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Breimyer Seminar

Philippe Raup

11 Jan 1988

AGRICULTURAL POLICIES: THE NEW REALITY

**Report of Seminar
College of Agriculture
and Extension Division
University of Missouri-Columbia
November 12-13, 1987**

**Special Report 370
Agricultural Experiment Station
University of Missouri-Columbia**

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AGRICULTURAL POLICIES: THE NEW REALITY

In November 1987, as it has done for 15 years, the College of Agriculture and the Extension Division of the University of Missouri-Columbia presented a seminar, open to all interested persons, on a timely topic in agricultural policy.

The term "Agricultural Policies", chosen for this year, hardly is new or definitive. To it was added, "The New Reality." The first day's program was devoted to the new reality in design of agricultural programs. The morning of the second day carried the title of the new reality in financing agriculture.

As the passing of time is itself innovative, any reality is new. An interesting feature of the talks and papers given at the seminar is that nearly every speaker chose a different version of what was new in the reality of the day. Ideas ranged from the stock market break of October 19, 1987, to heightened international considerations in farm policy, to the "reality" that confronts all participants in the political process as they find they must match wits and influence with representatives of many groups only marginally related to agriculture.

The 1988 seminar is scheduled for November 17-18. Suggestions for a topic are welcome. The annual seminar is funded from the Breimyer Seminar Fund, a part of the UMC Development Fund.

-- Robert Bevins

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THE STATE OF THE AGRICULTURAL ECONOMY

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Professor of Economics
Iowa State University

U.S. agriculture has been through nearly a decade of economic and financial turmoil. The principal causes have come from outside the sector. Since the 1960s, U.S. fiscal and monetary policy has had far-reaching and profound effects on the agricultural sector. Indeed, a major thrust of U.S. farm policy has been to counter the unfriendly economic environment generated by the policies contributing to inflation in the 1960s and 1970s, the restrictive monetary policy of the late 1970s and early 1980s, and the highly stimulative fiscal policy of the current decade. The impact of these policies on domestic interest rates, the value of the dollar, trade patterns, resource values, and the institutions providing credit to agriculture has been dramatic and has caused long-term effects on agriculture.

The agricultural sector has emerged from more than two decades of less than rational fiscal and monetary policies with two serious problems --

- * A non-sustainable debt load, concentrated heavily on about one-third of the farmers;¹ and
- * An overproduction of basic agricultural products that is now global in scope.

The first problem is short term in nature and is expected to persist for two to three more years. The second is long-term and stretches "as far as the eye can see" into the future.

The Setting

Rapid economic and social change in agriculture is not a new phenomenon. Since the beginning of recorded history, agriculture has been adjusting to conditions of greater efficiency. As a consequence, the percentage of the population and the percentage of the capital stock needed to produce food and fiber products have declined steadily. The reduction has been especially marked since the 1930s as developments in plant and animal breeding and machinery and chemical usage, and improvements in the level of management ability of farmers, have combined to cause an acceleration in the movement of labor out of the sector. Agriculture has truly been a development sector as the industry has "downsized" itself in relative terms, freeing labor and capital for use in the nonfarm economy.

The development occurring in agriculture has been enormously beneficial to the general economy, permitting the allocation of resources to a burgeoning service sector and to high technology manufacturing. Had agriculture been frozen by the implementation of highly protective policies in the condition it was in as of the early 1920s -- the beginning of two decades of severe economic trauma for agriculture -- society could have been denied the resources needed to support the enormous development effort of the past half century.

The Debt Problem. However, what has occurred in agriculture in the past five years in terms of firms failing because equity is exhausted or operating credit is denied, has had little to do with efficiency and does not represent a continuation of the long-term trend toward greater efficiency in agriculture. In fact, the firms at risk have been some of the most efficient in the industry and were operating at or near the minimum point on the long-term average total cost curve except for one factor: the amount of debt held and interest obligation on it were excessive as measured by the economic environment of the 1980s. Those who survive are not necessarily the most efficient and in fact tend to be the older, more cautious farmers with smaller operations and little or no debt. Thus, the phenomenon has cut across farm and ranch firms in a highly arbitrary manner.

¹Harl, Neil E., "Architecture of Public Policy: The Crisis in Agriculture," 34 Kan. L. Rev. 425 (1986).

U.S. agriculture since 1981 has been through the most wrenching financial adjustment in a half century. Not since the 1930s have issues of debtor distress gripped rural America as they have in the 1980s.

* In several agricultural states, land values have dropped by more than 60 percent since 1981, cutting enormous amounts of collateral value and wealth from balance sheets and increasing the economic vulnerability of even those who survive.

* The numbers of farm foreclosures, forfeitures of land contracts, and defaults on notes have reached levels not seen since the days of the Great Depression.

* The level of emotional trauma being suffered by indebted farmers and small business persons has been a tragedy of awesome proportions.

The scope of the problem is much broader than farms. Although economic stress gained a foothold among the more heavily indebted farmers, the phenomenon escalated sufficiently to threaten the entire rural community. Diminished economic vitality in rural communities as purchases have been deferred and as employment has been lost has led to failing businesses and reduced ability to support governmental services. The effects on school districts, health care delivery systems, local units of government and other rural area institutions have tended to lag the effects on farm firms but are nonetheless substantial. In some rural areas they may lead to a significant reduction in the quality of life.

The data make it clear that the problem is almost national in scope. The severity varies from area to area, and the upper midwest has suffered the most, but agricultural stress has existed in almost all areas of the country.

Why the Problem Exists. It would be an unwise use of time to focus a great deal of attention on who is responsible for the plight of rural communities. Finger-pointing and accusations of culpability will do little to remedy the situation. But in choosing remedial policy instruments, it is important to recognize the roots of the problem. Two principal categories of forces are responsible for much of the economic woes of agriculture -- (1) three major federal policies that created an economic environment highly unfavorable for agriculture and other sectors that are both capital intensive and export sensitive, and (2) forces operating at the farm or ranch level that moved some firms into a "window of vulnerability." Once within the window of vulnerability, the unfavorable economic environment was sufficient to move the firms inexorably toward insolvency.

Federal Policies. As noted, three federal policies operating over nearly two decades created an economic environment that in the 1980s has been highly unfavorable for agriculture. Although agriculture is not alone in being impacted adversely, the characteristics of a relatively low cash rate of return for many farm assets, a high level of capital intensity for U.S. agriculture, and sensitivity to changes in export supply and demand conditions in international farm commodity markets have magnified the impacts upon farm firms.

* The first federal policy contributing to the unfavorable economic environment for agriculture was the set of policies over five different federal administrations that came to treat inflation as an expected part of economic life. The relatively high rate of inflation from the budget strains of the Vietnam conflict was compounded by the effects of rapid increases in energy costs after 1972. By the late 1970s, the persistence of inflation in the economy had led to widespread efforts at accommodation. The most common strategy for accommodating inflation was to index one's economic fortunes to the rate of inflation. Thus, social security benefits and taxes were indexed, Presidential authority was granted to adjust federal civil service compensation levels, and many labor union contracts were indexed. Then, beginning in 1985, the entire income tax system was indexed.

Farmers were unable to index with the same degree of effectiveness. In some instances they accelerated the purchase of capital assets in the face of consistent increases in the cost of machinery and equipment and in the price of land. The differential effect of the two responses to inflation became painfully clear in the early 1980s. Indexing is a benign strategy in an era of declining rates of inflation. Anticipating the purchase of capital assets is not benign and leaves the purchaser with financial commitments to be met.

The experience of the inflationary era of the 1960s and 1970s makes it clear that an enormous price is paid when expectations about conditions that should be viewed as aberrational in nature harden into a belief that the condition is permanent.

* The second important factor was the decision by the Federal Reserve Board in October of 1979 to wring inflation out of the United States economy. The action, to limit the supply of credit, led almost immediately to high nominal rates of interest which eventually served to dampen the level of economic activity. In the 1980s, inflation dropped from the 13 to 15 percent range to two to three percent. Thus, the gains from inflation that were substantial during the decade of the 1970s were dramatically reduced, leaving farm debt to be serviced largely from current income.

* The third significant factor contributing to an unfavorable economic environment for agriculture in the 1980s appears to have been the enactment of the Economic Recovery Tax Act of 1981. That law cut federal revenues so sharply as to assure massive budget deficits. The 1981 legislation was enacted with the realization that an estimated \$872 billion in revenue would be cut from the federal tax system through fiscal year 1986. Cuts of that magnitude assured that the outcome would be massive federal budget deficits.

The result of these policies has been an economic environment of low inflation and record-setting real interest rates, as tight credit and strong private sector demand for capital have maintained interest rates at elevated levels. For agriculture, the result has been -- (1) a strong dollar that has set records against other currencies and that has cost U.S. agriculture dearly in terms of exports of farm commodities, (2) high interest rates that have boosted the cost of production for indebted farmers to high levels, and (3) falling land values as potential investors have been confronted with the reality of 8 to 12 percent real interest rates and the reassessment of land as an alternative investment in the economic environment of the 1980s.

Factors Contributing to Farmer Vulnerability. In the economic environment of the last four or five years, any factor that made a farmer vulnerable by increasing the debt load was sufficient to assure economic difficulty. It was the resulting "window of vulnerability" that set the stage for financial stress.

* Beginning farmers are almost always vulnerable the first several years of operation. Part of the uniqueness of family farms is that families accumulate most of the equity capital for the firm from earnings. The result is economic vulnerability during the first several years of life of farm firms. That has certainly been the case in the 1980s.

* Adverse weather conditions in some areas with consequent loss of part or all of a crop have been costly to farmers affected. For some areas, agriculture has experienced an unusual sequence of adverse weather conditions beginning in 1980, both too wet and too dry.

* Losses in cattle feeding in the 1970s and even losses in hog production (except for the past year) have increased debt loads and, thus, vulnerability. For almost half of the months over the last five years, hog production has been at a loss. Losses in cow-calf enterprises in recent years have been perhaps less visible but no less devastating.

* Expansion to bring a family member into the operation has increased debt loads. The economics of farming in recent years has encouraged the continuation of family operations with ownership and management transferred to the next generation.

* Major purchases of land, machinery, or livestock facilities in the late 1970s and early 1980s were factors increasing economic vulnerability.

Any event or series of events that placed a farmer in the window of vulnerability has proved to be economically devastating. Once in that window, high real interest rates have moved the firm toward insolvency at a breathtaking pace.

Impact of Turmoil in Financial Markets. The turmoil in financial markets of late 1987 is believed to be attributable principally to the enormous federal budget deficits and the persistently high trade deficit that have come to traumatize U.S. policy makers faced with politically difficult and economically painful choices. Clearly, the central problem facing this country is a prompt and orderly resolution of the budget deficit. As indicated in testimony more than two years ago to the U.S. House of Representatives Ways and Means Committee, the budget deficit has for some time been a matter of serious national security with the country more at risk

from internal economic damage than from any external threat. As stated in print on September 29, 1981,² and as reiterated in slightly different form in testimony before the Joint Economic Committee on May 10, 1984,³ the tax cuts in the Economic Recovery Tax Act of 1981 should properly be viewed as a highly irresponsible Congressional act at the irresponsible urging of the Administration. If not addressed promptly and with substantial effect, the prospect is for escalating economic and financial turmoil.

The initial effects of financial turmoil may be grouped into five categories.

* In any significant financial market travail, holders of capital tend to respond to perceptions of uncertainty of outcome and increased financial risk with a flight of capital to relative safety. Thus, capital in weaker equity investments tends to flee to stronger equities and capital in equities generally tends to flee to debt securities, particularly government instruments. The expected outcome is to drive up the value of traded debt securities and to drive down interest rates. Depending upon the era and the perceptions of associated risk, capital may flee to real estate. With farmland just having been through a 50 to 65 percent decline in value in the past six years, it is doubtful if a substantial amount of investor capital will move to farmland investments in response to turmoil in financial markets.

If the level of financial travail does not rise significantly, this effect of interest rates may predominate.

* If financial turmoil becomes substantially more severe, the probability of capital flight across national boundaries is expected to increase. Thus, if the turmoil comes to be viewed by foreign investors as a matter of loss of confidence in the U.S. economy or a loss of confidence in those who manage the U.S. economy, flight of capital from this country would be expected to lead to higher interest rates to ration available capital, induce higher levels of savings, and entice foreign capital back to this country. The United States is highly vulnerable to transnational capital flight in light of heavy and growing dependence upon foreign capital to fund current and accumulated deficits.

* Unlike the late 1920s and early 1930s, the Federal Reserve Board is expected to relax monetary constraints in times of financial turmoil to a degree appropriate with providing ample liquidity for the financial system. Such moves are generally inflationary in nature and could lead ultimately to significantly higher levels of inflation. A side effect of higher rates of inflation, of course, is to cheapen debt which is important for Third World debt repayment as well as for domestic U.S. debt.

The specter of economic contractions of the type experienced following the 1929 turmoil in financial markets seems less likely than an inflationary outcome.

²See D. Yepsen, "Jepsen Backs Taking Step Leading to Gold Standard," Des Moines Register, September 29, 1981, pp. 1A, 4A:

"...[T]here is 'no hope of covering the deficit' that is being created by the Reagan tax cut....That cut will come to be viewed 'as the most irresponsible Congressional action of this century.' He added, 'and I pick these words intentionally.'"

³See N. Harl, "Statement Presented to the Joint Economic Committee, United States Congress," in Taxes and Agriculture, S. Hrg. 98-1049, Joint Economic Committee, May 10, 1984:

For many farmers and ranchers, the economic pain from continuing high interest rates dwarfs any possible combinations of benefits from the tax cuts from the Economic Recovery Tax Act of 1981....The realization is becoming clearer to taxpayers that a macro price of enormous proportions is being paid for what at first blush appear to be highly attractive benefits from a micro perspective.

As we pointed out in print in August and September 1981, the Economic Recovery Tax Act of 1981 was the most irresponsible Congressional act of this century....We are now inclined to reconsider that statement. We now believe it was the most irresponsible Congressional act in the history of the republic. As a matter of tax policy, nothing now ranks with restoring a sense of fiscal sanity to the economy of this country. A severely and chronically unbalanced budget is a matter of national security.

* Turmoil in financial markets is expected to lead to a general perception of uncertainty by consumers as to future levels of employment and economic activity. It is anticipated that this effect will be relatively widespread, well beyond those with a direct financial stake in financial markets. The impact is expected to be greatest for easily deferrable purchases such as housing, automobiles, major household investments, and vacation spending. The same outcome is expected for capital investment and expenditures in the business sector.

The almost inevitable result is a slowdown in economic activity. Indeed a recession of significant proportions is anticipated within the next year. It is noted that declines in the stock market have preceded the onset of recessions by an average of about eight months.

As will become painfully obvious if a recession develops, the United States is not well positioned to weather a major recession. The usual prescription for cushioning the effects of a recession and to induce recovery is to engage in deficit spending. That strategy has been used without interruption since the last recession. The outcome could well be a federal budget deficit at double present levels if deficit spending is utilized as a major policy tool in the next recession as is almost certain.

* Finally, the nature of the financial trauma of late 1987 suggests unequivocally that federal budget deficits do indeed matter and are the major disequilibrating force in the economy. The message to the Congress and to the Administration is that substantial closure of the budget deficit is imperative if even worse turmoil is to be avoided. Cuts in federal spending and increases in taxes to accomplish that result must be large and genuine. The precarious condition of financial markets world-wide will not be improved by token efforts to close the deficit or by nominal reductions with little substance.

The outcome will likely be tax increases and cuts in several program areas including federal farm price and income support programs. The extent and nature of the reductions in level of funding for farm programs will have a significant effect upon the way the agricultural sector weathers the final stages of the farm debt crisis.

Spending cuts and tax increases are generally viewed as contractionary in nature and thus are consistent with a recessionary hypothesis. However, the perceptions of financial sector problems are such that, in the current environment, spending cuts and tax increases should be viewed in a decidedly positive light, long term.

Global Perspective

Surely no one needs to be reminded that U.S. agriculture has been "internationalized" by its stake in international trade in agricultural products. U.S. agricultural exports reached a peak of \$43.8 billion in 1981. By 1986, that figure had dropped to \$26.3 billion before rising slightly in 1987. At the same time, imports of agricultural products have been rising and totaled \$20.9 billion in 1986, with a modest decline in 1987. Clearly, policies pursued in the early 1980s placed U.S. commodities at a competitive disadvantage in international trade.

Efforts to become more competitive internationally by lowering commodity loan rates in the Food Security Act of 1985 will likely discourage additional land in other countries from being brought into production. Moreover, the United States may gain a larger share of new demand.

However, due in part to the fact that the U.S. dollar remained high for an extended period (1981 through early 1985 before commencing a decline), agricultural productivity in other countries has increased sharply in the past decade. A great deal of use has been made in other countries of modern technology, much received from the United States. The world has experienced unusually favorable weather conditions for grain and oilseeds production in the major producing regions. Table 1 traces the increase in production for corn, soybeans, and wheat in the United States and for the world from 1976-77 through 1986-87. As can be seen from the table, the increase in U.S. corn production during that period was 33.8 percent while world production was increasing 41.7 percent. For soybeans, U.S. production rose 56.0 percent but global production was rising 61.1 percent. For wheat, the world production increased 20 percent while U.S. production remained nearly constant.

For two principal reasons, producers elsewhere are unlikely to remove land from production in the face of the new-found enthusiasm in the United States to become more competitive internationally.

Table 1. Production of Selected Commodities, 1976-1986

Year	Corn		Soybeans		Wheat	
	U.S.	World	U.S.	World	U.S.	World
-----millions of metric tons-----						
1976-77	157.9	336.3	35.0	61.4	58.5	421.2
1977-78	161.8	364.9	47.9	72.6	55.7	384.2
1978-79	184.6	390.0	50.9	77.4	48.3	446.8
1979-80	201.7	423.7	61.7	93.8	58.0	423.3
1980-81	168.8	406.8	48.8	80.7	64.6	441.1
1981-82	208.3	437.4	54.1	86.1	76.1	448.2
1982-83	213.3	437.7	59.6	93.6	76.4	472.9
1983-84	106.0	350.0	44.5	83.2	65.9	489.4
1984-85	194.5	445.3	50.6	93.0	70.6	516.0
1985-86	225.2	481.4	57.1	96.3	66.0	502.8
1986-87 (est)	211.2	476.5	54.6	98.9	58.9	505.6
-----percent-----						
Increase over 1976-77	33.8	41.7	56.0	61.1	--	20.0

Source: Commodity Research Bureau, Commodity Year Book, and USDA.

* It is not rational to remove land from production until price drops below variable costs. That is not likely to happen in view of the level of variable costs in most producing regions and the commodity loan rates possible under the Food Security Act of 1985.

* Several producing countries are sufficiently indebted to external creditors to assure that pressures to export agricultural products will be intense for some time to come. Total Third World debt at the end of 1985 was reported by the World Bank at nearly \$950 billion and exceeded \$1 trillion by the end of 1986. The 33 most heavily indebted Third World countries owe more than \$650 billion to external creditors and 31 of the 33 projected an increase in debt load in 1987 over 1986.

The outcome internationally could well be a lowering of commodity prices, benefitting consumers and giving rise to a modest increase in the quantity demanded, but with little change in market shares. Other countries may simply adjust to our lower price structure by maintaining competitive prices. The question then becomes which countries are willing (and able) to insulate their farmers from internationally competitive commodity prices.

The Debt Load in U.S. Agriculture

Never in the history of U.S. agriculture have problems of debtor distress been marked by so high a degree of heterogeneity in financial condition among farmers and ranchers as has been true recently.

Amount and Distribution of Debt. The amount of debt in U.S. agriculture has increased dramatically since 1950, as shown in Figure 1.⁴ Total farm debt outstanding in 1950 was \$11.2 billion. It rose to over \$216 billion in 1983 before commencing a decline in 1984 as some debt was paid off or discharged otherwise and as the economic environment has discouraged the contracting of new debt. Total debt stood at about \$188 billion at the end of 1986 and will likely have dropped below \$170 billion at the end of 1987.

The rate of increase in personal, business and federal government debt has been similar, as shown in Figure 2.

⁴Data are from Financial Characteristics of U.S. Farms, January 1, 1985, Econ. Res. Serv., U.S.D.A., Agr. Inf. Bull. No. 495, July 1985, and Table 1.

Figure 1
Net Farm Income and Debt

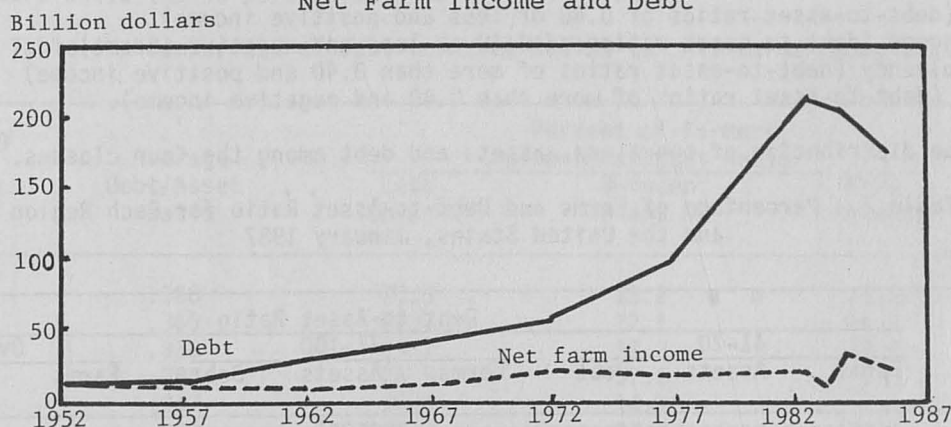
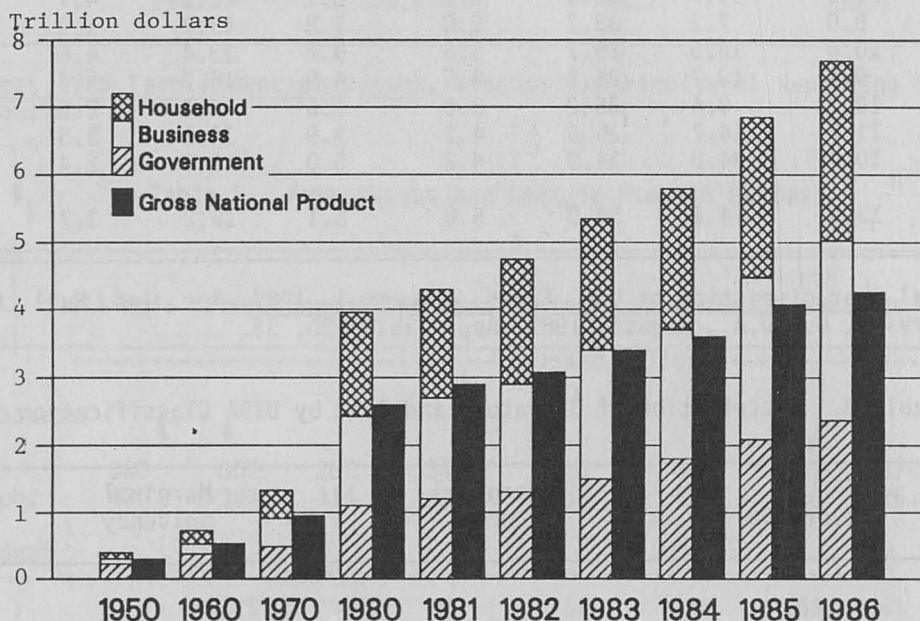


Figure 2
National, Personal, and Business Debt



Sources: Federal Reserve Board and U.S. Dept. of Commerce

Extent of Financial Stress. As of January 1987, nearly 22 percent of the farmers nationally had debt-to-asset ratios of greater than 40 percent (Table 2). They were responsible for more than 67 percent of the farm debt.⁵ In general, it has been thought that farmers with debt-to-asset ratios below 40 percent would be able to service their debt and pay other costs even in a setting of real interest rates as prevailed in the mid-1980s.⁶ Recent data raise a question about that assumption, as some farmers below the 40 percent line have moved toward insolvency.

⁵ See Financial Characteristics of U.S. Farms, January 1, 1987, Econ. Res. Serv., U.S.D.A., Agr. Inf. Bull. No. 525, August 1987, App. Table 30.

⁶ Some firms, because of unusually capable management, unusually good production records, or unusually favorable price for output have returns to equity high enough to be economically and financially stable even with debt-to-asset ratios above 40 percent. See A. Joseph and R. Reinsel, "The Financial Condition of Agriculture: An Income Analysis," paper presented at Annual Meeting of the American Agricultural Economics Association, Reno, Nevada, July 28, 1986.

In terms of both income and solvency, USDA classifies farms into four groups⁷ --

Favorable (debt-to-asset ratios of 0.40 or less and positive income)
 Marginal income (debt-to-asset ratios of 0.40 or less and negative income)
 Marginal solvency (debt-to-asset ratios of more than 0.40 and positive income)
 Vulnerable (debt-to-asset ratios of more than 0.40 and negative income).

Table 3 shows the distribution of operators, assets and debt among the four classes.⁸

Table 2. Percentage of Farms and Debt-to-Asset Ratio for Each Region and the United States, January 1987

	Debt-to-Asset Ratio								
	41-70			71-100			Over 100		
	Farms	Assets	Debt	Farms	Assets	Debt	Farms	Assets	Debt
	-----percent-----								
Northeast	10.9	7.6	33.8	--	--	--	--	--	--
Lake States	18.1	20.6	34.9	8.4	9.4	24.7	5.1	3.8	17.2
Corn Belt	13.9	17.4	34.3	6.5	6.1	18.8	5.0	3.8	17.2
Northern Plains	20.2	19.7	34.4	8.0	8.1	22.2	4.7	2.6	13.3
Appalachian	8.0	7.1	33.2	2.0	1.8	13.7	1.9	0.7	7.7
Southeast	10.6	12.9	29.7	1.6	9.2	33.4	4.6	1.3	11.9
Delta States	9.4	10.7	26.8	4.5	4.9	18.7	5.4	2.1	19.0
Southern Plains	10.7	9.4	35.2	3.0	1.6	9.1	2.5	1.6	20.1
Mountain States	11.5	14.7	35.0	4.2	3.9	14.1	3.5	1.6	10.4
Pacific States	10.4	34.0	34.9	4.2	5.0	18.3	2.4	0.7	7.1
United States	13.0	14.1	34.0	5.0	5.1	19.2	3.7	2.0	13.9

Source: Financial Characteristics of U.S. Farms, January 1, 1987, Agr. Inf. Bull. No. 525, Econ. Res. Service, U.S.D.A., August, 1987, App. Tables 30, 33.

Table 3. Distribution of Operators and Debt by USDA Classification

	Favorable	Marginal Income	Marginal Solvency	Vulnerable
	-----percent-----			
Operators	47.41	30.96	11.12	10.51
Debt	22.66	10.27	32.06	35.02

Source: Financial Characteristics of U.S. Farms, January 1, 1987, Agr. Inf. Bull. No. 525, Econ. Res. Ser., U.S.D.A., August, 1987, Table 11.

A survey of nine Midwest states in early 1986 focused on the financial condition of farmers.⁹ As shown in Table 4, 28.1 percent of the farmers reported debt-to-asset ratios above 40 percent. In Iowa, the figure was 38.3 percent.

⁷ Financial Characteristics of U.S. Farms, January 1, 1987, Econ. Res. Serv., U.S.D.A., Agr. Inf. Bull. No. 525, August 1987.

⁸ Financial Characteristics of U.S. Farms, January 1, 1987, Agr. Inf. Bull. No. 525, Econ. Res. Ser., U.S.D.A., August 1987, Table 11.

⁹ Midwest 1986 Farm Finance Report, Wisconsin Agricultural Reporting Service, Madison, Wisconsin.

Of the farmers reporting debt, 45.6 percent in Iowa (and an average of 38.1 percent for the nine states) were above the 40 percent mark as shown in Table 5.

Table 4. Comparison of Debt-to-Asset Ratios for All Farms Among States

States	Average Debt/Asset Ratio	Percent of Farmers with Debt/Asset Ratio			Percent Quitting 1986
		Less than 40	Between 40 and 69	More than 69	
Illinois	.308	70.6	18.2	11.2	5.0
Iowa	.369	61.7	22.1	16.2	4.9
Kansas	.318	69.2	18.3	12.5	5.6
Michigan	.286	76.9	17.6	5.5	4.3
Missouri	.247	78.8	14.1	7.1	6.0
Nebraska	.343	63.2	23.0	13.8	6.4
North Dakota	.347	62.2	23.1	14.7	3.0
Ohio	.212	82.8	12.6	4.6	5.0
Wisconsin	.262	74.7	18.7	6.6	4.4
Nine states	.294	71.9	18.1	10.1	5.1

Source: Midwest 1986 Farm Financial Report, Wisconsin Agricultural Reporting Service, Madison, Wisconsin.

Table 5. Farm Assets and Debt in Midwest States

Item	Illinois	Iowa	Kansas	Michigan	Missouri	Nebraska	North Dakota	Ohio	Wisconsin	Nine States
-----Thousand Dollars-----										
Average total assets										
All farms	380	367	282	347	228	426	447	287	357	334
Farms with debt	420	392	314	413	253	457	470	326	404	369
Average total debt										
All farms	117	135	90	99	56	146	155	61	94	100
Farms with debt	159	179	131	151	94	181	188	104	133	142
Debt-to-asset ratio										
All farms	30.8	36.9	31.8	28.6	24.7	34.3	34.7	21.2	26.2	29.4
Farms with debt	37.8	45.6	41.7	36.5	37.0	39.6	40.0	31.8	32.9	38.1.

Source: Midwest 1986 Farm Finance Report, Wisconsin Agricultural Reporting Service, Madison, Wisconsin.

By focusing on the farm business, Lines and Morehart¹⁰ found the state of financial stress to be much greater than reported when off-farm income is eliminated and account is taken of inventory

¹⁰See Lines, A., and M. Morehart, "Financial Health of U.S. Farm Businesses: A Region, Type, and Size Analysis," paper presented at the Annual Meeting of the American Agricultural Economics Association, Reno, Nevada, July 28, 1986.

changes, depreciation, and unpaid family labor. In that analysis, 70 percent of all farms and 40 percent of commercial farms had "poor financial health" and were in "serious financial difficulty."¹¹ As the authors note, "policies grounded in the concept that the economic well-being of farm businesses includes off-farm income, foster a farm sector dependent upon off-farm income and unable to pay all its expenses."¹²

The data make it abundantly clear that enough assets and debt are held by farmers who are unstable economically to assure that liquidation of collateral and loan-restructuring are likely to continue unless -- (1) farm incomes remain high, (2) real interest rates for agricultural lending decline significantly, or (3) major public-sector intervention stabilizes the agricultural sector.

The impact of debtor distress on lenders has been substantial. In 1985, the Farm Credit System incurred a \$2.7 billion loss, the largest one-year loss of any U.S. financial institution. The loss for 1986 was \$1.9 billion. A total of 68 agricultural banks failed in 1986, out of a total of 138 failed banks. The concentration of debt among the most heavily indebted farmers indicates that further deterioration of financial condition of the most vulnerable lenders is likely.

* Commercial banks hold more than 29 percent of operator debt with more than 61 percent of those loans owed by operators above a 40 percent debt-to-asset ratio. Just over 11 percent of their debt is owed by insolvent farmers.

* Federal Land Banks, with just over 20 percent of operator debt, have more than 67 percent owed by operators above the 40 percent line. Nearly 13 percent of their debt is owed by insolvent farmers.

* The Farmers Home Administration, holding just over 14 percent of the debt, has more than 84 percent concentrated in the hands of operators with debt-to-asset ratios above 40 percent. More than 30 percent of the debt held by FmHA is owed by insolvent farmers.

* For Production Credit Associations, with just over six percent of the operator debt, slightly more than 60 percent is owed by operators with debt-to-asset ratios above 40 percent. A total of 12 percent of their debt is owed by insolvent farmers.

Table 6. Distribution of Debt Owed by Farm Operators

Lender	Percent of Operator Loans	Percent of Loan Portfolio Owed by Operators with Over 40 Percent Debt-to-Asset Ratio
Commercial banks	29.3	61.5
Federal Land Banks	20.3	67.3
FmHA	14.3	84.4
Production Credit Associations	6.4	60.4
Commodity Credit Corp.	7.3	60.8
Merchants and dealers	1.1	59.5
Life insurance companies	2.7	78.6
Other individuals	12.6	64.0
Other lenders	6.1	69.6

Source: Financial Characteristics of U.S. Farms, January 1, 1987, Econ. Res. Serv., U.S.D.A., Agr. Inf. Bull. 525, August 1987, Table 16.

¹¹For the criteria for classifying farm businesses into seven categories, see A. Lines and M. Morehart, note 10, Table 1. Categories six and seven were considered to include firms with "poor financial health."

¹²Lines and Morehart, supra note 10 at 16.

As loan losses have mounted, farm lenders, in their role as brokers of funds, have "socialized" the costs involved by maintaining interest rates for farm loans several points above normal equilibrium rates. This has been made possible by the diminished competition in rural areas among lenders as loan rates have risen. As a consequence, borrowers not in financial difficulty are paying a substantial part of the costs of those unable to pay principal and interest when due.¹³

The Sharing of Losses

In the past five years, agricultural finance in the United States has been dominated by efforts to minimize the sharing of losses. Even though the amount of debt has been in a clear downward trend since 1983, the amount and concentration of debt suggest that the loss-sharing process will likely continue for another two to three years before substantial equilibrium is reached.

The phenomenon of loss sharing has created problems and perspectives on agricultural finance that have not been experienced in a half century. The effects have been particularly significant for the legal or institutional side of agricultural lending. Participants in credit extension share cheerfully in gains without much attention to legal niceties. But no one shares in losses unless legally obligated to do so.

The Loss Sharing Process. As collateral values have fallen and cash flows have proved to be inadequate, lenders have been thrust into the unaccustomed role of "brokering losses." Losses are being shared among several parties in the adjustment process -- (1) the borrower who is in default and unable to make payments, (2) the lender, (3) other borrowers, and (4) the federal government.

* The sharing of losses by the borrower and the lender is traditionally straightforward and to be expected. After default on loan obligations, the borrower often loses all assets other than exempt property. With respect to any residue of loss remaining, the lender loses to the extent collateral values are less than the amount owed.

In the current era, however, the sharing of losses is no longer completely traditional, as the rules have been modified legislatively.

* Borrowers not in financial jeopardy are contributing to the adjustment process as interest rates have remained elevated to cover loan losses and to reflect diminished lending competition in rural areas.

* The federal government has also participated in loss sharing directly through loan guarantees and indirectly as farm subsidy payments have risen to record levels and have added income buoyancy to the loss sharing process.

This "socialization" of losses is, to a degree, inconsistent with the traditional view that borrowers unable to repay principal plus interest suffer the consequences. In recent years, the process has necessarily and inescapably involved more participants because of the nature and magnitude of the problem.

Rules Governing Loss Sharing. From the beginning of the recorded history of lending, the institutional system has furnished the rules governing remedies upon default and the realization of creditors' rights. The traditional creditors' remedies have included foreclosure and forfeiture with Uniform Commercial Code default procedures added in a more recent time. Debtors have never been totally without rights, however, and in the modern era have been eligible for bankruptcy (Chapter 7 liquidation, Chapter 11 reorganization and Chapter 13 rehabilitation). In the 1930s, 28 states enacted statutes providing for moratoria on farm real estate mortgage foreclosure.

In the 1980s, the moratorium has received relatively little attention, perhaps because of the adverse impact on lenders and on lending and the realization that better intervention approaches could be fashioned to provide relief for debtors.

¹³Some commentators who focus only on the macro side of the farm debt crisis seem to have ignored this response by those suffering losses. See Gabriel, Stephen C., and Paul T. Prentice, "Fundamental Economics (Not Farm Policy) Now Drives Agriculture's Future," Choices, Second Quarter, 1986, pp. 40-41.

* One of the more successful interventions has been mandatory mediation, enacted in Iowa and Minnesota and considered in several other states. Early in the process, we observed that lenders, in pursuing their traditional remedies, were provoking greater losses to themselves than would be needed in the form of principal forgiveness or interest rate reduction to make the borrower economically and financially stable.

Mediation is a rational procedure to force the parties to examine both sides of the issue and, hopefully, to reach agreement on a rational outcome.

* Chapter 12 bankruptcy, discussed below, has become a part of the loss-sharing process. It enables eligible farm debtors to write down debt to collateral value if necessary to make the debtor stable. The amount of debt above collateral value is treated as unsecured debt which is substantially discharged. Under a typical Chapter 12 plan, less than 10 percent of the unsecured debt is paid.

Current Issues in Further Intervention

Chapter 12 Bankruptcy. When legislation enacting Chapter 12 of the U.S. Bankruptcy Code was signed into law on October 27, 1986 (effective November 26, 1986),¹⁴ it marked the most significant national step in farm debtor-creditor relations since the Great Depression.

Except for the federal Debt Adjustment Program announced administratively in 1984¹⁵ and the 1985¹⁶ and 1986¹⁷ legislation that was directed to the rapidly weakening condition of the Farm Credit System, the governmental response to the deteriorating condition of the most heavily indebted U.S. farmers has been mostly at the state level. From one perspective, that is not surprising. The balance of rights between debtors and creditors has traditionally been a matter of state law. Therefore, developments in the area of real estate mortgage foreclosure moratoria, mandatory mediation, modifications of the rights of creditors to pursue deficiency judgments, and amendments to property exemption rules have taken place at the state level.

Chapter 12, which also realigns the rights of debtors and creditors, does so on a uniform basis nationally within the context of bankruptcy law. The degree of utilization of Chapter 12, assuming that it survives constitutional challenge, will depend upon -- (1) the present and future economic condition of U.S. agriculture, (2) the approach taken by the bankruptcy courts in approving Chapter 12 plans, and (3) whether the Internal Revenue Code is amended to create a new tax entity for Chapter 12 filers.

What Chapter 12 offers is an additional bargaining tool encouraging a rational approach to loan review and liquidation. It is already clear to lenders in the most heavily stressed areas, and it is becoming clear everywhere, that it is not rational to force liquidation of a loan line with loss of perhaps 40 percent of the loan when forgiveness of a lesser amount of principal would make the borrower economically and financially stable. It is clear that borrowers who cannot be made stable will slide inexorably to insolvency. For those who can be made stable, under conditions somewhat less favorable than at present, survival may be a realistic expectation.

Arguably, Chapter 12 does not increase the hit taken by lenders but it does -- (1) require that the hit be taken sooner than the lender or the lender's examiners would have required, (2) preclude the lender from recovering more if the borrower's economic position improves (either because of better fortunes for agriculture or because Aunt Lillian dies), and (3) the lender loses some of the control traditionally held over the default-liquidation processes.

¹⁴Bankruptcy Judges, United States Trustees and Family Farmer Bankruptcy Act of 1986, Pub. L. No. 99-554, 100 Stat. 3088 (1986).

¹⁵See 49 Fed. Reg. 41,220, 41,223 (1984). The announcement outlined a four-part initiative. See also 11 Harl. Agricultural Law § 96.02[5][d] (1986); FmHA Instructions, Exhibit B to 1980-B, 7 C.F.R. § 1980.200 (1985).

¹⁶Farm Credit Act Amendments of 1985, Pub. L. 99-205, 99 Stat. 1678 (1985).

¹⁷Farm Credit Act Amendments of 1986. H.R. 5300, 99th Cong., 2d. Sess. (1986)

Ongoing research at Iowa State University confirms that the influence of Chapter 12 goes well beyond the number of filings, which is substantial, as shown in Table 7. The availability of Chapter 12 is influencing debtor-creditor negotiations outside bankruptcy.

The widespread and pervasive influence of Chapter 12 helps to build the case for intervention benefits favoring lenders. Borrowers may become stable either -- (1) by receiving interest payment assistance (generally assumed to come from government) or (2) by being the beneficiary of principal forgiveness or interest write down by lenders.

Restructuring the Farm Credit System. The rapidly deteriorating condition of the Farm Credit System assures that assistance is needed in 1987 if the system is to avoid financial instability. The amount, type, and timing of assistance all are critical variables in terms of the influence on long-term configuration of the system and on the extent to which the problems of heavily stressed

Table 7. Number of Chapter 12 Filings in the North Central Region
Since November 26, 1986

State	Number as of 1-31-87	Number as of 3-31-87	Number as of 5-31-87	Number as of 7-31-87	Number as of 9-30-87
Illinois	46	121	179	233	250
Indiana	30	74	153	199	216
Iowa	73	188	264	290	308
Kansas	59	102	139	210	244
Michigan	18	48	87	137	148
Minnesota	46	69	91	120	126
Missouri	18	109	172	206	225
Nebraska	96	220	409	491	556
North Dakota	25	51	74	87	113
Ohio	23	87	142	163	187
South Dakota	106	208	315	438	512
Wisconsin	38	89	129	154	179
Total	578	1,366	2,154	2,728	3,064

farm borrowers are addressed. To the extent that assistance is funded from amounts diverted from price and income support programs, an additional segment of borrowers is placed at risk as farm incomes decline, thus creating the need for targeted programs of intervention for borrowers.

Various patterns are possible and feasible for providing assistance to the Farm Credit System.

Any intervention effort, whether available to lenders or to borrowers, must at some point provide for determination of which farm operations are to be liquidated, which farm operations are to be restructured, and which farm operations are to be ineligible for intervention benefits. In all instances, an "upside" eligibility test is necessary to identify operations that are capable of being, or becoming, economically stable without intervention assistance and a "downside" eligibility test to identify operations incapable of becoming economically stable even with intervention assistance.

The Uniquenesses of Agriculture

I turn to the problems of overproduction. Three factors -- two on the supply side and one on the demand side -- complicate agricultural policy and set agriculture apart from most other sectors that produce goods and services.

¹⁸ See Harl, Neil E., "A Proposal for Interim Land Ownership and Financing Through an Agricultural Financing Corporation," 8 J. Agr. Tax'n & Law 19 (1986). The concepts were first discussed in Harl, Neil E., "Draft Proposal for Interim Land Ownership," Iowa State University, November 27, 1984.

* First, the demand for most agricultural products is relatively inelastic. Rice, for example, is a food item with one of the more inelastic demands, meaning that the demand curve is more nearly vertical. A five percent increase in the supply of rice would, all else being equal, be accompanied by a drop in price of nearly 35 percent.

In general, the shorter the time period for adjustment, the more inelastic the demand. Over time, as prices rise for commodities, substitutions with other commodities increase and demand becomes more elastic.

The phenomenon of inelastic demand means that fluctuations in supply are followed by disproportionately large fluctuations in price and in producer profit. For items with highly

inelastic demand, production is somewhat of a knife edge. If supply is reduced, price rises sharply. If supply increases, price plummets.

For goods subject to relatively elastic demand, by contrast, conditions of overproduction can be remedied by reducing price and increasing the quantity demanded. But in the case of most agricultural commodities, a reduction in price to deal with overproduction leads to only modest increases in the quantity demanded.

* The second major factor complicating agricultural policy from the supply side arises from the vagaries of weather. As a non-standard factor of production, weather alone can be and is responsible for substantial year-to-year variation in production of crops, especially grains. This feature of the production equation makes year-to-year planning with respect to agricultural production exceedingly difficult and justifies the construction and use of inter-year commodity storage facilities.

Coupled with inelastic demand, the production variability attributable to weather becomes a highly significant factor affecting commodity price levels and resulting profitability levels for producers.

* The third major factor complicating agricultural policy, also on the supply side, is the inability of individual producers to influence price levels as decisions are made on level of production. If automobile manufacturers observe that demand is easing for their product, the eventual response is to slow down production lines and, in extreme cases, halt production. That is because the level of production of individual firms affects price levels in the industry.

For agriculture, because of the nearly perfectly competitive nature of the sector, no single producer is large enough to influence price. Therefore, a perceived overproduction does not lead to decisions by individual farmers to reduce production. Such a sector may need external assistance in downsizing the productive capacity of the sector to deal with overproduction.

Adjustments Needed to Deal with Overproduction

It is clear that the fortunes of U.S. agriculture are heavily dependent on whether agricultural exports rise substantially above current levels. If that does not occur, long-term efforts must be made to -- (1) increase demand for U.S. farm products otherwise, or (2) reduce supply by removing more land and capital from the sector than has been proposed.

The prospects in the near term for increasing the U.S. share of the global markets in basic agricultural commodities are not particularly bright. In a world in overproduction, competitors in export markets are expected to reduce price along with, if not slightly ahead of, the United States, and to continue to sell whatever is produced. For many countries, there is no choice. Debt pressures are intense in many countries to generate export earnings to keep interest paid. In addition, many exporting countries lack facilities to store commodities.

A key question, long-term, is whether U.S. costs of production are significantly below those of other countries and, if not, whether the United States has the political will to make up the difference.

It is increasingly apparent that demand and supply cannot be balanced at 1987 price levels. The markets are sending clear signals that U.S. agriculture is utilizing too many resources to produce too much food under current economic conditions in terms of effective demand.

Prospects for Increasing Demand. The prospects for increasing the demand for food are not bright, as noted above. About a dozen countries would like to increase caloric intake and at least three dozen would like to upgrade diets. The problem is an economic one -- they cannot afford to eat better and probably will not be able to do so until they enjoy higher levels of economic activity. It's basically an income problem, a poverty problem, marked by low personal productivity of many individuals in those countries. Quite simply, they cannot produce enough goods of the type demanded by the rest of the world.

The best interests of U.S. agriculture would be served by supporting an accelerated pace of development in the Third World. If the United States maintains a comparative advantage in food production the United States should end up supplying at least part of any increase in food demand.

The possibilities for increasing industrial utilization of farm commodities are uncertain. When energy prices are at low levels, that solution is received with less enthusiasm because many industrial uses involve petroleum substitutes.

Reducing Supply. If demand does not increase substantially, the only alternative to burgeoning surplus stocks is to reduce production. That means reducing the amount of land and capital devoted to agricultural production.

Reducing the Number of Farmers. There is very little connection between the number of people in agriculture and the level of aggregate production. Reducing the number of farmers by 10 percent would have very little impact on total production.

Reducing the Amount of Land. The amount of land in production does affect the aggregate level of output. For more than five decades, the removal of land has been the principal means of dealing with overproduction in the United States.

Land can be removed from production in two ways: (1) by paying land owners to idle land, and (2) by letting the market system idle land as commodity prices fall, with the least productive land moving out of intertilled crops first.

Paying landowners to idle land on an annual basis or with multi-year land retirement is the least painful route to removing land from production but that approach creates a highly visible target for budget cutters.

If land is removed from production by market forces, it will mean that profitability everywhere must be squeezed so that profitability totally disappears from the least productive land. When commodity prices drop below the point where the revenue does not cover variable costs, land goes out of intertilled crop production.

A major question is at what level of commodity prices land shifts to its next most profitable use. For some agricultural land, the shift is from intertilled crops to grazing land. For other land, the shift may be from grazing land to waste land. Both shifts are extremely painful economically. Because land with lower levels of productivity is not distributed evenly over agriculture, the impact of shifts in land use tends to bear on some communities disproportionately. Total reliance on a market solution to agricultural overproduction could inflict an awesome adjustment burden on some communities. With some of the marginal areas heavily dependent upon the production of intertilled crops, a land use shift to grazing affects the economic fortunes not only of the farmer. Those who have invested in facilities to serve the input-supplying and output-processing needs in producing intertilled crops also experience substantial capital losses.

Reducing the Supply of Capital. Capital is more mobile and generally flows toward the greatest profitability. That means capital isn't too likely to flow into a sector with depressed earnings unless (1) it is induced by tax shelter incentives or (2) investment occurs in connection with a government public works program.

The message in that respect is clear: agriculture does not need tax-induced investment that would increase aggregate output. Increased output brings a disproportionate drop in price and in profitability. The attack on tax shelters in the Tax Reform Act of 1986 is indeed justified.

It is important to note that investment in an activity can have the same effect on aggregate output whether made by an outside investor or by a farmer. Many anti-tax shelter measures affect

farmers as well as outside investors and may in fact have a greater impact on output because of effects on farmers.

For the same reasons, agriculture does not need public works programs that would increase total output for commodities in surplus.

Planners Have Been Wrong Before

One need only look back three decades to find sobering evidence of massive miscalculations by experts in estimating food demand and supply. In the 1950s and early 1960s, much discussion focused on the need to "set the fifth plate" as rapid population growth threatened to engulf food supplies. In the early 1970s, the U.S. Secretary of Agriculture was exhorting farmers to "plant fence row to fence row." In 1980, one leading agricultural economist was quoted as saying --

...better days are just around the corner.

The agricultural sector in general has the most optimistic outlook that it has had in the last 80 years...

Rising land prices will lift farm prices in the future and...inflation will continue to drive up land prices. Also, the use of farmland for non-agricultural uses will force farm prices up as land becomes more scarce...

...a growing world population will continue to boost demand for food, which will help increase farm prices. Further, the world's per capita income is also increasing which should allow developing countries to purchase more U.S. grain.

Current projections, made in an era of global overproduction, may also turn out to be wide of the mark. While it is not possible to specify much about the magnitude of possible error in current projections, we can at least identify the principal areas of uncertainty.

* Population growth rates are major determinants of food demand, particularly in developed countries. A return to human fertility levels of the 1950s and earlier would alter projections.

* The pace of economic activity in the world is also a major factor affecting the demand for food. A return to the economic growth patterns of the 1970s would have relatively little impact on the demand for food in the United States, but sharply higher levels of income in Third World countries would boost the demand for food substantially.

* Interruption of oil flows from the Middle East would strengthen the demand for agricultural products as substitutes for petroleum.

* Adverse weather conditions in the major crop producing regions of the world would shrink supplies. While weather patterns of the last few years have been unusually favorable for food production, the probabilities are relatively low that adverse weather will be a major factor affecting global supply.

* The discontinuance or curbing of use of herbicides, insecticides, or chemical fertilizers because of perceived health hazards is also unlikely but could affect agricultural output if controls or limitations materialize.

* Major disasters leading to multi-year land retirements from nuclear accidents, while again low in probability, should also be included in developing world food policy. Several accidents along the lines of the Chernobyl incident, if occurring in major food producing regions, could alter supplies through direct radiation and contamination of water supplies.

The list could be extended, almost without limit. The key point is not so much the identification of specific factors that could affect the demand and supply of agricultural products; it is the cumulative uncertainty involved.

A Global Approach

With overproduction already occurring on a global scale, and with production of several major agricultural products increasing more rapidly outside the United States than within it, the

problems of managing overproduction for the United States alone are daunting. If the supply of agricultural products is reduced in the United States, producers in other countries are not likely to follow suit. Indeed, an aggressive program of production control in the United States could realistically lead to continued production increases elsewhere. The outcome could well be a sharp downsizing for U.S. agriculture and pressure to limit agricultural imports into this country.

This state of affairs provides arguments in favor of orchestrating national policies -- on a global basis -- to the end that -- (1) the necessary adjustment of resources out of agriculture is orderly and humane, (2) concerns about food security locally are addressed satisfactorily, and (3) agricultural policies are harmonized with other policies relating to trade, growth, and equity. A global food and agricultural policy is needed that would include shared responsibility for maintaining reserve stocks, implementing rational resource conservation policies, and pursuing enlightened policies of resource adjustment.

Quite clearly, a global food policy, at best, would be exceedingly difficult to develop and implement. Compelling arguments could be made that efforts in that direction could be futile.

Without a doubt, such an approach to managing food production problems on a world-wide basis would necessarily involve attention to several major factors.

* A global food production policy should involve consideration of the management of the Third World debt problem. Because of the necessity for heavily indebted Third World countries to maintain, if not increase, exports in order to be able to service their debt loads, pressure will remain strong to continue to increase agricultural output in those countries. The economic vitality of Third World countries will determine whether the "last frontier" in increasing global food demand -- low income Third World countries -- can fulfill the hope of increased effective demand for food.

This means that any movement toward a global food policy must necessarily involve the active cooperation of the U.S. Department of Treasury, the World Bank, the International Monetary Fund, and the Agency for International Development.

* A global food policy should be viewed as a policy leading to rational resource allocation and adjustment, not an "OPEC-type" control program. Any long-term program to limit production and deny the benefits of lower food cost to consumers would be viewed with almost universal disapproval on humanitarian grounds as well as on the purely practical grounds of inability to maintain agricultural commodity prices significantly above market-clearing levels. The probabilities are high that support for limiting global production sufficiently to maintain prices above market levels will not be great.

* A program of global food policy would necessarily involve attention to barriers to trade in agricultural products. Barriers to trade could be used to undercut negotiated commitments to adjust resources out of agriculture.

Inclusion of trade issues in global food policy would mean that cooperation of additional governmental agencies would be necessary for effective policy planning and implementation.

*Because of deeply-held concerns about food security in many countries, and because of the practical problems of year-to-year variability in food production everywhere, global food policy should also involve planning and funding for adequate food reserves.

Few persons quibble with the assertion that progress toward a global food policy would likely be painfully slow and would require the type of careful, patient diplomacy practiced in areas such as arms control. Moreover, a global food policy should be viewed as providing long-term solutions, not short-term. The need, however, for such a policy is great and growing. There are few practical alternatives to deal with with the prospects for almost certain increases in productivity in a world of uncertainty as to other factors affecting food demand and supply.

For those who would argue that the idea of a global food policy is impractical or ideologically repugnant, I can only say that planning has gone on in this area for years, but largely without much attention to agriculture. What is urged is a planning approach in which agriculture is a full-fledged participant along with major world financial, economic, and political interests.

Final Observations

We face now a series of critical decisions on the future of U.S. agriculture.

U.S. agriculture would be best served in the latter part of the twentieth century with stable, rational, globally-appropriate fiscal and monetary policies. The highest priority must be given to development and implementation of policies to reduce the federal budget deficit and to assure steady and long-term-sustainable economic growth in this country.

A shift of resources into Third World development and resolution of Third World debt problems would help to achieve the long-sought objective of alleviating world hunger and would provide long-term potential for increased demand for food. A shift of resources to these areas from defense would enhance the long-term security of this country.

If we see ourselves as being competitive internationally in a decade, our marching orders are clear: we must mount an absolutely unrelenting attack on production costs and transition toward being competitive on a largely unsubsidized basis. It won't be easy. For those who are heavily indebted it comes at the most difficult of times and special programs will be needed to assist that group.

I doubt that the government will ever recede completely from involvement in agricultural policy. In my view, it is not in the best interests of farmers or consumers for food production to be completely privatized. The maintenance of food reserves as needed to even out supply variations from weather, disease and other factors of that general type will continue to be the province of government. But the level of government involvement will likely recede from present levels.

THE PLACE OF DOMESTIC AGRICULTURAL POLICY IN AN INTERNATIONALIZED AGRICULTURE

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"The dominant tendency in the history of agricultural policy in the 20th century has been the development and refinement of protectionism in its many forms and guises. Since at least the first world war, the state has assumed an increasingly prominent role in the determination of the overall structure of agriculture... Free trade has not existed in agriculture in the 20th century..."

"...it is unlikely that a move to free trade is possible. The prospects for a managed agricultural trade, although rejected by the USA, appear once again to be in prospect."

-- John Cathie, Food Policy, Feb. 1985

Every moment in time is an instant intervening between the completed past and the expectant future. Likewise every consideration in a national policy for agriculture is poised delicately between what has been experienced in previous years, and what is hoped for in years to come.

This fourteenth annual farm policy seminar addresses policies in "the new reality." Being mindful that any reality of today is only a link between the old reality of yesterday and the reality-to-be of tomorrow and is itself transitory, I have been tempted to dodge the new-reality subtitle. A further reason for doing so is that as a veteran of 54 years of the old reality I remember how many times a new reality was said to be bearing down upon us. Farm programs were always declared to be due for a change. Often the language was that we were "at a crossroads" in policy-making.

We may have been at a crossroads now and then but if so, we seemed always to pass through it without deviating far from the previous course.

One such occasion was as recent as the writing of the 1985 farm law. For two years prior to enacting the law, at seminars held nationwide the nation's brightest minds searched for a new design for farm programs. What came of the exercise? There came of it a 1985 farm law that had several exceptional features yet was within the context of the laws of the previous 50 years.

Three New, or Partially-new, Elements in the 1980s

Although today's reality is not really new it has distinctive features that justify the title given this seminar. I highlight three.

Deflation of Asset Values. Number one has to be the massive decapitalization of U.S. agriculture. I put it ahead of loss of export markets as a major event of the 1980s. Close to \$400 billion has been struck from capital values. The human cost has been intense. Although it's true that the 1970s saw some farmers go wild in leveraging themselves, it's also true that basically the swing from asset inflation in that decade to deflation in the 1980s is traceable to general economic policies, principally monetary policies.

The attrition of farmers has borne little relation to operating efficiency. The phenomena of the 1980s are basically financial in nature. Among individual farmers the "fittest" now surviving are often not the more capable, but the better financed.

A last quick comment on decapitalization is that although it is not new -- agriculture went through it just after World War I -- it caught us unprepared. We are still struggling to know what to do about it including (as of the time of writing this paper) how to reform and refinance the Farm Credit System.

General Economic Policies. The part monetary policy has played in the farm decapitalization of the 1980s introduces my second "new" feature in the agricultural situation of the 1980s. It's the prominence of general economic policies, and general economic developments, as influences on what is happening in agriculture.

Agriculture has always been subject to economic forces lying outside its sphere. Nevertheless, I concur with the many agricultural economists who say that in the 1980s as never before, the farm economy has been affected more by nonfarm events than by what has happened within its own backyard.

It's easy to name the most prominent outside influences but hard to agree on their relative importance. Monetary policy is on everyone's roster. Fiscal policy is never absent, and some economists make it their favorite whipping boy. In my judgment, much as I deplore the deficit I don't believe it's the major cause of our ills, or that balancing the federal budget is a magic formula for setting everything right.¹

The third big policy area is income tax policy. No economy should be put through the dipsy-dos of the infamous 1981 law followed by the Tax Reform Act of 1986. One of the least advertised effects of the tax code of 1981-85 is that it helped induce foreign investment into the U.S. economy, thereby contributing to an overvalued dollar and a shrinking of farm product exports.

I suggest a fourth policy area that often is overlooked. It's business trade practices and anti-trust law. The merger mania and the rapidly rising concentration in food processing including livestock slaughter raises serious questions about quality of competition in farm product markets. Yet economists and farm leaders alike are in a Rip Van Winkle sleep.

The fifth and last policy area on my list is also the most complex and perplexing. It makes our agriculture hostage to events worldwide. I refer to the world trade situation and the trade and investment policies of other nations. I will go into these later. However, I note in passing that one of the unknowns regarding the recent stock market crash is how the investment policies of other countries will be affected. In view of their past funding of our deficits this is not a minor matter.

To repeat, the main forces that have affected our farm product exports in recent years are not exclusively agricultural. The loss in farm export markets during the 1980s is only part of an

¹It's rarely pointed out that the federal budget is essentially balanced in its current accounts. Current revenues almost balance with current spending. Interest payments are what throw the budget into deficit. We've let interest obligations pyramid; and the chances are not small that we will continue to meet them by issuing yet more promises to pay.

The budget-balancing issue is given a new focus by the events of October 1987. A heroic balancing effort that may have been appropriate before that date became perilously harmful after it.

overall reduction in U.S. exports, a reduction that led to a trade deficit now running at about \$170 billion. Farm leaders are too quick to view farm export losses as arising in-house, and likewise as curable by farm policy measures.

The Public Temper. I turn now to a third category of what may be somewhat new in farm policy today. It too is hard to size up and report accurately. It's the perceptions, attitudes, and philosophies of citizens generally.

In teaching farm policy to undergraduates, I insist that students understand, or at least be willing to repeat back in examinations, that the most basic of all considerations in the making of farm policy is the attitudes held by citizens at large. I have in mind not only their knowledge of the facts of any situation or even their political stance, but also their moral values -- their philosophical premises.

I believe most persons sense that the public temper has changed in the last 10 or 15 years. We have lost, I think, some of our national self-confidence, our faith in being able to solve any problem that might arise. We had enjoyed that confidence after surviving the Great Depression and winning World War II.

More to the point of this seminar, I suggest further that in recent years we have gone through a wrenching reconsideration of the proper role of central government in economic affairs. We haven't made up our minds, and our attitudes are inconsistent. There is, I believe, a sharpened recognition of the major role government plays, even a fear of it. We don't like that, and we respond variously. The Reagan Administration has trimmed back many of the more visible regulatory activities of government, as in civil rights, environmental pollution, and enforcement of anti-trust, while enhancing the more generalized policies such as monetary, fiscal, and tax. These latter are the less conspicuous policies and therefore, some critics allege, the more insidious.

We have also become more concerned for macro values in the economy and less for micro and distributional. Evidence is clear that distribution of wealth and income has become more uneven in recent years.

In November 1987 government feels new pressures to stabilize the economy, in the aftermath of the break in stock markets. It remains to be seen what the course of action will be.

In my judgment we have seen the last few years a greater polarization of attitudes, a taking of all-or-nothing stands. This is not the long-standing American practice; the philosopher George Santayana insisted that Americans have traditionally mixed pragmatism with idealism. Much of the urban press, breaking with that tradition, has been calling not for modifying present farm programs but for ending them completely. A contingent of theoretical economists who have recovered their courage and old-time faith are taking up the chant. They declare that government-free farm product markets would in fact fulfill sought-for goals of equity, stability, and security. Those economists are what I call the Pygmalion gang. They become enamored of the conceptual models of the agricultural economy that they draw up and believe them to be the real thing.

Another example of a sweeping proposal is the one our spokesmen are advancing in the negotiations at Punta del Este. We are offering to dismantle all government action in agriculture. Every direct and indirect obstruction to international trading would be ended, provided other nations do the same.

I don't know how widespread the interest in radical change may be. I only suggest that a restiveness in public attitudes complicates any forecast of what lies ahead.

Internationalization of U.S. Agriculture

I do not include internationalization of our agriculture in my list of new or partially-new pieces of the farm policy picture. Certain trade issues are indeed new but an international posture is not. Our agriculture has been international since 1607 when Jamestown was founded. Exporting began quickly after the first colonization, and it has never stopped. To be sure, the mix of products sold abroad has changed. We no longer ship indigo. Nor, for that matter, are cotton, wheat, and tobacco the big three now as they were as recently as the years of my youth.

Our agriculture has long been international on the investment side too, and in both directions. English money developed much of the Plains. Later, U.S. money went into buying and

developing farmland in Australia, Brazil, and many other countries. Now the direction of flow has reversed once again. Foreign money is being put into our agriculture. The amount is not big enough to be of great concern but it is significant because it is part of a new influx of foreign investment funds into the economy as a whole. After a 70-year interlude following World War I, the United States is again being invested in. It's another instance where agriculture is being caught in events that are not basically agricultural in origin.

The major events of our international trade in farm products have been publicized widely. An export boom of the 1970s lasted until the beginning of the 1980s. The value of farm product exports peaked at \$43.8 billion in fiscal 1981. They were down to \$26 billion in fiscal 1986 and may have recovered to about \$28 billion in the year that ended September 30, 1987.

Causes for the run-up in exports in the 1970s and run-down in the 1980s are still in some dispute. The recycling of petrodollars beginning about 1974, initially at bargain-counter interest rates, certainly contributed to the surge in world demand for foodstuffs. The United States, as the dominant trading nation in grains, was in a strategic position to take full advantage of the new demand. We did so. At about the turn of the decade the world economy began to falter. More importantly, Third World countries no longer were beneficiaries of generous lending. Instead, they were expected to service their debts. World demand lost its momentum.

Total world grain movement has been essentially flat since 1980. As a consequence exporting countries, each with increased export capacity, have contested for shares of the static market. In such a setting the dominant nation loses its advantage.² In that setting our 1985 farm law was enacted, calling for lower loan rates on export crops.

A More International Agriculture in a More Mercantilistic World

It's easy to become preoccupied with how farm products are faring in world trade, and to overlook the twin facts that international trading as a whole has expanded since World War II, locking nations in interdependence, and that the terms of trade have become ever more subject to management by trading nations. In my judgment, world trade has entered a new period of mercantilism.

Against that background we acknowledge the disturbing developments of the 1980s, primarily the slowing of economic growth in many countries even as world trade slackened. Various countries responded as countries usually do. They turned to trade practices that were more aggressive on the selling side and more protectionistic in buying. It's always thus when an economy falters. Free markets thrive best in good times, and are shackled when times turn bad.

G. Edward Schuh, Director for Agriculture and Rural Development of the World Bank, puts it that during the early post-war years the "by-word" was "cooperation..." But the last 10 to 15 years "have seen a gradual reversal of that perspective. Nation states have become increasingly competitive..., and economic policies have become increasingly predatory."³

The principal tool of mercantilism today, even as four centuries ago, is money. However, it's no longer a case of moving shiploads of bullion around the world, but of elevating monetary exchange rates up or down. At the end of World War II the world's wisest heads decided to avoid that brutal game. The Bretton Woods agreement called for monitoring relatively stable exchange rates. Twenty-five years later the United States had a major hand in capitulation of that system. It acted in the name of the virtues of floating exchange -- and also, I suggest, in virtual disregard of the role our dollar plays as the world's leading currency.

Even today we do not know what would happen if rates everywhere were allowed to float. David Henneberry of Oklahoma State University has pointed out that a relatively small part of all trade in farm products takes place under genuinely floating rates. All we know for sure is that the

²In a paper given at the November 1983 seminar I pointed out that the dominant supplier gains whenever world trade picks up, but finds its position "painful" when trade is slow. "U.S. Farm Policy in a World Dimension: The Setting in 1983," United States Farm Policy in a World Dimension, University of Missouri Agr. Exp. Station Special Report 305.

³G. Edward Schuh, "Some Issues Involving Agriculture in the Coming MTN," paper presented at seminar sponsored by the World Bank, Geneva, Switzerland, February 6, 1987.

mental image of rates floating or wafting gently in a summer breeze has proved false. Instead, rates have bounced around as though tossed in a gale. And each movement up or down has devastating effects, enriching those who gain by it and breaking those who lose.

Furthermore, not only monetary instruments are involved in mercantilistic management of exchange rates. Nor do the needs of commodity trade essentially define the demand and supply of exchange, even where rates are allowed to float. The flow of investment and loan funds is the prime mover. It, in turn, reflects an array of influences ranging from favorable income tax rules to borrowing by governments. Here in the United States, the tax law in effect from 1981 to 1986 drew in foreign investment money, and the burgeoning federal budget deficit has pulled in loan funds. Until a year or so ago the exchange value of the dollar went up. The value of exports -- all exports, not just those of farm products -- went down.

A May 16 column in the Wall Street Journal summed well the hegemony exercised by investment flows:

Increasingly, world investment rather than world trade will be driving the international economy. Exchange rates, taxes, and legal rules will become more important than wage rates and tariffs. This is one of the major changes in the world economy and one to which neither government nor economists nor businessmen have given adequate attention.

It is ironic that not until this year (1987) did the annual Economic Report of the President discuss in depth the worsening situation in our foreign trade and investment, or give consideration to rectifying measures.

I remind briefly of other dimensions of the overall trade and investment situation. Our annual deficit in current accounts is locked at about \$160 billion annually; we have become the world's largest debtor, to the tune of nearly \$400 billion; and foreign investments and loans to us now stand at about \$1-1/3 trillion.

But the point of these remarks about the new mercantilism is that the agricultural sector is caught up in it. It is by no means certain how much of agriculture's trade problem can be dealt with in camera -- that is, independently of more general efforts at trade-problem-solving.

A Variety of Trade Barriers; the Subsidy War

Mercantilistic nations of today are more inventive than their predecessors. They dream up more ways to manage trade. The time-honored mechanism for influencing a nation's trade has been the protective tariff. It is imposed by importers.

Both importers and exporters now manipulate exchange rates, as just mentioned.

In agricultural trade two instruments for managing trade flows, although not new, have come into use here in the United States and elsewhere. One is restrictive on the import side. It is the repertory of non-tariff barriers that many countries have added since World War II. These range from outright quotas to various sanitary bans that sometimes are valid but often not. So-called variable levies may be classified as non-tariff barriers, because they differ from straight ad valorem or quantity-unit tariffs.

Now, exporters are getting into the act, using a third and powerful instrument. A number of exporting countries are subsidizing their sales of farm products to a degree, and a cost, greater than ever before. In my judgment export subsidization is the most vicious of today's protectionist devices. It is vicious because it is available only to rich nations, and because it causes severe injury to other exporters. I think it likely that it does more harm to other exporters than it helps its own producers. The big beneficiaries are buying countries.

To be sure, export dumping has been engaged in for many years. It has also been outlawed in most international trading agreements. The techniques now employed are more subtle. We have our Export Enhancement Program, a direct export subsidy employed, supposedly, only to meet the competition from other exporters. But our really big subsidy is the funding, by direct Treasury payments, of part of the cost of production.

Apart from Export Enhancement, a substantial part of the \$15 billion or so of direct deficiency payments to farmers represents an implicit subsidization of exports. The origin of

this new policy is familiar. When the 1985 farm law was enacted, a hue and cry was heard that we were losing exports because we were pricing ourselves out of the market. If we would reduce our prices, it was said -- nay, promised -- that we would regain our earlier market share. As no one expected world demand to expand very much, the assumption was that we would crowd other exporters out.

What happened is that other exporters refused to be crowded out. The European Community particularly resisted. It joined us in a subsidy war. So now the United States and the Community checkmate each other. Exporters who are not financially able to play the subsidy game are hurt severely. And the buyers get a huge windfall in the form of cheap grain and cotton.

We now see, in fact, the anomaly that Japan, for example, uses the currency she saves by buying our grain so cheap to fund, by loans, the deficit in our budget caused by our subsidizing of sales to her. It's an interesting, if distressing, kind of recycling.

My personal judgment is that we are paying a high price in both dollars and foreign relations for a minor gain in export values. It's little more than a guess, but each dollar gain in exports may cost the Treasury at least three dollars.

Not in doubt at all is the injury done smaller exporters. The most incisive effect comes about from the marketing loan program being used for cotton and rice. If the Aquino government of the Philippines should fall, it is conceivable that our cut-rate pricing of rice, so damaging to the islands' rice farmers, will have contributed. That possibility brings to mind an event of many years ago when the United States was jousting with the Soviet Union over Lebanon. Somehow our soybean trade got mixed into it. In his eloquent Nordic accent the late Oscar Jesness told the soybean farmers of Minnesota that the peace of the worrrld was more important than their selling a few more beans.

To a man the farmers agreed.

Maybe we need an Oscar Jesness now.

U.S. Proposals at GATT

I will not give much time or space to the proposals our U.S. delegation is making at the GATT session in Uruguay. The proposals call for every country to end, within this century, all measures supportive of agriculture.

The positive feature of the U.S. stance is that the proposals are not confined to import restrictions; rather, they recognize that many of the violations of free and open trading take place on the export side. The negative is that the proposals are so sweeping that they may lie outside the realm of political feasibility. I've never seen much to be gained from standing tall, but also immobile.

In the quotation at the head of this paper a Scottish economist, John Cathie, observes that in the mercantilistic setting of today a move to free trade is unlikely. He foresees more management of trade, and so do I. Although most of us prefer multilateral understandings, my hunch is that we will enter into a series of bilateral compacts. Anchor to all of them will be an agreement with the European Community to halt, or at least diminish, the export subsidy contest. Without it, all else is mute.

The recent negotiations with Canada are in the same vein and, if completed successfully, could set a pattern for the future.

Issues in U.S. Farm Policy

An obvious aspect of the current farm policy situation is that the domestic and international components are intertwined. In fact, they are almost a unity. I offer only a few observations and suggestions.

Farm policy will get sharp scrutiny in 1988. The quiet of 1987 will convert to turbulence next year. Of that I am reasonably certain.

What will tick people off quickly is the size of the bill. Even though the current cost of \$26 billion may recede a bit, it is still large enough to be conspicuous and therefore a target.

But what will stir things most is not the number of dollars as such, but who gets them. Publicity given the largest recipients is strictly negative. And the ruses and deceptions gone through to hold down individual payments (to below the statutory maximum) are so offensive, and really senseless, that "something's gotta give."

I have taken the stand that insofar as it is desirable to retire cropland, the best technique is just to pay a per-acre rent and not worry about the size of any payment. I would, however, keep the rental rates low.

I have serious reservations about the wisdom of forcing export prices down to rock bottom levels. My own view is that the United States, as the leading grain exporting nation, should try to pitch export prices at an intermediate level with which most exporters can live. I have also long favored setting up an export agency endowed with authority, and money, with which to flex prices up and down as circumstances warrant, within a prescribed range.

Insofar as commodity prices remain below even a minimum adequate level -- minimum with regard to production costs -- a modest payment can be made on a straight per-bushel, -pound, or -ton basis.

In addition, my thinking extends to reserving some \$3 billion to \$5 billion of the direct payments for targeting to whatever category of farmers is regarded as most deserving of an income supplement. Presumably those farmers would be of moderate size. Payments might be confined to operators. One political benefit is that if it were known that some payments were going to middle-sized farmers, the instances of large rental payments to landholding giants would not bring so much adverse publicity.

Expressed in other words, in the political climate of recent years the so-called distributional features of farm programs -- who gets how much money -- were either disregarded or handled by means of the clumsy and largely ineffective payment limitations. I favor removing the limitations but I insist with some fervor that the distributional question of who gets how much for what performance cannot be sidestepped. It will be a topic of debate during the farm policy discussions next year. After all, distributional questions have been raised by every critic of economic policies since at least the time of St. Thomas Aquinas in the Middle Ages. Why should we expect anything different in 1988?

As farm programs are reconsidered next year some people will dally with major reconstruction, either to abolish them or to convert them to a mandatory form and thereby save Treasury money. Nevertheless, I think it likely that any revisions will be confined to the context of the law now in place. Perhaps I arrive at this judgment because I have heard so many calls for revisionism in past years. I doubt the new realities of today will themselves force a major reorientation of our national agricultural policy.

But I do believe that some new or intensified pressures will arise from outside agriculture. They will emerge in the aftermath of the devastating shock experienced recently in the world's capital markets. It is too soon even to guess what to expect. I only confess to an apprehension that drastic steps might now be taken that will accentuate rather than alleviate the situation. Surely this is a time when prudence and even some restraint are called for.

That, however, is not my final comment. My last word is to pose a searching question about our national orientation on the world scene. For three decades following World War II the United States was unquestionably the world's leading nation. Our currency was the leading currency, and our trade practices set patterns everywhere. Historians will long debate whether we played our role wisely. I doubt we will get a grade higher than B-. In any event, in the last decade our dominance has faded. Europe has challenged us, and we are engaged in a costly farm-export trade war with her. But I suggest that we are turning our face in the wrong direction. Japan has been our pupil, learning from our instruction. She has learned so well that, in the classic scenario, she is now outperforming the teacher. It's in Japan and the rim of Asia that the world's investment flow is centered. This is, I suggest, a highly relevant datum as we consider both economic and agricultural policies in an international perspective.

MY VIEWS ON AGRICULTURAL POLICY -- HOW AND WHY THEY HAVE CHANGED

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My Changed Position in Profile

In the years following the end of World War II I took a deep interest in agricultural policy. During the 1950s I came to the conclusion that favored rather tight production control and price support programs. I was a strong supporter of commodity programs in general. I had in mind programs involving price supports, production control, purchase of surplus products, and instances of use of direct income payments.

A few years later, in the early 1960s, I led the charge in the Administration of President Kennedy to lift commodity prices appreciably higher through the employment of effective production controls. I stress the word "effective." I wanted controls to be that.

I began to lose my confidence in those programs during the years of the 1970s. I had increasing doubts about the economic wisdom of commodity programs.

And now in the 1980s I have come to believe that we should eliminate commodity programs -- completely, and as quickly as possible.

Reasons for My Changed Thinking

Two lines of reasoning have led me to this change in my position regarding commodity programs. The first is international.

Our production capacity in agriculture is so great that we have turned more and more to the international market as an outlet. We have become an integral part of that market. But it's not easy to sell in an international market when domestic prices are being supported above world levels. It is like running up a steep hill.

Then if domestic production is controlled so as to effectuate domestic prices above world levels three unattractive consequences follow. The action (1) holds a price umbrella over producers around the world, thereby (2) inducing those producers to increase their production; and it eventually (3) leads to a search for ways by which to subsidize our exports.

All these consequences have come home to haunt us in the 1980s. We have lost market shares because of high domestic prices sustained under laws prior to the 1985 law. The whole world is awash in surplus grains and other storable commodities. And, obviously, we are spending a lot of Treasury dollars in subsidizing exports.

Internal Aspects. The second reason for my changed thinking lies in the internal or domestic aspects of programs to reduce production and support commodity prices.

Invariably, the added income flowing to producers from supported commodity prices and/or income payments becomes capitalized into land values. This capitalization phenomenon contributed importantly to the rising land values of the 1960s and 1970s, which then collapsed in the 1980s.

Commodity programs have a differential effect among various categories of producers, and they contribute to a growing concentration of landholding in U.S. agriculture. The more aggressive and innovative farmers typically have drawn on the extra income they get from commodity programs, together with the easier credit those programs make possible, to acquire the productive assets of their laggard farmer neighbors. Commodity programs make credit available on favorable terms because they improve farmer-borrowers' income stability.

By virtue of this process, productive resources in farming have been concentrated into the hands of fewer and fewer, and larger and larger, farmers. This cannibalistic process proceeded relentlessly through the 1950s, 1960s, and 1970s. The results are that (1) over 70 percent of total farm production in the United States is now produced on some 300,000 larger farms; and (2)

those 300,000 farms currently (1987) receive most of the income benefits of the commodity programs.

Thus, in 1987 we are spending huge sums of money -- between \$20 and \$30 billion -- to support a highly productive farming industry in the name of saving the family farm. Yet in fact most of the program benefits go to some 300,000 large to very large farms.

In my judgment it is time, in fact past time by a decade or more, to stop the foolishness.

My Proposals

On the negative side I propose immediate elimination of target prices, of payments based on them, and of commodity production controls. I would continue for a time to make payments that are decoupled from target prices, but would phase them out entirely by the end of four or five years.

To a rejoinder that "this is not the time to take such drastic action" I reply that there is never an attractive or even convenient time to do that.

I contend further that the painful asset devaluation of the past six years puts the better, more efficient producers in a position to survive without continued government support.

On the positive side I would do a lot of things. Farmers large and small and those in between are confronted with difficult problems that are beyond the individual farmer's capacity to cope, and therefore require group action. I highlight a few of them here, but my entire proposal as presented in another paper is attached as a supplement to this paper. The first is specific actions to expand exports. Talking about the virtues of the free market won't get the job done; even the members of the present Administration now recognize that this is true. Second is a well-chosen program of action to deal with the credit crisis. Third are programs to feed the hungry. I add, fourth, a formula to be followed during the phase-out period for payments, by which to decouple payment rates from the number of units produced. Fifth, I call for a greatly expanded Conservation Reserve Program. Sixth is a legitimate grain reserve program, and seventh, a special program to assist modest-size, part-time farmers.

Prospects for Action

Are reforms in agricultural policy of the kind I have just suggested likely to be adopted in the near future? The answer to that question is "no." I get this answer for several reasons.

- * With the possible exception of President Truman and USDA Secretary Brannan, no President or Secretary since Roosevelt and Wallace have given the reform of agricultural policy a top priority. Yet unless the White House gives strong leadership in this confusing policy area, nothing will get done.
- * Urban leaders in the Congress are particularly confused by the complexity of the "farm problem" and have given up in despair.
- * Laymen are likewise at their wits ends to understand the situation.
- * In this confusing and confused state of affairs, the commodity interest groups, each bearing a clearly articulated program for its commodity, and each linked to spokesmen in the appropriate sub-committees of the Agriculture Committees of the House and Senate, can ram through their complex commodity programs. Their proposals are accepted by urban Congressional leaders and the White House once those parties have been assured that no noticeable increase in food prices would result. For reasons not clear to me, the budgetary impact is simply forgotten.
- * So year after year we get the same old commodity programs, modified only by a wrinkle here and there, by which to deal with new developments that sometimes are of substantial importance.

But will the current policy process in agriculture go on forever? Probably not. At some time in the future rationality will thrust itself into the agricultural policy process of the United States, just as it did in Britain a century and a half ago with the repeal of the "Corn Laws." But when will that happen? Possibly in 1989, after a new administration has taken office. A more likely date is 10 or even 20 years in the future.

I can hazard a guess as to how such a burst of rationality might take place. Here are two possibilities. One is that a future President might have such a deep interest in agriculture, or be so concerned for the cost of current programs, that he will give the reform of agricultural policy a top billing in his administration. He might even be lucky enough to find a Secretary of Agriculture who understands both the politics and the economics of agriculture. In such a fortunate event we could have a smooth policy transition into a brave new world of agriculture.

A more likely sequence is that urban Congressional leaders will get fed up with the cost of commodity programs, and take a meat ax to them. This would be the scenario of the repeal of the British Corn Laws. If that action were taken here, U.S. agriculture would be left in chaos for a while.

But for the next few years I see few if any changes in prospect, for either agricultural policy in general or commodity programs in particular.

To be sure, 1988 is an election year but no one seems to want to rock the boat. Senator Dole and Vice President Bush on the Republican side are locked into the existing programs. On the Democratic side, with the exception of Congressman Gephardt the candidates are saying that we must continue down the same farm policy road that we have been travelling. Each affirms that he can make the road a little smoother for farmers. Again, the budget seems to be ignored. Mr. Gephardt wants to do in 1989 what President Kennedy, Secretary Freeman, and Willard Cochrane could not get done in 1961.

What does this add up to for the next few years? Probably, more of the same.

Appendix: Summary of a Paper on a Proposed Food and Agricultural Program

Certain economic and political conditions and realities are recognized: (1) the U.S. farm sector continues to experience a severe economic depression; (2) the international market is awash in surplus grains and other storable commodities, and the United States cannot expect to increase its share of that international market easily or readily; (3) farmland prices have fallen precipitously -- by over 60 percent in Iowa, for example, but the decline appears to be bottoming out in some areas; (4) some 10 percent of all farmers are in such dire financial straits that many, if not most, are likely to fail and go out of business in the near future, and another 10 percent are experiencing severe financial stress; (5) at the other extreme, some 20 to 25 percent of all farmers have little or no debt and are enjoying positive cash flows, if not handsome profits; (6) the costs of federal farm programs are exorbitant, approaching \$26 billion currently; (7) there is much hunger and malnutrition among persons living in poverty in the United States, and although famines have abated abroad, much hunger and malnutrition continues to exist around the world; and (8) farm politicians and farm commodity groups are reluctant to make any important changes in the commodity programs that are generating the high levels of government costs noted above.

Actions Needed Immediately

1. In the farm credit field:

- * If the Farm Credit System is to remain solvent, it will almost certainly require a substantial infusion of capital in 1987.
- * To deal with the financial stress problem in U.S. agriculture Professor Neil Harl of Iowa State University proposed in 1984 the formation of an Agricultural Finance Corporation (AFC) similar in many respects to the Commodity Credit Corporation (CCC). The first component of the AFC would provide the supplemental financing for "buying down" interest rates on farm loans for feasible cash flows/reorganization plans, with the expectation that interest subsidies would eventually be repaid with some interest on the amounts advanced. The second component would provide a mechanism for acquiring the assets, notably farmland, given up by farmers who are unable to develop a feasible cash flow/reorganization plan short of asset liquidation. This entity could acquire land (1) subject to foreclosure or bankruptcy, (2) from lenders holding land in inventory, or (3) from farmers who are unable to service the real estate debt. The time may have passed

when the second component was needed. But the first component could still play a role in the survival of many farmers who are not hopelessly in debt.

2. The creation of a special feeding program to help feed the hungry in the United States. This program would provide local nonprofit organizations (e.g., the Salvation Army) with (1) foods in surplus, (2) funds needed to purchase foods required in providing nutritionally adequate meals, and (3) funds to acquire the facilities and equipment required to cook and serve the meals.
3. The creation of programs designed to expand the export of U.S. farm products. These include (1) increases in food aid shipments to very low income countries; (2) increased use of subsidized credit in commercial sales to foreign countries; (3) negotiation of long-term bilateral trade agreements with important trading partners, which include special inducements to purchase U.S. farm commodities.

All of these export programs would, of course, stretch into the long run, but they should be initiated as quickly as possible.

Actions to be Taken in 1988 or 1989

1. Fix loan rates in the first program year at levels judged to be long run world equilibrium prices. Thereafter move loan rates up and down in accordance with a three-year moving average of world market prices. Loan rates would thus move slowly toward market clearing levels.

Under this program any farmer would be able to obtain a nonrecourse loan up to his maximum use of this practice in any one of the three preceding years.

2. Reduce the total amount of funds available for direct payments to farmers from the 1987 level down to zero in four steps in four years. This procedure would establish an absolute total dollar amount to be expended in each year. Politicians might wish to increase the adjustment steps to five or six, but the longer the phase-out period, the greater the danger that the final reduction will never occur.
3. Distribute the payments to farmers each year from the total funds available that year, decoupled from farm production or sales, by the following two step formula. One half of the total funds to be distributed in each of the first three years would go in equal sized payments to each eligible farmer (no funds would remain to be distributed in the fourth and final step). Farmers who participated in a commodity program in 1987 would be eligible to receive such an equal sized payment. The other half would be paid out in grants to any farm operator who certifies that he actually operated the farm involved. The object would be to implement a farm plan to increase the cash flow of that farm. Grants would be made by a county committee chaired by the Extension Agent with six other members as elected in a county-wide election. Criteria for awarding these grants-in-aid would include (1) the amount of funds available for the purpose, (2) the size of the farm operation, and (3) the quality of the proposed plan and its relevance to the existing farm operation.

Implicit in the above is elimination of the entire target price and deficiency payment apparatus.

4. Eliminate all commodity production controls. This action is necessary for four important reasons:
 - * Farmers have not in the past accepted production controls unless they are paid, and paid well, for doing so. In their performance under production control systems, farmers have employed every conceivable subterfuge to negate the curtailing effects of such controls. Production control effected through conventional acreage controls is particularly slippery and inefficient.
 - * To the extent the production controls are effective they must push up farm prices in the marketplace and thereby raise food prices. This leaves the administration deploying such controls open to the legitimate criticisms of consumers and opposition politicians that the administration is employing the monopoly powers of government to raise food prices.

- * Where domestic farm prices have been raised above world market levels through the use of production controls, either voluntary or mandatory, further interventions become necessary in the form of export subsidies and import controls. In short, a farm exporting nation that attempts to raise domestic farm prices through the production control route must end up with a complexity of economic controls that farmers, middlemen, and modern governments have shown a complete unwillingness to accept.
 - * Finally, and in the long run, the employment of production controls in the domestic setting must mean that foreign competitors will expand production, seek to expand their exports and thereby complicate the problems of the nation seeking to raise its domestic prices through the production control route. Domestic production control by an exporting nation simply provides an umbrella under which other exporters will expand production.
5. Double the size of the Conservation Reserve Program and eliminate all state quotas and/or restrictions. This is the way to help many farmers in the short run, to help reduce the magnitude of the excess capacity problem, and to conserve natural resources in the long run.

Actions to be Taken as Soon After 1989 as Possible

1. Convert the present farmer-owned grain reserve into a legitimate grain reserve program with the capacity, through acquisition and disposition of stocks, to hold world market prices in the grains near domestic loan levels for the period in question. The pricing goal of the Reserve Program would be to hold market prices within 10 percent, plus or minus, of the domestic loan level, where the loan level is set at the long-run world price level, as determined by a three-year moving average of world market prices.

This is another way to introduce increased market stability into the domestic agricultural economy when the basic elements of the commodity programs have been eliminated. And it is a way of providing price stability for consumers and livestock producers as well as crop farmers.

2. Develop a technical assistance and special credit program for part-time farmers. This is a new breed of farmers who produce about 20 percent of the total national farm product but are ignored by the agricultural establishment. Many of these part-time farmers produce specialty commodities that are in demand by particular segments of the urban population, but these farmers need help in producing and marketing those specialties.
3. Begin work on a national plan for water use. Water is becoming a scarce national resource. But we continue to waste it and squander it as if it were a free good. We also use it to produce unneeded farm commodities. We must begin to treat this national resource like the scarce and valuable resource it is.
4. Initiate an educational program to assist farmers and bankers in their financial planning for operating in an unstable, uncertain farm economy. In something approaching a free market economy, bad years always follow the good ones, but no one knows when. Thus farmers and their banker friends have got to learn to make safe, solid financial decisions in the context of price and market uncertainty, or both will be out of business.
5. Review the food stamp and school lunch programs to ascertain whether they are meeting their stated objectives, and make such adjustments and revisions in those programs as seems desirable.
6. Continue the support for, and strengthen, the national program of agricultural research. The ability of U.S. agriculture to compete in the modern, interdependent world economy is absolutely dependent upon a strong program of agricultural research. But the federal government has not funded this research program adequately in recent years.

Some Concluding Thoughts

The above programs will not quickly cure the ills of U.S. agriculture. We and other exporters are currently producing too much product relative to effective commercial demand. And there is no effective way of adjusting world production to world demand at some level of prices that is deemed satisfactory.

But the above policy would do several things.

- * It would deal with the excruciating credit problems of farmers and likewise with the hunger problems of certain unfortunate members of society.
- * By eliminating per-unit deficiency payments it would reduce the incentive to expand production on individual farms; and grants-in-aid to increase the cash flow of individual farms would give an incentive to economize in use of purchased inputs. These actions in conjunction with a greatly expanded Conservation Reserve should operate to slow the rate of aggregate expansion in output in the long run, and might even reduce it in the short run.
- * It would reduce the horrendous cost of the commodity programs as now in place, and thus make a contribution toward reducing the federal budget deficit.

Unless by some miracle farm exports should increase dramatically, aggregate farm income would fall during the four year transition period, as government payments declined. This is inevitable if large scale commercial farming is ever to be weaned away from permanent government support. The painful asset devaluation process of the past five years does, however, put the efficient producer in the position to survive and, in time, prosper at foreseeable levels of farm prices.

POLICY TOOLS AND THEIR LIMITS

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Introduction

In 1987, debate on agricultural policy has revolved around the level of government involvement in agriculture. One school of thought pushes toward a more market-oriented agriculture with minimum government support. The Food Security Act of 1985 takes steps in this direction but with considerable near-term government cost. The Boschwitz-Boren decoupling bill, which would separate government supports from commodity-specific payments, moves further in this direction as does the farm program proposal discussed by Willard Cochrane in the preceding paper.

The other extreme is the Harkin-Gephardt bill that calls for mandatory controls at higher prices expressed in terms of parity. Although such a law would lodge strong government control at the national level, at predetermined prices and with production quotas, its supporters say that markets would receive these signals with a higher degree of certainty than currently prevails.

In 1987, farm programs have been the bread and butter for a majority of the major crop commodities. At least one-half of net farm income is derived from government sources. Moreover, part of the direct payments to farmers are made with Payment-in-kind (PIK) certificates that have a significant influence on market prices -- reducing them. The number of players that have a political stake in farm program design obviously complicates the policy process. In too many cases it is impossible to second guess the direction compromises will take.

Government release of certificates is likely to dictate the market price path in the coming year. And given the level of stocks on hand, this may be the case for several years, perhaps until the end of the decade.

On the one hand we have a market-oriented theme, but on the other we currently have considerable government control shaping the destiny of U.S. agriculture. Therefore, it isn't surprising to discover a policy debate to revolve around what level of government involvement would provide the best balance among consumers, producers, the international trade, and government cost. As the government is so heavily involved in agriculture, part of my task, and that of my associates, is to describe the variety of policy levers that can be pulled to influence the agricultural economy, and finally to evaluate how well these management strategies are working or might work in the current environment.

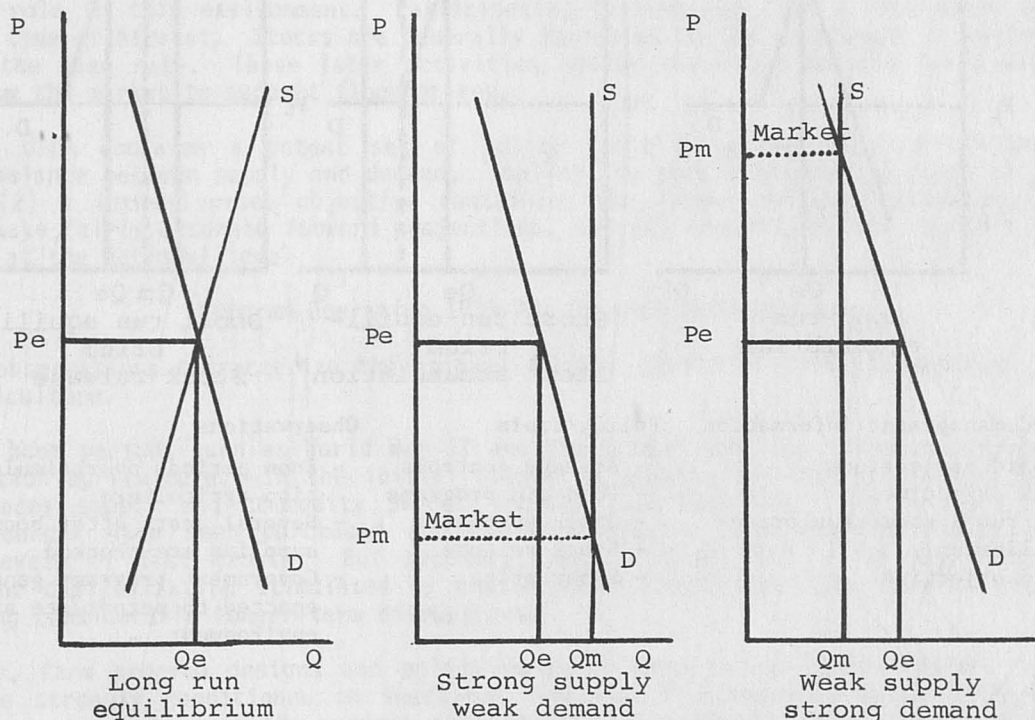
Free-Market Agriculture

Almost without exception, governments around the globe are involved in agricultural policy. This is an interesting situation given our current focus calling for a market-driven agriculture. Several reasons logically explain government involvement. One is that the consuming public everywhere holds the government responsible for an ample food supply. Shortages breed discontent and political instability. As a result, developed importing nations are led to establish relatively high internal support policies as a way to avoid complete dependence on foreign supplies. This is especially the case in Japan and the European Community. In other instances such as the United States, an inelastic market demand represents the chief motivating factor. Prior to the Great Depression of the 1930s and the 1933 legislation that placed floor prices under major crop commodities, U.S. agriculture was characterized as market-driven with minimum government involvement.

The free-market period prior to 1933 was marked by major swings in farm prices. During the golden agriculture era of 1910-14 and World War I, demand for U.S. products had been strong. Following World War I, excess supplies caused tremendous downward price pressure. Boom-bust periods in agriculture and many farm failures were regarded as justifying government involvement beginning in 1933. Charts will illustrate varying relationships of government to agriculture.

An uninterrupted market-oriented agriculture is shown in Figure 1. Over the longer run, supply and demand settles around an equilibrium price. Unfortunately, in agriculture's inelastic environment prices tend to vary widely in the short run. Sometimes an excess of supply, declining demand, or both can generate prices substantially below the longer run equilibrium level. Conversely, short supply, strong demand, or both can lead to prices significantly above equilibrium. Shortages spark consumer pressure while excess supplies put stress on the farming community. So the government can enter the picture in an attempt to ensure greater stability for all parties involved.

Figure 1
Free Market Agriculture



Observations

- | | |
|-----------------------------|---|
| - Markets very inelastic | - Shortages imply consumer pressure |
| - Extreme price variability | - Excess supplies imply producer pressure |
| * Weather variability | - Pressures imply government involvement |
| * World economic conditions | in agriculture |
| * Technology | |

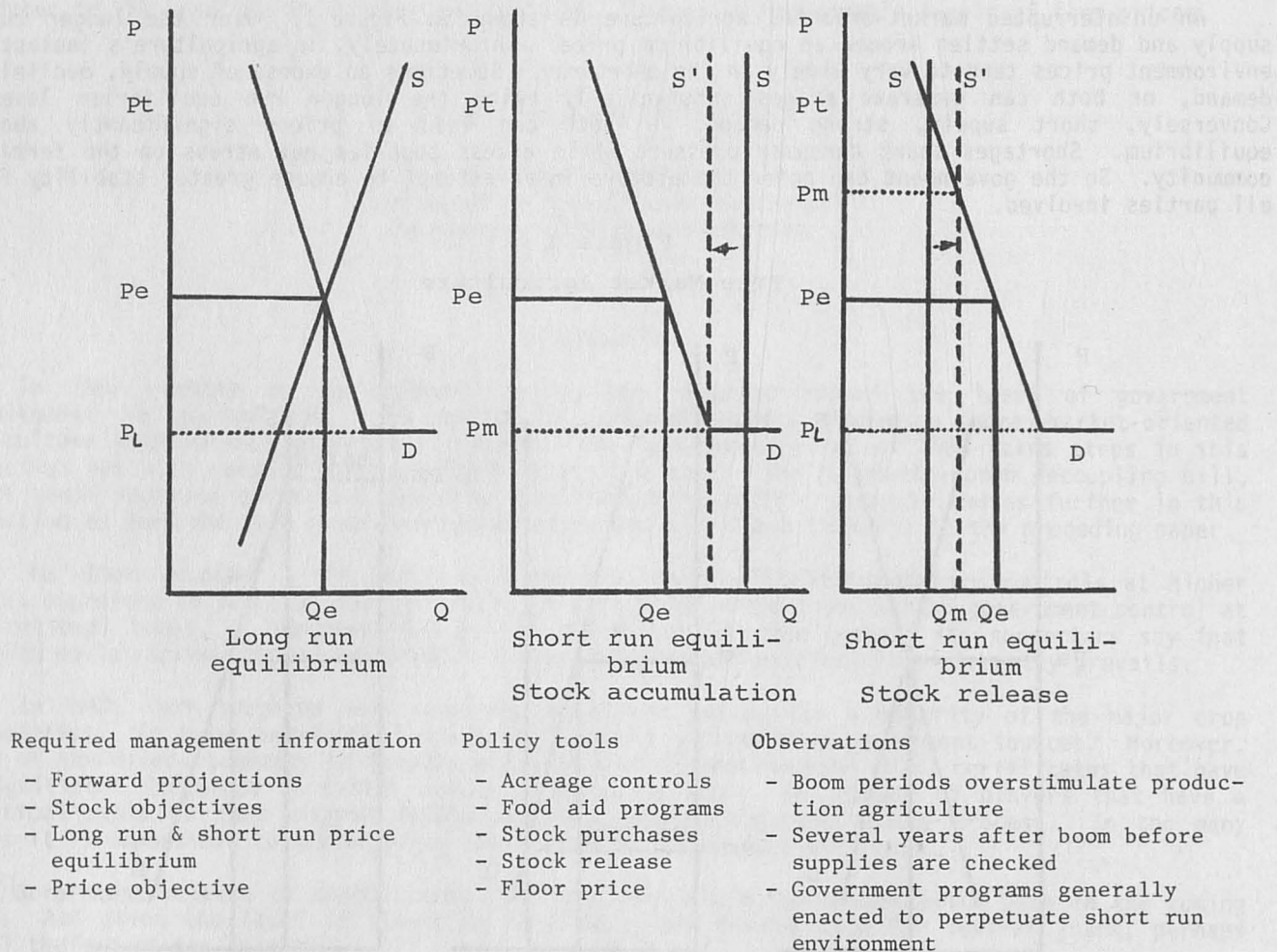
Kinked Demand Curve and Policy Tools (1973-1977)

Current farm programs are a derivative of the original legislation that placed floor prices under major crops in 1933 and introduced the era of the "kinked demand curve" (Figure 2). A simple measure taken by the U.S. government placed a floor under grain prices and substantially altered the economic environment for agriculture. Domestic producers and world economies were assured that the U.S. price would not fall significantly. The government would take over surplus stocks, virtually guaranteeing floor prices for all farm producers of the program commodities. Accumulated stocks can then be released to buffer upward price movements during periods of short supplies, such as unexpected droughts.

Given this new position of stock accumulation and release, government officials and Congress took on a new role, one aimed at maintaining a longer-run balance. Such a role requires considerable information. First, projections must be available that give reliable estimates of supply and demand plus expected prices at least two years into the future. Acreage control

Figure 2

Government Involvement (Kinked Demand 1933-1977)



becomes a necessary brake during periods of stock accumulation. Therefore, allotments, quotas, and set-aside or diversion programs must be developed prior to planting, implying reliable estimates of current crop utilization plus future plantings, production, and utilization. Moving toward the desired equilibriums requires analytical skills that can correlate program designs with farmer participation and corresponding planted area. If programs that are designed to pull a specific amount of land out of production prove to miss the target, they will accentuate, rather than reduce, price variability.

Secondly, some notion of a longer-run stock objective must be arrived at. When stocks become substantially larger than desired levels they will trigger control programs, and perhaps actions to stimulate demand.

Thirdly, a forward-price objective, or free-market price band, is also implicit. Not only is there a minimum support that will often cause stocks to accumulate but some market price must be established that triggers government stock release back to the market. If this forward price objective or band is not established so that the longer-run equilibrium price falls within it, additional price instability will enter the picture. If, for example, the desired price objective -- or, in this case, the loan rate -- is substantially above the longer-run equilibrium price, strong signals flow to producers to increase production. This action will require even stronger acreage control programs that carry a considerable expense to the government. But without strong controls, stock accumulates, further complicating the government situation.

A fourth observation is that the Administration must have enough political support to ensure efficient program design and operation at the national level.

Policy Tools. Tools designed to help accomplish these objectives have focused on both the supply and demand sides of the equation. First, acreage control programs from 1933 through 1977 were imposed to curb supplies. These ranged from acreage allotments, set-asides, and paid diversions to Soil Bank strategies. Voluntary set-aside programs with a two-tier price scheme were introduced in 1962. Program participants were guaranteed an income support payment as an incentive to set aside or voluntarily not plant a portion of normal crop acreage. This second tier price, later referred to as a target price, is only visible to the producer. It is designed to compensate for idled land and is used as a primary incentive for program participation. Market prices are indirectly affected since acreage control implies a corresponding (lower) level of supplies for the marketplace.

A second set of policy tools at the government's disposal is the floor price or loan rate plus the target price. A third set involves direct action to stimulate demand. Public Law 480 establishes a direct supplement for food aid to needy countries. Food stamp programs are aimed at domestic poverty groups of the population. The Commodity Credit Corporation (CCC) plays a significant role in this environment. Participating farmers can take a nine-month non-recourse loan at the time of harvest. Stocks are generally forfeited to the government if market prices do not exceed the loan rate. These later activities become the major vehicle for removing excess supplies from the market to support floor prices.

So the USDA contains a potent set of policy tools to guide U.S. agriculture toward a longer-run balance between supply and demand. Implicit in this management process is (1) a stock objective, (2) a forward price objective containing the longer-run equilibrium price, (3) the ability to make fairly accurate forward projections, and (4) enough political support to maintain the balance at the national level.

Program Operation 1933-77, General Observations

Three observations characterize the initial 44-year period of direct government involvement in U.S. agriculture.

First, boom periods such as World War II and the Korean conflict attracted heavy investment into production agriculture. In the initial stages of growth, investments tend to move slowly. Demand outpaces supply and commodity prices increase substantially. By the end of the boom period, resources have been purchased and new technologies have developed that can sustain continued levels of fast growth. But secondly, boom periods tend to be short lived. Over-investment or capitalization stimulated by these sudden bursts can take several years to tame down, causing considerable longer-term disruptions.

Thirdly, farm program designs and policy measures tend to be short sighted. In general, programs are strongly conditioned on short-run trends with corresponding policies designed to accommodate a continuation of the current environment. Even though the Secretary of Agriculture and other principal players in the political process may be aware of distortions, the process itself often precludes measures that may be more beneficial in the longer run.

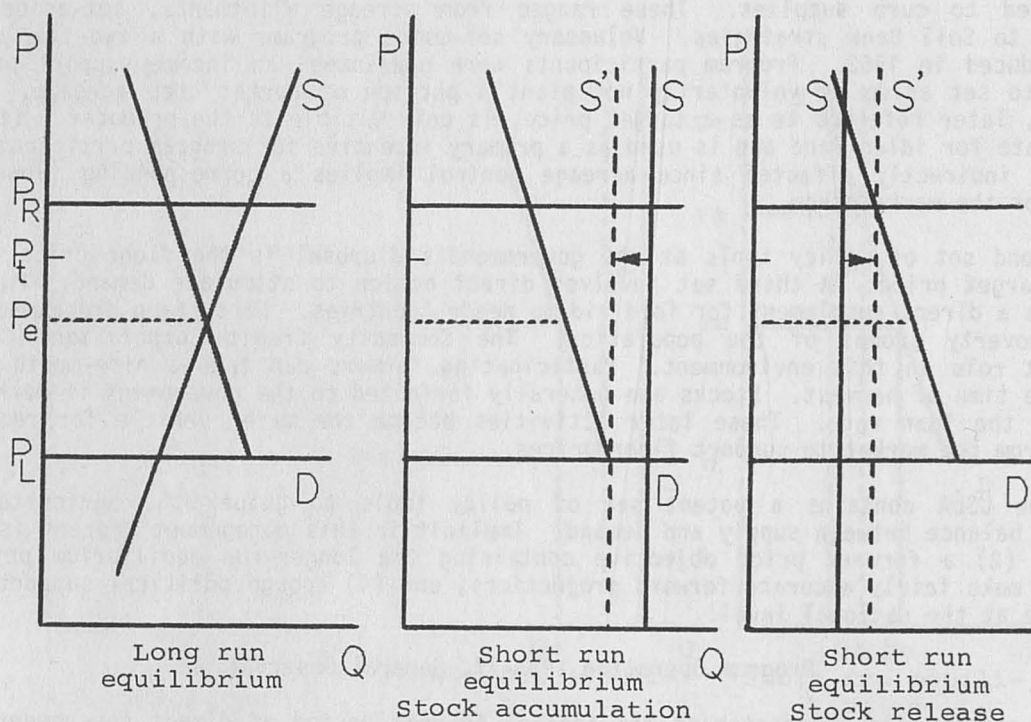
U.S. agriculture has experienced two of these cycles since the Great Depression. World demand associated with World War II and the Korean conflict stimulated the first part of the

production cycle that extended into the early 1960s. The farm programs that were implemented directly after this period sustained relatively high loan rates or government support prices. Meanwhile, technological advances contributed to a doubling in corn yields between 1950 and 1965. So the political environment lost sight of one very important policy indicator -- the longer-run equilibrium price. Delays in moving supports downward resulted in government programs' providing the best game in town. By 1960 total ending feed grain stocks were 55 percent of production.

Two farm bills had expired and a third implemented in 1960 before brakes were applied to the production engine hard enough to allow demand to catch up. Programs implemented in the 1960s did curb supplies, finally bringing ending stocks into normal levels by the mid-60s.

The second cycle began in the early 1970s and repercussions are still being felt as supply control adjustments were later again focused on realignment of supply with demand. So another break point occurs with the enactment of the 1977 Farm Act.

Figure 3
Buffer Stock Program (1977-1985)



Policy tools	Required management information	Observations
- Acreage controls	- Free market probability range	- Political constraints preclude efficient management
* Set aside	- Equilibrium price	* 1980 embargo
* Paid diversion	- Desired stock levels	* 1982 RAP program
* Deficiency payments	- Accurate projections	* 1983 PIK program
* PIK	* Demand	* Delayed program announcements
- Stocks	* Program participation	- Forecast error
* 9-month CCC loans	- Price range flexibility	* Exports
* 3 year farmer owned (int. waiver, storage payment, re-lease price)		* Program participation
- Demand		- Market prices most likely at floor or ceiling
* Food aid		- USDA declining policy role
* Long term contracts		- Heavy stock accumulation
* Embargo		- High government cost
- Support prices - mandated		

Buffer Stock Program (1977-85)

One of the most popular farm program designs was implemented in 1977 (Figure 3). The environment was characterized as a strong growth period with considerable upward price pressure and variability, plus substantial annual inflation rates. The Nixon Administration imposed a price freeze in 1973 as a stop gap measure to contain sharp increases in food prices. An export embargo was put in place in the fall of 1975, one year after a severe U.S. drought. Therefore, a general theme that prevailed during the 1977 debates was price stabilization -- it brought in the buffer stock program, a modification of the kinked demand curve theory that prevailed for the previous 44 years.

Four pieces of information are germane to efficient operation of this program (Figure 3). First, a free-market price band is established. No government action takes place within the band. However, at prices below the band (PL), stocks are accumulated, and they are released at prices above the desired top side (PR). Second, a forward price objective (PE) is set near the center of the band. Otherwise, serious distortions would be introduced. Moreover, the amount of acreage reduction required should match the forward price objective. For example, should the forward objective move to the bottom side, only enough acreage would be removed each year to protect the lower range price at expected normal production. At a higher objective, more land would be removed. In either case, if the size of crop proves to be greater than the estimate used in designing the program, the price will hug the support level and government stocks will accumulate.

Thirdly, a desired stock objective is also necessary. One of the guiding levers is departure from desired stock levels -- either open or close the production gate in future acreage control programs.

Fourth, the political environment must also have the flexibility to allow the price range to slide up or down. This requires knowledge about the expected level of the longer run price equilibrium.

Required Management Information: Summary

- * Free market price range
- * Equilibrium price
- * Desired stock level
- * Reasonable forward supply and demand estimates
- * Price range flexibility

The Policy Tool Bag became even larger under the buffer stock program of 1977-85. Acreage control programs continued, on a voluntary basis, relying on set-aside, paid diversions, and deficiency payments as major enticements for taking land out of production. Heavy stock accumulations led to a payment-in-kind program (PIK) in 1983. Farmers received payments in commodities rather than cash payments for land diversion. The PIK program, not previously utilized since 1962, thus became another new tool in the policy bag.

Stock accumulation under government control received the greatest attention. Among modifications was an added option allowing farmers a three-year contract in conjunction with the normal nine-month CCC program. These longer-term contracts proved to be highly popular with the farming community as their higher loan rates, interest waivers, and storage payments financed a considerable addition to farm storage capacity. Also, the farmer had the option of defaulting the loan at the end of the contract period if market prices were at or below loan rates.

A release price (PR) was also added to the policy tool bag. If market prices should exceed the upper price boundary, government incentives under the three-year contract were to be discontinued. Farmers no longer would receive storage payments or interest waivers. This provision was an attempt by the USDA to induce grain back into the market place.

On the demand side, domestic and foreign food aid programs continued, although at reduced levels. Longer-term trading contracts became more prevalent, and notably were made with the Soviet Union and the Peoples Republic of China. The embargo reemerged in 1980, implemented by the Carter Administration against the Soviet Union.

Support prices were on the rise during the 1970s, and the trend was maintained in the 1977 and 1981 Farm Acts. However, these prices were more binding in the 1981 Farm Act. Target prices

were mandated to increase each year at or near the expected rate of inflation. Loan rates were set at minimum floor levels. In order to establish the PIK program, policy negotiators offered to freeze target prices at the 1983 level along with a moderate reduction in loan rates.

Policy Tools - Summary

Acreage Control Programs

- * Set aside
- * Paid diversion
- * Deficiency payments -- target price
- * Payment-in-kind (PIK)

Stocks

- * Nine-month CCC Loans
- * Three-year farmer owned reserve
- * Interest waiver
- * Storage payment
- * Release price

Demand

- * Food aid
- * Long-term contracts
- * Embargo

Support Price

- * Increasing over time
- * Mandatory under 1981 Farm Act
- * Frozen at the 1983 level through the remainder of the Farm Act

Program Operation (1977-85), General Observations

The first four years of the buffer stock program were associated with the second major boom period for U.S. agriculture since the Great Depression. All sectors of agriculture were experiencing phenomenal growth. Inflation rates were high, input costs were on the rise, and support prices were increased liberally. Specialization was on the increase, heavy equipment became commonplace, and land prices began to escalate. The only major blemish during this initial four-year stage was the Carter embargo in 1980. Approximately 600 million bushels of grain intended for the Soviet market were diverted into farmer-owned reserves. The administration attempted to use the flexibility of the farm program to cushion market pressure resulting from the embargo. Although market strength finally returned to previous levels, exceptionally low prices were experienced in the first two to three months. In addition, the buffer stock program was severely strained in attempting to accommodate the situation. The drought of 1980 prevented longer-term problems in stock management.

The 1981 Farm Act came at the end of the boom period and directly followed the severe drought of 1980. Expectations were a reflection of the trend set in the 1970s; the new Secretary of Agriculture favored minimum land controls, as he preferred to use reserve programs for sustaining prices. Congress again adopted the buffer stock program but added a major modification: supports were set in anticipation of continued growth with target prices escalating at about five percent per year.

Problems began to surface almost immediately upon enactment of the 1981 law. The boom was over: the U.S. was experiencing high interest rates and the federal deficit began to climb. By the time (fall of 1981) when farm program announcements were made for the 1982 set-aside program, the Secretary's hands were tied on land control options, budget constraint being the major obstacle. The 1982 program did not contain sufficient incentives for the amount of land diversion that was desired. Also, yields proved to be exceptionally high, demand was down, and stocks escalated.

The pattern continued through 1985. The budget process forced untried alternatives for curbing supplies. Program supports were fixed. At the same time, U.S. agriculture was entering a financial crisis not experienced since the Great Depression. The third stage was out of step. The 1981 Farm Act had been designed under the expectations of continued expansion in demand -- domestic and especially export. These expectations, it may be noted, were not without wide support in the USDA, Congress, and academia.

Available policy levers proved to be so constrained by the program design and political environment that they were inadequate for dealing with the downturn of the 1980s. The budget process precluded strong acreage control in most years. Market prices moved to the bottom of the price band, stocks accumulated, government costs increased, asset values declined over 50 percent, and farm financial pressures placed 30 percent of U.S. farmers in jeopardy of bankruptcy. Efficient management of the buffer stock program was not possible. Stock objectives were quickly exceeded, forward price objectives dropped to the bottom of the price band, and acreage control was constrained by the budget process. Not surprisingly, the program design that was so strongly embraced earlier met with considerable despair by 1985.

Food Security Act of 1985

While the focus and objectives have changed under the Food Security Act of 1985 (FSA85), the basic model is essentially a buffer stock program. Modifications from the 1981 law include a 25 percent drop in loan rates, a moderate decrease in target prices, implementation of a 45 million acre Conservation Reserve, first attempts at decoupling, 17 different PIK options, and a new concept termed "marketing loan" (Figure 4). The new bill focused on agriculture's becoming more competitive in world markets, on maintaining income support to farmers, and on moving gradually towards a more market-oriented agriculture.

The current management style has been more politically than economically motivated. The theme is more akin to "damn the torpedos -- full speed ahead." Put another way, we seem to be intent on making a point regarding export market share no matter what the Treasury cost. For this reason, the program is intentionally operated such that market prices remain considerably below loan rates, which have already dropped more than 25 percent below 1981 program levels. Farmers received about \$7 billion in PIK certificates in 1987 and will likely receive around \$8 billion in 1988. These payments contain sufficient economic incentives to keep market prices significantly below loan rates, ensuring farm income protection but at a considerable expense to the government. Program cost exceeded \$25 billion in 1987 and will likely be above \$20 billion in 1988. Given the current high level of total stocks under government control, it is very likely that prices will generally remain at or near loan rates even if a drought should occur in 1988.

Management information required for efficient operation of a program under FSA85 involves several factors. The more significant are: (1) some estimate of the world equilibrium price after stocks reach normal levels, (2) desired stock objectives as a target, (3) a free-market price range, (4) accurate projections of demand and participation in a specified program, and (5) structural issues associated with livestock, crops, exports, farm numbers, farm size, farm debt, and rural community structure.

Policy tools and program levers have become manifold. Acreage control can be achieved through (1) set aside, (2) paid diversion, (3) deficiency payments, (4) conservation reserves, and (5) a "50-92" program.

Stock adjustments have also become more versatile with (1) nine-month CCC loans, (2) three-year farmer-owned reserves, (3) marketing loans, and (4) 17 different PIK options.

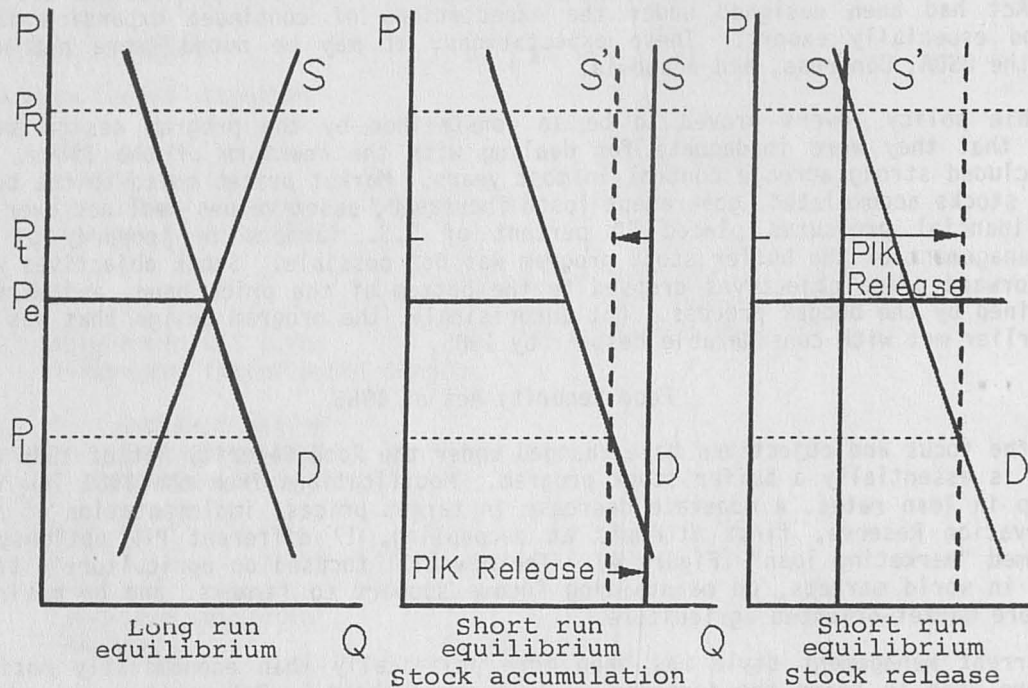
Direct demand incentives include (1) food aid through PL-480, (2) food stamps, (3) long-term trade contracts, and (4) Export Enhancement. Currently Export Enhancement entails a cost of about 82 cents for every bushel of wheat that is exported.

Support prices have been adjusted. Loan rates initially reduced 25 percent are targeted to decline an additional five percent per year. Target prices are also on a downward path but a slower one as they will edge down about two percent per year beginning in 1988.

FSA85 Program Operation - General Observations

So far the farm program can be credited with achieving several of the desired objectives. These include:

Figure 4
1985 Food Security Act (1985-1990)



Policy tools

- Acreage controls
 - * Set aside
 - * Paid diversion
 - * Deficiency payments
 - * Conservation Reserve
 - * 50-92
- Stocks
 - * 9-month CCC loan
 - * 3-year farmer owned
 - * Marketing loan
 - * 17 different PIK options
- Demand
 - * Food aid
 - * Export Enhancement
 - * Long term contracts
- Support prices
 - * 25% reduction
 - * Moderate target price reduction

Required management information

- World equilibrium price
- Desired stock objective
- Free market probability range
- Accurate projections
 - * Demand
 - * Program participation
- Structural implications
 - * Livestock industry
 - * Crop substitution
 - * Export response
 - * Farm numbers and size
 - * Rural communities

- * Higher net farm income in 1987 than had been experienced since 1979
- * Higher livestock profitability
- * Turn-around in the export market for the first time since 1981
- * Twenty-two million acres in the Conservation Reserve, with up to 45 million acres targeted
- * Strong government support for participating farmers who hold a reasonable acreage base
- * \$52 billion allocated by the Administration for the first three years of the farm act, or \$17 billion per year

These achievements place this farm program in a fairly strong position relative to other options that may be under consideration. But certain concerns continue to draw criticisms. Among them are:

- * Uncertainty about U.S. and world economies
- * Tremendous excess capacity
- * Sluggish exports with possible trade retaliation

- * Financial problems
- * High levels of program costs
- * Strong likelihood of turn-down in net farm income by the end of the decade
- * Artificial stimulation of livestock production with low grain prices
- * Distorted price ratio between feed grains and soybeans
- * Level of national control and management of the PIK certificate program

In general, agriculture is going through a considerable downsizing. It has substantial excess capacity, made worse by a shift away from consumer demand for red meat. This downsizing is directly related to the boom cycle experienced in the 1970s with its overstimulation of the production side, followed by difficult problems of realignment afterwards.

Should we consider fine tuning or slightly modifying FSA85? Ought that be done? Our analyses indicate that we have overshot on the down (low price) side in our attempt to regain our earlier share in world grain trade, generating distorted market signals and costing too much relative to a more moderate strategy. Why do we think this is the case? Originally the cost of programs under the current law was estimated at \$17 billion per year. This cost was associated with expected prices of about \$2.20 for corn, \$3.00 for wheat, and \$5.25 for soybeans -- prices that are more likely to prevail at low to moderate stock levels. Costs are now ranging around \$20-25 billion with prices substantially lower -- \$1.65 for corn, \$2.50 for wheat, and \$4.85 for soybeans. Commodity prices significantly below a longer-run equilibrium stimulate market action that leads to negative short-term and longer-term pressures.

The export market is currently responding slowly to lower prices. It seems to be more subject to the influence of world economic growth, countries' debt load, strong competitive supplies, and domestic and foreign subsidies. Fighting negative factors with lower prices requires some knowledge of how far down to go. What level of prices can be said to represent a stabilizable longer-run position? As we fall below such a level, gains to us will be expensive and artificial. Also, larger competitors also are scrambling to maintain trade shares and several will probably maintain them with subsidies. This strategy is forcing the issue, with high risk consequences. Moving toward a market-oriented trade may be scuttled if we deliberately hold an artificial low price; we may find ourselves shifting toward a trade war or attempting to get a trade agreement with world acreage controls. These latter two possibilities would move us further away from market signals in the direction of negotiated positions that would be tough to manage and enforce.

On the crops side, prices below loan rates go with high program participation at maximum deficiency payments. The program provides income protection, so producers must participate. High program costs are a result. By the same token, farmers' income becomes highly susceptible to target price changes. Distorted signals are likely to be drawn from price relationships. The soybean/corn ratio is out of line (as of 1987), holding down domestic acres of beans but stimulating foreign production. Continued use of PIK certificates holds all feed grain prices down even after stocks of minor feed grains, soybeans, sorghum, oats, and barley have been liquidated.

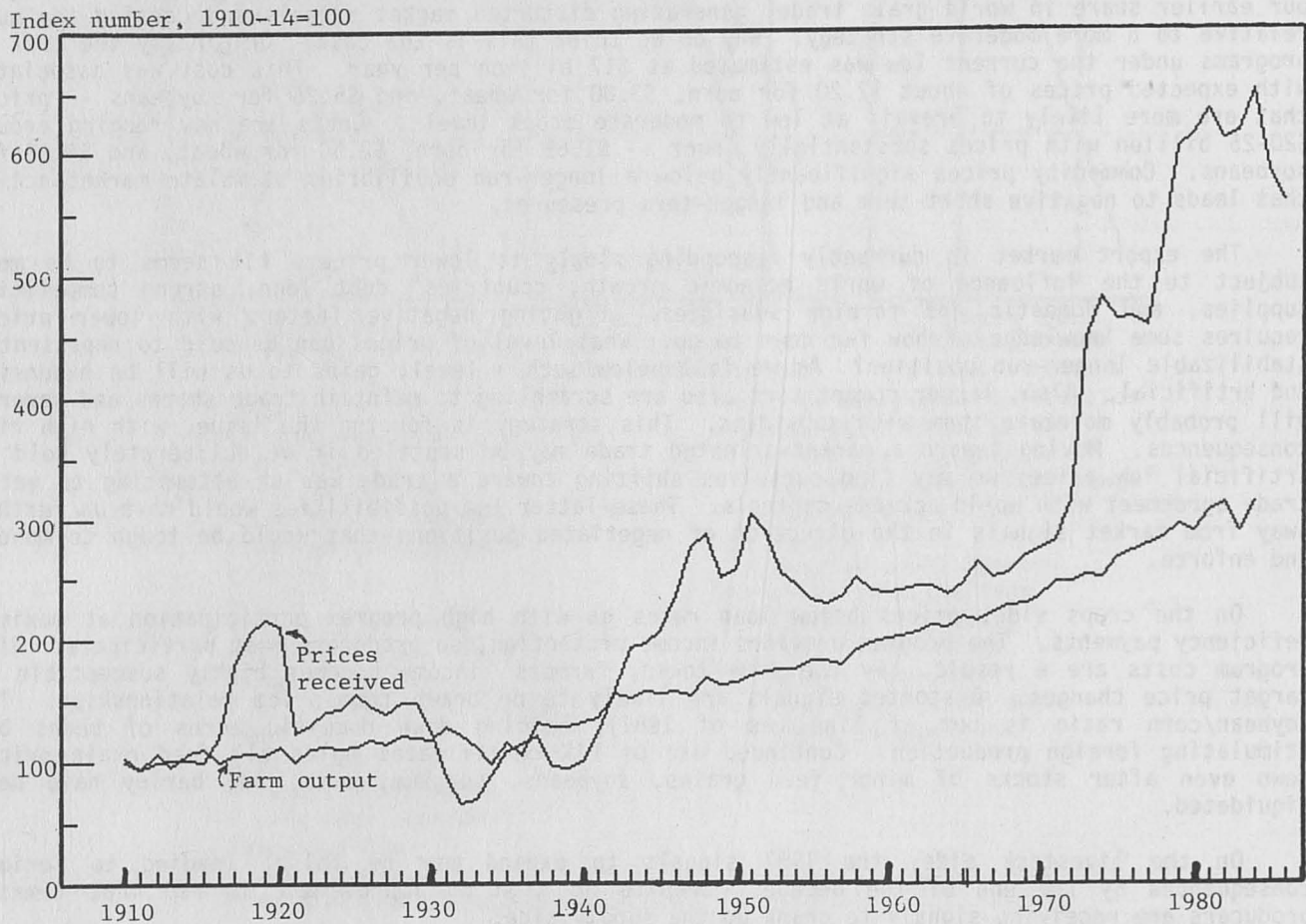
On the livestock side, the 1987 signals to expand may be false, leading to serious consequences by the end of the decade. Despite no sign of improvement in red meat demand, producers are receiving signals to crank up the supply side.

We in FAPRI (Food and Agricultural Policy Research Institute) drew up data modifying the current management of FSA85 so as to achieve a moderately higher price path for grains with less aggressive use of payment-in-kind certificates (certs) and an increase in the set-aside requirement (percent of base) in the acreage reduction program (ARP) for corn. Loan rates were kept at minimum levels so the United States could revert to an aggressive management strategy, if necessary, to sustain export trade shares. Our estimates as to what would happen are as follows:

- * Net farm income was only slightly lower than the base. Producers received higher crop cash receipts, requiring smaller deficiency payments from the government. In the livestock industry, higher feed costs resulted in lower profits and slowed the production expansion.
- * Government costs were reduced from the base by nearly \$2.5 billion annually. The cost of carrying stocks was increased, but deficiency payment rates, the quantity of production eligible for payments, and total deficiency payments were substantially reduced.

- * Acreage planted to the five major program crops was not significantly altered. Corn plantings were slightly lower, and wheat and soybeans slightly higher.
- * Carryover stocks of the five major program crops averaged about seven percent above the base because of the dramatic reduction in the use of certs for program payments and export subsidies.
- * The volume of exports was reduced only slightly from base levels. The value of exports increased about six percent over base.

Figure 5
Prices Received for Farm Products and Farm Output



Summary

U.S. agriculture has been characterized by boom-bust periods since the turn of the century. For each, three distinct stages are evident (Figure 5). Boom periods characterized World War I, World War II, the Korean conflict and the strong growth period of the 1970s. In each case, they depleted supplies quickly, resulting in substantial price increases for farm commodities. The initial effect was to signal for a heavier allocation of resources to agriculture. But investment response was slow at first, requiring several years. A second stage marked the end of the boom period, which normally is of about six to eight years. As the boom dies down expectations fall out of step; the supply side overruns demand, and prices fall. The third stage involves winding down the supply side. It tends to take substantially longer. Measured in terms of farm legislation, it often extends through the life or three to four farm bills before supplies adjust adequately to prevailing demand.

Farm programs have been designed, among other purposes, to provide a safety net during these down periods. They cushion the blow during the readjustment period of stage three. Current debate is over how well in the 1980s the USDA has been able to perform its function. How well does its record compare with strategies that rely more heavily on market signals? Farmers invariably experience difficulties after boom periods with or without farm programs. How well have programs helped in the 1980s?

It is evident that in times past, programs have often been out of step with the changing economic environment. They have therefore prolonged the adjustment process. Relatively high loan rates sustained through the 1950s resulted in high stock accumulation, high government cost, and painful downsizing problems which required strong acreage control programs in the early 1960s.

This sequence of events provides a recurring example of the farm program alignment problems and management difficulties that arise in the political environment. Often it has taken about 10 years for this political process to adequately digest supply-side incentives and finally realign a program.

Almost an identical pattern occurred with the enactment of the 1981 Farm Act. The 1970s boom was over but not recognized, and escalators were attached to support prices that perpetuated near-term rates of growth. The political process constrained adequate acreage control. Almost without exception, budget constraints prevented necessary alignment of the supply side during the life of the 1981 act. Farm prices moved to the bottom of the price band, stocks accumulated, demand plummeted, and government costs soared. With enactment of the 1985 act, techniques -- program design -- moved toward policy decisions that tend to circumvent the market place. In 1987, for example, 82 cents on every bushel of wheat exported is subsidized. Heavy utilization of PIK certificates will dictate market prices for the foreseeable future.

The policy tool basket has never been larger. For a start, over 17 PIK options are available. Distorted price signals stimulated livestock production and created an economic advantage for soybean exporters in Brazil and Argentina.

Obviously, a safety net is required as we move out of boom periods. A free-market transition without government support would be painful and politically unacceptable. But the fact remains that farm programs often perpetuate near-term expectations while delaying necessary actions for dealing adequately with crisis situations.

Most observers are in agreement that too much of the control is currently in the hands of program administrators. We are currently debating the level of involvement with an underlying theme that a more market-oriented agriculture will be more successful in reacting to the economic conditions. In fact, the FSA85 will move swiftly in this direction by 1990.

It is apparent that boom-bust periods are a fact of life and that some degree of government support will be required in periods of rapid change in the economic environment. Research and debate will be required to sort out advantages and disadvantages of various program options. The studies should be undertaken with care and caution.

POLICY "USERS" PERSPECTIVES: A FARMER'S RESPONSE

Gary Riedel
Centralia, Missouri

The topic for this panel was subtitled in the form of a question. What does each of us "users" of farm policy want from policy, and what are the politics of the agricultural policy response?

I want first to modify the question and talk about the difficulties I perceive in getting out of the policy process what I as a farmer want from it.

It has been said often, but I say again, that one of the obstacles is the difference in opinion among my fellow farmers, and among our farm organizations. One explanation lies in a difference in philosophy. The cause may lie equally as much in a difference in understanding. It's my conviction that we could achieve more unity through education on economics. Everyone will agree that two plus two equals four. Economics is almost as logical, but we haven't come to a widespread recognition that economics is the study of cause and effect relationships. It is not an abstract science.

A second source of difficulty is a failure to be realistic about what is really possible. In the Executive Branch of government just now, many of the limits to what is possible are set by the Office of Management and Budget. With all respect to Secretary Lyng, once he bumps his head against the restraints of the OMB he is little more than a figurehead.

Thirdly, policy-making in government tends to be reactionary in nature. Steps are taken to react to a problem that has emerged. The policy response is likely to be short-sighted, and could have adverse long-term consequences.

A fourth obstacle to effective policy-making is conflict of interest. It's everywhere. One example is the way the banking system's interest in Third World debt affects farm exports. The Export Enhancement Program cannot be extended to countries (buyers) that might otherwise buy from Latin American debtor nations. Bankers have more clout than agricultural interests do.

To sum it up, when we consider the prevalence of conflict of interest, the reactionary nature of policy-making, and the many mixed signals, it is little wonder that we get sub-par results.

What I Want from Agricultural Policy

Internationally. On the world scene, I think it is necessary that we negotiate with those countries that subsidize their farmers heavily. The object should be to put our farmers on a more equitable basis with theirs. Perhaps something of this sort can be accomplished through the GATT talks. It is said that Europe supports -- subsidizes -- soybeans to a price of \$15 a bushel. There can't be anything close to fair trade relationships when Europe spends that kind of money to produce commodities that we can produce much better.

We ought also to dispense with a lot of protectionist trade policies and actions we have here at home. The latest example is the action of the Department of Commerce, a preliminary decision, to slap import duties on Canadian potash. The action raised the cash cost to farmers from 11 to 16 cents a pound.

I particularly want from agricultural policy an end to embargoes or economic sanctions that disrupt normal flow of trade. It's discouraging for a commodity organization to develop a foreign market and then have it nullified by action of the State Department. In any such action the beneficiaries are our competitors. We need to cultivate markets and then be faithful in supplying them.

Many soybean farmers would join me in regarding the lending policy of the International Monetary Fund as faulty. The same feeling applies to the World Bank and to some U.S. banks. I have in mind as an example a 1985 effort of the World Bank to lend \$200 million to Brazil for construction of railroads. The crux of the matter is the large size of Third World debts. Brazil

owes \$108 billion, and Argentina \$50 billion. Instead of resolving the situation the lenders have chosen to lend still more money. Banks flourish on the interest payments; the U.S. farmer pays the bill.

A more positive stand in the international sphere is to support the foreign market development activities of the Foreign Agricultural Service. The FAS has worked effectively with commodity organizations. In my opinion our joint market development work has represented a better use of taxpayers' dollars than does the export subsidy. The cost of FAS programs is on the order of \$100 million a year. Subsidies run into many billions.

Lastly, most soybean farmers take a dim view of programs of technical assistance by USAID that in effect fund our competitors.

Domestic. First of all, my goal for domestic agricultural policy is that any current and future policy must provide a climate that will enhance the viability of American agriculture and allow our agricultural sector to achieve the potential warranted by our inherent wealth of soil and climate.

Having said that, I have conceived three commandments, three Thou Shalt Not's, that must be obeyed by domestic policy-makers if we are to achieve that goal.

1. Thou shalt not enact any agricultural policy legislation that interferes with the free enterprise system. What do I mean by that? I mean that there must be no move toward socialization of American agriculture. There must be no guaranteed price with accompanying quotas that curb our incentive, dull our imagination, stifle our innovation, and lull us into a false sense of well-being in a climate of mediocrity. One example of a whole industry's dependence on government protection is our merchant marine. I pray that agriculture will never become so dependent. But we are getting dangerously close and there are proposals around that would put us irrevocably on that road.

2. Granted that proper consideration should be given to soil conservation, Thou shalt not pass any agricultural policy legislation that mandates less than full production. The key words are "mandate less than full production." Production will be less than full when supply and demand, and the resulting price, make it unprofitable to produce on marginal acres.

Mandating less than full production gives notice to competitors that they can claim more market share as we lose some of ours.

There is irony in the fact that we have already helped our competitors -- helped their expansion -- with our price support mechanism.

The tactics of supply management employed in our commodity programs in the past would have proved more workable, and would not have had such dire consequences, if there had not been so much capacity for expansion in Brazil and Argentina.

So long as there is a frontier in our agriculture, we cannot afford the risk of restricting supply via legislation.

A further problem with taking acres out of production is that it reduces the scale of U.S. agriculture and hastens the exit of farmers from business.

3. Thou shalt not pass any agricultural policy legislation that curbs the incentive to be innovative and progressive.

Instead, we must forge ahead with projects such as the University of Missouri's "Food for the 21st Century." We must continue with utilization research.

Some persons say we now produce too much. We are on the horns of a dilemma. If we get prices too high, utilization dries up. If they are too low, farmers cannot make a profit. The obvious answer is to reduce production costs through higher productivity. If we don't do that we will lose our competitive edge. There are benefits too from utilization research. We must have balance.

Conclusion

It will be clear by now that I favor moving toward unrestricted production, and liberation from government interference. I don't mean full production in the fence row to fence row sense, but unrestricted in the sense that we are free to produce according to the dictates of supply, demand, and resulting profitability.

What would we do with the increased supply? One outlet is to use more grain for motor fuel. It would be more feasible if concessions were made in the auto fuel tax. Those concessions would be an indirect subsidy but would add to the Gross National Product. And in any case, petroleum coming in from the Persian Gulf is not without its subsidy. Our petroleum industries are being subsidized by the Department of Defense.

We should do all we can to step up agricultural exports. It's a fact that people with full stomachs are less likely to stir up trouble. During the 1970s, the Soviet market opened up. If we had cultivated that market instead of imposing the 1980 embargo, the Soviets would have become so dependent on us for food that they would not dare bomb us. It's still not too late to use our food resources as a tool for peace. 20

The reality of agricultural policy is that we have two choices. There is no in-between. The in-between would only postpone the inevitable to our detriment.

We can either move toward a more productive and better-used agriculture and allow such an agriculture, the tap root of our economy, to grow and flourish; or we can continue to scale down production, prune our taproot, and risk economic ruin through the introverted policies of a top-heavy bureaucracy.

It has always been my instinctive, heartfelt dream and vision that our nation's agriculture can be a powerful tool to further communication and trade among the many and varied cultures and countries of the world. To use our agricultural resources to enhance the quality of life and promote peaceful co-existence for all will enrich the legacy we leave our children.

To make that vision a reality is surely a just and noble cause worthy of our committed and unified effort.

POLICY "USERS" PERSPECTIVES: AN AGRIBUSINESSMAN'S RESPONSE

Frank Hoffman
Hoffman & Reed Elevator
Trenton, Missouri

When asked to appear on this panel I hesitated, but I am vitally interested in the agriculture of the state of Missouri and equally interested in the University of Missouri. This year we have had pretty good crops in our area. Some of our farmers are paying not only the interest on their debt obligations but some of the principal. Some of our bankers are almost happy. Yet at this seminar I am hearing that another eight or ten years of lagging incomes are likely. I don't know whether we could stand that or not!

Most of the banks in our area have taken their knocks. They have had to write down some loans. They have had to take over a few farms, some of which they have sold. I believe the local economy has improved in Trenton and north central Missouri. We are getting a lot of PIK certificates -- buying \$50,000 to \$75,000 worth every day, it seems. A lot of government money is coming in; everyone knows that. I think our economy is better. We need to get some legislation through Congress that would get the Farm Credit System operating and make it possible for the System to handle its excess debt. I am sure everyone knows that a \$1,000-an-acre mortgage the FmHA holds against an upland farm in north central Missouri is not a good loan. But someone must make a move! The Farm Credit System cannot move until it gets a directive from Congress. I hope the FCS's problems can be straightened out, because doing that would be the biggest stabilizing help we could get. I see no reason to take a farm away from Bill Smith because he owes \$1,000 an acre and sell it to someone in Kansas City for \$500 an acre, when Bill could probably operate successfully with a \$500-an-acre loan. I'm not sure how best to bring that about but if enough attention is given the situation, and compromises are made, it should be possible to arrive at a reasonable course of action.

Let me illustrate with the cases of two men to whom I am fairly close and whose financial situations I know pretty well. One raises hogs. He is a good hog man. He is current on his payments to the FmHA. The agency won't talk to him about getting his \$1,000 loan down. He would like to renegotiate the loan to put it on a firm basis so we can operate with some security, but he cannot get a response from the FmHA people. He is not delinquent, so they can't talk to him.

Another farmer is tied up with the FmHA, the Federal Land Bank, and a local bank. He is in a terrible shape. He farms one of our farms and he's one of the best farmers in Grundy county. He has averaged 175 bushels corn yield over three or four years. He is a good farmer, but he bought some hill ground that just is not worth \$1,000 an acre. His buying it was bad management on his part. It was also bad management on the part of the man who lent him the money. His creditors were brought together. A compromise was worked out; every lender was prepared to take a little less. For some reason, the arrangement didn't go through, and he will have to take Chapter 12 bankruptcy. No one wants to take Chapter 12 bankruptcy.

The word "Chapter 12" has scarcely been mentioned at this seminar, but I can assure anyone that when the word is mentioned to a lender, he gives it his attention quickly.

Much has been said here about cutting down on acreages. I think that in north central Missouri we are at the point where we can hardly operate on the reduced amount of crop production we now have. In our county 27,000 acres are signed up in the Conservation Reserve Program. Neighboring counties have that much or more. Approximately 40 to 60 percent of the cultivated acres in our county are in the CRP. Many other counties in Missouri are not so heavy in CRP as we are. The program is bringing in a lot of money to us just now. Almost everyone is happy. Farmers are putting land in the CRP -- they must have owned it three years in order to do it -- and then selling it to someone in Kansas City or some investor in town or some other buyer. There is a ready market for it. People are out looking for land that is in the CRP, signed up at \$65 an acre for 10 years.

In north central Missouri we have a severe erosion problem. It's one of the most severe erosion problems in the state. I know that to be true. It might even be one of the worst in the United States. Putting land in grass for 10 years will solve the erosion problem for 10 years -- but then what will we do? I have not learned of anyone who has a program addressed to what will be done with our CRP land in 10 years. Our 27,000 acres will increase to 45,000. What will be done with 45,000 acres in 10 years? It would take 10,000 cattle to use the grass. Where will 10,000 old cows come from? Or, it might be plowed up -- well, no, that won't be possible because of the conservation compliance rule. I think it is time we dealt with the question of what will be done with the CRP ground after 10 years. That's an area of legislation that needs to be looked at, seriously.

CRP is said to have some teeth in it but it doesn't really have any. All it does it cut a farmer out of some government programs. Some persons are saying at this seminar that there won't be any government programs in five years in any case. So there's not any teeth in the CRP. I think it's ridiculous that the SCS won't let farmers terrace the CRP ground before it is seeded down. The farmer's got to seed it down before he can get any payments. Of course, that's what farmers will do; they will seed it down so they can get the payments.

But CRP does not solve the problem. We still have severe erosion in north central Missouri on the ground that's not in the CRP and will not be put in the CRP. It's going to be farmed in soybeans because that's how it has been farmed and the farmer doesn't have enough corn base to switch over. We have a serious problem, and the University needs to be thinking about it.

On this panel I am supposed to be representing agribusiness. Agribusiness is real concerned about the "0-92" bill. Here is an account.

The House of Representatives on August 7 passed an "0-92" program to allow wheat and feed grain farmers to forgo planting a crop in 1988 and in return receive 92 percent of their expected income support payments. According to the Fertilizer Institute, not only was there little opposition to the bill but USDA supported it. The Senate hasn't done anything with "0-92" yet...but with budget pressures being what they are they will probably adopt it. The USDA predicts only about six million acres of feed grain and wheat idled because of "0-92", which is not reassuring in light of their 20-million-acre underestimation of the PIK participation. CRP has already idled nearly two million acres in Missouri and an estimated 23 million acres nationwide. Addition of "0-92" will

not only have devastating short-term effects on the agribusiness industry; it is the global macroeconomic long-term consequences that should frighten you the most. In other words, we will be sending a clear message to the world that America no longer is interested in playing a major role in world food supplies. These markets we have served might just as well look to other suppliers because we are taking our land out of production. For the \$200 to \$500 million dollar projected savings in fiscal 1988 "0-92" could force America out of the major food markets that will never be regained. This would have devastating effect on our balance of trade which is already a disaster and could greatly increase the likelihood of increased world hunger globally. Are we willing and able to tamper with such powerful world forces of which "0-92" has potential? We think not. You need to express your concern to your Congressman.

That's something about which we need to send a message to Congress. The amount of land that is being taken out of production in north central Missouri at the present time is going to have a devastating effect on not only agribusiness but every business in small towns in the area. I don't care whether it's groceries or clothing or furniture that a business sells; as we lose population, the shrinking will hurt the whole area of north central Missouri. I think it's about time we call it to a halt and do something else.

I would like to see the University come up with a study of how we can control erosion of the land that is out of production at present. I think the University needs to come up with some plans on terracing, and on other practices. We know that the cross compliance part of the farm bill requires that plans be done by 1990 and implemented by 1995. Erosion is a problem; I know it's a problem. But we've got to control it on a long-term basis and not short term. If farmers in the CRP program in north central Missouri are to be paid \$65 an acre, the same amount of money would terrace their whole farms. Why not terrace the land one year, and then pay the \$65 an acre?

Over the 10 year period we are going to have to control erosion. I know that. We have to do that to be a viable force in agriculture.

We keep hearing that we are moving toward big farms and bigger farmers, and we are. We have already gone to bigger farmers. Family farming is still the most efficient way to operate a farm. I do not mean a 160 acre farm or even a 400 acre farm. Mr. Riedel's 2,000 acre farm is a family farm, family operated. No corporation can compete with that. If we get corporation farms -- I hope we don't -- we won't need an Extension Service because industry will service the corporation farms. We won't have an Extension Service to advise farmers on how to do things. Industry will take that function over and do a good job.

I think the SCS needs to be more flexible in setting up its programs for conservation compliance. The agency has expanded its staff. An insurance company man told me his firm had taken over a 700-acre farm that was set up for 235 acres of strip -- grass strips. What will an insurance company do with 235 acres of grass? Some terraces will be put in. Generally, persons who don't have terraces don't want them; but they are going to have to have them. I think we are going to have to put teeth in an erosion law that makes it possible to stop erosion as much as we possibly can. The teeth are not there now. Just to cut a farmer off from his farm programs is not going to do the job.

I would hope that Congress will be able to pass legislation that would put some teeth in cross compliance so that people will have to control erosion. To be sure, I don't want to be the one to go out and tell people they must do that, but somebody must do that and I hope that somehow we will get those results.

As Mr. Riedel says, we have lost our market share overseas, partly because of the embargo, partly because of the World Bank and the big bankers' pushing the crops of South America where the countries owe so much debt -- that's one way they could collect interest on their loans. I happened to be at a meeting of bank directors when the debt problems began, and a director from southeast Missouri asked why bankers lent money to South America when they could lend all they wished in St. Louis. There was silence for 10 minutes. It's true that U.S. money is invested there, but why let those countries take our markets away from us? They are hurting our agriculture. So let's don't have any more embargoes; let's don't have strict production controls because all they do is let competitors elsewhere increase -- the controls are hard on American farmers. We are the most efficient producers in the world and we can be the greatest agricultural region in the world so long as we stay free and do it that way.

POLICY "USERS" PERSPECTIVES: A COMMODITY ORGANIZATION RESPONSE

Scott Shearer
Executive Director
National Corn Growers Association

During this decade of the 1980s, we have seen many changes in our agricultural economy. We have seen farm debt at record levels, the number of farm foreclosures at the highest rate since the Great Depression, and a decline in our share of the world market for grains. We have also seen farmers' net farm income change from being determined primarily in the market place to where 35 to 40 percent is from the federal government. And a large percentage of their total income comes from off-farm sources.

The national debt currently stands at over \$2 trillion. In just seven short years we have doubled our national debt. In other words, we have increased the national debt in the last seven years by the same amount as had accrued from the beginning of our nation's history until 1980. Farm program costs have reached highs that are a record for the 50-year history of programs. With the continuing federal deficit, Congress has been called upon each year to make alterations in federal farm programs.

We have come to the realization that we live in a more global economy than we had previously thought. Last month (October) this was emphasized in more distinct terms with the fall of the stock market or Black Monday and the new projections on our trade deficit and the continuing struggle to control the federal deficit. We have discovered that many of the effects on agriculture are outside the scope and jurisdiction of the farm bill.

Historically, long-term planning has been absent from government policy. New farm policy has appeared every four years with the beginning of each new President's term in office. With this approach, neither Democratic nor Republican administrations have been able to provide the stability needed by farmers and agribusinesses.

Historically, the purpose and goal of farm legislation has been to provide an adequate supply of food and fiber at a reasonable price to the consumer while providing farmers a fair return on their investment and at the same time helping to stabilize the agricultural economy.

I think this is still about what the agricultural community would like to see: a long term policy, and a consistent policy, not only in agriculture but in monetary, fiscal, and trade areas, one that allows us to make planning and business decisions, to expand our opportunities in both domestic and foreign markets, to provide a fair return on investment, and to stabilize the agricultural economy of this nation.

What are the political realities of obtaining such a policy today and in the future?

I would like to address a few of the parameters that we are dealing with currently and will continue to deal with. First is the budget. There has been a lot of discussion regarding the budget. We are now spending anywhere from \$20 to \$30 billion on agricultural programs. When I was in Washington working for Senator Dixon -- he was a member of the Senate Agriculture committee, which is where I spent my time -- and we finalized the 1981 farm bill, the estimated cost for the life of that program was \$9 to \$11 billion. We are now seeing expenditures of almost \$11 billion for the corn (feed grain) portion of the farm bill. With the budget act that the Congress adopted in the 1970s and Gramm-Rudman, and also now with the events of the stock market on Black Monday, I think that we will see more constraints in the future as we deal with the budget. At times it seems that we have written our policy more to meet budget numbers than the conditions facing agriculture whether it be a farm program or agricultural credit, and I believe we will see that continue in the future.

The second aspect is reaching a consensus now on agricultural policy. It becomes more and more difficult. More groups and organizations are trying to influence policy now than at any other time. Groups that had been observers of farm policy in the past are now at the deliberation table as full participants.

Just think back. In the 1950s and 1960s basically the Senate and House Agriculture Committees, the Department of Agriculture, and the general farm organizations took part in the

debate. In the 1970s the commodity organizations came along in an expanded role. In the 1980s with embargoes, the dairy buy-out plan, and PIK program, we have seen more groups come to the table to be full participants in the deliberations.

Let me give you an example. It relates to enactment of the 1985 farm bill. Among groups that were trying to influence the policy decisions being made in Congress -- I doubt I have even a third of them -- were first of all the general farm organizations: the Farm Bureau, NFO, Farmers Union, Grange, and the American Agriculture Movement. There were commodity organizations representing corn, soybeans, wheat, cotton, rice, milk, sugar, wool, peanuts, honey, pork, cattle, and poultry. We had the suppliers representing fertilizer, seed, chemical, feed, equipment, and credit. And we had the processors, the consumer groups, environmental organizations, and labor unions. And representing the Administration was the USDA but also influencing the USDA's proposals were the Office of Management and Budget, Commerce, State, Treasury, and the U.S. Trade Representative.

Then there were 100 Senators and 435 Congressmen who felt they had a say in the process; and finally the general public, all of us.

Not everyone agreed. The two parameters that were established among those who came to the table were the removal of government from agriculture, and the use of mandatory controls. These were the two parameters and there were numerous positions in between.

I think we will see this problem of consensus continue, with no decrease in the number of people. It has become more difficult to reach a consensus, to establish a policy, because of all the compromises, the give-and-take, that have to take place.

The third area we are now addressing in agriculture is what I call the jurisdictional issue. What do I mean by that? I mean that many of the policy arenas in which agriculture finds itself are outside the scope and jurisdiction of the House and Senate Agriculture Committees. At any farm meeting in 1981 only one topic was under discussion. It was the embargo. The legislation that essentially restricts the President's authority in imposing an agricultural embargo was never considered by the Senate or House Agriculture Committee. It was written by the Senate Banking Committee and the House Foreign Affairs Committee. And we find ourselves today spending more of our time away from the Agriculture Committee as we work with the Budget Committees, Appropriation, Banking, Senate Finance, and House Ways and Means Committee. We especially do so as we talk tax policy and trade policy, foreign affairs, commerce, energy, and environment. And as we deal in these new arenas, these new jurisdictions of committee control, we must realize that we in agriculture are not a natural constituency of many of those committees, and that we will be dealing with other organizations outside of agriculture that historically we have not dealt with.

The other aspect that I think we must face as we try to influence policy is that Congress becomes more urban with each election. As farm population decreases, Congress is more urban. Fewer than 15 out of 435 members of the House of Representatives have a farm population of over 25 percent. There are more Congressmen who have zero farm population in their District than who have more than 25 percent.

What does this mean? It means that it causes us in agriculture to coordinate our efforts more, to consult more, to form coalitions with more diverse groups; and that we must also be able to bring the urban members, especially of the House but the Senate too, to realize how closely agriculture is related with other segments of the economy.

My final point about the difficulty and frustration in obtaining policy action is that attitudes among our various groups change all the time and we get mixed signals. If this seminar meets a year from today, a new Administration will just have been elected. Whether it be Democratic or Republican, the newly elected persons will come into office with a new farm policy, a new trade policy, a new fiscal policy, a new monetary policy. The new Administration will have its own players in the various departments and agencies and the Office of Trade Representative. And so I believe that as we look to the future it becomes increasingly difficult at times for us to pass legislation. I remind of the budget constraints, the problem of consensus among the numerous groups, the diversity of proposals, and the various jurisdictions and arenas we are dealing with now in agriculture. We face also a declining farm electorate in the elections of every two years. We must remember one thing in agriculture, that if we are not there to represent our interests, someone else will decide what our interests are and will form policy. So we must be there and work hard and be diligent and be represented from the beginning of the debate until the end so that we can have some influence on our own destiny.

POLICY "USERS" PERSPECTIVES: CONGRESS AND NATIONAL

Robert Young
Economist
Committee on Agriculture, Nutrition,
and Forestry, U.S. Senate

The topic for this panel poses the provocative question of "what I want from agricultural policy." Scott Shearer came by my office last week and we discussed what the other was going to talk about in this forum. Jokingly we both said that the answer to the question was easy; we'd like to see high farm income, ever expanding export markets, low government costs, and the ability to plant over 360 million acres a year to feed grains, food grains, cotton, and oilseeds.

One could answer the "what I want" question from a partisan bias. I'd like Agricultural Policy to give my side 66 seats in the Senate and control of the Administration.

But I think the question was posed in a serious vein, and I'll try to give you my thoughts. In arriving at my wish list, however, I think its critically important that we first take stock of where we've been, where we are now, and what we expect from the markets over the next few years.

In reviewing where we've been I'm not going to discuss the changes in export markets, declining asset values, and other market related variables. Rather I'd like to talk about who the new players are in the agricultural policy arena and, what I think may be more important, who the players are not.

One of the new players is the input industries. The Fertilizer Institute said very little about agricultural policy prior to 1983. The PIK program really woke them up, however. Now the Institute is able to marshall considerable economic and political pressure in order to make its wishes known and even kill programs proposed by either party that it finds objectionable.

Another player is the National Cattlemen's Association. For many years, the NCA did not worry much about the support price of milk. But in the wake of the dairy termination program, we can't talk about even changing the dates of dairy price cuts without creating a major beef (pun intended).

I don't pick these two groups at random. The first represents an interest group that has little concern with stock levels, or how balanced a commodity program may be. Its only concern is how many acres of crops are planted each year. A high volume, low margin agriculture is their objective, and one that attracted much attention prior to the 1987 crop.

The NCA's sudden activism illustrates how production agriculture is showing signs of internal conflict. Groups from without and within are together limiting our ability to adjust agricultural policy in response to changing conditions.

More important than these agriculturally related groups is a category of citizenry that does not appear as visible as it once was. It's the "worried or sympathetic urbanite" -- the urban constituent who used to feel that we needed to do something to help the farmer.

The negotiations between the Congress and White House in November to reduce the budget deficit provide an excellent case in point. Of the fifteen participants, only two have any agricultural interest. Of the two, only one actively participates on behalf of agriculture. When the entire budget process began in February, only two members of the Senate budget committee actively pushed to ease the proposed cut in the agricultural budget.

The 1985 Farm Bill substantially increased spending on agricultural programs. Under prevailing market conditions it has made farm income captive to the budget process. The budget battles of this year will be repeated, sometime. They might not recur next year if the current negotiations are successful, but with ever-declining-deficit targets, and farm program costs even down to the \$15-\$18 billion range, agriculture will continue to come under scrutiny. And that scrutiny will come from groups that are much less sympathetic than they have been in the past.

That's where we've been and where we are, with new groups of interested parties looking at agricultural policy from without as well as from within, and lacking the cadre of sympathetic urbanites that previously had been on agriculture's side.

In view of 1987's record farm income, one could say that we should wave these problems off -- that we don't have anything to worry about. We can take a few billion dollars out of government spending for agriculture, it might be supposed, without really hurting the sector that much.

But let's think about where we're going.

We're in a situation where livestock and poultry have contributed an unusually large part of farm income. The ratio between livestock and crop cash receipts exceeds 1.23, a record. Hog and chicken prices have already reacted to the increase in production brought on by lower costs of feed. Cattle numbers and production may take a little longer to respond but there too we can expect some price decline. What happens to farm income in one or two years when the livestock receipts fall back to \$69-\$70 billion?

Government payments are making up 11 percent of total farm cash receipts for 1987. What happens when direct payments, through a sequester or other action, fall by \$1.5-\$2.0 billion?

What happens too when we implement a gasoline tax or a Canadian potash ruling, or interest rates rise to support the dollar? If some of these factors combine to give even no more than a 2-3 percent increase in production costs, we've cut another \$2.5-4.0 billion from farm income. We will quickly be back to a farm income, in 1982 dollars, below the levels seen in 1984 or 1985, and well below that of 1987. It will be, in other words, a situation where farm income cannot support the current stabilization in land prices. The asset value of agriculture will resume its fall.

Now, clearly, we're doing things to try to keep this from happening. We've taken measures to fix the Farm Credit System, measures that will allow producers to renegotiate their debt structure, and measures to force the Farmers Home Administration to negotiate with the borrower. These actions will go a long way toward taking care of the liability side of the sheet.

And we will continue to work to hold the federal budget deficit down in an effort to keep interest rates under control. But that may, I repeat may, come at the cost of reductions in direct payments in farm programs.

The Administration is adamant in asking for reductions in target prices as a means of generating budget savings. There was a time in early November when the Administration wouldn't even provide a cost/savings estimate on a package that did not have some form of target price cuts.

And just about any proposal to reduce the budget cost of agricultural programs encounters opposition from one or more groups, including the two I named above as illustration. The Fertilizer Institute is adamant in opposition of the "0/92" program, a decoupling that would save some costs. Among ways to lower dairy spending are another mini-buyout, a diversion program, or a small assessment. But the NCA will probably come out strongly for further cuts in support prices.

These are the kind of player problems I mentioned at the outset. One group can bring constituents to bear to kill one proposal. Another has other targets. Fighting within agriculture itself, on display before a group of negotiators who really aren't all that worried about agriculture, comes at a time when a fragile recovery is occurring in agriculture, a recovery based on high livestock prices, large government payments, and low production costs. Knock any one of the legs out from under the recovery stool and you'll have a real stability problem, and therefore a political action problem in view of the antagonisms among the players.

So what do I want from agricultural policy? Basically, I want two to three more years in which to ease adjustments. During those years I want an agricultural policy that will help shelter the industry from budget cuts from groups that hesitate to accept strong corrective action, and from ourselves. I want the shelter to last long enough for us to get our economic house in order, including getting the farm debt situation under control. I want to get to the place where we can live with corn target prices at \$2.60 per bushel if we have to, with wheat target prices at \$3.75 if we have to, with milk prices at \$9.40 per cwt if we have to.

Because that's what's on the table now. Adjustments toward those prices are not some remote possibility in the future, but are a part of administration proposals relative to current law, right now. If we fight among ourselves, if we allow the policy decisions to be swayed by groups who are primarily worried about how much we plant and not by how much we use, then we're not going to be able to maneuver the overall industry to a point where it can live with those constraints.

In other words, I want two to three more years, not because it would be nice to keep our income levels up and expect the boom to last forever, but because the two to three more years are going to be needed badly if we're going to prevent another agricultural recession.

Because the chances are we'll have to.

THE CONTRIBUTION OF THE LAND GRANT SYSTEM TO AGRICULTURE AND RURAL POLICY DEVELOPMENT: A POLICY ISSUE

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Publicly-supported policy research and education in the Land Grant system has played a significant role in the development of agriculture and rural policy for the United States. The role that it might play in the future is a policy issue itself.

I address these comments mainly to the users of publicly-supported policy research and education. The outline of the paper is to review the importance of a knowledgeable citizenry in the policy process, examine the scope of policy issues that affect agriculture and rural life, discuss the responsibilities of the Land Grant system, and conclude with observations on some policy issues to be addressed.

Much of the paper draws directly from sections of a report now being drafted by a Division of Agriculture Committee of the National Association of State Universities and Land Grant Colleges. A list of the committee members is added as an appendix. This paper reflects my views of the draft materials and is not a statement of the committee. The committee statement will be available later.

Knowledge, Citizens and Policy

Democracy cannot long exist in the absence of an educated population. Thomas Jefferson clearly recognized the need for a populace well educated about the issues of the day. Jefferson stated in a September 28, 1820 letter to William Jarvis: "I know of no safe depository of the ultimate powers of the society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform their discretion by education."

Public policy research and education rests on a specific concept of the Land Grant university and its role in a democratic society. The Land Grant university is concerned with the problems of people and is committed to using the knowledge it assembles to improve the quality of life for the people of the state.

Public policy research and education is also based on a pluralist view of the democratic political process in which numerous individual interests and interest groups take part. Among the various branches of government are found many decision-makers with potentially conflicting interests. Public policy decisions are often compromises among these divergent interests. The fact that debate takes place means that the perceived interests of different groups conflict, giving rise to policy issues. The "perceived interests" of various groups largely depend on their beliefs about the outcomes of alternative actions, and how these outcomes affect them and the welfare of the larger society. Scientific knowledge, including the knowledge of social scientists, can be useful in assisting individuals and groups to obtain information and process that information so as to understand better (make transparent) the costs and benefits of alternative actions. With such information at hand all actors in the policy process can assess the trade-offs among options more knowledgeably.

The level of knowledge of the citizen and of elected or appointed officials is a key element in policy formation. Well-done public policy education and research can improve the level of knowledge of both citizens and officials. Intelligent policy making requires a knowledge of the agricultural and rural economy that is not only descriptively and historically accurate, but also

predictive -- it projects the consequences of policy alternatives. There is a need for better understanding of how farmers, consumers, and others respond to market and policy institutions; to anticipate the individual and aggregate implications of various policy actions; and to identify and provide for the information needs of those involved in the U.S. agricultural and rural economy.

The Scope of Public Policies that Bear on Agriculture and Rural America

Public policies that have an impact on agriculture and rural America include:

* General Economic Policies

U.S. agriculture is more tightly integrated into the rest of the economy than ever before.

Agriculture is a highly capital-intensive line of economic activity. One consequence is to make it dependent upon short-term as well as long-term credit.

Agriculture of our day relies heavily upon purchased intermediate inputs. It has come to depend upon export markets to absorb a significant portion of its output. The economic health of the U.S. farm sector is very much influenced by U.S. monetary and fiscal policies. For example, major changes in the level of U.S. interest rates and/or the foreign-currency value of the U.S. dollar have major implications for agriculture and those whose livelihood is tied to it.

* Agriculture and Food Policies

Agriculture and food policies are the programs targeted directly on the agricultural sector. They have a major impact upon the level and variability of farm incomes as well as upon the cost and availability of food to consumers. They are currently a subject of considerable public concern because the cost of the farm price support programs is currently exceeding \$25 billion per year.

* Technology

The development of new technologies is a constant process. Technology inflections do occur which stimulate relatively sharp production shifts that can overwhelm policies aimed at price maintenance and supply control. The pending biotechnology revolution promises to result in sharp production increases and severe stress. It seems likely that policy proposals will be made to regulate the development and adoption of this new technology, so as to protect producers from the effects of production shifts and also to protect consumers from possibly harmful food products.

* Policies for Rural America

Agriculture is a critical element of rural America. However, it is not the only economic activity in rural areas, and targeted farm programs are not adequate to address the many needs of rural people and communities. In fact, a healthy rural America that is relatively independent of agriculture would greatly assist agriculture. First, it would provide rural people, including farm families, with needed services such as education, health care, transportation, and recreation. Second, alternative economic opportunities would greatly aid the transfer of farmers out of agriculture when such adjustment is needed, as well as give part-time farmers additional income opportunities.

Policies related to the economic development of rural areas need to be reviewed and their payoff to the nation analyzed.

* Natural Resources and Environmental Issues

Agricultural practices employed on much of U.S. farmland are such that soil erosion takes place at rates that exceed the natural replenishment of the soil. Farming is a major cause of chemical pollution of ground water, rivers, and lakes. The rate of withdrawal of ground water for agricultural irrigation in much of the West exceeds the rate at which the aquifers are naturally replenished. These are natural resource problems that can be addressed with appropriate public policies.

* Global Perspective

The increased importance of international factors to American agriculture -- expanded markets as well as monetary conditions -- has been both boon and bane. World markets have contributed the major share of increased agricultural demand the past 15 years. They stimulated growth and initially added to farm income. They also infused new risks. The latter are seen in the export market declines of the 1980s that have brought sharp price reductions and contributed to deflated land values.

Internationalization of markets is not the exclusive reason for disequilibrium in agriculture, but it is a major contributor. A critical factor was the speed of the expansion of world markets in the 1970s, which encouraged an excessive production response not only in the United States but also in other developed nations -- Canada, Australia, and the EEC. The recent international monetary situation coupled with domestic farm programs that ignore international market realities has seriously exacerbated export sales problems.

International markets are not controllable. However, they could be managed better. The importance of international markets to agriculture and the U.S. economy requires that domestic farm programs not be inconsistent with international economic realities.

Responsibilities of Land Grant System

In the short span of 125 years, the Land Grant institutions of the United States have gained an enviable reputation throughout the western world. They are well recognized both for their academic excellence and their commitment to public service. They are the peoples' colleges; they were founded to provide educational opportunities for the sons and daughters of all the nation's citizens. The American dream of opportunity for the individual has been fostered in large measure by access to higher education for any and all who seek it.

One of the reasons that these institutions are so well regarded is their commitment to objectivity, to the search for truth wherever it may lead, to the quest for answers to real world problems. There must be openness to any and all ideas. Debate and difference of opinion are expected. It is in this setting that new agricultural technology has been developed and tested, applications of basic science have been adapted to unexpected new uses, and understanding of life processes has been pursued.

The record of the Land Grant system in serving both the individual and society has been good. Bringing together research, teaching, and extension in one organization has been a cornerstone of that success. Much has been accomplished, but many latent possibilities remain unrealized. Expectations about what can be done have grown with the system. Providing answers to all the questions asked has not been easy. For example, when a commercial farmer needed help in choosing a ration for his hogs, he looked to Cooperative Extension or the Experiment Station for information and advice. If help was needed in combating a pest that was attacking his row crops, the accumulated knowledge of the Land Grant system was available through a variety of sources including both private businesses and Extension. Over time, public policy issues over a wide array of topics, from the level of pesticides that were acceptable in water supplies to the level of prices received for individual farm products, have also become subjects for study and inquiry. Not surprisingly, expectations have arisen that workers in the peoples' colleges could provide answers about what is a "fair" price for corn in the same manner that a new recommended variety of corn was developed. But simple answers to complex, value-laden questions seldom exist.

The opportunities for increasing understanding of complex issues may be defined as follows:

- * Single "best" solutions are not possible. Both within and outside the Land Grant institutions, successes in finding answers to an amazing array of difficult technical questions have fostered impressions that social, political and similar public policy questions could be provided with the "best" answers if only enough scientific resources were applied to their solution. The scientific method used in all fields of science allows objective study and experimentation. But simple, direct answers to complex questions seldom are provided in any field. Thus, one "best recommendation" for the fertilization of corn does not exist. Much more information is needed before one can suggest a good fertility program for a particular soil type and expected yield level, even when the results of a recent soil test are in hand. Recommendations are made for individual fields on the basis of accumulated knowledge and recently acquired local information.

Policy prescriptions or "best" recommendations are certainly no easier to obtain for complex questions of price and income policy than for levels of fertilization. Yet there often remains an expectation that such prescriptions or analyses should be derivable from policy studies and research. One of the fundamental obstacles both within and outside the Land Grant system is a lack of understanding about the likelihood of finding and instituting single best answers to complex agricultural, rural, and natural resource policy questions. It is particularly important that Land Grant professionals understand this reality and help others to recognize that simple solutions do not exist for policy problems.

- * Analysis is commonly done in an alternatives-consequences framework. Public policy analysis is centered around the search for alternative ways in which individual questions may be approached and answered. The search is for acceptable alternatives, for each of which a careful study and analysis is made of likely consequences. It is always necessary to recognize as fully as possible the political, economic, and financial environment in which choices must be made.

There are always tradeoffs. Also, seldom if ever does a policy action fail to have losers as well as gainers. The public sector costs must be weighed against private gains; conversely, the costs of new programs to taxpayers must be assessed against expected benefits.

Analyses in an alternatives-consequences framework should be at the heart of work in public policy in Land Grant institutions. Consideration must be given to a variety of alternatives that respond to policy issues. Simple or straightforward answers to policy questions that make all groups better off are hard to find.

- * Advocacy positions are not tenable. Advocacy of specific policy positions by Land Grant institutions or indirectly by individuals within such institutions is not in the public interest or in the long-run interests of the institutions themselves. This is not to say that individuals should not have opinions or beliefs about which a number of alternative policies might work best or be most appropriate. But advocacy in the political arena using an institutional banner to support the cause is likely to forfeit the claims of objectivity and scientific method upon which the Land Grant system has been built.

Public policy analysis demands consideration of the consequences of different alternatives and our best efforts to project what might happen under different circumstances. Individual faculty members may well belong to political parties and speak clearly in favor of political, social, and economic programs. In the final analysis, it is the people and their representatives who will make the policy decisions, not scientists or administrators. Looking for new policy alternatives and studying ways in which old alternatives may be amended or adjusted is part of the mission of analysts in the Land Grant system. Deciding which alternative is best and then "selling" the general public on this choice is not within our charter.

The Land Grant system belongs to the people. It must represent all their interests as fairly as possible. While its institutions may be based in and concerned for rural America, scholarship and research must be in the interest of all the people, not just farmers or the food industry. To be effective in a political environment and to serve the people broadly, the Land Grant institutions must be a source of ideas and objective analyses. They cannot advocate individual solutions to policy problems or champion the positions of one group in society at the expense of others.

The continuing challenges for the system include:

- * To create awareness of the policy process. Policy decisions are usually the result of compromise. Competing interests invariably seek divergent ends. Whether the issue be the allocation of scarce water within a water district or the reduction of trade barriers between the United States and Canada, it is necessary to understand the nature of differing positions, the evidence supporting alternative approaches, the decision making process itself, and the influences which will be crucial to the final decision makers. It is a complex process.

If the Land Grant system is to be effective in helping the people through their institutions make wise decisions, professionals within the Land Grant institutions must become more politically aware of the processes by which policy decisions are made. This is true irrespective of whether the discussion be within a community or across international borders.

- * To recognize dimensions and scope of the problem. In an alternative-consequences framework, one looks for differing approaches and reasons for holding opposing views of what needs to be done. Many people may be affected, even though some only indirectly. When farmers seek use-value assessment for agricultural lands, they pass property tax burdens to other property owners and reduce sources of local government revenues. Acreage restrictions imposed on participating wheat and feed grain producers to qualify for deficiency payments in our domestic agricultural programs will at the same time reduce pressures on European Community producers competing in international markets to control their supplies. One of the unique potentials of the Land Grant system is to help those who ultimately make policy decisions to recognize more fully the scope and dimensions of each problem studied and its alternative solutions.
- * To provide forums for opposing views. The college or university provides neutral ground for the discussion of differing views. It can serve as a place where people can express varying or opposing views and search for potential routes of compromise. This is not a new role for the Land Grants, but may be one that could be given new prominence and encouragement. In the process, additional evidence or new information may be introduced from the scientific community. Alternatively, new applied problems may be posed for further study.
- * To assist in the process of change. Part of the Land Grant heritage has been in "helping people to help themselves." Most public policy issues revolve around some kind of change in the physical, biological, social, or economic environment. The forces of the status quo are always competing with the forces of change. This is just as true in rural America today as it was 100 years ago. The specific issues may be new but the challenge of responding to change required by a decision of the majority is no less complex. Whether it be in responding to the loss of water rights to the larger community or the loss of a market for sugar beets because of a change in national sugar policy, the challenge of assisting the "disadvantaged" to adjust rationally to a different environment remains a special responsibility within the Land Grant tradition. In the same manner, bringing together as much information from existing knowledge to assist in implementing new programs or policies efficiently is equally a part of the Land Grant function.

Policy Issues

The future contribution of the Land Grant system's policy research and education will be determined, in large measure, by the action of the political process. Thus, a number of policy issues bear on the contribution of the Land Grant system to agriculture and rural policy development. This final section outlines a number of these issues briefly.

- * What is to be the level of funding for Land Grant policy research and education? The level of funding provided by state and federal sources for agriculture and rural policy research and education will determine in large measure the contribution that will be made by the Land Grant system. With low levels of funding little information and education will be developed. Higher levels of funding should lead to increased contribution by the system. As is the case with any significant decision made by government, no one decision determines the outcome; but clearly the level of public support is a major and significant policy issue.
- * What is to be the level of public funding for federal government research and education? The productivity of Land Grant policy research and education is importantly linked to federal government research and education. The Land Grant system is a part of a larger Land Grant/USDA system of science and education. Increasing the funding of Land Grant policy research and education while reducing that for federal activities will reduce the productivity of the Land Grant system. For example, many of the national and international data are collected and disseminated by USDA agencies such as the Economic

Research Service and the National Agricultural Statistics Service. The levels of public funding for Land Grant and for federal government policy research and education are interrelated.

- * What is the proper role for Land Grant policy research and education? As outlined previously, a wide range of issues have an impact on agriculture and rural America. To focus narrowly on agricultural policy would lead to overlooking the impact that monetary policy, fiscal policy, international trade policy, and environmental policy have on the choices and options for U.S. agriculture and rural America. If only a narrow scope of issues is funded and addressed, the contribution of the Land Grant system will be limited.

When policy research and education are "packaged ineffectively" or are "politically naive", they fail to be policy-relevant. Land grant researchers and educators may tend to work on problems that interest them but are not of significance in the political process. Policy development often is strengthened by an iterative process where analysis is done, the results are examined by political actors, and the analysis is then redone taking into account the questions and concerns of the policy actors. How to achieve useful interaction between policy actors and policy researchers and educators is a policy question itself.

How can the public at large foster and support the ability of the Land Grant system to respond promptly and adequately? The "culture" of the Land Grant system tends to reward performance that is marked by intellectual excellence and richness. In the policy development process the actors often have a time constraint rather than a quality constraint. Thus, the ability of the system to provide research and education according to the needs of the policy development process is important. Creative policy changes that would encourage adequate and timely response are highly desirable.

- * How can coordination of policy research and education be achieved? It is conceivable that each state legislature would have the view that its Land Grant university should do all of the research and education on all policy problems for the state. Such an attitude would lead to much duplication and reduce productivity. How to achieve coordination of policy research and education among the states and between the states and federal agencies is itself a policy issue. For example, FAPRI has demonstrated the useful results of coordination between Iowa State and the University of Missouri. The funding decisions and attitudes of the users of research and education have important impacts on achieving the benefits of coordination.
- * Where will the new policy researchers and educators come from? Fundamental to long-run contribution by the Land Grant system to policy development is a well-trained, skillful cadre of analysts and educators. Thus the graduate and undergraduate teaching programs that produce the human capital needed for useful policy research and education need attention. Will there be a sufficient supply of the human capital required for future policy analysis? The provision of public funding for policy research and education should include funding for human capital development.

Conclusions

It is my judgment that we are in the midst of a rapid and fundamental renegotiation of the social contract between society and the agricultural science and education establishment. The agricultural and rural policy science and education system thus is also in the process of renegotiation with society as to what it will do for whom and how.

I suggest that the users and providers of policy analysis and education need to give attention to this negotiation. The users should interact with the policy analysts and educators to make clear what is wanted and what they are willing to pay for. (The difficulty of obtaining consensus among users should not be minimized.) The policy analysts and educators need to talk to the users of their work to find out what is desired and to make clear what is possible at what cost.

It is my hope that these observations will encourage a more useful and thoughtful negotiation. The future contribution of the Land Grant system to agricultural and rural policy development depends on the outcome.

Appendix

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THE NEW REALITY IN FINANCING AGRICULTURE: FARMERS AND THE FDIC

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In this presentation I will share some of the experiences and observations of my colleagues and myself in helping farm families having financial difficulties. More specifically, I will report on the work we have done with farmers and the local office of the Federal Deposit Insurance Corporation (FDIC) in failed bank situations. To put my comments about our work in better perspective, I will review a bit of our recent efforts at assisting farmers in financial trouble.

Problem Background. The drouth in 1980 over much of Missouri was the initial spark that ignited the flame of our presently known "farm crisis." As a result of it, many farmers who already were stretched thin by heavy debt loads incurred a few years earlier experienced reduced cash flows. Rising interest rates compounded their problems, especially if their loans were made at variable rates. The rising value of the dollar was a more distant event that further aggravated farmers' cash flow difficulties. It increased the price of farm export products on foreign markets, and caused export demand to decline. As export values decreased commodity prices fell, causing farmers' cash flows to be stressed further. Loan servicing then became more difficult. Many loans became delinquent. Soon afterward foreclosures (loan defaulting), voluntary conversions, and bankruptcy contributed to devaluation of farm assets, especially land and machinery. Lower value assets reduced collateral values securing loans and more farmers found themselves and their businesses threatened. Inflation that earlier had encouraged investment had turned 180 degrees.

Extension's Response. In the early 1980s the size and scope of the need for financial management assistance programs was not readily seen. The early cash flow deficiencies were often perceived as after effects of the drouth. Price declines were not yet understood to be lasting. The extent of the excess capacity built into our agriculture was not realized. Nor did we see the growing self-sufficiency of countries importing our farm commodities. As we know now, Murphy's Law functioned well in the first half of the 1980s -- much of what could go wrong, did.

Extension's first big thrust to meet the needs of farmers in financial difficulty was a statewide financial management training session for agricultural specialists, held in 1982. It was called, "Troubleshooting the Farm Business."

Owing to the growing number of farmers and farm creditors who were encountering financial difficulties, Extension and the State Department of Agriculture initiated in 1984 the MOFARMS program, a financial consulting service. This thrust was deemed necessary in order to provide additional unbiased third party consulting to deal with problems of debtors and creditors. Extension Farm Management Specialists and the MOFARMS consultants were trained to use financial management aids to help farmers demonstrate their credit-worthiness and/or to identify desirable restructuring options. The FINPACK financial management computer programs helped provide better information for borrowers and lenders as they addressed decisions dealing with farm debt. The procedure involved more paperwork than many farmers were comfortable with -- income statements, balance sheets, cash flows, and FmHA loan applications. These often proved confusing. Many farmers who had hoped better times would resolve their economic problems found it hard to face more adversity. Agribusinesses with which farmers dealt often found their businesses in difficulty too. A domino effect spread through rural communities and reached country banks.

Bank Closings. Small rural banks with limited diversification of loans were highly vulnerable to the deteriorating farm situation. As farm loan payments became delinquent, collateral values provided weak security and more farm loans became non-performing. Bank examiners placed increasing scrutiny on bank reserves. Bank capital was gradually depleted. When calls for additional capital for reserves could not be met, banks closed. In 1984 two Missouri banks did so. In 1985 nine failed. In 1986 nine more failed and it was rumored that 150 Missouri banks were in trouble. Most of these banks were small and heavily involved in agriculture.

As banks failed, a trail of anxious farmer borrowers was left behind. The FDIC apparently added to farmers' anxiety by permitting, at some locations, delay in processing. There were at various times and places misunderstandings, poor communication, errors in handling accounts, and

other people problems. Attention to these problems was focused by an active community grapevine and maybe enhanced just a bit by the rumor mill. That raised anxiety levels to a point that interfered with good working relationships. By the end of 1986, FDIC and farmers were having enough processing problems that they looked for help.

FDIC Asks for Help. In January 1987, following the failure of the Citizens Bank of Windsor, FDIC looked to Extension for help. Staff members of the Kansas City office wanted to pilot a project in Missouri patterned after their experience at Gehring, Nebraska. At Gehring, they were successful in selling many loans of a failed bank to other banks in the area. They attributed much of their success to Extension Farm Management Specialists who helped farmers prepare necessary financial management instruments, together with applications for guaranteed Farmers Home Administration loans. This paperwork was a necessary prerequisite to securing credit from a new lender.

An FDIC account manager working at Windsor, who had worked at Gehring, asked the Nebraska Extension Specialists for advice on how he could involve the Missouri Extension Service. One of the Nebraska Specialists then called us at Columbia and described how Nebraska Extension had helped FDIC and farmers with classified loans. We were asked to contact the FDIC account manager at the Windsor bank and discuss how we could assist farmers and FDIC in the settlement process. We made the contact with FDIC officials at Windsor and their supervisors at the regional FDIC office in Kansas City.

From those initial contacts with FDIC personnel, we scheduled a meeting in Windsor on January 7 to discuss ground rules and operating procedures for working together. Participating in this meeting were FDIC officials, FmHA District and County Supervisors, state and area Extension staff members, FDIC debtor farmers, and a local attorney.

The Problem and Response. Both FDIC and farmers needed our help in preparing financial statements and cash flow projections, and completing a series of forms needed in an application for FmHA guaranteed loans. FmHA guaranteed loans were sought as a way to reduce risk of loss by prospective new lenders -- who, it was hoped, would take over loans of debtors in the FDIC portfolio. The loans were mostly classified loans, defined as loans delinquent in payments, or lacking adequate collateral as security, and/or projected to underperform due to inadequate cash flow. Not all agricultural loans in failed banks were classified, but most were.

Of the classified loans, about one-third of the debtors apparently were able to find other creditors. Approximately one-third relinquished control of assets to FDIC. Another third sought help from us. Thus, the tough issue for farmers with classified loans was how to survive the FDIC liquidation process by finding a new lender. Our assistance to farmers and FDIC at failed bank sites was to get the process of credit resolution initiated quickly and to help the farmer demonstrate his credit worthiness using conservative estimates of production, commodity prices, and costs. These estimates were generally used by FmHA in loan applications.

Conservative cash flow projections were made to demonstrate the debt servicing ability likely to be appropriate in the future, rather than to attempt to support the cash flow data as perceived when the debts were incurred. This procedure established a chasm between the amount of debt the debtor had incurred before the bank failed and what was likely to be the amount he could service in the future. Most farmers with whom we worked had serious deficiencies between the amount of debt that could be serviced by cash flows and the debt that had been incurred earlier -- the loan being held by FDIC. Likewise, there was a deficiency in the collateral value securing the loans of most debtors we assisted. In some cases, a debt reduced by write-down to the value of the secured collateral could then be serviced by expected cash flows. On some other farms, cash flow generation was inadequate to support even a debt that had been reduced to collateral value. We found still a few other instances where collateral values equalled debts without a debt write-down, yet cash flow generation was insufficient.

Several basic kinds of problems were observed. First, most of the farms had acquired debts (on real estate) in the 1970s to the limit of debt servicing at that time; little risk cushion had remained. Operating losses in following years pushed the debts higher, making debt servicing increasingly difficult. Contributing to the debt-to-cash-flow imbalance was the fact that most of the farms were smaller ones under control of a middle-aged farmer, and organized in such a way that the operator was monetarily underemployed. These conditions are not conducive to recruiting new creditors.

Given that kind of environment, what did we do? We worked at four failed bank sites -- Windsor, Pattonsburg, King City, and Forest City. At these four sites, 113 agriculture loans totaled \$17.1 million. Of the 113 borrowers, our response teams assisted 53.

Response Teams. The response teams at each failed bank were selected from eleven Extension Farm Management Specialists and five MOFARMS consultants. Each response team member was asked to spend no more than a week at a site. At each site before the response team was assigned, FDIC, FmHA, and Extension personnel met to coordinate efforts and agree on operating procedures. Work with farmers at each site was conducted away from FDIC offices, in private places, usually a local church. FDIC agreed to share the file held on each farmer. However, most files provided little current information and, therefore, were of limited help. Most of the response team's assistance to farmers was completed within two weeks of the coordination meeting. In addition to the paperwork assistance mentioned above, response team members analyzed the debtor's situation and suggested strategies they believed (based on the data at hand) to be available for the debtor to pursue in his negotiations with FDIC, FmHA, and other creditors. We recognized, however, that the debtors seeking our help tended to be those in the middle of the population of classified loans and were in modest to weak negotiating positions. What we tried to do was to make sure the debtor understood the underlying problems contributing to his financial dilemma, and the options available to him for realizing the best outcome for his family.

The Work Experience. Dealing with FDIC was sometimes about what one would expect in dealing with an established agency not highly experienced in agriculture. And sometimes it was more difficult than that. We really were limited beyond our early assistance on itemizing assets and liabilities, projecting cash flows, and critiquing and strategizing. From follow-up contacts with some of those assisted, we learned about unkept appointments, errors in record keeping, personnel who were unfamiliar with agriculture, and some persons who were intimidating to deal with. When questioning FDIC officials about such unfortunate instances, we were told that most FDIC staff people were on temporary appointments, and most had less than a year remaining before termination of their appointment. It was admitted that dedication to the job may have been missing. It is suspected by some of us that FDIC inherited a job larger than that for which the agency was prepared. For debtors feeling intimidated, officials suggested that FDIC personnel, in attempting to fulfill their fiduciary responsibility to the former bank stockholders, may have pressed harder than necessary for maximum collection. This experience of intimidation via strong collection procedures suggests a possible educational need of quite a number of farmers -- that of learning how to negotiate. I suspect some of the debtors' financial distress could be traced to earlier farm business negotiating deficiencies.

Slow Progress. By June 12, six months after Extension began to lend a hand, only three of the 11 farmers we helped at Windsor had settled with FDIC. The loans of all six farmers whom we helped at Pattonsburg were purchased by another bank, and only 11 of the 36 at King City and Forest City were in process of being settled.

In mid-summer, new legislation signed by the President, the "Competitive Equality Banking Act," ended the closure of additional Missouri agricultural banks. This legislation permits bank capital deficiencies to be replenished over a seven-year period instead of a single year.

Settlement of FDIC accounts is slowed, according to FDIC officials, by the difficulty in obtaining financial concessions by FDIC, FmHA, and other lenders. I suspect each player is attempting to strengthen his position to minimize future loan losses.

When I was asked to make this report I got in touch with one farmer at each of three sites, Windsor, King City, and Forest City, whom I had assisted. I posed three questions:

- What progress have you made in your attempts to remove your loan from control of FDIC?
- What did the Extension response team members do that you feel was of value to you?
- What additionally should we have done?

I chose three persons who I thought might have different perspectives.

One was a young couple, about 30 years of age, who had purchased land late in the 1970s. They also had six landlords, and were involved in two businesses in town. Their farm business was undersecured and nonperforming.

Another case was an owner about 40 years old with a small farm of 160 acres, and almost a full-time job off the farm. This farm was undersecured, and would not cash flow without off-farm income. FDIC held one secured note and one unsecured note.

The third case was a large cash grain and beef cow farm, about 1200 acres, half owned and half leased. One man who was more than 50 years of age farmed the acreage with occasional hired help. This farm operation was slightly (10 percent) undersecured, had a large line of operating credit, and would almost cash flow.

The answers to my first question were as follows:

The young couple had settled with FDIC and were dealing with a new banker. They were able to settle within 60 days.

The farmer with 160 acres and off-farm work conformed to FDIC's request to make a settlement offer about 10 days after we helped him. Six months had passed and FDIC has promised but failed to make a counter-offer. This borrower is current with FDIC but becoming delinquent to FmHA. FDIC is requiring most of the proceeds.

The third case, the large farmer, has yet to start negotiations. The bank failed at crop planting time so planting and caring for the 1987 crop was the farmer's top priority. About 300 acres of soybeans were yet to be harvested on November 7. FDIC had obtained appraisals on the secured property but had been unwilling to share the data. The farmer said he intended to initiate action as soon as the crop harvest was completed.

As responses to the second question, Extension's contribution was expressed in these terms:

Young couple -- "Your help with all that paperwork."

Smaller farmer -- "Your help with laying out the whole picture. That helped us and FDIC understand the problem."

Larger farmer -- "Your telling us what we could expect."

Their response to the third question did not reveal anything further we in Extension could have done; however, the two who have not settled reminded me they still have my phone number so yet may call me for more help.

Finally, I cite a statement in the July 24 newsletter of the University's Vice President of Academic Affairs. This statement was a quotation from Reverend Joe Bunce of the Baptist Church at King City. In reporting to the University's Board of Curators Reverend Bunce said, "The rural crisis would have been rural chaos without the help of Extension in our community." He was referring to the work of the response team. We obviously feel good that Extension was able to respond to the 50+ farm families who asked for help, as we assumed a new role for us within a very short time.

THE NEW REALITY IN FINANCING AGRICULTURE:
AN APPRAISAL OF THE CURRENT AND FUTURE ROLE
OF FARM LENDING ENTITIES -- WHAT IS AT STAKE?

J. Bruce Bullock
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Who will finance agriculture in the future? This question has been raised with increasing frequency as the agricultural sector has moved through its financial problems of the past six years.

Concern about the answer to this question has risen as we have observed, first, the move to make the Farmers Home Administration a loan guarantor rather than a lender; second, the insolvency of the Farm Credit System; and third, decisions by some banks to reduce sharply, if not eliminate, their agricultural lending operations.

Developments in the agricultural finance market of the past six years raise two questions that are the focus of my discussion:

- (1) Will there be a shortage of agricultural credit in the future?
- (2) Who will be the suppliers of agricultural credit in the future?

For both of these questions, "future" refers to the next 5-10 years.

My answer to the first question is, "No, there will not be a shortage of agricultural credit." My answer to the second question is, "There will not likely be major changes in the sources of agricultural credit." My task now is to explain why I arrive at these answers.

Any discussion of agricultural credit markets and public policy on agricultural credit must recognize the economic realities of the structure of U.S. agriculture. Less than three percent of the U.S. population lives on the slightly over two million farms reported in the Census. We also know that 90 percent of agricultural products sold in markets are produced by only 30 percent of the people who live on farms. Moreover, about five percent of the farms account for about 50 percent of agricultural sales. Also, keep in mind that only about 12 percent of the families who live on farms earn at least half their family income from the production and sale of agricultural products.

So what are we talking about when we refer to the U.S. agricultural sector? One definition of agriculture would be to include only the set of high technology, large scale, capital-intensive agricultural production businesses that are the primary source (over 90 percent) of food and fiber for U.S. consumers and U.S. agricultural exports. Another view would be to include all the people living on the two million plus farms who want to be known as farmers.

For purposes of our discussion, we will accept this latter definition. But we will partition potential agricultural borrowers into two groups. The first group we will call farmers. The second group we will call agricultural production businesses. Farmers are defined as the 70 percent of the farm population that produces 10 percent of output. Generally, farmers as so defined earn less than 50 percent of their family income from production and sale of agricultural products. Agricultural production businesses are defined as the 30 percent of producers who produce 90 percent of agricultural sales.

Types of Agricultural Credit

Agricultural credit is a business arrangement between an agricultural borrower and his lender for the temporary use of capital with an understanding and obligation for repayment with interest at an agreed-upon time. Given our two categories of agricultural borrowers we have two types of agricultural credit: (1) loans to farmers, and (2) loans to agricultural production businesses.

If we had looked at a typical commercial bank's loan portfolio five years ago, we would have found the portfolio partitioned into three types of loans, (a) consumer loans, (b) business loans, and (c) farm loans.

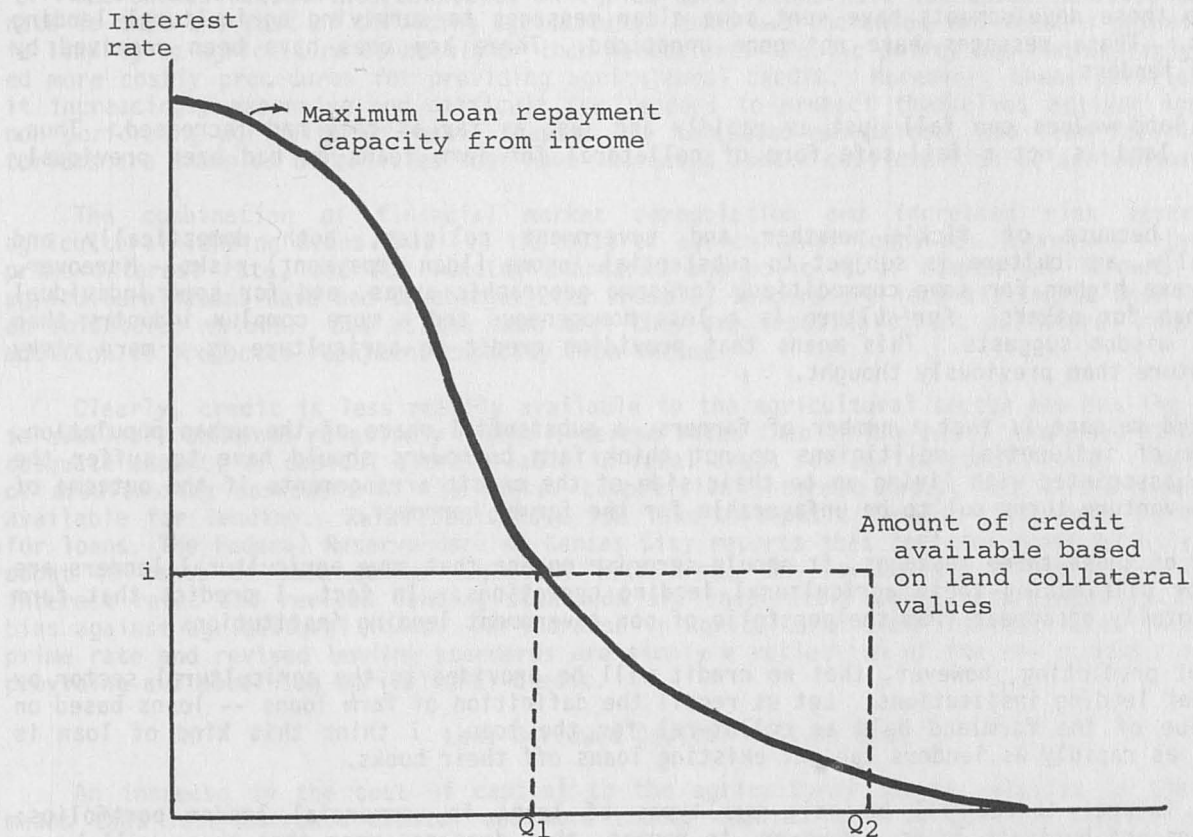
Consumer loans are made in accordance with the lender's evaluation of the borrower's repayment capacity based on the level and stability of the borrower's income. Business loans are expected to be repaid from the anticipated income stream of the business being financed rather than the income of the business owner. Farm loans, on the other hand, have been on anticipated market value of land pledged as collateral for the loan. When made in that way repayment capacity based on the borrower's income was of little or no concern. The market value of the land collateral provided lenders with all the loan repayment guarantee they felt they needed. Whether farm loans will continue to be made in that way is a current issue.

The significance of the distinction between consumer, business, and farm loans -- farm loans as made in the past -- is illustrated in Figure 1. The solid line represents the maximum amount of debt that a borrower can repay at alternative interest rates from the borrower's income stream. For example, at interest rate i the maximum amount of debt that can be repaid from the borrower's income is Q_1 . This is the maximum loan a lender would make for a consumer or a business loan. However, if the borrower owns farmland, he is eligible for a "farm" loan. The maximum amount of a farm loan is based on the value of land the borrower is willing to pledge as collateral. This is represented by Q_2 in Figure 1. The only way loans in excess of Q_1 can be repaid is by sale of the collateral asset.

The illustration bears on the farm loan experience of the last decade or two. Unfortunately, income repayment capacity never existed for a major portion of the farm loans made during the 1970s.

This approach to making farm loans led to a 228 percent increase in farm debt during the decade of the 1970s in response to a 220 percent increase in the value of agricultural assets.

Figure 1
Debt Repayment Capacity from Income Compared with
Credit Availability Based on Collateral Value



Repayment capacity (net farm income) increased only 50 percent while farm debt increased 228 percent. The over leveraging of farm income with farm debt was becoming obvious by 1980. The pending financial disaster became a reality in 1981 when land values fell sharply. The value of land held as collateral for the rapid expansion of farm debt during the 1970s fell by 50 percent throughout much of the midwest. We have been struggling through the unpleasant but inevitable outcome of those events for the past six years.

Effects of Agricultural Finance Problems

Two aspects of the financial adjustments that have occurred in agriculture since 1981 are important. First, the debt repayment problem has been geographically widespread. Only the northeastern United States has been spared. Moreover, the only reason the northeast was spared is that land prices did not increase as rapidly there during the 1970s as in other parts of the country. Second, the political response to the financial threat to family farms was an increase in efforts to impose loan repayment moratoriums, interest rate write downs, and debt forgiveness on lenders in order to prevent financially troubled farmers from being "forced off the farm." The passage of Chapter 12 bankruptcy laws was an obvious response to the political pressures generated by the farm credit problems.

The financial problems of agriculture took a serious toll on agricultural lenders as well as borrowers. Numerous agricultural banks failed. More diversified lenders suffered substantial financial losses, but survived. The biggest casualty was, of course, the Farm Credit System. The magnitude of the Farm Credit System's financial problems was compounded first by the prolonged refusal of System management to recognize and admit the nature and magnitude of its financial problems, and second by an unwillingness of System management and Congress to deal with the economic realities of the System. Congress is currently trying to pass legislation to keep the System from having to default on its own debt obligations. Congress also seems to be intent on restructuring as well as recapitalizing the System. I return to the implications of the pending Farm Credit legislation below.

Developments in the agricultural finance market over the past 10 years and public policy responses to those developments have sent some clear messages to surviving agricultural lending institutions. These messages have not gone unnoticed. Three key ones have been received by agricultural lenders.

First, land values can fall just as rapidly and just as far as they had increased. Thus, agricultural land is not a fail-safe form of collateral for farm loans as had been previously assumed.

Second, because of fickle weather and government policies, both domestically and internationally, agriculture is subject to substantial income (loan repayment) risks. Moreover, these risks are higher for some commodities, for some geographic areas, and for some individual producers than for others. Agriculture is a less homogeneous and a more complex industry than conventional wisdom suggests. This means that providing credit to agriculture is a more risky business venture than previously thought.

The third message is that a number of farmers, a substantial share of the urban population, and a number of influential politicians do not think farm borrowers should have to suffer the consequences associated with living up to their side of the credit arrangements if the outcome of the business venture turns out to be unfavorable for the farmer borrower.

Because of these three messages, it should surprise no one that some agricultural lenders are curtailing or eliminating their agricultural lending operations. In fact, I predict that farm loans will totally disappear from the portfolio of non government lending institutions.

I am not predicting, however, that no credit will be provided to the agricultural sector by non government lending institutions. Let us recall the definition of farm loans -- loans based on expected value of the farmland held as collateral for the loan. I think this kind of loan is disappearing as rapidly as lenders can get existing loans off their books.

In the future, there will be only two types of loans in commercial lender portfolios: consumer loans and business loans. However, to repeat, that does not mean that there will be no credit available to the agricultural sector from commercial lending institutions.

On the contrary, credit will be available to the agricultural sector at competitive interest rates. In the future, commercial lenders will treat loans to the agricultural sector just as they do their loans to other segments of the economy. Consumer loans and business loans to agriculture will be based on the lender's evaluation of the borrower's repayment capacity based on income projections, not on the basis of collateral values. Most loans to "farmers" (the 70 percent who produce 10 percent of agricultural sales) will be classified as consumer loans and related primarily to the level and stability of the borrower's off-farm income. Most loans to agricultural production businesses will be classified as business loans. The amount and nature of these loans will be based on the lender's evaluation of the businesses' income potential and the risks associated with the possible shortfall of that income below a level required for successful loan servicing.

I said that there will be no shortage of agricultural credit in the future at competitive interest rates. This raises a question about what "competitive interest rate" means. A competitive interest rate for agricultural loans reflects the foregone returns that would be obtained from using the capital in the non agricultural sector of the economy plus a risk premium (discount) to reflect the extent to which agricultural lending is more (or less) risky than other types of lending.

Higher Cost of Capital to Agriculture

In the last few years, interest rates on loans to agriculture have increased relative to the prime rate, for two reasons. First, deregulation of U.S. capital markets has raised the cost of funds to commercial banks in general and particularly rural banks. Deregulation of financial markets has also increased the access of rural capital to higher-return and less-risky non-farm investments. This means that agricultural borrowers will have to pay a higher interest rate in order to get access to these funds than was the case before deregulation. But on the other hand, deregulation has also meant that interest rates on savings of rural residents have increased to levels more like those of urban residents.

The second reason interest rates on agricultural loans have increased relative to the prime rate is that the cost of servicing agricultural loans has increased and lenders perceive the risk in lending to agriculture to be higher than heretofore. Public policy has increasingly established more costly procedures for providing agricultural credit. Moreover, these policies have made it increasingly expensive and difficult for lenders to protect themselves against losses from a non performing agricultural loan. Chapter 12, homestead exemptions, and loan foreclosure moratoriums are examples of policies that have increased lender cost and risk of agricultural lending.

The combination of financial market deregulation and increased risk associated with agricultural lending means that (1) the cost of agricultural loans has increased relative to the prime interest rate, and (2) lending standards and policies of commercial lenders relative to agricultural loans have had to change. For example, lenders are less willing to base loan amounts on collateral values. But at the same time they are imposing strict collateral requirements in addition to projected repayment capacity from income.

Clearly, credit is less readily available to the agricultural sector now and the credit that is available commands relatively higher interest rates than in the past. However, large and quite adequate amounts of capital are available in rural areas for agricultural loans. The shortage is of creditworthy borrowers at the higher competitive interest rates, not a shortage of capital available for lending. Rural banks have low loan-to-deposit levels. They have funds available for loans. The Federal Reserve Bank of Kansas City reports that regional banks have lent out only about 48 cents of each dollar deposited with them, the lowest rate in 10 years. The higher interest rates and revised lending standards are incorrectly being interpreted as a new lender bias against agricultural loans. An increase in agricultural loan interest rates relative to the prime rate and revised lending standards are simply a reflection of the new economic realities of providing and obtaining agricultural credit.

Less Borrowed Capital Will Be Used

An increase in the cost of capital to the agricultural sector relative to the prime rate means that less borrowed capital and more equity capital will be used to finance agricultural production businesses. This is occurring already, in several ways. Favorable weather and sustained prices have enabled large numbers of farmers to increase equity in their operation by using income to pay down debt. Many farmers -- grain producers, for example -- are using more rented or leased land and are owning less of the land they operate. Equipment leasing and lower

replacement rates on existing equipment are increasingly common. Contract livestock feeding and farming are also ways in which equity financing is becoming more important relative to borrowed capital. The demand for agricultural credit is clearly changing to reflect the new economic realities of agriculture.

Figure 2 shows the amount of farm debt provided by each of seven sources of agricultural debt. Commodity Credit Corporation loans are technically debt, but are more nearly a method of farm income support than a source of agricultural credit. Thus, CCC loans are not important for purposes of this discussion.

The Farmers Home Administration currently provides about 14 percent of U.S. farm debt (see table). The FmHA was established as a lender of last resort for farmers. More recently FmHA loans have been used as a mechanism to funnel various types of financial relief and assistance to eligible farmers. The current Administration has tried to curtail direct lending by FmHA and to expand its role as a loan guarantor.

Distribution of Farm Debt Outstanding, by Source, December 31, 1986

Lender	Total Debt of \$190 Billion	\$140 Billion Debt to Commercial Lenders
	-----percent-----	
Federal Land Banks	21	29
Production Credit Associations	6	7
Commercial banks	23	31
Individuals and others	19	26
Life insurance companies	6	7
Farmer's Home Administration	14	--
Commodity Credit Corporation	11	--

Source: General Accounting Office reports

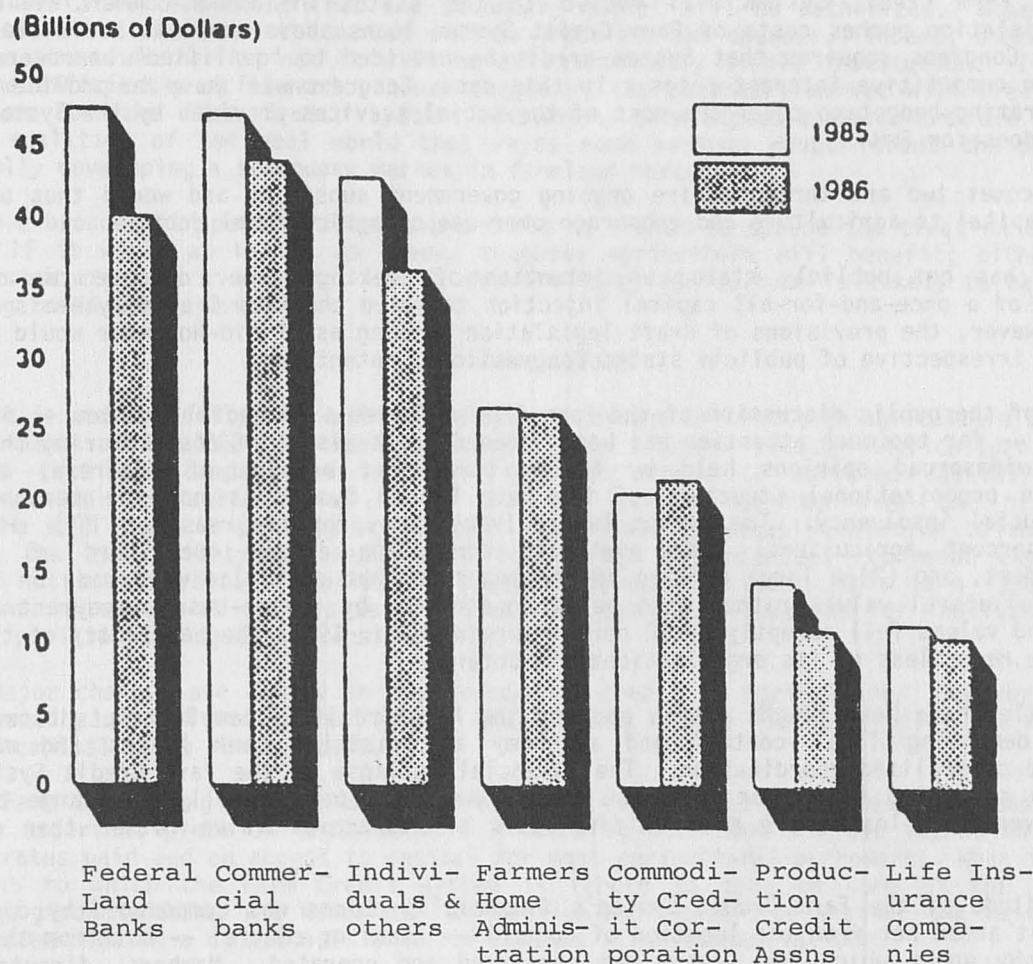
The FmHA is a non-commercial lender -- it lends money to qualified farmers with little or no expectation of repayment with interest. Commercial lenders, on the other hand, make loans with the full intention and understanding that the loan will be repaid with interest in accordance with the conditions of the loan.

Court rulings and pending farm credit legislation make it increasingly clear that Congress has no intention of trying to collect these non-commercial FmHA loans. As a result, about two-thirds of the FmHA portfolio is delinquent or non-performing. Moreover, 70 percent of the delinquent loans have been delinquent for at least three years. The dictionary definition of debt is "an obligation or liability to pay or render something to someone else." FmHA outstanding loan volume hardly seems to qualify as debt and probably should be removed from the liability side of the farm sector balance sheet.

Current and Future Sources of Agricultural Credit

This leaves agriculture with about \$140 billion of what might be called real debt owed to commercial agricultural lenders as of December 31, 1986. As noted above, commercial agricultural lenders make loans with the understanding that the loan will be repaid with interest. At present (1987) five groups of commercial lenders are providing credit to agriculture: commercial banks, individuals and others (including dealer credit), life insurance companies, Federal Land Banks, and Production Credit Associations. I see no new candidates for additions to the list. However, the farm credit legislation being developed in Congress as of November 1987 will determine whether the Federal Land Banks and Production Credit Associations will be restored to economically viable commercial lending institutions, or whether they will be transferred to the category of non-

Figure 2
Total Farm Debt by Lender, 1985 and 1986



commercial lenders along with the FmHA. Current information indicates that political reality is overriding economic reality and that Congress will likely pass legislation that begins the conversion of the Farm Credit System from a commercial lending institution to a non-commercial one.

Three legislative outcomes are possible:

- (1) The Farm Credit System will be returned to the status of an economically viable commercial agricultural lender. This will occur only if the legislation provides an appropriate level of direct financial assistance and imposes a restructuring plan and operating restrictions in such a way that the System can provide credit to agriculture at competitive interest rates without direct or indirect subsidies to the System. The restructuring and operating restrictions imposed by Congress must recognize that operating costs of the reorganized and refinanced System will have to be low enough to offset the higher risk of a non-diversified loan portfolio if System lending operations continue to be limited to agricultural loans.

- (2) The System will continue to operate as a commercial lending institution but will have costs that require higher than competitive interest rates. Because of restrictions imposed by the legislation, this will require that Congress provide annual operating subsidies to make up the difference between Farm Credit System operating costs and the competitive interest rates that the System will be forced to charge, if it is to maintain some target share of the agricultural credit market.
- (3) The Farm Credit System will evolve to the status of a non-commercial lender if legislation pushes costs of Farm Credit System loans above competitive interest rates, but Congress requires that System credit be provided to "qualified" borrowers at less than competitive interest rates. In this case, Congress will have to provide an annual operating budget to cover the cost of the social services provided by the System just as it does for FmHA.

Both outcomes two and three require ongoing government subsidies and would thus understate the cost of capital to agriculture and encourage over-use of agricultural debt.

Congress has not publicly stated an intention of seeking either outcome two or three. Members speak of a once-and-for-all capital injection to solve the Farm Credit System's financial problems. However, the provisions of draft legislation pending as of mid-November would result in outcome three irrespective of publicly stated Congressional intentions.

In much of the public discussion of the Farm Credit System's financial problem -- its causes and solutions -- far too much attention has been focused on the issue of restructuring the System. Contrary to widespread opinions held by System borrowers, members of Congress, and other observers, the organizational structure of the Farm Credit System is not the reason for the System's financial insolvency. The System is insolvent today for two reasons: (1) it held an almost 100 percent agricultural loan portfolio comprising almost one third of all U.S. agricultural debt, and (2) a large portion of the loans in that portfolio were made on the basis of inflated collateral values rather than being constrained by income-based repayment capacity. Thus, when land values fell abruptly by 50 percent beginning in 1981, the bankruptcy of the System was inevitable regardless of its organizational structure.

Long battles have been fought within each of the Farm Credit System Districts between local associations demanding local control and autonomy and district bank boards and management demanding more centralized coordination. The financial collapse of the Farm Credit System would not have been prevented by either of these groups had they been totally in charge of System operations given that loans were made on the basis of collateral value rather than repayment capacity.

The magnitude of the Farm Credit System's financial problems was compounded by operational procedures that arose not from the location of control -- local or central -- but from the cooperative philosophy under which the System was organized and operated. Members, directors, bank management, and Farm Credit Administration officials all viewed the Farm Credit System as a non-profit service cooperative. This cooperative philosophy at first led to the attitude that the holders of non-performing loans should fully meet their debt obligations so that costs of other members would not be increased. Initially, the repayment problems of the 1980s simply weren't officially recognized, in the hope that they would go away. As the repayment problems intensified, it became impossible to ignore them. It also became painfully obvious that blood could not be squeezed from turnips. Loss sharing between borrowers and lenders began to take place (see the Neil Harl paper in this report). Interest rates to System borrowers having performing loans were increased to cover the added costs of non-performing loans. Unfortunately for the System, this occurred at the same time other lenders were reducing interest rates. A number of borrowers with good loans either repaid their loans or transferred them to other lending institutions.

The result is that the Farm Credit System is now at a point where it needs \$3-6 billion of financial assistance to be returned to an economically viable status. This is at a time that is inauspicious for asking Congress to make budget expenditures.

Congress postponed dealing with the issue as long as it could. Moreover, federal assistance will not be provided without attachment of strings. The ongoing conflict between local control vs centralized control provides a convenient political framework to design some of those strings. In addition, the Farm Credit System legislation will provide an opportunity to deal with frustrations created by the curtailment of direct lending operations of FmHA. Congress is being sorely tempted

to impose some of the lending obligations previously handled by FmHA on the Farm Credit System. The strings being attached to the financial assistance package under consideration at the time of this seminar strongly increases the likelihood that outcome two or three rather than outcome one will be the result of the legislation.

One final observation about the legislation pending in November relates to creating a secondary market for farmland mortgages. This is a much discussed component of the legislative draft. There is little doubt that the secondary market will be authorized. However, there is considerable doubt about how the market will be organized and operate. Indeed, there is increased discussion about whether or not it will be an economically viable institution. If it works as neatly and efficiently as economic theory suggests, the secondary market will create very stiff competition for the Farm Credit System. However, knowledgeable observers are pointing out numerous realities of the real world that raise some serious doubts about the possibility of successfully developing a secondary market in farmland mortgages.

From a broader perspective there seems to be no reason to oppose the creation of a secondary market. If it works as neatly as theory suggests agriculture will benefit, although the Farm Credit System might be a casualty. If it doesn't work, agriculture is likely to be no worse off for having tried the experiment.

Conclusions

There is not currently, nor will there be, a shortage of credit to agriculture at competitive interest rates. The kicker is the term "competitive interest rates." Agriculture will have to pay rates that are competitive in order to have access to borrowed capital. Because of developments in the agricultural sector and the general economy over the past 10 years, agriculture will have to pay higher interest rates than previously relative to the prime rate. Moreover, the availability of credit will be limited to projected repayment capacity of the borrower, not to the value of collateral pledged against the loan. This is a financially sound development. However, it creates very difficult adjustment situations for individuals caught in the wrong position during this transition.

No major changes are likely in the sources of credit to agriculture. However, less credit will be used by agriculture in the future, meaning that equity financing will be a more important source of capital flows for agriculture.

The Farm Credit legislation that Congress will develop during the ending weeks of 1987 will be a very important piece of legislation. I think it will have limited impact on the level of interest rates paid and on access to capital for most agricultural borrowers. What is at stake is the extent to which the Farm Credit System is forced to take on some of the social agenda previously given to FmHA, and hence the legislation will determine whether the restructured Farm Credit System remains a commercial lender or becomes a non-commercial one.

THE NEW REALITY IN FINANCING AGRICULTURE:
A CRITICAL OBSERVER'S PERSPECTIVE

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Center for Rural Affairs
Walthill, Nebraska

At some risk to diplomacy I am tempted to chide the planning committee for suggesting in this seminar's title that there are new realities in agricultural policy. Economic and political realities may change, but not nearly as frequently as our perception of them. In fact, most of what is heralded as new is merely newly discovered by analysts and politicians who've been wrong before.

Public Intervention in Credit Markets. A good deal has been wrong about public intervention in agricultural credit markets. It has been excessive, ill-founded, and misdirected. Having declared that, let me hasten to add that public intervention in agricultural credit markets is appropriate, but that it must serve disciplined public purposes. The most grievous aspect of the mistakes that have been committed is that they undermine the public interest in such legitimate purposes.

The major federal intervention in credit markets might be said to have begun historically with various Congressional schemes to sell the public domain and populate western territories. The public interest lay in national security broadly, and in converting non-productive public assets into a privately held tax base. Putting aside the checkered record of these initiatives with respect to social objectives, we can credit the program with some success.

More explicit credit programs really began with the formation of the Federal Land Banks. They were intended to introduce land-collateralized loans to finance labor-saving mechanical technologies, the introduction of which coincided with the closing of the frontier and the concomitant increase in land values. Traditional local credit markets simply could not supply the capital -- agriculture was credit-starved.

Later, the Production Credit Associations were formed to perform debt relief functions during the Great Depression and to encourage short and intermediate borrowing to rationalize farms technically. In this instance, agriculture was credit-starved only in the sense that lenders had lost confidence in it generally.

The most inspired federal intervention in credit markets was the collection of Depression-era programs that sought to provide access to land for the rural poor, to mitigate against permanent tenancy as a prevailing land tenure, and to reduce barriers to entry. These programs eventually settled in the Farmers Home Administration.

All of these programs have lost their purpose. Land settlement programs, of course, ran out of land to sell, and expired. But the others managed to outlive their usefulness less gracefully, and to live on while degenerating in purpose.

The FLBs and PCAs became aggressive, undisciplined lenders, denying their federal origins or their public service obligations in financing the most egregious land boom of a century in the 1970s. Like too much of the cooperative movement, these agencies became management centered, lost touch with their most numerous members -- the average family farm -- and served their own perceived self-interest by serving that of their most rapidly expanding customers. They sought and got Congressional approval to lend on up to 85 percent of land value (95 percent with a federal guarantee), reduced the role of local directors in determining loan policies, abandoned beginning farmers with a nearly religious zeal, and managed their portfolio with as much sophistication and as much sensitivity as program traders on the stock exchange.

When the first PCA failed during the current financial crisis, it had about \$18 million in bad loans, of which \$12 million had been made, at the urging of the district bank, to one borrower. It was a cartoon caricature of the things that were to come.

The degeneration of purpose in the Farmers Home Administration hardly needs to be restated. The agency's eligibility guidelines have steadily been liberalized as its "emergency" programs have proliferated, its loan size limits have multiplied, and its direct loans have been largely

replaced by guarantees given to private lenders who have simply shifted some of their most insatiable borrowers onto FmHA.

Meantime, the agency's historic New Deal era programs have atrophied. What was once the agency's main purpose -- interest-subsidized loans to capable family-sized farmers who could not get credit elsewhere but who might graduate to commercial credit in a few years -- has been compressed into a minor program for "limited resource" farmers which the current administration simply ignores.

It is time to fess up. The premise justifying most forms of federal intervention in credit markets has been wrong. Agriculture is not, and has not been for some time, a capital deficit industry. In fact, it has been overcapitalized, and may well still be.

In this environment, the role of agricultural credit intervention by the federal government has been to increase capital flow to agriculture not by reducing its cost, but by shifting the risk from lender and borrower to the public. It has done so by guaranteeing the bonds of the Farm Credit System (anyone who says those bonds are not guaranteed by the firmest measure of Congressional assurance doesn't know what Wall Street knows), by expanding the use of FmHA emergency loans to larger-than-family-sized farms, by liberalizing accounting standards applied to agricultural lenders by bank regulators, and by infusing cash in advance for deficiency payments. These risk-absorbing chickens soon came home to roost.

There are deficiencies in agricultural credit markets, but they are largely mirror images of deficiencies in the land market -- the imbalance between land prices and farm income. These deficiencies operate to reduce competition by barring entry to otherwise qualified farmers. The only significant role of the federal government in credit markets that can be justified is to foster competition in the land market by encouraging entry by those who have farming skills but inadequate financial resources. Scaled back to its original purposes and trimmed of any other responsibility, there is nothing wrong with the foundational purpose of the Farmers Home Administration.

Secondary Market. One questionable new idea involves creation of a secondary market for farm loans. It is argued that Congress has provided an unfair competitive advantage to the Farm Credit System by giving it agency status, and that to level the playing field, it needs to provide banks with similar access to money markets.

The public purpose of this adventure is not clear. Apparently, it is only to increase the volume of credit available to agriculture, and not to reallocate it among prospective borrowers, since Congress seems certain to prescribe tough underwriting standards for these loans. The blue chip borrowers will have two windows on Wall Street, and maybe these preferred borrowers will also benefit from lower interest rates as a result. The not-so-secure can only expect more disinterest on the part of the once-concerned country bankers who now can leverage their loan capital and compete with the Farm Credit System in the fast track of agricultural lending.

In the meantime, neither the Farm Credit System nor its new private bank competitors will be required, as a quid pro quo for their government secured access to the bond market, to perform any service of obvious public value. Instead of reforming the Farm Credit System to prevent the abuses of discretion it suffered in the 1970s, Congress seems bent to authorize private banks to behave in the same way.

Moreover, odds are that legislation authorizing the secondary market may well provide that loans originated under the plan be exempt from state redemption rights or other debtor-friendly debt settlement laws.

The new reality here appears to be that a mistake that wasn't worth making once might be worth making twice.

Role of the States. The states are significant only to the extent that they can regulate the debt collection process. In general, they have responded slowly, as they have since Shay's Rebellion, to the pleas of debtors for leniency. This is not necessarily all bad, as the presence of debtor-friendly laws in a normal financial situation only encourages imprudent borrowing. However, most farm states have long since adopted harsh debt collection procedures written by and for lenders. These procedures create a "winner-take-all" contest between lenders and their financially troubled borrowers.

This harsh environment is heavily weighted in favor of the lender who controls all stages of the debt collection process. It's pay up or liquidate. Liquidate or foreclosure. Significantly, the effect of lender-friendly debt collection laws is the same during good financial times as that of debtor-friendly laws. They encourage imprudent lending.

In the 1980s, the lenders have been particularly sanctimonious in their insistence on the pound of flesh. In many states, they have steadfastly refused to entertain mild reform measures aimed at introducing third-party mediation, homestead redemption rights, or other attempts to moderate the debt settlement process. The result has been a lot of needless liquidation of farms that, if reorganized, might provide the banks with long-lasting customers and the community with continuing viability. Important mandatory mediation laws have been passed in Minnesota and Iowa, but states have generally been willing to let the lender draw blood when he takes his pound of flesh.

Among commercial agricultural banks, this hardening of the heart has been accompanied by a cynical withdrawal of profits. It is revealing that from 1977 to 1985 cash dividends paid to agricultural bank shareholders as a percentage of bank assets increased steadily, even as the farm crisis deepened. In all, bank owners were taking cash dividends in 1985 at twice the rate they were in 1977.

The federal government has offered a constructive alternative where the states have feared to tread. The new Chapter 12 of the federal bankruptcy code has provided a meaningful measure of relief and a negotiating tool for family farmers. The real meat in the measure is a provision allowing debt to be written down to the value of secured assets, and a prohibition on creditor vetoes. Now, it's negotiate or bankruptcy.

Land Inventory Issues. The farm crisis is now in or very near its third stage, the opportunity stage. Each crisis produces such a stage when asset values are relatively low, matched only by low levels of confidence in the financial future. The opportunity stage is preceded by two other crisis stages: the speculative stage when assets are bid far beyond their earning power (1973-1980), and the more widely recognized panic stage when assets are rapidly devalued (1981-198?).

The opportunity is lodged in land which for one reason or another is poised to change hands. There are gobs of it, several million acres currently in the inventory of lenders, including federal agencies, more to enter inventory, and yet more (perhaps far more) simply in weak financial hands. Who owns this land and what holders do with it is crucial to the future of rural America. In that sense, it is the most important economic development asset of many communities. Indeed, it holds their future.

For potential buyers with some purchasing power and the capacity to manage farm investments, there are real opportunities if investments are timed well and planned carefully. Many people would like to take advantage of these opportunities, including those who are starting farming for the first time, those who wisely left agriculture early in the panic stage and want to re-enter, those whose prudent management insulated their capital from the crisis, and a few who lost their farms but not all their capital in the panic. If able to get financing, these people would live on the land and farm it, and be part of the surrounding community.

But equally prepared and better positioned to buy this land are those who are cash-ready and eager to find a safe haven from the stock market for their idle or vulnerable funds. They can move more quickly to buy land in bulk. If these people get the land, rural America will look like a bargain basement the day after the sale -- damaged goods and leftovers no one wanted.

This really highlights the fact that a good deal of agricultural credit policy has served as a poor proxy for land tenure policy. Public intervention in the credit market at this time can serve no greater purpose than to maximize access for beginning and beginning-again farmers to land that is in transition.

One such provision exists in the FmHA authorizing-legislation requiring the agency to offer to sell land that is suitable for family farmers only to farmers who are eligible for FmHA loans for a period of three years. Unfortunately, the current administration has cavalierly declared that much of the land which only a few years ago was suitable for FmHA loans is no longer suitable for family farmers. Declaring the land surplus, FMHA can then sell it immediately to the highest bidder. Two Nebraska farm families who were outbid by non-farm investors for such land have filed

suit to force the agency to comply with the law. Congress is considering amendments that would remove any doubt about the agency's discretion in this area.

The Senate Agriculture Committee has recently included a provision in the Farm Credit System bailout bill that provides FmHA-eligible farmers with a loan guarantee and a four percent interest subsidy for five years for the purpose of buying land in the Farm Credit System inventory. This would be landmark legislation.

Caution. Public intervention to encourage purchase of land by beginning farmers ought to provide economic opportunity without promoting rash investments. Federal agencies and Land Grant universities should offer financial planning assistance to would-be beginning farmers, helping them to make careful, prudent decisions about buying land. Most of the public utterances now made by officials and experts are merely discouraging; but it is no better to offer blind optimism. If there is one thing we all should have learned in the last decade, it is that experts are fallible.

I remember a Federal Land Bank publication from the 1940s encouraging potential beginning farmers to evaluate their options carefully. Its tone was cautious but its message was clear -- this may be the right time for you to buy. It offered sound advice about how to evaluate one's situation, how to plan for contingencies, and how to make an informed judgment. It didn't preach leverage and it didn't dampen enthusiasm. It was a practical guide to making an important decision. We can do as well now.

Conclusion. Public intervention in agricultural credit markets has been poorly conceived and clumsily executed for many years. It can, however, be purposeful, formidable, and effective. The only real need at this time is for a credit intervention designed to expand economic opportunities by opening the land market with targeted long- and short-term credit. All other purposes seem empty. States should reform debt settlement laws to encourage work-out arrangements, and the federal government should preserve Chapter 12 of the bankruptcy code.

A PERSPECTIVE AND SUMMARY OF THE 1987 BREIMYER SEMINAR

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The 1987 Breimyer Seminar scores with this reviewer as one of the truly outstanding episodes in this highly-regarded series of annual assessments of policy issues. Each paper reflects professional expertise and an insightful grasp of real world problems.

This very excellence itself was a demanding challenge to the reviewer. Any adequate review would run to too many pages. Therefore, exercising implicit license to organize the review at his discretion, this reviewer has chosen to aggregate papers and authors under only three sub-titles:

1. The present situation (the state of the agricultural economy)
2. Contributive causes (how we got here)
3. Alternative remedies (what we can do about it)

This consolidation of papers will necessarily result in slighting the more tangential topics (e.g., Dr. Hildreth's) and perhaps those papers presented the second morning (e.g., Marty Strange's paper). With apologies to authors of those less adequately reviewed, the reviewer appeals to their charity.

The Situation: State of the Agricultural Economy

Professor Harl initiated the seminar with a highly professional and comprehensive documentation of the economic problems in U.S. agriculture. A segment of agriculture has been left with a non-sustainable debt load as collateral values (especially of farmland) have collapsed since the early 1980s. In some of the best agricultural areas (e.g., Iowa), land values have dropped by 60 percent or more. Areas closer to nonfarm employment centers -- which are not so dependent on agriculture -- have been spared some of the reduction in land values.

Farm foreclosures, as documented by Professor Harl, have been more numerous than at any time since the 1930s. Rural bank failures have also been the highest since the 1930s.

These financial difficulties have, however, been spread unevenly among farmers within an area -- and among areas. Areas that experienced less of a boom in land prices during the 1970s have suffered less of a crash. In Missouri, nearly half the farmers had no debt to service in 1986, but 15.5 percent had debt exceeding 40 percent of their assets. In the Dakotas, nearly 40 percent, by contrast, had debt in excess of 40 percent of their total assets. In general, the heavy debt loads were carried by comparatively larger, more aggressive, and younger farmers.

Professors Morehead and Bullock documented problems among agricultural lenders and discussed alternative loss-sharing remedies. Morehead reported on experiences of the Missouri Extension Service in cooperation with the Federal Deposit Insurance Corporation in evaluating and planning workouts with classified loans of failed rural banks. While results were somewhat mixed and successes are still tentative, this effort, along with MOFARMS and the strenuous and taxing efforts of Area Farm Management Specialists in assisting threatened farms, represented an excellent Extension response to crisis conditions. So it seems to this reviewer.

Bullock examined the condition of the Farm Credit System and options for saving it. He forecast a shift from collateral lending to repayment-based lending, and a partitioning of farm borrowers into essentially household and business borrowers. He laid out the conditions (and Federal "bail-out") required, in his view, to preserve a viable system. Even if those conditions are met, however, Bullock contended that agricultural credit will cost more in the future relative to more nearly riskless market rates (i.e., "prime" rates).

Some tightening of farm credit was not, however, viewed as necessarily damaging to agriculture.

Contributive Causes: How We Got Here

It's difficult to name either basic or contributive causes for the current situation. Mutual interdependence and circularity of causation are a mark of our complex economic system. Any attempt to identify "original" causes is certain to be frustrating. In a very real sense, identification of primary causes is like beauty -- "in the eye of the beholder." Furthermore, exogenous events -- unexpected ones from an outside source -- lead to a range of discretionary policy responses. In spite of these complexities it is necessary to identify causes if appropriate remediation is to occur.

Both Harl and Breimyer stress causes external to the agricultural sector. Harl cites three policies of the Federal government. First, he names a tendency during the 1960s and 1970s to accept inflation as normal and legitimate, as evidenced by indexing in entitlement programs. Second, as the public reacted to higher inflation, monetary authorities responded by trying to "wring it out." Third, with the Economic Recovery Tax Act of 1981, we started down the path to larger fiscal deficits which demanded still sterner monetary policies to reduce inflation. These events, Harl alleges, led to the recent and present financial turmoil with huge trade and fiscal deficits. Moreover, they threaten a future recession, monetary instability, and a flight of capital to safer havens.

In this decade the monetarily-induced disinflation led to rapid asset deflation not only in agriculture but in other raw product industries. It also led to income and export problems for Third World countries that are exporters of raw products.

Breimyer cites similar causes, and additionally cites the internationalization of U.S. agriculture. As he correctly states, dependence on exports is not a new phenomenon and did indeed begin 380 years earlier in Jamestown. Even so, the percent of U.S. cropland planted for export has increased from a post-depression low of 4 percent in 1940 to 25 percent in 1970, and to a peak of 39 percent in 1980. Thus, the sudden reversal of export demands, which Breimyer notes was not unique to agriculture, has indeed been a large contributor to the economic misery in the farmbelt.

A depressing note sounded by Breimyer, along with Cochrane and Harl, is the worldwide rise in protectionist or mercantilist sentiment. Thus, all three speakers were pessimistic about an early remedy to the decline in exports.

Breimyer in particular comments on the increased subtlety in pursuing mercantilist policies. To the simpler and more explicit ad valorem tariffs of the 1920s and 1930s are now added "health" regulations, licensing, exchange restrictions, internal subsidies, quotas, and a host of other devices. Much of the emphasis has shifted from restricting imports to subsidizing exports. Breimyer particularly deplores the export subsidy contest that the United States and the Common

Market have effectively become locked into. He notes that only the richer countries can play this game, it is destabilizing to Third World economies, and only the importers may be the ultimate winners.

Alternative Remedies: What We Can Do About It

Apparently taking the view commonly expressed on financial pages, Harl first stresses a reduction in the fiscal deficit -- and prefers a 40 billion reduction over the 23 billion commonly cited as a goal for the actions underway (November). Breimyer appears to disagree, and states that he is "...afraid we'll do what we should have done several years ago," meaning that a big budget-balancing act would have been more appropriate earlier. Certainly, the reviewer finds a curious irony in the apparent consensus view (on financial pages) that a reduction in the fiscal budget is the first remedy to a threatened recession.

Harl would continue giving assistance to farmers over the short term, and attempt to bring supply and demand into a more favorable balance over the longer term. The longer-term solution Harl suggests would apparently include demand-enhancing economic growth in the Third World countries along with output-reducing efforts here at home through closing of tax shelters and elimination of subsidies in development of new agricultural lands. How development programs in the Third World would suddenly gain in efficacy was unclear to the reviewer.

Breimyer reminds that in designing farm programs we would ignore the "public temper" at our peril. He suggests a "0-92" provision for total idling of crop base would hasten the end of price-income support programs by encouraging nonfarmers to perceive their tax dollars were only subsidizing a nonproductive lifestyle. He suggests the general public's concern is likely to focus on two parameters of the agricultural program: (1) the size of the bill; and (2) the distributional question of who gets what. Despite concern with the distributional question, Breimyer still favors a land retirement program (ARP), even with the \$50,000 limit lifted. He doubts the wisdom of too low export prices, seeing them as only helping the importers (i.e., our creditor -- Japan) and having destabilizing effects in Third World countries.

Willard Cochrane, in a refreshingly forthright and courageous statement, traced the evolution of his views from those with which he was generally associated in the 1960s. He has concluded that farmers won't accept mandatory acreage controls; that yesterday's assistance tends to be transformed into today's and tomorrow's costs (via capitalization into land values); and that support programs originally targeted to preserve smaller family-type farms have toward more concentrated ownership. Thus, he would eliminate target prices and all "per unit" payments as supportive of trends to larger farm units.

Alternatives suggested by Cochrane include expansion of food aid, both domestically and abroad; decoupling of deficiency payments from plantings; increasing technical assistance to make farmers more competitive internationally, especially in "alternative" enterprises; and giving more emphasis to bilateral trade agreements in what has become a more protectionist world.

Professor Abner Womack, in a comprehensive review of past and present farm policy instruments (or "levers"), stressed the necessity of having accurate projections and predictions available. With an expanding arsenal of levers to be adjusted, accurate projections of equilibrium prices, participation rates, demand, stocks, etc., are required if efforts at stabilization are not to be more destabilizing than stabilizing. In addition to the problem of forecasting accuracy, objectives and goals must be defined clearly. Stabilization has to be built around a price level that approaches market equilibrium levels; otherwise, a higher price must be supported by program-induced supply reductions, or it will result in a build-up of stocks.

In the "users" statements, Riedel and Hoffman appeared to be more concerned with longer-term competitiveness, and they deplored downsizing efforts as opening the door to foreign competitors. Hoffman was also concerned with effects of land retirement programs on the community. Even when CRP payments improve the farmer's net income, he contended that large scale land retirement can be devastating to the total rural community.

Shearer and Young stressed the increasing difficulties of reaching political consensus on farm programs because of the rapid expansion of the number of interest groups demanding a place at the roundtable. To general farm organizations (with their ideological diversity) have been added a plethora of commodity organizations with particular interests to be served. For example, the National Cattlemen's Association had historically been passive on the dairy support programs prior to the "buyout." Now it wants a voice. In addition to the proliferation of farm groups, a

similar proliferation of other interest groups, often with rather narrow interests, gradually seeks to graduate from interested observers to equal participants. In effect, part of the "new reality" of future farm program determination is the proliferation of an ever larger number of groups and organizations among whom a consensus must be sought.

An "Outsider's" Perspective

As a comparative outsider to the subdiscipline of agricultural policy, this reviewer would give the 1987 Breimyer Seminar quite high marks. Each paper carried relatively high interest, and was rich in mature experience, professional competence, and contemporary relevance.

Nevertheless, in a brief exercise of reviewer's license, this comparative outsider would raise a few questions not to criticize what came before but only to suggest possible questions for future seminars. Nor will these questions be particularly new nor innovative, but only (in the reviewer's mind) relevant.

- * Does the very existence of professional specialty in "Agricultural Policy" and of events dedicated to that issue tend to establish a presumption as to the desirability of governmental intervention in private markets and industries?
- * What is, or should be, the public sector's responsibility with respect to both the occurrence and the consequential aftermaths of the inevitable periods of non-sustainable income windfalls that all industries and sectors episodically enjoy? Whether it be Iowa corn for export, off-shore drilling rigs in The Gulf, gold mines in Canada, or stock market investors -- all industries do periodically experience unforecast windfalls and good fortunes that typically last long enough to generate expectations that must ultimately be disappointed. And, unfortunately, all such windfalls become incorporated into a much inflated cost structure -- as with the land boom of the 1970s. An example is frequent over-expenditure on tax sheltering equipment and facilities.

People often overlook the rapidity with which non-sustainable windfalls ensure their own demise. In cattle feeding, for instance, in an example of several years ago feedlots were posting per-head losses of \$80 to \$100 by the 4th quarter of 1979, even though fed cattle were selling for a 23 percent higher price than a year earlier when lots posted a profit of \$30 to \$40 per head! Further, this "unprofitable" price of 4th quarter 1979 was a solid 58 percent higher than only two years earlier. Why such losses with such a seemingly high price? The windfall profits enjoyed in 1978 and early 1979 had inspired feedlots to bid 600-700 pound feeders in at almost 50 percent higher than a year before (\$86.83 vs. \$58.00 per cwt.).

While such a response in cattle feeding occurs regularly enough to be viewed only as a normal or cyclical event, one demanding no public response, it only compresses into a much shorter time period the same kind of boom-to-bust phenomenon that is stretched out over longer periods for total industries and sectors. What is the public responsibility, or what should it be? Protect from the bust? Control the boom that in part causes the bust? Educate the populace to better diagnose the non-sustainability of the boom and its windfalls?

The above questions are believed to be generic in their application. Should the U.S. manufacturing industry and its labor unions (smokestack industries, especially) have been expected to understand better the temporary nature of their post-WWII near-industrial-monopoly? And should the public have tried to cushion the decline in real income that probably was required if we were to remain competitive? It's a major change for us when the income-enhancing effects of our helping to rebuild foreign industry is replaced by the competitive effects of a rebuilt and modernized foreign industrial plant.

Market history discloses "Tulipmanias," "South Sea Bubbles," land booms, export booms, post-war adjustments, and boom-to-bust phenomena aplenty. What is the public's responsibility? Even if the aggregate economy can be effectively fine-tuned with monetary and fiscal instruments, there will still be boom-to-bust scenarios for individual sectors and industries beneath the more peaceful and placid macro surface.

- * What are the psychological, social, and moral effects of various policy instruments and income or price support programs? How much management energy is devoted to "playing the games?" Do the programs reward borderline honesty, subterfuge, and even outright dishonesty? How do we avoid addictiveness in public aid of any kind? Can we keep "temporary" assistance truly temporary -- or does yesterday's assistance only inflate tomorrow's costs and supplies, necessitating even greater assistance? Does public assistance cultivate a "dependency syndrome?" To whatever extent the above risks are real, what means can be employed to minimize or avoid the mischief they might otherwise cause?
- * Finally, how can society at large avoid aggregate income losses from industries and sectors pursuing particular gains? Freshman-level understanding of markets suggests to any group that limiting market supply of a particular product or service having an inelastic demand will increase the share of national product received. But when all industries or producing groups discover this monopolist's panacea, what is the effect on the total product available to be divided among the contributing sectors? While all might see and describe it as only "bringing supply and demand into balance," the net result is usually the same -- somehow restrict output to enhance price. Can income targets be established below which such actions are considered socially defensible, and thus desirable, and above which we should call them monopolistic and in restraint of trade, and thus illegal?

Whether this restriction of output comes via wages or prices administered above free market levels, impediments to entry, producer-voted acreage or marketing controls, or whatever, the purpose would still seem to be to increase a sector's slice of the national pie by reducing its contribution to it. Should supply limitation be illegal for large corporations, but socially defensible for worker groups (unions), and not only approved but actively sought via government programs for small businesses such as farms? When should private firms or labor groups be prohibited from, benignly permitted, or actively and deliberately aided in increasing price through reductions in output?

When, in short, is the monopolist solution illegal in the extreme, and when is it socially desirable, even morally superior?

The above questions are intended only to stimulate thought on the part of the reader. The reviewer offers no answers or remedies, but only the observation that much well-intentioned assistance may fail to fulfill its original objective and, sometimes, only create a new problem necessitating additional remedies.

The 1987 edition of the Breimyer Seminar was very productive and useful. It should add lustre to and ensure continuation of these annual events. It was the reviewer's pleasure to have been a participant.

