



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

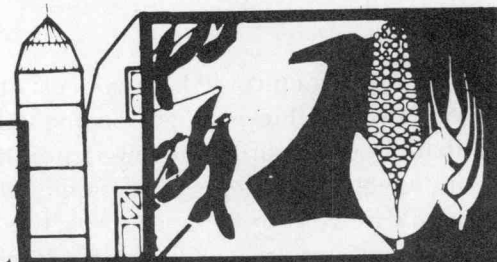
*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Waite

WAITE MEMORIAL BOOK COLLECTION
DEPT. OF AGRIC. AND APPLIED ECONOMICS

FEDERAL RESERVE BANK OF CHICAGO

AGRICULTURAL



ISSN 0002 - 1512

October 14, 1983

Number 1614

LETTER

FARM REVENUE INSURANCE has been receiving growing attention recently from policy makers and farmer organizations alike. With federal outlays for agricultural price support operations burgeoning to \$22 billion in fiscal 1983, a major debate on the future shape of farm policy is expected in the coming year. One proposal being discussed is insurance for farm income. Under a subsidized insurance program the public sector would continue to share the costs of supporting the farm sector, but farmers could be required to pay a portion of the premiums. Some analysts believe that a properly structured farm revenue insurance program would be more efficient and equitable than the current commodity programs while being less costly. Such an income insurance scheme might be implemented either as a substitute for, or a supplement to, the existing programs.

Existing commodity programs are designed to stabilize farm prices and income. Current programs center on a system of loans and transfer payments to achieve this policy objective. A major component of the system is the nonrecourse loan from the Commodity Credit Corporation. Eligible farmers can use their stored crops as collateral for a specified amount of loan per bushel. This amount, termed the loan rate, provides a floor price for the commodity since borrowers have the option of repaying their loan in full with the physical commodity if market prices do not rise sufficiently. Deficiency payments are an additional price support mechanism. For crops, the deficiency payment is tied to the target price established for the particular crop. When average market prices fall below the target price for a period of time, eligible producers receive payments for the difference.

Other programs are intended to regulate the marketable supply—and therefore the price—of commodities. Under the farmer-owned grain reserve program a producer agrees to store grain for a specified time period in exchange for CCC loan and storage payments. Market prices must rise to a certain level—the trigger release price—before farmers can sell their grain and

repay the loans. To further control supplies, farmers are often required to reduce their planted acreage to be eligible for loans and payments. Some acreage reduction programs may offer payments in cash or in kind to participating farmers.

While the commodity programs address low prices and income by influencing market supply and prices, the Federal Crop Insurance Corporation (FCIC) addresses the instability of a farmer's income arising from production shortfalls. Under the "all-peril" insurance program run by the FCIC, producers choose one of three yield coverage options to insure the level of production. If yields fall below this level the farmer is reimbursed for the difference at one of three price options selected when the policy was written. Government subsidies cover a significant portion of the premiums for the FCIC insurance.

The commodity programs and crop insurance have been criticized for their indirect and fragmented approach to stabilizing crop farmers' incomes. The variety of separately administered programs are overlapping and make coordination of benefits difficult. Further, they do little to address the instability in crop prices and income stemming from overseas trade. The benefits are directed almost exclusively to crop farmers, with no direct benefits to livestock producers. Moreover, the cost of these programs to the taxpayer has increased dramatically in recent years. Federal price support outlays, after averaging about \$3 billion annually during the latter half of the 1970s, climbed to more than \$22 billion in 1983 and, although declining, are expected to remain at high levels for the next several years. Although government outlays for crop insurance to cover operating expenses and subsidize premiums pale in comparison to price support payments, they are still substantial at an estimated \$308 million for 1983.

Farm revenue insurance has been suggested as an alternative method of achieving income stability in agriculture. Proponents of an insurance scheme suggest that

such a program could be more cost effective and more efficient in achieving farm income stability. They argue that directly insuring income rather than attempting to influence it by affecting commodity supplies and prices would be a more efficient approach to the policy objective. Furthermore, combining the fragmented elements of the current price and income support apparatus into a single program could result in greater cost effectiveness.

While a number of income insurance proposals have been set forth, it appears such a program would take one of two forms. These forms differ principally in the manner in which indemnities are determined in the event of an overall revenue shortfall. Direct revenue insurance would assure participating farmers some proportion of their historical revenues. If revenue from the crop fell below the insured level the farmer would be indemnified for the amount of the shortfall. Compensation under this type of insurance program, therefore, is independent of the cause of the revenue shortfall. Whether yields, prices, or some combination of the two caused total revenue to fall below the insured level, a farmer's income would be guaranteed at the level specified in the insurance policy.

Alternatively, a farm revenue insurance program might combine the current federal crop insurance program with a revenue or price insurance component. Under a yield and revenue insurance scheme, participants would receive a yield indemnity if production fell below the insured yield level. If this indemnity plus the revenue from the actual yield at market prices fell below a guaranteed level, a revenue payment would be made as well. Alternatively, the insurance program might combine price insurance with yield coverage. Production shortfalls would be covered as before, but there would also be an insured or guaranteed price for a crop. If market price fell below the guaranteed level a payment of the difference would be made for the amount of the crop marketed or the amount covered by yield insurance.

While the farm revenue insurance concept may offer a more cost effective option to the current price support programs, there are a number of practical problems to be addressed before such a program could become workable. Major difficulties revolve around the

price or revenue protection component of such an insurance program. While production risks vary considerably among farms, low prices affect all producers of a crop. Therefore, much of the risk-pooling aspect of insurance is negated when prices are incorporated in an insurance program. Furthermore, the particular level of price or revenue chosen for triggering indemnities will greatly influence the degree of benefits perceived by producers. Harvest time prices, for instance, would not accurately reflect the revenues generated throughout the marketing year. Alternatively, an average price for the marketing year, although more representative of receipts, would lead to a considerable time lag in determining payments and might reward participants for poor marketing decisions. Similarly, a price or revenue target set too high might create production disincentives, while low payment levels would discourage farmer participation.

By insuring price or revenue levels directly, farm income insurance might distort the relative prices of agricultural commodities as well as the overall price level. Cropping decisions could come to be based on guaranteed income levels and premium costs rather than market prices for the crop. Support prices or revenue levels could lead to significant overproduction by insulating farmers from market pricing signals to reduce output and result in self-perpetuating indemnities. Moreover, a subsidized income insurance plan could continue the distortion of capital allocation in agriculture prevalent under the existing programs.

A farm revenue insurance program would require widespread and continuing participation to succeed. Low or sporadic levels of participation would not provide a broad enough base for the spreading of risk or premium costs. The continuation of current programs would likely reduce the incentive for farmers to use revenue insurance. This suggests that the best chance of success for an insurance plan would be as a substitute for rather than a complement to the existing price support and yield protection programs. However, before undertaking such a program, considerable attention would have to be given to its potential shortcomings.

Peter J. Heffernan

TRENDS IN U. S. AGRICULTURAL EXPORTS, despite some encouraging developments, remained sluggish this summer. Because of high crop prices, the value of U.S. agricultural exports in the third quarter was up

from the low year-ago level. However, the volume of third-quarter export shipments was about unchanged from the extremely low year-earlier level. Despite several encouraging developments, such as a pickup in

outstanding export orders, the new long-term grain agreement with the USSR, and the apparent resolution of trade disputes with China, it appears that the summer trends will characterize the pattern in agricultural exports for the next several months. For fiscal 1984, analysts believe that higher grain and soybean prices will help recoup some of the sharp declines in the value of U.S. agricultural exports experienced the past two years. But with available supplies down because of drought and acreage cuts, the volume of agricultural exports is not likely to increase in fiscal 1984.

The rise in export values this summer only partially offset earlier declines. Although figures for September have not yet been tabulated, USDA estimates suggest that the value of all U.S. agricultural exports in fiscal 1983 approximated \$34.5 billion. If that holds up, it would mark a 12 percent decline from fiscal 1982 and a 21 percent decline from the fiscal 1981 peak. In tonnage terms, the USDA is estimating that some 143.5 million tons of U.S. agricultural commodities were exported in fiscal 1983, down 9 percent from the year before and off 12 percent from the fiscal 1980 peak.

The pace in grain and soybean export shipments this summer varied by commodity, but remained at a low level overall. Based on actual shipments in July and August and weekly export inspections for September, it appears that corn exports in the third quarter were up about 8 percent from the extremely low level of the year before. Despite the faster summer pace, exports of corn and corn products for all of fiscal 1983, at 1.85 billion bushels, were down 6 percent from the year before, down 24 percent from the fiscal 1980 peak, and the smallest for any fiscal year since 1977.

While corn exports picked up this summer, exports of soybeans and wheat were down from year-earlier levels. Exports of wheat and wheat products were off about 5 percent, marking the fifth consecutive quarter in which wheat exports have lagged the year-earlier level. Although still at a comparatively strong pace, soybean exports this summer were down about 3 percent from the record pace of last year. For all of fiscal 1983, soybean exports were down 4 percent while wheat exports were down 14 percent.

While the overall rate of export shipments continued sluggish, foreign purchases of U.S. grains and soybeans have picked up in recent months. Outstanding export orders for U.S. corn as of late September totaled approximately 700 million bushels, nearly half again as large as in the previous two Septembers but still well short of the heavy orders in 1979 and 1980. Outstanding

export orders for soybeans as of late September were also considerably higher than in recent years but orders for wheat were still quite depressed.

Prospects for fiscal 1984, despite the pickup in export orders, are still not particularly bright. Continued economic growth in other industrialized countries may add some strength to foreign demand for U.S. grains and soybeans. Also, the new US-USSR grain agreement fore-shadows increased shipments to the USSR in fiscal 1984. That agreement stipulates that the USSR, as a minimum, must import 9 to 12 million metric tons of U.S. corn and wheat annually, although imports of 500,000 tons of soybean products can be used to offset a million tons of the required grain imports. So far, the Soviets have purchased 4.5 million tons of U.S. corn and wheat and 400 thousand tons of soybeans for delivery in fiscal 1984 and prospects for full compliance suggest that shipments to the USSR in fiscal 1984 will significantly exceed the 6.2 million tons of grain shipped in fiscal 1983.

Similarly, with the recent easing in the dispute over textile imports from China, U.S. grain sales to China have picked up considerably in recent weeks. The US-China grain agreement calls for China to import 6 million tons of U.S. grain in each calendar year, although imports in 1983 will probably fall well short of the agreement specifications.

Despite these encouraging signs, several negative factors still prevail. The high value of the U.S. dollar with respect to other currencies continues to hamper exports to most foreign markets. Although many analysts expect that the value of the dollar will trend lower, chances that the decline will be sufficient to significantly boost export prospects in the near term are regarded as slim by many analysts. Moreover, the heavy debt burdens in a number of less-developed countries will continue to hinder foreign demand for U.S. agricultural products well into the future. Also, the sharply higher U.S. grain and soybean prices, due to the impacts of acreage cuts and drought on 1983 production, will no doubt cause some rationing in exports in the months ahead.

Overall, it seems likely that higher prices will lead to some pickup in the value of U.S. agricultural exports in fiscal 1984. However, the volume of shipments may decline for the fourth consecutive year. For major Midwest crops, analysts are expecting a sharp decline in export shipments of soybeans—largely reflecting the curtailed supplies. For corn, however, export shipments are expected to be nominally larger in fiscal 1984.

Gary L. Benjamin

Selected agricultural economic developments

Subject	Unit	Latest period	Value	Percent change from	
				Prior period	Year ago
Farm finance					
Total deposits at agricultural banks†	1972-73=100	September	284	+ 0.7	+11
Total loans at agricultural banks†	1972-73=100	September	299	+ 0.9	+ 6
Production credit associations					
Loans outstanding					
United States	mil. dol.	August	20,146	- 0.7	- 9
Seventh District states	mil. dol.		N.A.	N.A.	N.A.
Loans made					
United States	mil. dol.	August	1,948	+ 1.2	- 8
Seventh District states	mil. dol.		N.A.	N.A.	N.A.
Federal land banks					
Loans outstanding					
United States	mil. dol.	August	47,972	+ 0.1	+ 2
Seventh District states	mil. dol.		N.A.	N.A.	N.A.
New money loaned					
United States	mil. dol.	August	290	+ 4.6	-21
Seventh District states	mil. dol.		N.A.	N.A.	N.A.
Interest rates					
Feeder cattle loans††	percent	2nd Quarter	13.58	- 3.0	-21
Farm real estate loans††	percent	2nd Quarter	13.32	- 3.9	-20
Three-month Treasury bills	percent	10/6-10/12	8.69	- 4.5	+15
Federal funds rate	percent	10/6-10/12	9.46	- 0.8	- 1
Government bonds (long-term)	percent	10/6-10/12	11.49	- 1.5	+ 4
Agricultural trade					
Agricultural exports	mil. dol.	August	2,614	+ 0.7	+ 5
Agricultural imports	mil. dol.	August	1,392	+ 7.3	+ 3
Farm machinery sales^P					
Farm tractors	units	September	8,737	+15.8	- 5
Combines	units	September	1,486	+34.2	-18
Balers	units	September	534	-45.7	-25

†Member banks in Seventh District having a large proportion of agricultural loans in towns of less than 15,000 population.

††Average of rates reported by District agricultural banks at beginning and end of quarter.

^PPreliminary.

N.A. - Not available.

AGRICULTURAL LETTER
FEDERAL RESERVE BANK
OF CHICAGO
Public Information Center
P.O. Box 834
Chicago, Illinois 60690
Tel no. (312) 322-5111



FIRST-CLASS MAIL
U.S. POSTAGE
PAID
Chicago, Ill.
Permit No. 1942

AG001
HEAD-DEPT. OF AGRIC. ECON.
INSTITUTE OF AGRICULTURE
UNIVERSITY OF MINNESOTA
ST. PAUL, MN 55101