all lenders other than FmHA have declined substantially. The improved quality of most lenders loan portfolios suggests that farm creditors will be better able to deal with those farmers most affected by the anticipated income drop in 1991.

Specialized agricultural creditors appear to have been more adversely affected by these losses than lenders with more diversified portfolios.

- Estimated commercial bank loan losses totalled over $5 billion during 1984-90. While these losses contributed to the rural bank failure rate, total bank farm debt increased by almost $1 billion during this period. Banks are expected to report net recoveries (negative losses) in both 1990 and 1991.

- Farm Credit System losses were almost $4 billion during 1984-90. However, FCS loans outstanding dropped almost $28 billion, a decline of

43 percent. The System reported net recoveries in 1989. Recovery of past losses is expected to continue through 1991.

Together, these observations suggest that more FCS borrowers may have been lured away by other lenders (principally banks) than were subjected to collection action by the FCS. Loan pricing policies had facilitated the rapid expansion of the System during the late 1970's and early 1980's. As interest rates fell at mid-decade, bank loan rates became more attractive, and many farmers shifted from the FCS to their local banks. As lower risk borrowers changed lenders, the reduction in the average quality of its loan portfolio contributed to the financial difficulties of the FCS. The competitive nature of agricultural lending may have increased FCS exposure in the farm financial crisis.

o Farmers Home Administration losses have increased dramatically in recent years, as FmHA has begun to account for losses that had effectively occurred in the early 1980's. By the end of 1991, FmHA losses (of principal and interest) may approach $11 billion, with write-offs totalling almost $8 billion during 1989-91.

## Conclusions: Guarded Optimism for 1991 and Beyond

The U.S farm economy enters 1991 with reason to be cautiously optimistic. The expected record level commodity receipts assumes a relatively strong demand for farm products. Livestock producers should benefit from anticipated differentials between livestock and feed prices. Crop supplies will need to be monitored carefully. As 1990 wheat markets have shown, commodity stock levels can change dramatically with one production season.

All is not positive for the sector in 1991. Despite high cash receipts, the expected rise in farm expenses will mean less net income available to farmers. Even though the resulting net income squeeze is anticipated to be much less severe than that of the 1980's, farmers can expect to make less financial progress in 1991 than they have experienced in recent years. While it appears that farmers will not make great financial strides in 1991, most will be able to avoid major set-backs.

Overall, the financial position of farmers entering 1991 appears to be stronger than at any time since the late 1970's. This is largely due to cautious investment behavior, effective cost control, increased cash financing, and continued reduction of outstanding debt. The combined effect of gradually increasing asset values and reduced debt loads have greatly lowered farmers' vulnerability to short-term fluctuations in income.

While the health of the farm economy through the early 1990's is not a certainty, farmers and their lenders appear to be incorporating some hard finance lessons learned in the mid-1980s. Both are now reluctant to respond to the relatively high income levels of recent years with renewed debt-financed expansion. Farmers are applying this same cost-consciousness to variable input useage. Higher prices for most purchased inputs, at least in the near term, will require application of even more effective cost control measures. Through the globalization of agriculture in the 1990's, politically resolved trade issues may significantly change economic relationships, creating conditions that can be expected to greatly affect the sector's financial performance.

**(1) FARM FINANCE OUTLOOK 1991**

- o CROP & LIVESTOCK RECEIPTS
- o PRODUCTION EXPENDITURES
- o NET INCOME
- o BALANCE SHEET CHANGES
- o FINANCIAL PERFORMANCE

**(2) THE FARM ECONOMY IN 1991**

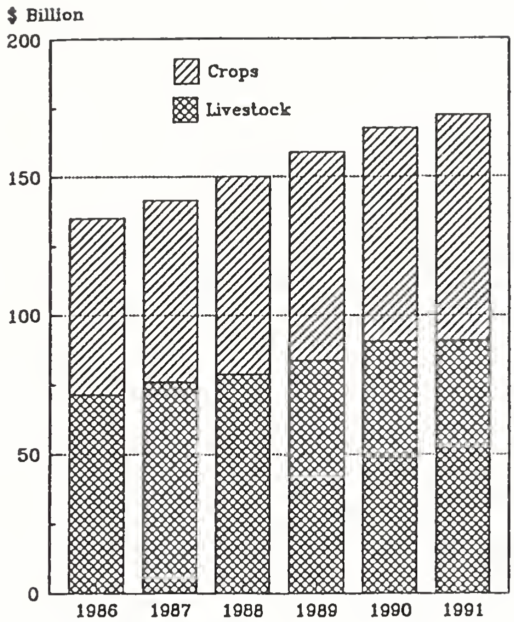
SHORT-RUN ECONOMIC PERFORMANCE WILL BE INFLUENCED BY:

- o GLOBAL COMMODITY LEVELS
- o ENERGY MARKET STABILITY
- o GENERAL ECONOMIC CONDITIONS
- o FARM BILL IMPACT

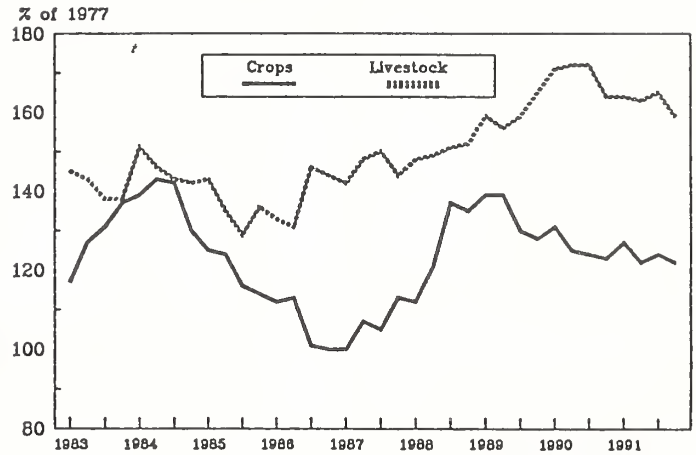
**(3) THE FARM ECONOMY BEYOND 1991**

- o FARM BILL IMPACT
  - REDUCED GOVERNMENT PAYMENT
  - GREATER PRODUCER FLEXIBILITY
- o GATT NEGOTIATIONS
  - REDUCED BARRIERS TO TRADE
  - REDUCED INTERNATIONAL SUPPORT OF AGRICULTURE
  - LOWER DOMESTIC SUPPORT

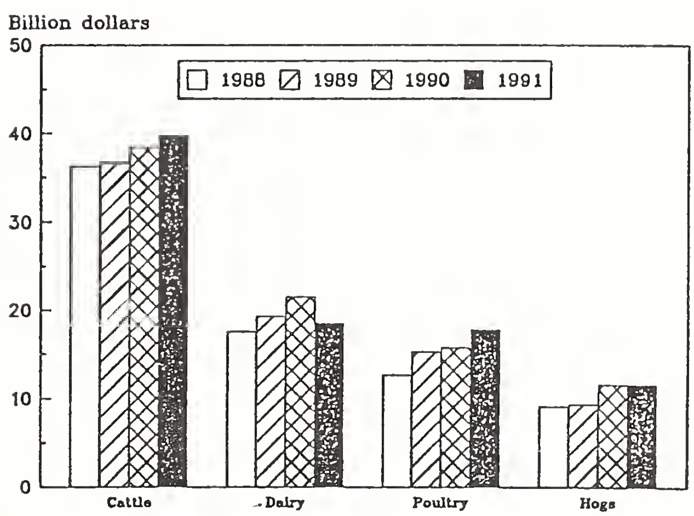
(4) Cash Receipts



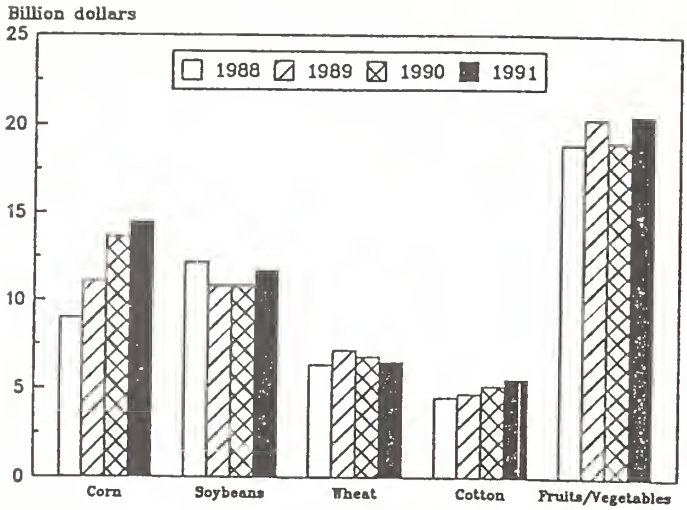

(5) Prices Received by Farmers




(6) Livestock Receipts



(7) Crop Receipts




(8) Direct Government Payments

| Year | Billion dollars |
|---|---|
| 1987 | 16.7 |
| 1988 | 14.5 |
| 1989 | 10.9 |
| 1990 | 9.4 |
| 1991F | 8-9 |

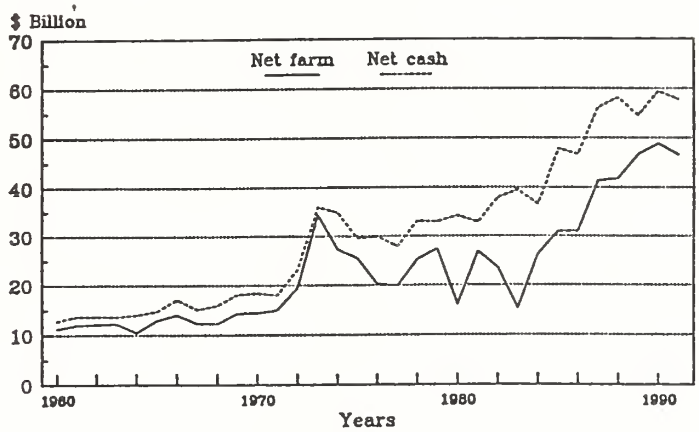
(9) Total expenditures up about 5 percent

| | 1988 | 1989 | 1990 | 1991 |
|---|---|---|---|---|
| | Billion dollars | | | |
| Total | 132 | 143 | 145 | 149-154 |
| Feed, seed, calves | 37 | 39 | 40 | 40 |
| Fertilizer, chemicals, fuel | 18 | 21 | 21 | 23 |
| Interest | 15 | 15 | 14 | 15 |
| Depreciation, taxes, rent | 29 | 31 | 32 | 33 |

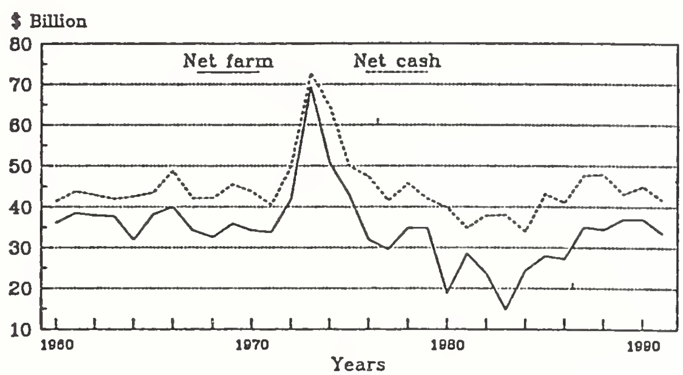
(10) Farm income and expense measures

| | 1988 | 1989 | 1990 | 1991 |
|---|---|---|---|---|
| | Billion dollar | | | |
| Gross cash income | 170 | 178 | 184 | 185-190 |
| Cash expenses | 112 | 123 | 125 | 127-133 |
| Net cash income | 58 | 55 | 59 | 55-60 |
| Non cash income | 4 | 12 | 10 | 8-12 |
| Non cash expense | 20 | 20 | 20 | 20-22 |
| Net farm income | 42 | 47 | 49 | 44-49 |

(11) Net farm and net cash income, 1960-1991
current dollars

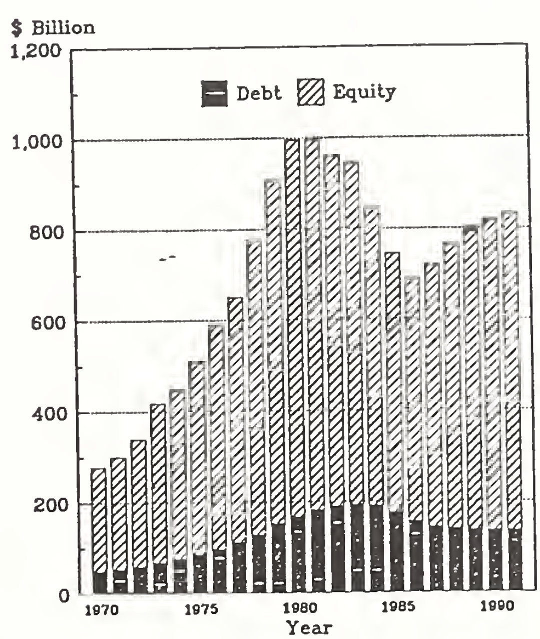



(12) Net farm and net cash income, 1960-1991
real dollars




Note: Deflated by the GNP Implicit Price Deflator (1982=100)

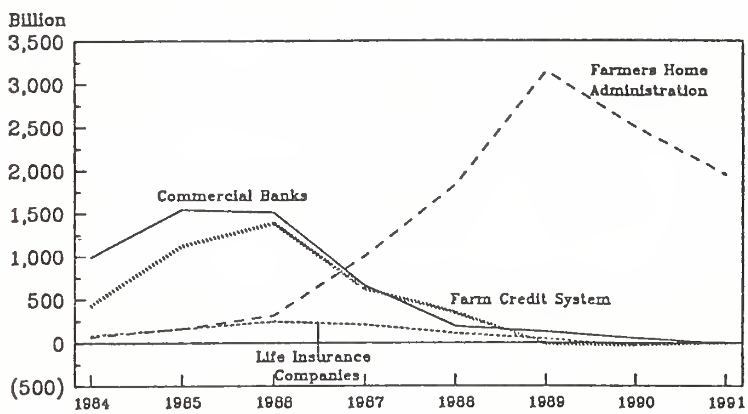
(13) Farm Debt and Equity



(14) Farm balance sheet in 1991 shows slight improvement in nominal terms, slight decline in real terms

| | 1987 | 1988 | 1989 | 1990 | 1991 |
|---|---|---|---|---|---|
| | | | Billion dollars | | |
| Current dollars | | | | | |
| Assets | 719 | 764 | 794 | 818 | 825-835 |
| Debt | 142 | 138 | 136 | 134 | 133-137 |
| Equity | 577 | 626 | 658 | 684 | 695-705 |
| Deflated dollars (1982) | | | | | |
| Assets | 611 | 628 | 628 | 617 | 590-600 |
| Debt | 122 | 116 | 109 | 103 | 100-105 |
| Equity | 490 | 514 | 520 | 516 | 500-510 |

(15) Annual Lender Loan Losses




(16) 1991 BOTTOM LINE: GUARDED OPTIMISM FOR FARM ECONOMY

- RECORD COMMODITY RECEIPTS
- CONTINUED STRONG LIVESTOCK PROFITS
- INCREASING CROP STOCKPILES
- RISING FARM EXPENSES
- MODERATE NET INCOME SQUEEZE
- LESS FINANCIAL PROGRESS IN 1991