THE FINANCIAL ASPECTS OF AGRICULTURE

In

Oregon

by

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Historical Introduction

Any study of agriculture is a complete course in economics, politics and sociology. Agriculture is not only a means of securing a livelihood but also a way of living. There are few places where this combination is more clear or important. There is need of showing differences between agriculture and industry in Oregon, but no need to hold that the factors affecting it are peculiar to Oregon. Likewise there is no need of proving that there is an "agricultural problem". That there is a problem is admitted in both industrial and political circles. Disagreement arises in stating the scope of the problem, and in the attempt at solution.

This study is an attempt to offer an understanding of the financial aspects of agriculture, dealing particularly with the state of Oregon, and generally with agriculture throughout the United States.

In the United States there are approximately one hundred and thirty millions of people, about one fourth of whom are on farms. In the state of Oregon there are approximately a million people, one fourth of whom are directly dependent upon the farm as a source of livelihood. On January 1, 1935, approximately 27 percent of the land area of the state was in farms. The investment in farm property in Oregon was set by the 1930 Census of Agriculture at $755,896,689. For the same year the Oregon State Tax Commission estimated that the total full

cash value of all taxable property in the state was $1,952,041,417. There may be some doubt as to the comparability of these two estimates, but they do show in a general way, the comparative importance of the investment in agriculture and the total private physical investment in the state.

Agriculture in 1935 brought the state of Oregon a cash income of approximately $89,299,000, and the U.S. Department of Agriculture estimates of home consumption bring the total gross income to about $99,806,000.[1] This is only an estimate of total income and does not take into consideration wages, interest, and other payments that must be made for the calculation of net income. The agricultural income of Oregon in 1929 was $144 million and even in 1935 is but slightly less than the total wages and salaries paid by all Oregon industries in 1929.[2] In 1929 Oregon agriculture was directly concerned with the lives of 223,667 persons, while industrial occupations supported approximately 180,000 in the same year.[3] The 1935 Census of Agriculture shows an increase in farm population to 248,767 persons. In consideration of the investment of farm property and the population dependent upon it, agriculture appears to be an important, if not the most important, industry in the state.

During the past quarter century agriculture in the United States has undergone profound and important changes. In the period from

1. U. S. Department of Agriculture, "Farm Value, Gross Income, and Cash Income from Farm Production", 1936.
2. U. S. Department of Commerce, Bureau of Census, "Census of Manufactures 1929, Salaries $19,412,571, and Wages $86,828,968.
3. Determined by applying coefficient of dependency 2.33, to total number of employes and officials.

1910 to the World War agriculture was relatively prosperous. Farm income was in most cases sufficient to meet prevailing costs and allow a reasonable interest on investment. In Oregon in 1910 agriculture was relatively undeveloped and unburdened. Taxes amounted to but forty cents per $100 of assessed valuation, or about seventeen cents per acre. The mortgage indebtedness of Oregon farms in 1910 was $34,950,000 or 7.7 percent of the value of farm land and buildings in the state. Farm prices and income were satisfactory and there was little evidence that farm costs were greater than receipts. The period, 1910 to 1913, is often used as the base period, or desirable condition, when a basis of comparison is wanted. Many agricultural indexes are based upon this period and it is generally referred to as the parity period.

With the advent of the World War changes took place rapidly in agriculture. The Allied demand for food supplies pushed farm prices upward to new heights. Land values mounted steadily as high prices pushed farm incomes to new high levels. Land transfers increased apace and mortgages were freely used to facilitate such transfers. The Federal government encouraged increased production by guaranteeing prices, and many farmers, who felt that the price level was a stable one, used mortgages to finance the expansion of current operations and the purchase of farm machinery, in order to take advantage of prevailing prices, rather than to use the increased income to reduce indebtedness already outstanding.

4. U. S. Department of Agriculture, Agricultural Statistics 1936.

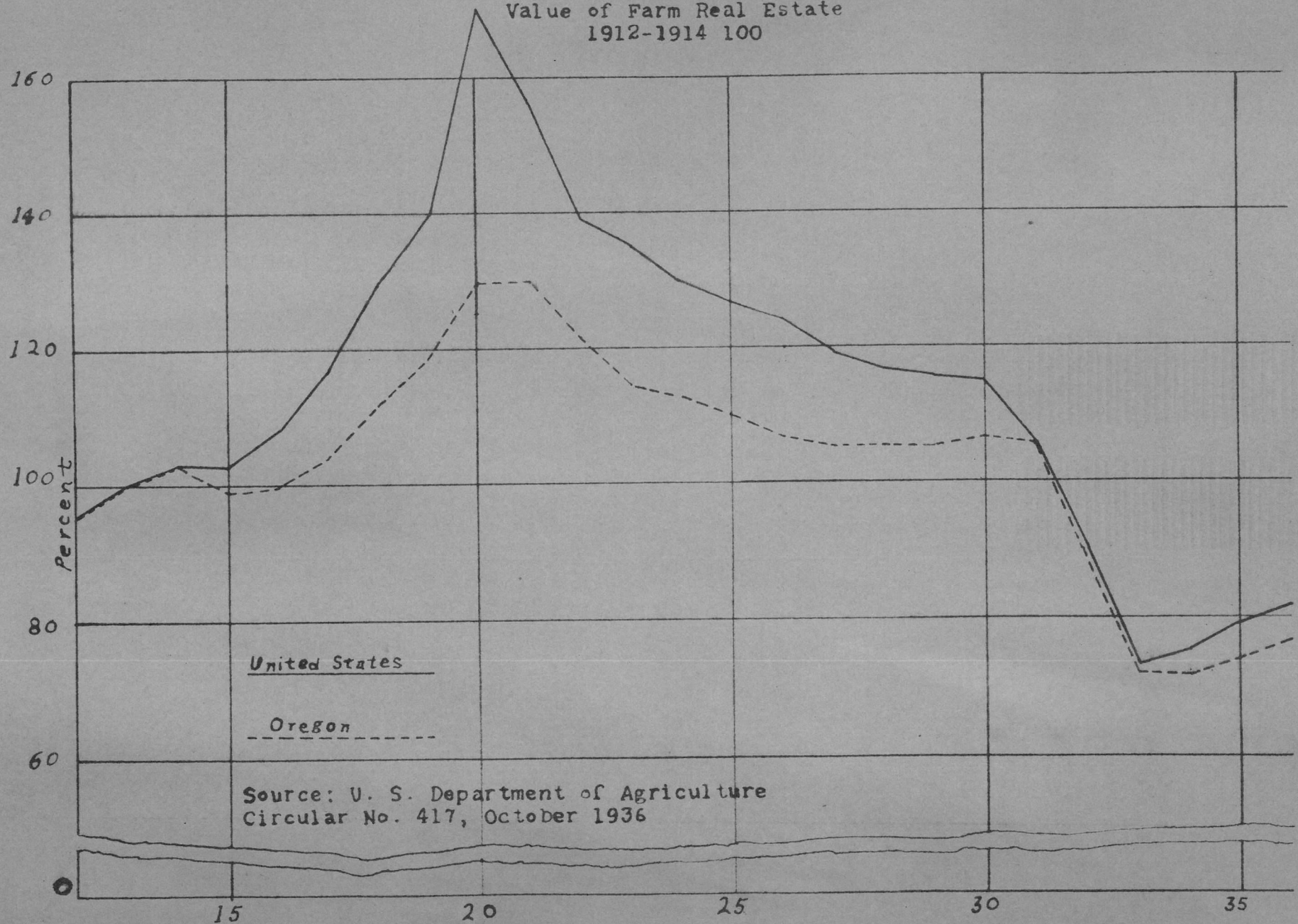
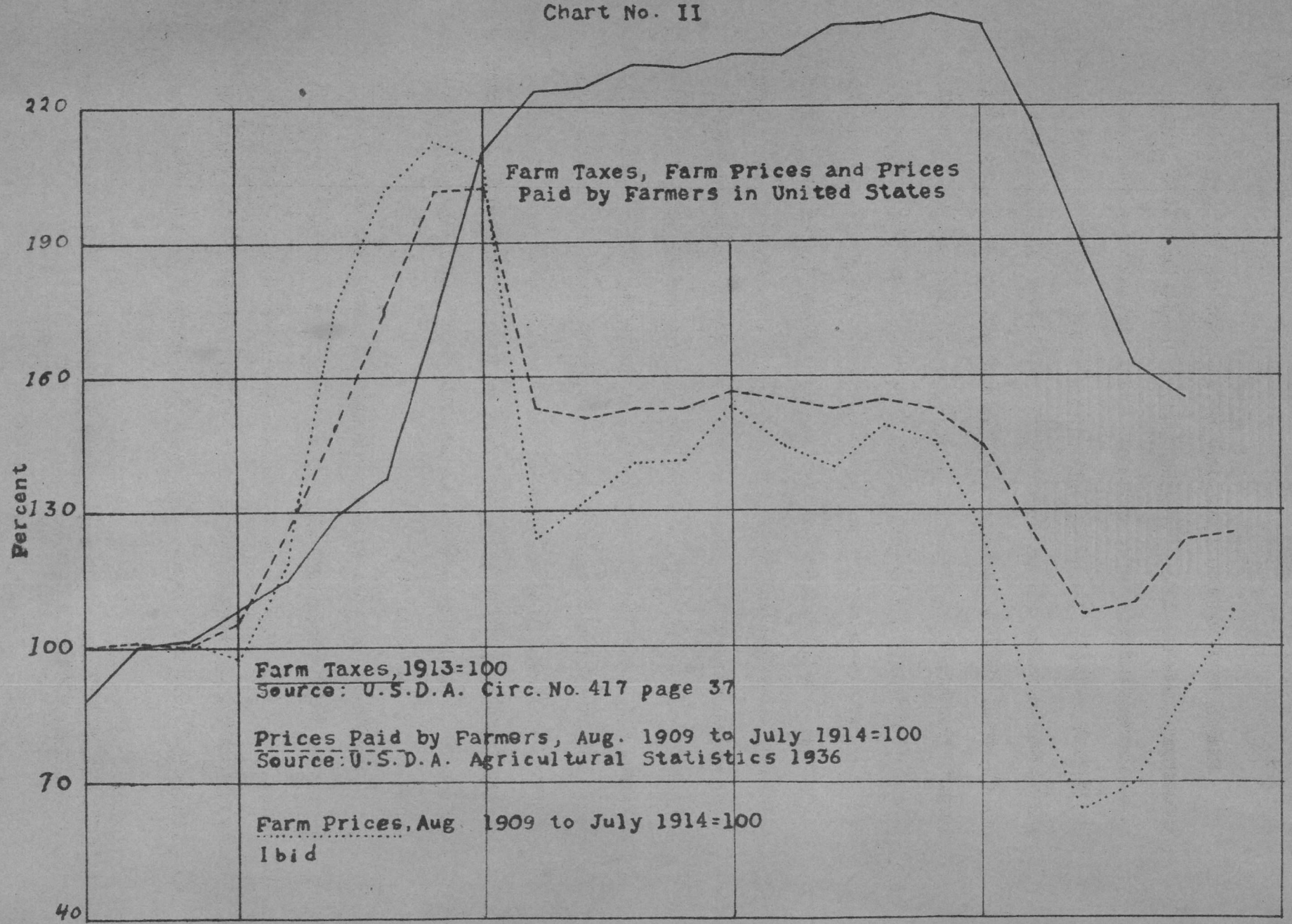


Chart No. I
Value of Farm Real Estate
1912-1914 100
160
140
120
100
80
60
0
Percent
United States
Oregon
Source: U. S. Department of Agriculture
Circular No. 417, October 1936
15
20
25
30
35

Chart No. II


Farm Taxes, Farm Prices and Prices Paid by Farmers in United States
220
190
160
130
100
70
40
Percent
Farm Taxes, 1913=100
Source: U.S.D.A. Circ. No. 417 page 37
Prices Paid by Farmers, Aug. 1909 to July 1914=100
Source: U.S.D.A. Agricultural Statistics 1936
Farm Prices, Aug 1909 to July 1914=100
Ibid

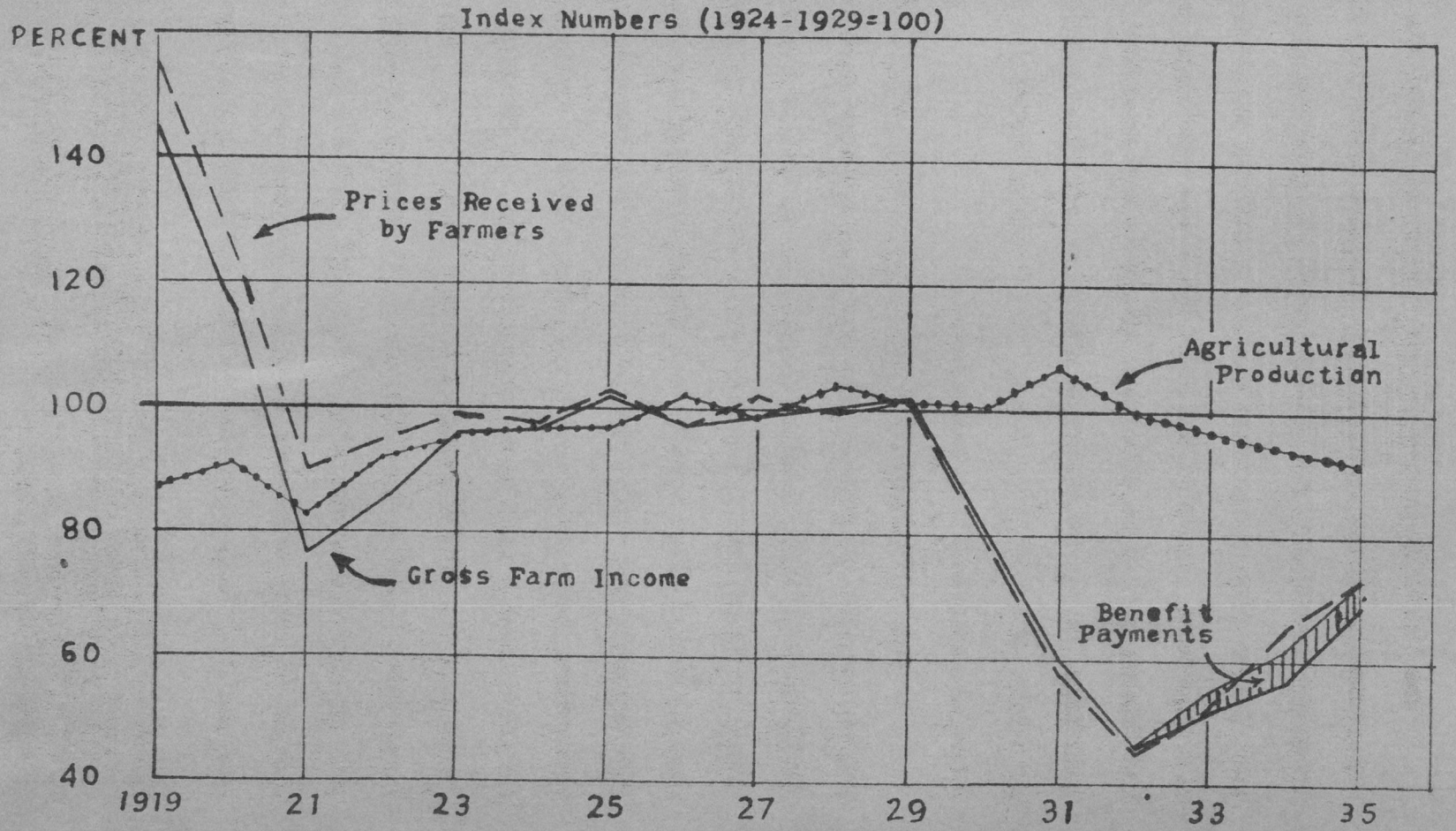
Rising land values alone were not responsible for the increase in mortgage indebtedness in Oregon because Oregon farm land values increased but slightly when compared to the general rise throughout the United States. The accompanying chart compares the rise of land values in Oregon to the rise throughout the United States. (Chart no. I) Oregon's farm mortgage indebtedness did reach $91,090,000 in 1920.[5] The greatest portion of this increase was undoubtedly used to finance the bringing into production of about two million acres of new land, the purchase of farm machinery and the erection of new farm buildings. The 1910 Census of Agriculture valued farm implements and machinery in Oregon at $13,205,645. By 1920 the value of such implements and machinery had increased to $41,567,309. During the same period the value of land and buildings increased from $455 to $675 million, and the value of all farm property in the state increased from $528 to $818 million. It must be recognized in connection with these valuations, that they were taken at a time when values were abnormally high. However it must also be recognized that land values, and prices in general, did not go as high in Oregon as in other portions of the country.

Farm taxes mounted steadily throughout the United States in pace with farm prices, but did not come downward when prices fell in 1921. The accompanying chart (No. II) shows the movement of taxes in the United States and the movement of farm prices. Farm taxes in Oregon followed the trends noticeable throughout the United States.

5. U. S. Department of Commerce, Bureau of Census, "Census of Agriculture, 1930".

Chart No. III

AGRICULTURAL PRODUCTION, PRICES AND INCOME, UNITED STATES 1919 to DATE



Source: U. S. D. A. Bureau of Agricultural Economics "Income From Farm Production in the United States in 1935" Washington 1936

The 1919-1920 period is most important in the consideration and understanding of the agricultural situation since that time. In the first few months of 1920 the situation was substantially as follows. Farm prices were high, in many cases exceeding the guaranteed prices of 1919 crops. Agricultural production was encouraged by high prices and farmers mortgaged present holdings to buy more land, improve their buildings, or buy machinery to increase production and thereby take advantage of prevailing prices. Taxes also mounted and were capitalized at the prevailing price level.

In the latter part of 1920 and the first part of 1921 farm prices declined from their post war peak and were stabilized at about 130 percent of their pre-war level. Using 1924 as a base, Oregon farm prices declined from a level of about 165 percent in 1920 to 90 percent in 1921.[6] Farm income fell almost directly with farm prices. (See accompanying chart, No. III, showing the trend of agricultural production, farm prices and gross farm income.) While farm income fell drastically farm costs remained fixed, or declined but slightly. Taxes remained at 200 percent of the pre-war level.[7] Prices paid by farmers fell slowly, declining from 163 percent in 1920 to 110 percent of 1924 prices in 1921. This necessitated a greater number of bushels of wheat or dozens of eggs to purchase manufactured goods than before. Land purchased in 1919 and 1920 for a third of its value

6. Oregon State Planning Board, "Price Trends of Oregon Products Compared with those of Commodities Purchased from Outside the State, 1919-1925, 1936.
7. U. S. Department of Agriculture, The Farm Real Estate Situation, Circular No. 417, 1936.

until the mortgage represented 50 to 75 percent of the true value of the land, as determined by its earning power.

During the period 1923 to 1929 industry was prosperous and expanding its operation to take advantage of decreasing costs of large scale operations. Farmers, on the other hand, had expanded their productive capacities during the war far beyond the point where the market could consume the production when other producing areas were again brought into the market. This was especially true with regard to wheat production. During the war Australian wheat was not available to the world in large quantities and France had not been able to produce her usual amount. American producers had expanded their operations to cover this deficiency, but following the war these producing areas again became important. The result was a world surplus of most export agricultural commodities, which kept farm prices so low that few farmers were able to reduce their indebtedness, pay taxes, keep up their capital investment, and allow themselves wages for their time and interest on their equities. Throughout most of this period tax sales, foreclosures, and bankruptcies became usual, if not popular. In the state of Oregon such transfers loomed large when considered alongside the total transfers of farm property in the state. But the percentages are small when compared to the forced sales in other states. In 1926, the first year that such a study was made, the U.S. Department of Agriculture found that for every 59.9 transfers of farm property in Oregon 20.7 or 34.5 percent were the result of tax delinquency, foreclosure, bankruptcy, or related default. The following table shows the trend of forced sales from 1926 to 1936.

Table I

Changes in Farm Ownership in Oregon, Number per 1000

	Forced Sales and Defaults			Total Transfers All classes	Forced Sales as Percent of all Transfers
	Delinquent Taxes	Foreclosures, Bankruptcies & Related Defaults	Total Forced Sales		
1926	3.5	17.2	20.7	59.9	34.5
1927	5.2	16.0	21.2	70.1	30.2
1928	6.0	17.9	23.9	76.1	31.4
1929	5.2	10.0	15.2	56.2	27.0
1930	3.7	11.2	14.9	67.0	22.2
1931	7.0	13.4	20.4	66.4	31.0
1932	9.5	22.3	31.8	73.2	42.0
1933	7.8	33.5	41.3	84.0	49.1
1934	4.3	26.1	30.4	75.1	40.4
1935	4.6	19.8	24.4	69.3	35.2
1936	4.8	21.3	26.1	78.4	33.3

Source: U. S. Department of Agriculture Circulars No. 101, 354, and 417, "The Farm Real Estate Situation", Annual Publication.

Accompanying these transfers of farm property, and largely as the result of such forced sales, land values throughout the country declined steadily so that by 1928 and 1929 they more nearly conformed to the true value of such property as determined by its earning power. (Note Chart No. I) However other forces began to make themselves noticeable in agriculture. On the political side there was recognition of the sad state of affairs, and the farmer's demand for aid resulted in marketing and tariff legislation supposed to aid the farmer. There was an emergency tariff act in 1921 which placed duties on the importation of wheat and other agricultural commodities. These duties were later raised during the administration of Coolidge. In 1927 and 1928 two McNary-Haugen bills designed to subsidize the export of wheat were passed but were vetoed by Coolidge. In 1929 the Agricultural Marketing Act was passed and with the depression the

government found it necessary to take more positive steps to alleviate the growing distress of the farm population. The "New Deal" farm program was, an attempt to do, what the agricultural tariffs hoped to do, but which were doomed to failure from the start. The protective policy of this period in so far as it applied to those things the farmer must buy, raised his costs but did not raise his income.

Farm prices in the United States remained below parity during the period 1923 to 1929, but more nearly approached it during 1929 than at any time since 1920. In Oregon the situation described above was probably not as serious as in other states of the United States, but as long as forced transfers of farm property constituted from one fifth to one third of the total transfers of farm property the situation could not be considered healthy.

Oregon prices, for the most part, are set on the world market and influenced by the same conditions as agricultural prices in other sections of the country. Because land values in Oregon had not reached the extraordinary heights experienced elsewhere there is reason to believe that Oregon farmers could have improved their position had their incomes remained at the 1924 to 1929 level.

There was considerable improvement from 1924 to 1929 in Oregon, the tension being eased as industrial prosperity managed to filter into the farmers hands or as natural forces entered into the determination of the supply and forced some prices into the profit side of the ledger. Based on earning power farms were greatly overvalued. Taxes and interest were relatively fixed and were paid,

for the most part, although there was little left as interest on the farm capital. The repayment of indebtedness took place only if the farmer delayed the purchase or repair of machinery, and other capital expenditures, in order that such expenses might be paid. Thus depreciation became to some extent a contributing factor in the declining farm property values.

Taxes throughout the United States increased quite steadily until 1930. For the nation as a whole taxes in 1929 were 213 percent of the 1913 level. In Oregon the average tax on farm land in 1913 was .17 cents per acre or .40 cents for each hundred dollars of assessed value. In 1929 taxes amounted to 44 cents per acre or $1.15 per hundred dollars of assessed value.[8]

During this period of industrial prosperity farmers had not been able to reduce their mortgage indebtedness. In Oregon in 1925 the mortgage indebtedness was estimated at $105,503,000 or 15.5 percent of the value of farm land and buildings in the state. For the United States the ratio was 18.9 percent. In 1930 the mortgage indebtedness in Oregon had increased to $116,805,000 or 18.5 percent of the value of land and buildings in the state. For the country as a whole the mortgage indebtedness amounted to 19.3 percent of the value of all land and buildings.

8. U. S. Department of Agriculture, Agricultural Statistics 1936.

Table II

Ratio of Farm Mortgage Indebtedness to Estimated Value of Farm Land and Buildings, 1910-1935

Year	Farm Mortgage Indebtedness, Oregon $000	Value of Land and Buildings Oregon $000	Mortgage Indebtedness as % of Value of Land & Buildings, Oregon	Mortgage Indebtedness as % of Value of Land & Buildings, U. S.
1910	$34,950	$455,576	7.7%	
1920	91,090	675,213	13.4	11.8%
1925	105,503	616,069	15.5	18.9
1928	110,875			19.8
1930	116,805	630,827	18.5	19.3
1933	108,019			28.0
1935	104,000	448,712	23.1	23.8

Source: Donald C. Horton "Long Term Debts in the United States" U.S. Department of Commerce 1937 and Census of Agriculture 1930 & 1935.

From 1923 to 1929 the situation in agriculture was not improving according to all signs that have been shown. While it is held that in many respects Orogon was better off than other sections of the country it was also true that Oregon herself was not immune to farm mortgages. In 1930 the Census of Agriculture pointed out that 51.8 per cent of all the farms in the state were mortgaged and in one county of the state the percentage moved as high as 80 percent.

Table III

Percent of Farms Mortgaged, 1930
Selected Oregon Counties

Gilliam	80.0%	Morrow	70.2%	Hood River	65.5%
Sherman	77.9	Tillamook	67.9	Deschutes	64.8
Wheeler	76.1	Wallowa	65.8	Union	64.6

Source: Census of Agriculture 1930

In 1929 the first rumblings of a crash were noted and by 1930 the decline in farm prices and farm incomes was in full swing. Prices and incomes reached new low levels for the crop year 1932. The situation was in many respects similar to that of 1921. Prices of farm products and incomes of farmers declined rapidly while the prices of those things he must buy and taxes and interest declined slowly or not at all. Clarence Anton Wiley characterized the situation in 1920 as follows: "Agricultural prices fell first, fell fastest, and fell farthest".[9] The situation with regard to interest, taxes and prices was practically the same in 1933 as in 1921, but there was one essential difference, that mortgages contracted in 1919 and 1920 were falling due and no means were available to meet them except extensions and refinancing. During the period from May 1, 1933 to June 30, 1936 the Federal Farm Credit Administration through the Federal Land Banks and the Land Bank Commissioner estimated that the proceeds of their loans in Oregon had largely gone for the refinancing of indebtedness incurred at an earlier date. The following figures are given to show the extent of the refinancing operation in Oregon during the period mentioned above.

9. Agriculture and the Business Cycle Since 1920, University of Wisconsin Studies in Social Sciences and History No. 15, 1930.

Table IV

Purposes for Which Federal Land Bank and Land Bank Commissioner Loans were Issued from May 1,1933 to June 30, 1936

For Financing First and Junior Mortgages Held by			
Life Insurance Companies	Commercial Banks	Join-Stock Land Banks	Others
$2,817,000	$2,086,000	$2,158,000	$9,670,000

For Financing Other Debts			
Commercial Banks	Taxes	Other Indebtedness	For the Purchase of Land or Redemption from Foreclosure
$1,449,000	$1,689,000	1,861,000	$121,000

For General Agricultural Purposes	For Stock Association and Bank or Loan Fees
$ 637,000	$1,168,000

Source: Farm Credit Administration, Farm Credit Quarterly, Vol. I, No. 3, September 1936, p. 21.

During the year ending December 31, 1934 the Federal Farm Land Banks and the Land Bank Commissioner received 10,445 applications totaling $49,585,236 from Oregon farmers. During the year they were able to close but 5,652 of these loan applications for a total of $15,396,900.[10] In many cases it was found that the amount needed to refinance the present mortgage was over fifty percent of the value of the land and the Federal Land Banks are limited to loans of fifty percent. Some of these applications were cared for by loans of the Land Bank Commissioner who is permitted to loan up to 75 percent of the value of the land. But in many cases there was no relief unless the present holder of the mortgage was willing to extend it. The situation in 1933 is characterized by the statement of the Farm Credit Administration that 23.2 percent of the mortgage loans of the Federal Land Bank of Spokane were considered delinquent on December 31, 1935.[11] In 1933 41.3 out of every 84 transfers of farm property in the state of Oregon were the result of tax delinquency, foreclosure, bankruptcy, or related default. Throughout the Middle West the situation was even worse. In South Dakota 103.1 out of every 131 transfers of farm property in 1933 were forced. In Mississippi 115.3 out of every 154.5 transfers were forced.[12]

10. Farm Credit Administration 2nd Annual Report, 1934, p. 94.
11. Farm Credit Administration 3rd Annual Report, 1935, p. 123.
12. U. S. Department of Agriculture, "The Farm Real Estate Situation, 1935-36", Circular no. 416, 1936.

Notwithstanding the fact that prosperity had never smiled on the nation's farmers from 1921 to 1930 their plight was never made so clear as in the period 1931 to 1933. If their income before 1930 had not allowed them reasonable interest on their capital or sufficient wages for their labor they were at least able to feed their families and meet interest on mortgages and taxes. In 1932 and 1933 it became clear that many were in danger of losing their remaining equities through foreclosure and tax delinquency. The result was "penny" tax and foreclosure sales in the Midwest and political pressure for farm relief wherever agriculture was carried on.

Since 1933 the situation has improved markedly. Farm prices started upward in April 1933. Nature cooperated by means of droughts and floods to cut down the large surpluses of agricultural commodities. State and national laws have been passed to bring needed relief to the farm debtor and mke it possible for him to refinance his indebtedness. Machinery has been set in motion by the Farm Credit Administration to facilitate scaling down oppressive mortgages and high rates of interest. We have had an Agricultural Adjustment Act and moritoria on foreclosures, the success of which are disputable. But have they solved the problem confronting the American farmer? Is the relief permanent or but temporary? It is only by reviewing the case of the farmer that the success of the past actions and the plan for the future can be evaluated and formulated.

This brief historical resume of the farmers plight is by no

means complete. It is intended as an introductory statement to the study of the present financial situation of agriculture in Oregon. There is no reason to believe that the situation in Oregon is different from that in other parts of the United States. Indeed, as was pointed out above, in some important respects Oregon farmers have been much better off than farmers in other sections of the United States.

Chapter II

The Nature of the Industry

In order that we may more nearly understand the actions of the farmer, it is desirable to point out some factors that are peculiar to agriculture. These peculiarities are not always absolute but may be present in many other industries in varying degrees. However, the degree with which they apply in agriculture, often has important effects upon the farmer's actions.

First, agriculture is a highly individualistic industry. Production is, for the most part, carried on by relatively small units. A single person or family owns and operates each farm and assumes all risks and gets all profits. In contrast to this, most other industry is carried on by incorporated concerns with ownership and risk divided among a large body of stockholders. The individualism of agriculture, contributes, to a very marked degree, to the failure of agriculture to combine successfully in any group large enough to control production. Varying sectional opinions may often lead one section to increase production while another section is trying to cut it down. The tendency toward centralized control, that is so evident in other industry, is not found in agriculture.

Second, agriculture is dependent upon nature to a much greater degree than other industry. The productive process cannot be hurried,

unless artificial conditions prevail. The weather, seasons, etc. affect production and the ultimate income depends upon these factors as well as on the initiative of the individual farmer.

The farmers dependence on nature is a determining factor in his income cycle, in a majority of cases. If it takes a year to plant, grow, and harvest wheat, the income cycle is one year. If it takes three years to raise a beef steer the income cycle is three years. Only a few agricultural pursuits, such as dairying and poultry farming, have a continuous income cycle similar to that found in most industry. The farmer that raises wheat or sells beef or mutton must make some committments and preparations at least one year in advance. During the time between the planting and the harvest the prices may fall. The farmer cannot control his productive process. He cannot stop the forces he has set to work without losing all that he has expended. This is in direct contrast to the situation in most industry. The manufacturer of automobiles feels that for some reason conditions are not satisfactory for the production of automobiles. He can stop his productive process, lay off his men and retire from production for a time. It is good business for him to do this. But it would be very bad business for the farmer to try to stop his productive cycle, to do so would mean a complete loss of all that had already been expended. The car on the assembly line will be there when the manufacturer wishes to resume production, but half grown wheat will continue to grow without regard to prices. By carrying through the productive process the farmer will get back part of his expenses. It is better that he harvest this crop and take a small loss than to take a larger loss by abandoning it because

the price has fallen.

Third, within the limits of the mechanization process, agriculture operates under the law of increasing costs. The land area available for agricultural production at any time limits the possibilities of mechanization and brings the law of diminishing returns into operation within a relatively short period of time. In other industry there seems to be little sign of any such limit upon the application of machinery and human inventiveness. As long as this holds true other industry can be regarded as operating under constant or diminishing costs.

Fourth, as E. R. A. Seligman points out, agriculture seems to have a greater proportion of constant to variable costs. Professor Seligman says in his enumeration of the peculiarities of agriculture that: "the proportion of constant to variable costs seems to be greater. In the majority of agricultural products the costs which very directly with the quantity of production are of smaller importance than those which are independent of production. Not only is the overhead greater, but the percentage of the ordinary costs of production that are unaffected by the volume of output is larger."[1] There is considerable difference of opinion over the allowable costs in the determination of the proportion of constant to variable costs in agriculture as compared to other industry. Should the farm be charged with a labor bill during periods of depression just because the farmer cannot discharge his family? If it is not a paying proposition to continue to employe himself or his family the bill should be written off. Professor Seligman obviously allows the farm wage bill as a constant cost,

1. Economics of Farm Relief, Columbia University Press, 1929, p. 47.

which is in the writer's opinion the usual interpretation given to the wage item. Seligman supports this thesis by referring to other sources.[2] If the farmer were to retire from production in time of depression his fences would fall into disrepair and his fields grow up with weeds. His capital investment is imperiled by such a course. It seems reasonable that the wage bill necessary to cover such labor is an allowable item in the farmer's fixed costs. However, having made this allowance, credit must be given for it in a depreciation account rather than as a cost of production. In good times but a small part of the wage bill would be credited against the depreciation account, and a large part would be charged against cost of production. In poorer times the cost of tilling the soil and maintaining fences may be for the protection of capital investment as much as for production.

Taxes and interest are other important items in the overhead costs of the farmer. Interest rates are usually set by contract and pay little attention to the output of the farmer or the fluctuations in his income. Taxes, under the general property tax, are set by the needs of the government and not by the taxpayer's annual income.

Fifth, farm prices move upward and downward with great ease and have a very wide range of fluctuation. As it was pointed out above, during periods of falling prices the farmer cannot stop the forces of nature and it pays him to continue the process if he can

2. H. Belshaw, The Profit Cycle in Agriculture, Economic Journal, Vol. 36, 1926, pages 29-49.

cover his variable costs and a part of his constant ones. The farmer must make all his changes in production between the productive cycles. There is an important lag between price changes in agriculture and resultant changes in production, as contrasted to their immediate effect in industry. The time that must elapse between the downward swing of prices and the downward swing of production resulting from it, is often long enough for opposite price trends to set in before the changes in production occasioned by the first downward swing of prices has affected the supply. These factors contribute to the difficulty of forecasting farm prices and attempting to base present commitments upon them. Each farmer tries to forecast the change for the better during periods of low prices, in order that he may cut off the otherwise long period of adjustment for higher prices. In doing this he tends to stabilize his own production nearer the prosperity level than he would if his productive cycle were shorter.

These factors all contribute to the stability of production in agriculture. Being completely independent of each other there is no means of controlling production in order to influence prices. Each farmer draws his own conclusions on the market prospects. He must consider the chances of falling or rising prices. He must consider the depreciation that would result if he were to abandon his farm for a year and the added cost that would be necessary to return it to production at a future time. He must consider the fact that taxes and interest have to be paid whether the farm is operated or not. His constant costs may be large enough to pay him to operate each year, if by operating he can cover the variable costs and have something

to apply to the constant ones. In other words it is good business. These factors have all pointed to the general conclusion that it is usually good policy for the farmer to continue to produce even though present prices may not assure a profit.

This tendency to maintain production without definite assurance of a reasonable return is a bad one because of the effect it may have upon both human and natural resources. Constant loss-cropping means the failure to allow for desirable items of expense. One of the easiest ways this may be done is by failing to maintain the fertility of the soil or failing to keep buildings in repair. It may also mean a subsistence level for the farm family, which is hardly in keeping with the American ideal.

Chapter III

Farm Income

There is no part of this discussion more pertinent or more important to the entire agricultural problem than that part dealing with farm income. If agricultural incomes were properly balanced with farm expenses, in the broad sense, there would be no tax delinquency, no burdensome farm mortgages and no logical reason for mining our soil resources. Because this condition seems to be too ideal to put into practice, we do have many farms burdened with large tax and interest payments. It is only by bringing agricultural expenses into balance with the farmers income that the dangers that accompany the lack of balance can be overcome. To achieve this necessary balance several suggestions immediately present themselves to mind. Shall we try to raise the income and leave everything else along? Or shall we cut expenses only? Another question might be, are the tax bills and other expenses properly divided between urban and rural populations in accordance with the distribution of net income between the two? Our information on the distribution of wealth in the state of Oregon is very fragmentary, as is one item of the expense account, namely wages. Because of such limitations our discussion can only cover those items upon which information is available. Such information is available, in part, for the positive side, farm income. Information for the other

side of the ledger consists of some data on farm taxation and farm mortgages. It is desirable to go as far as our information will permit at any time in order that those difficulties that may be found may also be remedied. By such a course the best interests of the community are served and the advance will keep abreast of our knowledge.

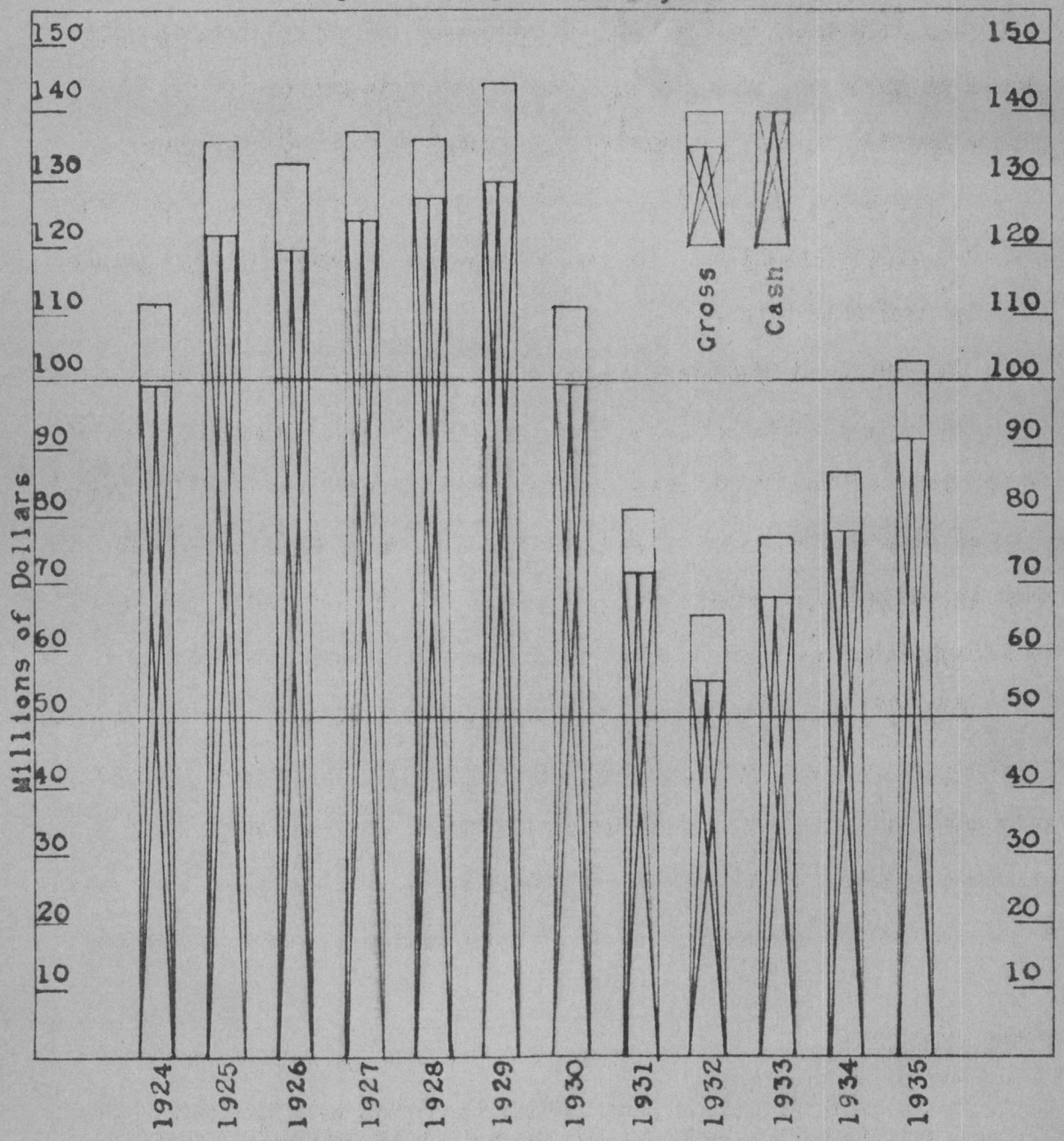
Farm income differs from the usual concept of income in that allowance must be made for items of home consumption and the use of the farm home. When gross income is spoken of in the discussion to follow it includes estimates of the consumption of farm products but does not include the rental of the farm home. When cash income is mentioned it applies to income from the from the sale of farm prodcuts but does not include income from labor off the farm.

The United States Department of Agriculture estimated that the gross income of Oregon farmers reached a peak of $144,513,000 in 1929. This income, if divided equally among all the farms in the state would have meant an income of about $2600 a farm, when wages, interest, and taxes are not considered. The gross income of Oregon farmers has fluctuated widely during the thirteen years that the Department of Agriculture has calculated such a figure for the state. The department's figure is only an estimate based upon regular reports from Oregon farmers but is accepted as the most reliable estimate that is now practicable. In 1924 the Department of Agriculture set the gross income from farm production in the state at $112,188,000. In the next five years the income fluctuated between $132,460,000 in 1926

Chart No. IV

OREGON

GROSS INCOME AND CASH INCOME
FROM FARM PRODUCTION
Includes Benefit Payments



Source: U. S. Department of Agriculture Yearbooks

and $144,514,000 in 1929. In 1930 it fell again to $112,023,000 and in 1932 reached a low point of $65,062,000 or less than half the income of the year 1929. If divided equally this meant that each Oregon farmer received about $ 1,000 to buy food and clothing and to pay taxes and interest. In 1933 income recovered slightly, with the aid of, or in spite of, the Agricultural Adjustment Administration and other "New Deal" attempts to lift the nation out of the depths of a major depression. Gross income advanced to about $ 87,307,000 in 1934 and $103,107,000 in 1935. The accompanying chart shows these changes in gross and cash farm income.[1]

Net income of Oregon farmers is even more difficult to approximate than gross income because many factors are not adequately known. It is possible however to show some of the expenses that must be subtracted from gross income to approximate the net income. Any such step is subject to a wide margin of error and the following treatment is illustrative only, no attempt being made to insert exact data.

In 1929 the gross income of Oregon farmers was set at $ 144,513,000. In 1928 Oregon rural real property paid taxes of $ 21.23 per $ 1000 of true cash value.[2] The United States Census of 1930 set the value of all farm property in the state at $ 755,896,689. By applying the first figure to the second we secure $ 16,047,693 as the tax bill of Oregon

1. Estimates of gross farm income are taken from U.S. Department of Agriculture, Yearbooks.
2. W. H. Dreesen, "Trends of Tax Levies in Oregon with Emphasis upon Rural and City Real Properties", Oregon State College, Agricultural Experiment Station Bulletin No. 257, 1929, p. 5.

farmers. As a check we can compare the total assessed value of all property, included by the Oregon Tax Commission as rural property, excepting timber lands, to the total value of taxable property in the state, locally assessed and apportioned by the State Tax Commission. The first figure includes the assessed valuation of all tillable lands, non-tillable lands, improvements on deeded or patented lands, farm implements and machinery, wagons and automobiles, horses and mules, cattle, sheep and goats, and bees. The total assessed value of this property in 1929 was $ 407,952,604 and is compared to the total value of taxable property, locally assessed and including that property assessed and apportioned by the State Tax Commission, of $1,124,988,692.[3] This property was 36.3 percent of all the taxable property in the state, so assessed and apportioned. Property taxes levied for state and local purposes in 1929 were $49,556,175.[3] Rural property, excepting timber lands, proportionately paid 17,988,892 of this bill. This figure is too large to be considered the tax bill of Oregon farmers by the amount of taxes levied on non-farm rural property. The first estimate is therefore used as the tax bill and it can be considered reasonable.

Farm mortgages in 1930, as shown by the Census of Agriculture estimates, amounted to $ 116,805,000. Debt charges at that time were found to be 6.41 percent for the state of Oregon. Calculating on the basis of 6 percent, however, it was found that the annual interest pay-

3. Oregon State Tax Commission, "Twelfth Biennial Report", 1935, page 15.

ments of Oregon farmers in 1929 amounted to a little over $7,000,000. This does not make any allowance for payments on the principal sum.

Farm wages, being the largest and most difficult expense to calculate, have been left till the last in this consideration. An estimate of such expenditure can be made in two ways, either by allowing a subsistence item for each farm family, or by allowing the going wage to all farm workers. The latter case fails to recognize the fact that farm labor is largely family labor and that wages are determined in a great degree by the cost of living. The first method was chosen for this reason.

As a reasonable wage allowance for the year 1929 $400 per year per person has been accepted. (This would probably have been too low for small families and too high for large ones.) The wage bill of 55,153 farms, supporting 223,667 persons would be by this method, $94,000,000.

When these three items are considered it is found that $16,000,000 for taxes plus $7,000,000 for interest on mortgage indebtedness added to $94,000,000 wages, leaves but $27,000,000. Here there must be allowance made for the rent of the farm home. This estimate considers only those farms owned and operated by the same person. The rent of the home on tenant farms being considered in the usual rental payment of the tenant. Taking into consideration the lack of conveneences of most farm homes the annual income derived from the use of the farm home is set at $300. In 1930 there were 44,521 owner operated farms in the state. Income from the use of the farm home is by that

measure $13,356,300. Added to the income remaining above gives a little over $40,000,000.

This sum can be considered the amount that Oregon farmers had to cover depreciation, to pay interest on investment and retire the mortgage. Interest on the farmers' equities in the farm plant of the state figured at 5 percent would have amounted to over $31,000,000. If allowance is made for a depreciation span of thirty five years it would be necessary to allow over $21,000,000 a year for that item. The result is obvious. Some necessary expenses were delayed or cut. The interest item was probably the first to fall but all other accounts should have been met and the Oregon farmer, as a group, should have received about 2 percent on his investment in 1929.

If this were true in 1929 what was the case in 1932 when gross income fell to $65,000,000. Taxes had not started downward, the mortgage still drew the same interest rate and the prices of those things that the farmer must buy had not declined in a like manner to those things he sold. Taxes and interest had taken 16 percent of the gross income of Oregon farmers in 1929. If they remained at the same level and had all been paid in 1932 they would have amounted to over 35 percent of the gross income. Taxes and interest, however, cannot be paid out of gross income, but only out of cash income. Forty-two percent of the cash income in 1932 would have gone to taxes and interest alone.

What really happened in 1932 was that many of the items mentioned above were not paid. There was probably no interest allowed, the amount that should have gone for depreciation was forgotten, farm wages

were cut by cutting the cost of living as low as possible. If there was anything left it was applied to taxes and mortgages.

The determination of agricultural incomes involves three factors. The first is the price received for commodities sold off the farm. The second is the production which when considered with prices determines the annual cash income of the farmer. The third factor is that of home consumption, including the rent of the farm home.

Prices are the first important consideration in the analysis of the factors determining the income of Oregon farmers. From 1924 to 1935 the fluctuations of gross income were almost directly proportional to the price level upon which Oregon farm products sold. As a means of showing this relationship the correlation between prices and income was computed for the twelve year period 1924 to 1935.

Table V

Farm Income and Prices in Oregon

Year	Income in * Millions of $	Oregon Farm ? Prices, 1924= 100	
1924	$112	100	
1925	136	119	
1926	132	106	
1927	137	102	
1928	136	102	Coefficient of
1929	144	110	Correlation=.96
1930	112	91	
1931	82	63	
1932	65	53	
1933	78	57	
1934	87	63	
1935	103	72	

* U.S. Department of Agriculture, Yearbooks.

? Oregon State Planning Board, Price Trends of Oregon Products Compared with Those of Commodities Purchased from Outside the State, 1919-1935,36.

The correlation of .96 indicates that in over ninety cases out of a hundred income rose when prices rose. This close relationship is especially significant. It seems to indicate that prices are a determining factor in the farmer's income.

Production is another factor in determining income. The close relationship between prices and income that was noted above does not seem to apply in equal measure to production and income. An increase in production may often mean a decrease in income rather than an increase. There being no regularly prepared index of agricultural production for Oregon the analysis must be referred to Chart No. III in the first chapter. In 1920 agricultural production in the United States went up slightly but incomes came down 25 to 30 percent. In 1920 both income and production fell. In 1922 and 1923 they moved upward together. In 1925, 1926, 1927, and 1928 they moved in opposite directions. In 1931 production moved up markedly but incomes were on the down grade in 1930 and 1931. The contrary movement of production and income can also be noticed in 1933, 1934, and 1935. If any tendency can be noticed, it is that an increase in production often means lower farm incomes. But because of lack of adequate information we can only say that there does not appear to be any direct relationship between income and production.

Wheat is one of the largest items in the determination of the cash income of Oregon farmers. Is there any relationship between the production of wheat and its value? If so, some light may be shown on the relationship of income and production. As the price of wheat is determined on the world market it is not desirable to limit the analy-

sis to Oregon. Let us compare the production of wheat in the United States to its value.

Table VI

Volume of Production and Value of Wheat Produced in the United States

Year	Wheat Produced, Millions of bu.	Value of Production, Millions of Dollars	
1919	952	$2,059	
1920	843	1,539	
1921	818	843	
1922	846	817	
1923	759	703	
1924	840	1,047	Coefficient of
1925	669	961	Correlation .56
1926	833	1,014	
1927	833	1,041	
1928	912	911	
1929	823	851	
1930	889	596	
1931	932	363	
1932	745	283	
1933	528	391	
1934	496	420	
1935	603	505	

Source: U. S. Department of Agriculture,"Agricultural Statistics, 1936", page 5.

The correlation between the two is .55. In fifty five cases out of a hundred when production rose income rose, but in 45 cases out of hundred a change in production had no effect on income. The relationship is hardly a significant one and confirms the observations made concerning the chart mentioned above, that an increase in production does not determine income to as great an extent as does an

increase in prices.

The relationship between prices and production does not seem to be a constant one. There is need of a very intensive study of the demand and supply relationships in agriculture in order to determine a basis for any desirable control of income in agriculture. However it does seem that prices will be an important consideration in such an analysis.

Home consumption is the third factor in the determination of farm income. Here lies the secret of the farmer's ability to get along satisfactorily with a smaller cash income than the urban dweller. The farm house is considered part of the farm and the rent of it must be credited to the income of the owners and operators of such property. The fuel produced and consumed on the farm is a second consideration that must be credited. A third item is that part of the total food supply produced and consumed on the farm. The value of these items of home consumption must be added to the cash farm income in order to correctly evaluate the total income of Oregon farmers.

Estimates of the value of food and fuel consumed on the farm are based upon the prices of these items in neighboring markets. The United States Department of Agriculture's estimates of gross income include estimates of home consumption and such value approximates 10 percent of the total gross income, falling as low as 7 percent in 1928 and rising as high as 14 percent in 1932. There is a tendency on the part of farm families to consume less farm commodities in times of high prices and consume more during periods of low prices. This tendency is not-

ed with some disfavor by the National Industrial Conference Board in this typical paragraph.[4]

"Food purchased commercially requires a cost outlay on the average at least twice as great as the price paid to the farmers for the same materials. Feed alone required a cash expenditure by farmers of nearly a billion dollars in 1929. Under existing conditions the farmer himself can be his own more profitable market for a much wider range of supplies than specialty production provides. The agricultural education leaders have long urged the farmers to see to it that insofar as practicable their farms provide their own living requirements. While cash prices were high, the advice was not so well followed. With the depression the soundness of the advice is better appreciated."

The conclusions of this paragraph are sound as long as it is true that the price level upon which the farmer buys is higher than the one upon which he must sell. However such may not always be the case. The farmer should not be encouraged to diversify his farm so highly that he attempts to produce items which are better and more cheaply produced under highly specialized conditions.

Because prices are of such great importance to the real income of the farmers they deserve the special attention of this study. Four price indexes have been assembled for this purpose. The first two are the indexes of the prices of agricultural commodities in Oregon, an index for Livestock and Dairy products and another for Field and Orchard products. A third index includes both these groups for Oregon, Washington, and Idaho, and is shown for comparative purposes.[5] A fourth index of prices is for those commodities purchased outside

4. National Industrial Conference Board, "The American Agricultural Problem in the United States, Conditions and Remedies", 1936, p.50.
5. These indexes were originally prepared by the class in Statistical Methods, Reed College, Portland, Oregon. They have been corrected for seasonal variation by the writer.

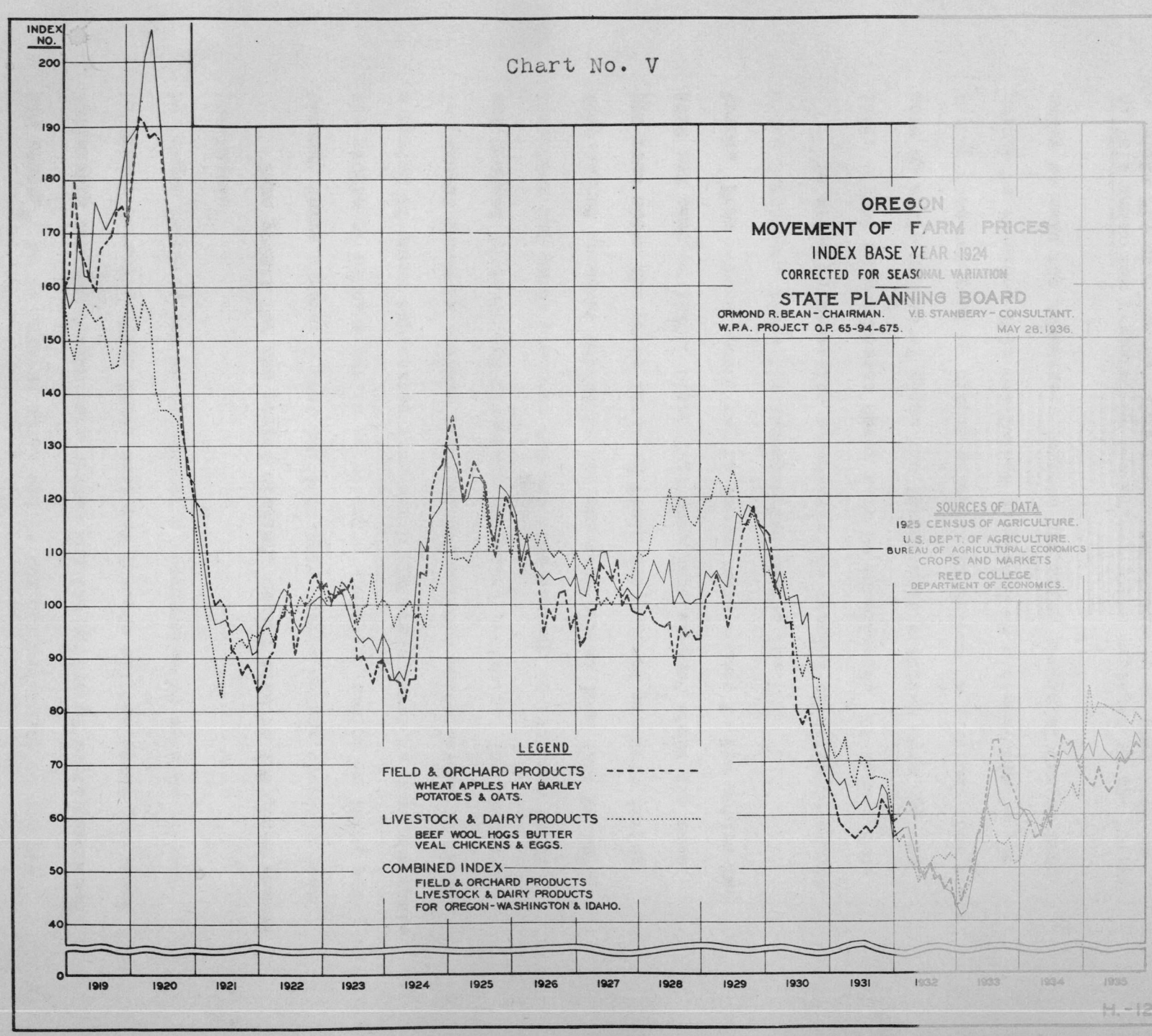


Chart No. V
INDEX NO.
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
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0
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
OREGON
MOVEMENT OF FARM PRICES
INDEX BASE YEAR 1924
CORRECTED FOR SEASONAL VARIATION
STATE PLANNING BOARD
ORMOND R. BEAN - CHAIRMAN. V.B. STANBERY - CONSULTANT.
W.P.A. PROJECT O.P. 65-94-675. MAY 28, 1936.
SOURCES OF DATA
1925 CENSUS OF AGRICULTURE.
U.S. DEPT. OF AGRICULTURE.
BUREAU OF AGRICULTURAL ECONOMICS
CROPS AND MARKETS
REED COLLEGE
DEPARTMENT OF ECONOMICS.
LEGEND
FIELD & ORCHARD PRODUCTS
WHEAT APPLES HAY BARLEY
POTATOES & OATS.
LIVESTOCK & DAIRY PRODUCTS
BEEF WOOL HOGS BUTTER
VEAL CHICKENS & EGGS.
COMBINED INDEX
FIELD & ORCHARD PRODUCTS
LIVESTOCK & DAIRY PRODUCTS
FOR OREGON-WASHINGTON & IDAHO.
H.-127.

the state.[6] It is offered as an aid in the determination of the relationship between Oregon farm prices and the prices of goods purchased by Oregon farmers. This index does not include all the items purchased by Oregon farmers, but it does cover a representative section of such purchases.[7]

Farm prices for the period studied, namely 1919 to 1935, have passed through three phases: a post war inflation period ending abruptly near the middle of 1920, a period of relative stability ending in 1929, and a period of great depression from which the price level is just emerging. In general there is a close parallel between the price levels of Field and Orchard Products and Livestock and Dairy products. The prices of Livestock and Dairy products did not rise as high in 1919 and 1920; they lagged somewhat behind in the recovery period from 1924 to 1929; but rose above the price level of Field and Orchard products during 1928 and part of 1929. Since 1929 they have assumed about the same trend. Farm prices prevailing in Oregon were common to the entire Pacific Northwest. (Note the accompanying chart, No. V)

In order to determine accurately the results of price movements their affect on purchasing power must be considered. If farm prices move up while prices of goods the farmer must purchase move up, the farmer does not gain by rising prices. If prices he must pay rise while prices he receives fall the farmer is placed at a disadvantage. In order to make the comparison between the price levels of Oregon farm

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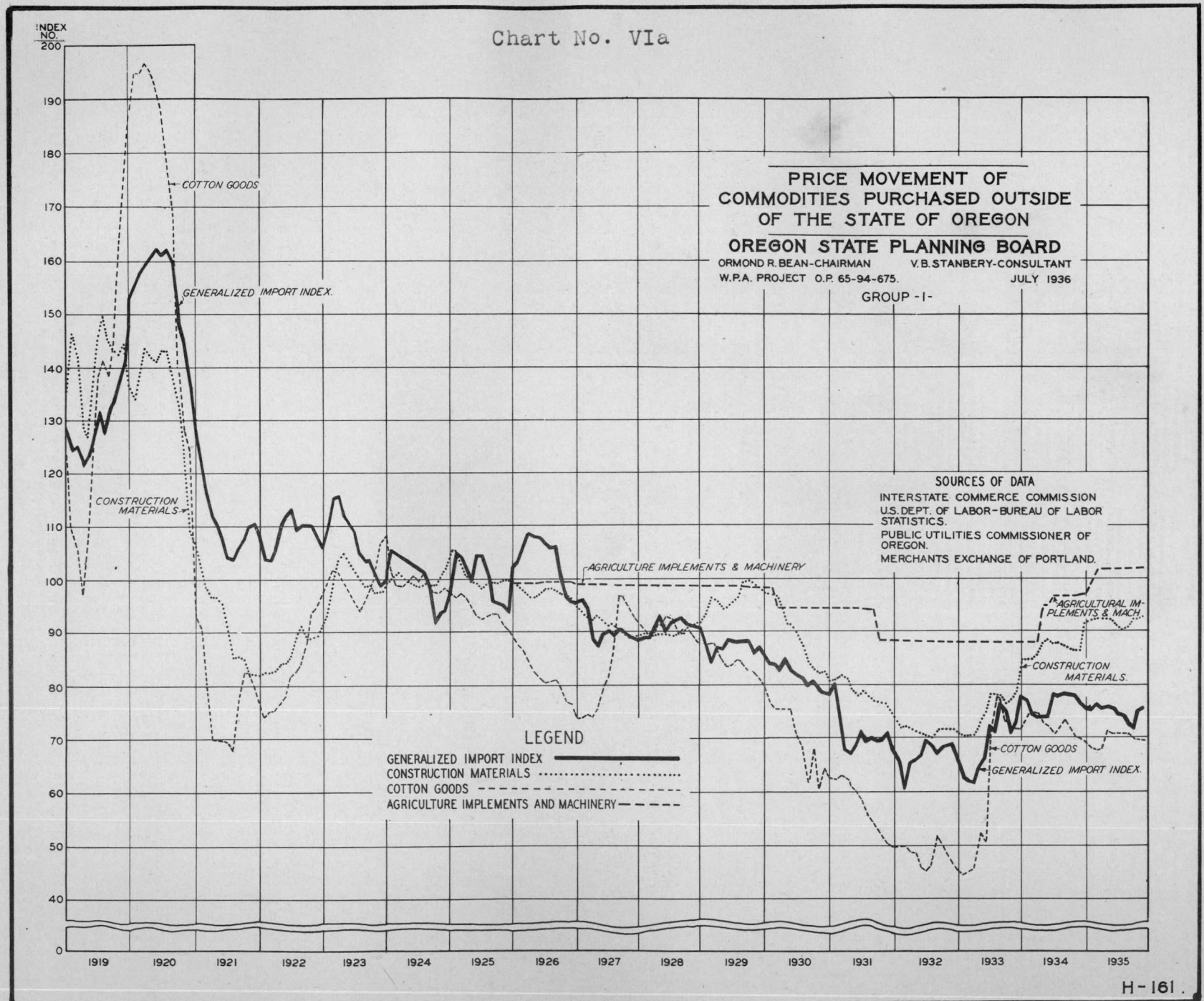
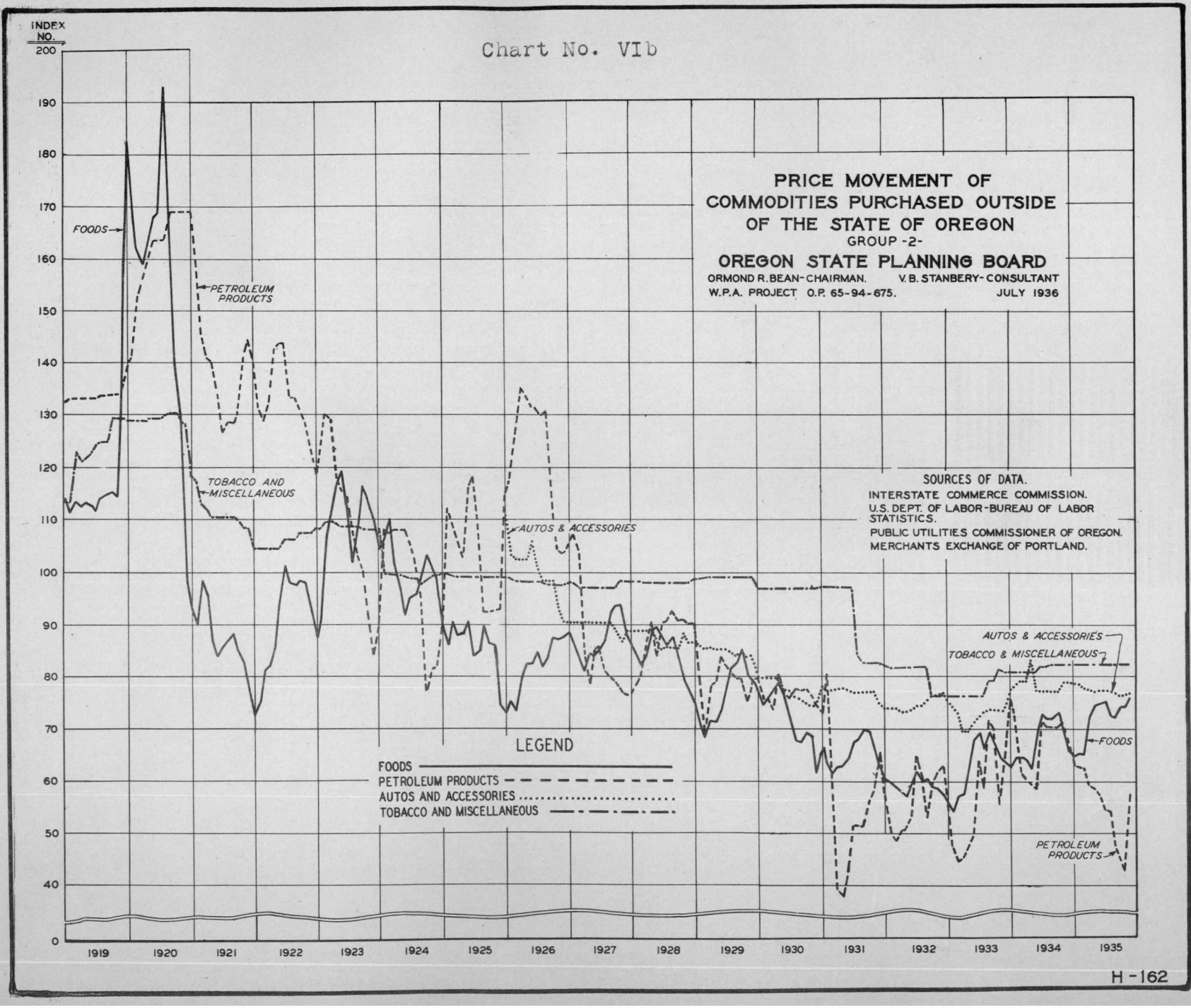
6. This index was prepared by the writer while employed by the Oregon State Planning Board. This index was published by that body in 1936 under the title of: Price Trends of Oregon Products Compared with Those of Commodities Purchased Outside the State, 1919-1935.
7. The index represents annual Oregon purchases of $115,000,000, which includes expenditures for farm machinery, cotton goods, tobacco, sugar, wine, sugar, etc.

Chart No. VIa



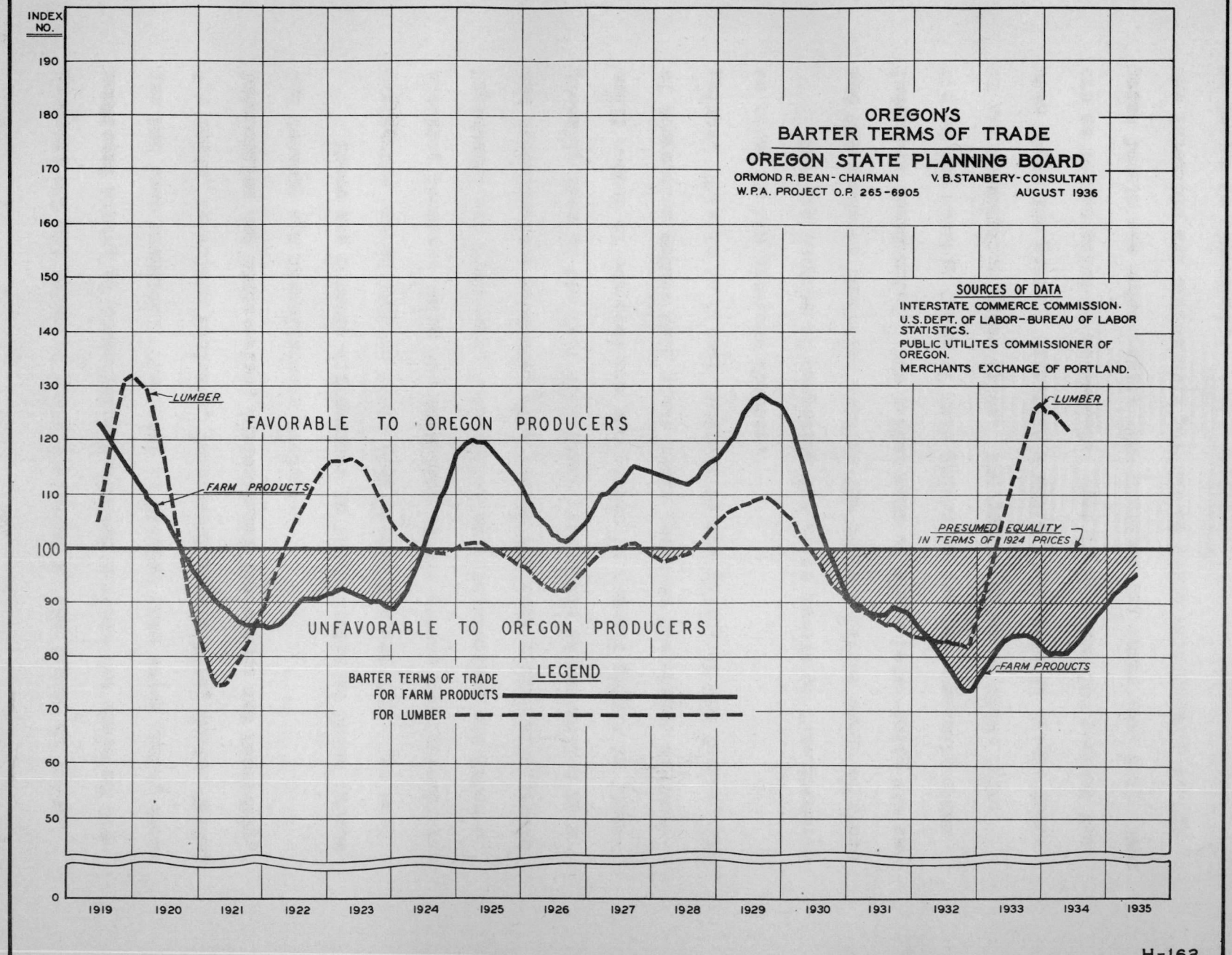
H-161.

Chart No. VIb



H-162

Chart No. VII



H-163

products and the price of goods purchased by the farmer an index, mentioned above, of commodities purchased outside the state of Oregon has been prepared. The index is divided into seven parts, namely: Foods, Petroleum Products, Construction Materials, Cotton Goods, Automobiles and Accessories, Agricultural Implements and Machinery, and Tobacco and Miscellaneous Products.

There are notable differences in the behavior of these groups during the period 1919 to 1935. (See charts VIa and VIb) The most striking features being the stability of the prices and Agricultural Implements and Machinery, Automobiles and Accessories, and Tobacco and Miscellaneous products. The reason for such rigid price levels probably lies in the fact that their production is controlled by a small number of corporations who prefer to curtail output in time of depression rather than place their goods on the market at lower prices. This is in direct contrast to the policy of the farmer, as we noted in the previous chapter.

For the purpose of comparing the price levels of farm products and the products purchased outside the state a barter terms of trade index was constructed. The barter term of trade index being the ratio of the monthly index of farm prices to the corresponding index of the consumption goods index. The barter terms of trade index when above 100 percent signifies a period favorable to Oregon farmers as far as price is concerned. When it is below 100 percent the price levels are unfavorable. The accompanying chart (No. VII) shows the favorable and unfavorable periods of price relationship as far as Oregon is concerned.

When considered in this fashion these data suggest that, during the seventeen years under consideration Oregon farm prices were favorable for only eight years.

Considering farm income in terms of prices it is permissible to say, that if 1924 prices and consequently incomes were high enough for Oregon farmers to meet their fixed charges and permit them a small return on their investment, then agriculture in Oregon from the middle of 1924 to the middle of 1930, was receiving an adequate return. But, as we noted in the introductory chapter, mortgages were increasing and tax sales and foreclosures were numerous. If income were adequate would not these factors tend downward? Perhaps income was high enough to give a small return to the farmer, but not high enough to enable him to build up a reserve to retire the mortgage. The income of the Oregon farmer in 1929 did not allow him, at the most, five percent on his investment. The conclusion is that farm income from 1924 to 1929 was adequate to meet current needs but was not high enough to retire indebtedness incurred during the period of abnormally high prices and land values. In order to retire the indebtedness a much larger annual income would have been necessary or the expenses should have been lower.

The question can be raised as to the liability of the present consumer for debts assumed during abnormal wartimes when values were unreasonably high. It would have been desirable to have written off debts contracted at this time as a cost of the war. But having failed to fix responsibility the present debts must be considered a legiti-

mate item of expense. The National Industrial Conference Board expressed this opinion:[8]

"While it is true that a part of this loss to agriculture may be considered a speculative loss falling upon the farmer in his role as an investor, it would appear quite unfair, as is often done, to dismiss it with the comment that the farmer should stick to his business and not try to combine real estate speculation with farming. Other fields of economic activity are not so free of the speculative element as to justify discharging a hail of critical cobblestones at the farmer; and, moreover, other groups outside the agricultural class play a large part in the speculative booming of land values in some farming districts".

8. National Industrial Conference Board, "Agricultural Problems in the United States", 1926, pp. 120-121.

Chapter IV

Farm Taxation

In the state of Oregon as elsewhere in the United States the general property tax is relied upon for the major share of the support of local government, including local school districts and county government. The taxes collected under the general property tax in Oregon has fallen heavily on the Oregon farmer because nearly all his assets are of the type that are successfully reached under that system of taxation.

Total property taxes levied for state and local purposes in Oregon rose from $11,960,278 in 1910 to $50,794,633 in 1929. Since 1929 they have fallen about $10,000,000, being in 1936, $40,542,872.[1] The state Tax Commission estimated that in 1936, 75.42 cents of the property tax dollar came from real estate, other than utilities. Also, 16.65 cents came from the property tax on real and personal property of utilities and 7.93 cents came from personal property, other than that held by utilities.[2] Because the farmer's assets are in land and bulky personal property to a much greater degree than most other individual's he is called upon for a larger percentage of revenue than individuals with other types of assets. The farmer can-

1. Oregon State Tax Commission, Thirteenth Biennial Report, 1937 p.20.
2. Ibid, p. 21.

not hide his farm, nor can he conceal his livestock and machinery to keep it from being assessed and taxed.

It was estimated in a previous chapter that the tax bill of Oregon farmers in 1929 was about $16,000,000. We found this by applying the millage rate computed for full cash value to the full cash value of farm property as estimated by the Census of Agriculture in 1930. Millage rates applicable to such full cash value are not available for the years 1929 to 1936 so it is necessary to use the second method suggested above. This involves the comparison of the total assessed value of all property in the state, as assessed and apportioned by the state Tax Commission, to the value of all rural property in the state, excepting timber lands in those counties where timber lands are separately classified. Correction must be made for taxes on non-farm rural lands in order to arrive at a reasonable estimate of the tax bill of Oregon farmers.

The method of correction must be rather arbitrary considering the extent of the material available, which does not give any hint of the amount of non-farm rural lands classed as non-tillable. By applying the weighted average millage estimated for the full cash value of rural property in the state for the year 1925, 20.19 mills,[3] on a census valuation in 1925 of $714,410,119 gives a farm tax bill for 1925 of $14,423,940. This is $2,566,578 less than the tax found by the comparison of rural real property and total property. This is assumed to

3. W. H. Dreesen, Trends of Tax Levies in Oregon with Emphasis upon Rural and City Real Properties, Oregon State College Agricultural Experiment Station Bulletin no. 257, 1929.

Table VII

Property Tax Assessments, Property Taxes Levied and Estimates of the Taxes borne by Rural Property, Other than timber Property, and by Farm Property 1925-1936. $000

Year	Total Value of All Property Assessed for Tax Purposes	Total Rural Property Locally Assessed, Except Timber Lands	Rural Property as Percent of Total	Property Taxes Levied for State and Local Purposes	Total Taxes Paid by Rural Property	Farm Tax Bill Estimated
1925	$1,084,537	$412,108	38.0	$44,975	$17,090	$14,841
1926	1,110,677	413,507	37.2	47,975	17,847	15,597
1927	1,124,416	411,741	36.6	49,944	18,279	16,029
1928	1,122,332	409,622	36.5	50,795	18,540	16,290
1929	1,124,988	407,953	36.3	49,556	17,989	15,739
1930	1,125,160	388,807	34.6	50,223	17,377	15,127
1931	1,092,807	378,442	34.6	42,979	14,871	12,871
1932	1,037,794	362,244	34.9	42,043	14,673	12,673
1933	958,750	349,133	36.4	41,572	15,132	13,132
1934	943,504	344,974	36.6	39,632	14,505	12,505
1935	924,072	341,466	37.0	40,543	15,001	13,001
1936	892,808	324,327	36.3			

Source: Oregon State Tax Commission Biennial Reports.

assumed to be the tax on non-farm rural lands in those counties where such property exists. We found previously that such tax would have amounted to $1,941,199. The average of these two estimates is $2,253,888. The farm tax bill from 1925 to 1930 was estimated by subtracting $2,250,000 from the rural tax bill for that period and $2,000,000 from that bill from 1930 to 1935. The change was necessary due to the decline in assessed values during the latter period. The accompanying Table shows the tax bill of Oregon farmers, as estimated, for the period 1925 to 1935.

These estimates of the total farm tax bill are not unreasonable in comparison with estimates from other sources. Whitney Coombs of the Department of Agriculture estimated that farm taxes were 2.06 percent of the value of all farm property in Oregon and Washington in 1924.[4] The Census valuation of Oregon farms in 1925 was $714,410,119. The tax bill so estimated would be $14,716,848, which is comparable to the estimates given for other years and in line with the trend of the period.

The farm tax bill bears a very close relationship to the cash income of the farmer. It cannot be paid out of the gross income which the farmer receives, but must be paid out of the income from the sale of farm commodities. The tax payment of Oregon farmers in 1925 took about 12 percent of their cash income and 1932 tax rolls — levied over one fifth of it. This percentage of total cash income devoted to tax payments seems burdensome in consideration of the

4. Whitney Coombs, "Taxation of Farm Property," U. S. Department of Agriculture, Technical Bulletin No. 172, 1930 p. 24.

narrow margin that exists, at best, for most of the industry. The following table gives estimates of the percentage of cash income that should have been, though often was not, devoted to tax payments.

Table VIII

The Estimated Farm Tax Bill and the Cash Income of the Oregon Farmer, 1925 to 1935

Year	Estimated Farm Tax Bill, $000	Cash Income $000	Tax Bill as Percent of Cash Income
1925	$14,841	$121,117	12.3 %
1926	15,597	118,901	13.1
1927	16,029	123,860	12.9
1928	16,290	127,193	12.8
1929	15,739	129,288	12.2
1930	15,127	99,146	15.3
1931	12,871	71,818	17.9
1932	12,673	56,706	22.3
1933	13,132	66,316	19.8
1934	12,505	74,472	16.8
1935	13,000	92,600	14.0

Source: U. S. Department of Agriculture estimates and calculations based on material from the Biennial reports of the Oregon State Tax Commission.

The tax bill of the Oregon farmer, as outlined above, takes a considerable part of the cash income of the farmers in the state. This tax is allocated to each farmer in accordance to the value of his land, as assessed by the local assessor and according to the millage levy in his local county and school district. This method of determining each persons share of the bill holds that the value of the land is the measure of ability to pay, and that the value of property is determined by the income from it. The theory underlying the general property tax is defensible, but, in practice some very real difficulties have arisen.

The laws of the state of Oregon, as in most states, require that the assessor value all real and personal property at its true cash value and that it be taxed at a uniform rate, "within the territorial limits of the authority levying the tax".[5] Accepting the theory of the general property tax with the safeguards mentioned above, it would be expected that the burden of taxation would be fairly, in accordance to ability to pay. However, fair as the general property tax may be in theory, it is unfair in practice. (It is said that it is poor theory which does not work in practice.) In all fairness, it must be admitted that it has never been applied according to the theory underlying it. The tax burden of Oregon farmers is not divided according to the true cash value of their property, as determined by its voluntary sale price.[6] The reason for this is the inability of the assessor to determine the true cash value with any degree of equality and accuracy. As assessments are made in every county of the state, the percentage of true cash value represented by the assessed value varies from county to county and even between various parcels of land in the same county or school district. The result is that many farms of the same true value are assessed at varying amounts and taxed at the same rate. Farm "A" and farm "B" have the same true value, $10,000. Farm "A" is assessed at $7,000 and farm "B" at 5,000. Farm "B" will pay one third less taxes than farm "A", although the assumption was that both farms had a true value of $10,000 and the same earning

5. Oregon State Tax Commission, "Laws Relating to Assessment and Taxation", 1935.
6. Ibid, page 13.

power and therefore, according to general property tax theory had equal ability to pay.

The Census of Agriculture in 1930 found this type of variation between equal valued property, as well as a clearly defined tendency to tax property with a low value of land and buildings per acre more highly than farm property having a high value of land and buildings per acre. This census study includes 9563 farms in six Oregon counties and is based upon estimated true valuations. They found that farms having land and buildings valued at less than $800 per acre paid $1.94 per $100 of true value. They also found that farms having land and buildings valued at over $1062 per acre paid but $.83 on each $100 of true value.[7] The variation in tax per $100 of estimated true value are given on the accompanying chart, (No. VIII) for these farms classified according to the value of land and buildings per acre.

This study shows that the tax burden is unequally divided between poor farms and rich farms, that property having land and buildings valued at less than $163 per acre must pay a far greater share of the tax bill than property more highly valued. It shows that the 49 percent of the property, most highly valued, in these six Oregon counties, paid but 41 percent of the tax bill of the 9563 farms covered by this study.[8]

Some question can be raised over the accuracy of the census valuations because they are given by the farmer-operator and are

7. Warder B. Jenkins, Taxes on Farm Property in the United States, U. S. Department of Commerce, Bureau of Census, 1933, p. 60.
8. Clackamas, Marion, Washington, Baker, Umatilla, and Union.

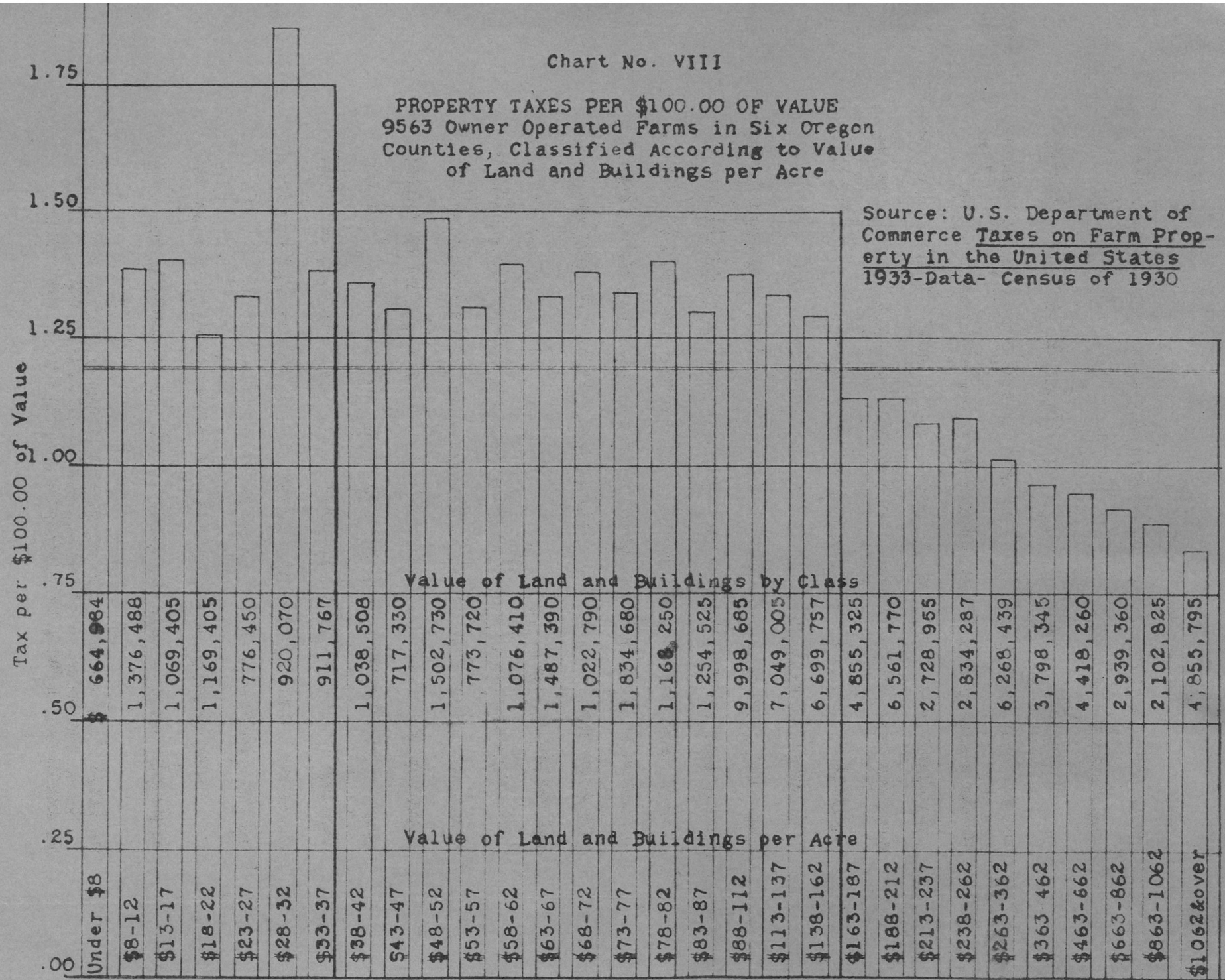
subject to error. The census enumerator was instructed to accept the self valuation unless the value given was decidedly above or below the actual value as compared to other values in the surrounding area. While these values are not as satisfactory as sales values, for the most part they bear out all conclusions found by actual sales data.

W. H. Dreesen found in his study of the ratios of assessed to sales values in Oregon,[9] conditions very similar to those noted from the census data used above. Rural property in Class "B" counties, which included all but six counties in the state, were found to have a very wide range of assessment ratios. For Class "B" counties as a group they varied from 71.72 percent of the sales values for those properties having a sales value below $1000 to 37.84 percent for parcels of property selling at from $6000 to $7000.[10] Within a single county the extremes of assessment are even more striking. In Yamhill county parcels of property valued a less than $1000 were assessed at 92.69 percent of their sales values, but property having a sales value from $1000 to $2000 were assessed at only 43.77 percent and property between $4000 and $6000 at but 37.55 percent. The result might be that property having a sales value of $900 would pay more taxes than another piece of property having a sales value of $1800. The accompanying charts show the variations in assessments for Class "A", "B" and "C" counties as classified by the above

9. "A Study in the Ratios of Assessed Values to Sale Values of Real Property in Oregon", Oregon State College, Agricultural Experiment Station Bulletin No. 233, 1928.
10. Ibid, pages 14-15.

Chart No. VIII

PROPERTY TAXES PER $100.00 OF VALUE
9563 Owner Operated Farms in Six Oregon Counties, Classified According to Value of Land and Buildings per Acre



Source: U.S. Department of Commerce Taxes on Farm Property in the United States 1933-Data- Census of 1930

Chart No. IXa

RATIOS OF ASSESSED TO SALES VALUES RURAL REAL PROPERTY BY VALUE GROUPS Six Years, 1921-1926

Source: W. H. Dreesen
O.S.C. Experiment Station
Bulletin No. 233 pages 14 & 15

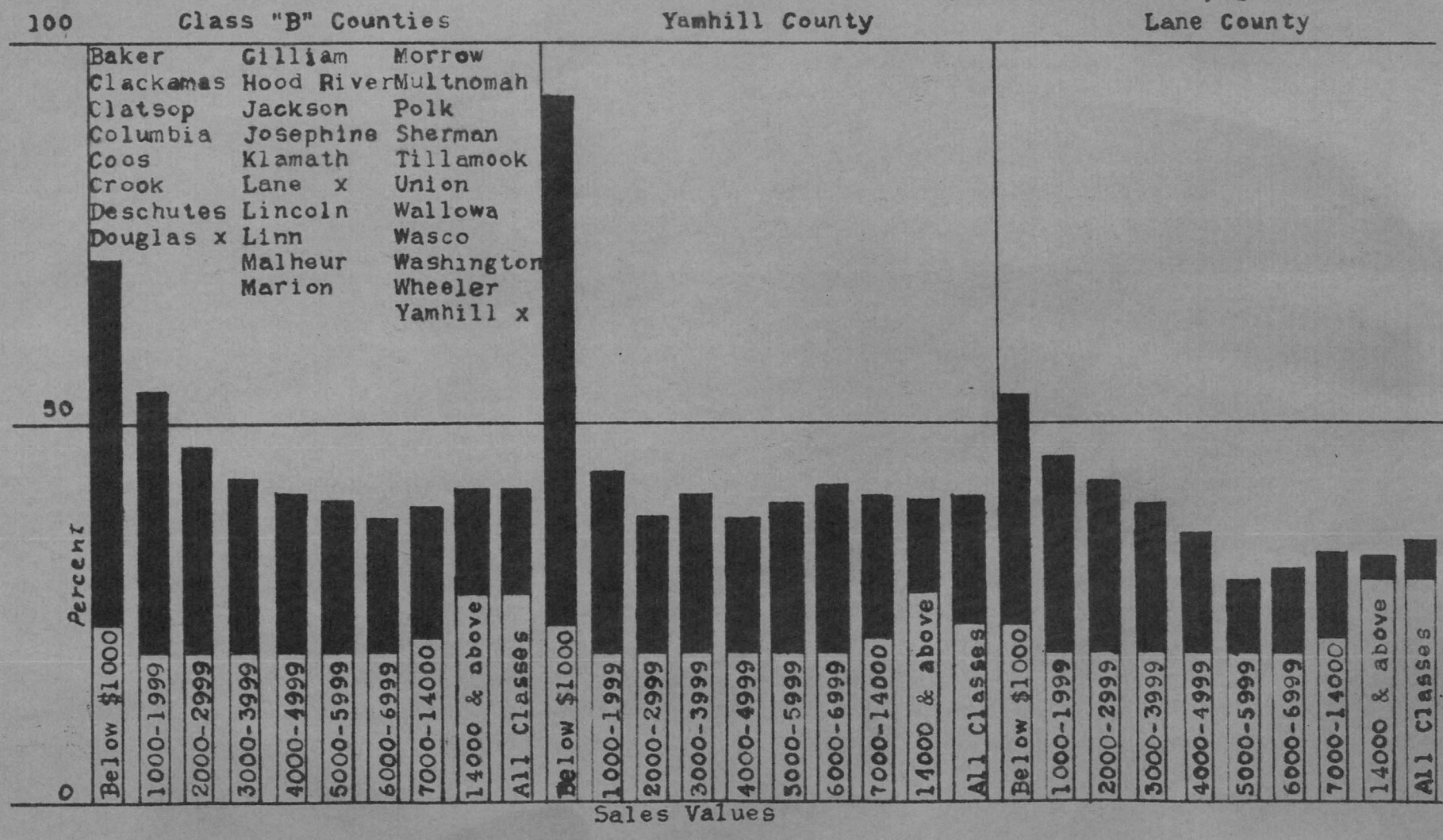
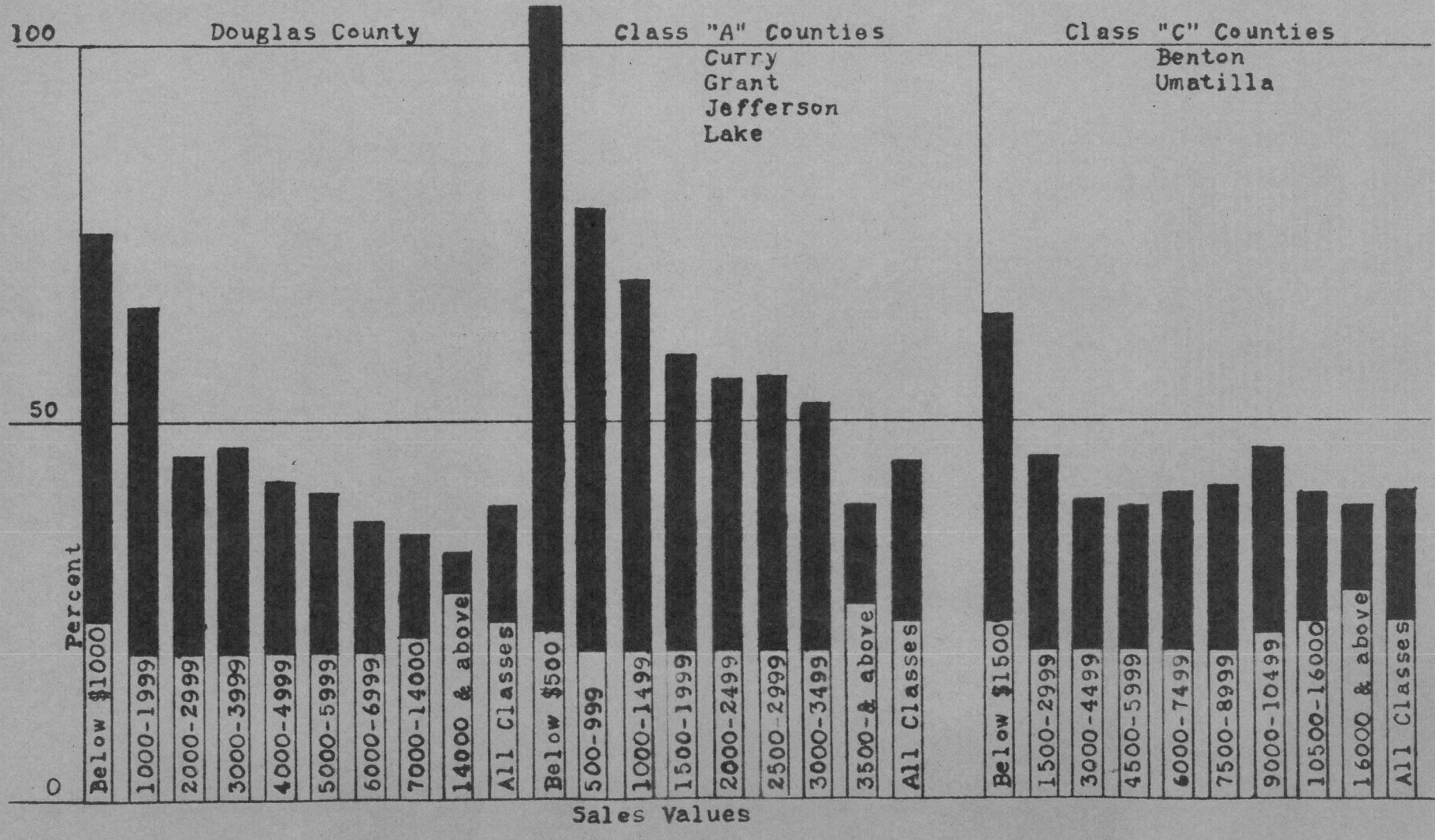


Chart No. IXb

RATIOS OF ASSESSED TO SALES VALUES RURAL REAL PROPERTY BY VALUE GROUPS Six Years, 1921-1926

Source: W. H. Dreesen
O.S.C. Experiment Station
Bulletin No. 233 pages 14 & 15



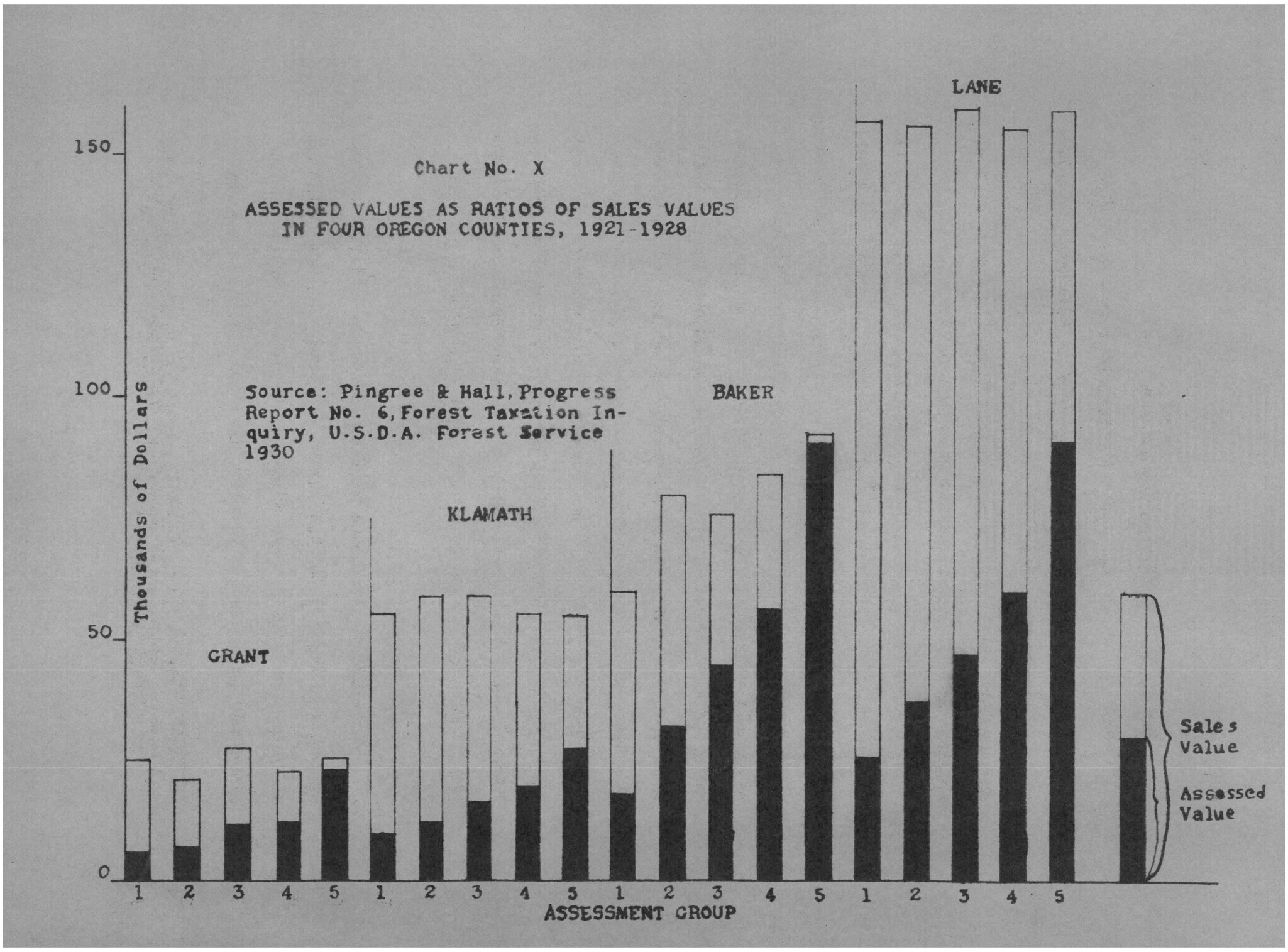


Chart No. X
ASSESSED VALUES AS RATIOS OF SALES VALUES
IN FOUR OREGON COUNTIES, 1921-1928
Source: Pingree & Hall, Progress Report No. 6, Forest Taxation Inquiry, U.S.D.A. Forest Service 1930
Thousands of Dollars
150
100
50
0
GRANT
KLAMATH
BAKER
LANE
1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5
ASSESSMENT GROUP
Sales Value
Assessed Value

mentioned study. (Charts no. IXa and IXb)

Progress Report No. 5 of the Forest Taxation Inquiry also gives some very striking material on ratios of assessment in several Oregon counties.[11] The accompanying chart No. X shows their verified findings with regard to the variations in assessment for farm property in four Oregon counties from 1921 to 1928.

The findings of these three independent studies all point to the inequalities of assessment, and, because of these inequalities, to the inequalities of the tax burden on various parcels of property. One of the desirable reforms that such a resume indicates, is the reform of the method of assessment in order that a closer approximation to the true value, as measured by the earning power or sales value, can be achieved and some inequalities in the tax burden can be erased. At the present time the assessor is a county official, poorly paid and poorly equipped for the job of assessment and serving a rather short term of office. He is more often chosen for political reasons than for his ability and understanding of the problems of assessment. The result has been, in most cases, a poor job.

Some evidence that farm taxes are heavy can be gained by noting the percentage of the cash income necessary for the payment of the farmers tax bill. Other evidence that farm taxes are a heavy burden are the figures on property tax delinquency. If the tax

11. Daniel Pingree and R. C. Hall, Assessment Ratios of Rural Real Property in Oregon and Washington, U.S. Department of Agriculture, Forest Service, 1930.

bill shown by income percentages appears heavy then the figures on tax delinquency can be regarded as showing that they were truly oppressive during the recent depression.

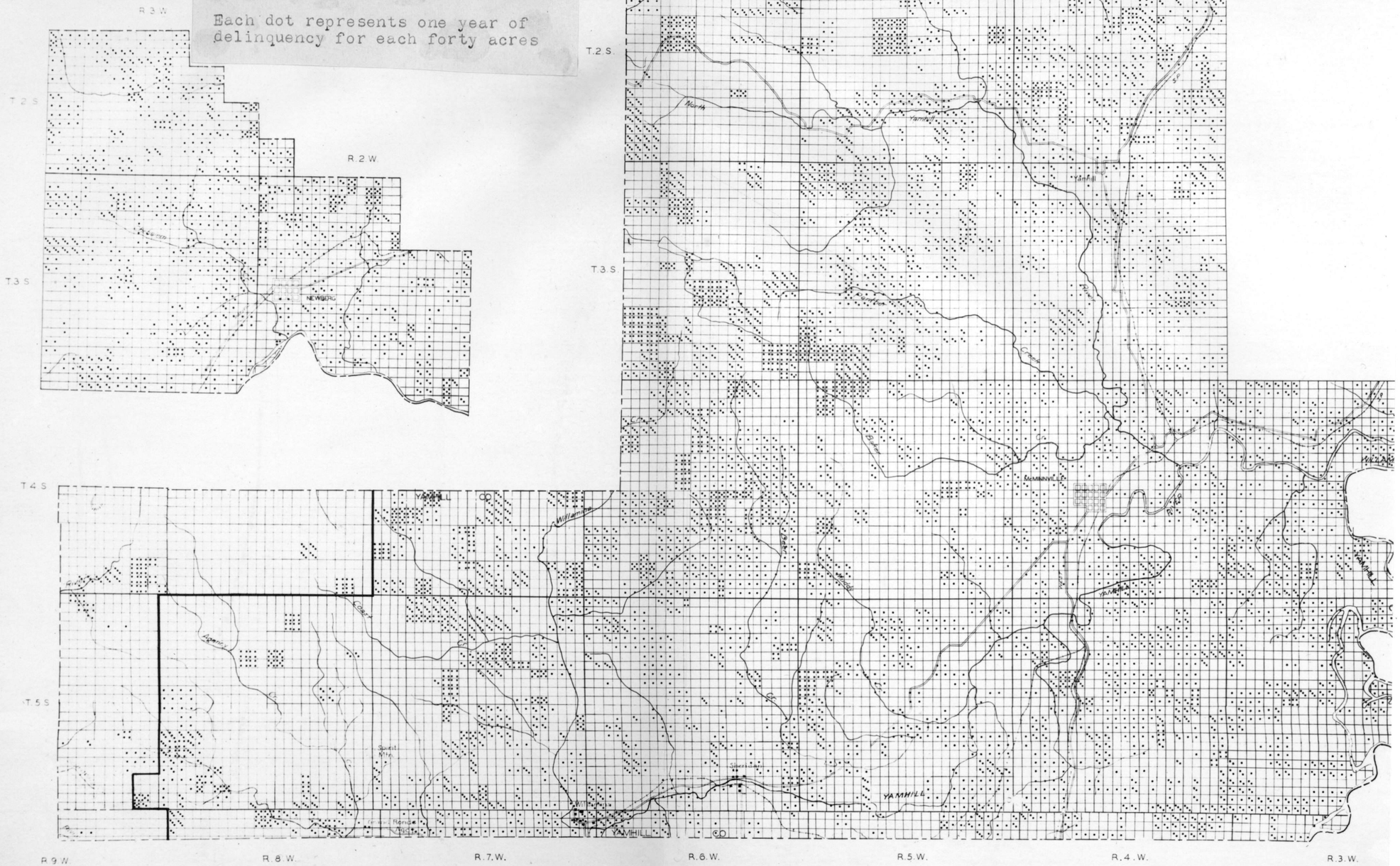
On December 31, 1935 the property taxes levied in the state of Oregon by 1931 tax rolls were 15.42 percent delinquent. For the individual counties the percentage of delinquency varied from 8.73 percent in Umatilla county to 44.21 percent in Curry county.[12] Taxes levied by 1932 tax rolls were 20.41 percent delinquent for the state as a whole and the percentages of delinquency in the various counties varied from 11.97 percent in Umatilla to 57.47 percent in Curry. The 1933 tax rolls show 23.61 percent delinquency for the state and from 15.92 percent delinquency in Multnomah county to 60.40 percent in Curry county. The 1934 rolls show 30.13 percent delinquency for the state and variations from 21.80 percent in Multnomah to 65.6 percent in Curry county. It is interesting to note that Umatilla and Multnomah counties ranked in the two lowest places consistently during the depression period, and that Curry county had the highest percentage of tax delinquency during the year noted.

It can hardly be denied that a large share of the tax delinquent property is farm property. W. H. Dreesen of Oregon State College conducted a W. P. A. staff project during the past year on the tax delinquency of farm property in the state of Oregon. Maps made by this staff showing tax delinquency on farm property are

12. Oregon State Tax Commission, "Thirteenth Biennial Report", 1937, p. 63.

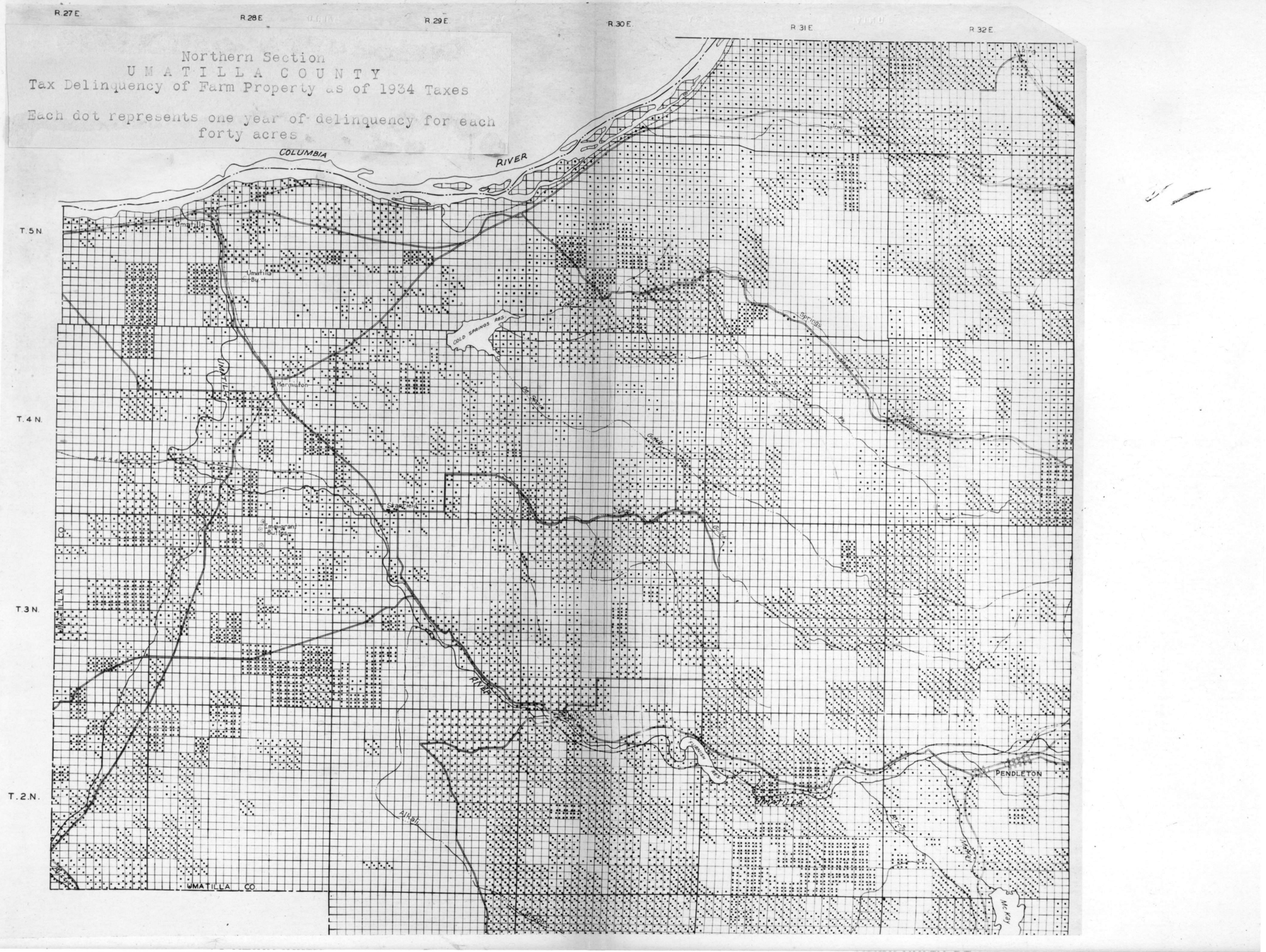
YAMHILL COUNTY
Tax Delinquency of Farm Property as of 1934 Taxes

Each dot represents one year of delinquency for each forty acres



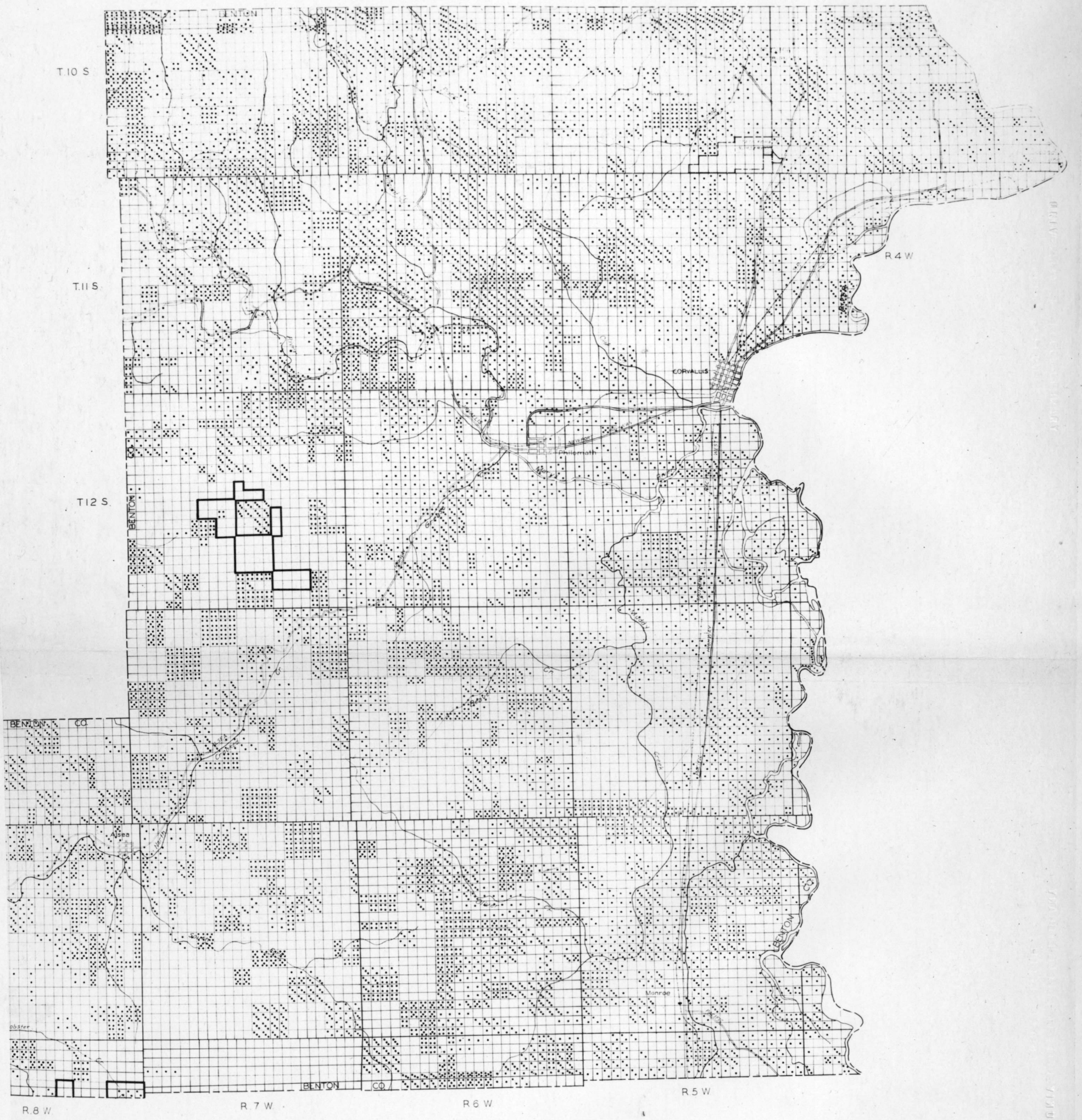
Northern Section
U M A T I L L A C O U N T Y
Tax Delinquency of Farm Property as of 1934 Taxes

Each dot represents one year of delinquency for each forty acres



Northern Section
SHERMAN COUNTY
Tax Delinquency of Farm Property
as of 1934 Taxes

Each dot represents one year of delinquency for each forty acres



B E N T O N C O U N T Y

Tax Delinquency of Farm Property
as of 1934 Taxes

Each Dot represents one year of delinquency for each forty acres
Information compiled by W. P. A. workers under the direction of W. H. Dreesen, Oregon State College.

particularly enlightening. Sections of the maps of four counties accompany this statement. These sections were chosen more with concern to the pocketbook of the writer than to show any exaggerated tendency toward tax delinquency. They are typical of the entire state. The information gathered by this staff is now being compiled in Washington, D. C., and it is not possible to present statistically, the information shown on these maps. They show the tax delinquency of farm property, as of 1934 taxes and indicate the number of years of delinquency, for each forty acres of farm property, insections of four Oregon counties.

The extent of the farm tax burden and the inequalities in its apportionment have been shown. The next fundamental question concerns the use to which such revenue is put.

In 1922 the total state and local revenues of Oregon amounted to $46,116,615. Eighty-eight percent of this revenue came from the general property tax, which reaches nearly all farm property in the state, and 72 percent or $33,139,325 went to the support of the local government and schools. In 1929 state and local property taxes levied in the state of Oregon reached $50,794,633, but due to increases in revenue from other sources, amounted to but 77 percent of the total state and local revenues. The amount levied for local units of government, namely county and school districts had increased to $45,205,999 for 1929. This amount is about 68 percent of the total state and local revenues from all sources in 1929. During no period from 1922 to 1935 have property taxes, as levied for the support of local government, fallen below 64 percent of

the total state and local revenues. There has been a decline in the use of property taxes for the support of state government and in one year, 1932, no property tax was levied for the support of state government. But the amount levied for local purposes in 1932 still approximated 73 percent of all state and local revenues for that year. The accompanying table shows the property tax levies and their relationship to the state and local revenues.

Table IX

STATE AND LOCAL PROPERTY TAXES AND THEIR RELATIONSHIP TO STATE AND LOCAL REVENUES, 1922 to 1935

Year	State and Local Property Tax Levies	Local Property Tax Levies	Total State and Local Revenues	State & Local Property Tax Levies as of Total Rev.	Local Levies as of Total Revenues
1922	$ 40,474,006	$33,139,325	$46,116,615	87	71
1923	41,037,186	34,220,889	48,047,085	85	71
1924	40,224,751	34,849,403	50,750,430	79	68
1925	42,660,339	37,285,339	53,469,062	79	69
1926	44,975,048	39,943,293	56,383,779	79	70
1927	47,975,378	42,749,170	60,011,119	79	71
1928	49,943,568	44,482,297	63,109,342	78	70
1929	50,794,633	45,205,999	65,569,728	77	68
1930	49,556,175	44,983,107	68,387,770	72	65
1931	50,222,606	45,688,978	67,246,452	74	67
1932	42,979,176	43,015,711	58,430,599	73	73
1933	42,042,546	39,231,635	53,904,975	78	72
1934	41,572,394	38,402,803	55,926,528	74	68
1935	39,632,371	36,936,821	57,374,566	69	64
1936	40,542,872	37,897,618			

It can be clearly seen that the property tax as it now stands bears a very high percentage of the cost of government in Oregon. Because farm property comprises such a large part of the total property in the state is bears a large part of that burden. If the estimates of farm taxes, given above, are anywhere near accurate they show that Oregon farmers bear about one third of the entire cost of government in Oregon. While they may bear such a burden, it can hardly be contended that the farmer, as a class, possesses on third of the tax-paying ability in the state.

Accepting, for a time, the desirability of the use of the general property tax for the support of county and local government, how can the burden on property be eased and in this manner also ease the tax burden of the Oregon farmer? The most obvious answer is by lowering the cost of such government. But such a proposal immediately meets objections from those persons interested in maintaining schools at a high level of efficiency, and those financially interested in the maintenance of county governments. Perhaps, if it can be shown that the tax burden can be lowered, and at the same time equalized, without destroying the efficiency of the schools or completely doing away with county government some of the objections would disappear.

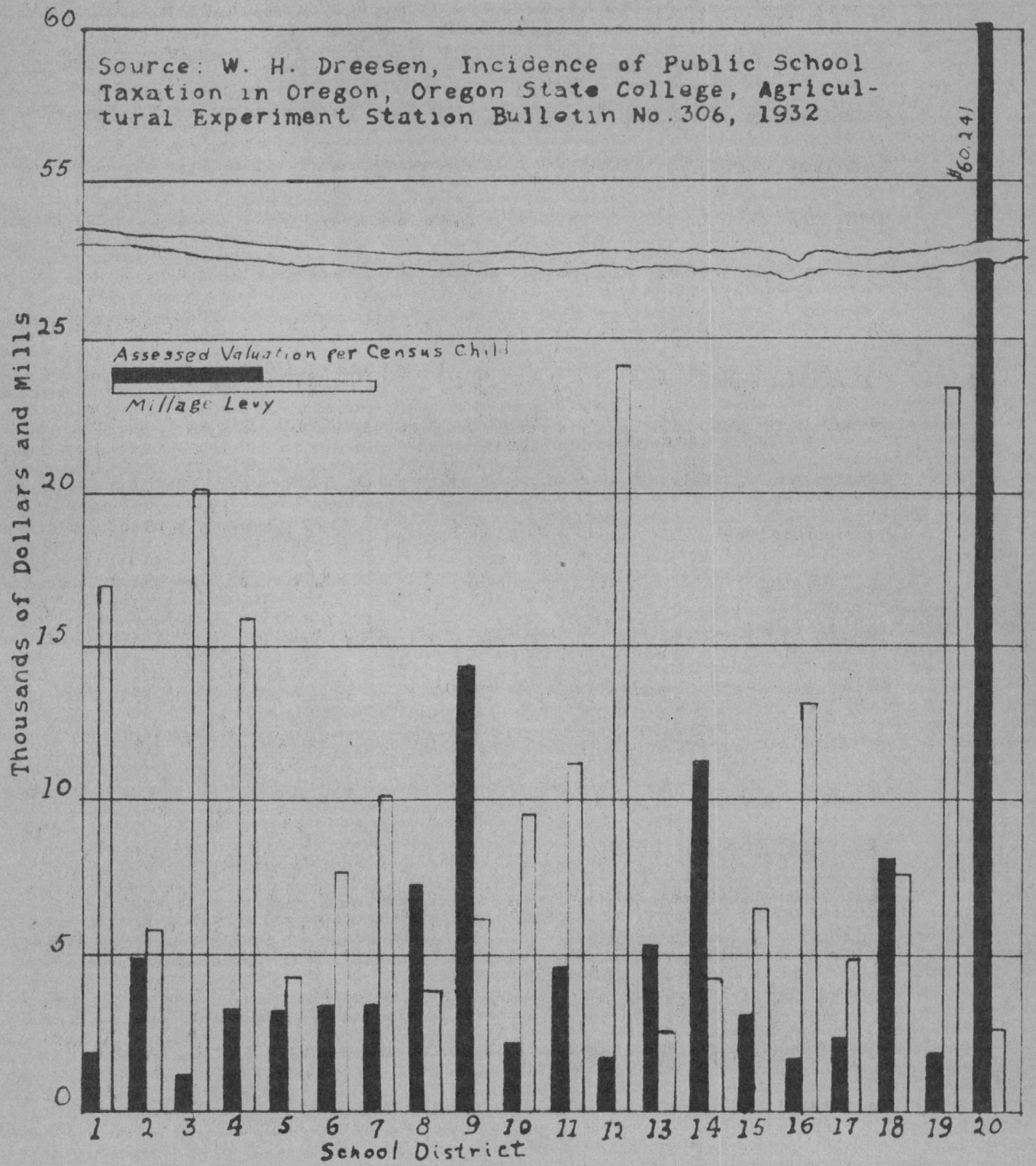
In Baker county in 1929 it was found that the assessed valuation per census child in the 84 school districts of the county varied from 1638 to $49,796.[13] It was also found that the levy for

13. W. H. Dreesen, "Incidence of Public School Taxation in Oregon With Special Reference to Elementary and County School Fund Laws", O.S.C. Agriculture Experiment Station Bulletin, no. 306, June 1932, p. 17-18.

Chart No. XI

Assessed Valuation per Census Child and Millage Levy for First Twenty School Districts in Lane County

1929



the support of schools in that county varied from 1.3 to 24.6 mills or roughly at a ratio of one to seventeen.[14] Property in a poor school district had to be taxed more highly to support schools than in districts where property valuations were high. Poor districts, which may mean poor farm lands, must pay more for every dollar of assessed value, in order to provide comparable schools. In conjunction with the higher ratios of assessment for poor land it adds much to the regressivity of the property tax system.

In Lane county in 1929 the assessed value of property per census child varied from $534 to $9621 and the levy for the support of schools from 3.2 to 131.9 mills.[15] In order to get a school system in a district having a valuation of $534 per census child comparable to that of a district having $9621 of taxable property per census child, there would have to be a levy over 17 times as great. Of course that is assuming an equal amount of revenue per child can give a comparable education in the two districts. The accompanying chart shows the valuation per census child and the millage levy of 1929 for the first 20 school districts in Lane County.

In Tillamook county the valuations per census child in 1929 ran from $111,548 down to $2142, and the levy in mills ranged from 2.6 to 18.9.[16] In Yamhill county the valuations ran from $15,604 to $139 and the levy ranged from 39.8 mills down to 4.9 mills.[17] In every county of the state, where school districts make their

14. Ibid
15. Ibid, pp. 60-62
16. Ibid p. 84
17. Ibid p. 102

own levies, the discrepancies are of major importance. The result has been a wide fluctuation in quality of education offered within a single county. A rich district may be able to give a high quality of education with a very low levy on the property in the district, but a neighboring district having poorer resources may be required to levy ten times as much for each dollar of property value and still have only revenue enough to provide a poorly equipped school.

In order to correct these obvious tax inequalities it has often been suggested that a county system of schools be adopted. Such plans are now in effect in three Oregon counties. By centralising the system of education the inequalities of the burden of school taxes would be ironed out within the county and enable a more uniform system of education to be maintained within that area. Rich school districts, which may be the result of political gerrymandering, are opposed to this because they are called upon to assist poorer ones, and where the valuations are high, it may even mean raising the millage levy for the support of schools.

The revenue necessary for the support of schools under the county unit system should decline when the advantages of large scale organization are fully realized. The central purchase of supplies and more efficient teacher-pupil relationship are among the advantages of such a system.

The county government itself might well be reorganized in the interests of economy. Many county officers are maintained to do work similar to that carried on by state offices. The sheriff's office is an outstanding example to such duplication. State police

are now operating in all counties of the state side by side with the county sheriff, and the have the obvious advantage of being able to cross county boundary lines. The Tax Commission also has a staff for the collection of taxes, which might well be used for the collection of county revenues as well as state.

This necessarily brief resume of the property tax burden has shown the extent of it and some important ways in which it may be reduced and equalized. However, there is one further suggestion to be made, that perhaps the total burden upon the general property tax is too high and that other taxes or higher rates on existing taxes could be used to help support education. This is a more positive suggestion for property tax relief, but as long as the property tax is in operation the other reforms are still desirable.

The Oregon income tax laws of 1923 and 1929 were closely associated with property tax relief and it has been particularly important in the decline of property tax levies for state government purposes. Clauses in these laws required that sums collected, were to go for the purpose of lowering the otherwise necessary property tax levy. Some such tax or taxes might well be levied to aid the support of schools and lower the burder on general property. In order to meet the objections of those who feel that the farmer would not be relieved by such a tax, that it was merely shifting the burden from one shoulder to the other it may be well to point out that under the 1923 income tax law in Oregon the farmer bore but a small percentage of the burden. The Oregon State Tax Commission in an

extensive analysis of the 1923 income tax returns found that but 518 farmers filed returns out of a total number of returns of 42,745. These farmers paid but $10,672 out of the total collections of $1,096,296.[18] Because of larger families and lower net incomes the farmer does not pay an income tax in most cases. The income tax or similar taxes are needed to lighten the burden on the general property tax.

18. "Eighth Biennial Report", 1923-1924, Table XLVII.

Chapter V

Farm Mortgages

The cost of farm mortgages is another important item in the budget of the nation's farmers. While it is true that every farm in the state of Oregon is not mortgaged, the percentage of farms mortgaged and the percentage of the total value of all farms covered by mortgages, is astonishingly high, when low annual incomes are considered. Mortgages are so widespread and constitute such a high percentage of the value of all farm property that it is permissible to speak of farm mortgages in terms of the state and nation without exaggerating the true picture to any great degree.

One of the major considerations involved in this study of the farm-mortgage outlook in Oregon was the fragmentary material available for an accurate review. Information for the period 1930 to 1933 is especially fragmentary and of piecemeal character as the following discussion will indicate.

In 1910 the mortgage indebtedness of Oregon farmers was estimated by the Census of Agriculture at $34,950,000, or, as pointed out in the introductory chapter, 7.7 percent of the value of all farm land and buildings in the state. Since 1910 there has been a

marked increase in the number and size of the mortgages on farm property. In 1920 the farm mortgage indebtedness amounted to $91,090,000 and by 1925 the increase over 1910 was three-fold, reaching $105,503,000. In 1930 the mortgage indebtedness was estimated at $116,805,000. This amount has since decreased through foreclosure and the scaling down of indebtedness to approcimately $104,000,000 as of Dec. 31, 1934.[1]

The reasons for this increase in mortgage indebtedness has been briefly given in an earlier portion of this study and at this point in the discussion all that is needed is a brief review of that history as it applied to farm-mortgages. The greater portion of the increase in mortgage indebtedness took place during the period 1910 to 1920, and probably larger during the latter part or war period. The Allied demand for foodstuffs encouraged the production of farm products by guaranteeing prices at high levels. Oregon farmers and farmers throughout the nation were overly optimistic as to the stability of the price level and hastened to expand production, in order to take advantage of the high price level. In order to do this they purchased machinery and brought new land into cultivation even more rapidly than their high incomes permitted them to pay for out of present income. In other words they sought mortgage credit to increase production, to increase already abnormally high incomes, and sought it at a rate commensurate only with high land values that accompanied high incomes. With the fall in prices and income after 1920 they were unable to retire this in-

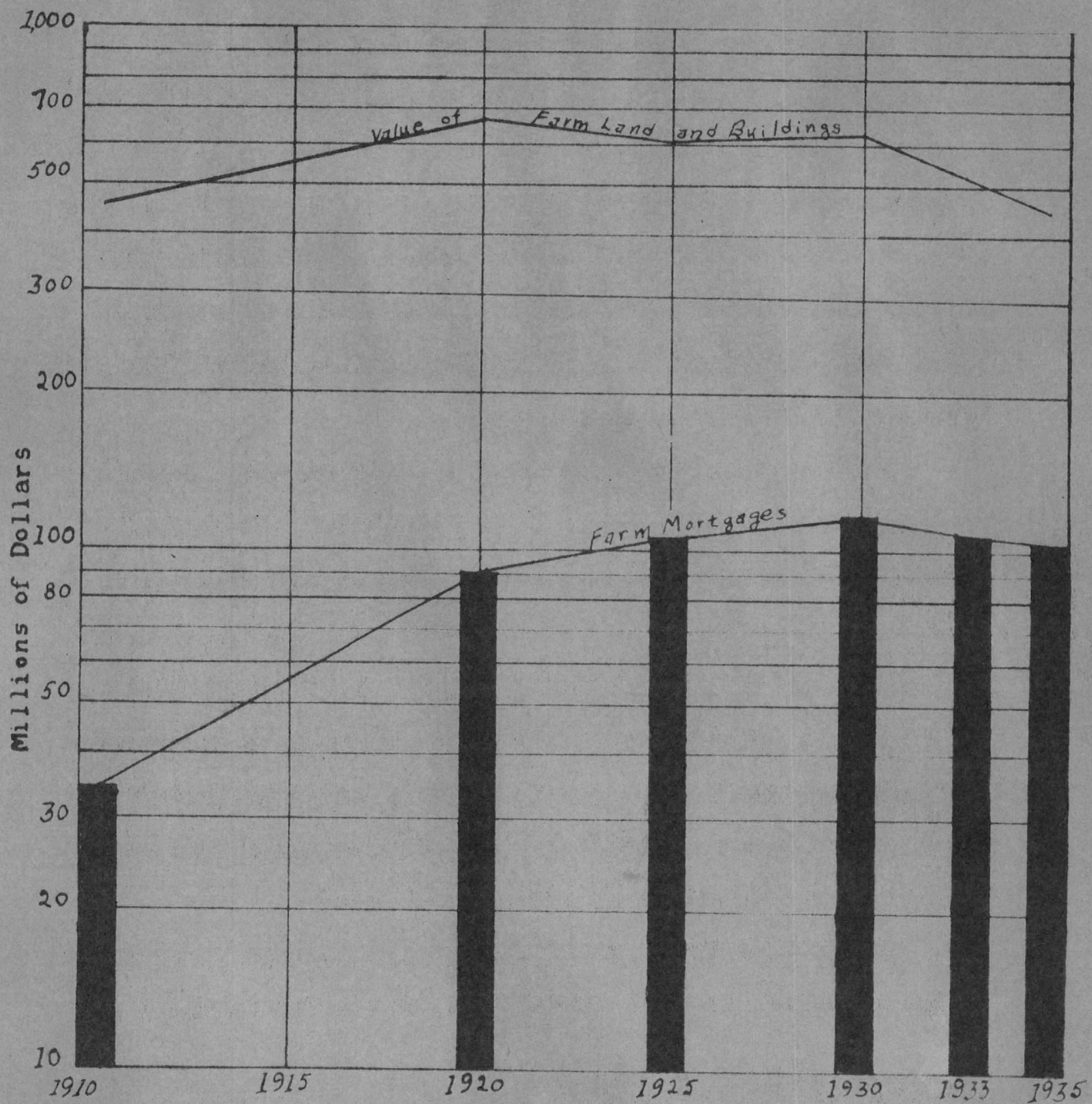
1. Farm Credit Administration, Personal Letter of April 6, 1937.

Chart No. XII

Value of Farm Land and Buildings

and the Trend of Farm Mortgages

in Oregon



debtedness. The slow but gradual increase in the value of farm mortgages outstanding from 1920 to 1930 is indicative of the period as far as agriculture was concerned. Incomes of most farmers were high enough to carry the mortgage but not high enough to retire it or build up a reserve. A crop failure meant a new mortgage or an increase in the old one. At no time from 1924 to 1929 was farm income sufficient to build up a reserve to retire the mortgage as well as carry the annual interest payment. The accompanying chart, No. XII, shows the relative rates of change of farm mortgage indebtedness, and the census valuations of farm land andbuildings in the state. These figures are shown on a semi-logarithmic scale so that the comparative rates of increase can be noted.

While the total burden of mortgage indebtedness was increasing there was also an increase in the percentage of farms having mortgage indebtedness. In 1910, 33.4 percent of all owner-operated farms in the state were mortgaged. In 1920, 44.8 percent were so indebted and in 1925 and 1930 the percentage of indebtedness was 45.7 and 51.8 percent respectively.[2] The percentage of indebtedness on tenant operated farms was slightly lower, being 32.3 percent in 1925 and 34 percent in 1928.[3] The percentage of tenant farm mortgaged in 1930 are not available from census Data.

By far the greater part of the mortgage indebtedness of the state is borne by owner-operated farms, although the individual in-

2. Census of Agriculture, 1935.
3. U. S. Department of Agriculture, The Farm Debt Problem, House Document No. 9, 73d Congress, 1st Session.

indebtedness of tenant operated farms bears a ratio of about three to one over that of owner-operated farms. David L. Wickens of the Department of Agriculture estimated that in 1925 $82,036,000 or 76 percent of the burden was so placed.[4] The average loan on tenant-operated farms on the Pacific Coast from 1925 to 1928 was $17,782 as compared to $5,363 on owner-operated farms.[5] This is accounted for by the larger value of tenant-operated farms and by the outside income of the owner, which may be a determining factor in the amount of credit extended.

In 1910 the average loan on owner-operated farms in the state of Oregon was $2,060 or about 22.6 percent of the value of the average owner-operated farm. In 1920 the average mortgage loan outstanding was $3,622 or 31.2 percent; in 1925 $ 3,771 or 37.7 percent and in 1930 it was $ 3,526 or 34.4 percent. The number of owner-operated farms in the state has increased from 32,982 in 1910 to 36,674 in 1930, and the average value of such farms had increased from from $ 9,103 to $ 10,239, but both the number of farms free from mortgages and the equity of the owner had decreased markedly.

The lending agencies holding this mortgage indebtedness have also undergone a decided change in importance during the past five years. At the present time the Federal Land Banks and the Land Bank Commissioner hold about 36.5 percent of the farm mortgage in-

4. "Farm Mortgage Credit", U. S. Department of Agriculture, Technical Bulletin No. 288, 1932, p. 18.
5. Ibid.

debtedness now outstanding in Oregon.[6] The great increase of government holdings of farm mortgages is shown by the fact, that in 1930, government agencies held but 16 percent of the mortgages on farm property in Oregon. However, Joint Stock Land Banks, private banks chartered under the Farm Loan Act of 1916 held about $11,668,000 worth of mortgage loans in Oregon on December 31, 1929.[7] On November 30, 1933 they held about $9,515,000.[8] The amount still held by Joint Stock Land Banks has probably fallen considerably since that time due to the liquidation proceedings called for under the Emergency Farm Mortgage Act of 1933. $2,158,000 of the mortgage loans of these banks were refinanced by the Federal Land Banks and the Land Bank Commissioner between May 1, 1933 and September 30, 1936.[9] The present holdings of Joint Stock Land Banks are probably around $5,000,000.

The rapid change in the percentage of loans held by the Federal Land Banks and the Land Bank Commissioner took place between May 13, 1933 and the present time. With the onset of the depression commercial banks found it necessary to liquify their assets in order to meet the demands of depositors, and insurance companies were called upon for a large volume of policy loans. The result was the

6. Farm Credit Administration, "Division of Finance and Research Monthly Report and Loans and Discounts, Jan. 25, 1937.
7. David L. Wickens, "Farm-Mortgage Credit", U. S. Department of Agriculture, Technical Bulletin No. 288, 1932, p. 29.
8. Farm Credit Administration, First Annual Report, 1933, p. 80.
9. Farm Credit Administration, Farm Credit Quarterly, Vol. 1, no. 3, Sept. 1936, p. 21.

withdrawal of a large block of funds from the farm-loan market. The urgentneeds of commercial banks and individual holders occasioned many foreclosures and threatened many more. The situation in the last few months of 1932 and the first months of 1933 were extremely critical and many commercial banks were forced to close their doors. Between Jan. 1, 1921 and Jan. 31, 1933, 32.5 percent of the active banks in Oregon at the beginning of the period had failed.[10] Long term agricultural loans have, in the opinion of the Department of Agriculture, contributed to this heavy mortality, especially among country banks.[11] The extreme pressure upon both debtor and creditor brought numerous demands for relief. Commercial banks were especially instrumental in demanding government funds for refinancing farm-mortgages. Such refunding would restore most of their mortgage assets to a more liquid state. The individual states attempted to relieve the situation by moritaria on foreclosure and similar devices. The Federal government also responded to the need for farm debtor relief by the Federal Emergency Farm Mortgage Act of 1933. This act provided emergency funds for refinancing mortgage indebtedness, and consolidated all Federal farm lending agencies under the head of the Farm Credit Administration. An intensive refinancing program of emergency proportions was carried on throughout the nation following the passage of this act.

In the state of Oregon from May 1, 1933 to December 31, 1936 the Federal Land Banks and the Land Bank Commissioner loaned

10. U. S. Department of Agriculture, The Farm Debt Problem, House Document no. 9, 73d Congress, 1st Session, 1933, p. 30.
11. Ibidem.

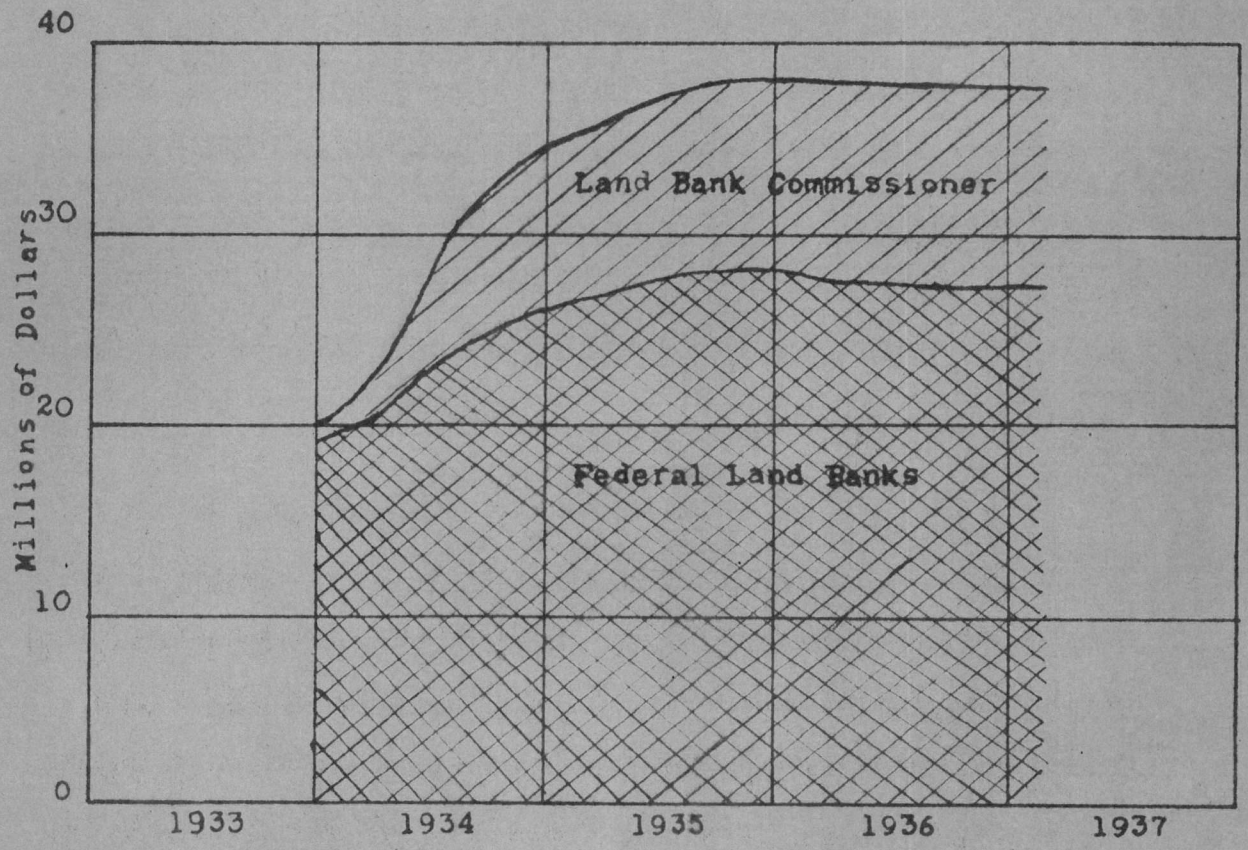
$ 24,586,850 to farmers in Oregon, largely for the purpose of refinancing mortgage and other indebtedness.[12] During the period from May 1, 1933 to September 30, 1936, only $637,000 of this amount was loaned for regular agricultural purposes. $9,670,000 loaned during this period went to finance first and junior mortgages held by individuals and mortgage companies; $ 2,817,000 was loaned for the purpose of financing mortgages held by life insurance companies; $ 2,086,000 was to finance mortgages held by commercial banks, and $ 2,158,000 went to refinance mortgages held by Joint-Stock Land banks. During the year ending Dec. 31, 1934, the Federal Land Banks and the Land Bank Commissioner received 10,445 applications from Oregon farmers for loans totaling $ 49,585,236. Only 5652 of these applications were closed for a total of $15,396,000.[13] It was found that many farms were not eligible for loans even under the new regulations which permitted the Land Bank Commissioner to loan sums up to 75 percent of the normal value of the land.[14] The sums needed to refinance their obligations

12. Farm Credit Administration, "Division of Finance and Research", January 25, 1937.
13. Farm Credit Administration, Second Annual Report, 1934, p. 94.
14. The Federal Emergency Farm-Mortgage Act of 1933 provided a fund of $2000,000,000 for special loans to farmers who were in need of aid and could not qualify for Federal Land Bank loans. Loans from this fund are made with the approval of the Land Bank Commissioner and are known as Commissioner loans. They can be issued in amounts up to $5000 on security of 1st or second mortgage to 75 percent of the normal value of the land. Federal Land Bank Loans are limited to first mortgage security and 50 percent of the normal value of the land. The $200,000,000 emergency fund was used in less than a year and on Jan. 24, 1934, Congress created the Federal Farm Mortgage Corporation, a government financed institution, to provide funds for Commissioner loans.

Chart No. XIII

Federal Land Bank and Land Bank Commissioner

Mortgage-Loans Outstanding in Oregon



Source: Farm Credit Administration, Division of Finance and Research, Monthly Report on Loans and Discounts

was in some instances more than the normal value. The increase in loans held by the Federal Land Banks and Land Bank Commissioner are noted on the accompanying chart, No. XIII. The amount of Land Bank Commissioner loans should be especially noted, because such loans can only be given when the borrower cannot meet the requirements of the Federal Land Banks. The requirements of the Federal Land Banks are set by law and specify a first mortgage of not over 50 percent of the normal value of the land and 20 percent of the value of insured permanent improvements. On February 28, 1937, the Land Bank Commissioner had loansoutstanding in Oregon of $10,487,362.[15] Land Bank Commissioner loans cannot be over $5000 and may have either a first or second mortgage as security. This means that over 2000 farms, as a minimum, are mortgaged at over 50 percent of their value to the Federal government.

The farm mortgage credit extended by commercial banks has been especially important on the Pacific Coast and still remains an important source of funds, although the percentage of such funds loaned for long terms with real estate security has declined markedly. During the period 1924 to 1930 they were considered the most important single source of farm mortgage credit on the Pacific Coast. In 1928 they were estimated to hold 28.1 percent of the mortgages outstanding on the Pacific Coast. For the United States as a whole, only 10.8 percent of the farm mortgages are held by commercial banks. On December 31, 1934 commercial banks in Oregon were estimated to

15. Farm Credit Administration, "Division of Finance and Research", Monthly Report on Loans and Discounts, February 1937.

hold $9,861,000 worth of loans to Oregon farmers.[16] However only about $2,667,000 of this amount was secured by farm real-estate. Loans secured by farm real-estate on December 31, 1935 were estimated at $2,350.000 and on June 30, 1936 at $2,284,000.[17]

The rapid contraction of commercial bank loans took place in 1932 and 1933. The experience of Commercial banks during this time has undoubtedly been important in determining their present mortgage outlook, which is considerably more stringent than before. Evidence of the contraction of the agricultural loans held by Commercial banks is given by the fact that during the period May 1, 1933 to September 30, 1934, 16.2 percent of Federal Land Bank Loans in the United States and 17.9 percent of Land Bank Commissioner loans went to repay first and junior mortgages held by commercial banks.[18]

Insurance companies have long held an important place as a source of farm mortgage credit and they still constitute one of the chief lending groups in Oregon. On January 1, 1931 the farm mortgage loans of life insurance companies in Oregon amounted to approximately $13,627,000. Since that time the life insurance companies have undoubtedly contracted a portion of this by foreclosures and the refinancing operations of the federal agencies. The Federal Land Banks refinanced $2,817,000 worth of farm mortgages held by life insurance companies in Oregon between May 1, 1933 and Sep-

16. U. S. Department of Agriculture, The Farm Debt Problem, House Document No. 9, 73d Congress, 1st Session.
17. Norman J. Wall, Agricultural Loans of Commercial Banks, U. S. Department of Agriculture, Technical Bulletin No. 521, 1936.
18. Norman J. Wall, "Agricultural Loans of Commercial Banks", Federal Reserve Bulletin, April 1936, p. 240.

tember 30, 1936. The percentage of foreclosures by insurance companies is probably small because the interests of such companies are usually better served by permitting the owner to continue to occupy the farm under the direction of the insurance company.

Table X

Farm Mortgage Loans of Life Insurance Companies in Oregon, as of December 31.

Year	Outstanding	New Loans During the Year
1927	$11,581,000	$2,243,000
1928	12,627,000	1,964,000
1929	13,471,000	1,902,000
1930	13,880,000	1,627,000
1931	13,627,000	

Source: David L. Wickens, Farm Loans of Life Insurance Companies, U. S. Department of Agriculture, Bureau of Agricultural Economics, Mimeographed, 1932.

In the opinion of the president of one of the large insurance companies having investments in farm-mortgages, the Willamette Valley is one of the best areas in the United States for farm mortgages, and it is the opinion of many that life insurance companies are again the chief source of mortgage credit in the state of Oregon.[19]

Information concerning the holdings of other agencies and individuals in Oregon has successfully evaded those interested in such information. The large percentage of loans of Federal agencies that have gone to refinance loans held by other lenders points to a marked decline in the loans held by individuals and smaller mort-

19. Robert M. Green, "Farm Mortgage Delinquencies and Foreclosures", Journal of Farm Economics, Vol. XV, No.1, January 1933.

gage and loan companies. The resources of many of these agencies and individuals was sorely tested by the depression and it is very probable that their holdings have declined as pressure on debtor resulted in foreclosure and refinancing. Mortgages held by these individuals and agencies resulted in a greater volume of emergency refinancing on the part of Federal Agencies than any other. Between May 1, 1933 and September 30, 1936, $9,670,000 was loaned to finance mortgages held by other than the agencies dealt with above, namely, Life Insurance Companies and Commercial Banks.[20]

The holdings of farm mortgages by private individuals, mortgage companies and similar agencies probably constitute thirty to forty percent of the mortgage indebtedness still outstanding. Some of this is occasioned by the sale of farm property on mortgage contracts and the funding of private obligations. Information concerning the types and characteristics of the loans held by this group is very limited and our outlook is extremely hazy. There is need of much research to add to our knowledge of the importance of such sources of farm of farm mortgage credit.

Interest rates charged by various lending agencies vary considerably between sections of the United States and also between lending agencies. Commercial bank loans tend to bear the highest rate of interest and the Federal agencies the lowest. It was found that average interest rates for Federal Land Banks on mortgages outstanding on the Pacific Coast January 1, 1928 was 5.6 percent. This

20. Farm Credit Administration, Farm Credit Quarterly, Vol. I, No. 3, September 1936, p. 21.

is comparable to the 6.9 percent being charged by commercial banking institutions. Joint Stock Land Banks and Life Insurance Companies were charging 6 and 6.1 percent respectively.[21] Loans at 6 percent comprised the greatest part of the total loans, with 35.11 percent of all loans outstanding on the Pacific Coast bearing this rate of interest. However, 34,86 percent of all loans outstanding in 1928 bore an interest rate of 7 percent and 5 percent of all loans bore 8 percent.[22]

The interest rates of the Federal Land Banks are set at 1 percent over the interest rates of the last issue of bonds by the Land Banks prior to the time of the mortgage for loans made through National Farm Loan Associations. Direct loans permitted under the emergency act bear 1-2 percent higher rates. As part of the emergency farm mortgage program outlined by the Federal Emergency Farm Mortgage Act of 1933 interest rates were lowered by law to 4 1-2 percent for loans made through loan associations and 5 percent for direct loans.[23] This rate was to continue until May 12, 1938 after which the rate was to return to the rate set by the original mortgage contract. However, on June 24, 1936, the rate was again changed by law to 3 1-2 percent which is to continue to June 30, 1937, after which the rate is to return to the amount prescribed by the original contract.[24]

21. David L Wickens, "Farm-Mortgage Credit", U. S. Department of Agriculture, Technical Bulletin No. 288, February 1932.
22. Ibid. p. 65.
23. Farm Credit Administration, First Annual Report 1933, 1934, p. 15.
24. Farm Credit Administration, Farm Credit Quarterly, Vol. I, No. 2, June, 1936.

Interest rates quoted by other lending agencies did not decline proportionately during the depression and in the case of commercial banks and mortgage companies the interest rates quoted were higher than before. Interest rates quoted by mortgage bankers on the Pacific Coast from March to June 1932 were 6.7 percent. Commission charges brought the cost of mortgage loans to the borrower to 7.2 percent.[25] Commercial bank rates for long term farm mortgage loans average about 1 percent higher.

Interest payments on farm mortgages constituted about $7,000,000 in 1930. In consideration of the fact that the rates vary with the type of lending institution it seems clear that this burden might be eased to a great extent by seeking loans from Federal Land Banks as contrasted to the Commercial Bank. Both the farmer and the bank would be aided by such a course, the bank by keeping its assets more liquid and the farmer by having a lower interest bill to pay.

In 1924 the average length of life of mortgages made on the Pacific Coast was 8.5 years. Forty-six and five tenths percent of all farm mortgage loans were for five year periods and only 13.2 percent of the loans were for periods of over thirty years. All but four tenths of one percent of the loans for over thirty years were held by the Federal Land Banks and the Joint-Stock Land Banks.[26]

25. David L. Wickens, Farm Mortgage Terms and Conditions 1930-1931 and 1931-1932, U. S. Department of Agriculture Bureau of Agricultural Economics, Mimeographed, 1932.
26. David L. Wickens,"Farm Mortgage Credit", U. S. Department of Agriculture, Technical Bulletin No. 288, 1932, p. 77

The remainder was held by life insurance companies.

At the present time, with the exception of the Federal Land Banks and the Land Bank Commissioner, the short term farm mortgage loan seems to be the rule. In 1930, 41 percent of the mortgage loans of mortgage companies to Pacific Coast farmers were for a ten year period and no loans were made for over ten years. In 1931, 27.3 percent of all loans made by mortgage companies on the Pacific Coast were for from two to four years; 57.8 percent were for five years and 6.6 percent were for periods from eight to ten years. No loans reported by mortgage companies in 1931 were for over ten years.[27]

In direct contrast to the short term loans of private agencies are the long term loans of the Federal Land Banks and the Land Bank Commissioner. The loans of these two agencies are made on terms over thirty years. This is more nearly in accord with the actual needs of agriculture. Between 1925 and 1928 it was found that the average farm mortgage retired during this period has been in effect for 32.4 years.[28] While few of these mortgages had such a time limit specified in the original contract, extensions, and refinancing had been resorted to. This points to the need of long term farm mortgages to eliminate charges for extensions, and refinancing.

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26. David L. Wickens,"Farm Mortgage Credit", U. S. Department of Agriculture, Technical Bulletin No. 288, 1932, p. 77.
27. David L. Wickens,"Farm Mortgage Terms and Conditions, 1930-1931 and 1931-1932", U. S. Department of Agriculture Bureau of Agricultural Economics, 1932, Mimeographed.
28. U. S. Department of Agriculture,"The Farm Debt Problem", House Document No. 9, 73d Congress, First Session, 1933.

Table XI

Length of Term of Farm Mortgage Loans: Percentage Distribution of Holdings of Principle Lending Agencies, as of 1924.

Agency	Average Term	Percentage of Loans For					
		1 Yr.	2-4 Yrs.	5 Yrs.	10 Yrs.	11-30 Yrs.	Over 30 Yrs.
Insurance companies	5.6	4.4	13.3	64.8	14.6	2.5	.4
Fed. Land Banks	33.0	----------					100.0
Comm. Banks	2.6	52.1	19.9	26.7	.7	.6	----
Mortgage Companies	6.2	.3	2.8	74.5	20.6	1.8	----
Other Sources	4.7	20.1	13.5	53.6	11.1	1.7	----
All Agencies	8.5	15.5	11.7	46.5	9.6	1.5	13.2

Source: U. S. Department of Agriculture, The Farm Debt Problem, House Document No. 9, 73d Congress 1st Session 1933.

Another factor of importance in the study of farm mortgages is the type of mortgage. Most farm mortgages are of the term-type which require annual interest payments and a lump-sum payment of the principal at the end of the period. In consideration of the fact that the farmer's income, at best, leaves only a narrow margin over expenses, it would seem to be desirable to adopt the amortized type of mortgage loan. This type is used by the Federal agencies for all long term loans. It is being used to a greater extent by other lending agencies than before the depression. This is especially true of the insurance companies and much progress is being made along this line. The income margin of the American farmer does not contribute to the accumulation of the lump sum necessary

to retire a mortgage in full. Any individual weakness concerning the accumulation of a considerable sum is removed also. By subtracting the necessary amount from the annual income each year the burden of farm mortgages can be eased.

The mortgage credit needs of the farmer seem to be best filled by Federal agencies and life insurance companies. These agencies are able to offer longer terms, lower interest rates and are not subject to cyclical business influences to as great an extent as commercial banks and individual holders of farm mortgages. The marked decline in the farm mortgage holdings of commercial banks and individuals has been very helpful to Oregon farm debtors and as long as the trend is toward such long term, low interest amortized loans there is reason to be optimistic about the credit outlook of Oregon farmers.

Chapter VI

Conclusion

The discussion of the financial aspects of the farm problem that has been presented has not touched on some very vital considerations. It has been concerned only with those financial aspects of the problem about which there is great concern and enough information to enable us to arrive at a logical and workable plan that will remove some of the evils that are now present.

This discussion has been presented with the desire to aid the average farmer. Out of necessity acknowledgment must be made of the other types, the supra-marginal farmer, considerably above the average, and what is more important, the sub-marginal farmer. There is no problem when we consider the supra-marginal farmer because he is one of the few farmers that made money in depression. The average farmer, on the other hand, is normally intra-marginal. He has made money in good times and lost it in bad. The product he produces is necessary to the world but that of the sub-marginal producer adds to the surplus and forces the margin down. Economically speaking there is no place for a sub-marginal farmer. Sub-marginal farms should not pay taxes and interest because they should not be operated. But as long as sub-marginal farms produce

in competition with intra-marginal and supra-marginal farms they hold the income level of all farms below its otherwise normal level. In other words they hold the margin below its true level by adding to the supply of agricultural products. The farms that are marginal or sub-marginal because of this competition and not because of natural conditions would be aided by a program that would successfully shift the sub-marginal farmer to other production.

There is a very real problem in connection with our sub-marginal farmer which has important sociological and political implications other than the economic ones mentioned above. The question of the sub-marginal farmer is raised here but no attempt is made to solve the problem he presents. But there are some fundamental considerations that must enter into its satisfactory solution. Should our American farmer produce on the theory of the world market or only for the national market? Are our farmers sub-marginal because of lack of ability? Or is it because of poor land? Will it pay to try to rehabilitate the sub-marginal farmer and try to make him an intra-marginal producer in some other field or on some other farm? If he is sub-marginal because of lack of ability and resourcefullness he will gravitate to the sub-marginal class again. If such is to be the case it would be economically justifiable not to aid him. But, if he is sub-marginal because of artificial factors that may be remedied it would be socially and economically justifiable to undertake a strong program of rehabilitation.

For those farmers that are sub-marginal, as measured from the artificial standard that the competition of the sub-marginal farmer

sets up, because of taxes and interest payments, the discussion given is applicable and the suggested plan of procedure will aid them. But many farms are sub-marginal for absolute reasons and it is not desirable for them to continue in their present manner. How important the factors discussed in this paper are to the determination of the margin the writer has no means of determining. By the adoption of the reforms suggested we may be able to shift these borderline cases from the sub-marginal to the marginal class.

Our disucssion up to this point has dealt with the peculiarities of agriculture, farm income, farm taxes and farm mortgage credit. It has pointed out some important details in each of these fields as they affect the financial position of the Oregon farmer. It is now necessary to draw the threads of our discussion together and see how we may aid a large block of our farm population.

The farm problem, as we have seen, is by no means a recent one. It has arisen out of the abnormal expansion of productive capacity occasioned by war-time demands and the accompanying high price level. These abnormal conditions were accompanied by a great increase in mortgage indebtedness economically justifiable only on a very high price level and accompanying high land values. Expenses of the farmer did not decline proportionately with the decline in farm prices and, as we have seen, taxes and interest charges began to bear heavily upon farmers in Oregon, even during the period 1924 to 1929, when farm income was relatively improved as compared to 1922 and 1923. Some of the failure of the farmer to improve his conditinn

during 1924 to 1929 has been ascribed to the fact that, even at best, farm income was not sufficient to retire past indebtedness. Farm income even in periods of prosperity, did not provide a wide margin of profit and a much longer period of time would have been necessary to amass a reserve to retire indebtedness than the period 1924 to 1929 afforded.

The farmer's problem was enhanced by political influences affecting the free flow of goods between countries and large surpluses accumulated in the United States. How much these surpluses contributed to the drastic and sudden end of prosperity the writer does not feel qualified to hazard an opinion. But it was true that a larger part of the farm income wasnecessary to meet fixed interest and taxes, The production of farm commodities did not fall markedly in the first two years of the depression. This is perhaps due to the peculiarities of agriculture as the earlier discussion tried to point out. Farm income did fall to new low levels and great pressure was exerted on farm debtors because interest and taxes were set in such a manner that they did not respond readily to the fall in incomes. As the pressure of tax and interest payments was exerted it became evident that income would not meet all expenses and that mortgage creditors inclined to be lenient in prosperity were sadly in need of funds in depression. Under such pressure farm debtors called upon the government for aid. This aid took the form of moritoria upon foreclosure and tax sales, and new Federal machinery for refinancing farm indebtedness.

At the present time the farm problem seems to be eased, probbably as a result of such emergency measures and the natural forces

that have contributed to the reduction of the agricultural surplus. With the return to higher income levels it becomes important to initiate reforms that will remove some of the factors that contributed to the agricultural distress. The preceding pages have tried to point out some important factors with regard to farm income, farm taxes and farm mortgage credit that may adversely affect the average Oregon farmer. A brief summary of these factors is in order.

The Oregon farmer pays the largest part of his tax bill under the general property tax. We have found that it discriminates against the poor farm and poor farmer; that he must pay a greater percentage of the tax burden than he actually should pay. We have also found that the poor school district must tax itself more highly for the support of education than the rich district. These are problems of assessment, centralization of local administration, and the substitution of a new tax revenue. The assessor is a local officer, usually poorly qualified for the job of assessment and subject to local influences. Because the influence of the richer farmer is usually greater than that of the poor farmer, or some other reason, he tends to assess their property at a lower rate than he does other property. Such discrimination should be removed by assuring a more accurate assessment. Lands should be classified in every county to assist the assessor in determining a true value. The assessor should be removed from local influence by giving him permanent tenure removed from politics. He should be responsible only to a central organization, perhaps the State Tax Commission. In order to equalize

the burden of education between districts it is desirable to adopt the county or state unit for the support of education. This will remove the need for higher millage levies in districts that fail to have a large amount of real estate. Such reforms are very desirable as long as the general property tax furnishes such a large part of the revenues of state and local government. These reforms will lower the burden on the poor farm and raise it on the richer, but it will result in a more equitable and just tax system.

The farm mortgage outlook at the present time is much brighter than it has been for several years. Although the indebtedness of many of our farms dates from the period of abnormal war time expansion, with favorable credit terms the burden can be carried and retired. The tendency of farm loans has been away from the mortgage loans of commercial banks, which are drawn for relatively short periods of time with a high rate of interest. Even at best the farmer's margin between income and expenses is small and should be used to the best advantage. The short terms of mortgage loans made by commercial banks do not conform to the profit margin and the length of time needed to acquire the reserve necessary to retire the indebtedness. It has also been noted that long-term mortgages are not desirable for commercial banks to hold in the interests of liquidity.

The trend toward longer periods, lower interest rates and amortized loans has been pushed forward by Federal farm mortgages agencies. Their competition with other lending agencies has brought desirable changes in the prodedure of farm mortgage finance. Longer terms, amortized loans and lower interest rates bring the present

loan opportunities more nearly in accord with the needs of agriculture and will make it possible for agriculture to bear the indebtedness.

The income of Oregon farmers has fluctuated markedly since 1924 when the first estimates of total income were made by the Department of Agriculture. Prior to that time general information seems to show that variations similar to those of the price level took place. We have some evidence that Oregon farmers received income high enough to permit a low rate of return on their capital during the period 1924 to 1929. We have little evidence however that indebtedness contracted earlier was retired. The weight of such evidence seems to point to the conclusion, arrived at in our discussion of income, that, farm income was only high enough during the period 1924 to 1929 to carry current charges. Debts contracted by the farmer before this period if retired at all, were paid by the use of sums that should have gone for the maintenance of soil fertility and for the replacement of worn-out capital. In other words it was paid, in part, out of the capital itself. In order to have retired such indebtedness the profit margin would have to have been much larger or extended over a longer period of time in order that sums necessary could have been accumulated. If farm income in periods of prosperity is not high enough to overcome the deficiencies of periods of low income there is no way to return to the land the elements not accounted for in periods of low income. Rundown farms result, with a constant waste of human resources to cultivate them.

The satisfactory solution of the problem of farm income is more difficult and the conclusions with regard to it are necessarily less clear and definite. Because of this we have left our suggestions on it to the last part of our discussion. We have pointed out that in periods of low income the farmer draws on his capital for running expenses by failing to maintain buildings and machinery in repair and fields in fertility. If farm income in periods of prosperity is not high enough to overcome the deficiencies of low periods there is danger of mining our soil resources. Should we try to provide income in prosperity high enough to overcome the deficiencies of low periods or shall we attempt to stabilize the income at a level that will not cause soil resources to be mined or capital wasted? The writer is inclined to believe that any attempt to regulate income should proceed along the line of stabilization.

If the interpretation of the relationship of income and costs that has been given is in any way sound it appears that, during the period 1922 to 1923 and from 1930 to 1936, income was not sufficient to allow for all acceptable items of expense. When mortgages and taxes fell due after the decline in income there was no way to meet them without robbing capital replacement funds and other delayable accounts. Many farmers were even forced to delay interest and taxes in order to subsist. This is evidenced by the large number of delinquent farms and mortgage foreclosures.

Low income periods in agriculture are periods of exploitation of soil resources. The importance of these resources can hardly be over-stressed if any obligation to future generations is recognized.

Future production on such mined soil would necessitate a greater outlay of capital and labor and an even greater future income to farmers in order to return to the soil the elements taken during periods of depression. This fact should be recognized and some provision made to stabilize farm income before the situation becomes even more serious and the burden on the consumer an even greater one.

The method of stabilization of farm income is a subject of much dispute and should not be adopted hastily. There is need of a study of the factors determining farm income. Our analysis of the effects of prices and production on farm income gives us a point of departure for such a study. Prices, as we have seen, appear to determine income to a greater extent than the volume of production. This signifies a varying relationship between supply and demand forces in agriculture. There is no unit relationship between prices and production. That is, a unit change in production does not always mean a unit change in price. Such a study may indicate the point where an increased production means a fall in income below the level that is desirable. We might suggest voluntary limitation of production at this point but we must take into consideration the peculiarities of agriculture that seem to make such voluntary attempts to control production extremely difficult. Another factor that such a study may find is that farm income is dependent upon consumer purchasing power. If such is the case then some means of stabilizing such consumer purchasing power would be the

means of stabilizing farm income. Whatever the procedure, the stabilization of farm income seems to be a desirable step in the solution of the agricultural problem.

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