
FARM POLICY— THE EMERGING AGENDA

**Report of Seminar
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and Extension Division
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FARM POLICY - THE EMERGING AGENDA

The emerging agenda for the making of U. S. farm policy features three principal topics. They are domestic price and income policy, credit policy, and international trade policy.

All were reviewed at the Harold F. Breimyer Agricultural Policy Seminar held on the campus of the University of Missouri-Columbia November 14-15, 1985. The seminar, renamed a year ago, has been an annual event since 1973.

Three themes ran through the discussions of a day and a half. One is that agriculture's economic difficulties of 1985 trace more to general economic policies, and to economic conditions outside agriculture, even the situation internationally, than to imbalances within agriculture itself.

It logically follows -- the second theme -- that the best hope for improvement lies in better general economic policies but above all in economic recovery and resumed economic growth in our country and in the countries that buy our exported products.

Thirdly, U.S. agriculture has become internationalized. The terms of international connection are by no means clear, but the fact is not in dispute.

These topics were discussed by the speakers at the seminar, and by the farmers, agribusinessmen, and other interested Missourians who attended the seminar.

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-- Robert J. Bevins

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FARM POLICY - THE EMERGING AGENDA

Report of Seminar on
Agricultural Marketing and Policy
College of Agriculture
and
Extension Division

University of Missouri

November 14-15, 1985
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TURBULENT TIMES FOR U.S. AGRICULTURE

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U.S. agriculture is passing through troubled waters. While the general economy has enjoyed three years of strong expansion, the farm sector has had a much more turbulent passage. Financial problems of considerable magnitude are spread broadly across the sector--from an increased number of farm liquidations, to restructured agribusinesses, to a rising count of farm bank failures. Following the benevolent decade of the 1970s, U.S. agriculture finds itself adjusting to a harsh new market reality.

U.S. agriculture enters 1986 with many concerns. Grain bins are full, even overflowing, while export markets remain in the doldrums. Livestock producers are finishing a very disappointing year. Farmland values are 20 to 25 percent below a year ago. Farm lenders are under great financial pressure, as agricultural bank failures reach a post-Depression high. Rural communities struggle as business failures rise. Agriculture is a worn down industry.

Meanwhile, the U.S. general economy has just completed its third year of economic expansion. Growth has been good, overall, and inflation has stayed low. But never before has our economy grown with the benefits spread so unevenly across industries and regions of the country. While overall economic growth has been strong by comparison to other postwar recoveries, many important sectors--notably agriculture--have not shared fully in the growth. This fundamental imbalance has led many persons to question how durable the expansion really is. Colorado Governor Dick Lamm recently described the expansion as a "souffle economy." Although I do not support his concerns for a collapsing economy, his suggestion that the growth layer may be fairly thin contains a grain of truth.

Agriculture faces another difficult year in 1986. In supporting that conclusion, I would like to consider four topics. First, I will consider the general economic outlook, arguing that international factors will play a critical role in the outlook and shaping economic policy. Second, I will review recent developments in the farm economy. Third, I will consider the current situation for farm lenders. Finally, I will pose an outlook for farm credit conditions in the coming year.

The General Economy: International Factors

Put simply, the U.S. economy has been very sluggish in 1985. Real GNP grew only 0.3 percent in the first quarter, and growth improved to only a revised 1.9 percent in the second. A sharp burst in auto sales boosted growth to 3.3 percent in the third quarter. But taking into account the last half of 1984, the economy has stalled during that period and 1985, in sharp contrast with the vigorous expansion in 1983 and the first half of 1984.

Several factors account for the slowing. Consumer demand was relatively strong, but a growing portion of final demand was met by imported goods. Another factor in a slowdown in the economy was a slowdown in manufacturing. Industrial production grew only 1.0 percent during the 12 months beginning in late 1984, well below the rapid advances in 1983 and early 1984. A third reason for the slowdown was more sluggish consumer spending. Consumers provided the major stimulus for the outstanding economic growth in 1983 and early 1984 when they rushed to make major purchases that had been postponed in 1981 and 1982. Except for the automobile-buying binge in September 1985, consumers clearly have been catching their breath since mid-1984.

Low inflation has remained the real bright spot in the economy. The GNP deflator--one of the broadest measures of price inflation--increased only 3.3 percent from the third quarter of 1984 to third quarter of 1985. The Consumer Price Index increased nearly the same amount. Wholesale prices, as measured by the producer price index, rose less than 1 percent in that year.

Never before has our economy marched forward with the peculiar combination of policy and economic imbalances that we now have. Economic growth has been very unevenly distributed across sectors of the economy. Sectors that depend heavily on exports or that must compete with imports have suffered. But sectors that are insulated from the world market, such as services, have enjoyed vigorous expansion.

The plainest indicator of this trend is our burgeoning trade deficit. In fiscal 1985, our current account deficit was estimated to be as much as \$140 billion, another new record. To put that number in perspective, the deficit was \$42 billion in 1983 and \$102 billion in 1984. Thus, the United States is building up IOUs with the rest of the world at a rate that would have been unthinkable only a few short years ago.

The \$140 billion inflow of foreign capital is both good and bad. It is good because it means that foreigners are willing to finance about two-thirds of our federal budget deficit. It also means that U.S. interest rates are lower than they otherwise would be. But the inflow is bad in that it means that an ever larger amount of our national income will have to be used in future years to service the debts we are accumulating. Thus, less money will be available to invest and enhance the productivity of our economy. And when we recognize how critical it will be to invest prudently and compete effectively in an international market for goods and services, the looming current account deficits appear rather ominous.

Another international consideration is the health of the world economy. If the United States has a "souffle economy," then the world may be doing well to have scrambled eggs. Economic growth in the developing world, and particularly in middle-income countries, is vital to recovery in U.S. agricultural exports. Many of these countries simply have not bounced back from economic and financial distress. To give an example, less developed countries averaged 4.8 percent growth in real GNP from 1977 to 1980, but have managed only 2.0 percent since then. While we can assail the EC and others for unfair trade practices, the reality is that U.S. farm exports will expand only when the low- and middle-income countries return to more rapid economic growth.

Hand in hand with these international factors is domestic economic policy. The United States continues to operate with a rather peculiar mix of economic policy. Fiscal policy remains expansionary, with the federal budget deficit expected to exceed \$210 billion this fiscal year. With the economy growing more slowly than expected, the deficit could widen even further. Technically, fiscal policy will not be stimulative in 1986 because the deficit is expected to decline. If the forecast of the Congressional Budget Office, of \$175 billion, is correct, fiscal policy will actually be slightly contractionary. Nevertheless, the projected deficits remain very large, and importantly, the prospect of those deficits will serve to keep real interest rates high in financial markets.

Meanwhile, monetary policy has noticeably eased in the past year. M1 has grown fairly rapidly in 1985. The Federal Reserve rebased M1 in May in reaction to market developments early in the year. Since then, M1 has continued to grow at a rapid pace, and as of late 1985 the aggregate is above the upper limit of its 3 to 8 percent long-run growth rate range for 1985, as depicted by the traditional cone, and also above the upper bound of the parallel band.

This rapid growth in M1 must be put in perspective. Recent monetary growth does not correlate well with either real economic growth or recent trends in inflation. Thus, one might ask if the traditional relationship between M1 and the economy has changed. My own assessment is that it has. With the rapid innovations we have seen in financial markets in recent years, I believe that we are much less able to explain the behavior of monetary aggregates. Thus, I conclude that recent rapid growth in M1 is not as alarming as it at first appears.

On balance, the economy will be shown to have grown more rapidly in the second half of 1985 than earlier, but the growth rate will remain moderate. The Blue Chip consensus forecast was 3.0 to 3.5 percent growth in real GNP in the second half of 1985. Although consumers may have responded to lower interest rates with a spending spree in the last quarter, consumer debt levels--already high--and growing perceptions of a sluggish economy have tempered consumer spending. My forecast suggests that growth for all of 1985 will prove to have been about 2.5 percent, compared with 1984's torrid 6.8 percent.

Looking to 1986, I expect the economy to continue along its sluggish path. The Blue Chip consensus forecasts are for 3.0 percent growth in real GNP, with the GNP deflator rising to 3.9 percent. I generally agree with this outlook, although I believe that inflation may be a little higher due to further weakness in the dollar.

In summary, the economic outlook is neither brilliant nor hopeless. The outlook is for an economy that lumbers forward, but lacks real bounce, and an economy that is seeking a more permanent sense of direction. This outlook underscores the need for economic policy that

encourages economic growth abroad, particularly in developing countries, and for a policy that removes the basic imbalances in the economy. In short, the outlook will turn brighter only when deficits are reduced, more balance is restored to economic policy, and real interest rates decline. This would certainly help basic industries to return to health.

Farm Economy: Another Difficult Year

Financial problems continue to mount for farmers in the nation and in the Kansas City Federal Reserve district. U.S. farmers are harvesting a bumper crop, export markets remain in the doldrums, and farm prices continue to slump. Farm lenders watch as loan losses rise and collateral values decline. All in all, agriculture seems poised for a period of great financial stress and reckoning. Allow me to discuss some recent developments in the farm economy, the current situation for farm lenders, and the outlook for the coming year.

Mother Nature blessed U.S. farmers this year even if no one else did. Record feed grain and near record wheat and soybean crops will go into the bin this fall. With an 8.5 billion bushel corn crop, corn carryover supplies will nearly double in the coming marketing year. Wheat stocks, already large, will get bigger. So, two years after the PIK program, we are fast approaching the huge stocks that spawned that program.

Meanwhile, farm exports have weakened markedly in 1985. The value of farm exports is estimated as declining to \$32 billion, 15 percent below 1984. World crop supplies remain large, competitors are anxious to market their stocks, and demand remains weakened by slow economic growth in low- and middle-income trading partner countries. Many persons have expressed hope that a weaker dollar will turn U.S. farm export sales around. Although an important factor, a weaker dollar will not help U.S. farm exports as much as would improved economic growth in the Third World.

With very large stocks and weak foreign demand, crop prices trended downward all year. In late 1985, prices for major crops were as much as 20 to 25 percent below what they had been a year before. During the heart of the harvest, corn prices at country elevators may have dipped below \$2.00 for the first time since 1982. Because of the low market prices, most farmers will put their grain into CCC stocks this fall, and government stocks promise to be very big throughout 1986.

Livestock prices have been disappointing in 1985. As the year began, lenders and borrowers expected solid livestock profits to provide some stability to farm finances. But red meat prices, and especially cattle prices, have been weaker than anticipated. For example, many analysts expected prices for finished steers to approach \$70 a hundredweight by midyear; instead, prices were in the low \$50 range. Few explanations can be given for this disappointment, but weak consumer demand figures to be a major factor. With reduced livestock supplies as we move into 1986, however, red meat prices should strengthen in coming months.

With weak crop and livestock prices, farm income dropped sharply in 1985. Net farm income may have declined nearly 30 percent, from \$34.5 billion in 1984 to perhaps \$24 billion in 1985. Direct government payments will make up an important portion of 1985 farm income. The USDA estimates that direct government payments for farm commodity programs could exceed \$9 billion in 1985, up slightly from what they were in 1984 when commodity prices were stronger.

Farmland values are still dropping in light of the weakening farm economy and still high interest rates on farm loans. At the end of the third quarter of 1985, district farmland values had fallen 22 percent from the previous year and 44 percent from the 1981 peak. The leading edge of decline in values is now probably more than 50 percent off the market high. With many farm assets up for sale in the next few months and with very soft commodity markets, the prolonged fall in farmland values gives no signs of being over.

The Status of Farm Lenders

Farm lenders remain severely strained by further deterioration in the quality of their loan portfolios. Data through the first half of 1985 indicate that both agricultural banks and the Farm Credit System were experiencing more problems than in 1984.

Farm loan losses continue to mount. During the first half of 1985, U.S. commercial banks charged off 1.3 percent of their farm loans, about twice the rate of one year before. Even bigger writedowns were expected in the second half.

Loan conditions at the nation's agricultural banks deteriorated further in the first half of 1985. Loan losses for these banks amounted to 0.7 percent of total loans, nearly double the losses of a year earlier. And losses at agricultural banks still run well above those for nonagricultural banks.

Growing numbers of past-due and nonaccrual loans verify that many farm loan problems simply were postponed in the spring of 1985. Total past due loans at the nation's agricultural banks in late 1985 were running about 20 percent above a year before. But even more disturbing, nonaccrual loans were running more than 50 percent higher. These nonaccrual loans are the ones that have a high probability of later turning into uncollectible credits.

Finally, the number of agricultural bank failures continued to climb steadily in 1985. Of the 100 banks that had failed by fall months, 51 were agricultural banks. That compares to just 25 for all of 1984.

The financial woes of the Farm Credit System also are deepening, increasingly in a highly publicized fashion. Wall Street was rudely awakened to the System's problems in September when the governor of the FCA publicly announced a need for public assistance to the System. Afterward, the spread on FCS bonds widened sharply over Treasury securities. At mid-fall, that spread was about 100 basis points compared with 15 to 30 points normally.

Financial markets will remain skittish about FCS bonds in the months to come. The FCS has reported a loss of \$426 million for the first nine months of 1985, and it no doubt will register its first annual loss. At mid-fall the System listed about \$11 billion in delinquent loans and reported primary capital at about \$5 billion.

All of these data, therefore, underscore the further unwinding of farm credit conditions. While I would like to say that the worst is over, the outlook for the farm economy suggests that the four to six months of mid-winter 1985-86 will be a time for difficult reckoning for farm borrowers and lenders. Lenders will be forced into more foreclosures and decisions to deny production credit. When next spring's planting season is over, more farmers will go without credit than the previous year. Farm assets will crowd already thin markets, and land values can be expected to drop still further. Barring major action by Congress on new farm credit legislation, the FmHA will remain the primary safety valve for troubled farmers. Next spring it is likely that the FmHA will again write a large number of direct operating loans.

The Farm Financial Outlook

U.S. agriculture faces another difficult year in 1986. Farm income is expected to weaken somewhat, as weak crop prices and a possible reduction in crop production more than offset stronger livestock profits. Livestock prices are expected to increase in the first half of 1986 as supplies decline. Red meat prices in particular should benefit. Livestock profit margins will be helped by cheap feedstuff prices. Crop prices should remain weak throughout the year, although prices may not decline much further from current levels. Huge carryover stocks will be the major factor depressing prices. The weaker dollar could lead to some improvement in farm exports, but sales are expected to remain sluggish due to weak economies in the developing world. Overall, farm income could decline \$2 to \$3 billion next year, with a similar fall in net cash income.

With that level of farm income, financial stress is almost certain to build. Stress will remain concentrated among commercial scale farms that are highly leveraged. In particular, farmers and ranchers with debt-asset ratios over 40 percent and with negative cash flows will have extreme difficulty servicing their debt.

By any measure, the farm credit problem has significant dimensions. Two recent studies further clarify the amount of farm debt that is troubled. In July, the U.S. Department of Agriculture estimated that 129,000 commercial farms--one-fifth of all farms with annual sales of over \$40,000--were under serious financial stress as the year began, because they had both a negative cash flow and a debt-asset ratio of more than 40 percent.¹ These producers were estimated to owe approximately 39 percent of farm operator debt, or about \$46 billion.² Isolating only the most severely stressed, or those commercial farms with debt-asset ratios over 70 percent and negative cash flows, those producers numbered about 55,000 farms, a twelfth of all commercial farms, and they owed nearly a fifth of all farm operator debt, or approximately \$23 billion.

Other estimates also suggest that a considerable farm loan problem still lies ahead. Melichar recently classified the financial position of farm operators according to debt-asset ratio, amount of equity, return on assets, and return on equity.³ His results, while different from the USDA results cited above, still suggest that a substantial portion of farm assets must move from weak to stronger hands. Melichar concluded that about 10 percent of commercial farms, or about 63,000 farms, were "vulnerable" as the year began. These farms might be thought of as being in peril of failing. Interestingly, he estimated that these farms owe about \$23 billion to all farm lenders, the same amount USDA estimated for the worst borrower category. Melichar also estimated that an additional 44,000 farms, 7 percent of commercial farms, were "stressed," or headed for trouble in the next few years. These farms owe another \$10 billion to farm lenders.

Thus, comparing the USDA estimates for farms with negative cash flows having debt-asset ratios over 70 percent and Melichar's "vulnerable" category, the number of farm operators in danger of failing in the near term is probably 55,000 to 65,000, and these farm businesses appear to owe \$23 billion to all farm lenders.

With low farm income in 1986, therefore, the stage appears to be set for a period of significant financial stress and reckoning. Many farm loans have been reluctantly renewed in recent years--and especially this past spring--because lenders were unwilling to force settlement of loans when faced with losses from the sale of acquired assets. Increasingly, however, lenders lack the freedom to renew troubled loans. Stockholders are worried about bank earnings, and in some cases bank soundness. Regulators continue to voice concerns over the deteriorating quality of farm loan portfolios. Thus, farm liquidations, both full and partial, can be expected to run well above normal, particularly in the early spring months when most credit decisions are finalized.

With many farm assets for sale, and with a bleak outlook for the farm economy, farm asset values will remain under downward pressure in 1986. Farm loan interest rates are expected to remain high, contributing to lower land values. Many persons are now asking how far land values could fall. The answer is uncertain at present, but two key factors will govern the outcome. The first is the floor that net cash returns will provide. Most observers agree that a positive cash flow is the market fundamental that will eventually support values. With land in some regions now 60 percent off the market high, a positive cash flow is not far distant. Final passage of the Farm Bill will help to eliminate uncertainty about what cash flow assumptions to make.

The second key factor is the rate at which farm credit problems are resolved. Up to now, agriculture has adjusted to its new market reality at a painful, but still fairly manageable, rate. That is a major reason why land values have declined at a fast but even pace. But an accelerated handling of farm credit problems could quite easily force large amounts of farm assets onto thin markets, leading to precipitous declines in values. With the prospect for that development still very real, there remains a need for policymakers to continue to assess the role for public policy in moderating agriculture's adjustment.

The coming year promises to be another interesting one for the Farm Credit System. Wall Street likely will remain edgy about FCS bonds, and the spread over Treasury securities probably will remain historically high. Structural changes in the system will continue to be made. Production Credit Associations and Federal Land Bank Associations are likely to merge into fewer local associations, thereby allowing consolidation of capital.

¹ U.S. Department of Agriculture. Financial Characteristics of U.S. Farms, January 1985, Agriculture Information Bulletin, No. 495.

² Farm operator debt totals about \$120 billion. The remaining \$93 billion of farm sector debt is in the hands of landlords or is borrowed by farmers for nonfarm purposes.

³ Emanuel Melichar. "Farm Financial Experience and Agricultural Banking Experience," Testimony before the Housing Banking Committee, October 23, 1985.

Conclusions

I recently returned from a worldwide conference of agricultural economists in Spain. The theme of that conference was "Agriculture in a Turbulent World." Discussions there reaffirmed my conviction that U.S. agriculture is adjusting to new global and economic realities. The world is awash in grain, and food demand is anemic. Thus, there is no quick fix for U.S. agriculture's problems. Rather, restoring farm prosperity depends on greater balance in U.S. macroeconomic policy, more market-oriented farm policy, and more vigorous economic growth in the developing world. Until these factors emerge and take hold, agriculture's current period of adjustment promises to remain turbulent.

AGRICULTURAL FINANCE AND CREDIT: THE FARM VIEW (MICRO)

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The financial crisis in agriculture has been a reality for some farm families since early 1980. As with any industry-wide upheaval, it was slow in developing. Its origins can be traced back at least a decade. Today we know more about farm financial conditions than at any time since the crisis began. However, little consensus exists among farmers, policymakers, or academic people about agriculture's capacity to adjust to financial stress, or the type of public intervention that would be appropriate if existing institutions and markets are to be assisted.

This paper is largely descriptive. It is partly background for policy papers to be presented later in the seminar.

U.S. Farm Financial Conditions, 1985

At first glance, the current farm financial problems appear to be widespread and fairly uniform among farm families. This is not the case. Some farmers are earning acceptable incomes and rates of return. Others are failing utterly. These differences make public financial policy difficult to design and even more difficult to administer.

Another characteristic that makes the situation difficult is that it has both human and financial dimensions. Farm financial stress is a human problem. It affects a definable group within the farm population. As with any crisis, financial stress causes suffering and pain. There is a financial side as well. Financial and farm asset markets are not performing well. Many institutions ranging from county seat banks and grain elevators to the farm credit system seem to be in jeopardy. Although the human side of this crisis gets some place in the press, the financial dimension is receiving the attention of the policymakers.

Incidence and Relative Frequency of Financial Stress

Measuring financial stress is not straightforward. In the short run, a farm's negative cash flow can indicate stress. It may also reflect expansion or a routine buildup in grain or livestock inventories. The debt-to-asset (D/A) ratio has been widely used as a measure of stress. Normally the D/A ratio measures solvency. However, it can also be used as a rough measure of liquidity. With rates of return to owned assets currently averaging 6 to 7 percent and debt service costs (principal and interest) averaging 15 to 16 percent, farmers with a D/A ratio exceeding 40 percent can be expected to have a negative cash flow.

Insolvency is the extreme measure of stress. When a farm has debts that exceed the value of its assets, it is in most cases a fail-and-cess operation. The insolvency rate is ex post, and not a good leading indicator of financial problems.

Table 1 gives the proportion of farms falling in these three stress categories for the United States and 10 regions. Estimates are based on data from the USDA's Farm Costs and Returns Survey, and reflect January 1985 conditions.

- Slightly more than 50 percent of U.S. farm operators in 1984 failed to generate a positive cash flow. In other words, farm and nonfarm income could not meet all cash obligations including debt service.

Table 1. Incidence and Relative Frequency of Financially Stressed Farm Operations, by Region

Region	Percent distribution by region			Percent of farms in region			
	All farms	Negative ¹ cash flow	D/A ratio over 40%	Stress category Insolvent	Negative ¹ cash flow	D/A ratio over 40%	Insolvent
Northeast	7.2	4.5	1.0	0.2	62.8	14.2	3.0
Lake States	12.7	6.0	3.3	0.4	47.3	25.6	3.3
Corn Belt	21.3	9.9	5.3	0.8	46.4	24.7	3.9
Northern Plains	10.7	5.3	2.9	0.4	49.1	26.7	4.0
Appalachia	13.7	6.6	1.3	0.1	48.0	9.5	0.9
Southeast	6.0	2.9	0.8	0.2	48.3	13.2	3.0
Delta	5.4	3.5	1.0	0.2	64.4	17.7	4.1
Southern Plains	12.0	6.1	1.3	0.3	51.2	11.2	2.1
Mountain	5.4	2.9	1.2	0.1	53.4	22.0	2.4
Pacific	5.7	2.7	1.0	0.2	47.5	16.6	3.2
United States	100.0	50.3	19.0	3.0			

¹Net cash income from farming plus off-farm income less estimated family living expenditures and principal payment.

Source: 1984 Farm Costs and Returns Survey, USDA.

- Over 18 percent of farmers had D/A ratios over 40 percent. Nearly 3 percent were insolvent.
- Financially stressed farmers were most common in the Lake States, Corn Belt, and Northern Plains. For the most part this pattern reflects the distribution of farm operations in the United States.
- In relative terms, a greater proportion of farm operators were experiencing cash flow problems in the Northeast and the Delta than in other regions.
- Farmers with high D/A ratios, including insolvent operations, were relatively more common in the Corn Belt, Northern Plains, and the Delta.
- Appalachia, Southern Plains, and Mountain States showed average or above average proportions of farmers with cash flow problems. However, insolvency and high D/A ratios seem significantly less of a problem there than in the Midwest.

One commonly held belief is that farm debt problems primarily affect large high-rolling operations of mid-sized, inefficient farms. Table 2 reports the frequency of financial stress by annual sales class.

- The size composition of the farm population as defined by the Farm Costs and Return Survey is given in the column headed total farms. Over 60 percent of the population has annual sales less than \$40,000. In terms of a corn farm, this is a size of less than 120 acres.
- The frequency of financial stress follows the farm size distribution closely. The most common farm size with cash flow or solvency problems is the small part-time operation.
- In relative terms some differences between small and large farms are evident. Small farms tend to experience relatively more cash flow problems. Larger farmers, on the other hand, show proportionally a much greater frequency of high leverage and insolvency.

Table 2. Incidence and Relative Frequency of Financially Stressed Farm Operations, by Sales Class

Annual sales value (thousand dollars)	Percent distribution by region				Percent of farms in region		
	All farms	Stress category			Negative ¹ cash flow	D/A ratio over 40%	Insolvent
		Negative ¹ cash flow	D/A ratio over 40%	Insolvent			
500 and over	1.8	0.7	0.7	0.1	38.9	38.9	6.0
250-499	4.1	1.5	1.6	0.2	36.6	39.0	5.8
100-249	13.6	5.4	4.5	0.6	39.7	33.1	4.7
40-99	18.1	8.6	5.0	0.8	47.5	27.6	4.4
10-39	23.3	13.4	3.8	0.8	57.5	16.3	3.4
Less than 10	39.2	20.6	3.4	0.4	52.6	8.7	1.0
United States	100.0	50.3	19.0	3.0			

¹Net cash income from farming plus off-farm income less estimated family living expenditures and principal payment.

Source: 1984 Farm Costs and Returns Survey, USDA.

Severity of Financial Stress

The severity of financial stress in the United States cannot be inferred directly from Tables 1 and 2. A farm firm's earned equity growth rate can provide an approximate measure of financial stress. The equity growth rate in this analysis is calculated as follows: the dollar growth in equity is equal to net cash farm income plus off-farm income less family living expenditures. If positive, the money is available to reduce principal, replace capital equipment, expand, or serve as a risk reserve. If negative, the shortfall is either added to debt (hence subtracted from equity) or discharged by the lender. The equity growth rate (EGR) is obtained by dividing the dollar growth in equity by the firm's market value equity or net worth. In this ratio form, the magnitude of the equity gain or loss is expressed relative to the size of the farm's net worth.

In Table 3 five EGR ranges are defined. Farms with an EGR less than -20 percent are losing 20 percent or more of their equity from earnings alone. With declining asset values, farms in this category are extremely vulnerable to financial failure. Insolvent firms are included in this category.

Farms with an EGR from -20 to -5 percent are likely experiencing serious financial difficulties. Interest payment obligations are continuing to accumulate. No principal payments are being made. Farms with an EGR from -5 to +5 are in limbo. They cannot replace equipment or meet principal repayment requirements. With an EGR from +5 to +20 the farm business is showing reasonable progress. Equity may still fall due to declining asset values. However, the farm's earnings are satisfactory.

A farm with an EGR exceeding 20 percent would, at first glance, seem exceptional. The EGR may be due to very high earnings on assets. However, it may also be due to a small positive income combined with an even smaller net worth.

The distribution of farm operators, their debt, and assets among the five EGR categories is given in Table 3. Several key results are indicated:

- For the United States, 15 percent of the farm operators are insolvent or have an EGR less than 15 percent. These farmers control nearly 28 percent of U.S. farm operator debt and 8.8 percent of farm assets. In general, this group will not survive.
- At the other extreme, 15.5 percent of farm operators showed an EGR exceeding 20 percent in 1984. This group controls 14.7 percent of the debts and 10 percent of the assets.

Table 3. Percentage Distribution of Number of Farm Operators, Their Debts, and Their Assets, by Equity Growth Rate and Region

Region and category	Percentage of regional total, by equity growth rate (percent)				
	Insolvent less than -20	-20 to -5	-5 to +5	+5 to +20	Over +20
Northeast					
Operators	16.5	23.9	31.2	17.6	11.0
Debt	26.8	16.7	21.7	19.9	14.7
Assets	7.4	19.9	43.2	10.0	9.5
Lake States					
Operators	12.7	15.9	28.7	28.1	14.8
Debt	23.1	12.6	23.5	30.6	10.0
Assets	8.5	12.4	33.4	37.3	8.3
Corn Belt					
Operators	14.2	15.3	26.0	25.2	19.2
Debt	28.1	11.4	20.0	20.5	20.0
Assets	9.9	12.4	33.8	30.2	13.9
Northern Plains					
Operators	17.5	13.7	28.9	25.8	13.9
Debt	24.2	17.7	23.6	21.1	13.4
Assets	9.7	13.4	37.9	30.8	8.3
Appalachia					
Operators	14.4	18.8	26.6	23.9	16.3
Debt	16.9	11.1	22.9	25.6	23.5
Assets	5.7	13.8	40.1	27.4	13.1
Southeast					
Operators	15.9	19.9	24.9	23.4	15.7
Debt	37.6	15.9	15.7	16.1	14.5
Assets	9.5	15.1	43.1	20.1	12.5
Delta					
Operators	19.0	24.6	27.1	15.1	14.2
Debt	32.6	18.6	15.1	9.5	14.2
Assets	9.1	18.3	33.5	15.2	8.1
Southern Plains					
Operators	17.4	19.0	27.3	21.1	15.1
Debt	35.1	19.5	17.8	15.5	12.2
Assets	9.1	16.9	47.0	18.8	8.3
Mountain					
Operators	14.0	13.6	39.1	20.5	12.7
Debt	24.6	15.2	29.6	18.6	11.8
Assets	8.2	11.8	53.4	20.4	6.3
Pacific					
Operators	10.7	17.2	31.0	27.1	14.2
Debt	35.1	11.5	20.8	20.4	12.2
Assets	8.4	12.9	44.5	25.2	8.8
United States					
Operators	15.1	17.5	28.3	23.6	15.5
Debt	27.6	14.3	22.2	21.2	14.7
Assets	8.8	14.3	40.8	26.2	10.0

- Combining firms with EGR less than 5 percent, 60.9 percent of the operators controlling 64.1 percent of the debt are likely to experience financial stress and need to make operating changes if they are to remain viable.
- In relative terms, the Corn Belt and Lake States show fewer farmers in the -20 percent EGR groups and more in the +20 percent groups.
- In the Delta, Southern Plains, and Southeast more operators are experiencing severe financial stress. Furthermore, these farmers owe 30 percent of the regional farm debt.
- The Pacific States show a very high concentration of debt, as 35 percent is held by a relatively few severely stressed farm operators.

In table 4, we look at the severity of financial stress as a function of farm size.

Table 4. Percentage Distribution of Number of Farm Operators, Their Debts, and Their Assets, by Equity Growth Rate and Sales Class

Annual sales value (thousand dollars) and category	Percentage distribution of sales class total, by equity growth rate (percent)				
	Insolvent less than -20	-20 to -5	-5 to +5	+5 to +20	Over +20
500 +					
Operators	16.1	8.9	18.9	23.3	32.9
Debt	32.6	7.5	18.2	21.2	20.4
Assets	13.1	12.8	28.7	27.4	17.9
250-499					
Operators	13.7	6.5	17.8	27.0	23.5
Debt	22.4	9.9	23.2	26.6	17.9
Assets	9.5	8.1	35.9	32.7	13.7
100-249					
Operators	13.0	10.2	23.0	33.3	20.5
Debt	22.8	15.5	22.6	25.5	13.6
Assets	7.8	11.3	37.8	32.8	10.3
40-99					
Operators	15.3	14.0	32.2	25.5	12.9
Debt	31.5	20.0	25.3	14.5	8.7
Assets	9.5	15.0	47.5	22.6	5.4
Less than 40					
Operators	15.4	21.0	29.0	20.5	13.9
Debt	31.9	17.0	20.8	15.6	14.6
Assets	7.3	20.0	45.1	20.5	8.2
United States					
Operators	15.1	17.5	28.3	23.6	15.5
Debt	27.6	14.3	22.2	21.2	14.7
Assets	8.8	14.3	40.8	26.2	10.0

- The largest farm sizes have the greatest proportion of high-income and high-stress farms.
- Farmers with annual sales under \$100,000 show relatively few high EGR farms. The concentration of debt in stressed operations is greater than average.

- Financial stress affects all size categories. However, the larger sales category accounts for relatively more of the debt and assets and fewer operators.

Characteristics of Farm Operators

The Farm Costs and Returns data contain relatively little demographic information on farm operators. Table 5 reports characteristics of Iowa farm families by D/A class. These data were collected in early 1985.

Table 5. Average 1985 Financial Condition of Sample Iowa Farm Operators, by 1985 Debt-to-Asset Ratio

Financial or operator characteristic	Debt-to-asset ratio (percent)					All farms
	0-10	10-40	40-70	70-100	100+	
Assets (\$1000)						
Non-real estate	136	166	236	156	85	166
Real estate	282	375	420	348	152	340
Total	418	541	656	504	237	506
Debt (\$1000)						
Non-real estate	6	44	121	143	190	60
Real estate	4	82	238	251	124	101
Total	10	126	359	394	314	161
Net worth (\$1000)	408	415	297	110	-77	345
Debt-to-asset ratio (%)	2.4	23.3	54.7	78.2	132.5	31.8
Operator characteristic						
Age	59	54	48	46	45	54
Years in farming	35	29	25	23	22	29
Dependents	2.4	3.1	3.5	3.7	3.3	3.0
Dependents <18 years	0.3	0.8	1.1	1.4	1.2	0.7
Husband's education ¹	2.2	2.3	2.4	2.3	2.4	2.3
Wife's education ¹	2.4	2.4	2.5	2.4	2.4	2.4
Acres owned	235	280	295	271	159	261
Acres rented	114	172	285	302	326	193
Acres operated	327	430	562	539	484	433
Off-farm income (\$)	7738	5795	6621	5574	9426	6779
Percentage distribution						
Operators (%)	35	32	21	7	4	100
Assets (%)	29	34	28	7	2	100
Debts (%)	2	25	48	17	8	100

¹Education attainment, highest level attended:

1 = grade school, 2 = high school, 3 = college or vocational

Source: 1985 Iowa Farm Finance Survey.

- Iowa farmers with small debt tend to be older, with fewer dependents. They operate smaller acreages.
- Education level does not seem to be related closely to D/A class.
- The largest farms in terms of assets and acreage are in the 40 to 70 D/A group.

- The distribution of operator's debt and assets among D/A groups parallels the national data. Iowa farmers with D/A ratios over 40 percent have over 70 percent of the operator debt.

Rapidly falling asset values have dramatically changed the financial condition of Iowa farmers in just a year's time. Table 6 gives the percentage change in balance sheet data for farmers in a given D/A group.

Table 6. Percentage Change in Financial Condition, 1984-1985, Iowa Farm Operators

Financial characteristic	Average	40-70	70-100	100+
	-----percent-----			
Assets				
Non-real estate	-8.8	-6.9	-16.5	1.4
Real estate	-21.5	-20.6	-31.4	-32.4
Total	-17.7	-16.1	-26.2	-21.2
Debt				
Non-real estate	13.2	7.0	-2.4	11.8
Real estate	-1.9	-1.6	-16.9	-32.7
Total	3.2	1.3	-10.4	-6.9
Net worth	-24.8	-34.5	-88.4	-62.2

Source: 1985 Iowa Farm Finance Survey.

- The sample average showed a loss in asset value of 17.7 percent -- roughly the decline in land values. Debt levels increased sharply, as non-real estate debt increased but real estate debt declined. Overall, equity fell nearly 25 percent in one year.
- Farmers in the 40-70 percent D/A group experienced moderate to severe stress. Changes in their average balance sheet followed the sample average. However, equity fell 34.5 percent.
- The high-debt farm operators in the 70-100 D/A group lost over 88 percent of their equity. This came despite attempts to reduce debt. Falling asset markets and partial liquidations were the likely culprits.
- Farms that were insolvent in January 1984 increased non-real estate debt during the year. Asset values declined. Net worth, already negative, fell an additional 62 percent.

Farm-Level Adjustments to Financial Stress

Data presented in this report suggest that up to two-thirds of the farm debt in the United States is held by farm businesses experiencing financial stress. This is clearly an unstable situation. In the short run, farms may adjust by attempting to increase productivity, by reducing costs, or by reducing principal repayment. In the longer run, farm operations will need to adjust enterprises and in many cases restructure assets and liabilities. Financial restructuring involves selling assets, reducing debts, and, in some situations, renegotiating principal balances with lenders. The restructuring process takes time. For some farm businesses, the adjustment is relatively minor. For others, so much of the asset base must be sold that the firm will likely fail before the restructuring can be accomplished.

Restructuring requirements for financially stressed farm businesses were estimated from Iowa Farm Finance Survey data. For the average farm in 40-70 and 70-100 D/A group three common techniques were applied in restructuring. A scale-back involves selling assets, retiring debts and reducing the size of the business. A sale-leaseback liquidates assets, but then assumes that assets could be leased at prevailing rates. In debt discharge it is assumed that the lender writes off sufficient debt to produce a positive cash flow.

The results of this analysis were presented in Table 7 for three income levels. At current incomes, the average 40-70 percent D/A producer shows a negative cash flow, -\$11,400. Using a scale-back, a positive cash flow could be produced by selling 28.6 percent of the firm's owned assets. Over 44 percent of the debt would be reduced. A sale-leaseback reduces the extent of liquidation required to 21.5 percent. If the lender would discharge 20 percent of the debt -- about \$72,000 (Table 5) -- the business would have a positive cash flow. The results in Table 7 suggest:

- For moderate debt operations and current income levels, liquidation requirements are extensive but generally feasible. Changes in income levels have a significant impact on the extent and feasibility of restructuring for this group.
- Debt discharge, in general, offers only a partial solution to restructuring problems.
- For high-debt farms, the 70-100 percent D/A group, all restructuring options seem scarcely feasible. The prospect of liquidating 70 to 80 percent of a farm's asset base with a lease-back seems fortuitous at best. Farmers in this group, in general, are living on borrowed time.

Table 7. Average Percent Asset and Debt Liquidation Required to Service Remaining Debt, by Debt-to-Asset Ratio and Current Income Level, Iowa Farm Operators

Item	Debt-to-asset ratio (percent)					
	40-70			70-100		
	Low income	Current income	High income	Low income	Current income	High income
Net cash flow (\$1000)	-20.0	-11.4	-2.9	-37.4	-30.5	-23.7
Restructuring option (percentage change)						
Scaleback						
Asset	43.0	28.6	8.7	NF	NF	NF
Debt	66.6	44.3	13.5	NF	NF	NF
Sale-leaseback						
Asset	35.5	21.5	5.8	86.3	74.8	61.8
Debt	55.0	33.3	9.0	94.1	81.5	67.4
Debt discharge						
Debt	35.6	20.3	5.2	59.3	48.4	37.6

Note: Current income -- 7.5 percent cash return on assets; low income -- 6.5 percent cash return on assets; high income -- 8.5 percent cash return on assets. The recovery rate on liquidated assets is assumed to be 85 percent.

Source: Jolly and Doye, FAPRI Staff Report #8.

Final Comments

Currently a third of the farmers in the United States are experiencing serious financial problems. Unfortunately, this group owes most of the money. Financial restructuring offers the main long-term solution to this debt crisis. However, doing so will take time -- perhaps up to an additional five years. Furthermore, there is real doubt as to the capacity of agricultural asset markets to accommodate such a massive adjustment. Up to 15 to 20 percent of farm assets may be liquidated as farmers and lenders attempt to adjust to current economic conditions. This compares to the historical 2-4 percent of annual based sales. Improved incomes would lessen, but not eliminate, the need for extensive restructuring. Lower farm incomes would be a disaster. The key financial policy issue is how to buy sufficient time to make the transition without incurring unacceptable economic and human costs.

AGRICULTURE INTERNATIONALIZED -- THE MEANING

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Introduction

It is a pleasure to take part in this seminar on agricultural policy. Within our democratic form of government an informed citizenry that has taken the opportunity to explore and debate political and economic choices represents our best hope for wise public policy. I'm pleased to participate.

When I saw Harold Breimyer this summer he advised me not to attempt to provide answers but simply to present background that aids in understanding the major questions faced by farmers and agribusiness leaders today. Since I don't have the answers I am more than happy to follow Professor Breimyer's advice.

My theme is that conditions in the 1950s and 1960s were vastly simpler and more amenable to influence by domestic policies than is true today. I argue that the major cause of increased complexity is the internationalization of the U.S. economy in general and the agricultural sector of that economy in particular.

Increased interdependency with other nations is not limited to the United States. It has been a worldwide phenomenon in which almost all nations have been participants. Even after adjusting for the influence of inflation, world trade in 1980 was almost three times the level in 1970 and more than 10 times that of 1950. Although trade has fallen by more than 10 percent since 1980 because of worldwide economic recession, it is unlikely that commerce among nations will ever return to the levels of 1970. It is a virtual certainty that we will not revert to the conditions of the 1950s and 1960s. We have little choice, as individuals or as a nation, other than to try to understand the economic and policy choices available to us in this interdependent world.

U.S. Agriculture and the World in the 1950s

By way of background, in the early 1950s we began to accept as chronic that American agriculture has the capacity to produce more than consumers are willing to buy at prices acceptable to farmers. The condition was seen as unlikely to be solved by continued growth in U.S. population and per capita incomes.

Yet our analysis of agriculture's economic problems and our search for policy solutions was limited for the most part to looking at agriculture in relative isolation. We discussed and implemented agricultural policies with little concern for their effects on the rest of the domestic economy and with only limited attention to the rest of the world. We did not look to other nations as a source of, nor as a solution for, our agricultural difficulties. We paid little attention to other nations as competitors in foreign markets or as potential long-term customers.

The prevailing view in the 1950s was that the solution to agriculture's price and income difficulties would be found within agriculture and within the United States. We sought price stability at levels higher than markets would have provided. As a result we stored large quantities of farm products under government ownership despite efforts to reduce production. By 1954 we recognized that the volume of stocks and the cost of their storage was approaching politically unacceptable levels. Then for the first time since the 1920s we began to consider policy solutions that went beyond our borders.

We enacted Public Law 480, the Food-for-Peace program, with proclamations that the purpose was humanitarian, i.e., to bring food to the hungry in the developing world. Nevertheless, we knew that its primary purpose was surplus disposal. It was a way to dispose of stocks in a manner that was less costly than continued storage and more politically acceptable than dumping grain on the ground or sinking it in the ocean. The program did have, and continues to have, humanitarian benefits but we should not delude ourselves into believing that humanitarianism was the primary motivation for the legislation.

Even with P.L. 480 in place we took a casual view toward the rest of the world as we sought agricultural policy solutions. We continued to set price support levels with almost total disregard for international price levels. We sought and gained exclusion of agricultural commodities from some of the key provisions of the General Agreement on Tariffs and Trade, commonly known as GATT. In doing so we informed the international community that domestic agricultural policy was of higher priority than our commitment to freer trade.

Because of the presence of the GATT, many restrictions to world trade in industrial products have been reduced. Unfortunately, we cannot say the same for agriculture. As other nations have developed and refined their own agricultural policies they, too, have taken advantage of the GATT exceptions for agricultural commodities. Thus, our innovation has been turned against us in the 1980s as we have sought to retain export markets.

Agriculture's main, if not sole, policy concern in the 1950s was farm policy. In promoting farm policy farmers and their leaders paid little attention to the effect their actions would have on the rest of the economy or the rest of the world. Neither did they participate to a significant degree in the development of general economic or trade policies. When they did participate, as in the GATT negotiations, the context was often the seeking of special recognition for agriculture.

Lest these comments be misunderstood, let me emphasize that farmers and farm policy makers were not entirely selfish in their concerns. There was relatively little objection to looking on the agricultural economy as relatively self contained, and there was some validity to the belief that what was good for agriculture was good for society. No nation in history had had the assurance of the bountiful supply of low cost and high quality food that our citizens enjoyed during the 1950s and 1960s.

But changes that have occurred between 1950 and 1985, especially changes of the past 15 years, make an isolationist attitude on the part of agricultural policy makers no longer in the best interest of agriculture nor of society generally. It is these changes to which I wish to devote the remainder of this paper. Briefly stated, the U.S. economy, including, or perhaps especially, its agricultural portion, has become internationalized.

The Internationalization of U.S. Agriculture

The beginnings of internationalization were visible in the late 1950s to those who looked for them, but most of us didn't look. For example, P.L. 480 included a title that provided for market promotion and development. In the late 1950s and early 1960s we had some successes. Among the most notable were the opening of markets for U.S. frozen chickens in western Europe and for U.S. wheat in Japan.

We soon learned that to sell our farm products abroad we had to buy industrial products from others. We also learned that technology such as that which led to low-priced chicken meat in the United States was easily transferred. Thus, for example, German markets for U.S. poultry were quickly transformed into markets for U.S. corn and soybeans as German farmers adopted our techniques for mass production of poultry. This delighted German farmers and U.S. corn and soybean growers. But it was not welcomed by the U.S. poultry industry, which encouraged President Kennedy to engage in a diplomatic exercise that has become known as the "chicken war."

The poultry experience in Western Europe illustrates a fundamental feature of international trade. Even though there is incontrovertible evidence of the overall benefits of trade there generally are individual losers as well as winners in both importing and exporting nations.

The "chicken war" was only the beginning of a series of disagreements on agricultural trade matters between the United States and its European allies. In fact, the formation of the European Common Market and development of its Common Agricultural Policy during the late 1950s and early 1960s perhaps did more than anything else to alert us in the United States that our influence on international economic conditions is subject to constraints. We began to realize that in the development of domestic policies such as those relating to agriculture we would be required to pay much more attention to international factors than had been our practice.

International considerations undoubtedly influenced the nature of the 1965 farm bill. Recall that we changed our system of price and income supports and lowered support prices, and we did so, in part, in order to make our exports more competitive. We offset the effect of lower prices on producers' incomes by making deficiency payments. To some of our critics this was not viewed as a move toward improved international relations. They saw deficiency payments as nothing more than an ill-disguised export subsidy.

Exports of farm products nevertheless were slow to increase. Throughout the 1960s they never reached \$7 billion. Even the peak of near that figure, which seems paltry by today's standards, was achieved only by shipping a third or more of the total under P.L. 480 and other government programs.

As suggested earlier, there was some growth in markets for U.S. farm products in Europe and Japan, and this growth was a harbinger of things to come. It was an indication that economic growth in the last half of the 20th century would depend to a significant degree upon ever-increasing commerce among nations. As the financial strength of other economies improved, however, the postwar system of international finance dependent upon fixed exchange rates encountered increasing difficulty. It also became apparent to an inflation-plagued United States that part of our domestic economic problems could be traced to use of the dollar as the base of this fixed-exchange international monetary system. The international economy became increasingly unstable as we moved from the decade of the 1960s to the 1970s.

Three events in the early 1970s changed the world of U.S. agriculture in ways that few persons could have envisioned earlier:

The first event was devaluation of the dollar in 1971 and again in 1973. Along with these devaluations we ceased governance of the world financial system by the Bretton Woods agreement signed in the closing days of World War II. A 30 year period of relative stability in international financial transactions was over. Americans and others were going to learn to cope with variability that results from unregulated international currency exchange.

The second major event was a change in policy within the Soviet Union. Russia has long been plagued by erratic agricultural production. Since the end of World War II she had accommodated to shortages primarily by enforced reduction in consumption. In 1972 Russia elected to make allowance for a short grain harvest by entering world markets as a major importer.

The effect of the Russian decision was compounded by bad weather in portions of the U.S. Midwest and elsewhere and by a decline in the anchovy catch off the coast of Peru. The result was a shortage in supply of grain and protein meal and soaring prices. U.S. grain and soybean prices rose by 200 to 300 percent between the 1971 and 1974 crop years.

The third event was the rise in oil prices resulting from the decision of the OPEC nations to act as international monopolists.

By 1975 we were well aware that our nation and its agriculture had entered a new era. But we were slow to sort out causes and to decide how to adapt to our new circumstances.

In some degree we misread the signals. Regarding the worldwide food situation we interpreted the events of 1972-74 as reversing the 40 year trend wherein world-wide supply outruns demand. Many persons proclaimed that the predictions of Malthus were finally becoming reality. They saw the era of surpluses giving way to a long-term struggle against widespread hunger. Production controls were replaced by unrestrained expansion as the Secretary of Agriculture (allegedly) urged farmers to plant "fence-row to fence-row" to meet expanded world needs.

The 1973 farm bill continued support prices and government payments but most people viewed the legislation simply as a security blanket for farmers. They believed the price support and payment provisions would rarely have to be invoked because of high prices resulting from current and prospective worldwide food supply and demand conditions.

Due in part to higher prices the dollar value of agricultural exports in 1974 was three times its 1970 level and it was to be twice the 1974 level in 1981. Volume of exports rose too, though not as much. In the peak year of 1980 export volume was two and a quarter times the level in 1970.

As exports and farm incomes soared to record levels farmers responded to their new-found prosperity and to the expectation of even greater opportunity in the future by going on an investment binge. Although interest rates rose in the later 1970s, high rates of inflation kept the real interest rate near, or in some months below, zero. Farm debt rose from \$81 billion in 1975 to \$165 billion in 1980. It climbed further to more than \$200 billion in 1983. More significant, debt rose from three and one half times net farm income in 1975 to twelve and one half times a reduced net income in 1983.

Only in the last few years have we begun to sort out in a realistic fashion what really happened in the early 1970s. First, we now realize that the appearance of excess demand in the early 1970s probably was not a reversal but more than likely a short-term aberration in the long-term trend of world food demand and supply. Second, we now realize that the continued large exports of U.S. farm products through 1981 was due in part, if not in large measure, to a favorable competitive situation resulting from the relatively low value of the dollar in foreign exchange and to strong rates of economic growth throughout most of the world. When, in the 1980s, those growth rates slackened and the dollar value changed from weakness to strength, it became somewhat easier to place the events of the 1970s in proper perspective. When all is said and done it is now apparent that because of our increased productive capacity and the expanded role of exports, U.S. agriculture can no longer obtain significant or lasting relief from farm policies developed in isolation from general domestic and international economic policies.

What are some of the specifics of today's export markets? In 1950 exports absorbed about 15 percent of our total farm output. Today they are the outlet for 25 percent. But even more significant than the increase in importance is the changed composition of our exports.

Cotton and tobacco have been important export commodities for U.S. agriculture since colonial times. In 1950 they comprised about 40 percent of our agricultural exports. Today they account for 10 percent or less.

Wheat has been and continues to be an important export commodity. In 1950 and today we provide about 40 percent of the total quantity traded on world markets. But today that amounts to 105 million tons compared to 21 million tons in 1950, and it amounts to 60 percent of our total production compared with 25 percent in 1950.

But the most significant change and the one most important to Missouri farmers is what has happened to corn and soybeans. Corn exports have grown from 14 to 65 million tons and from 15 percent to 35 percent of our production. We supply more than half of all the feed grains moving in world trade.

The growth of soybean exports has been even more dramatic. In 1950 we exported a mere 800,000 tons. Today we export slightly less than 30 million tons, which is 40 percent of our production and between 80 and 90 percent of total world trade. These statistics relate to trade in soybeans. If expressed in soybean equivalents to take account of trade in meal and oil the export share of U.S. production would be somewhat higher and our share of world markets somewhat lower because one of our major competitors, Brazil, exports most of her soybeans in the form of meal and oil.

There is a "good news-bad news" quality to the shift in relative importance of our exports. The good news is that sales of corn and soybeans as inputs to livestock production will respond more to economic growth abroad than will sales of cotton and tobacco. The bad news is that when worldwide economic growth slackens as it has in the 1980s, our export markets will suffer more than if they were dominated by cotton and tobacco.

It should be clear from the statistics I have cited that world markets no longer are a marginal factor in the U.S. agricultural economy--something to be accounted for only after all domestic issues have been considered. Those whose livelihoods depend upon U.S. corn and soybean markets today must give consideration to factors such as the size of the Russian grain crop, the levels of growth in per capita income in countries such as Korea, Taiwan, and Japan, and the Common Agricultural Policy of the European Economic Community. It no longer is adequate to concentrate on traditional domestic considerations such as acreage, weather, livestock demand, and the like.

Let me provide some specific examples of some of the more significant changes that have occurred during the past 20 years. In the 1960s the European Economic Community (EEC) was of interest to U.S. farmers because of its market potential. Today, even though we still maintain substantial exports to the EEC our interest is focused much more on how its exports of wheat and dairy products interfere with our sales to other nations.

India, a recipient in the 1950s and 1960s of much of the U.S. P.L. 480 largesse, is now struggling with the problem of storing and exporting surplus wheat. Whether this will be a long-term condition or is simply a short-term aberration remains to be seen.

Thailand is a major competitor influencing sales of U.S. feed grains in Europe and rice in Asia. The Soviet Union was an exporter of grain in the 1950s. Today, with expanded levels of income and with the change in national policy discussed earlier, she is a leading importer. Because of the unpredictability of her import demand due both to weather and political considerations, she also is a major source of year-to-year instability in world markets.

Indeed, one reality of today's world is that 95 percent of international wheat sales involve a state trader on at least one side of the transaction. Thus, our continued reliance on private traders places us definitely in the minority. This need not cause us to change our system but the predominance of state trading adds still further uncertainty to behavior of customers and competitors.

A number of the nations mentioned in the last few paragraphs are less developed nations. Some such as Korea and Taiwan fall in a category called Newly Industrialized Countries or "NICs." Because U.S. farmers often are critical of U.S. assistance to developing nations, especially assistance relating to increased agricultural productivity, I want to comment about these nations briefly.

I mentioned above the transition of Germany from an importer of poultry to an importer of feed grains and soybeans. A similar phenomenon accompanies the economic growth of less developed nations. In the early stages of development it is important for most countries to increase productivity of their agricultural sector. Such development often reduces the need for imports of commodities such as wheat and rice. But as has been clearly shown in the case of Korea, Taiwan, and a few other nations, this reduction in agricultural inputs is temporary. As development takes off the desire to consume and the ability to buy higher priced foods such as animal products leads to significantly increased demand for U.S. feedstuffs for animal production. My California colleagues anticipate that it will also lead to expanded markets for fresh fruits and vegetables in much the same fashion as occurred in the United States and Europe 20 and 30 years ago. One of the issues that will help determine whether we share in these expanded markets is the degree to which we and other nations move toward agricultural policies that encourage rather than discourage trade.

The large number of nations whose actions affect the level of our exports illustrates why the state of our agricultural economy has become much less amenable to change by actions of our own government. Agricultural policies traditionally have been designed to shield domestic producers and consumers from some of the instability that characterizes agricultural markets. In effect we, the Russians, the European Economic Community, and others have attempted to export our domestic price instability. It is generally accepted that prices and supplies in international markets have become even more unstable than would be the case in the absence of domestic policies. The United States as the world's leading trader in agricultural commodities is particularly vulnerable to unstable international prices. There can be little doubt, for example, that international price instability is partially responsible for the increased cost of operating traditional price and income support programs in the 1980s.

Although the subject of domestic economic policies is not part of my topic I comment on them briefly because of their importance to our international performance.

Our ability to compete in the international markets of the 1980s depends at least as much on the level of the dollar in foreign exchange as it does on the domestic price of our products. In fact, because of the rising value of the dollar our farm exports increased in cost to foreign buyers even as domestic prices declined the last few years. The resulting decline in exports of both agricultural and nonagricultural commodities and the increase in imports has led to record trade deficits for the United States. Continuation of the trade deficits of recent years when combined with massive deficits in federal spending constitutes a serious threat to agriculture's and society's long-term economic welfare.

Agriculture makes a relatively minor contribution to the federal deficit and it is a major positive force in reducing the size of the trade deficit. Nevertheless, agriculture's stake in the correction of these twin deficit problems is at least as great as that of any other sector of the economy.

Conclusion

The mind-boggling complexity of the modern economic world leads to suggestions that we return to the conditions of the 1950s when life was simpler and agriculture went its own way with relatively little regard for external conditions inside or outside the United States. Unfortunately that option no longer exists. Imagine for a moment the problems associated with an agricultural establishment whose planted acreage is reduced by 25 percent from present levels. This is what would be required to allow for that portion of our output that is exported. Or, imagine the problems of our economy without the benefit of agriculture's \$30 + billion of foreign exchange earnings. What other sector would be capable of generating a similar sum to offset our imports of oil, automobiles, and television sets?

Like it or not, we are going to have to find ways of living in an interdependent world. For agriculture and for all citizens this means gaining a better understanding of the benefits and costs associated with a world of interdependencies. For agricultural leaders it means working as hard for sound trade and domestic economic policies as for specific agricultural policies. The former may mean more to their constituencies today than the latter did in the 1950s.

For example, policies designed to protect U.S. industry from imports could be an extremely damaging decision for agriculture. Federal deficits that are out of control and exorbitant levels of international debt could override the long-term, and even the short-term, benefits of even the best agricultural policies. The events of 1983-85 have amply demonstrated that rising target prices protected in four-year legislation cannot offset the farm income consequences of a dollar value in foreign exchange value that favors our competitors.

We must be prepared to protect our self interest but self interest political behavior no longer is sufficient for our nation or for its agriculture. We must develop the capacity to understand the complexity of our international relations in both political and economic terms. We must develop the willpower to make the tough decisions that such understanding suggests. Among other things, we should take the lead in offering to negotiate broad provisions of domestic agricultural policy in the GATT or a similar forum. Perhaps we could begin by reaching some sort of bilateral or trilateral understanding with the European Community and Japan relating to the limits within which domestic policy will operate. Successful negotiations of this sort almost certainly will result in the fruits of our outstanding agricultural productive capacity being more widely shared among the nations of the world.

As the 20th century draws to a close we and other nations must acknowledge and reflect in policy the fact that our economies are inextricably intertwined. We and they can profit from interdependence but only if we recognize the potential and adjust traditional behavior to achieve it.

STATUS OF THE 1985 FARM BILL¹

Carl R. Zulauf
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As the 1985 farm bill was not yet law at the time of writing this paper, specific provisions cannot be discussed with confidence. However, the House and Senate each passed its version of the farm bill. It is possible to examine these two bills for broad areas of agreement and to discuss their potential implications for U.S. agriculture. For brevity, my observations are confined to four areas of agreement: (1) conservation programs; (2) export enhancement programs; (3) "self-help" programs; and (4) loan rates/target prices.

Before discussing these areas, I address a question asked by many farmers and others: why did the bill take so long? The reasons are helpful in understanding why the House and Senate farm bills were drafted as they were.

Why the Farm Bill Took so Long

Reasons for the delay are many, but three stand out: (1) continuing deterioration in the farm credit situation; (2) failure of the Reagan Administration to present a viable farm bill; and (3) budget constraints. A brief discussion of each follows.

Farm Credit Crisis

Although some observers had warned of the financial problems facing agriculture, the farm credit crisis did not become part of the national agenda until Senator Melcher of Montana held hearings in Washington, D.C., in February 1985. A subsequent filibuster over the nomination of Edwin Meese to be Attorney General paved the way for the Senate and House to pass a farm credit assistance package aimed at assuring farmers credit for planting.

President Reagan vetoed the credit relief bill, but farm credit was on the national agenda. Congress could not ignore the interrelationship between the farm bill and the credit crisis. Importantly, the farm bill assumed not only its traditional price and income support role but also a credit relief role. Congress had to consider what impact reducing government support would have on the credit situation.

Preoccupation of Congress with the farm credit crisis during February caused the Senate and House Agricultural Committees to postpone hearings on the farm bill by at least one month. From the very beginning, work on the farm bill started late.

Administration's Farm Bill

The traditional start to markup (i.e., write) the farm bill is the Secretary of Agriculture's testimony before Congress presenting the Administration's farm bill. This year's traditional start was in most respects without meaning. The administration's farm bill, "The Agricultural Adjustment Act of 1985," was a radical program that essentially moved agriculture to a free market over a six year period. Most farm groups and farm state legislators labeled the program reckless and irresponsible. It went too far, too fast, in their eyes, and would increase the financial difficulty facing farmers.

Whatever the merits of the Administration's position, it was dead on departure as far as political realities were concerned. The administration undermined much of its influence over the farm bill by proposing and maintaining such an extreme position. It provided little initial foundation for marking up a farm bill. Both the Senate and House Agricultural Committees chose as their markup vehicles the bills submitted by their respective chairmen, Senator Helms and Representative de la Garza. The result was further delay in writing the farm bill.

¹At the time of the seminar Professor Zulauf was on leave from Ohio State University, working in Senator John Glenn's Washington, D.C. office. He spoke to the seminar audience from there. This text was updated later, reflecting the House and Senate bills that went to a conference committee. Dr. Zulauf credited Kathy Connolly and David Dyer for assistance in writing this paper.

It should be noted, though, that the much maligned "Agricultural Adjustment Act of 1985" proposed lowering loan rates and setting them through a moving average of market prices, and both proposals will be in the final farm bill.

Budget Constraints

The federal deficit of around \$200 billion annually has surfaced as a major national agenda item. In 1985, Congress took a significant step at least to control further increases in the deficit. The "Budget Resolution for Fiscal Year 1986" called for cuts of \$55 billion in federal spending. While most experts believe the actual cuts will be \$35-40 billion, the fact is that Congress got serious about cutting federal spending in order to narrow the deficit.

Meanwhile (at seminar time) a Congressional conference committee was considering a far more comprehensive budget reduction package. The so-called "Gramm-Rudman" approach would automatically balance the budget by 1991 through across the board cuts in most federal programs, excluding antipoverty and social security programs. Passage of Gramm-Rudman could force reductions in farm price and income supports no matter what the provisions of the 1985 farm bill may turn out to be.

Farm programs no longer enjoy an open checkbook. The Budget Resolution allocated about \$35 billion over the 1986-88 fiscal years for farm income and price support programs. This figure amounts to an average annual expenditure in excess of 40 percent of average annual net farm income over the last three years. However, the \$35 billion amounts to a cut of \$6-8 billion in outlays if current programs were to be continued. Thus, it represents a significant constraint on farm program expenditures.

Budget constraints have caused substantial disagreement over how farm programs should operate in an era of tightening fiscal control, and over how the projected costs of the 1985 farm bill should be contained. These points of debate, along with the farm credit crisis and the Administration's farm bill stance, substantially slowed progress of the farm bill through Congress.

Selected Common Themes in the House and Senate Farm Bills

Strong Conservation Programs

A common feature of the House and Senate farm bills was a strong commitment to soil conservation. Both bills contained sodbuster and swampbuster provisions. These provisions deny farm program benefits to farmers who break-out (plant crops on) newly cultivated lands designated as highly erodible or wetlands. Program benefits are denied for all crops produced, not just those produced on the broken-out erodible lands or wetlands.

The bills would also require farmers to apply accepted conservation practices on already cultivated land designated as erodible or risk losing farm program benefits. The Senate bill requires approved practices to be in place by 1988 while the House bill sets 1995 as the compliance date.

Lastly, the two bills contain a long term conservation reserve for fragile land already in crop production. The reserve will be at least 25 million acres. Farmers will bid for a per acre payment in return for removing the land from production for at least seven years. Payment will most likely be in cash but some could be in commodities, according to the House bill. The Secretary of Agriculture would also provide aid for up to 50 percent of the cost of installing approved cover crops or conservation practices.

Public support for strong conservation measures has increased since the erosion impact of fence-row-to-fence-row planting was felt in the late 1970s. Their inclusion in the 1985 farm bill primarily represents the efforts of conservation groups such as the American Farmland Trust, Audubon Society, and Sierra Club. Although many farm groups climbed on board the conservation freight train in 1985, they were basically minor players in what will probably be the most novel program in the farm bill.

Taken as a group, the conservation provisions represent a return to the philosophy of the farm programs of the 1930s. Farmers as a group are expected to practice good soil stewardship in return for federal farm program benefits. The conservation provisions also illustrate that new thrusts in farm legislation normally have an incubation period of five to ten years before the national agenda allows commitment to them.

Strong Export Enhancement Programs

Both the Senate and House farm bills contain a strong commitment to export enhancement. Both reauthorize the Food for Peace program (P.L. 480) and increase its size. Both reauthorize the short term export credit guarantee program and reauthorize and broaden the intermediate term (three to ten year) export credit program. Both bills also direct the Secretary of Agriculture to carry out an export payment-in-kind program and to use commodity export assistance to counter subsidies offered by foreign competitors.

The strong export market development programs reflect a consensus among Congressional and Administration leaders that export enhancement programs offer a substantial method to boost demand, thereby reducing burdensome surpluses and increasing net farm income. The aggressive stance also reflects growing Congressional concern over the inroads foreign producers have made into traditional United States markets for farm as well as industrial and other commodities. As far as export enhancement programs are concerned, agriculture has benefited from the very broad national concern now prevailing over the trade imbalance.

The export programs in the farm bill will result in an increase in the proportion of farm exports shipped under some form of federal assistance. In fiscal year 1984, 15 percent of agricultural exports were shipped under either P.L. 480 or Commodity Credit Corporation credit programs. It is highly possible this proportion could rise to one-fourth or more of U.S. exports over the next three years.

Self-Help Programs

During the last quarter century, an increasing number of producer-funded checkoffs have been established for different agricultural commodities at the national or state level. These checkoffs fund research and market promotion efforts. The 1985 farm bill as drafted represents a major addition to this legacy. It contains provisions concerning national checkoffs for beef and pork. Furthermore, responding to suggestions from the major beef and pork commodity organizations, the producer referendum to certify the checkoff will be delayed until at least one year after the checkoff begins. The argument is that this delay gives producers a chance to judge the effectiveness of the checkoff.

These two referendums reinforce what I see as a growing trend among public officials and representatives to ask agriculture to help itself. Checkoffs are one aspect of self-help. Another is producer assessments (taxes) to help finance commodity price support programs. The no-net-cost tobacco program and the recently completed dairy diversion program are examples. The House bill contains an extension of this approach by authorizing a producer tax to cover the cost of a whole-herd dairy buyout program, another dairy diversion program, and the cost of purchasing surplus milk above 5 billion pounds.

The trend to ask agriculture to help itself can be traced in part to the increasing cost of government income and price support programs. It can also be traced to the fact that farmers are becoming fewer and larger. Furthermore, large farmers acquire the largest share of farm program benefits. Increasingly, questions are being asked such as whether large farmers need federal help and, even if they do, should it be extended given their size? A producer self-help program is one answer to these questions, as producers are taxed in proportion to the benefits they receive from federal programs.

Loan Rates and Target Prices

Both the Senate and House farm bills continue the current nonrecourse loan programs. For wheat, feed grains, cotton, and rice, loan rates will decline but no more than five percent per year. Eventually, the loan rate would be set at 75-85 percent of the five year moving average of market prices minus the high and low price. In addition, both bills permit the Secretary of Agriculture to further reduce the loan rates through either a marketing loan or "Findley" adjustment. The Findley adjustment allows the Secretary to reduce the loan rate if the Secretary determines lower loan rates are needed to maintain price competitiveness. Both bills give the Secretary discretionary authority to use the Findley adjustment.

The Senate farm bill requires the Secretary to offer a marketing loan. Under this provision, commodity loans could be repaid at a rate lower than the nonrecourse loan rate. The House bill makes a marketing loan optional at the Secretary's discretion.

Lastly, the House bill sets a \$250,000 limitation on nonrecourse loans; none exists in the Senate bill. As an aside, the soybean loan rate will also decline but, given the substantial differences between the Senate and House farm bills, the soybean program will have to be worked out by the farm bill conference committee.

The Senate bill contains a one year continuation of 1985 target prices. For 1987 and later crops, target prices can drop by up to five percent a year. However, in 1987 the Secretary is required to make up any reduction in target prices with payment-in-kind of government-owned commodities, and in 1988 the Secretary must pay up to five percent of the target price with commodities, to the extent they are available. Thus, the Senate bill effectively has a two year target price freeze.

The House bill has a two year target price freeze at 1985 levels. Up to a five percent annual reduction is permitted for 1988 and later crops, but only if the cost of production declines at least five percent from the previous year. Most experts agree this translates into a five year freeze (the House bill covers five crop years).

Both bills maintain the \$50,000 limit on deficiency payments, except that the Senate bill abolishes the limit for cotton and rice. Excluded from the payment limitation are any payments that come from discretionary reduction in loan rates by the Secretary of Agriculture or payments under a marketing loan.

The net effect of likely loan rate and target price provisions in the farm bill would be:

- (1) loan rates would decline over the foreseeable future;
- (2) given current surplus production and the inelastic short term demand for agricultural commodities, market prices would decline as loan rates decline;
- (3) maximum possible deficiency payment per bushel or pound of commodity would increase as loan rates decline and target prices remain frozen, even if only for one year;
- (4) the increasing maximum deficiency payment would increase budgetary exposure, at least in the short term;
- (5) increasing budget exposure would bring pressure for either larger land set-asides or, if Gramm-Rudman passes, reductions in target prices beyond those specified in the farm bill.

The end result is that farm income will come under pressure from declining market prices, increasing land set asides, and potential cuts due to Gramm-Rudman. This conclusion stems not so much from the specific form of the 1985 farm bill as from the current surplus production situation and increasing national concern over the budget deficit.

Summary and Conclusions

The 1985 farm bill, if enacted in line with House and Senate bills, will confirm the old adage that farm policy is evolutionary, not revolutionary. The basic mechanisms in the bill will be the same as in the 1981 law. But the 1985 bill has its novel features too. The conservation programs represent a strong return to the idea that farmers as a group should practice good soil management in return for federal assistance. Furthermore, a major decision has been made: for better or worse, farm policy will be more market oriented. This is the same decision as was made in the 1950s and the 1960s.

The bottom line is that the 1985 farm bill will provide producers experiencing financial stress a "window of opportunity" for at least one year, probably two, but not more than four, during which to address their problems. National preoccupation with the budget deficit means the level of farm support will have to decline in the near future. With surplus production, that unfortunately translates into lower farm income.

COMMENTS ON THE STATUS OF LEGISLATION

Harold D. Guither
Policy Specialist, Extension Service, USDA and
Professor of Agricultural Economics
University of Illinois

Carl Zulauf has outlined very well the situation regarding writing a 1985 farm bill. I add only a couple of footnotes. Regarding cargo preference, when we recognize what happened in the House we can say that we got about as good a compromise as might be expected. The combined strength of the maritime unions and maritime ship owners was greater than agricultural interests could counter in the House. It would have been a windfall to maritime interests to have applied cargo preference to all exports involving any kind of government guarantee or government support, in view of the expected increase in blended credit and other export enhancement programs. As Dr. Zulauf said, only the PL 480 exports will be covered under the compromise plan, if the bill becomes law. There is an issue, though, about whether the appropriation for cargo preference cost (all, not just PL 480) will come out of the Department of Transportation budget or the CCC.

The Harkin bill. Zulauf's comments are correct. I add only that it is sometimes said that Congress is not getting the signals about the Harkin approach, but in my view Congress is getting mixed signals. Some groups favor a farmer referendum for "farmer approved programs" that could result in mandatory acreage control or the marketing certificate program as passed by the House committee (in the Bedell amendment that was removed in House floor debate). But in the House debate more organizations were opposed than in favor of both the Bedell and the Alexander amendment that in effect was equivalent to the Harkin bill. The vote was rather overwhelming.

My own observation is that feed grains were the problem in the marketing certificate and to some extent the Harkin bill. In an effort to restrict acreage of grains (feed grains particularly), and providing (in the certificate plan) for restrictions on where a non-participant could sell his grain, the fact comes into view that somewhere around half of all corn sold off farms goes to another farmer or feeder. The higher price to the farmer selling the corn would be a higher cost to the feeder buying it. I think that is where the opposition to the Bedell amendment originated. (Seven of Georgia's nine Congressmen voted against the Bedell amendment; their poultry constituents must have got word to them that they did not want a Bedell amendment in the bill.)

The Farm Bureau was against the Bedell amendment, and the wheat and corn growers and the soybean association. Favoring it were Farmers Union, NFO, AAM, and a few other groups.

Another feature of debate over various parts of the farm bill is that it is essentially nonpartisan. Positions tend to be somewhat regionally and commodity centered.

I have a list of issues to be resolved, if there is to be a 1985 farm bill before Christmas. (1) Target prices. Will there be a 1-year, 2-year, or 4-year freeze? (2) Closely related is the budget exposure that goes with target prices. The House has a 2-year freeze with a 5 percent reduction permitted, provided the Secretary of Agriculture can prove that costs of production have gone down that much. The Senate is talking about a 4-year freeze. (3) The marketing loan concept -- the idea that a CCC loan can be repaid at market prices. One object is to avoid accumulating stocks in the CCC. But a question arises about budget cost if the market price is very far below the loan. (4) The farmer referendum issue I commented on above. This will be around for consideration in future farm bills. (5) The dairy program and where compromise could come. (6) The conservation reserve. This is the most original part of the bills now being considered. The main difference between House and Senate is the term of the contract. The House calls for 10 years; the Senate is considering flexible 8-15 years. It's not possible to get land out of crops and into grass instantly, and there will be questions of defining the land that is eligible, and so on; but these are not the big issues.

RESPONSE TO LEGISLATION AND THE FARM SITUATION

Burdette Frew
President, MFA, Inc.

When this session was planned it was hoped that a 1985 farm bill would have been passed. I had no illusions. I am not even sure there will be one in January. What we probably will get is a band-aid approach to what we've got, and that's what we don't need. I will tell what I think we ought to have, from the standpoint of the farmer and agribusiness. Basically I comment from the agribusiness standpoint. It won't be possible to do what everybody wants -- all the farmers, all agribusiness, anyone else -- in an industry that is as sick as agriculture is today. We can't satisfy all the people. The one thing that agribusiness, and cooperatives especially, will generally say, and that a private sector counterpart would add that he knows even better, is the truism that no industry that is overcapacity will be allowed to overproduce forever. A consolidation will take place. We can either go through it methodically, logically, orderly, strategically over time; or we can pick up what's left after the crash. A crash is going to happen; there's going to be a consolidation.

MFA is a farm supply and marketing cooperative. We are one of many. We are about the 13th largest. There probably are too many farm supply cooperatives in the United States today. We all vie for some of the same market, although MFA is somewhat fortunate in that it pretty much enjoys control over its own market territory. But there is overcapacity. There is overcapacity in grain milling, in grain elevation and origination; and all this comes about because agriculture is overproducing for the market conditions we have today. The challenge seems to me to be very simple. We must develop a long run strategic plan that recognizes this and moves us toward a stable agricultural industry for this country. We can't do it alone. As a matter of fact, in my opinion there is no segment that can do it alone. If all the players involved are not willing to participate on an equal basis, I don't believe it can be done.

What am I talking about? Agribusiness is going to have to bite the bullet to a greater degree than we have already bitten it. We are going to have to consolidate effort with one purpose in mind, and that is to lower the input costs to the farmer. That's got to be our driving force. Obviously, an adequate return on investment must come about at all levels, or there will not be an entity. So, therefore, agribusiness has to look at consolidation.

I believe a part of the difficulty we face has been a poor approach by our legislators toward solving the problem that has existed since the 1930s. I'm not saying their heart was not in the right place. I am saying the kind of solutions that were arrived at were not the kind that will take us where we have to go over the long run. Therefore the administration in office, whoever it may be, must at some time develop a common view or objective that fits the strategy. And it must be perpetual; it can't change every four years. It can't go from embargo type mentality to "plant fence row to fence row, folks, we've got to feed the world." There must be some consistency, from administration to administration, in the goals and objectives that agriculture must serve.

That has to carry over in the Congress. Congress must finally realize the value of agriculture. Someone in the seminar asked, "The farm credit crunch was no surprise to farmers. Why was it a surprise to Congress?" I think the question demonstrates the lack of communication that exists between our government, including Congress, and the real farmer and his problem in the country. Therefore, realizing that we are only three percent of the population, or less, and that we have only a minor effect on the total budget of the federal government, I believe there has to be a good understanding of the value of agriculture and the contribution of the farmer -- an understanding held by both urban Congressmen and those from rural areas.

My opinion is that our inexpensive food policy, followed over time, has accrued to the consumer. We must change to a more even balance, so that some of the benefits of policy accrue to the producer.

There has to be a strong R&D effort. I am afraid that our R&D effort in agribusiness is diminishing. I do agree that the farmer must participate in some way in an R&D effort. I will explain why I feel that way, and feel strongly; and it must come about through some kind of a check-off program, I suppose, even though that is controversial.

Heretofore, in my opinion, the technological improvements in production have accrued to the consumer. I believe that from here on out the improvements in production through technology ought to accrue to the producer, by lowering his costs. So from here on out he will have an even

greater interest in research and development that relates to enabling him to reduce his input costs, with the target of retaining for himself more of the benefits.

Then, obviously, we must get back to the matter of consolidation. We cannot continue to overproduce, and we all like to think that the farmer himself would be able to regulate that, to govern that. We would like to believe that, but I don't really believe it. I doubt anyone really believes that the individual farmer is capable of doing that.

First of all, a difficulty arises because the farmer does not know what his target is. And secondly, we are a breed of entrepreneurs who sit around and scheme about how each can take advantage of a market condition that no one else sees. In some way we must approach some kind of control on production.

One of the most important aspects of any legislation -- all of which must be a long term strategy -- is that it enable us to take our rightful place as an exporter, as a provider of the food the world needs. We want our proper market share. To accomplish that we cannot continue the pricing formulas and price levels that we now use. We cannot achieve our objective with them. We are constantly not competitive on the world market. This has to do with target prices, loan prices, a lot of different things.

It is necessary that at some point in time we devise a system that assures that our grain is competitive on the foreign market. To be sure, I doubt this is possible without some subsidization. It will then be possible for us to exercise our ability to regain the market that was lost over the years.

Another person has said, and I believe it to be true, that the Less Developed Countries are prime targets as customers, and we should do what we can to make sure we have a part of that trade.

There probably are many more key aspects to a long term strategy that must come into play. Nevertheless, I believe it is not possible to drop out any one of the key elements of that strategy and accomplish what we hope to accomplish. I do not believe agriculture as an industry, the Administration, or the Congress has ever taken that kind of an approach to it. That's what business would do. Business would gather its resources, it would put together the resources necessary to develop the strategy, and then work to the end of fulfilling the needs of that strategy. Until now I think we have had a lot of push and pull and the results are easy to see. We are struggling with what we have at hand, and it is not working. To patch it up and band-aid it is not the answer. My comments are intended to prove the point that we are overproducing, we are overcapacity, and we can either take care of this problem systematically, strategically, or we can plan to pick it up after the crash as we did in the 1930s.

RESPONSE TO LEGISLATION AND THE FARM SITUATION

Gary Hanman
Executive Vice President and General Manager
Mid-America Dairymen

My objective is to explain what the dairy industry is trying to do to resolve its problems, and to ask whether our experience has any application to agriculture.

Ever since the 1950s we in dairy have tried to set up some sort of governmental relations policy, or program, that is cooperative with other parts of agriculture but specifically designed for dairy -- taking into account the uniqueness of its markets, the perishability of its product, and the elasticity of its demand. What we have done basically in the dairy industry is to recognize that our market is domestic. We do not try to get into the world market. Most of the world's trading is subsidized and our government and our farmers have not been willing to subsidize our exporting into the foreign market. With that in mind we say we want to be able to protect our domestic market. In order to defend against subsidies and government assistance in some other dairying countries we have been able to pass and maintain some types of restrictions on entry into this country of foreign subsidized dairy products. We have a complicated system of quotas set up by country of origin, by product definition. Anyone who wants to bring dairy products into the United States must be in compliance with these controls. Our market is a domestic market.

We have also said in our dairy policy that price is our target. Recognizing what the domestic market is, we try to get a price and then let supply adjust to demand, holding to price as our target. In other words, we have not opted for, nor would our present stand favor, combining loan rates, target prices, and deficiency payments. We have not given up on parity as a concept. Our proposal for the 1985 farm bill as written in the House contained a continuation of parity as a concept. It's really a cost-of-production adjuster, to move milk prices along with input costs. It called for modification by a supply-demand adjuster. We were saying that we thought we knew what the price ought to be but we might not be able to hit it right on the head, so the price can be modified according to what the CCC buys. If the CCC buys too much the price will come down a little, and if it doesn't buy much it will go up a little.

The third point of a program is an attempt to tailor supply to existing demand and not use price alone as a mover to do it. We call it a self-help incentive plan. Two features are a 5-30 percent paid diversion wherein a dairy farmer who wants to sign up for two years to reduce his production would get \$10.00 a cwt. for those pounds he did not produce. The other option in the bill is a whole-herd buy-out. A dairy farmer could sign up to stay out of production for three years, bidding on a cwt. basis on production history as to what price he would ask to do that -- to idle that production facility. The theory is that if a milk barn is removed from production for three years, it is not likely ever to come back into production.

Our supply control, then, is CCC purchases, with some price as a mover, with the voluntary supply control mechanism. Farmers are eligible to sign up for 5-30, or for whole-herd, but they do not have to. Cost of the program would be funded by dairy farmers themselves. Those who do not sign up will help fund it for those who do, basically. Every dairy farmer will fund it. We hope to fund it and get supplies in line with demand for 50 cents a cwt., which compares with a support price for manufacturing grade milk of about \$11.60.

With regard to the demand side of the market -- our own domestic market for which we produce -- we have devised some unique plans and systems whereby we can take advantage of the uniqueness of the demand curve for the fluid milk products (those we drink). That's about half of our market, and we can increase the price on that side of our business without suffering reductions in sales, and thereby net more dollars for farmers. So in the 1930s the industry put in federal milk marketing orders which split out the fluid side and premium-priced it, giving the money back to farmers and enhancing the price mechanism. The other side is manufactured products, which is essentially supported by the support program. These are two different types of programs, splitting the domestic market that has been isolated.

Why, further, is dairy different? We think we are different from the rest of agriculture in three ways. First, 80 percent of all the milk that moves off our dairy farms moves through dairy marketing cooperatives such as the one I work for, Mid-America Dairymen. For a large commodity such as milk -- in contrast with walnuts or pecans -- that is a high percentage. Milk is produced in almost every Congressional district in the United States. And 80 percent of it is organized. Of those dairy marketing cooperatives, about 95 percent work together at the national level through the National Milk Producers, National Council of Farmer Cooperatives, CLUSA, or some other organization to put together our national legislative program and then to support it. So we have an organization, we have most of the milk.

Thirdly, and most recently, these organizations have become very politically active. And they do not just relate to agricultural Congressmen and Senators. We have organized PACs (Political Action Committees). We have gone to our dairy farmer members and have asked them to give this committee some money with which to elect our friends and defeat our enemies, if you please. And, surprisingly, when we started our boards were saying it cannot be done. It is not possible to go to farmers and ask for \$100 without telling them what will be done with the money. But we went, and they paid. More than half of our 11,000 dairy farmer members contribute up to \$200 a year to our PAC. Our PAC will generate \$700,000 a year to be used in political processes to educate Congressmen and Senators on what farmers want. As an example, when we went to the House with our "dairy unity bill" with its five points that I mentioned above, the Administration was against us and, incidentally, most of the major farm organizations were against us. When we came down to the final vote we only passed it with 75 votes. We will pass it before we get through, we think.

Does what we have done in dairy have any meaning for all agriculture? Can we take what we have done in dairy and say, one, "Have you been successful?" and, two, "If you have, can you apply it to the rest of agriculture?"

First, we have obviously not been totally successful. We must recognize the limitation of not having any effective supply control. A beef farmer can become a dairy farmer if he wants to. A wheat man can put in a milk barn. There are some limitations to entry, though. It takes a substantial amount of capital to get into the dairy business, and the investment is highly specialized -- for production only of milk. When Dr. Bartlett at the University of Illinois advised that anyone not liking dairying should get out of it and use the resources for something else, one of our members asked him if he had ever tried to raise hogs in an elevated milk parlor. A milking area doesn't make very good farrowing crates.

Nevertheless, despite some barriers to entry we found in the early 1980s when milk prices were going up three to five percent every six months and prices in the rest of agriculture were being pulled down by deflation and the world situation, and feed costs were going down, we built up some tremendous surpluses. We are in the same soup again. So we have to work within the total environment of agriculture. But on a relative basis we can probably do better than some other enterprises.

Basically this is what we have done in dairy. Will something similar work for all agriculture? Probably not. Not all agriculture can say, "We are going to produce just for the domestic market." Much of agriculture has to produce for export. But maybe we can take a look at some of the domestic uses and examine the demand elasticity and segregate those favorable outlets, premium pricing for them and blending the proceeds over all growers.

Secondly, I agree with Mr. Frew that we have too many acres in production of row crops. We are productive on those acres, obviously, so we must idle some land. The whole agricultural production machine has got to be scaled back to conform to demand. I don't know how many acres will need to come out but I'd guess somewhere between 70 million and 110 million. Some kind of aggressive land retirement program is necessary. I'd like to call it a conservation reserve, to be set aside for food production for my grandchildren. Meantime, if I want to go out from the city and hunt pheasants on the idled land, I can do so. Some type of public land use program is desirable wherein we set the land aside as a reserve for the future but keep it from being a depressant on the market, rather like the federal forests. I believe this makes sense.

Thirdly, we have to recognize that government expenditures are limited. If we think we can go to Congress and get the kind of money some farm programs would call for, \$10 or \$15 or \$30 billion over budget allocation, or if we expect half of our income to come from the government, we are whistling Dixie. It's not possible to continue to do that. Some money can be extracted but not those big figures. We need to find out what size of budget appropriation is feasible, build that in, adjust our supply to what our demand is, and then try to set up a mechanism, with government assistance, whereby we can do that ourselves. I have in mind some kind of government-assisted, government-sponsored, government-encouraged arrangement, maybe along commodity lines, to do the marketing, and the production system, and the R&D that Mr. Frew has in mind.

Last but not least, dairying has recently gone to self help advertising and promotion. We initiated a program at 15 cents a cwt. that generated \$200 million and I hope everyone is seeing on TV and hearing on radio the advice to drink milk and eat cheese, which are good for you, it's good food, and so on. We set up the activity without consumers on the board, without industry either. Only those who contributed are on the board. We put it in without a referendum, and without an ask-out that would enable a contributor to get his money back. We said, "Give us a year and we will prove it will work, and then you can ask farmers whether they like it or not." We have just had a referendum, and 90 percent of the farmers said they want to continue it. We now have a program that will continue for at least a while that provides \$200 million for research, public relations, market enhancement, and the whole ball of wax. Some of us believe that might be the forerunner to the type of program that some other commodities could use.

RESPONSE TO LEGISLATION AND THE FARM SITUATION

Robert Hitzhusen
Director of National Legislative Programs
Missouri Farm Bureau Federation

I will take a quick journey through the Farm Bureau policy relative to the 1985 farm bill, reporting the progress up to mid-November. We are noted in the farm community as a conservative farm voice. Some other farm groups are less conservative than we are. Two or three years ago a very definite opinion was forming in the minds of Farm Bureau members along about these lines: "Farm programs have been around for 50 years. We certainly have not gotten prosperous under farm programs, we have not stopped the decline in farm numbers under farm programs, so it's time we start phasing out of this mess." We were strong in terms of looking at a three or four or five year phase-out where we could begin to get out of farm programs as much as possible. Then an interesting thing happened on the way to a 1985 farm bill. When the farm economy went extremely sour, Farm Bureau members changed their tune ever so slightly but in significant ways. They then said, "Yes, we still have a long-term goal of getting out of farm programs and go back to where we are responding more to market signals, but 1985 is not the time to do that." Our people made some very significant changes in their attitudes in that two or three year period. So when we started the 1985 year and the farm bill was up for discussion, we found ourselves in a rather interesting position -- one we are not often in -- a middle of the road position. We found the Administration had taken up the chant of getting rid of farm programs, phasing them out. Some other farm groups said they wanted more government, more opportunity to try to control production. Farm Bureau found itself in a no-man's-land, the middle, saying, "Yes, as a long term goal we'd like to move in that direction but we need to keep some of the price support mechanisms in place at least for the next four or five years to get through these tough times."

It's interesting to note that the farm bill that is being hammered out in Congress this fall looks very much like the Farm Bureau farm bill. I wish I could tell you that the reason this is true is that we are so effective as lobbyists, that we went in and we got everything we wanted. Unfortunately, I don't think that is the case. I think Congress has run into the same thing we ran into as an organization. We are essentially, in our policy process, a miniature Congress. By the time we get to our annual meeting we have a whole group of voting delegates who are trying to compromise, and argue, and come up with something that everybody can live with. That process does not lead to some grand new extreme change in farm policy, but a compromise that more or less suits everybody. That's what we ended up with, and that is what Congress has been headed for. Congress has been close to where we were at the start of the year, and has found it necessary to do the same compromising and changing that we did.

We need to think about expectations. We have been hearing from a lot of people who began with elevated expectations as to what they could or could not do with regard to a 1985 farm bill. That has been true not only in the farm community but in Congress. Congressmen ran around making a lot of promises, and started work on the bill earlier than I have ever seen them start on any major piece of legislation. Congress was holding hearings in 1984. The amount of lead time given was unprecedented.

We could say now that never have so many toiled so long to produce so little. This remark is a bit negative but probably correct. Congress started out with grand expectations. A lot of people in the farm community got swept up in the idea that somehow the 1985 farm bill was going to save us, that we could find the answer there that would take us out of agriculture's problems.

Our expectations got us into a lot of difficulty, as they were not realistic as to what that piece of legislation could do. Dr. Learn has observed -- a good statement -- that farm groups would do well to concentrate on sound trade and economic policies that may be even more important than specific farm policy legislation.

In other words, we could look at the farm bill as relatively minor. I don't mean that it is unimportant. But if we look at the trade imbalance, if we look at the \$200 billion fiscal deficit, if we look at tax reform measures that are necessary in order to help agriculture, if we look at trade policies that are necessary to help agriculture, how can we possibly depend on one bill to solve all our problems?

I'm not a Biblical scholar but we can make an analogy with a line from the New Testament that refers to the people who have a tendency to choke on a gnat and swallow a camel. I use the analogy loosely, but when we hear people say we have lost the 1985 farm bill because it doesn't

totally solve farmers' problems -- it doesn't provide the income or generally solve the problems -- I think they are choking on that gnat and at the same time are swallowing the camel of \$200 billion deficits and the other national economic problems that are much greater than farm program legislation and must be addressed in a much broader sense.

I will not comment on a couple of issues of current interest and will try to explain where we are as of mid-November. I don't mean to take exception with Dr. Zulauf but the only source of information on where the farm bill stands is Senator Dole's office. The 1985 farm bill rests in Senator Dole's hands. He is trying to put together a compromise that will get 51 votes on the Senate floor. If he proves unable to do that, there will be no 1985 farm bill. He is the main broker.

As to the Chairman of the Senate Agriculture Committee, he is a non-player. Senator Helms is more worried about tobacco, which has been pulled out of the farm bill this year. He is more active on matters far removed from a farm bill.

Senator Dole has played the game of putting in anything that seemed likely to get votes on the Senate floor, so that a bill can be passed and go to conference. Senator Dole has had his lists of reasons why the farm bill has moved so slowly, but he left off what I regard as the major reason. It is the 1986 election. In working with members of the Missouri Delegation I find more antennas up in the air than I have ever seen before. It's frustrating. Members cannot talk about anything without worrying about what the pollsters are saying about 1986. Republicans want the Democrats to look like they are the bad guys. Democrats want Republicans to make the first move, and that's the fight over the Gramm-Rudman provision. Are cuts in budget to start before the 1986 elections or after them? Democrats want them before because they think the cuts will make the Republicans look worse, and so on. The farm bill has been wrapped up in that, the Gramm-Rudman issue is involved, and it's all intertwined.

The new soybean proposal for per-acre payments is an interesting development. I had kept telling soybean people that it did not stand a chance of being considered because, politically, it's too blatant, I said. You can't hand someone \$50 an acre. You can confuse them with target prices and loan rates and deficiency payments and get \$50 an acre but you can't just call it \$50 an acre and get it. But negotiating started with Senator Dole, and there has seemed to be a possibility that the Senator will include the per-acre payment in his compromise plan. I am learning that anything is possible in politics. If Senator Dole believes he can get more votes by having the provision in the bill he will put it in. Then it may mysteriously disappear in conference.

It's worth noting, if we look at the soybean plan, that it points out some of the costs that we are facing today in farm programs that are sometimes overlooked. The figure of \$50 an acre seems extremely costly. What the soybean people have been successful in doing is showing that that is actually cheaper than keeping things where they are now. If we leave the loan rate at \$5.02, allowing a lot of beans to go into government storage, incurring costs of storage and trying to get rid of stocks, it's cheaper to lower the loan rate in exchange for paying the \$50 an acre. The soybean people see a net savings under their plan. Even though it's blatant, it does make a very interesting point. Loan programs aren't costless either. Their costs are often overlooked by decision-makers in Washington.

One final word. Mr. Hanman made a statement about what he called dairymen's political education efforts. If you doubt whether that process works, look at the cargo preference provision. I was in the House gallery when the House put the maritime union cargo preference language in the farm bill. I looked into the matter and found that three major maritime unions gave Congress \$2½ million in political contributions in the last election.

RESPONSE TO LEGISLATION AND THE FARM SITUATION

Dan Jennings
Sikeston farmer and state ASCS Committeeman

All that has been said at this seminar is so bearish I feel I must report a piece of information our state ASCS office got from Washington. It's that the rate of decline in the farm economy is declining. In the situation today I guess that amounts to good news. And we need any good news we can get.

I recognize that just about everyone has some notion of what should go into a 1985 farm bill (or 1986 or 1987 bill, whenever we finally get it). Down home we have written a farm bill several times, in our coffee shop.

The one proposal that makes most sense to me and, I believe, offers some hope, is what has been called a marketing loan concept. It provides income protection, it allows the market system to work at whatever level it can work, it sends a very clear signal to Europeans that we are going to make our commodities competitive in a world market, it says that we are not going to sacrifice our farmers, and it adds that we are not going to support their farmers any longer either. I learned when in Europe last summer that without question the Europeans are very concerned that we are going to lower our loan rates and add additional cost as they support the very expensive agriculture that they have.

I think the marketing loan program offers some hope to agriculture. It offers an opportunity for profit, I believe. Also, it's not going to do any good to pass a farm credit bail-out if we do not pass a farm bill that gives us some hope for profitability in agriculture.

A marketing loan program, as I understand it, would freeze the target level where it is. The loan rate would be held close to where it is now, and the farmer would be eligible to put his commodity under loan but he would repay the loan at the market price prevailing at the time of repayment. If, for example, corn went under loan at \$2.60 a bushel and the market price stayed at \$2.20, the farmer would have the option of paying the government back \$2.20. The market would flow.

The way we are operating currently, we have a commodity going under loan, and by the time we pay elevator charges in and out, trucking charges and nine months' storage, the grain elevators and trucking companies together get 60 to 70 cents a bushel and the grain still has not been sold. It's only gone into a storage facility. I don't believe it does anyone any good for grain to end up in government hands. A marketing loan would stop that from happening. Government is not a market, but in 1985 the ASCS office has become the most active place in a farming county.

I am not sure whether under a marketing loan the loan rate would be frozen for four or five years. My tendency would be to do that but I might be negotiable on that point. If the market system is going to work, we will have to give it time to work. But most farmers don't have that much time. We are going to have to give them some support as we go through a transition period. My point is that it's costing the government 60 to 70 cents a bushel as payment on many bushels, and then the CCC may have to take over the commodity on forfeiture and pay storage costs for two or three more years. It seems to me it makes more sense to pay out government money directly rather than pay out so much to elevators and truckers. If the point of a farm program is to support farmers, the present system doesn't seem a viable system for doing that.

WHAT PROSPECTIVE CHANGES MAY MEAN FOR
AGRICULTURE AND RURAL AMERICA

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Introduction

In the fly-leaf to his famed Principles of Economics, Alfred Marshall inscribed the Latin motto, Natura non facit saltum -- nature does not make leaps. This was a fitting credo for an economist trained in the full bloom of Darwinian thought in the closing decades of the 19th century. It is not a motto that a contemporary economist would likely adopt.

The Darwinian support for this sentiment is increasingly questioned in the biological and earth-sciences. Economic and social affairs since the birth of the age of petroleum have recorded changes that, while they may not be leaps, are certainly major discontinuities. We are currently faced with one of these periods of drastic change in the organization and structure of U.S. agriculture. Before attempting any speculations regarding the possible effects of these changes, a brief look is required at their roots and antecedents.

Given the penchant for historical parallels, it is important at this point to recall that the current depression in agriculture is frequently compared to the trauma of the 1930s. This is wrong, and it may be dangerously misleading. The depression of the 1930s affected the entire economy -- some sectors more than others, but almost no sector escaped. The collapse of asset values in agriculture in the 1980s occurs in the presence of some booming sectors and regions, and in frequent proximity to suburban and rural non-farm life-styles that, if not booming, have managed to retain a vigor that only sharpens the contrast with farming neighbors.

The comparison with the 1930s is wrong in a more telling dimension. Agriculture entered the 1930s with an impaired physical plant, worn down by the decade-long agricultural retreat of the 1920s. It emerged from the 1930s and the years of the Second World War with a structure of asset ownership, control, and management that was virtually identical with the structure of 1930. In the intervening years, all-time highs were recorded in 1935 in the number of farms, and in the absolute size of the farm population. The depression of the 1930s was associated with a migration into agriculture, and a reinforcement of its traditional structure. The major changes that were to set the stage on which agriculture performs in the 1980s were yet to come.

Roots and Dimension of the Current Farm Crisis

The contemporary crisis in rural America has many roots, but four can be singled out for particular emphasis.

1. Generational change has given us a population in which the majority has no personal recollection of the history of past financial crises.
2. Decision-making in agriculture was dominated for four decades by a preoccupation with capital gains and a neglect of cash-flow. Farmland values rose almost without interruption from the mid-1930s to 1981.
3. Well-publicized world food shortages in the 1960s and 1970s created a belief in a virtually unlimited export demand for U.S. farm products.
4. There was delayed recognition of the extent to which the United States had lost its position as a self-sufficient economy, was increasingly integrated into the world economy, and was being transformed from a creditor into a debtor nation.

These four roots of rural crisis were fed by tax and fiscal policies that stimulated over investment in land, buildings, and equipment capital, and by monetary policies that contributed to real rates of interest that in the 1970s were the lowest and in the 1980s are the highest in more than a century. From 1973 to 1981 the real rate of interest on Federal Land Bank mortgages (the nominal rate minus the inflation rate) was negative in 18 of the 32 quarters. In effect, gasoline was poured on the fire of anticipated capital gains.

From 1971 to 1981 farmland values rose four-fold nationally and increased 4.5- to 5.5-fold in major grain-producing areas of the Midwest and Great Plains. The drop from 1981 to 1985 has exceeded any previous four-year decline in land values in the Grain Belt for which we have records.

Nationally, from February 1981 to April 1985 farmland values fell 17 percent in nominal (i.e., current) dollars. In real terms (current dollars deflated by the CPI index), the decline from 1981 to 1985 was 30 percent. In the Corn Belt, Lake States, and Northern Plains declines were much more severe, as shown in Table 1. Declines on this scale have wiped out asset values and credit capacity to an extent that fully justifies the use of the term crisis to describe the agricultural situation.

Table 1. Nominal and Real Declines in Farmland Values, Lake States, Corn Belt, Northern Plains, 1981-1985

	Jan.-June 1981		April 1985		Percent decline	
	Nominal	Deflated	Nominal	Deflated	Nominal	Deflated
CPI Deflator (1967=100)		272		322		
	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>	<u>percent</u>	<u>percent</u>
<u>Lake States</u>						
Michigan	1,289	474	1,052	327	18	31
Wisconsin	1,152	423	847	263	27	38
Minnesota	1,281	471	823	256	36	46
<u>Corn Belt</u>						
Ohio	1,831	673	1,126	350	39	48
Indiana	2,031	747	1,259	391	38	47
Illinois	2,188	804	1,314	408	40	49
Iowa	1,999	735	1,064	330	47	55
Missouri	990	364	659	205	33	44
<u>Northern Plains</u>						
N. Dakota	436	160	360	112	17	30
S. Dakota	329	121	250	78	24	36
Nebraska	729	268	444	138	39	49
Kansas	619	228	466	145	25	36
U.S. (48 states)	819	301	679	211	17	30

Source: Agricultural Land Values and Markets, Economic Research Service, USDA, CD-90, August 1985, Table 2.

The Deteriorating Shock-Absorbing Capacity of U.S. Agriculture

Historically, the great strength of a farm structure composed of many relatively small units was the ability to absorb economic or weather-induced crises by suppressing family levels of living. When labor was a major input in farming, the willingness of producers to tolerate low labor returns measured their shock-absorbing capacity. Until the 1960s, labor remained the largest single input cost in U.S. farming. Faced with economic adversity, large shocks could still be absorbed by underrewarding labor. The extent to which this option has been eroded is shown in Table 2.

Table 2. Percentage Distribution of Farm Inputs, 1910-1983

Year	Labor	Farm real estate	Inputs involving production credit				Taxes, interest	Miscellaneous
			Machinery	Chemicals	Purchased feed, seed livestock	Subtotal		
percentage of total, 1935-39 weights								
1910	53.4	20.2	8.5	1.7	3.2	13.4	8.3	4.7
1915	51.6	19.8	9.8	1.6	3.0	14.4	9.3	4.9
1920	50.0	18.5	11.8	2.1	3.9	17.8	8.8	4.9
1925	48.9	17.8	12.0	2.3	4.6	18.9	9.7	4.7
1930	46.2	17.7	14.1	2.8	4.4	21.3	10.4	4.4
1935	47.0	19.2	12.9	2.7	4.1	19.7	9.7	4.4
1939	42.8	18.4	14.7	3.4	6.2	24.3	10.3	4.2
1947-49 weights								
1939	54.4	17.0	10.1	1.9	6.5	18.5	7.0	3.1
1945	48.0	15.8	14.3	3.2	8.2	25.7	7.4	3.1
1950	38.1	16.7	20.3	4.7	9.4	34.4	7.5	3.3
1955	32.0	16.4	23.3	6.2	10.7	40.2	7.9	3.5
1957-59 weights								
1955	32.2	19.4	24.0	4.4	9.0	37.4	7.7	3.2
1960	26.5	19.4	25.0	5.8	10.9	41.7	8.6	3.8
1965	20.4	19.7	24.9	9.1	12.5	46.5	9.4	4.0
1967-69 weights								
1965	23.2	23.6	26.8	5.3	6.7	38.8	10.8	3.5
1970	19.0	23.0	28.3	8.0	7.4	43.7	10.8	3.5
1975	16.7	21.8	31.5	8.8	7.1	47.4	10.8	3.3
1976	16.0	21.6	31.3	9.6	7.4	48.3	10.5	3.6
1976-78 weights								
1975	17.1	24.1	33.0	8.0	6.2	47.2	8.3	3.2
1980	13.8	23.6	33.5	11.0	6.9	51.4	7.8	3.7
1983	12.8	25.2	32.5	9.6	6.9	49.0	8.5	4.6

Source: National Economics Division, Economic Research Service, USDA, Feb. 1985.

The dominant problem facing agricultural producers in the mid-1980s is survival, and survival strategies have changed drastically. Underrewarding the labor input no longer offers much shock absorbing capacity. The labor share of input cost is too small, averaging 13 to 14 percent in the 1980s for U.S. farming as a whole. In many cash-crop operations, the proportion falls to 5 percent or less.

Some shock absorbing capacity exists in the possibility of varying fertilizer and chemical inputs, but together they accounted for only about 10 percent of the cost of total farm inputs in 1983. Taxes and interest costs are also significant, but in 1975-83 they were at about the same levels of relative importance as they were in 1910-20, i.e., averaging about 8 to 9 percent of the cost of total inputs.

The only two large items of input costs that can be varied in the 1980s to absorb economic shock are land costs, at about 25 percent of total costs, and mechanical and machinery expenses, which in 1983 accounted for one-third of total input costs.

The largest fraction of current farm input costs is accounted for by mechanical equipment and farm machinery. Any attempts to cushion the shock of economic reverses in farming by reducing current expenditures must focus on this class of inputs. This is occurring. Bankruptcy and merger activity are prominent among farm machinery manufacturers, and farm machinery dealers are going out of business throughout the farm belt. Tractor manufacturers in the United States in 1983 operated at only 22 percent of capacity, and combine manufacturers at 14 percent of capacity (USDA, 1984, p. 31). In 1949, there were 1492 farm equipment dealers in Minnesota and South Dakota; in 1984, only 600 were still in business (Austin, 1985).

The rural farm economy, in short, is consuming capital. Income to labor and management has fallen to levels that cannot maintain family investment in human capital. The education and motivation of the next generation of farmers is being impaired, in ways that defy measurement but that could prove to be the most critical impairment of the capital stock of agriculture.

Undermaintenance of building and machinery capital is widespread. This can be tolerated for a short time, but it will eventually be reflected in a failure to keep abreast of new developments in technology. If undermaintenance continues, rising costs and falling productivity are inevitable.

Absorbing shock by under-rewarding labor and undermaintaining physical capital are the most obvious responses to the current financial crisis. A less visible but potentially more damaging response is to exploit the resource base through a neglect of soil and water conservation. The areas suffering most acutely in the current crisis include areas of the Corn Belt and Great Plains that are highly susceptible to water and wind erosion. This fact suggests that long run impairment of land and water capital is one of the greatest risks imposed by the traumatic fall in farming profitability in the past four years.

These forms of absorbing shock by exhausting capital involve individual farms and families. A larger dimension of the process of "eating the seed corn," or living off of capital, involves the deterioration of rural communities. The most obvious consequence of the wipe-out of land values is a parallel wipe-out of the property tax base. This is a lagged effect, and the full impact has not yet been felt.

Land value declines of 40 to 50 percent can only mean a reduced capacity to support public services in rural areas, and an increased burden on non-farm property. Most states in the areas of greatest farm distress have extensive programs of state aids to local governments, to maintain approximate equality of access to education, health care, and welfare. A sharp increase in the cost of these state aids to rural governments is sure to occur. This will probably be the first and most tangible way in which the cost of the wipe-out of capital in farmland will be transmitted to non-farm and urban taxpayers.

This much can be measured. What cannot be measured is the deterioration in the quality of life in rural communities. The support base for non-governmental institutions will be reduced as surely as is the tax base for schools and roads. Churches, clubs, voluntary professional associations, and related institutions making up the stock of rural social capital are threatened. It is this aspect of the process of absorbing shock by consuming capital that is most worrisome in its long run implications.

One aspect of the massive shift to purchased inputs shown in Table 2 is of central importance. At the end of the Second World War those inputs requiring short-term or production credit involved only one-fourth of total input costs. In the 1980s, short and intermediate-term credit is required for one-half or more of total inputs. The farmer has become much more dependent on credit markets, and is much more exposed to interest rate fluctuations on loans that would normally not be based on land collateral.

This helps explain why the collapse of land values has had so dramatic an effect on the farm financial structure. Much of the expansion in farm credit in the 1970s was triggered by the growing need for short-term credit but was secured by rising land values. Land-based credit was used extensively for production purposes. When the land value base collapsed, the need for production credit had to be supported by a much smaller collateral base.

Many of the farmers currently in financial difficulty did not buy overpriced land. Instead, they used unrealistic land values to finance a level of input use that could not be supported by conventional short-term credit standards. The heavy requirement for production credit led to a burden on the land-capital base that became, in effect, another way of "living off of capital." This is a basic part of the explanation for the acute crisis in short-term or crop-season credit

that emerged in 1984 and 1985 and can be expected to grow worse in 1986. Land values are no longer available as a support for production credit.

Interpreting the probable consequences of this credit crisis is confused by the extreme range that separates farmers with no debt from those that are bankrupt in all but a formal declaration. Madden has pointed out that just over half of the 2.2 million farms enumerated in the 1982 Census of Agriculture reported no interest expenses. The percentages ranged from a low of 30 percent in Iowa and North Dakota to highs of 65 percent or over in Connecticut, Hawaii, Massachusetts, Rhode Island, Tennessee, Virginia, and West Virginia (Madden, 1985, Table 2). In general, farms reporting no interest payments (and presumably no debt) were concentrated in the New England states and the South. While the burden of debt declines with size of farm, a surprising statistic is that almost one-fourth (23 percent) of all farms of over 2,000 acres, and of all farms over 500 acres, reported no interest payments in 1982 (Madden, 1985, Table 3).

The farm debt problem is acute, but it is not universal. One of the clearest conclusions to emerge from Madden's study is that in all age groups of farm operators the low debt burdens were reported by those who listed their principal occupation as other than farming, i.e., whose primary income source was from non-farm employment (Madden, 1985, Table 7). These were 45 percent of the total of all farms.

Two conclusions seem indicated:

1. Small farms are not the source of the most acute financial problems.
2. Survival in farming depends more than ever before on the availability of off-farm employment.

The historic survival strategy of suppressing family living expenses (i.e., labor income) has been supplanted by the search for off-farm jobs. Specialization and mechanization have converted the majority of producers of crops into part-time farmers. Where they have little or no livestock, they are underemployed for a major fraction of the year. The locus of these farms in areas where off-farm job opportunities are rare or non-existent defines the area of the most acute financial crisis in contemporary U.S. agriculture.

Economic Policies that have Hurt the Farm Sector

Farmers have been hurt by the economic policies of the current national administration. The damage has ranged from moderate to severe, and there are very few plus-marks to offset the many minuses. Ranking the policies in terms of harm inflicted is highly subjective, and the ranking is not uniformly applicable to all sectors of agriculture. With this acknowledgement, it may still be analytically useful to suggest the following ranking for those policies that have hurt agriculture the most.

1. The strong dollar

This is, of course, a symbol rather than a causal factor, and resembles the use of a thermometer in measuring a patient's temperature. And yet it must be accorded a policy role of its own. No nation willingly accepts a devaluation of its currency. The very language used to describe the status of a currency -- strong or weak -- carries an implicit policy judgment. An exceptional level of economic understanding is required to comprehend that a weakening dollar may be a sign of returning vigor, and strong dollar a sign of profligate living on borrowed money. There is no evidence that this understanding has reached the upper levels of the current administration.

Until it does, farmers will face the progressive loss of foreign markets, with the prospect that some of them may be lost for good. As of October 1985, the projected carry-over stock of wheat of 47.3 million metric tons at the end of the 1985/86 marketing year will be 66 percent greater than projected exports for 1985/86 of 28.5 mmt. The estimated coarse grains carry-over of 97.8 mmt is 97 percent above expected exports of 49.7 mmt (USDA, 1985B). An exchange rate for the dollar that prices U.S. grains out of foreign markets has unquestionable top ranking in any list of economic policies that harm U.S. agriculture.

2. Tax policies that have diverted investment flows into commercial, i.e., depreciable, real estate

As is the case with the role of a strong dollar, the economic consequences of current tax policies are subtle, and difficult to identify by available measurements. The tax act of 1981 reduced the allowable depreciation schedule for structures to 15 years. Coupled with a continuation of an investment tax credit of 10 percent for equipment and a lowered tax on capital gains, this has triggered a boom in commercial real estate and construction. This is one explanation for high and sustained real rates of interest. Farmers have had to bid for funds in credit markets in which they gained little if any of the benefits that tax policies conferred upon their competitors. The burden falls especially hard on proprietary firms with little or no income tax liability against which to offset accelerated depreciation or the interest cost of borrowed funds.

It should not be surprising that the force of the current depression in agriculture is felt most keenly by smaller commercial farms. These are the units that are too small to generate income on the scale needed to benefit from current tax policies, and too large to enable the operator to supplement farm income with an off-farm job.

Although it was certainly not the intent of the framers of the tax act of 1981, the policies are those that might have been devised to eliminate small to moderate sized, or family-type, farms.

3. The deregulation of banking

This step has been focused primarily on the financial requirements of the non-farm economy but its effects have been especially severe in the farm economy. With high ratios of capital to output, and slow turnovers, farmers must now bid for funds in national capital markets. They lack the market power required to pass these higher credit costs on to their customers, with the result that the cost must be absorbed within the farm sector. This is a major part of the explanation of the sharp decline in farmland values. One of the most fundamental postulates in economics holds that the capital value of an asset is an inverse function of the rate of interest. We are currently witnessing a text-book demonstration of this truth. The deregulation of banking alone did not cause high interest rates. But it has transferred the full force of this rise to the farm sector, at a time when the sector was least prepared to absorb the shock of a repricing of credit.

What Can Be Said About the Future Structure of Agriculture?

Overhanging any attempt to speculate on the answer to this question is the threat of renewed inflation. Those who benefitted from inflation in the 1970s, and who may wrongly see their salvation in another dose, comprise a formidable group. Included are bankers, farmers, forest land owners, "gold bugs," the energy sector, commercial real estate investors, and home owners. The current scale of the deficit in the federal budget, coupled with a doctrinaire unwillingness to raise taxes and the political difficulties in cutting expenses, make it a foolhardy exercise in optimism to forecast a future that includes only modest inflation. If by unlikely good fortune that future does emerge, some major trends of today give a basis for hesitant forecasts of tomorrow.

We can begin with the ownership structure of farm real estate. One of the most durable trends of the past 40 years has been the relative stability of the proportions of farmland operated by those who rent and those who own. Since 1945, the proportion of farmland operated under lease varied from a low of 34.9 percent in 1954 to a high of 39.6 percent in 1978, declining to 38.9 percent in 1982 (DeBraal and Wunderlich, 1983, p. 49). The obverse percentage is that the area of farmland operated by those who own it has been remarkably stable at between 60 and 65 percent of total farm acres since the Second World War.

The turn-down in the percentage of land rented in 1982 is especially significant. The major shift in farm structure since 1945 has been the rise of "part-owner" farms. Expansion was achieved by renting in additional land, making part-owners the dominant tenure class in the United States as a whole, and in all major regions. This dominance will probably remain, but it may well be reduced by some retraction in farm size to accommodate more stringent financing capacities. In the 1930s the generalized farm depression saw a sharp rise in tenancy, reaching an all-time high of 45 percent of all farmland in 1935. This trend is unlikely to be repeated in the 1980s. Land repossessed or foreclosed will be rented out as a short-run solution, but this

is likely to be offset by a release of some rented land by farmers in the part-owner class. The most plausible scenario is for a continuation of stability in the ratio of owned to rented land, with some possible reduction in size of part-owner farms and thus a decline in the area of land rented.

These speculations do not address the question of who will own the land. Here we enter an area of much greater uncertainty. It is this question that is most sensitive to expectations regarding inflation. If inflation can be contained within a range of 3 to 5 percent per year, this greatly reduces the attractiveness of farmland as an investment, or as an inflation hedge. Given the uncertainty that surrounds the prospects for foreign market expansion, a best guess for the remainder of the 1980s is that farmland values will do well to keep pace with the general level of inflation.

If this occurs, it will throw in doubt the economic rationale for any widespread purchase of farmland at distressed prices by non-farm investors. Their major incentive to purchase is the potential for sheltering income from tax through the conversion of ordinary income into capital gain. If capital gain prospects are not greater than expected inflation, the opportunity cost of investment capital tied up in illiquid farmland is likely to discourage any rush of non-farm capital into farm real estate. For the near term, this seems the most probable prospect.

Given the uneven distribution of highly indebted farms, even within local areas, and the documented patterns of current land market dominance by nearby farmers, the indicated answer to the question "Who will own the land?" is: the neighbors. This may be no bad thing.

The Central Issue of Excess Production

All of the explanations for the current farm crisis, and speculations about some possible consequences, are dwarfed by the primary cause, which is overproduction. There has been widespread unwillingness to face this issue squarely. Throughout history, and for the majority of the world's population today, the farm problem has been one of too little food, not too much. Dramatic reports of food shortages, malnutrition, and famine are daily reminders of the existence in major populations of food needs without effective demand. In the United States, farm and non-farm people alike have misinterpreted this need as evidence of potential export markets.

This misinterpretation is reinforced by the entire agricultural information system. Increasing output has been an almost universal goal of agricultural universities, experiment stations, and extension activities serving agriculture in the public sector. This is even more characteristic of private firms and information services supplying inputs or information to agriculture, or marketing its products. Agribusiness interests benefit directly from a high volume of farm output, and avoid or oppose any discussion of production controls.

The strangled nature of public discussion of alternative ways to reduce farm output has encountered even greater political opposition during the current crisis. This has been due to doctrinal and ideological positions taken by the present administration of the federal government. The evaporation of hopes of salvation through expanded foreign markets occurred at the peak of a rejection of any programs involving greater governmental participation in production controls. Given the number, distribution, and relatively small scale of U.S. farms, no power short of governmental action or brutal price declines could hope to bring down output on the scale needed. This administration has opted for price declines, although its conviction is wavering.

The prospect for the next three years is for delay, a death-bed conversion, and election-bred efforts at the last minute to introduce dramatic programs to reduce output. The ill-conceived and disastrously expensive PIK program of 1983-84 is unfortunately the only model on which to base a forecast of probable political responses to the present crisis.

The prospect is further confused by a persistent failure to distinguish between the problem of too many farmers, and the problem of too much land and capital committed to production. For at least 40 years the problem of increasing farmers' income has been viewed simplistically as a problem of too many farmers. The solution has been personalized by focusing on the withdrawal of labor and the elimination of farm firms.

It is arguable that the withdrawal of labor has gone far enough. Excessive labor costs are not propelling the present crisis, and it will not be resolved by eliminating farmers. The more critical question is what will be done with the land. Wiping out farm firms will leave untouched the problem of too much land in production, and may even make it worse. The farm firms being eliminated in the 1980s are not concentrated at the margins of cultivation, nor are they grouped at the bottom end of the scale of farm sizes. Their land will remain in production, in any scenario that rests on output control by commodity price declines.

The conclusion seems unavoidable that some program of land use control must be embedded in any prescription for the solution to the farm problem of the 1980s. The debate, when focused, is between a system that achieves restrictions on production by creating private firms or groups of firms large enough to internalize the cost of control, and a system that attempts control through some combination of regulations on land use and marketing that involve a substantial element of public authority.

Either alternative involves elements that are distasteful, and uncertainty that cannot be reduced to calculable risk. The broad issue is clear enough. Do we want production control in agriculture to be achieved by firms big enough to pass on the cost of control through the price system in the form of higher food prices? Or is the public interest best served by controls achieved by the selective use of tax revenues to bring about an orderly withdrawal of productive resources from agriculture, while maintaining reserve capacity that can serve as insurance against unexpected shocks? Do we want the cost distributed through the system of food prices, or through the tax system?

The farm crisis of the 1980s differs from previous crises in many ways. One of the most significant is that it is not most acute in areas where farm sizes are too small to be economic. The structure of U.S. agriculture is basically sound, but it is seriously threatened. The origin of this threat lies largely outside the agricultural sector. It originated in macroeconomic policies that generated inflation and unrealistic expectations in the 1970s, and dashed these expectations by a preference for interest-rate instead of tax policy to control inflation in the 1980s.

These policies raised credit costs, choked back exports, and precipitated a deflation in the agricultural sector that ranks with a scale of destruction of capital values that other nations have only experienced in time of war. It can in truth be regarded as a delayed response to the inflation that was guaranteed by the decision in the 1960s to engage in the Viet Nam war without raising taxes to hold back demand. Agriculture, heavy industry, and the export sector are now paying the cost of that mistaken decision.

The mistake was nationwide. It does not seem unreasonable to argue that the cost of repairing that mistake should also be assumed at the national level. The argument should not be couched in terms of the merits of further subsidies to a class of producers believed or not believed to be deserving. Instead, it should rest on the value to the nation of maintaining a stock of human and physical capital in an agriculture that has served it well.

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U.S. AGRICULTURE: ASSESSMENTS FOR 1985

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Introduction

As the U.S. Congress tried to hammer out a 1985 farm bill, considerable disagreement prevailed as to the optimum degree of government involvement in U.S. agriculture. Many hard-pressed farmers and some farm organizations asked for higher internal prices with mandatory controls, to insure prices above cost of production. At the same time a large segment of U.S. farmers and several farm organizations wanted less government with a market oriented agriculture. Search for the appropriate mix of these objectives, costs, and benefits set the agenda for public debate in the closing months of 1985.

Debate on that topic calls for evaluation of farm program options. Recent economic analyses conducted by the Food and Agricultural Policy Research Institute at the University of Missouri and Iowa State University indicate, for example, that none of three options--continuation of current government programs, or passage of policies that emphasize expanded exports on the one hand, or free markets on the other, will significantly bolster the agricultural economy.¹ These conclusions are based on several features of the 1985 agricultural environment.

Significant Factors Affecting U.S. Agriculture

Highlight of FAPRI analysis of alternative farm programs is that the most significant issues impacting U.S. agriculture in the later 1980s will be forces external to administration of farm programs. These include:

1. The level of growth in both domestic and foreign economies. Slow economic growth along with a highly valued dollar and high interest rates would keep U.S. agriculture in financial stringency. Additionally, per capita consumption of red meat continues to decline, placing U.S. livestock producers under continued financial pressure and shrinking the total livestock inventory. Total red meat consumption has declined from a high of 191 pounds per capita in 1971 to a current level of approximately 170 pounds per capita (Figure 1). Although the consumption rate fluctuates, its longer trend is downward. The slippage appears to be divided about equally between beef and pork.
2. Supply capacity at current market prices is approximately 30-35 million acres of production area in excess of what is required to meet current domestic and foreign demands. To maintain current loan and target prices would require strong acreage control programs that could cost \$7-8 billion for the crop portion alone. Dairy and other programs could increase the budget exposure to more than \$10-12 billion per year. Compounding this total supply problem is the large size of 1985 crop harvests, which are near or above long term trends. Continued accumulation of stocks and relatively low prices for farm crop commodities are in prospect (Figures 2 and 3). Sluggish domestic and foreign demand for 1985 crops points to an increase in stocks of grains and soybeans. Stocks at the end of the 1985-86 marketing season will be substantially in excess of longer run average carryover levels (Figure 4). In fact, the excess carryover in sight for major commodities is equivalent to approximately 24-25 million acres of crop land. The 30-35 million acres of total excess current production capacity plus the additional 25 million acres reflected in the projected carryover make clear that U.S. agriculture will continue to have difficulty achieving a balance with projected demand.
3. U.S. trade shares in export markets are being continually chiseled away by foreign competitors. The United States can improve its market share gradually over time by moving more toward a free market, but the loss in farm income may be too great, in the current environment. An immediate reduction in loan rate or support price to farmers plus reductions in other support payments could leave agriculture with \$8-10 billion less in net farm income than under current farm programs.

¹FAPRI staff Report #1-85, "Options for the 1985 Farm Bill: An Analysis and Evaluation," S.R. Johnson, Abner W. Womack, William H. Meyers, Robert E. Young II, and Jon Brandt, January 1985; FAPRI Staff Report #5-85, "Preliminary Results on a Variable Loan Repayment Option for the 1985 Farm bill," S.R. Johnson, Robert E. Young II, William H. Meyers, and Abner W. Womack, April 1985.

Figure 1

CONSUMPTION OF BEEF, PORK, AND ALL RED MEAT PER CAPITA



Figure 2

AVERAGE YIELD OF CORN PER HARVESTED ACRE, AND TREND VALUES

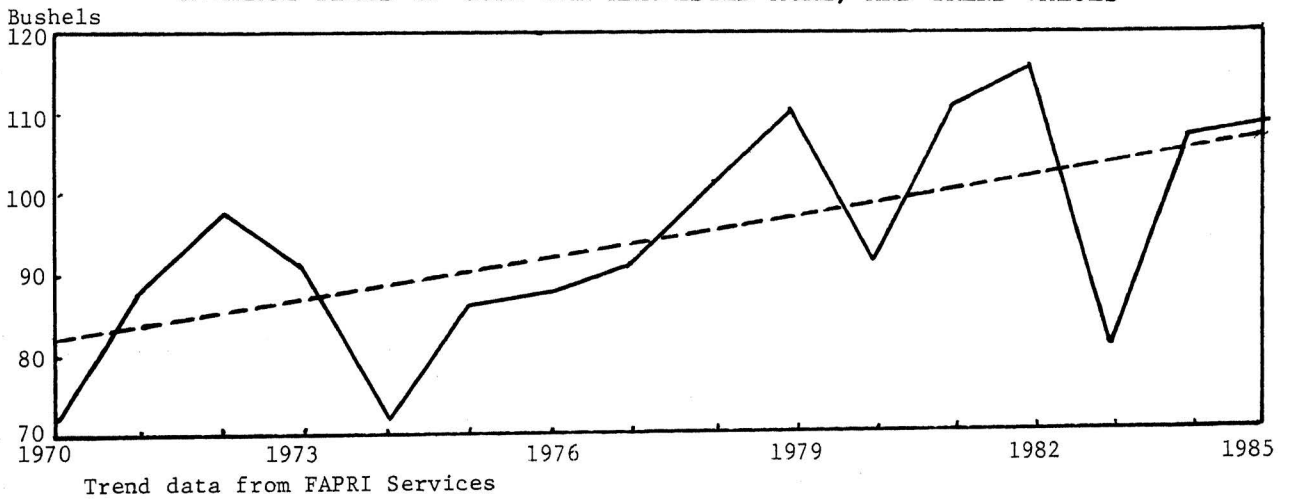


Figure 3

YIELD OF WHEAT AND SOYBEANS PER HARVESTED ACRE, AND TREND VALUES

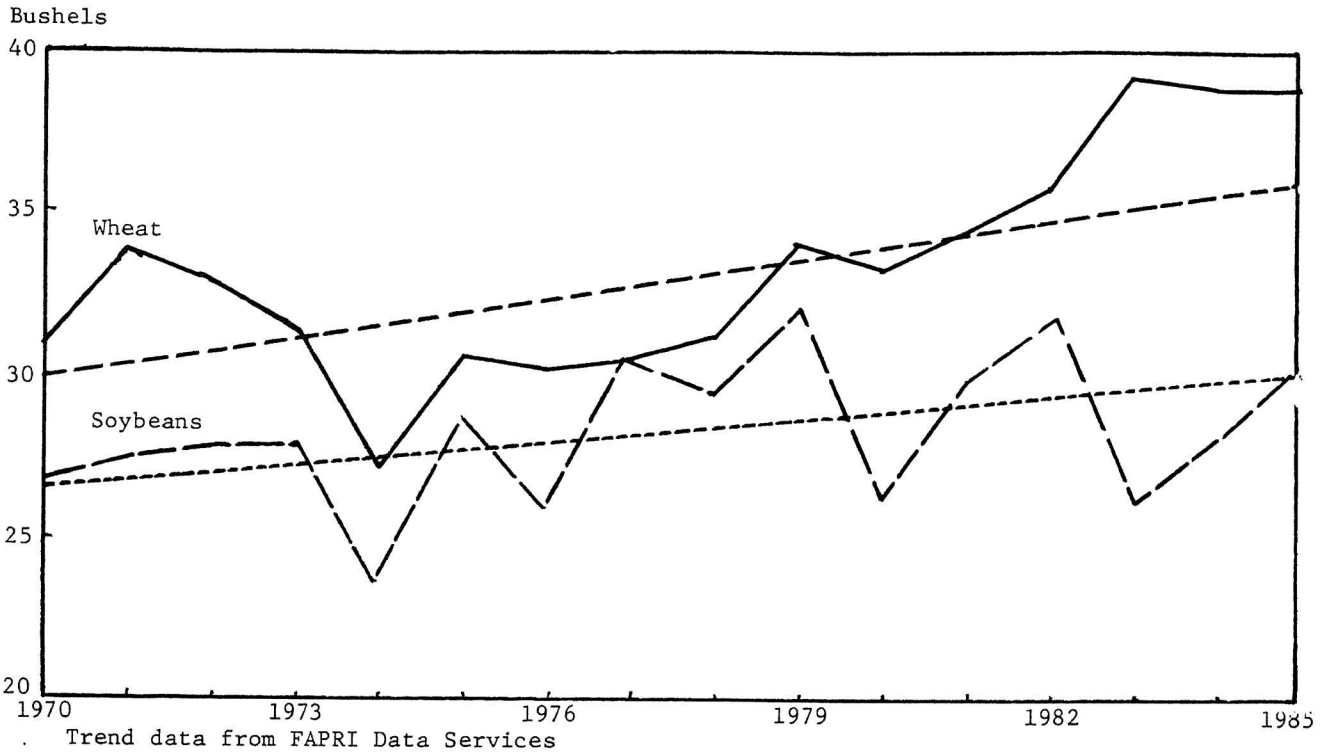
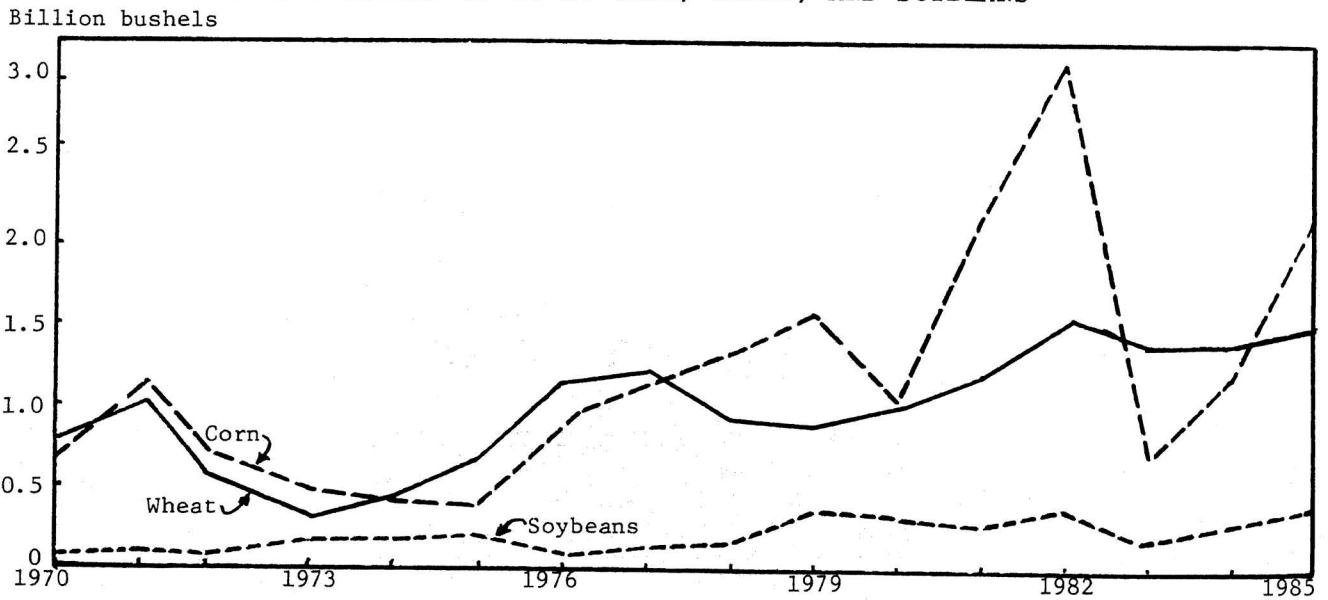


Figure 4

ENDING STOCKS OF U. S. CORN, WHEAT, AND SOYBEANS



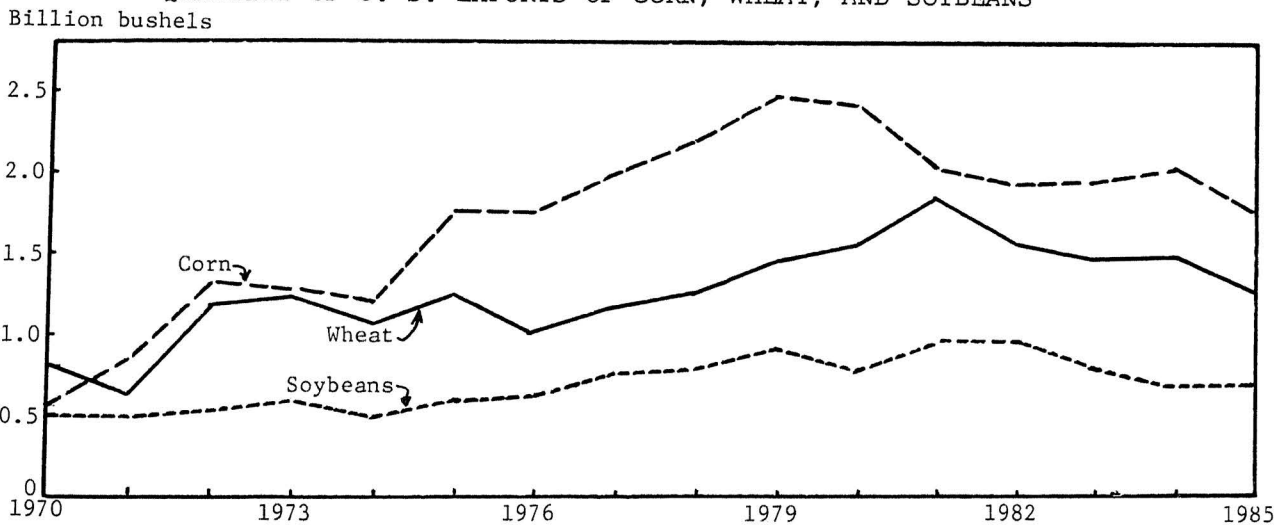
Several factors are associated with the decline in U.S. agricultural exports shown in Figure 5. Taken together, they indicate that it will be hard to arrest the current downward trend. The most significant is weakness in foreign demand, both in the developed and developing regions of the world. Developed regions have experienced recessions and developing regions have significant financial problems that will require a number of years to correct. Also, a highly valued dollar relative to the currency of countries with which we trade continues to put U.S. commodities at an economic disadvantage in world competition.

Production in both domestic and exporting regions of the world is projected to grow faster than demand. U.S. loan or support rates, setting a floor under world market prices, have contributed to foreign competitors' expansion in output of major exportable commodities.

Subsidization of exports by major competitors in the world market aggravates the oversupplied world market situation. There is even a potential for a trade war.

In view of all these complicating factors, it is by no means clear that an immediate shift to a lower price policy by the United States would quickly stimulate export demand to the extent that net farm income could be sustained at current levels.

Figure 5
QUANTITY OF U. S. EXPORTS OF CORN, WHEAT, AND SOYBEANS



4. The farm financial crisis is another negative feature of U.S agriculture today. Potential levels of unserviced debt exceed those of any period since the depression of the 1930s. A large number of farmers have been trapped by a turnaround in environment from one of incentives for expansion to the current downward spiral of asset values. Even many farmers who expanded only moderately during the mid to late 1970s now find themselves with debt/asset ratios that cannot be managed. Financial problems are common to all areas of U.S. agriculture. However, surveys conducted by several states tend to indicate that the most serious problems occur in the Corn Belt or, generally, the central region of the country. Incentives for expansion to meet anticipated strong export demand apparently resulted in more investment in land and equipment in that area. High interest rates and low commodity prices bring severe cash flow problems to many producers. Data in the table below report debt/asset ratios by age groups and regions of the United states in 1985. A vulnerable zone for cash flow or financial problems is a debt ratio of 40 percent or greater. A 40 percent debt/asset ratio implies \$40 of debt for each \$100 of assets. Data in the table indicate that the national average debt/asset ratio is about 32 percent with an average of 51 percent in the age group below 35. The central region of the United states contains heavy debt/asset ratios through age 54 with an average for the central region of 38.2 percent.

Farmers' Debt/Asset Ratio by Region and Age Group

Region	Age					All Ages
	Under 35	35-44	45-54	55-64	Over 65	
	percent					
Central	55.100	56.830	44.128	18.618	8.130	38.191
West	44.613	42.112	25.808	19.028	11.060	27.798
South	44.725	40.196	23.495	16.933	5.537	25.576
East	41.519	26.846	17.739	11.186	5.683	20.062
Weighted U.S. average	50.650	47.367	32.598	17.754	7.243	31.652

"The National Farm Survey on Financial Stress," FAPRI Staff Report #6-85, July 1985. Survey conducted by Farm Journal and the Food and Agricultural Policy Research Institute.

5. More responsible management of the current budget deficit could have a dual impact on the U.S. agricultural sector. On the positive side, reduction of the deficit, with its corollaries of lower interest rates and a lower valued dollar, would ease financial stress of farmers and strengthen our ability to compete on world markets for U.S. agriculture. However, if budget action were primarily the curbing of government spending, U.S. agriculture could be a net loser in the near term. Any programs of acreage reduction and farm financial assistance intended to defend the current structure of U.S. agriculture would involve government expenditures greater than the normal allocation to agricultural programs.

Implications for the 1985 Farm Bill

In general the Reagan Administration and major farm organizations are in agreement that the current farm program is not working satisfactorily. Program costs are substantially in excess of those normally experienced, yet 30 percent of U.S. farmers are in serious financial trouble. What program design would best address the problem, in the interest of both agriculture and the consumer? Currently the jury is still out. Voluntary programs that offer farmers incentives to reduce production have been favored over other designs for the past 30 years. No alternative farm program has yet left the drawing board that (1) retains the flexibility of voluntary participation; (2) circumvents the problems associated with stagnant demand, excess capacity, declining exports, financial pressures, and budget constraints; and (3) maintains at least current levels of net farm income. Clearly, a major difficulty in the development of a new farm bill is that all these considerations amount to a load heavier than has ever been carried by a farm bill. They exceed the range of most policy-making and program-administration.

Additional dialogue and debate on the 1985 farm bill (as of mid-November) was likely to focus on the following questions. First, should support for the farm financial crisis be maintained inside the farm bill or carried as a separate financial package? Second, does financial assistance require the development of a new farm credit organization, or support for the financial institutions now in place? Third, can formulas be developed for programs of interest buy-down and debt restructuring that are fair and equitable? Fourth, can a program of financial support be accomplished at a cost that is within the range of harm (cost) to the general economy (the spillover effect) that would be felt if nothing were done?

Summary

U.S. agriculture is at a crossroads. Program designs aimed at moving it into a more competitive environment in world trade could have serious immediate consequences for net farm income. The consequences could be severe, in the light of the high percentage of farmers in financial difficulty. Excess capacity compounded by very favorable crop conditions in 1985 make it harder to hold farm program costs within the budget guidelines set by Congress.

With regard to reducing the deficit in the federal budget, agriculture is trapped in a difficult spot. It would gain by a stronger demand, lower interest rates, and lower valued dollar. However, to whatever extent the budget action reduced spending for farm programs, a very serious farm financial problem would simply be compounded.

The jury was still out, as of mid-November, on the direction that Congress will take in hammering out a farm bill for 1985. But if the bill were to deal with all the problems and objectives that have been named here, major modifications in the existing program design would be necessary.

FARM FINANCIAL SITUATION:
ITS CAUSE, AND A LOOK AT PROPOSED SOLUTIONS

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There is widespread financial stress in the agricultural sector, in spite of the Administration's insistence to the contrary. Many farms have already passed the point of no return as an economically viable business unless Santa Claus puts a sizable roll of \$1,000 bills in their Christmas stocking. The same can be said for many agricultural banks and for the Farm Credit System.

U.S. farm debt is about \$215 billion. Based on USDA survey data reflecting the cash shortfall of farmers under financial stress, I estimate that \$50 billion of that debt cannot be repaid from the combined farm and non-farm income of the farm families who owe the debt.

To put it mildly, the agricultural finance situation is in a mess. Unfortunately, there are no simple or painless methods of correcting the situation.

My remarks focus on two questions: First, how did we get ourselves into a situation where 20 percent of agricultural debt cannot be repaid?

Second, how successful will alternative public policies be in dealing with this problem?

How Did We Get Here?

The current financial problems in U.S. agriculture were created because over the decade of the 1970s farm debt expanded annually by the amount of increases in asset values rather than at the rate dictated by growth in repayment capacity (farm income). Over the decade of the 1970s, the value of farm assets increased 220 percent; farm debt increased 228 percent. Consequently, the debt-to-asset ratio only increased from 16.8 to 17.3 percent and agricultural lenders felt quite comfortable with their collateral position. However, while farm debt increased 228 percent over the decade of the 1970s, net farm income (repayment capacity) increased only 52 percent.

There is no mystery about why a substantial number of farmers can't make loan payments. The expansion of debt during the 1970s simply got out of line with the repayment capacity of farm income. Farm debt per dollar of net farm income increased from an average of \$3.41 in 1970-72 to \$7.37 in 1980-82. Preliminary estimates for 1985 show \$9.87 of farm debt for every dollar of net farm income. Throughout the 1970s the tripling of farm debt was justified on the basis of a tripling of asset values generated by the inflation euphoria of that period. Unfortunately, repayment capacity never existed for a large part of the agricultural debt expansion. This debt was borrowed at double digit interest rates to finance investments that were earning less than a 5 percent rate of return.

Lending money against inflated values of assets that have inadequate earning capacity for debt repayment makes sense only if inflation continues forever, or if the assets are sold at their inflated value prior to termination of inflation. Obviously, neither of these developments occurred. Inflation was brought under control, causing the inevitable decline in land values. Land values established in 1981 made sense only if inflation continued at levels anticipated in 1981. Land values in the 11 midwestern states have declined from 20 to 49 percent since 1981.

The decline in land values has had the obvious impact of consuming the farmers' equity and hence their lenders' margin of collateral. The debt asset ratio for agriculture has risen from 0.16 in 1981 to 0.21 in 1984 and will be even higher for 1985.

The sharp decline in agricultural land values is often cited as the cause of the agricultural finance problems. However, the decline in land values is not the cause of financial problems of farmers. The decline in land values has had no impact on the debt repayment capacity of the

¹Bullock, J. Bruce. "Farm Credit Situation: Implications for Agricultural Policy," FAPRI #4-85, University of Missouri-Columbia, March 1985.

agricultural sector. Declining land values have simply removed the artificial impression of financial well-being that both farmers and their lenders had been operating under for the past 10 years. Without the umbrella of inflation-driven increases in land values to collateralize expanded debt to cover cash flow shortages, the agricultural sector is faced with the rising delinquency rates on farm loans and increasing numbers of loan foreclosures and farm bankruptcies.

Expanding debt beyond repayment capacity is the basic cause of the farm finance problem. However, the sharp decline in land prices has caused the farm finance problem to spill over into the laps of agricultural lenders. Since land acquired via foreclosures cannot be sold at the loan book value, the farm business failures are increasingly being translated into bank failures.

The observed increase in farm loan delinquencies has occurred simultaneously with record levels of real interest rates and substantial increases in the value of the U.S. dollar. Thus, government economic policies designed to bring inflation under control have been blamed for most of the financial problems in agriculture. High interest rates and the strong value of the dollar tend to compound the pressures created by the excess farm debt situation. However, high interest rates and weak export demand are not the cause of the financial problems in agriculture.

Some observers cite the fact that interest expenses have increased from 7.5 percent of total farm production expenses during 1970-72 to 15 percent in 1981-83 as evidence that high interest rates are the cause of the current problems. Total interest payments on agricultural debt in 1981-83 were 5.85 times their level in 1970-71 (\$21,096 vs. \$3,604). However, this increase resulted from a 260 percent increase in farm debt and only a 60 percent increase in interest rates. Over half, 53 percent, of the increase in interest payments is due to expanded debt. Furthermore, interest rates are down 24 percent since 1981, while farm debt is 18 percent higher.

This has been a rather long winded response to the question of how we got ourselves into a situation where 20 percent of farm debt cannot be repaid. The problem was created because lenders based lending decisions on debt/asset ratios rather than on debt repayment capacity. Land values were increasing much more rapidly than farm income. Thus, throughout the latter half of the 1970s collateral lending practices were converting non-income-generating increases in land values into cash via interest-bearing debt. The decline in land values since 1981 has evaporated the inflated value of the collateral but has not erased the interest-bearing debt. The cash had been spent on investments that generated returns below the interest rate at which the funds had been borrowed. There is no way to avoid the inevitable losses and wealth redistribution between borrowers and lenders. The difficult question facing policy makers is how these losses are to be distributed among farmers, agricultural lenders, and taxpayers. Unfortunately, most of the proposals for dealing with the financial problem of agriculture focus on treating the symptom of the problem rather than correcting the cause of the problem.

Policy Options and Their Potential Effectiveness

Debt Moratoria

Debt moratorium proposals basically treat the financial problem as being a temporary shortfall in income. However, net farm income has not changed much over the past five years. Also, there is no reason to expect farm income to increase sharply over the next three to five years. Thus, proposals for debt moratoria are based on an unrealistic view of the economic realities of the agricultural sector.

Most moratorium proposals do not explicitly state who is to absorb the cost of the moratorium. Indeed, most proposals do not seem to recognize that there are costs associated with a debt moratorium. One option is to have the borrower pay the cost by amortizing the unpaid principal and accrued interest into his debt. This solution expands the borrower's debt and makes no sense if the problem is already too much debt. The second option is to have the lender absorb the cost of the debt moratorium. This seems to be the option implied by most debt moratorium proposals. However, this option simply passes a large part of the cost of the moratorium on to other borrowers in the form of higher interest rates or to stockholders of the lending agency in the form of lower returns -- possibly even bankrupting the lender. Thus, debt moratoria either compound the problem or spread the cost of the moratorium to third parties. Neither option helps solve the basic problem.

Interest Rate Buydowns

This approach focuses on a symptom of the excess debt problem rather than on solving the problem. As noted earlier, interest rates are about 60 percent higher now than during the early 1970s. But more importantly, farm debt is over three times what it was in 1970. Higher interest rates account for less than half of the increased interest payments on the farm debt over the past 10 years. Farmers in financial troubles would have almost as many problems servicing their debt at earlier interest rates as at current ones.

Not every farm in financial trouble can be given effective temporary relief from its excess debt problem. Forty-five percent of the excess debt is held by farms with less than \$50,000 annual gross sales. This group also accounts for 54 percent of the farms with serious financial problems. We would have to forgive over 125 percent of the debt held by these farms in order to correct their financial problems. Thus, even interest rate buydowns that provided zero interest rates would not solve the financial problems of these farms.

Suppose we targeted an interest rate buydown program to those that could benefit. A 60 percent buydown of interest rates only for those farms with excess debt that could be converted to a positive cash flow would help about 52 percent of the financially stressed farms grossing more than \$50,000 annually (25 percent of all financially stressed farms). The program would cost approximately \$2.0 billion annually -- roughly \$21,000 per farm assisted.

If policy makers are interested in providing limited and temporary relief to symptoms of the excess debt problem rather than correcting the problem, then partial payment of interest bills (i.e., interest rate buydowns) probably provides more bang-for-the-buck than other alternatives. However, since this approach only relieves pressures of symptoms, it will have to be repeated for an indefinite period until the cause of the problem is corrected.

Higher Price Supports

Many farmers and other observers seem to think that higher farm commodity prices will cure any problem facing agriculture. However, analysis of USDA data shows that these observers are kidding themselves about the capacity of higher support prices to solve the current financial problems in agriculture. Farm prices would have to be increased from 15 to 560 percent to correct the financial problems for most of the farms with severe financial stress.

It is neither practical nor possible to generate price increases of this magnitude by price support programs. The current financial problems of U.S. agriculture are too large to be solved by price and income support programs.

Provide Government Loan Guarantees

Policy makers should keep one thing in mind as they consider this policy option for dealing with an excess debt problem. Government loan guarantees do not increase the repayment capacity of farmers with financial stress. A loan guarantee program will successfully deal with the financial stress problem only if the program requires that the excess debt situation of the borrower be corrected (e.g., sufficient debt is written off) as a precondition for obtaining the loan guarantee. Failure to impose such a requirement would simply mean that the unavoidable wealth losses required to correct the excess debt problem will be transferred from borrowers and lenders to the government. This is certainly a viable policy option. However, it should be recognized up front as a loss transfer mechanism.

Expand Government Loan Programs

More credit, even at subsidized interest rates, is not the solution to an excess debt problem. An expanded government loan program is the worst possible policy that could be pursued. Providing additional debt to these farmers is analogous to putting more water in the swimming pool in an attempt to save a person observed to be drowning in water over his head.

A strong case can be made that liberal lending policies promulgated by Congress through FmHA has already compounded rather than eased the farm credit problem. Government lending programs have provided 20 percent of the growth in non-real estate debt over the past 12 years. FmHA provided 34 percent of the increase in farm non-real estate debt during the 1979-82 period. FmHA market share of non-real estate debt increased from 5 percent in 1973 to 15 percent in 1983.

A good portion of this debt was for disaster relief. Disaster loans simply add to the disaster of farms that already have more debt than can be repaid. Borrowed funds can profitably be used only on investments that yield a return higher than the interest rate at which the funds were borrowed. Payment of last year's production expenses from funds borrowed in lieu of a failed crop produce zero return on investment.

The ineffectiveness of the disaster loan program for providing disaster relief is evident from delinquency rates on disaster loans. Thirty-nine percent of FmHA disaster loans were delinquent as of June 30, 1985. Of these delinquent loans, 91 percent have been delinquent for more than a year and 70 percent are at least three years past due.

There is perhaps a genuine need for farm programs to provide mechanisms for disaster relief. However, this disaster relief must take the form of indemnity payments from insurance to avoid doing more harm than good in providing farmers with money to deal with disaster.

Add Liquidity to the Land Market

One proposal is an agency to purchase land. This approach was being proposed for a while by the Farm Credit System under the title of the Agricultural Conservation Corporation. The agency would give strength and liquidity to the land market by purchasing land and then leasing it back to the farmer so that the farming operation could be continued. If the land purchase agency expected to receive a competitive return on funds invested in land purchases and if land were purchased at a price equal to the selling farmer's debt, the lease payments would be about the same as the interest payments the farmer had been making on the land debt. The borrower's title would be traded for release from making principal payments.

The operations of such a land purchase/lease back agency would completely solve the cash shortfall problems only for about 20 percent of the highly leveraged farms. The remaining farms would still have several thousand dollars in annual cash shortfalls.

The land purchase proposal does deal directly with the problem of excess debt. It removes the burden of principal payments from the farmer, but does not remove interest payment obligations.

Remove Excess Debt

Solution to the excess debt problem requires that the excess debt and associated principal and interest payments be removed from the agricultural balance sheet and cash flow. The facts of life are that someone is going to have to eat the excess debt. The only question is who will eat it.

The Federal Government will be heavily involved regardless of the policy option selected. The government holds about \$27 billion of the excess farm debt in the form of FmHA loans. Since FmHA is by law the lender of last resort, a very high proportion of its portfolio is almost certainly in the "impossible to repay" category. Thus, one step of the adjustment process might be to terminate all FmHA agricultural lending operations and forgive all outstanding FmHA farm loans. This would eliminate about one-half of the excess debt.

Do Nothing

One policy option is simply to let the chips fall where they may. This would mean that the losses will be shared between borrowers and lenders. A do nothing government program would result in a substantial transfer of asset ownership from borrowers to lenders and/or a substantial increase in the amount of land sales. Land prices have already fallen 20 to 49 percent in the Corn Belt. Forcing the complete adjustment to occur through land sales would generate additional declines in land values--something that may occur regardless of the policy selected. However, a do nothing policy is likely to cause an overreaction in land prices in the short run.

A do nothing policy is workable. The market will adjust. The results will include a substantial increase in the number of loan foreclosures and farm bankruptcies. It will also result in a substantial increase in the number of agricultural bank failures including the Farm Credit System. A viable agriculture and viable lending institutions would emerge after a do nothing policy.

The policy would bring major structural changes in agriculture and among the lenders. The impacts of these changes would spill over into main street of rural communities. Policy makers

will have to decide if these changes are an acceptable price to pay for getting rid of excess debt. From an economic efficiency standpoint, a do nothing policy is the preferred solution. However, the social consequences of a do nothing policy are quite likely to be unacceptable to both the public and to policy makers. However, policy makers have been quite reluctant to acknowledge that there is a financial problem. Thus, we may have a do nothing policy by default.

Conclusions

The magnitude of the excess farm debt problem requires large scale and immediate corrections. Failure to correct the problem will completely consume the remaining equity of farmers holding the excess debt. Failure to correct the problem will also threaten the economic viability of financial institutions currently providing credit to agricultural producers.

There is no way of avoiding the wealth transfers and losses resulting from creation of the excess debt and the asset devaluations that followed. Failure to recognize the losses and to terminate the growing debt service obligations associated with the excess debt compounds the problem.

The challenge facing policy makers is to determine how those losses are to be distributed among borrowers, lenders, and taxpayers.

High interest rates are not the cause of the farm finance problem. The excess debt problem is so large that interest rate subsidies will provide only partial relief to the symptoms of the problem.

The nature and magnitude of the farm finance problem renders price support policies ineffective as a solution. The farm finance problem must be dealt with separately from price and income policies. Moreover, it should have been dealt with before the 1985 farm bill was developed. Since Congress chose not to do this, it was impossible to obtain significant changes in the farm program.

One thing is clear. A policy decision should be made quickly. If there is to be relief through government programs, it should be implemented as soon as possible to terminate the losses and the disruption caused by the current situation. If the decision is to do nothing, then lenders and borrowers need to know that so they can immediately initiate the adjustments required to minimize losses.

EMERGING TRADE POLICY ISSUES: THE HARD CHOICES

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Agricultural trade policy has been receiving increased attention in the United States the last few years. The reason is obvious. After a decade during which the value of agricultural exports grew from \$8 billion annually to a peak of nearly \$44 billion in 1981, both quantities and values of exports have fallen substantially. USDA estimates put farm exports in 1985 at \$32 billion.

In the long history of U.S. agriculture, exports have often been a major force in agricultural prosperity and distress. It is a natural tendency, therefore, to look at export growth as a solution to the dismal state of the farm economy. Unfortunately, poor export performance is only one of a complex array of factors that have contributed to the current distress in agriculture; and many of these factors are jointly related to macroeconomic policies and performance.

The major elements of these changes from the 1970s to the 1980s are noted in Table 1. The economic policies that successfully wrung inflation out of the U.S. economy also slowed economic

Table 1. Economic Environment Affecting Agriculture, United States, 1970s and 1980s

Item	Unit	1970s		1980s	
		Period	Data	Period	Data
Inflation rate	Range in annual percent	decade	5 to 10	decade	3 to 5
Real interest rate	Range in annual percent	decade	-1 to 3	decade	5 to 9
Budget deficit	Range, annual, billion dollars	decade	-10 to -70	decade	-60 to -180
Current account balance	Range, annual, billion dollars	decade	+20 to -20	decade	+5 to -120
Exchange rate of dollar	Percent change over period	1969-80	-29	1980-84	+50
Net debt transfer to developing countries	Annual average, billion dollars	1978-81	+30	1982-83	-2
Value of exports of farm products	Change over period, billion dollars	1971-81	+35.8	1981-85	-11.8
Cost of agricultural programs	Annual average, billion dollars	1971-81	5	1982-85	14

growth here and in many foreign countries. U.S. inflation rates fell more rapidly than interest rates, causing real rates of interest to rise. The 1981 tax cut reduced government revenues without an associated cutback in government expenditures, causing the federal budget deficit to increase rapidly and put further upward pressure on real rates of interest. As foreign investors bought dollars to invest here and earn these high returns, the dollar appreciated and made our exports more costly abroad. The decline in exports relative to imports created a

substantial increase in the current account deficit. The world economic slowdown in the early 1980s, combined with high real interest rates and an appreciating dollar, contributed to debt crises in many Third World economies. Public and private debt disbursements to developing countries declined and debt repayments increased until the net debt transfers became negative.

All of these factors contributed to a substantial decline in U.S. agricultural exports from the peak in 1981. Added to this weak demand, the bumper crops in the United States in 1981 and 1982 set the stage for a substantial decline in farm prices, incomes, and land values. Commodity programs designed to provide a measure of protection to farm prices and income absorbed substantial amounts of the growing surplus through building stocks, and acreage reductions followed. Program costs rose to nearly three times the rate of expenditures incurred during the 1970s.

The reversal of conditions that existed before the turn of the decade could hardly be more complete. Exchange rate changes and export declines can be viewed as casualties rather than causes of this turnaround. It is clear that macroeconomic policies have been a major element in this reversal. The large negative impacts of the changed macroeconomic policies on agriculture were not anticipated. In fact, some earlier studies by Tweeten suggested that expansionary monetary policies were harmful to agriculture. More recent studies by Starleaf, Meyers, and Womack (1985) and Devadoss, Meyers, and Starleaf (1985) have provided evidence that farmers are adversely affected by the kind of stringent monetary policies that were initiated in 1979 and carried into the 1980s.

Before proceeding to discuss trade policy issues that have emerged from this wrenching experience, we need to look more carefully at the patterns of growth and decline in trade that have been experienced. A better understanding of the factors underlying these changes will make it possible to form better judgments about the trade policy issues and options that are emerging.

Sources of Growth and Decline in Exports

For analytical purposes, it is important to separate two components of change in U.S. exports. The first is the total world imports of the commodity, and the second is the U.S. share of those imports. Separation of these two elements helps to distinguish the factors that influence each and to determine the prospects for influencing these factors. Figure 1 shows the pattern of growth and decline in total grain trade for the world and the United States, and the U.S. share. World imports of these commodities nearly doubled from 1970 to 1980. The U.S. production machine was able to respond quickly to the fast growth in demand and increased its share of world grain trade from 34 percent in 1970 to a peak of 52 percent in 1979. Much land that had been idled by government programs in the 1960s was brought back into production, cropland irrigation was expanded, and productivity increased. As a result, U.S. agriculture took advantage of the situation but in doing so became more dependent on export demand, which is far less stable and predictable than U.S. domestic demand.

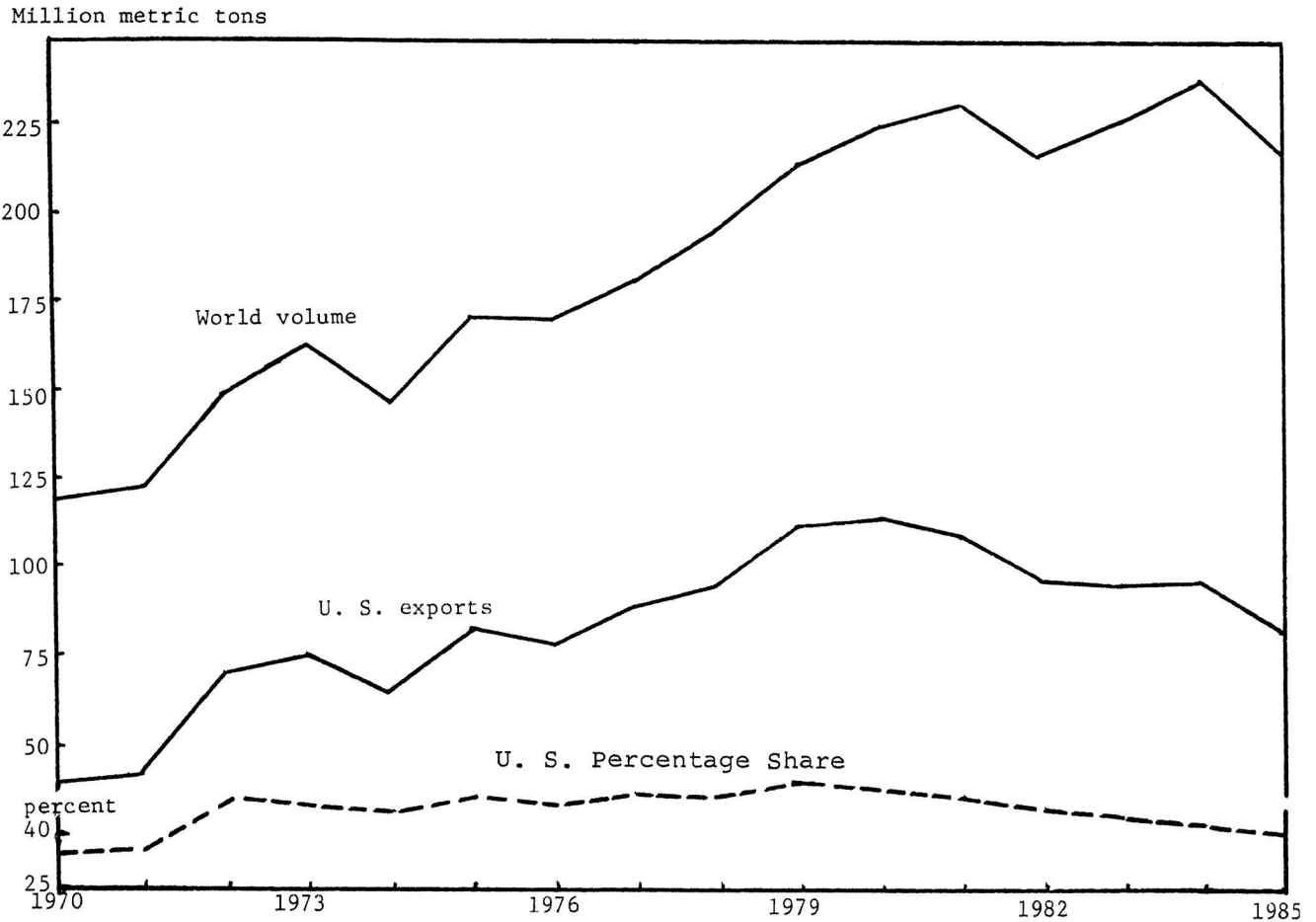
In the 1980s total world grain trade has exhibited slight variations from year to year but no growth. U.S. exports, however, declined and were replaced by exports from competitors including the European Community. During this period, the U.S. export share dropped to 40 percent in 1984, and is estimated at around 38 percent in 1985. Even if the U.S. trade share had been maintained at 50 percent, U.S. exports in the 1980s would not have experienced any growth.

Because of the relatively large U.S. share in world grain trade, it has been too easy to think that the world is heavily dependent on us for grain supplies. That is true in the short run, but it is important to remember that even though our exports now represent about 40 percent of world trade in grains, they only represent about 6 percent of world production of these commodities. It is clear that in the 1980s the United States is more dependent on the world market as a source of demand growth, but the world market is not as dependent on the United States as a source of supply.

Factors Influencing World Imports

The major factors affecting demand for grain in importing countries are the rate of growth in income and population on the demand side, and the rate of production growth in those countries. Population marches along at a fairly predictable rate, but economic growth and indigenous production are much more variable and subject to policy influences. The net importing areas of the world for wheat and coarse grains are divided into nine regions in Figures 2 and 3. In the 1970s all of these regions contributed to some degree to the growth in import demand, but

Figure 1
 VOLUME OF WORLD GRAIN TRADE AND U. S. EXPORTS
 and U. S. Percentage Share



in the 1980s China, East Europe, and West Europe (excluding the European Community) had sharp declines in import demand.

The most rapid import growth in the 1970s came from these last-named regions plus the USSR and the Upper-Middle Income (UMINC) Developing Countries. Throughout the entire period Japan, the Lower-Middle Income (LMINC) Developing Countries, and the High Income (HINC) Developing Countries show steady rates of growth. The low income (LINC) developing countries increased imports rapidly from 1971 to 1974 but then reduced their buying sharply in the following three years and remained fairly flat markets afterward.

Two of the three regions where imports fell sharply in the 1980s, East Europe and Other West Europe (excluding the EC), had large increases in production while utilization was fairly constant. In China, utilization increased but production increased much more rapidly, making import substitution possible. While slowing of demand growth is evident in other regions, it appears that a major factor contributing to the stagnant import growth in the 1980s is the sharp increase in production experienced in Europe and China.

Figure 2
 VOLUME OF IMPORTS OF WHEAT AND COARSE GRAINS
 Five Countries or Areas, Increasing Trends

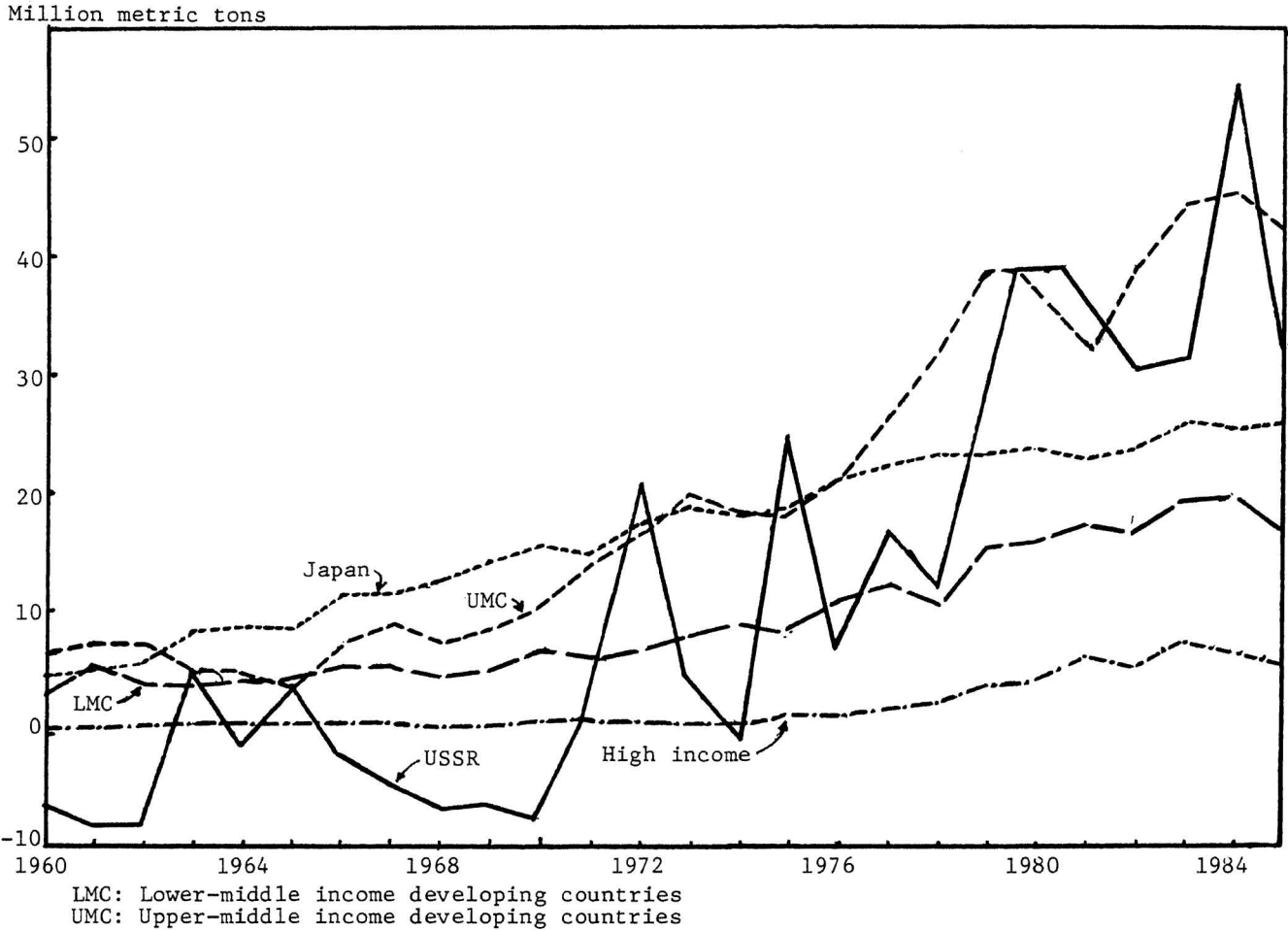
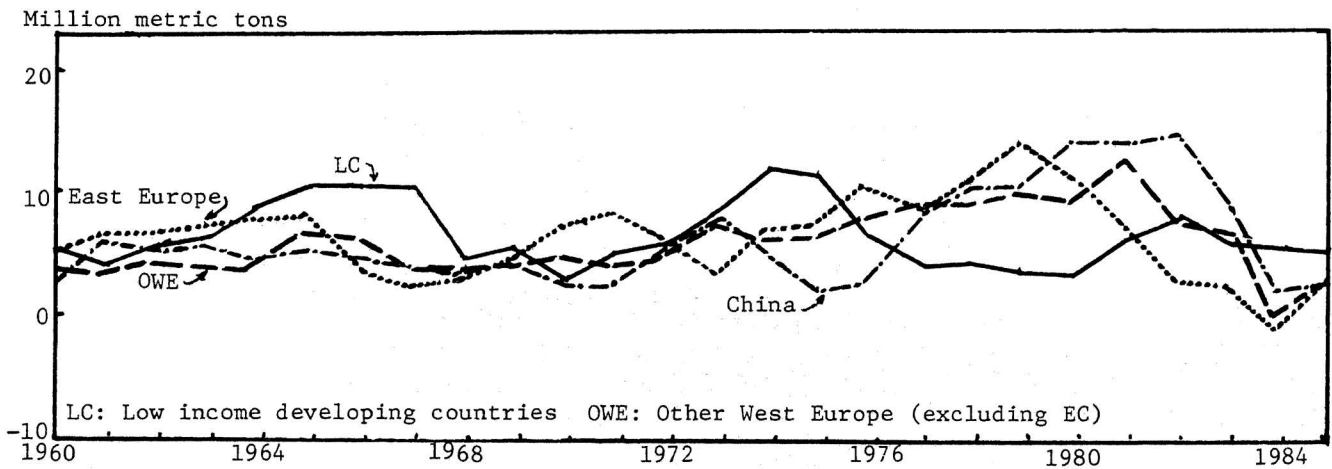


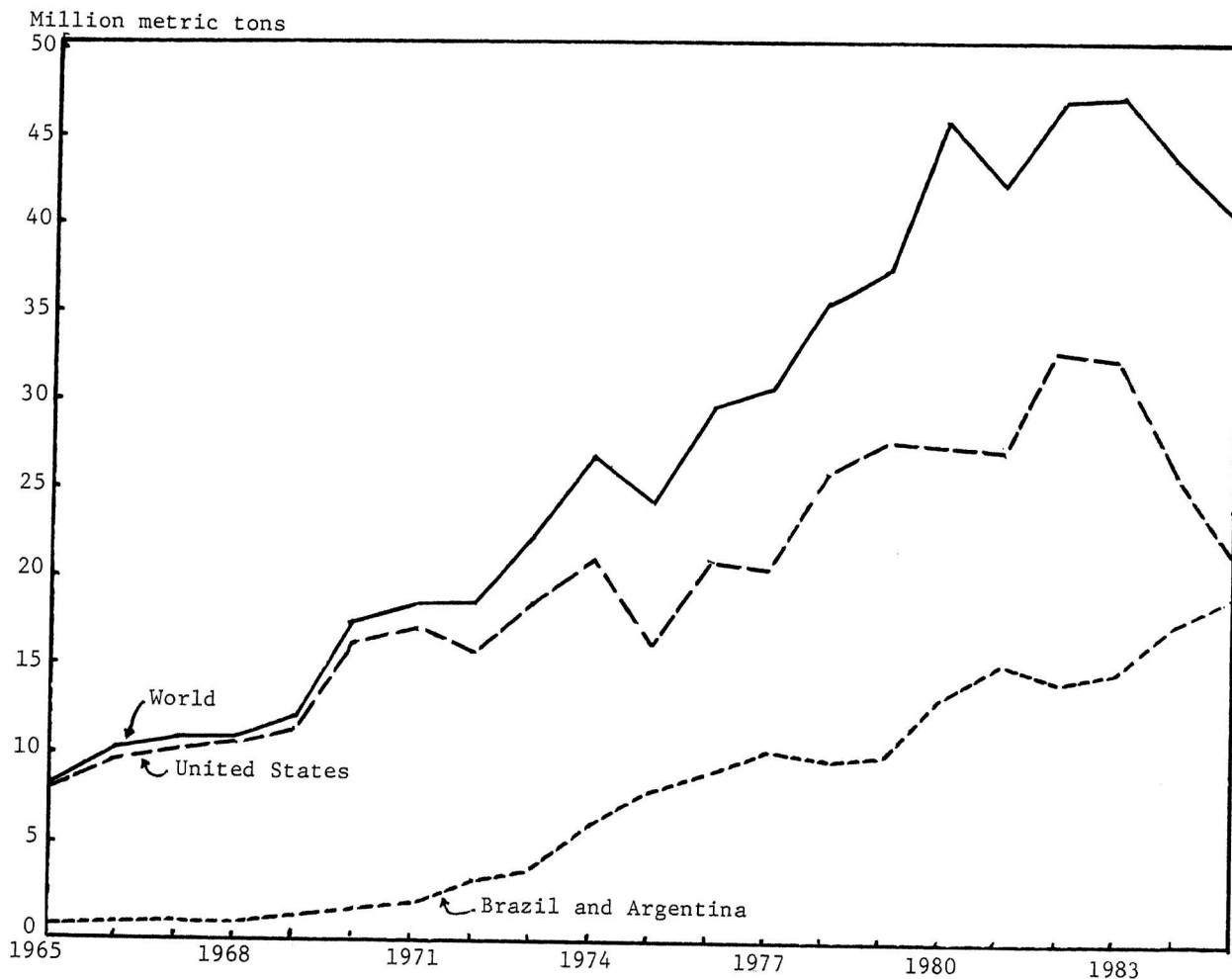
Figure 3
 VOLUME OF IMPORTS OF WHEAT AND COARSE GRAINS
 Four Countries or Areas, Decreasing Trends



Factors Affecting Trade Shares

Loss in trade share by the United States, when the world total is steady, is matched by equivalent gains by competitors. Our loss could be associated with the appreciation of the dollar, the price levels supported by our loan rates, or policies of competing exporters that induce larger production and/or subsidize their exports. For a number of years the United States and its competitors, including the EC, increased their grain exports at about the same rate. About 1980 U.S. exports began to decline, while competitor exports continued to grow. A very similar pattern is evident in Figure 4 for soybeans and the soybean equivalent of meal. Note that the turnaround in U.S. exports is coincident with the appreciation of the U.S. dollar relative to other currencies. The higher value of the dollar provides competitors with greater opportunity to sell competitively in international markets.

Figure 4
VOLUME OF EXPORTS OF SOYBEANS AND MEAL EQUIVALENT
World Total and by Major Exporters



Looking to the 1990s

Table 2 summarizes the major factors affecting total exports and trade shares that have been emphasized as having important effects on U.S. agricultural exports in the 1970s and early 1980s. In the 1970s, the positive factors overpowered the relatively less important negative factors and generated rapid export expansion. In the first half of the 1980s all of these factors have turned negative.

Table 2. Trade Impact of Factors Influencing World Grain Demand and U.S. Trade Share over Three Time Periods

Factor	1970s	1980-85	1985-90
Affecting world imports			
Importer's production	Negative	Negative	?
Importer's income growth	Positive	Negative	?
Net debt transfer	Positive	Negative	Negative
Affecting U.S. Trade Share			
U.S. dollar value	Positive	Negative	Positive
U.S. agricultural policy	Positive	Negative	?
Competitors' agricultural policies	Negative	Negative	?

Looking ahead to the last half of the 1980s, there appears to be one ray of hope so far. The dollar has been depreciating in value for much of 1985 and it is expected to decline further in the years just ahead. On the other hand, the debt problems of the developing countries are unlikely to improve. They could even get worse before they get better.

Other factors are more uncertain. Our FAPRI (1985) projections based on the macroeconomic forecasts of Wharton Econometrics, and assuming a movement toward market oriented loan rates in the United States, do not provide a very bright outlook. Even with substantial declines in the value of the dollar and continued low commodity prices, U.S. exports by the end of this decade still are not foreseen to recover their peak levels achieved at the beginning of this decade.

Trade War or Trade Policy?

As the size of the export pie has stabilized, the conflicts over shares of the pie have sharpened. The most vocal disputes have been between the U.S. and the European Community over export subsidies, but conflicts have also arisen with Canada over pork trade and with Japan over market access for several commodities. Within the United States the growing commodity surplus problem and its rapidly rising cost to the federal treasury is creating political disputes between interest groups who would end agricultural price supports, leaving prices free to seek "competitive" levels, and those who seek an increase in price and income support.

The lack of a clear and comprehensive U.S. policy on its agricultural trade has given rise to ad hoc approaches to the problem. Examples of these "trade war" options are discussed below, and some ideas about a "trade policy" approach are offered.

Export Subsidies

There has been much talk and some action in the direction of export subsidies to counter the subsidies of the EC and make them more costly. The latest of these ideas is the export PIK program where surplus commodities are used to subsidize the exports of the same commodity. Unlike a cash subsidy, the payment-in-kind has the effect of adding more grain to the market. It is not certain that this form of subsidy would enhance domestic market prices, as it increases market supplies. Even cash subsidies are of dubious value to a large exporter such as the United States. If such programs are limited to targeted markets they will have a negligible impact on total exports. If they are applied across the board, the costs could be prohibitive. Moreover, providing (at government expense) cheap feed to foreign livestock producers while keeping U.S. grain prices at a higher level is not likely to be a cost-effective means of improving U.S. farm income.

Retaliation

Most of the recent export subsidy actions have been directed against the EC in retaliation for the export subsidy the community has routinely used. Aside from scoring political points on the homefront and antagonizing an ally, it is not clear that these actions have achieved anything. A little introspection should tell us that political pressure from outside the country is not likely to have much influence on domestic agricultural policy decisions. It is the domestic policies in the EC that create the need for export subsidies and other surplus disposal programs. Like the United States, the EC has been forced in recent years to review its domestic agricultural policies critically, because of the increasingly high cost of the programs. These pressures have brought about some reduction in the support levels for commodities as well as supply adjustment programs for dairy and wine production.

High levels of price supports were relatively easy for the EC to continue as long as the community was a net importer. As a net exporter of some commodities, it finds itself under a different set of pressures that are beginning to have an effect on internal policy decisions. Nevertheless, we should not expect too much benefit to our trade if the community becomes more conservative. A recent study by Meyers, Thamodaran, and Helmar (1985) found that the slowing rate of income growth in importing areas of the world, and the appreciation of the U.S. dollar, had five times more impact on the value of U.S. exports than did the increasing level of support prices in the EC. Hence, while the domestic agricultural policy of the EC has had a negative effect on U.S. agriculture, it is not likely that a reversal of that policy would substantially improve the U.S. export performance.

The United States and the EC face similar problems. Both have substantial surplus capacity which was brought on in part by policies that induced expansion of productive capacity and resources in agriculture. Both face serious adjustment problems in the years ahead and need to find ways to maintain a vital agricultural industry under increasingly difficult budget and market conditions.

Trade Policy

Having recognized the factors that have combined to stifle the growth in U.S. exports, we can outline the elements of a trade policy to address the problem. To affect the factors enumerated above requires a trade policy that goes beyond traditional agricultural policy boundaries. It needs to recognize that the major growth areas for agricultural exports in the future are the developing countries. Many of these potential markets are now choked with credit constraints, debt service problems, slow economic growth--one or all. Effective action to relieve the situation and facilitate trade requires not only a broadly based U.S. policy, but also collaboration with other developed countries. Although multilateral cooperation is always difficult, enlightened self-interest could motivate the EC, Canada, and Australia, for example, to cooperate.

The primary thrust of the trade policy approach is to restore effective demand growth for agricultural commodities. The instruments to increase the purchasing power in developing countries would include the macroeconomic policies of the United States and other developed countries, the credit policies of private and public institutions in the developed countries, the trade policies of developed countries toward the export goods of the developing countries, and economic development assistance. Based on past experience, it is likely that North-South trade will be much more effective than development assistance in achieving economic growth and development in the developing countries.

Some of these initiatives are obviously long-term in nature, but credit and trade policies need not take a long time to have a significant effect on purchasing power. Such a trade policy approach recognizes once again that agriculture has become completely integrated into the domestic and international economies and relies heavily upon factors outside of agriculture to generate the growth that agriculture will need to remain a vital sector of the economy in the rest of this decade and beyond.

Conclusions

The dramatic turnaround in agricultural exports of the 1980s was the result of numerous factors that combined to reduce the growth in world trade in the key agricultural commodities as well as the U.S. share of this trade. It is a fact of life for a major exporter such as the United States that export growth is dependent upon growth in total trade. To focus our energies and resources on trying to get a larger share of the shrinking pie is a wasteful endeavor. It is always easier for the small trader to win such battles. It is more difficult to formulate a more general, comprehensive trade policy to deal with the problem, yet that is a task that offers some hope for success.

The conditions that have brought us to this point in the 1980s appear likely to continue for the rest of the decade. Grain export demand in the next five to ten years is expected to grow rather than decline, but growth is likely to be much slower than in the 1970s. Prospects for the United States and the EC and other exporting countries to reach agreements on cooperative production adjustment programs or negotiate market shares must be regarded as dim. However, there should exist a mutual interest in restoring effective demand for agricultural imports in the developing world. Current unilateral export expansion programs by individual countries are short-sighted in their focus on increasing market share and have little impact on increasing market size.

A well conceived trade policy that would include improvement of credit conditions would be much more effective than the sum of the unilateral efforts that now exist. The real choice is between a comprehensive long term trade policy and a continuation of short-run ad hoc reactions to trade problems.

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SUMMARY OF THE SEMINAR

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"Farm Policy - The Emerging Agenda" is certainly an appropriate theme. The first morning of this seminar dealt with agricultural finance and credit. It looked at the policies that have led us to where we are today, and the impact they have had. There was a recognition that one of the major problems with which we must deal is providing credit and other financing to agriculture. The challenge is to develop policies that accomplish the policy goals, not universally agreed upon, that we have for agriculture. There was inadequate discussion about what the credit and finance problems associated with declining land values may mean to the structure of land ownership in the United States. How we refinance agriculture will have an impact on who will gain control of land.

As we look at both the short-term and long-term policies that we may need to develop we may want to look at other industries and see if they provide any guidelines for us. Others have faced financial problems. Automobiles, steel, and electronics come to mind. In these industries we find few firms and a reduced worker force. We see evidence of a number of products and differentiated model of these products. Further, we see the application of new production technologies. Companies have certainly been restructuring in order to survive. We need to ask how and why did Chrysler and Continental Illinois first give up, and then get government help? We need to ask the ways in which agriculture is like these restructuring industries, and the ways it is different.

In financing, will we move toward more equity financing and less debt? Will we devise cooperative equity ownership as we have credit cooperatives of the past? A look back at history will cause us to remember that a new credit system developed out of the needs of the 1930s. Will new equity financing institutions develop in the 1980s in response to the present situation?

Irrespective of what decisions are made, there seems to be no disagreement that a difficult transition period lies ahead.

Overcapacity in Agriculture

Overcapacity in agriculture was mentioned by several speakers. There seems to be consensus that it is part of the problem. But the question must be asked whether a policy or course of action to deal with it can be agreed on. Options offered were the following:

1. Let the market dictate how we reduce capacity.
2. Let the government allocate production rights.
3. Initiate a joint farmer-financed effort, perhaps like that previously undertaken in dairy--and being considered again.
4. Find new markets for the products of overcapacity.

There was relatively little discussion about developing markets for the overcapacity, and in fact a consensus that opportunities are limited in the short run unless the rate of economic growth here and in many parts of the world can be speeded up.

Professor Raup pointed out that some approaches to overcapacity may not work as anticipated. For instance, reducing the number of farmers will not necessarily bring land out of production. The question has to be asked, what do we want? Do we want fewer big farms and, if we do, are we willing to accept the public programs that may be necessary?

¹ These comments are those of the speaker and should not be construed as representing views of either the United States Department of Agriculture or the University of Illinois.

International Dimension

Dr. Learn and, later, Dr Meyers reminded of the international dimension of the problems we face. Everyone knows about our increased export sales in the 1970s and more recent decline. But have we addressed the policies needed to accommodate this new international dimension? If we fail to do that, we are likely to perpetuate policies that had their origin in the mainly domestic agricultural market of the 1960s.

The point was made that the new international dimension is not consistent with the rise in protectionism that is sensed just now. This, of course, is an explanation why agricultural groups generally oppose import restrictions.

International markets, growing competition abroad, economic growth abroad -- all these have implications for domestic policies that are now in place and those that may be proposed and adopted. We need policy unification bringing together many considerations that we have been trying to deal with separately. We need to expand total export demand, and one of the ways to do this is to expand total trade. It appears that we may have more luck in increasing the market size globally than in increasing our market share. It appears that it would certainly be a mistake to freeze ourselves into the policy of the past. Honey and tobacco are illustrations of the costly effects of not recognizing the increasing importance of the international market for agricultural products.

Increasing Importance of Non-Farm Policies

We spent considerable time at the seminar recognizing the fact that policies that do not come from usual USDA Congressional Agricultural Committee sources may be even more important than those that do. Certainly monetary and fiscal policies are part of the major cause of many farmers' financial problems. High interest rates, the high value of the dollar, and tax policies all impinge heavily upon the agricultural sector, but the policies that govern these do not arise in the traditional farm policy setting or sources.

In 1984 in a 17 state survey, farmers said that they supported deficit reduction and even cuts in agricultural programs if all shared and we moved toward a balanced budget. Since the time these answers were given the financial crisis has become more severe and we find that many Congressmen are not willing to see any reduction in agricultural programs at this time. They even find it difficult to target programs in such a way that agricultural programs will help those who need it and not go to those who do not need help.

Concern for the federal deficit raises very quickly the whole issue of targeting of benefits. Are we willing to target benefits? Yet, benefits cannot be targeted until decisions are made as to the purpose of farm programs and the role of government in agricultural policies.

Professor Jolly tells us why the job of targeting is so difficult. He points out the wide range of situations in which farmers find themselves. This variation makes even more important the question of whether commodity support programs should be based on scale of business or upon financial need.

An issue raised but not dealt with in detail here is the political difficulty involved in explaining that payments for reducing production must go to those with production potential regardless of their financial needs -- if a cutback in output is to be attained. Limitation of deficiency payments or price support loans is more feasible and can be targeted more readily to those with certain levels of financial need.

Survival

The conference produced an agreement, though reluctantly, that not all farmers will survive in farming. There was only brief discussion on policies to help those who cannot continue to farm. There are issues here that deserve further discussion.

What role should policies have in deciding who will continue to farm? Do we wish to have policy in which three or four generations on the family farm will guarantee the right to continue that family on the farm? How many young persons can start farming today if their family has no land ownership or wealth with which they can acquire land? Are we going to head toward a policy of licensing farmers or develop some qualification test before they can start farming or obtain credit?

Lessons of History

What can we learn from history? What is the difference between the present and some earlier times? Professor Philip Raup most appropriately pointed out that the situation in the 1980s bears some resemblance to the 1930s but that there are major differences too. He reminded us that insofar as causes are different in the two time periods, the solutions also may be very different today from those of 50 years ago.

Other Issues

The conference did not deal with a number of important issues as, for example, the relationship between short-term problems and their solution and what may be the long-term implications of the short-term solution.

The conference did not deal with inequities among commodities. Soybeans, peanuts, sunflower seeds -- all these have different policies, but all are oilseeds with human food products derived from them. Does this make sense?

What about corn vs. wheat? Favoring one commodity can certainly affect the other. Should we freeze regional production relationships or should we recognize the interrelationships between these commodities?

Look at the differences in corn and wheat and how they move. A major part of the corn market is domestic. As specialization increases, more and more corn moves from a farm to a feeding operation. Wheat is not primarily a feed grain. Thus we can find inequities in programs. An example is the 1983 PIK program which had such strong effects on the livestock industry. Sometimes these relationships are recognized. For instance, in the dairy title of the House Bill (1985 farm bill), in response to the livestock producers' complaint, purchase of an additional 250 million pounds of red meat was authorized.

We did not adequately face up to the problems of wide differences in the size and organization of farming operations. It is very difficult to resolve program benefit issues when programs are widely different. It is probably easier to achieve a degree of balance when only financial need is the basis for benefits, but even this is difficult.

In the United States, to the average urban worker the financial data on agriculture look impressive. It is difficult to win concern for agriculture's problems. In a sense it is a matter of the difference between the farm household and the household plus the farm business. Do we need to explore ways to develop a business system that will separate the farm business from the farm family household? It is possible that family farming corporations may be able to do this to some extent.

The conference did not discuss in detail the high costs of intergenerational land transfers. Can we develop a system that relieves this burden on each new generation of farmers and their families? Have we carefully explored the alternative patterns of land ownership and control? Have we appreciated the necessity for secure land tenure arrangements? I wondered whether Europe provides any lessons for us. Note I said lessons, not patterns or example.

Do we already have a system of family landed gentry in America? Should we be concerned if new entrants, without farming background, want to farm? Should our policies make it possible for these people to get into agriculture or should agriculture be reserved only for those born to it?

While persons at the seminar seemed to agree that readjustment was taking place in agriculture, they did not spend much time looking at the cost of land to rent and how the landowner is going to share with the renter in the readjustment that obviously is taking place.

The conference did not deal with the extent to which there is need for more integration of farm production with value-added through marketing, processing, or some other way if family farm cash flow is to be improved. The conference almost completely ignored the impact of the present farm situation on the income and structure of rural communities. They are important issues.

A Look Back and a Look Forward

History tells us that farm numbers and farm population have declined for a long time. We know that we are going to continue to have research and extension programs that deal with those

who remain in agriculture as we have traditionally known it. But do we need more research and extension programs that emphasize how to help them to develop and maintain a new life that retains a connection with the rural community and the social values that rural people cherish? Should we be actively trying to make it possible for as many people to stay in the rural areas as possible?

New policy ideas come and go. The marketing loan is a new concept that may need more time. It seems worthy of additional study. Perhaps it will be refined and modified through compromise and brought back later as an acceptable policy tool.

For every policy implemented there is a consequence. Bruce Bullock gave us an excellent analysis of this. Do we look carefully enough at the consequences of the policies we adopt?

How much domestic protection for U.S. agriculture is appropriate? In dairy production it seems fairly well accepted. In sugar it is more in question. Perhaps one of the reasons is that with corn sweeteners our need for domestic production for security is lessened.

Technology is with us. New technologies will arise and not infrequently they will tend to change the regional patterns of production. How do we deal with this? Patterns of the past can be frozen to the detriment of other areas. Peanut quotas and tobacco quotas are examples. Do we want these to continue? The same questions can be asked of milk in the South. Does it make sense to shift production out of the Lake States?

This conference failed to deal with changes in dietary habits. Food is not just food. Market demands are changing. What effect should these have upon our policies?

A Parting Word

In the seminar we dealt with some important issues. There was not time to deal with all of them. Much work is left to be done. The task is not complete.

Farmers, agribusinessmen, and indeed all citizens need to be alert to the issues, the choices, and the consequences of the choices. The Breimyer Seminar and forums like it should help do that. Only knowledgeable, informed people can understand and make intelligent decisions.