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# AGRICULTURAL ADJUSTMENT AND PROCESSING TAXES

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The Secretary of Agriculture in paying benefit or rental payments to producers under the Agricultural Adjustment Act is required to levy processing taxes on the particular commodity for which benefit or rental payments are made. These taxes are paid by the first domestic processor of the product, for example, the miller or the packer. The farmer pays no tax on the product raised and consumed by himself, and a refund equal to the tax is paid upon export of the product. These taxes now amount to $2.25 a hundred weight on hogs and $.30 a bushel on wheat.

When the question, "Who pays the processing tax?" is raised, one of two quite different problems is ordinarily in mind. The first is the question of whose price is raised or lowered as a result of processing taxes. The second is who derives the benefit and who pays the cost of the entire program. The latter is evidently the more important, since even if the price of the product of a cooperating farmer were lower by the amount of the tax, he would still gain if the benefit payments and changes brought about by the program increased his total net income.

The processor may attempt to recover the tax payment either by raising the price of the product to the consumer or by attempting to purchase from the farmer at a lower price. The difficulty with the former is that consumers will take only a certain quantity of the product at a particular price in a given situation and to raise this price will decrease the quantity taken and with the same market supplies, stocks will be accumulated and prices will have to be lowered to move these stocks. However, if the farmers insist upon selling the same quantity of product as before the tax was levied, the processors may refuse to purchase except at lower prices and so pass the tax back to them in the form of a lower price. It is a well established principle of economics that a tax can be passed to the consumer in the form of a higher price, general conditions remaining the same, only when the supply on the market is decreased. Therefore, if producers continue to market as much product as before, either they or the processors must pay the tax. This is the situation at the beginning with a product such as hogs where production is already under way when the tax is laid and requires considerable time for completion. For example, on October 10, 1933, one week prior to the announcement of the tax on hogs, the packer's margin on per 100 pounds of hogs as computed by the Bureau of Agricultural Economics was 63 cents, while on November 20, 1933, two weeks after the tax of 50 cents was in effect, the margin was $1.16, an increase in margin of 53 cents. On February 14, 1934, two weeks after the tax had reached $1.50 per hundred weight, this margin was $2.18 a hundred weight, an increase of $1.55 over the margin on October 10. These data show that whenever the processing tax on hogs was raised, the processor's margin increased by approximately the amount of the tax. Since retail prices remained essentially unchanges, we may conclude that the tax was at first shifted to the producer in the form of lower price.

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On the other hand, the cooperating producers were paid benefit payments which, if they were equal in amount to the taxes collected, would just offset the loss in returns thru the lower price. Before the reduction in market supplies, it thus would appear that cooperating producers were receiving the same gross returns as before for their hogs, a smaller market value but an offsetting benefit payment, while non-cooperating producers were heavily penalized. The case is similar but the statistical data are not as clear for wheat and the other taxed products.

We may now consider the problem of whether the farmer's net income is larger or smaller as a result of a particular adjustment program and if it is larger, from where do the gains come. In this analysis we may assume that the proceeds of the tax are paid as benefit payments, so that even though the tax resulted in a correspondingly lower price to the farmers, the benefit payments would offset these losses. There are three possible sources of gains to farmers which might result from the reduction in the volume of production. The first is that the total expenditures of consumers for the commodity may be increased because of the smaller quantity placed on the market. The second is that the total taken by processors for handling the smaller volume may be less than formerly and finally that there may be some reduction in the expenses because of the smaller volume of production.

The total amount which consumers pay for a commodity is a product of the price per unit and the number of units or quantity purchased at that price. In the case of some commodities, consumers buy nearly as large a quantity at high as at low prices. Under such conditions, small supplies have a greater total value than large supplies and a reduction program will increase the amount which consumers spend for the commodity. There is a high probability that in these cases a reduction program will result in a larger gross income to the group producing the product. Wheat and cotton are thought generally to be commodities with such a demand situation. In the case of some other products, however, consumer expenditures on the product remain about the same regardless of the quantity marketed. The price which consumers pay rises just fast enough as supplies are decreased so that the total amount which they spend for the product remains about the same. Here it is evident that there are no gains to be secured under a reduction program from larger consumer expenditures since these expenditures remain substantially the same, and whatever gains are made must come from a reduction in the total processing expenses or a saving in farm expenditures as a result of the reduced volume of production. Although the evidence is not conclusive, it indicates strongly that hogs and butter fall in this class of commodities. Finally there are commodities in which a slight rise in price reduces greatly the quantity purchased by consumers, and small supplies have a smaller total sales value than large quantities. Here a reduction program would reduce the amounts which consumers spent on the commodity, and the farmer's net income could be increased only if processing margins and farm expenses were reduced more rapidly than consumer expenditures fell due to the reduction of the quantity sold. There is some evidence that beef falls in this group of commodities.

In nearly all cases, we may expect total processing and distributing charges to be less for a reduced supply than for the larger amount. Transportation and retailing margins per unit of product are slow to change and even manufacturing charges are likely to remain about the same. This would mean a gain to the cooperators even in the cases where consumers' expenditures for the commodity were the same for the reduced supply as they would have been for a larger supply. In hogs, for example, the consumer expenditures are probably about the same for the reduced supply as they would have been for a larger supply but the total processing and distributing margins are smaller since about the same amount is involved in shipping, processing and distributing the products for a single hog as before and less hogs are marketed. With consumers spending as much as before for pork, and the deductions for transportation, processing and distributing less than before, the gross income to hog producers should be increased. The wider these

margins, the greater the gains. While there may be some saving in expenses to farmers because of a reduction in the volume of production, these gains are not likely to be large. Out of pocket expenses which vary with the volume of production are relatively small on most farms and most outlays such as taxes and interest continue the same whether production is large or small, or are things like the operator's own or family labor or farm raised feeds which do not involve cash outlays.

In the case of hogs, we may conclude as follows:

1. The processing tax is passed from the processors to the producers in the form of a lower price for hogs. If the processing tax were removed, the producer's price would be expected to rise by the amount of the tax but consumers' prices would remain unchanged.

2. Non-cooperating producers are penalized by having prices reduced because of the tax, but they regain at least a portion of their losses because of the higher general level of hog prices resulting from smaller supplies. Benefit payments to cooperating producers may be assumed to just about offset the losses involved from the lowering of their price because of the tax.

3. Consumers appear to spend about the same sum for the smaller amount of hog products as they would have spent for a larger quantity. They lose by getting a small quantity of pork for the same expenditure, and having to make up the deficit in their food supply by increased expenditures on other products.

4. Transportation, processing and distribution margins appear to be substantially unchanged per 100 pounds of pork products. The smaller volume handled, in consequence, has resulted in a smaller total charge for handling the reduced production, and the producers have gained by this amount. It also means a corresponding reduction in the income of the transportation, processing and distributing agemcies handling the product.

5. There may have been some small gains in the form of a reduction of farm expenses.

Table 1 below summarizes the benefit and rental payments and tax collections as far as data are at present available.

Table 1

Payments and Tax Collections under the A.A.A.
1933 and 1934

| | 1933 (million dollars) | 1934 (million dollars) |
|---|---|---|
| Total rental and benefit payments,* U.S. | 162.0 | 556.0 |
| Total rental and benefit payments,* Minnesota | 2.8 | 16.1 |
| Receipts from processing and related taxes, U.S. | 140.4 | 500.3 |

*Includes cattle and sheep purchased in drouth area in 1934. Data from mimeographed release, B.A.E., February 1, 1935.

# MINNESOTA FARM PRICES FOR JANUARY 1935

Prepared by W. C. Waite and W. B. Garver

The index number of Minnesota farm prices for the month of January 1935 was 82.8. When the average of farm prices of the three Januarys 1924-25-26 is represented by 100, the indexes for January of each year from 1924 to date are as follows:

| | | | |
|---|---|---|---|
| January 1924 - | 85.5 | January 1930 - | 99.8 |
| " 1925 - | 101.6 | " 1931 - | 72.6 |
| " 1926 - | 112.6 | " 1932 - | 47.8 |
| " 1927 - | 112.4 | " 1933 - | 34.6 |
| " 1928 - | 99.5 | " 1934 - | 46.0* |
| " 1929 - | 101.2 | " 1935 - | 82.8* |

*Preliminary.

The price index of 82.8 for the past month is the net result of increases and decreases in the prices of farm products in January 1935 over the average of January 1924-25-26 weighted according to their relative importance.

Average Farm Prices Used in Computing the Minnesota Farm Price Index, January 15, 1935, with Comparisons*

| | Jan. 15, 1935 | Dec. 15, 1934 | Jan. 15, 1934 | Av. Jan. 1924-25-26 | % Jan.15, 1935 is of Dec. 15, 1934 | % Jan.15, 1935 is of Jan. 15, 1934 | % Jan.15, 1935 is of Jan. 15, 1924-25-26 |
|---|---|---|---|---|---|---|---|
| Wheat | $1.00 | $1.00 | $.73 | $1.46 | 100 | 137 | 68 |
| Corn | .84 | .84 | .37 | .69 | 100 | 227 | 122 |
| Oats | .52 | .52 | .28 | .40 | 100 | 186 | 130 |
| Barley | .91 | .91 | .50 | .64 | 100 | 182 | 142 |
| Rye | .66 | .68 | .49 | .98 | 97 | 135 | 67 |
| Flax | 1.71 | 1.72 | 1.65 | 2.59 | 99 | 104 | 66 |
| Potatoes | .35 | .35 | .55 | .77 | 100 | 64 | 45 |
| Hogs | 7.00 | 4.90 | 2.75 | 8.63 | 143 | 255 | 81 |
| Cattle | 5.00 | 3.90 | 3.35 | 5.41 | 128 | 149 | 92 |
| Calves | 5.80 | 4.60 | 4.40 | 8.25 | 126 | 132 | 70 |
| Lambs-sheep | 7.34 | 5.60 | 6.02 | 11.85 | 131 | 122 | 62 |
| Chickens | .105 | .098 | .069 | .158 | 107 | 152 | 66 |
| Eggs | .22 | .23 | .14 | .35 | 94 | 94 | 63 |
| Butterfat | .33 | .30 | .18 | .47 | 110 | 183 | 70 |
| Hay | 15.44 | 15.00 | 7.22 | 11.38 | 103 | 214 | 138 |
| Milk | 1.68 | 1.52 | 1.22 | 2.24 | 111 | 138 | 75 |

*Except for milk, these are the average prices for Minnesota as reported by the United States Department of Agriculture.

Indexes and Ratios of Minnesota Agriculture*

| | Jan. 1935 | Dec. 1934 | Jan. 1934 | Av. Jan. 1924-26 |
|---|---|---|---|---|
| U.S. farm price index | 75.3 | 74.3 | 49.0, | 100.0 |
| Minnesota farm price index | 82.8 | 68.9 | 46.0 | 100.0 |
| U.S. purchasing power of farm products | 90.3 | 89.6 | 63.6 | 100.0 |
| Minnesota purchasing power of farm products | 99.3 | 83.1 | 59.7 | 100.0 |
| U.S. hog-corn ratio | 7.7 | 6.0 | 7.0 | 11.0 |
| Minnesota hog-corn ratio | 8.3 | 5.8 | 7.4 | 13.2 |
| Minnesota egg-grain ratio | 13.8 | 14.6 | 15.0 | 21.3 |
| Minnesota butterfat-farm-grain ratio | 19.9 | 18.1 | 20.9 | 40.6 |

*Explanations of the computation of these data are given in Farm Business Notes No. 144.