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U.S. Agricultural Competitiveness  
and the 1985 Farm Bill:  
a Preliminary Analysis

Carlisle Ford Runge



**Department of Agricultural and Applied Economics**

University of Minnesota  
Institute of Agriculture, Forestry and Home Economics  
St. Paul, Minnesota 55108

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A Preliminary Analysis

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## Introduction

The purpose of this short paper is threefold. First, I would like to review briefly five familiar but overriding trends affecting the agricultural sector, which together emphasize the limited impact that the 1985 farm bill by itself can have on U.S. competitiveness in agriculture. Second, given these limitations, I will analyze the specific features of the 1985 bill most likely to enhance U.S. agricultural competitiveness. Third, I will discuss some provisions of the bill that may prove distinctly troublesome for farm policy, and offer some proposed alterations.

## Five Trends Leading to Crisis

The current crisis in American agriculture results from a series of trends in world markets that are largely beyond the reach of any domestic farm bill, no matter how well crafted. The problems of the Farm Credit System are but a reflection of the general crisis in agriculture. Confronting the problems of American farmers and farm credit markets therefore requires an understanding of the larger forces affecting American agriculture in a world economy. These forces condition all that we do in agricultural policy.

### Trend #1: Chronic Overproduction of Grain Crops

A recent article in Foreign Affairs described the global food stock situation (despite continued famine in some parts of Africa) as a "world awash in grain." This is accurate. This year, world surplus stocks of grain will total nearly 200 million metric tons. The United States will account for approximately 44% of this world surplus.

Needless to say, this level of overproduction creates tremendous downward pressure on prices, because buyers for it cannot be found. In the United States, to take one example, despite record grain purchases by the Soviet Union, wheat surplus stocks for 1985-86 are estimated to be unprecedented - almost enough so that we would scarcely need to plant a crop to maintain current supplies. CCC corn stocks will double, from 240 million bu. to about 475. Government wheat ownership will leap to 450 million bu. from 378. Soybean stocks will rise to 100 million bu. Rice, barley, sorghum and sugar stocks are all on the rise too. Over 5 million bales of cotton could wind up in CCC warehouses in 1985, compared with an expected 1.7 million bales for 1984. The government is not the only one with its bins full. Wheat and feed grains in the farmer-owned reserve add additional supplies, as do free stocks.

Soybeans and corn will have the smallest ending stock percentages, roughly a third of 1985/86 use. The exact percentage estimates at harvest were 31 percent for soybeans, 38 percent for corn, with rice and wheat carryouts much higher, at 62 percent and 69 percent respectively. Cotton is the most frightening. At the end of the 1985/86 marketing year, almost 90 percent of another year's use could be met without planting a seed.

#### Trend #2: Falling Prices

Given this chronic world surplus supply it is unsurprising that prices have fallen. In the U.S., September farm prices achieved an 80 month low, down 15 percent from a year ago, and the lowest since 1978. The ratio of prices received to prices paid fell from 87 a year ago to

75 in September, the lowest on record. Of course, because of the heavy reliance of U.S. producers on export markets, export declines and falling prices are related. Recent calculations indicate that agricultural export markets this year are down over 5 percent from a year ago. The value of wheat exports (again, even given record Soviet purchases) will be off about 20%, the value of corn exports will be off about 5%, and the value of soybean exports will be off about 25%. Falling prices are linked to falling exports, and falling exports are linked to a third trend.

Trend #3: An Overvalued Dollar

Foreign purchasers of our food exports must pay largely in dollars. When the dollar increases in value, our grain increases in price to foreign buyers. According to Wall Street analysts, the dollar's strength has accounted for from half to three quarters of our current trade deficit. The inverse relationship between the exchange value of the dollar and agricultural exports is controversial. It is undeniable, however, that the exchange value of the dollar rose, especially after 1981, U.S. agricultural exports fell (Figure 1). Recent attempts by central bankers to reduce the value of the dollar have driven it down by about 20 percent off of last February's high, but it is still almost 50 percent above the level at which agricultural exports began their fall in 1981. So if falling prices are linked to falling exports, and falling exports are linked to a strong dollar, we must explore the basic causes of the strong dollar.

Trend #4: Rising real interest rates

In 1979, when rural credit markets were deregulated, nominal rates rose from an average of about 6% to current averages of 12-14%.

For a time in 1980, they approached 20%. But as inflation has fallen, the real cost of borrowed capital has reached historic highs. These rates of interest, reflecting the cost of borrowing, are received in payment by those who buy bonds and bills - especially Treasury bills and bonds sold by the government. When the rate offered on these Treasury securities is high in real terms, foreign purchasers buy them. To buy them they need dollars. Hence, high real rates of interest have attracted foreign capital and increased the demand for dollar denominated assets at the same time that they have burdened farm borrowers. In my view, and I believe Chairman Volker's, the real rate of interest is a prime mover driving the demand for dollars, and therefore largely determines the strength of our currency as well as the farm cost of money. We must now ask, what drives real interest rates?

Trend #5: Record Deficit Spending

The rates paid to borrow money are determined in the market for Treasury bond and bills. Current annual deficits of more than \$200 billion are the largest ever recorded, although farm program costs are actually a relatively small proportion of total spending (see Figures 2 and 3). These massive borrowing needs are like a hemorrhage in the national Treasury, a flow of borrowing that puts upward pressure on interest rates as buyers must be found for the offerings of Treasury securities. Indeed, were it not for foreign purchasers of these securities, domestic interest rates would probably be substantially higher. Hence, deficit spending drives up real interest rates; these rates attract foreign purchasers, raising the value of the dollar. The overvalued dollar chokes off agricultural export demand, lowers farm prices, increases farm interest payments and generates huge domestic

surpluses.

### The Trends Together

The trends I have described are now about five years old and have virtually nothing to do with the farm bill. While interest costs on new debt are now moderating, most farmers continue to hold debt at near historic costs. While the dollar has fallen in recent months, declining export markets due to an overvalued dollar and slumping prices will persist for a time. This situation follows a period in the late 1970's in which low real interest rates, expanding export markets aided by a relatively weak dollar, and relatively strong farm prices made farm expansion seem like a reasonable thing to do. As a result, many farmers bought land and equipment in the 1970's in the expectation that it would pay for itself through inflation and good prices - a strategy supported and abetted by farm lenders in the Farm Credit System and commercial banks. The result of the five trends I have discussed has been a dramatic turnaround in land prices (Figure 4), particularly in the export-dependent cash grain sector of Minnesota. Land prices have fallen as real interest rates have risen. The equity represented by this farmland now puts the expanding farmers of the 1970's in a debt trap from which many will not escape.

### The Farm Bill to the Rescue?

In the face of these trends, how much can the new farm bill, acting alone, hope to accomplish in restoring U.S. competitiveness? More broadly, how significant can agricultural policy, as such, be in resolving problems that arise from fiscal, monetary, and trade policy? I believe that the answer is: "marginally significant". I have already indicated why its



impact is likely to be marginal. First, we must recognize that true reductions in budget deficits, not the posturing thusfar resulting from the Graham-Rudman-Hollings (GRH) deficit reduction measure, will be required to reduce interest costs and fully relieve upward pressure on exchange rates. The extremely difficult fiscal policy realignment which the GRH bill mandates, but does not and probably will not accomplish, will mean heavy cuts in defense and eligible entitlement categories, as well as tax increases. These tax increases, in David Stockman's words, must be "larger than we've ever had or contemplated." Stockman himself feels that \$100 billion must be raised by tax increases. The fact that agricultural support programs are one of the few entitlement programs not held harmless by GRH is very significant, as I will argue below.

What of significance for U.S. competitiveness does the 1000-odd page 1985 Farm Bill itself allow? By far the most important of its provisions, from the perspective of export competitiveness and market orientation, is the downwardly flexibility loan rate (Figures 5 and 6). As the figures indicate, when combined with Findley Amendment discretionary authority by the Secretary, the wheat loan may well fall from \$3.30 in 1985 to \$2.40 in 1986, and to as low as \$1.95 by 1990. The corn loan could fall from \$2.55 in 1985 to \$1.92 in 1986, and to as low as \$1.57 in 1990. This is the administration's opportunity to test the courage of the conviction that these loans matter to exports, which will be greatest in the first years of the bill, when target prices are frozen, protecting farm income. The administration has moved quickly to exercise its authority.

Why has it moved so fast? Because GRH is on its tail. Income protection via frozen target prices requires significant budget exposure in the form of deficiency payments set by the two-year freeze. With use of discretionary authority under the Findley Amendment, and downward adjustments in target prices after two years as mandated in the bill, deficiency payments will hover at approximately \$20,000 per 100 acres for wheat, and approximately \$23,000 per 100 acre for corn, assuming market prices do not rise substantially above to the loan (Figures 5 and 6).

It should be noted that this budget exposure is one main reason for the bill's provision's for large set-asides. Wheat set-asides, triggered by a 1.0 billion bushel marketing year carry-in, begin without payment at 15 percent under the program in 1986, with an additional 2.5 percent diversion paid in-kind and a further 7.5 percent paid at \$2.00/bushel optional for those who have already planted winter wheat. Hence, total setasides in 1986 could equal 25 percent at a maximum, and 17.5 percent a minimum. In 1987, the minimum rises to 20 percent, the maximum to 27.5 percent, and from 1988-90, the minimum and maximum are 20 and 30 respectively. For corn, a 2.0 billion bushel carry-in triggers a minimum 15 percent set-aside and a maximum 20 percent set-aside in 1986, with 2.5 percent paid in-kind. After 1986, the PIK payment is no longer mandated, dropping the minimum to 12.5 percent while maintaining the 20 percent maximum. Yields are 1981-85 averages (disregarding the high and low years) and bases are a previous five year moving average of planted and considered planted acreage.

These set asides reduce budget exposure directly by reducing the acreage on which payments are made in aggregate; they also make the programs increasingly unattractive over time, discouraging sign-up and theoretically reducing costs. Of course, the lower the sign-up, the less effective the supply control provisions of set-asides, and the less likely market prices are to rise above the loan, raising the budget exposure on those acres remaining in the program.

Because these payments amount to entitlements up to \$50,000 and have no limit where Findley Amendment authority is invoked, they are essentially unpredictable contributions to the Federal budget deficit. If, as seems likely, sign-up is sufficiently heavy (say 85 percent) in the first two years of the bill, and the Secretary uses his full authority to lower wheat and corn loans, then even with maximum set-asides surpluses will keep market prices close to the loan and budget costs are likely to be very substantially above the levels projected by the Administration and Congress. Precisely how high above them remains to be seen.

The fact that agricultural price supports are not exempt from automatic cuts under GRH then becomes highly significant, since they become a fat target for slashing beyond mandated levels, especially if set-asides are failing to control production. Indeed, the only parts of the agricultural budget immune from the March 1 GRH sequester order are Food Stamps, WICS, and wool and mohair. Why wool and mohair? Politics is politics.

To be most effective, however, the courageous faith placed by some in lower loans as a spur to our competitiveness must be accompanied by equal courage in cutting budget deficits via defense spending and increased taxes.

Moreover, this courage must be tested early in the game, before the budget exposure resulting from frozen target prices makes agriculture the sacrificial offering handed up to budget cutters.

This, as they say, is the good news. And it is not all bad news, by any means. As a spur to export demand, it may well work, if lower loan rates are combined with a moderately weaker dollar to produce more competitive prices overall. Even so, I for one am skeptical that we shall recover the export position we held in the 1970's, and favor the set-asides as a prudent short-run response to surpluses. However, these set-asides must be flexible and better coordinated with the conservation reserve which is also a part of the bill. As for lower loan rates, the celebrated controversy over the price responsiveness of foreign demand for U.S. exports can now be put to the market test. Let us hope that it passes that test, and that exports do respond, for failure may provoke a new round of calls for agricultural protectionism.

#### Problems with the 1985 Farm Bill

While lowered loan rates represent the major innovation and hope for the 1985 bill, it is flawed by a number of essentially short-run responses to the five trends sketched above that may actually harm the long-run competitiveness of U.S. producers. These arise in part from inconsistencies in the various titles, which are a natural outcome of the legislative process, but which now merit administrative review and correction. I shall divide these into three categories: (1) problems of coordinating commodity with conservation set-asides; (2) domestic and trade problems arising from Payments in Kind (PIK); and (3) trade subsidies in the form of both BICEPS and cargo preference. Each deserves brief comment.

(1) Coordinating general with conservation set-asides

The strict conservation language of the 1985 bill represented a major victory for environmental interest groups and all those concerned with the long-run impact of resource degradation on agricultural productivity. As in the past, however, a major part of the motivation for the passage of the widely supported conservation set-aside program, especially given its projected size of 40 to 45 million acres, is supply control. The agreement puts at least 5 million acres into the reserve in 1986, an additional 10 million in 1987, 1988 and 1989, and a minimum of 5 million in 1990. The multibillion dollar question is: which acres? In the past, the attempt to hit a supply control target with a conservation instrument has missed. The risk of this program is that it will miss the conservation target as well, by failing to differentiate the acres most suitable for the conservation set-aside from those eligible for general set-asides provided for under the commodity titles.

The conservation plan calls for a bid system, in which farmers name the price they will accept to retire land (with cost sharing for grass or trees) on acres eroding at twice the tolerable level (or "2-T"). The government will then accept the lowest bids first. To the farmer, the opportunity cost of putting highly erodible but productive land in the program will be high, especially given the ten-year time span envisioned for the set-aside and the "sodbuster" provisions of the bill. The acceptable bid for this land from the farmer's perspective will be raised by the foregone benefits of participation in the commodity program set-aside, which in a period

of low prices is likely to be very attractive, as noted above. This implies that it will be very expensive to draw marginal land into the conservation reserve except at high cost, or through the use of supplementary PIK payments. The lion's share of marginal acreage is likely to end up in set-asides under the commodity titles, making them competitors for the same acres the conservation reserve seeks to retire and raising overall costs.

The conclusion is that unless vulnerable lands eligible for the conservation reserve are targeted (which T-values alone cannot do), and declared ineligible for commodity program set-asides, the two kinds of set-asides will work at cross-purposes. Moreover, the likelihood is that those lands entering the conservation reserve without demarcation will be highly unproductive, with the majority going into other set-asides. The question then becomes, what is being conserved? We will have missed the conservation of vulnerable soils, failed to reduce output (since the land going into commodity set-asides will be more marginal than if declared ineligible) and spent a lot of money in the bargain. We will also have failed to shift production onto the land which is most productive and least erodible, which must be our long-term competitive strategy.

(2) Domestic and trade problems arising from payments-in-kind

The huge carryover stocks of this year and next create considerable incentives to unload government stocks through payments in kind. In the current bill, these payments are designed on the "a little here, a little there" model - not to exceed 5 percent of total deficiency payments, with some for conservation payments, some for paid diversion - and so on. Keeping it to 5 percent, given the budget pressures I have

mentioned, will be difficult. The magnitude of surplus stocks spills out into trade policy as well, one reason why the current bill essentially requires \$2 billion in Export-PIK payments. There is a strong likelihood of much more in the way of PIK payments with many of the same effects of PIK in its last incarnation. This could be very damaging for the farm implement and supply industry. Instead, I would favor a much more aggressive overseas sales program than provided for under the current bill.

(3) Export-PIK (BICEPS) and Cargo Preference

A last point concerns the Export-PIK program itself, and the maritime subsidy represented by the cargo-preference rules compromise. Both are extremely ill-conceived. In the case of Export-PIK, because it fails to do in terms of competitiveness what can be better accomplished through lowered loan rates and a lower dollar, because it invites retaliation by the Europeans and encourages the Soviets to hold off the market until they benefit either from its depressing effects or the subsidy itself (which they have demanded).

In the case of cargo preference, an agreement reached in conference to carry 60 percent of U.S. agricultural products under PL-480 on U.S. ships in 1986, and 75 percent by 1988, will frustrate general food aid expansion, severely punish the Great Lakes ports, and provide a severe drag on the competitive position of U.S. exports due to the increased costs of U.S. carriers. If we want to subsidize the maritime industry, there are many cheaper ways to do it (perhaps they would like some PIK payments). The only possibility for saving the current arrangement (which still

calls for 50 percent of food aid to go on U.S. ships) is if the Transportation Department fails to come up with some of the extra shipping costs - as they are obliged to - due to the impact of GRH.

In summary, both Export-PIK and cargo preference are short term responses to gluts, glutted grain markets on the one hand and excess maritime capacity on the other. Both provisions should be abolished, since they undermine our long-term competitiveness.

#### Conclusion

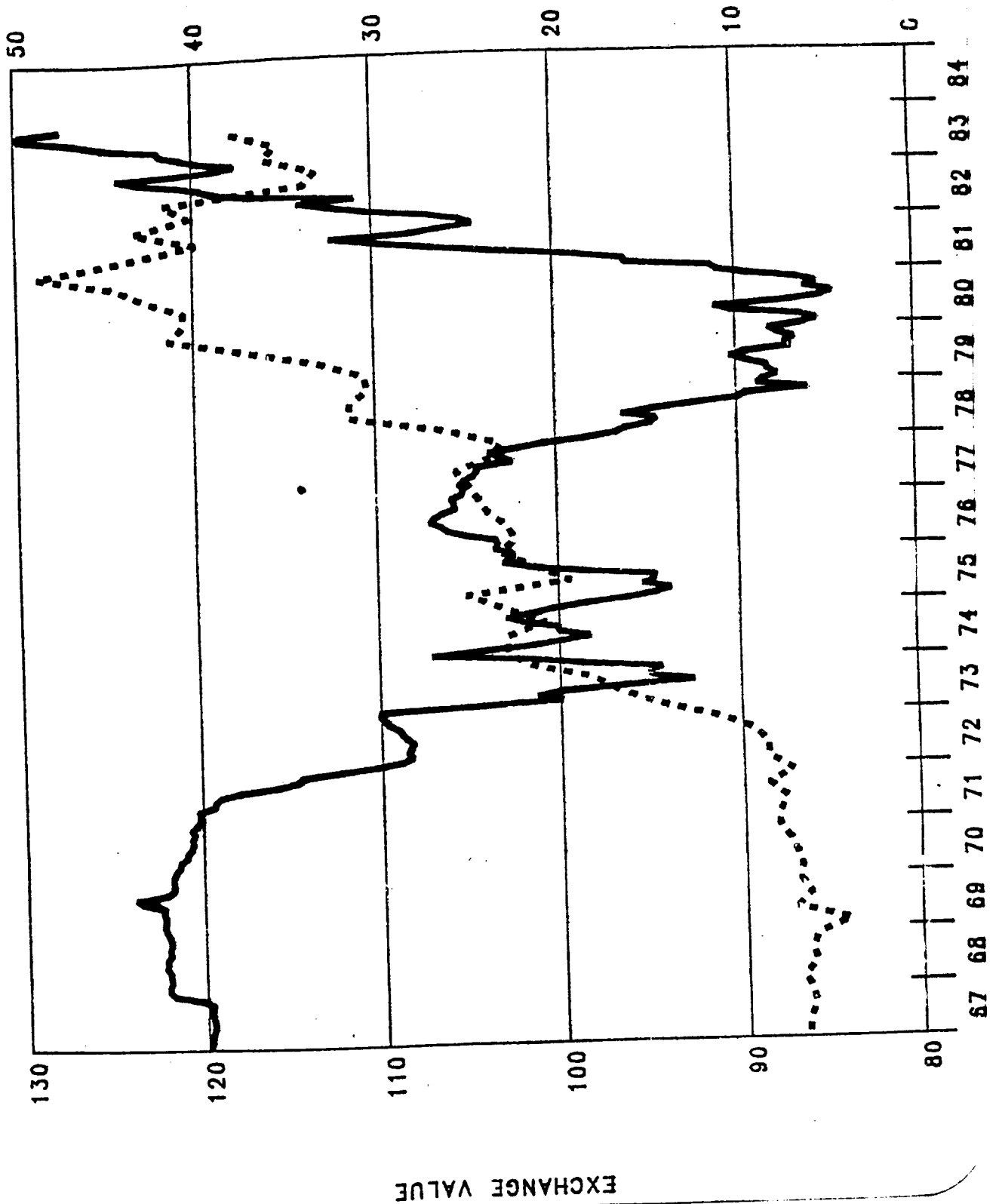
In conclusion, I have argued that worldwide trends make it exceedingly difficult for a farm bill, by itself, to enhance our competitiveness. The marginal but main impact of the current bill will be felt primarily through loan rates, if they are lowered dramatically and accompanied by fiscal policy realignments leading to a lower level of the dollar and interest rates. Given this marginal impact, there are numerous rough spots in the 1985 bill that still need work, notably the coordination of set-asides, the reduction of PIK payments, expansion of foreign surplus disposal, and the elimination of Export-PIK and cargo preference. These, and the general cuts imposed by GRH, should occupy the new Secretary early in his term.



Figure 1

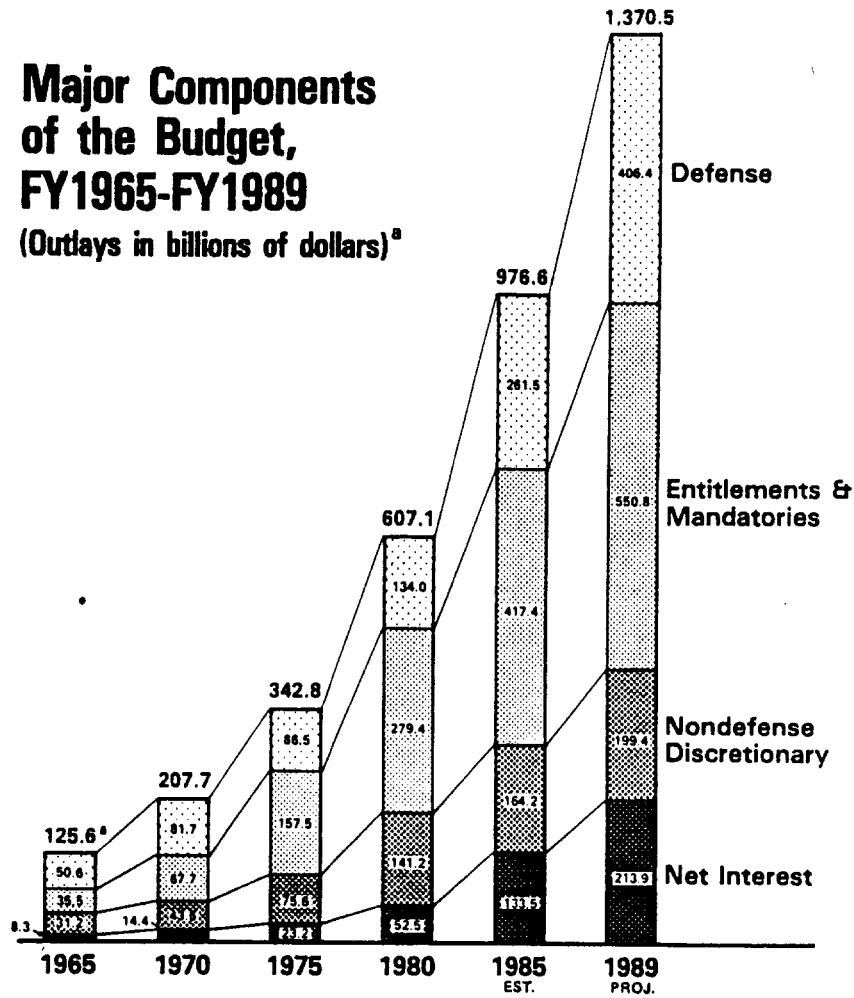
EXPORTS (BIL. \$)

EXCHANGE VALUE OF THE DOLLAR VERSUS  
U.S. AGRICULTURAL EXPORTS



# Major Components of the Budget, FY1965-FY1989

(Outlays in billions of dollars)<sup>a</sup>

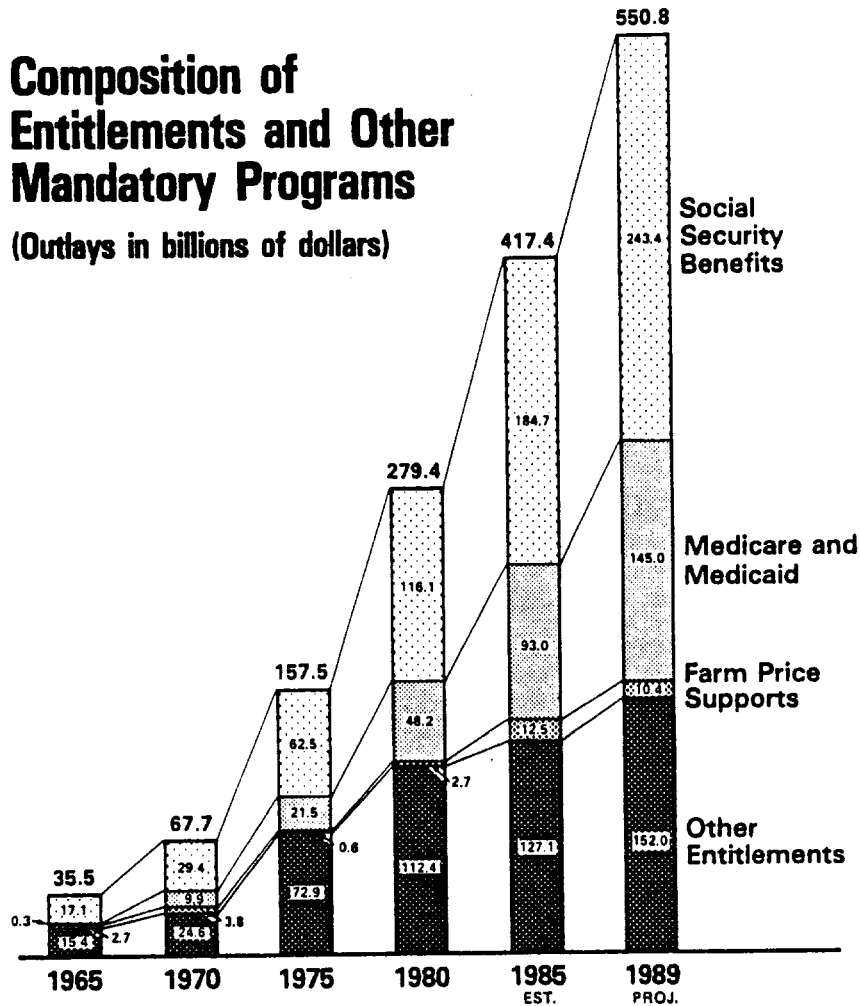


Source: Congressional Budget Office, *The Economic and Budget Outlook: An Update*, August 1984, and unpublished CBO data.

<sup>a</sup> Total on-budget expenditures for the four major categories, excluding offsetting receipts and off-budget.  
Chart 2.

# Composition of Entitlements and Other Mandatory Programs

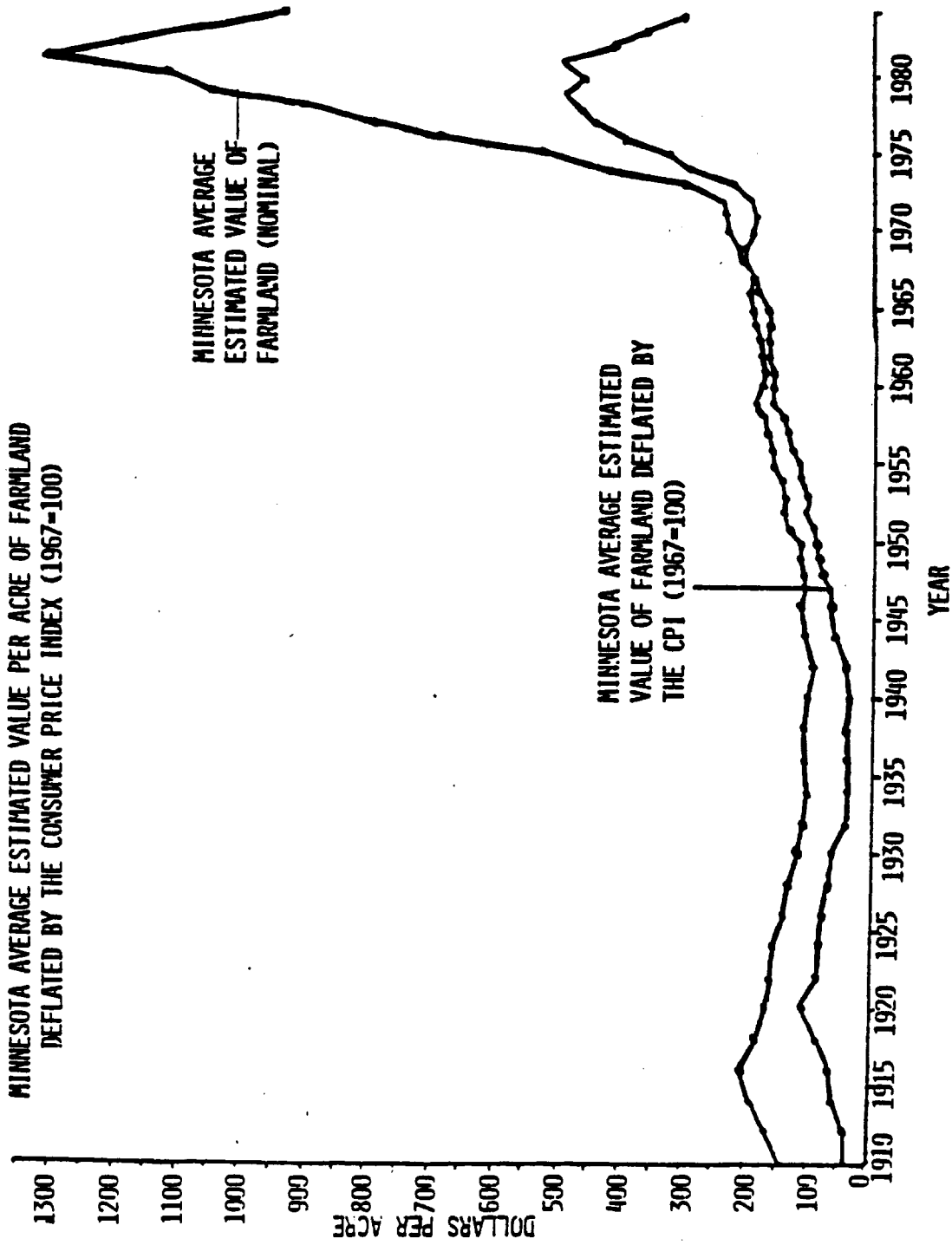
(Outlays in billions of dollars)



Source: Congressional Budget Office, *The Economic and Budget Outlook: An Update*, August 1984, and unpublished CBO data.

Chart 4.

Figure 4



Source: University of Minnesota, Department of Agricultural and Applied Economics.

<b>New wheat price supports</b>						
<b>(Examples based on 100 acres, 50 bushels/acre)</b>						
<b><i>Without discretionary loan-rate cut</i></b>						
	<b>Minimum national loan rate</b>	<b>Total loan available</b>	<b>Target price</b>	<b>Maximum deficiency payment per bushel</b>	<b>Total deficiency payment</b>	<b>Total of loan &amp; deficiency payment</b>
1985 .....	\$3.30	\$16,500	\$4.38	\$1.08	\$5,400	\$21,900
1986 .....	\$2.70	\$13,500	\$4.38	\$1.68	\$8,400	\$21,900
1987 .....	\$2.85	\$14,250	\$4.38	\$1.53	\$7,650	\$21,900
1988 .....	\$2.71	\$13,550	\$4.29	\$1.58	\$7,900	\$21,450
1989 .....	\$2.57	\$12,850	\$4.16	\$1.59	\$7,950	\$20,800
1990 .....	\$2.44	\$12,200	\$4.00	\$1.56	\$7,800	\$20,000
<b><i>With discretionary loan-rate cut*</i></b>						
	<b>Minimum national loan rate</b>	<b>Total loan available</b>	<b>Target price</b>	<b>Maximum deficiency payment per bushel</b>	<b>Total deficiency payment</b>	<b>Total of loan &amp; deficiency payment</b>
1986 .....	\$2.40	\$12,000	\$4.38	\$1.98	\$9,900	\$21,900
1987 .....	\$2.28	\$11,400	\$4.38	\$2.10	\$10,500	\$21,900
1988 .....	\$2.17	\$10,850	\$4.29	\$2.12	\$10,600	\$21,450
1989 .....	\$2.06	\$10,300	\$4.16	\$2.10	\$10,500	\$20,800
1990 .....	\$1.95	\$9,750	\$4.00	\$2.05	\$10,250	\$20,000
* Known as the Findley amendment. It allows USDA secretary to trim loan rates as much as 20 percent to make U.S. grain more competitive in world markets.						
Both tables assume the average national price stays below the loan rate and the maximum deficiency payment is made each year.						

## New corn price supports

(Examples based on 100 acres, 80 bushels/acre)

### *Without discretionary loan-rate cut*

	Minimum national loan rate	Total loan available	Target price	Maximum deficiency payment per bushel	Total deficiency payment	Total of loan & deficiency payment
1985 .....	\$2.55	\$20,400	\$3.03	\$.48	\$3,840	\$24,240
1986 .....	\$2.16	\$17,280	\$3.03	\$.87	\$6,960	\$24,240
1987 .....	\$2.28	\$18,240	\$3.03	\$.75	\$6,000	\$24,240
1988 .....	\$2.17	\$17,360	\$2.97	\$.80	\$6,400	\$23,760
1989 .....	\$2.06	\$16,480	\$2.88	\$.82	\$6,560	\$23,040
1990 .....	\$1.96	\$15,680	\$2.75	\$.79	\$6,320	\$22,000

### *With discretionary loan-rate cut\**

	Minimum national loan rate	Total loan available	Target price	Maximum deficiency payment per bushel	Total deficiency payment	Total of loan & deficiency payment
1986 .....	\$1.92	\$15,360	\$3.03	\$1.11	\$8,880	\$24,240
1987 .....	\$1.81	\$14,480	\$3.03	\$1.22	\$9,760	\$24,240
1988 .....	\$1.74	\$13,920	\$2.97	\$1.23	\$9,840	\$23,760
1989 .....	\$1.65	\$13,200	\$2.88	\$1.23	\$9,840	\$23,040
1990 .....	\$1.57	\$12,560	\$2.75	\$1.18	\$9,440	\$22,000

\* Known as the Findley amendment. It allows USDA secretary to trim loan rates as much as 20 percent to make U.S. grain more competitive in world markets.

Both tables assume the average national price stays below the loan rate and the maximum deficiency payment is made each year.