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## EFFECT OF SELECTED MACROECONOMIC AND FARM PROGRAM POLICIES ON FINANCIAL CONDITIONS IN AGRICULTURE: A LOOK TO 1990

John B. Penson, Jr. Dean W. Hughes Ann L. Adair

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## EFFECT OF SELECTED MACROECONOMIC AND FARM PROGRAM POLICIES ON FINANCIAL CONDITIONS IN AGRICULTURE: A LOOK TO 1990

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The financial stress facing many farmers today has become frontpage news. A mixture of music concerts, movies, celebrities, farm foreclosures, and lender woes have made a growing number of urban consumers aware that something is indeed wrong "down on the farm." Yet, urban consumers probably see themselves as being largely unaffected by the events taking place in agriculture. Inflation is the lowest it has been since the sixties, the civilian labor force is the highest it has ever been, and consumer credit is readily available at the lowest rates in the 1980s. Rural consumers residing in farming communities, however, have had the plight facing many farmers brought home to them in a radically different way. Rather than having Willie Nelson inform them of the financial stress facing many farmers, many rural residents have experienced the spinoff effects of farm financial stress in the form of reduced economic activity in their community. This reduction in economic activity has led to bank failures, store closings, and rising rural unemployment.

Against this backdrop of mixed public perceptions, policymakers, lobbyists, and others are currently fashioning macroeconomic, international trade and farm program policies. These policies will go a long way towards determining the future financial condition and ownership structure of the farm sector over the remainder of this decade. The Reagan administration, for example, has proposed modifications to the Agriculture and Food Act of 1981 that would reduce the prices at which program commodities are supported over the next four years. Joining the administration in lobbying for sharp cuts in federal price support programs are a variety of consumer groups. The Public Voice for Food and Health Policy, for example, argues that the programs for milk, sugar and peanuts results in substantially higher consumer prices. Others, including farm sector politicians up for re-election next year and many farm and agri-business lobby groups, argue this is not the time to cut back on farm price and income supports.

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The purposes of this paper are to identify some of the major macroeconomic and farm program policy options being considered by policymakers and the effects that a few of these policy combinations would have upon the economic performance and financial condition of the farm sector. The second section of this paper outlines the three macroeconomic policy scenarios we shall examine and their effects on the general economy and agriculture out to the year 1990. The third section examines the effects of a continuation of the 1981 Act versus adoption of the Reagan administration's proposal to reduce price supports for program commodities using one of the macroeconomic scenarios developed in the second section. The focus of the third section is to identify the implications these two broad farm policy options have for the economic performance and financial condition of the sector over the 1986-1990 period. The final section presents a summary of this paper and the conclusions drawn from our analysis.

#### Impact of Alternative Macroeconomic Policies

The economy has gone through some major changes since we presented our projections to 1990 at last year's meeting (Hughes and Penson 1984a). There has been an additional year of high federal budget deficits. While the 1984 deficit was slightly below the deficit recorded in 1983, the 1985 deficit looks like it will set an all time record. Thus far, policymakers have been unsuccessful in doing more than passing budget resolutions supporting the need to cut the budget deficit. Perhaps the most significant change in macroeconomic policy has been the dramatic switch by the Federal Reserve System to permit higher growth rates in the monetary aggregates. According to the Federal Reserve Bank of St. Louis, the growth in the monetary base (bank reservers plus currency) began to accelerate in late-1984. Since November of last year, the monetary base has grown by over 8%. In the last six months, the monetary base has grown at a 9.1% annual rate.

The acceleration in the growth of the monetary base has been reflected in the growth of the overall money supply. M1 balances grew at a rate of 12.2% from November 1984 through August 1985. Growth in this measure of the money supply averaged only 6.5% annually over the 1980-1984 period.

The result of this expansionary shift in monetary policy has been a decline in interest rates. The prime interest rate at commercial banks, which was 13% in September 1984, stood at 9.5% in August 1985. Other national interest rates have shown similar declines. Farm interest rates, however, have not declined like general market rates due to the risk premiums assessed by farm lenders in light of rapidly increasing farm loan losses.

Inflation has not yet shown any significant increase. The GNP price deflator for the first half of 1985 rose at an annual rate of only 4.2%. It is not difficult, however, to imagine that inflation will begin to accelerate in the near future with the money supply growing at

current rates. It is this anticipated increase in inflation that generates much of the difference between the projections we presented earlier (Hughes and Penson 1984a,b) and the projections presented in this paper.

Three different combinations of monetary and fiscal policies are briefly examined in this section. They are identical in design to those we presented at last year's meeting. The model used to examine the effects of these scenarios is the COMGEM macroeconomic model. COMGEM is a "large scale" econometric simulation model that incorporates 371 simultaneous equations which capture economic outcomes not only in the farm sector but in the nonfarm business, financial, household, government, and rest-of-the-world sectors as well. An overview of this model is provided by Penson, Hughes and Romain.

#### High Deficits and Fast Money Growth

The first scenario examined in this study is characterized by continued high budget deficits as well as a continuation of the easy monetary policy initiated in 1985. The real government deficit under this scenario is assumed to remain at or near its 1984 level through 1990. The monetary base is assumed to continue to grow at rates consistent with those seen in the first nine months of 1985.

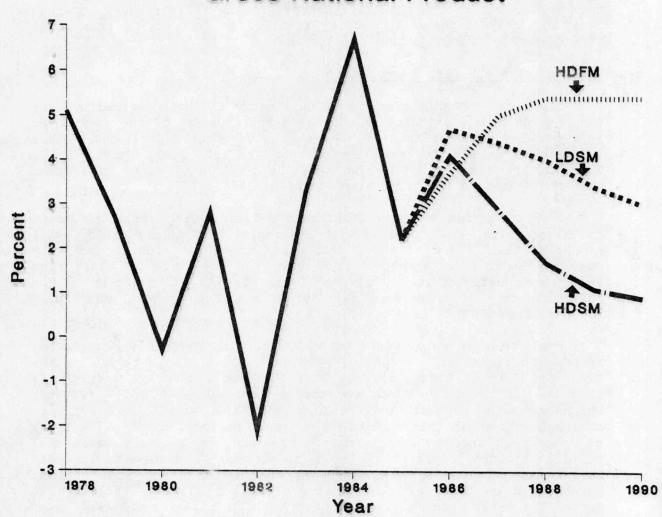
A continuation of high government deficits with their attendant fiscal stimulus, when combined with a stimulative monetary policy, will almost certainly lead to rapid increases in general economic activity over the short-to-intermediate-term (see HDFM in Figure 1). This rise in economic activity would, however, would lead a rapid growth in the inflation rate to grow more rapidly as resources become more fully employed (see HDFM in Figure 2).

Real interest rates would probably decline under this scenario as savers are continually surprised by higher and higher rates of inflation (see HDFM in Figure 3). How long this would occur is very uncertain in today's deregulated environment, however. The model results, which are based on historical reactions to rapid growth in money, are somewhat suspect in this regard. It may well be that, after a few years of lower real interest rates, upward pressures on interest rates will build as financial markets are asked to service large demands for both public and private sector credit. The Federal Reserve System at that point would be faced with the choice of either allowing inflation to exceed the rates observed in the early-1980s or allowing interest rates to rise.

Financial conditions in the farm sector as we noted at last year's meeting would likely end up going on a roller coaster ride under this scenario, first showing some improvement and then getting substantially worse (Hughes and Penson 1984a). Farm income would increase at first due to lower real interest rates (see HDFM in Figure 4). The exchange rate would also likely decline, and thus lead to an increase in

FIGURE 1

### Percent Changes in Real Gross National Product



Percent Change in Gross

National Product Price Deflator

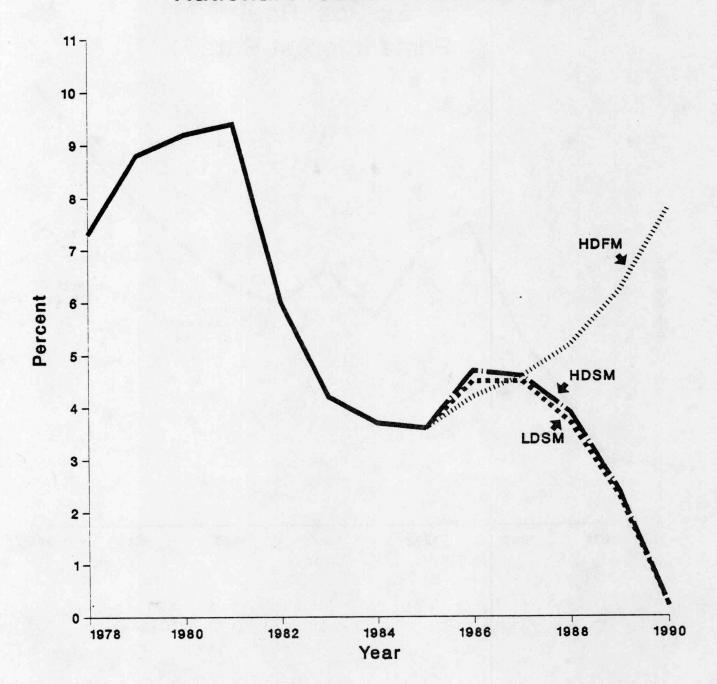


FIGURE 3

### Ex-Post Real Prime Interest Rate

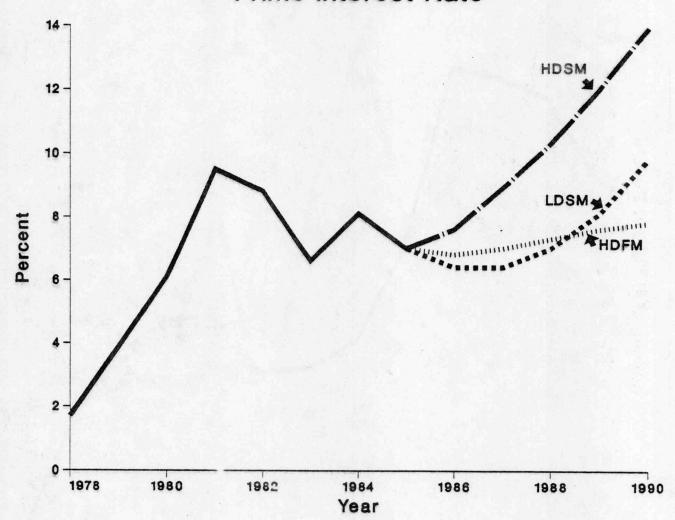
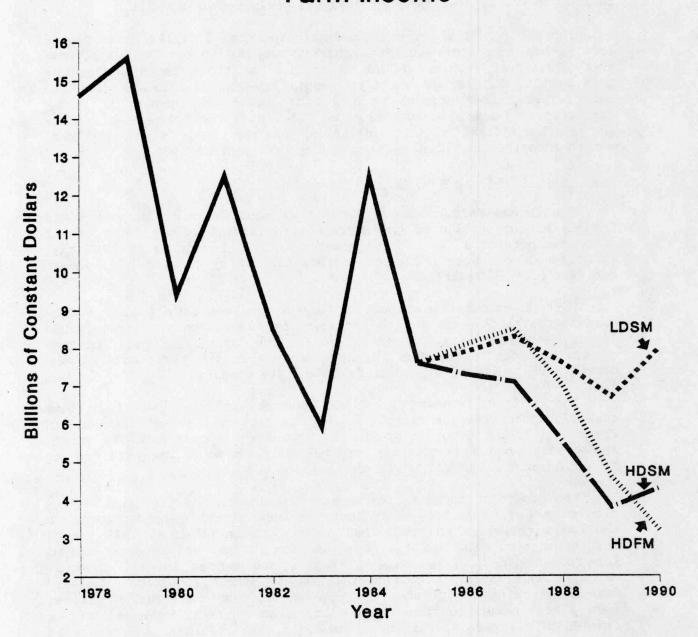


FIGURE 4
Projected Real Net

## Farm Income



agricultural exports. Lower interest rates would make farm interest expenses decline relative to other farm production expenses. Later in the decade, however, rising inflation would lead to declines in real net farm incomes. Conditions would be even worse if real interest rates are allowed to rise. Asset values would also show short-term strength, but then weaken. With higher profits and lower interest rates in the near-term, a reversal of recent declines in land and machinery prices might be anticipated. As real net farm income begins to decline sharply in 1988, however, real farm asset values would weaken as well.

The net result of monetizing continuing high deficits would therefore probably be some short-term relief for the sector. By 1990, however, financial problems would be similar to those faced earlier in this decade. Little, if anything, would have been gained by all the pain suffered from efforts to combat inflation throughout the 1980s. Furthermore, farmers would likely be faced with the prospect of enduring another "fight against inflation" in the 1990s with less real wealth than they had when we entered the last bout in 1980.

#### High Deficits and Slow Money Growth

The second macroeconomic scenario we shall examine in this paper assumes a continuation of the current high federal budget deficits. It also incorporates a restrictive monetary policy beginning in 1986 that is designed to reduce inflation to less than 1% by the end of the decade (see HSSM in Figure 2).

With a stimulative fiscal policy and a monetary policy sufficiently restrictive to control inflation by 1990, economic growth would likely be reduced (see HSSM in Figure 1). The "spurts and fits" pattern of economic growth observed in the economy over the first half of the decade would quite likely continue under this scenario.

The conflict between fiscal and monetary policy inherent in this scenario would generate sharply higher real interest rates (see HSSM in Figure 3). Slower domestic growth in incomes would constrain the growth in savings, and more foreign capital inflows would be utilized in financing annual federal budget deficits.

The impact of these macroeconomic policies on the financial condition of the farm sector is probably obvious since the environment in many ways resembles the 1902-1983 period. As we noted at last year's meeting, agricultural exports would decline further and domestic demand for food would also be reduced (Hughes and Penson 1984a). Interest expenses would continue to rise relative to other production expenses, more than making up for the slow rise in input prices. Thus, real net farm income would continue to decline from current depressed levels (see HSSM in Figure 4). Asset values would also continue to decrease as low farm incomes and higher interest rates would reduce the discounted present value of the expected returns to land. The real value of machinery and equipment would also decrease as both the price and the

stock of farm capital is diminished.

A return to fighting inflation solely through constraints on money and credit while running large federal budget deficits therefore would continue to impose serious adjustments costs on the farm sector. Real incomes would remain near the levels of the 1930s. Asset values would continue to decline. And more farmers would go out of business.

#### Lower Deficits and Slow Money Growth

The third and final macroeconomic policy scenario examined in this paper is characterized by reductions in federal budget deficits starting in 1986. Lower deficits are assumed to be the result of a decrease in the rate of growth in government expenditures. Like the second scenario, the goal of monetary policy in this scenario is assumed to be one reducing inflation below 1% by the year 1990 (see LDSM in Figure 2). Meeting this objective is made more difficult by the recent growth in the money supply. The macroeconomic policy objectives of this scenario, in fact, are identical to objectives inherent in the "lower deficit and moderate money growth" scenario presented at last year's meeting (Hughes and Penson 1984a). A more restrictive growth in the money supply than was necessary last year is now needed to reduce inflation below 1%.

If government deficits are reduced without large tax increases, the general economy is likely to experience a more balanced growth. Of course, slower growth in government expenditures will reduce the growth in GNP (see LDSM in Figure 1). The near-term decline in real interest rates, however, would probably offset at least some of the reduction in fiscal stimulus (see LDSM in Figure 3). The real prime rate under this scenario would begin to rise over the long run, however, as more contractionary monetary policy actions are needed to attain the objectives assumed in this scenario.

With lower annual budget deficits, the U.S. Treasury would not have to borrow as much as it would if these deficits continued at current high levels. When lower government spending is combined with the same monetary policy objectives assumed in the previous scenario, lower real interest rates can be achieved. Such declines in interest rates could increase profits in all capital-intensive industries like farming, lower the value of the dollar versus other currencies, and reduce foreign capital inflows. A lower exchange rate would also help the economy by increasing the foreign demand for our agricultural and nonagricultural exports.

A combination of deficit control and slow growth in the money supply is likely to produce some economic stability in the farm sector. Improvements in both foreign and domestic demand for food would increase the prices received by farmers, while lower interest and inflation rates would slow the growth in farm production expenses. The result would be higher real net farm incomes than observed under the

first two scenarios but still low by recent historical standards (see LDSM in Figure 4). Higher incomes coupled with lower interest rates could cause farm asset markets to recover in the near-term. Land price gains would probably not match those of the inflationary 1970s, but would show some improvement from current depressed levels. Expanded investment in machinery and equipment might also be expected as farmers have more incentive to replace an aging capital stock.

The net result of combining reductions in federal deficits with a slow growth in money and credit therefore would be a stabilized farm economy. Farm incomes and asset values would not continue to nose-dive as would occur under the first two scenarios.

#### Impact of Alternative Farm Policies

Two alternative farm program policy scenarios are examined in this section. The first scenario assumes a continuation of the Agriculture and Food Act of 1981. The second scenario assumes adoption of the Reagan Administration's proposal for pegging loan rates and target prices to a three-year moving average of the market price for each program commodity. Both of these policies will be examined in the context of the first macroeconomic policy scenario discussed above, which assumed a continuation of expansionary fiscal and monetary policies.

#### Farm Program Policy Scenarios

Before presenting the implications of these two farm policy scenarios for the economic performance and financial condition of the farm sector, let us briefly review their design.

1981 Farm Bill. The Food and Agriculture Act of 1981 specifies minimum annual loan rates and and target prices for program commodities. The USDA has the discretion to increase either or both under specified circumstances. Deficiency payments are limited to \$ 50,000 per farmer, with acreage allotment compliance being a condition for eligibility. There is no limit on the dollar amount of nonrecourse loans available through the Commodity Credit Corporation. The Secretary of Agriculture can require set-asides, acreage allotments, and paid diversion programs to influence total supply of surplus commodities. The CCC also purchases surplus dairy products which processors are unable to sell for at least the equivalent of the federal support rate. This rate is currently \$11.60 per cwt and will remain at this level through October 1987.

Large buildups in government-controlled stocks have occurred in recent years. This buildup is due, in part, to excessively high price support levels which have encouraged over production by giving misleading price signals to producers. Recent concern over the growing size of the federal budget deficit has spilled over to farm commodity programs. Legislators have begun to scrutinize federal outlays for these programs and to question the appropriateness of these programs in achieving long

run goals for both the farm sector and the general economy.

The loan rates and target prices for the major farm products individually modeled in COMGEM were assumed to remain at their 1985 levels under this scenario. The 1985 values for these variables presented in Table 1 therefore represent the values assumed in this scenario over the entire 1986-1990 period as well.

Reagan Administration Proposal. The Reagan administration has drafted a "market oriented" proposal to replace the Food and Agriculture Act of 1981. This proposal would reduce current support levels to farmers, thereby curbing the drain on the U.S. Treasury associated with farm programs. Under this scenario, loan rates over the 1986-1990 period for wheat, feed grains, soybeans, cotton, and rice would be set at 75% of the average market price over the previous three years. Target prices for all but soybeans would begin at 100% of the three-year average market price in 1986, and decline to 75% by 1991. Target prices by law would be identical to loan rates by 1991. Direct payments would be limited to \$20,000 in 1986 and decline by \$5,000 per year, leveling out at \$10,000 by 1988 and remaining at that level. Changes also are suggested to the Commodity Credit Corporation and Farmer Owned Reserve programs. A \$200,000 limit would be placed on nonrecourse loans, with additional loans available only on a recourse basis. The administration's proposal also takes a stand on supply management by eliminating any paid land diversion and a phase out of required acreage reductions by 1989.

The support price for milk would remain at \$11.60 per hundred-weight until October 1987. After that, an annual decrease of up to \$1.00 per hundredweight could be authorized if surpluses remained high. For purposes of this analysis, we assume the support price will fall to \$11.10 per hundredweight during the 1988-1989 period due to technologies which increase production per cow. After 1989, we assume the support rate will fall to \$10.60 per hundredweight as a majority of producers adopt these technologies.

It is apparent the administration feels that a reduction in price supports would both decrease the cost of farm programs to the U.S. Treasury and reduce the continuing large commodity surpluses which have accumulated under existing farm programs. The target prices and loan rates for specific program commodities modeled in COMGEM are presented in Table 1. A comparison of these values over the 1986-1990 period to the 1985 values which are continued under the 1981 Act suggest that government expenditures for farm programs should fall under this scenario.

#### Impact of Alternative Farm Policies

The effects of the loan rate and target price provisions called for under these two farm policy scenarios are examined in a macroeconomic environment characterized by continuing high budget deficits and

Table 1. Target Price and Loan Rates for Selected Program Commodities Under the Reagan Administration Proposal

| Corn Target price 3.03 3.01 2.53 2.12 2.00 Loan rate 2.55 2.26 2.02 1.80 1.80  Wheat Target price 4.38 3.39 2.85 2.39 1.90 Loan rate 3.30 2.54 2.28 2.03 1.71  Oats Target price 1.55 1.49 1.29 1.13 .98 Loan rate 1.31 1.12 1.03 .96 .88  Barley Target price 2.60 2.33 1.84 1.54 1.28 Loan rate 2.03 1.75 1.47 1.31 1.15  Sorghum Target price 2.88 2.75 2.34 1.98 1.84 Loan rate 2.42 2.06 1.87 1.68 1.66  Cotton Target price .81 .65 .56 .51 .52 |      |
|---|------|
| Target price 3.03 3.01 2.53 2.12 2.00 Loan rate 2.55 2.26 2.02 1.80 1.80  Wheat Target price 4.38 3.39 2.85 2.39 1.90 Loan rate 3.30 2.54 2.28 2.03 1.71  Oats Target price 1.55 1.49 1.29 1.13 .98 Loan rate 1.31 1.12 1.03 .96 .88  Barley Target price 2.60 2.33 1.84 1.54 1.28 Loan rate 2.03 1.75 1.47 1.31 1.15  Sorghum Target price 2.88 2.75 2.34 1.98 1.84 Loan rate 2.42 2.06 1.87 1.68 1.66  Cotton Target price .81 .65 .56 .51 .52      | 1990 |
| Loan rate 2.55 2.26 2.02 1.80 1.80  Wheat Target price 4.38 3.39 2.85 2.39 1.90 Loan rate 3.30 2.54 2.28 2.03 1.71  Oats Target price 1.55 1.49 1.29 1.13 .98 Loan rate 1.31 1.12 1.03 .96 .88  Barley Target price 2.60 2.33 1.84 1.54 1.28 Loan rate 2.03 1.75 1.47 1.31 1.15  Sorghum Target price 2.88 2.75 2.34 1.98 1.84 Loan rate 2.42 2.06 1.87 1.68 1.66  Cotton Target price .81 .65 .56 .51 .52  |      |
| Wheat Target price 4.38 3.39 2.85 2.39 1.90 Loan rate 3.30 2.54 2.28 2.03 1.71  Oats Target price 1.55 1.49 1.29 1.13 .98 Loan rate 1.31 1.12 1.03 .96 .88  Barley Target price 2.60 2.33 1.84 1.54 1.28 Loan rate 2.03 1.75 1.47 1.31 1.15  Sorghum Target price 2.88 2.75 2.34 1.98 1.84 Loan rate 2.42 2.06 1.87 1.68 1.66  Cotton Target price .81 .65 .56 .51 .52  | 2.06 |
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| Target price 2.60 2.33 1.84 1.54 1.28 Loan rate 2.03 1.75 1.47 1.31 1.15  Sorghum Target price 2.88 2.75 2.34 1.98 1.84 Loan rate 2.42 2.06 1.87 1.68 1.66  Cotton Target price .81 .65 .56 .51 .52   |      |
| Loan rate 2.03 1.75 1.47 1.31 1.15  Sorghum Target price 2.88 2.75 2.34 1.98 1.84 Loan rate 2.42 2.06 1.87 1.68 1.66  Cotton Target price .81 .65 .56 .51 .52   | 1.14 |
| Target price 2.88 2.75 2.34 1.98 1.84 Loan rate 2.42 2.06 1.87 1.68 1.66  Cotton Target price .81 .65 .56 .51 .52   | 1.08 |
| Target price 2.88 2.75 2.34 1.98 1.84 Loan rate 2.42 2.06 1.87 1.68 1.66  Cotton Target price .81 .65 .56 .51 .52   |      |
| Loan rate 2.42 2.06 1.87 1.68 1.66  Cotton Target price .81 .65 .56 .51 .52   | 1.87 |
| Target price .81 .65 .56 .51 .52  | 1.78 |
|   |      |
| 2007를 다고있다. (14.10년 20.10년 21.10년 12년 2월 12년 2월 12년 2월 12년  | .56  |
| Loan rate .57 .49 .45 .43 .47   | .53  |
|   |      |

fast money growth (i.e., the last macroeconomic policy scenario examined above). Time and space limitations prevent us from examining all the commodity-level detail provided by COMGEM. The examination of each farm policy scenario is limited here to their impact on cash receipts for crops and livestock, net farm income, and farm real estate values.

Impact on Cash Receipts. Cash receipts for the seven major commodities individually modeled in COMGEM (wheat, corn, oats, barley, sorghum, cotton and soybeans) under the two farm policy scenarios are expressed in constant dollars in Figure 5. A substantial difference between these two farm policy scenarios is noted by the year 1990. Real cash receipts for the seven major crops would be \$14.9 billion under a continuation of the 1981 Act. This is some \$2 billion more than real cash receipts for these crops in 1990 under the Reagan administration's proposal. While real cash receipts for these crops under continuation of the 1981 Act would be higher in 1990 (\$14.9 billion) than they were in 1985 (\$13.3 billion), the same cannot be said for the Reagan administration's proposal. Real cash receipts for these seven major crops by 1990 would be less under the administration's proposal (\$12.9 billion) than they were in 1985 (\$13.3 billion).

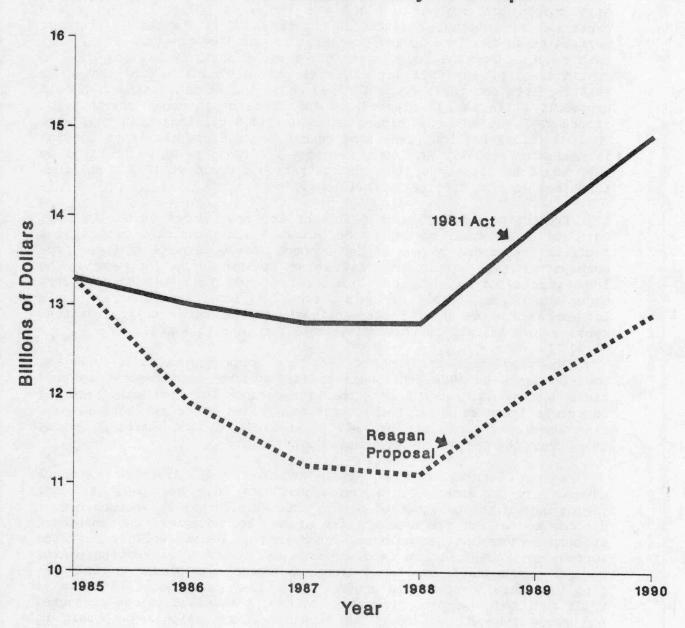
Production levels would be higher for most crops under the 1981 Act than they would be under the Reagan Administration's proposal as producers responded to the higher support levels. Stocks of these program commodities would also be higher, particularly for wheat. The lower prices for many of these commodities would lead to higher exports under the Reagan administration's proposal as hoped for. The relatively low exchange rates under the expansionary macroeconomic policy environment we have assumed in this analysis helped make this possible.

The projected expansion of beef cow herds beginning in 1987 and sows on farms in 1988 contribute to the expected improvements in feed grain prices. As Figure 5 suggests, the outlook for real cash receipts for crops improves under both scenarios. Prices for corn, for example, rise above the loan rate by 1987 under the 1981 Act scenario and by 1986 under the Reagan administration's proposal.

Before turning to real cash receipts for livestock, several caveats are in order. First, no adjustments have been made to crop yields beyond those suggested by projected biological and economic conditions to reflect the availability of new technologies. The emergence of output-enhancing technologies later in this decade would offset the improvements projected in feed grain prices. Second, acres planted for program commodities drop only slightly under the Reagan administration's proposal despite the unusually low loan rates noted in Table 1. While admittedly surprised by this outcome, the market prices projected for these commodities under the Reagan administration's proposal are above national average variable costs of production. However, we would likely see cutbacks in the production of some of these commodities in regions where costs of production exceed the national average.

FIGURE 5

# Real Cash Receipts for the Seven Major Crops



Cash receipts for the livestock commodities individually modeled in COMGEM (cattle, hogs and dairy) under the two farm policy scenarios are also expressed in constant dollars in Figure 6. Real cash receipts for livestock by 1990 are roughly equal to the levels observed in 1985. Real cash receipts for cattle and hogs under the Reagan administration's proposal are only slightly higher than the levels noted under a continuation of the 1981 Act. The reduction in the support price for milk from \$11.60 per hundredweight to \$11.10 in 1988 and to \$10.60 in 1989 and 1990 under the Reagan administration's proposal reduces cash receipts to dairy farmers in these years, and accounts for much of the difference between these two scenarios plotted in Figure 6.

The projections of real cash receipts for livestock presented in Figure 6 reflect the commercial availability of the bovine growth hormone (BGH) for dairy cattle beginning in 1988. A shot of BGH will reportedly result in a one-time increase in milk production of 20% per cow. It is expected that 90% of all dairy producers will have adopted this technology with four years from its debut.

Impact on Net Farm Income. Real net farm income under the two farm policy scenarios and an economic environment characterized by expansionary monetary and fiscal policy are depicted in Figure 7. Real net farm income will fall sharply from the levels suggested by a continuation of the 1981 Act if the Reagan administration's proposal was adopted. Part of the reason for this difference is the lower levels of real cash receipts for crops depicted earlier in Figure 5. Another major reason is the difference in the level of deficiency payments to producer under these two farm policy scenarios. Real deficiency payments would be practically zero under the Reagan administration's proposal by 1990. By law, they would fall to zero in 1991 since loan rates would be identical to target prices. Thus, the Reagan administration would achieve its goal of reducing government expenditures in agriculture. But the real net farm income levels projected by the end of the decade would be below depression-era levels. All farmers whose production costs equal or exceed national averages would undoubtedly experience substantial financial stress. The implications of this scenario for the ownership structure of agriculture requires further study.

Impacts on Real Farm Asset Values. The projected trend in real farm asset values under the 1981 Act scenario is very much like the projected trend for the high deficit-fast money growth macroeconomic policy scenario we presented at last year's meeting (Hughes and Penson 1984a). The substantially lower levels of real net farm incomes projected under the Reagan administration's proposal helps explain the lower real farm asset values under this scenario. Neither projected trend is particularly heartening to producers in areas where asset values have already fallen substantially. Capital expenditures would be lower under the Reagan administration's proposal; however, depreciation would exceed capital expenditures under both scenarios. The real equity losses under both scenarios have implications for both farmers and lenders that require further study.

FIGURE 6

# Real Cash Receipts for Cattle, Hogs and Dairy

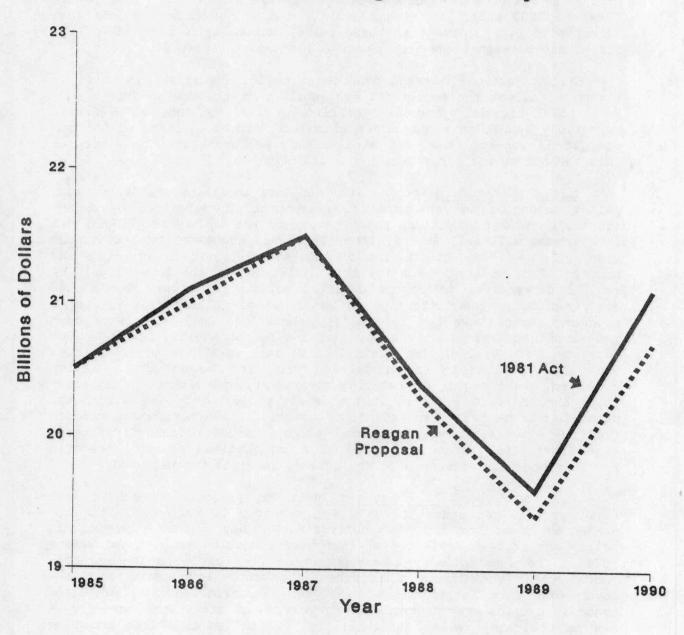
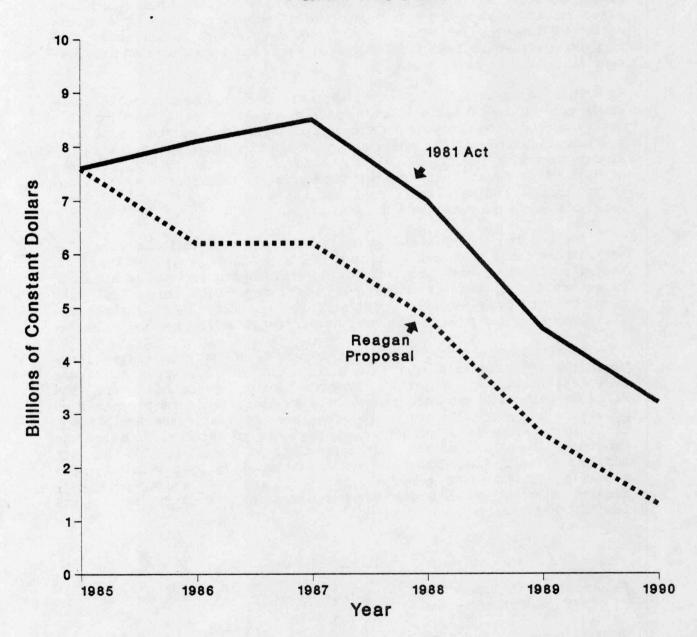


FIGURE 7

## Projected Real Net Farm Income



#### Summary and Conclusions

This paper initially updates projections of the farm sector's performance and financial position under three macroeconomic policy scenarios presented elsewhere by Hughes and Penson. The results of this study suggest the same conclusions; namely, the existance of high budget deficits has a negative effect on real net farm income and farm asset values in the long run regardless of monetary policy. The combination of lower budget deficits and a moderate growth in the money supply, however, would lead to higher real net farm income and an improvement in real farm asset values.

This paper went beyond an assessment of macroeconomic policies by using one of these macroeconomic policy scenarios as a backdrop for examining two alternative farm program policies. The macroeconomic policy scenario used in this analysis assumed a continuation of the expansionary monetary and fiscal policies observed over the first 3 quarters of 1985. This meant that the two farm program scenarios were examined in an economic climate where real GNP was expanding and real interest rates and exchange rates were falling.

The ensuing analysis showed that, while a continuation of the 1981 Agriculture and Food Act does not restore farm profitability, the Reagan administration's proposal for determining target prices and loan rates would make matters worse over the intermediate term. Real cash receipts for crops by 1990 would actually be below 1985 levels under this proposal, and some 15% below that projected under the 1981 Act.

Total cash receipts for livestock would change relatively little under the two proposals (cattle and hog cash receipts would be higher under the Reagan proposal but milk cash receipts would be lower). The difference in real net farm income between these two farm program proposals is largely explained by (1) the level of real cash receipts for crops and (2) the level of government payments to farmers. Finally, the continued downward trend in real farm asset values under the 1981 Act and expansionary macroeconomic policies would be magnified by the Reagan administration's proposal. The resulting real equity losses by farmers under both scenarios have implications for both farmers and lenders that require further study.

#### References

Federal Reserve Bank of St. Louis. "U. S. Financial Data." October 3, 1985 and older issues.

Hughes, Dean W., and John B. Penson, Jr. "Financial Conditions in the Farm Sector 1984-1990: Projections for Different Macroeconomics Policies." In <u>Financial Markets for Agriculture: Macro, Institutional and Policy Issues</u>. AE-4589, Illinois Agricultural Experiment Station, February 1985.