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Insurance Plans to Stabilize Farm Incomes

By K. L. Robinson

In the kind of uncertain world in which we now live, with the ever-present threat of renewed hot and cold wars, recessions or depressions, and drought, income instability in agriculture is likely to remain a major public problem. Any device that holds promise of reducing fluctuations in farm incomes merits consideration. Among the proposals made for achieving that objective is income or price insurance. My purpose in discussing this subject is simply to provide information which will enable you to decide what role insurance plans might play along with other devices in stabilizing farm incomes. With this goal in mind, I want to comment first, on the nature of insurance—what it is and what it can and cannot do; second, on the administrative problems that would be involved in putting an insurance plan into effect; and third, on the possible consequences of adopting either an income or price insurance scheme.

THE ROLE OF INSURANCE

In general, insurance is simply a device for redistributing income. An insurance plan alone cannot increase the total amount of income that is to be shared by the group participating in the program. Income may be redistributed under an insurance plan either by: (1) collecting small sums of money from many individuals to make substantial payments to a few who have suffered a particular loss or (2) collecting money at one period of time in order to increase income at another. Fire, hail, and accident insurance fall in the first category; most retirement plans are of the second type.

An income or price insurance plan for farmers presumably could be of either type. Losses which affect only a small proportion of farmers in any one year, such as those due to a local crop failure or disease in a herd of livestock, could be insured against by collecting relatively small premiums from farmers generally. Where there is a small chance of a large loss, an insurance program of the first type is feasible. But such a program will not solve the farm income instability problem if losses are widespread due, for example, to a general drought or a decline in the over-all demand for farm products.

Interest in insurance programs as far as farm incomes are concerned is mainly to even out year-to-year fluctuations in total farm income. This may be done by redistributing income from some years to others, that is, by collecting during periods of high incomes and

paying back during periods of low incomes. The introduction of an insurance plan, of course, does not necessarily preclude the adoption of other devices designed to raise farm incomes, such as acreage controls, consumption subsidies, two-price plans, etc. It is important to keep in mind that no insurance program can raise the total amount of income to be shared over any period of time. An insurance program of the second type, however, can alter the time when that income may be spent by the farm family.

ADMINISTRATIVE PROBLEMS RELATING TO INCOME OR PRICE INSURANCE

In carrying out an income or price insurance program, some assumptions regarding the nature of the income flow to agriculture over, say, the next three or four decades would have to be made. The premium or payment required to maintain a given level of income obviously will depend on the amount of changes in income which occur from year to year and on the duration of periods of high and low prices. The political acceptance of an insurance program also will depend on the economic climate. We can be sure, I think, that an insurance program will not be enthusiastically endorsed by farmers if, during the decade ahead, the prices of farm products remain low relative to those of nonfarm products, as they did during the 1920's. A period of stable prices at, say, 90 to 100 percent of parity, or a sustained period of low prices at less than 90 percent of parity, will not provide the kind of economic climate favorable to the functioning of an insurance program.

An insurance program clearly will operate best in a world in which sharp fluctuations in prices occur but with short intervals between periods of high and low prices. When prices are high, an insurance fund can be built up for use in making payments when prices are low. This kind of situation is likely to prevail if we continue to have more small wars or the threat of war interspersed with periods of peace—in other words, more of what we have had since the end of World War II.

Let us assume, for a moment, that the economic climate of the future is likely to be favorable for the introduction of a farm income stabilizing insurance program and turn to three questions that will face the administrators of such a program: (1) which should be insured—prices or incomes, (2) how much and where should insurance premiums be collected, and (3) what criteria should be established for making payments?

The ultimate objective of an insurance program presumably would

be to reduce fluctuations in net farm income. Stabilizing farm product prices, however, would not necessarily accomplish this objective since net income is determined by total production and the cost and amount of items used in production as well as the prices received. But a price insurance plan would be much easier to administer than an income insurance program, particularly with respect to collection procedures and the establishment of criteria for payment.

Income insurance premiums presumably could be collected as social security contributions are now collected from self-employed persons, that is, by making payments based on net incomes calculated for income tax purposes. Those who earned little or no income, of course, would contribute nothing to the insurance fund. The size of the annual contribution which would have to be collected depends, as indicated previously, on the assumptions made as to the amplitude and duration of fluctuations in farm income during the decades ahead. Some indication of the magnitude of the fund which might be required to guarantee incomes at even a conservative fraction of parity income, say, 80 percent of the purchasing power of net farm income in 1952 (when farm prices averaged 100 percent of parity) can be obtained by noting the gap between actual farm incomes and this standard during the period from 1920 to 1940. In this twenty-year period, an average payment of over \$400 per year would have been required to bring the income of farmers up to the equivalent of the 1952 purchasing power of actual farm incomes. If an average payment of \$400 per farm were made to the 2.5 million commercial farmers who produce 90 percent of the farm products sold, total payments would equal 1 billion dollars each year. To make such payments an extremely large fund would need to be accumulated. Certainly farm operators would not be likely to endorse a program requiring them to make an average payment of 10 to 20 percent of their net income even in relatively good years.

In addition to the problem of collecting a fund large enough to make substantial payments in years of low incomes, administrators of an income insurance program would also face the problem of establishing equitable criteria for making disbursements from the fund. Making flat payments to all farmers in years of low prices regardless of the size or efficiency of their farms, would result over a period of years, in redistributing income from those paying substantial premiums (the large-scale farmers) to those contributing little to the fund (the small-scale farmers). Even payments proportional to output based on the average decline in incomes of all farms combined would not stabilize the income of each farmer since incomes do not change at the same rate or at the same time on all types of farms. Despite

generally falling prices, usually a few farmers fare relatively well because of special circumstances. Payments might be related to the previous income or the premiums paid by each farm individually, but such a payment scheme would be expensive to administer and would not solve the problem of the small-scale farmer who never had anything to contribute. Moreover, those who were not farming in a prosperous period would have no opportunity to build up a base for payments. Families just getting started in farming, perhaps the most vulnerable group in times of falling prices, would receive no additional income under such an insurance plan.

Because of the administrative difficulties that would be involved in an income insurance program, most proponents of plans to stabilize farm incomes by collecting money during one period to pay back during another have based collections and payments on the prices of individual commodities rather than on gross or net farm incomes. Under a price insurance plan, collections for the fund (assuming any constitutional objections could be overcome) presumably would be made by imposing a processing tax or insurance premium at the point of first sale of all farm products. Thus, the tax would not be collected from the farmer directly, but from handlers of farm commodities somewhat as unemployment insurance contributions are now collected from employers. Ultimately at least part of the burden of the tax or premium would fall on farmers, but collecting the premium from handlers of farm products would be less difficult from an administrative standpoint and probably politically more acceptable than collecting from farmers.

The amount of money which would have to be collected in order to guarantee a certain percentage of the parity price of any commodity again would depend on the future amount and direction of price changes. For most farm products, payments would have been required to bring average prices up to even 80 percent of parity in at least half the years between 1920 and 1940. In the case of wheat, for example, payments averaging about 20 cents per bushel would have been required for each of thirteen years during this period to guarantee 80 percent of the 1910-14 parity price. A payment of 20 cents per bushel on a billion bushels of wheat would amount to 20 million dollars. A large fund obviously would have to be built up to make substantial payments on the major commodities such as wheat, cotton, milk, and hogs.

Payments to producers under a price insurance program presumably would be based on the difference between the actual market price and a guaranteed price, adjusted for grade and location differentials. Setting a standard or guaranteed price for each commodity would

necessitate either calculating average costs of production or devising a formula which would take account of changes in production costs, etc. The difficulties entailed in altering the present parity formula in such a way as to make it reflect changes in technology and demand are too well known to require reiteration. The same sort of problems would arise in trying to maintain a reasonable formula on which to base insurance payments. At least one writer has suggested that the payment be based on the difference between this year's price and, say, 90 percent of the preceding year's price, but this would not necessarily provide a reasonable standard, especially if the base year price were high or low in relation to average prices over a period of years. Cattle prices in either 1951 or in 1953, for example, certainly would not provide a very good standard for calculating payments to farmers in 1952 or 1954.

Some advocates of a price insurance program have suggested that a limit be imposed on the quantity of any commodity on which payments would be made. For example, payments amounting to the difference between the guaranteed and market price of wheat might be made only on a total of 800 million bushels. If actual production exceeded the quota, payments per bushel would be reduced accordingly. A payment of 10 cents per bushel on a quota of 800 million bushels of wheat would be equivalent to a payment of 8 cents per bushel on an actual production of 1 billion bushels.

POSSIBLE CONSEQUENCES OF INSURANCE PLANS

Assuming an income or price insurance program were adopted, what might be the effect of such a plan on the over-all economy, on agricultural production, and on the distribution and amount of farm incomes? Stabilizing farm incomes would undoubtedly help to stabilize purchases of farmers from nonfarm sectors of the economy and thereby contribute to over-all economic stability. But stabilizing farm income alone would have little effect on the total economy unless the incomes of nonfarm families, which account for over 90 percent of the national income, also were stabilized.

A price or income insurance plan might affect farm production in two ways: (1) total production might be increased moderately because of the assurance of at least a minimum price or income; and (2) adjustments in production, that is, the shifting of resources out of the production of one commodity and into another, might be retarded. Recent studies of the effects of the potato price-support program suggest that production is likely to be somewhat greater

under a support program than under free-market prices.¹ If an insurance plan were adopted, this in effect would become a support program in years of low prices. Thus, under an insurance program actual farm production might be greater and, consequently, market prices over a period of years might be somewhat lower than they would be in the absence of such a program.

Realized prices and incomes to farmers under an insurance program designed to stabilize prices and incomes would not necessarily provide good guides to production from the standpoint of consumers. With lower prices or incomes during World War II, for example, producers might not have increased production quite so much. Maintaining higher prices or incomes than would otherwise prevail in periods of declining demand would prevent or retard needed readjustments in production. Thus, an income or price insurance program may have the effect of perpetuating, at least for brief periods, outmoded patterns of production.

CONCLUSIONS

Insurance plans obviously can help to stabilize farm incomes, but they are unlikely to gain widespread political support unless they are combined with devices to raise incomes over a period of time. An insurance program is more likely to be successful if fluctuations in farm incomes are moderate and if the intervals between periods of high and low incomes are brief. The degree to which incomes can be equalized over time will depend on the willingness of farmers to make substantial contributions to an insurance fund in times of relatively favorable prices. Unless comparatively high premiums are paid in periods of prosperity or unless prosperity continues for several years, sufficient funds for insurance purposes will not be accumulated to guarantee a very high percentage of the parity price or a very high income if a real depression develops and prices remain low for several years. Of course, the federal government might continue to make direct price or income payments to farmers if the insurance fund were exhausted, but this would mean abandoning the insurance principle.

Price insurance has administrative advantages over income insurance since both the criteria for making collections and determining payments to farmers would be easier to establish. The amount collected at the point of first sale for each farm commodity under a price insurance program presumably would be based on the difference between the actual market price and some percentage of the parity

¹Gray, Sorenson, and Cochrane, "An Economic Analysis of the Impact of Government Programs on the Potato Industry of the United States," Minnesota Agricultural Experiment Station Technical Bulletin 211, June 1954.

price. In years of low prices, farmers would be paid the difference between the actual market price and the guaranteed price on each unit of the commodity sold.

Any program which would reduce fluctuations in farm incomes would have a moderating influence on land prices and would help to stabilize the over-all economy as well. But the effect on the total economy of stabilizing farm incomes alone would be relatively minor. Either an income or price insurance plan might stimulate agricultural production somewhat and, thus, cause market prices of farm products to fall slightly below the level that would otherwise prevail over a period of years. Moreover, changes in production patterns probably would not take place quite so rapidly under an insurance program as they would if incomes were not stabilized.

The ultimate effect of a price or income insurance plan, as indicated at the beginning, is redistribution of income. The amount of income which an individual family could spend over a period of years might be altered somewhat under an insurance program. For example, some farmers who paid into the fund might not remain in agriculture long enough to collect any money, and some who did not pay into the fund or contributed only small amounts might obtain relatively large payments in times of falling prices or incomes. The major effect of an insurance program, however, would not be a change in the total amount of income which farm families have to spend over a period of years but differences in the expenditure patterns of farm families from year to year.