

THE AGRICULTURAL SITUATION IN OHIO: AS AFFECTED BY
A CHANGING PRICE LEVEL

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by

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Changes in the General Price Level Since 1910

From pre-war days until now (January, 1933) this country has experienced the greatest price revolution in its history. From 100 in the pre-war period, 1910-14, the level of all-commodity prices at wholesale (1) increased to 225 in 1920, fell to 142 in 1921, fluctuated about this level until the latter months of 1929, when prices began their memorable decline, averaging 95 for the year 1932, which was 5 per cent lower than from 1910 to '14, and 58 per cent less than in 1920. (See chart I, page 2) In January of this year this wholesale price level stood at 89 which was 11 per cent lower than in the pre-war period, 1910-14.

Changes in the Purchasing Power of the All-Commodity Dollar
At Wholesale Prices Since 1910

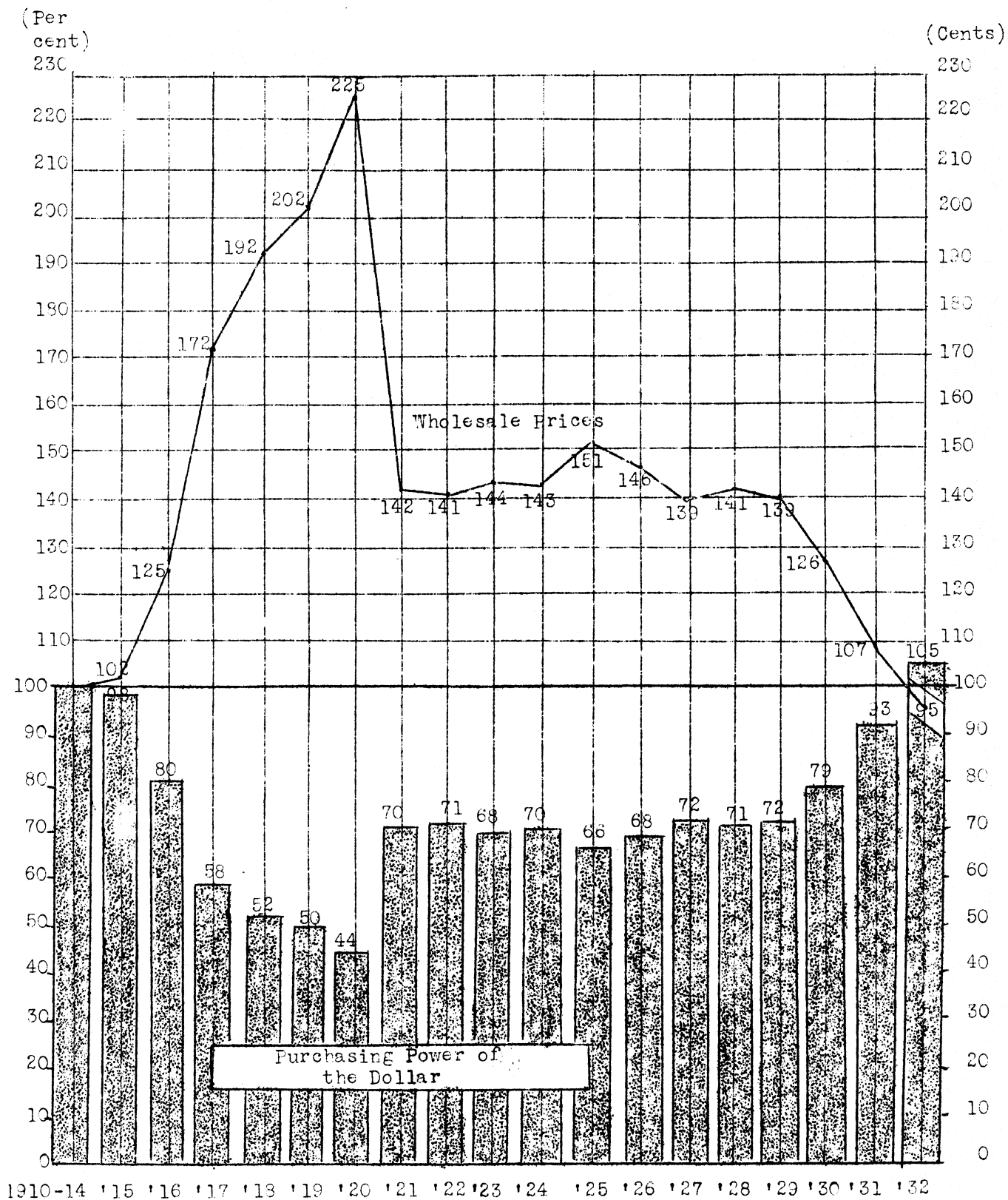
When prices rose from an average of 100 in the period, 1919-14, to 225 in 1920, the quantity of goods which our dollar would buy in the wholesale market declined 56 per cent. The dollar would buy only 44 per cent as much at wholesale prices in 1920 as in the pre-war period, 1910-14. (See chart I, page 2) When the price level dropped from 225 in 1920 to 142 in 1921, the purchasing power of our dollar increased 59 per cent. Our dollar would buy 59 per cent more goods at wholesale prices in 1921 than in 1920. From 1921 to the latter part of 1929 the dollar fluctuated around its 1921 level. Each year following 1929 the price level has dropped, which means that the value or buying power of the dollar has increased. The wholesale dollar would buy 5 per cent more in 1932 than during the five years, 1910-14, 139 per cent more than in 1920, 46 per cent more than in 1929, and the higher the purchasing power of these dollars the more difficult they are to acquire.

Some of the More General Effects of a Changing Price Level

Much economic distress arises out of the fact that with a sudden rise or fall in the general price level the prices of different groups of commodities do not rise and fall together. Prices of farm products rise more rapidly than prices generally when the price level is rising and likewise fall more rapidly than prices generally when prices are falling. Wages, on the other hand, rise more slowly when the price level goes up and likewise fall more slowly when the price level declines. Transportation charges lag when prices rise and remain relatively high after the general price level has declined. Taxes increase less rapidly than the general price level when prices are rising and likewise remain high long after the general price level has declined. Farm taxes in Ohio increased 81 per cent from 1910-14 to 1920 while the general price level increased 125 per cent. From 1920 to 1929 the general price level decreased 38 per cent, while farm taxes increased 40 per cent. Much of our present distress is due to the fact that the prices of different groups of products and services have not fallen together.

(1) Wholesale prices of all-commodities, published currently by the Bureau of Labor, Washington, D.C.

Chart I. Wholesale Prices and the Purchasing Power of the Wholesale Dollar in the United States, 1910-14 to 1932



When prices rise debtors gain, and when prices fall debtors lose.

The simple reason for this is that when prices are rising, the purchasing power of the monetary unit, the dollar, is falling, it requires more money to buy things, dollars are worth less. On the other hand when prices are falling, the purchasing power of the monetary unit is rising, it requires less money to buy things. The person who, for example, contracted a debt at wholesale prices in the period, 1910-14, and paid it in 1920, contracted his debt in dollars which were worth 100 cents in purchasing power and paid it off in dollars which were worth 44 cents in purchasing power. For every dollar he contracted to pay in pre-war days the debtor paid a dollar, to be sure in 1920 but each dollar was worth only 44 per cent as much in purchasing power in 1920 as from 1910-14, which means that the debtor paid back only 44 per cent as much purchasing power as he borrowed.

Since 1920 the tables have been turned, creditors have gained in purchasing power, while debtors have lost. The dollar has increased in purchasing power tremendously since 1920. This increase in purchasing power took place mainly in the years 1921, '30, '31, and '32. In 1932 the purchasing power of the dollar at wholesale prices was 139 per cent higher than in 1920. The person who contracted a debt of \$1000 at wholesale prices in 1920 and paid it back five years later actually turned over to his creditor 50 per cent more purchasing power than he borrowed, and if he paid back his loan in 1932 he paid back instead of \$1000 in purchasing power \$2,390, or more than twice the amount of purchasing power he borrowed in 1920.

As the dollar grows heavier and heavier more and more debtors feel the effects. As tax payers, all of us are debtors, all of us owe our governments--local, state, and federal. Measured in terms of wholesale dollars each tax dollar we parted with in 1920 was worth 56 per cent less in purchasing power than from 1910-14, and in 1932 these dollars were worth 5 per cent more than in pre-war days and 139 per cent more than in 1920 and therefore were 139 per cent more difficult to get.

The European debt problem is due very largely to the changing purchasing power of our monetary unit. Shortly after the Armistice, European countries were obligated to the United States to the extent of \$22,188,000,000 eleven and a half billion of which was to be paid as principal, and 10½ billion as interest. Approximately two thirds of this debt was incurred before the Armistice (November, 1918), and one third shortly after the Armistice. Had this debt all been incurred in the year 1919, and had it all been paid to us in gold in the latter months of 1931, we would have received twice the purchasing power we loaned Europe (measured in wholesale prices) because each dollar at this time was worth twice as much in purchasing power as in 1919.

The changing price level has been responsible for many bank failures in the United States. This rise of 125 per cent in our price level from pre-war days to 1920 and the subsequent decline to 5 per cent less than pre-war with its accompanying change in the purchasing power of our money, contributed very largely to the great increase in the number of bank failures in this country following 1920, but more especially since 1929. The banker is both debtor and creditor, he owes money and he has money payments due him. When prices are rising he loans out money on security which is rising in price. In such periods the banker prospers, for he finds it easy to increase his loans on security which is rising in price, and the borrower finds it easy to pay back his loan in dollars which are worth less and therefore easier to get.

easier to get. On the other hand when prices begin to fall the reverse situation develops. The debtor must pay off his loan in dollars which have a higher purchasing power and which are consequently more difficult to acquire. For awhile after 1929 the banker gained in purchasing power, for the money he took in had a higher purchasing power than when he loaned it. After awhile, however, there developed out of this situation forces which worked against the banker, and creditors generally. The fact that these dollars grew heavier and heavier in purchasing power made it more and more difficult for debtors to pay the banker and finally the debtor "threw up the sponge" and told the banker to take the security for the loan. The banker took the security, (for remember that he too had obligations to meet in these heavier dollars) but found that the value of the security had followed along down with the general price level to the point where in many cases it could not be sold for enough to cover the loan.

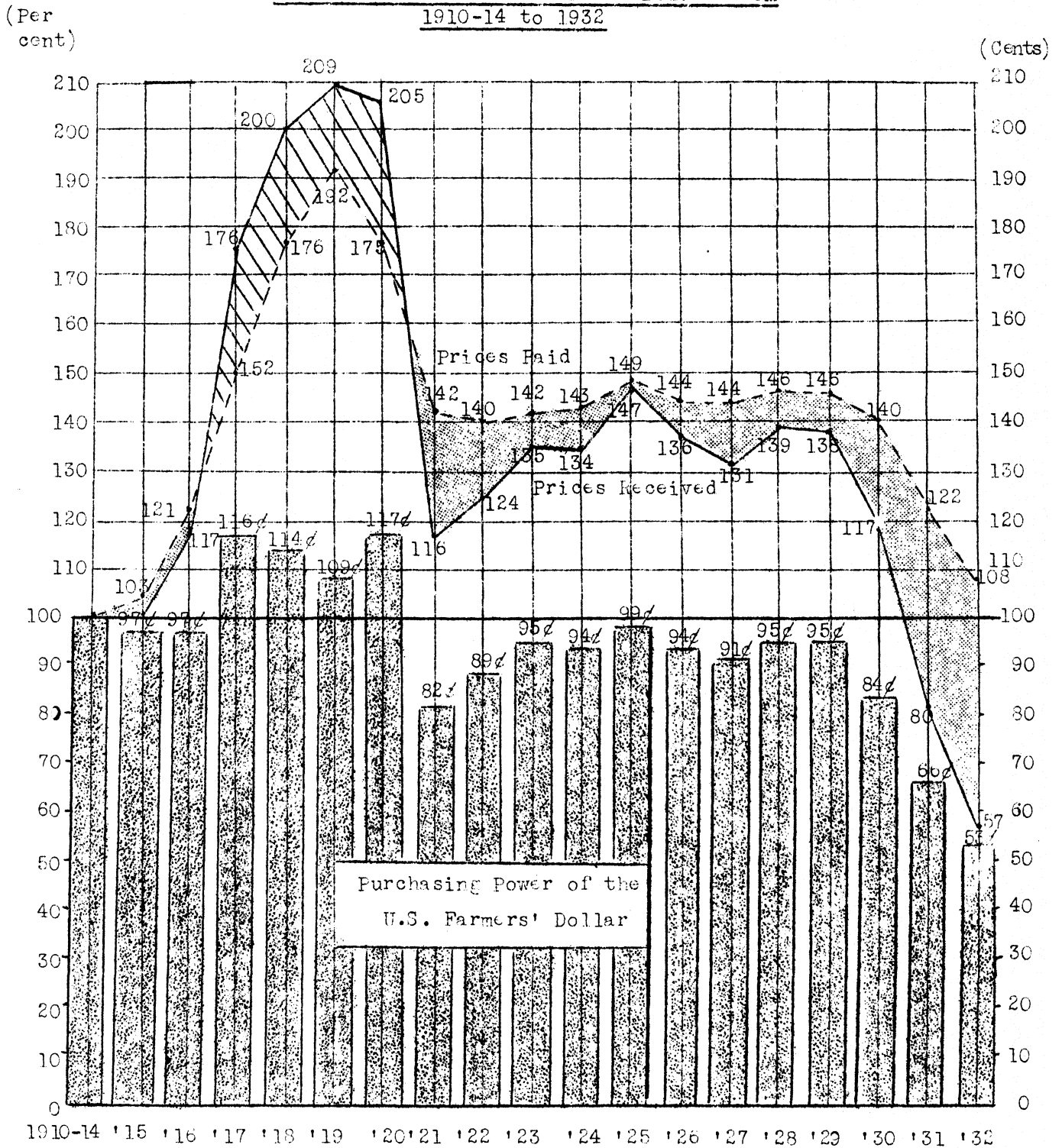
The Ohio banker who had taken mortgages on farms as security found that farm land which sold for \$120 per acre in 1920 would not have sold for more than \$83 in 1925, nor more than \$53 in 1932. The banker who had taken stock or even bonds as security found it difficult to sell the security for enough to cover his equity. The price of all bonds listed on the New York Stock Exchange averaged \$96 in 1929 and \$75 in 1932, a decline of 22 per cent. The Dow-Jones average of 30 industrial stocks which amounted to \$311 in 1929 averaged \$65 in 1932, a decline of 79 per cent. Bank failures which averaged 54 per month in 1929 averaged 112 per month in 1930, 192 in 1931, and 121 in 1932.

The effect of a changing price level on the wage earner. Wage earners have suffered severely since 1929. Due to the fact that wage rates rise and fall less rapidly than prices generally, wage earners were in an unfavorable position from 1915 to '20 when prices were rising rapidly. From 1921 to 1929 wage earners were in a relatively favorable position for the reason that wage rates held up well, but since 1929 they have been in an unfavorable position not so much because of wage rate decreases as because of pay-roll declines. For example, wage rates paid by the United States Steel Corporation declined 18 per cent from 1929 to 1932 while pay-rolls, the amount in the pay envelope, in iron and steel factories declined 73 per cent from 1929 to '32. This would not have been so bad had the laborers cost of living gone down in the same proportion as his income, but it did not; the average laboring man's cost of living in 51 cities in the United States declined 22 per cent from 1929 to 1932.

The Farm Situation a Result of Changing Price Levels

The purchasing power of the farmer's dollar in the market for production goods in the United States. How about the farmer? The farmer had his day from 1917 to '20. During the four years 1917, '18, '19, and '20, the farmer's dollar was larger than the all-commodity wholesale dollar for the reason that the prices of products which he sold increased more rapidly than the prices of those things which he bought. (See chart II, page 5) The purchasing power of the farmer's dollar in the market for production goods in the United States fell from 117 cents in 1920 to 82 cents in 1921, and for the 12-year period, 1921-32 averaged 86 cents as compared with 100 cents during the five years, 1910-14.

Chart II. Prices Received and Prices Paid by United States Farmers
For Production Goods(1) and the Purchasing Power
Of the United States Farmers' Dollar From
1910-14 to 1932



(1) Prices paid for such as fertilizer, lime, farm machinery, seed, feed, etc.
 Does not include wages, taxes, or interest.

From 1920 to '21 prices of all-commodities at wholesale declined 37 per cent while prices of farm products in the United States declined 44 per cent. While prices farmers received for their products were 44 per cent less in 1921 than in 1920, prices paid by farmers for production goods were only 19 per cent less. This disparity between prices received and prices paid for production goods by farmers in the United States reduced the purchasing power of the farmer's dollar from 117 cents in 1920 to 82 cents in 1921. By 1932 prices received by farmers in the United States for products sold had declined 72 per cent from their 1920 level while prices paid by farmers for what they used in farm production had declined 38 per cent, giving farmers a dollar worth 53 cents in 1932 as compared with 100 cents from 1910 to '14, 117 cents in 1920, and 95 cents in 1929. Expressed in terms of physical product this means that the average farmer in the United States who bought goods for use in his farming operations in 1932 had to part with 89 per cent more of his product than from 1910 to '14, 122 per cent more than in 1920, and 78 per cent more than in 1929.

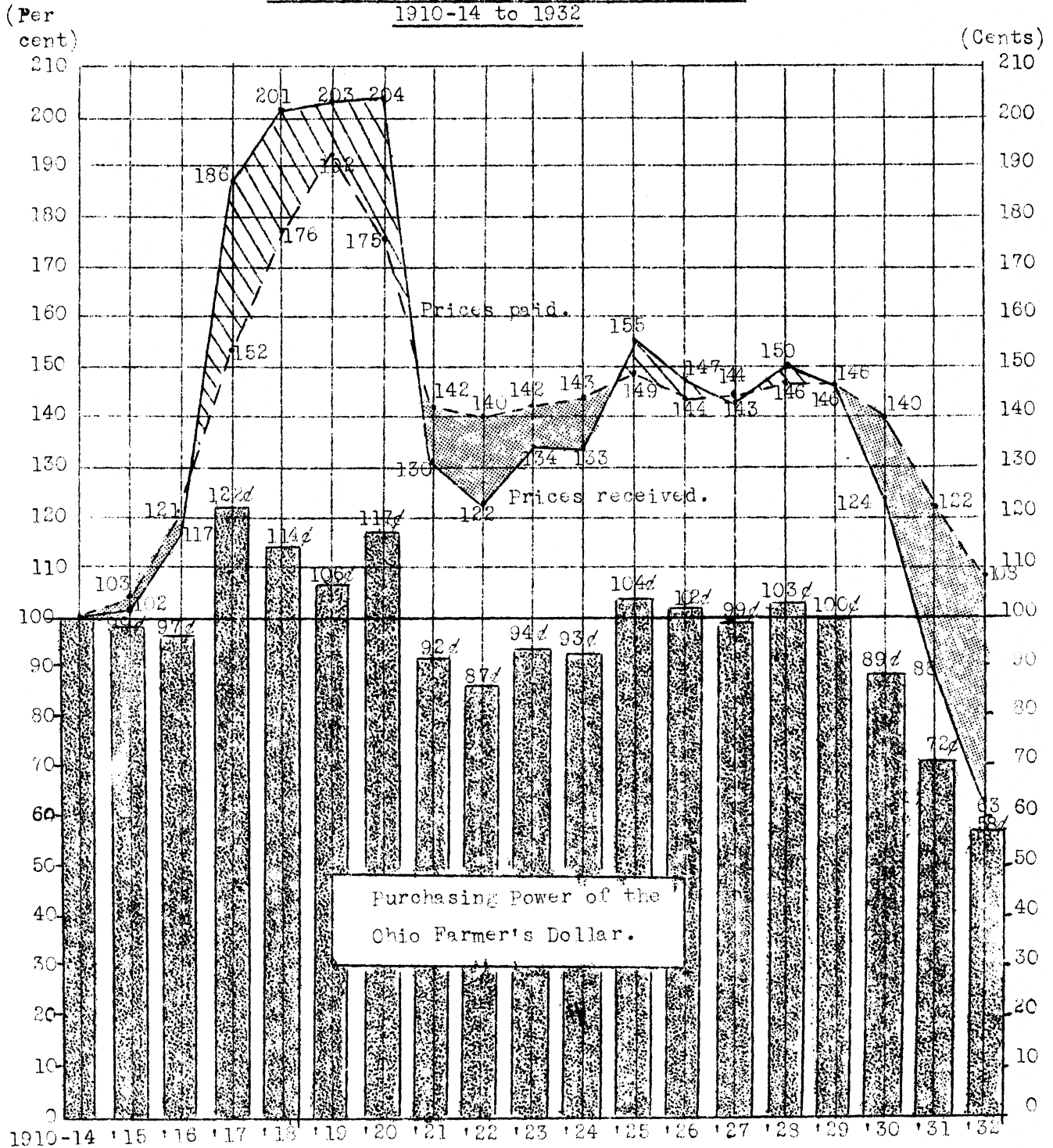
Purchasing power of the Ohio farmer's dollar in the market for production goods. The purchasing power of the Ohio farmer's dollar for production goods has held up better since 1920 than in the country as a whole, averaging 91 cents over the last twelve years as compared with 86 cents for the country as a whole (Compare charts II and III on pages 5 and 7). There are two principal reasons why the purchasing power of the Ohio farmer's dollar has held up better than that of farmers in the country as a whole. One reason is that the Ohio farmer is located nearer the consumer than farmers in the United States as a whole and thereby receives a larger part of what the consumer pays than farmers located a greater distance from market where transportation and handling charges take a larger proportion of the consumer's dollar. The other reason why the purchasing power of the Ohio farmer's dollar has remained higher than for the country as a whole is that prices of dairy and poultry products have held up better than most other products, and the sale of these two products make up a very important part of the Ohio farmer's income.

Purchasing power of individual Ohio farm products. The purchasing power of Ohio's principal agricultural products in the market for production goods, that is, for feed, machinery, fertilizer, lime, etc., is given in table I, page 8. The Ohio farmer's dollar in the market for production goods was worth 58 cents in 1932 as compared with an average of 100 cents from 1910 to '14, 117 cents in 1920, and 100 cents in 1929.

The Ohio farm product having the greatest advantage in the market in 1932 was poultry. Poultry had a purchasing power of 101 cents in 1932, one cent higher than from 1910 to '14. Next to poultry, whole milk ranked highest in purchasing power. The Ohio farmer's whole milk dollar was worth 75 cents in 1932 as compared with 100 cents from 1910 to '14. Ohio wool and corn had the lowest purchasing power of any of Ohio's principal agricultural products in 1932, averaging 40 cents for the year. Wheat and hogs ranked next lowest in purchasing power, wheat averaging 44 cents, and hogs 45 cents for the year 1932 as compared with 100 cents from 1910 to '14.

Table III

Prices Received and Prices Paid by Ohio Farmers
For Production Goods(1), and the Purchasing
Power of the Ohio Farmer's Dollar From
1910-14 to 1932



(1) prices paid for such as fertilizer, lime, farm machinery, seed, feed, etc.
 Does not include wages, taxes, or interest.

Table I.

Purchasing Power of Ohio's Principal Agricultural Products in the Market for Products
Used in the Farming Business (Such as Fertilizer, Seed, Machinery, etc.) Each
Year Since 1914 as Compared with the Average from 1910 to '14

Years	Hogs (Cents)	Cattle (Cents)	Whole Milk (Cents)	Butter- fat (Cents)	Eggs (Cents)	Poultry (Cents)	Wool (Cents)	Wheat (Cents)	Corn (Cents)	Potatoes (Cents)	Tobacco (Cents)	All Farm Products Combined (1) (Cents)
1910-14	100	100	100	100	100	100	100	100	100	100	100	100
1915	88	110	98	97	97	106	129	116	115	82	92	99
1916	98	100	94	93	95	105	130	112	106	164	81	97
1917	130	98	118	93	109	108	191	146	152	155	95	122
1918	126	100	115	95	105	114	178	125	136	120	152	114
1919	115	95	114	104	112	114	151	120	132	124	111	106
1920	104	94	134	143	131	130	153	143	131	141	203	117
1921	77	77	113	114	102	155	74	93	67	133	99	92
1922	86	76	101	107	93	130	136	83	71	101	116	87
1923	69	80	120	132	95	128	158	78	93	108	143	94
1924	75	79	112	122	99	127	140	88	93	94	109	93
1925	103	83	110	120	104	128	151	117	95	130	138	104
1926	115	85	115	122	104	153	122	100	75	175	111	102
1927	92	94	118	133	90	133	115	94	87	129	90	99
1928	82	117	117	134	99	143	144	103	108	84	116	103
1929	91	116	119	128	110	143	104	84	103	139	147	100
1930	89	99	109	101	86	124	75	68	91	131	129	89
1931	69	83	90	82	74	119	62	42	47	83	109	72
1932	45	72	75	62	65	101	40	44	40	65	69	58

(1) Including hogs, cattle, calves, sheep, fruits, vegetables, etc., all combined according to the value of each product sold from Ohio farms each year.

Prices paid by farmers for production goods. There are two reasons why the purchasing power of the farmer's dollar has been low. One is that the prices which he has received for his products, especially in the last three years, have been low relative to prices generally. The other reason is that the prices he has paid for what he has bought have been much higher than the prices he has **received**. The following table shows the relative prices paid by farmers for goods used for production purposes.

Table II.

Relative Prices Paid by Farmers for Commodities Used in
Production in the United States from
1910-14 to 1932(1)

Years	Feed	Machinery	Fertilizer	Building Materials	Equipment & Supplies	Seed	All Commod- ities Bought For Use in Production (2)
1910-14	100	100	100	100	100	100	100
1915	98	101	113	102	106	117	103
1916	129	111	122	118	129	112	121
1917	186	132	139	137	156	141	152
1918	196	160	173	161	180	188	176
1919	208	178	185	189	179	264	192
1920	133	188	189	205	188	149	175
1921	91	175	159	156	151	125	142
1922	118	156	131	159	139	133	140
1923	128	151	128	160	138	142	142
1924	135	155	122	159	131	148	143
1925	145	158	131	163	136	170	149
1926	120	156	129	163	142	190	144
1927	124	157	123	164	134	192	144
1928	133	158	133	161	131	179	146
1929	131	162	132	162	129	190	146
1930	119	159	128	158	124	169	140
1931	84	153	117	141	111	154	122
1932	62	149	102	129	102	104	108

(1) Published by the Bureau of Agricultural Economics, Washington, D.C.

(2) Excluding wages, interest, or taxes.

The reason why the Ohio farmer's dollar was worth only 58 cents in the market for production goods in 1932 was that the prices which he received were 37 per cent under the average from 1910 to '14 whereas the prices he was obliged to pay for goods used in production were 8 per cent above their 1910 to '14 average. It is evident from the foregoing table that the farmer had the greatest advantage in the feed market in 1932 and the greatest disadvantage in the farm machinery market. Feed prices were 38 per cent lower in 1932 than from 1910 to '14 whereas farm machinery prices were 49 per cent higher than

Table III.

Quantities of Ohio's Principal Agricultural Products Required to Buy a Given Quantity of
Products For Use in the Farming Business (Such as Fertilizer, Seed, Machinery, etc.)
Each Year Since 1914 as Compared with the Average Required from 1910 to '14

Years	Hogs (Cwt.)	Cattle (Cwt.)	Whole Milk (Cwt.)	Butter- Fat (Lbs.)	Eggs (Doz.)	Poultry (Lbs.)	Wool (Lbs.)	Wheat (Bu.)	Corn (Bu.)	Potatoes (Bu.)	Tobacco (Lbs.)	All Farm Pro- ducts Combined (Composite) (2)
1910-14	100	100	100	100	100	100	100	100	100	100	100	100
1915	113	91	102	103	103	95	77	87	87	123	109	101
1916	103	100	106	108	105	95	77	90	95	61	124	104
1917	77	102	85	107	92	93	53	68	66	64	106	82
1918	79	101	87	105	95	83	56	80	73	84	66	88
1919	87	106	88	96	89	83	66	83	76	30	90	95
1920	96	107	75	70	76	77	66	70	76	71	49	86
1921	129	129	88	88	98	74	135	108	149	75	102	109
1922	117	132	99	93	108	77	74	121	140	99	86	115
1923	145	126	84	76	105	78	63	128	108	93	70	106
1924	134	127	89	82	102	79	72	114	102	107	92	103
1925	97	120	91	83	96	78	77	86	105	77	72	96
1926	87	117	87	82	96	66	82	100	133	57	90	98
1927	108	106	85	75	111	75	86	107	115	78	112	101
1928	122	86	85	74	101	70	70	97	93	119	86	97
1929	110	86	84	78	91	70	90	118	97	72	68	100
1930	112	101	92	99	117	81	133	147	110	76	77	113
1931	145	116	111	122	136	84	161	239	214	121	92	139
1932	221	139	133	161	154	99	251	225	252	154	146	171

(1) Including hogs, cattle, calves, sheep, fruits, vegetables, etc., all combined, according to the value of each product sold from Ohio farms each year.

(2) Wagon loads of farm products.

from 1910 to '14. Next to farm machinery farmers were at the greatest disadvantage in the market for farm building materials, these materials averaging 29 per cent higher in 1932 than from 1910 to '14.

Quantity of Ohio farm products required to buy goods used in farm production. Let us see what this disparity between prices received and prices paid means to Ohio farmers in terms of quantities of farm products required to buy given quantities of production goods. With prices of Ohio farm products 37 per cent under pre-war and prices paid by farmers 8 per cent above pre-war the Ohio farmer was obliged to part with 71 per cent more of his products in 1932 to buy the same quantity of production goods he bought before the war and also 71 per cent more than in 1929. (See table III, page 10)

Ohio producers of corn and wool were at the greatest disadvantage in the market in 1932. For every 100 bushels of corn it took to buy a given quantity of goods to operate his farm in the pre-war period, 1910-14, it would have taken 252 bushels in 1932. For every 100 pounds of wool it took to buy these goods before the war it would have taken 251 pounds of 1932. Our wheat and hog farmers were also at a great disadvantage in the market in 1932. For every 100 bushels of wheat it took to buy equipment and supplies for the farm before the war it would have taken 225 bushels in 1932. Products costing 100 cwt. of Ohio hogs from 1910 to '14 would have cost 221 cwt. in 1932.

The Ohio producer of whole milk and poultry had the least disadvantage in the market in 1932. As a matter of fact it took less Ohio poultry by one pound in a hundred to buy these instruments of farm production in 1932 than before the war. Ninety nine pounds of Ohio poultry bought as much in 1932 as 100 pounds from 1910 to '14. The farmer who bought his goods with milk was obliged to part with 133 cwt. of milk in 1932 as compared with 100 cwt. in the period from 1910 to '14, and 84 cwt. in 1929.

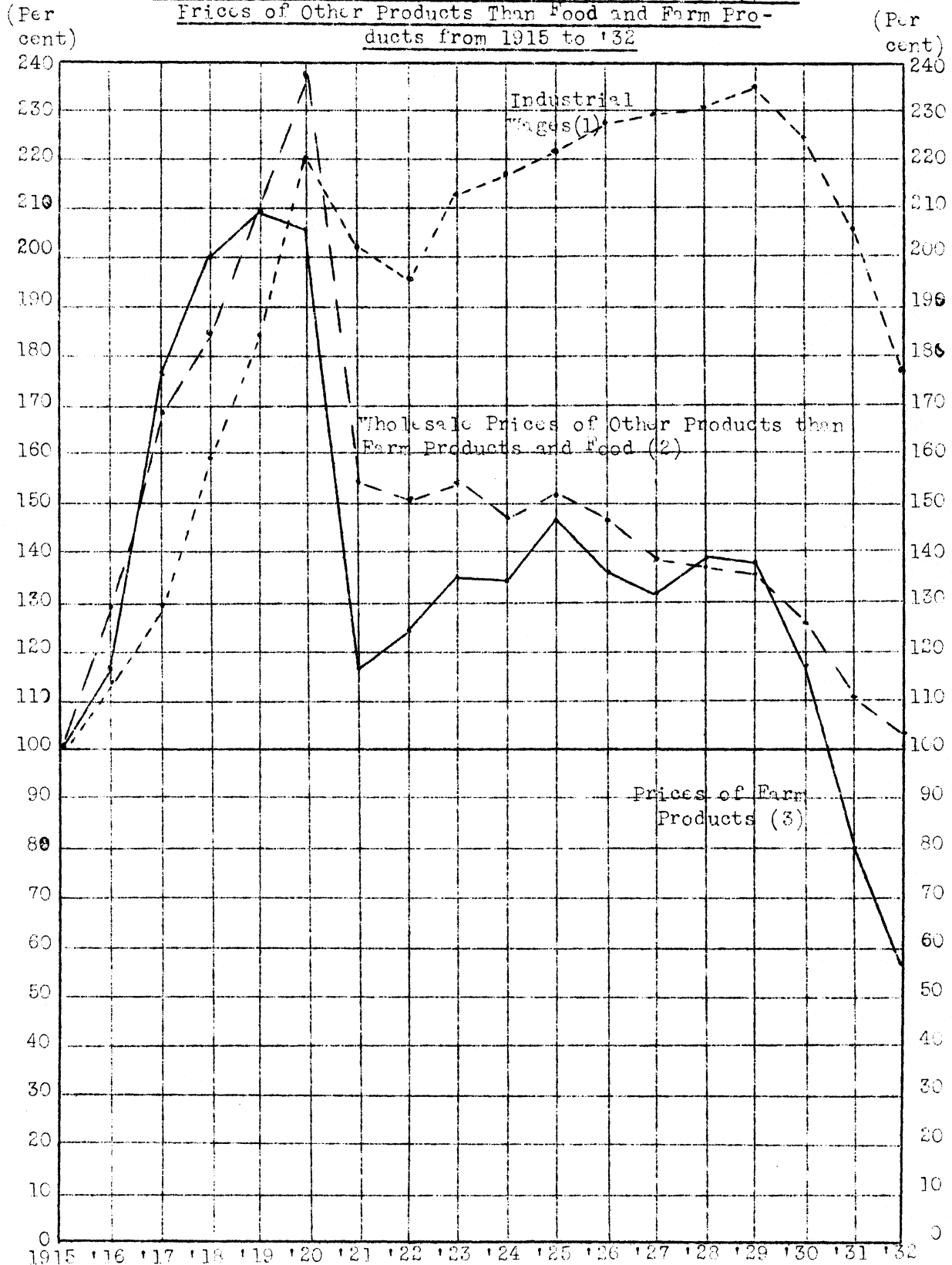
The Ohio grain farmer who bought farm machinery in 1932 and who paid for this machinery in wheat was obliged to part with over three times as much wheat in 1932 as from 1910 to '14 and 2.4 times as much as in 1929. The Ohio farmer who bought building materials for a dairy barn in 1932 was obliged to part with 59 per cent more whole milk than in the pre-war period, 1910-14, and 71 per cent more than in 1929 (1).

This difference between prices received by farmers and prices paid by them is one of the principal causes for the distress among farmers. Ohio farmers cannot prosper by selling at prices 37 per cent lower than pre-war and by buying at prices 8 per cent above pre-war.

What are the causes for these differences between prices received and prices paid by farmers? These price lags in different groups of commodities are characteristic of rapid up and down movements of the general price level. Prices of raw materials such as farm products, go up more rapidly when prices rise and likewise go down more rapidly when prices fall. The fund- (1) It should be recognized, of course, that farm machines and the like are of higher quality today than in pre-war days, but farm products, such as milk, eggs, fruits, etc., are also of higher quality than in pre-war days. There has been little change, however, in the quality of either what the farmer has bought or sold since 1929.

Chart IV

Relation Between Wages, Prices of Farm Products, and
Prices of Other Products Than Food and Farm Pro-
ducts from 1915 to '32



(1) Average weekly earnings, New York State factories. Published by the Bureau of Agricultural Economics, Washington, D.C.
(2) Published by the United States Department of Commerce.

mental reason for the more violent fluctuations in the movement of prices of farm products is that wages lag behind other prices both when the general price level moves up and when it declines. (See chart IV, page 12). One reason why the prices paid by farmers for manufactured goods have been higher than the prices received for farm products is that the wage rates embodied in these manufactured products have been relatively high. This does not necessarily mean as pointed out earlier that earnings of laborers have been too high. In a great many instances laborers have been working only two or three days a week, making their total earnings very low. Rather than a few hours or a few days a week the farmer's interest is in the laborer putting in a full week at a lower rate of pay per hour which will reduce the cost of the product to the farmer and also increase the total earnings of laborers.

High wage rates are not, however, the only cause for this disparity between the prices at which farmers sell and those at which they buy. Another cause is the tendency of some manufacturers to hold their capitalizations higher than the new price level will justify. To make earnings on these unjustly high capitalizations it is thought necessary to hold the prices of the articles produced artificially high.

Another retarding influence which inhibits this tendency of the prices of different products to seek the same general level is monopoly power, and the wide gaps now existing between the prices of certain products and the general price level suggest that monopoly power may still be a very potent force in our American economic system.

Still another cause for the wide spread between the prices of manufactured goods and those of farm products is special taxes such as gasoline taxes and the tariff on products the farmer buys.

Influence of price changes on taxes and interest payments. In addition to his voluntary business outlay for such as feed, machinery, fertilizer, etc., the farmer has two other involuntary business payments to meet, namely taxes and interest on the mortgage debt. In 1932 taxes to be paid by Ohio farmers were 92 per cent greater than the average from 1910 to '14. With the prices of Ohio farm products 37 per cent under the 1910 to '14 level the Ohio farmer had to part with three times the physical product to pay his taxes in 1932 as in pre-war days. It is of interest to note, however, that the Ohio farmer's tax bill dropped 21 per cent from 1931 to '32.

The interest due on the Ohio farm mortgage debt increased from \$6,799,000 in 1910 to \$12,435,000 in 1920 and in 1932 stood at approximately \$15,000,000. This was an annual interest charge in 1932 which was 121 per cent greater than in 1910. With the prices of his products averaging 37 per cent less in 1932 than in pre-war days and with interest due on the farm mortgage debt 121 per cent above pre-war, the Ohio farmer would have had to lay aside $3\frac{1}{2}$ times as much product to meet his interest bill in 1932 as before the war. In addition to interest the farmer is normally expected to pay some on this principal.

The following is evidence of the fact that farmers are not meeting their mortgage obligations: From 1925 to 1932 ten per cent of the land area in the three western Ohio counties: Putnam, Union, and Greene, changed hands as a result of inability to meet mortgage obligations. For the United States as a whole $9\frac{1}{2}$ per cent of all farms have changed ownership in the last five years as a result of inability to meet mortgage debt obligations.

Influence of price changes on cash rent contracts. Rapid price changes throw cash rent agreements out of kilter. The tenant who has a cash rent contract benefits with a rapid rise in prices, while the landlord loses. On the other hand, when prices fall the tenant with a cash rent contract suffers and the landlord gains if the rent is paid. Let us take the case of a three year landlord-tenant cash rent contract beginning in the spring of 1930. To pay this rent of say \$5.00 per acre the tenant would have had to produce and sell 23 per cent more products in 1931 than in 1929, and 51 per cent more in 1932.

Purchasing power of the Ohio farmer's net cash income. Up to this point we have been considering the purchasing power of the Ohio farmer's dollar in the market for products to operate the farm as a business. One of the main reasons for operating a farm, however, is to have something left over above operating expenses with which to pay for groceries, clothes, housing, the Doctor's services, amusements, etc.

The estimated amount of money taken in by Ohio farmers from the sale of their products decreased from 520 million dollars in 1920 (See chart V, page 15) to 296 million in 1921, rose to 374 million in 1926, and then declined sharply from 344 million in 1929, to 146 million in 1932.

The net amount left over in the hands of Ohio farmers, after deducting all cash operating expenses except interest on borrowed capital, declined from 344 million dollars in 1920 to 156 million in 1922, rose to 213 million in 1926, declined in 1927 and '28, stood at 156 million in 1929, and then declined sharply in each of the following three years to 45 million in 1932.

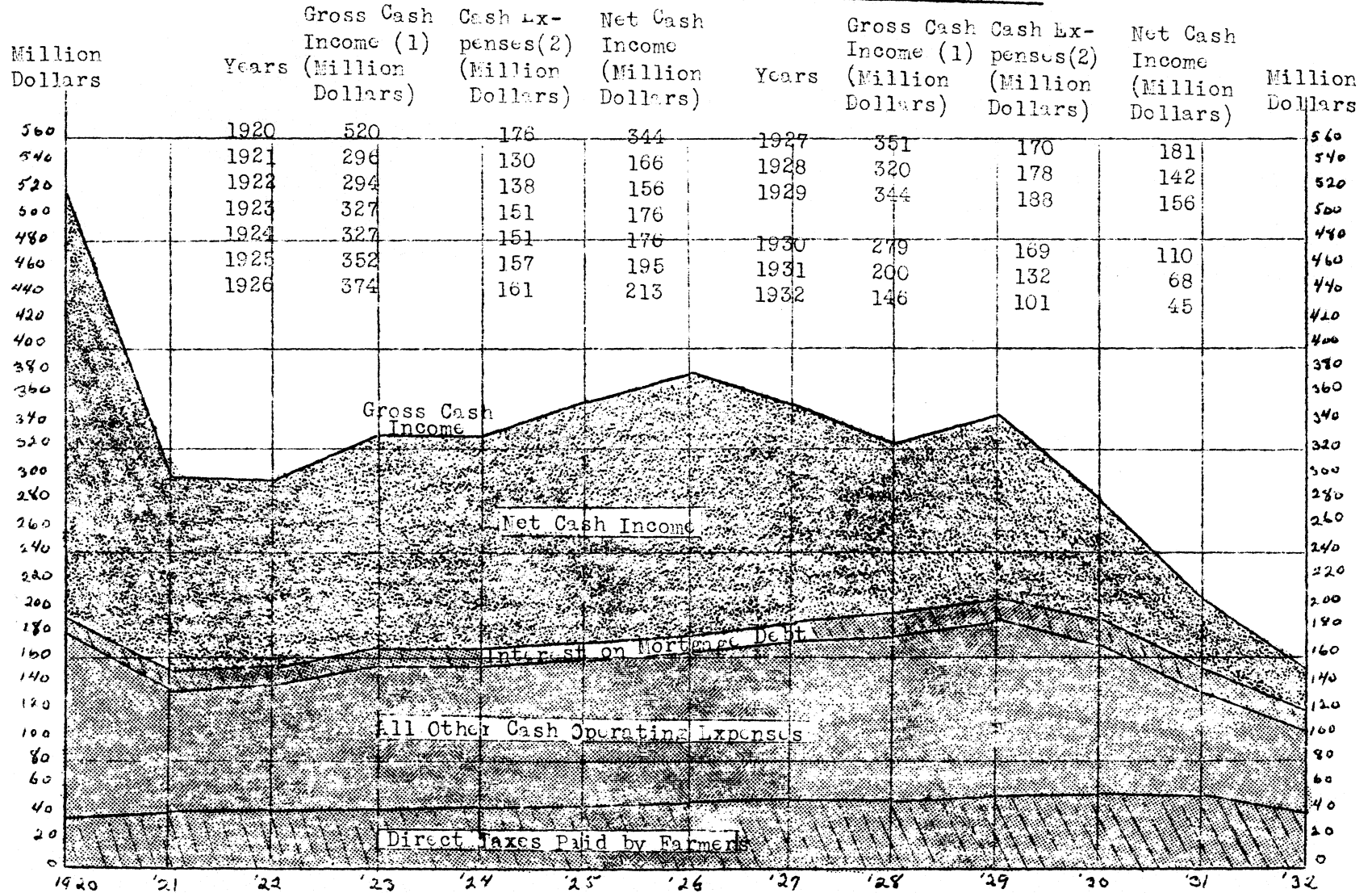
Net Income From Ohio Agriculture, 1920 - '32

Years	A Net Cash Income(1)	B Purchasing Power of the Ohio Farmer's Dollar in the Consumer's Market. 1920 = 100	C Purchasing Power of the Ohio Farmer's Net Cash In- come. (A x B)	D Value of Food and Fuel Pro- duced and Con- sumed on Ohio Farms.	E Net Income From Ohio(1) Agriculture (C + D)
	(Million Dollars)	(Cents per Dollars)	(Million Dollars)	(Million Dollars)	(Million Dollars)
1920	344	100	344	113	457
1921	166	88	146	74	220
1922	156	84	131	72	203
1923	176	92	162	80	242
1924	176	91	160	72	232
1925	195	104	203	81	284
1926	213	100	213	81	294
1927	181	99	179	80	259
1928	142	103	146	76	222
1929	156	101	158	73	231
1930	110	91	100	62	162
1931	68	76	52	43	95
1932	45	63	28	30	58

(1) Interest on borrowed capital must be paid out of this amount.

CHART V

GROSS AND NET CASH INCOME FROM OHIO AGRICULTURE, 1920-32



(1) From the sale of farm products.

(2) Interest payments not included.

The real net income of the farmer is the amount of goods and services he can command with the amount of cash he has left over after all cash operating expenses have been paid, plus the value of his living received from the farm.

Unfortunately there are no available estimates concerning the amount of interest paid by Ohio farmers on capital borrowed from without the industry itself. We shall be obliged here, therefore, to consider the net cash income remaining to the Ohio farmer after all cash expenses, except interest on borrowed capital, have been deducted.

Column E in the accompanying table contains the estimated net income from Ohio agriculture. The greatest decline in this income came from 1920 to '21 and from 1929 to '32. Net income declined 52 per cent from 1920 to '21, and 75 per cent from 1929 to '32. This decline in net income was due it will be observed to two factors: Fewer net dollars were taken in and each dollar was worth less in the consumer's market following 1920 and 1929.

Some Consequences of a Depressed Agriculture. There are numerous consequences of a depressed agriculture such as we now have. One of the most serious consequences evident is that farm owners are losing the equity in their farms, due to their inability to pay their interest and taxes.

Another serious consequence is that our farmers are being compelled to lower their standards of living. Farmers cannot stand a loss of 82 per cent in their purchasing power in the consumer's market in three years and still maintain the standards of economic well-being which we like to associate with farming. This inability to buy from the city likewise contributes very substantially to further economic stagnation there.

Of even greater importance to agriculture and to our country as a whole is the fact that this lack of buying power in the hands of farmers is driving our farmers back toward the old self-sufficing type of agriculture. In the past 20 years farmers of this country have produced food and raw materials for a third larger population with 6 per cent fewer people engaged in agriculture. This was possible only through increased efficiency which came about through increased commercialization or specialization in the broader sense of the term. Farmers sold a larger proportion of their products and bought back more from the city; they sold more wheat and bought more bread, they sold more cream and bought back more butter, more hogs and bought back more pork, they sold more hay, corn, and oats through livestock and bought tractors, trucks and gasoline. The present depression in agriculture has thrown this whole procedure in to reverse, the watchword among farmers today is "don't buy what you can produce on the farm". This situation is serious not only for our farmers but for those industries which depend upon agriculture.

The purpose of this paper has been to state the agricultural situation in quantitative terms as nearly as possible. The real problem is to work out a remedy to correct this situation, but first it is essential that we have the problem clearly before us.

Mimcographed Bulletins Available in the Department of
Rural Economics

12. Credit in the Purchase of Farm Supplies.
14. The Influence of the Corn Borer in Representative Areas of Northwestern Ohio.
17. Large Land Holdings and Their Operation in Twelve Ohio Counties.
18. The Combined Harvester-Thresher in Ohio in 1928.
22. The Estimated Gross Cash Income from the Sale of Agricultural Products from Ohio Farms, by Counties, 1927.
23. Semi-Annual Index of Farm Real Estate Values in Ohio, July 1 to Dec. 31, 1929.
24. The Mechanical Corn Picker in Ohio.
26. Ohio Farm Land Acquired by Life Insurance Companies Thru Foreclosure, in 1929.
27. The Estimated Gross Cash Income from the Sale of Agricultural Products from Ohio Farms, by Counties, 1929.
28. Financial Operations of Ohio Farmer-Owned Elevators During the Fiscal Year 1929-1930.
29. Farm Family Participation in Lodges, Grange, Farm Bureau, Four-H Clubs, School and Church.
30. Farm Equipment for Communication and Household Convenience.
31. Semi-Annual Index of Farm Real Estate Values in Ohio, Jan. 1 to June 30, 1930.
32. An Average Day's Work on Ohio Farms.
33. Semi-Annual Index of Farm Real Estate Values in Ohio, July 1 to Dec. 31, 1930.
34. The Adequacy of Farm Standards of Living.
35. A Survey of Some Factors that Influence Price of Eggs in the Cleveland Territory.
36. Some Relationships of the Variable, Cash Expenditure for Farm Family Living.
37. The Drought of 1930 in Ohio.
38. Ohio Farm Land Acquired by Life Insurance Companies Thru Foreclosure in 1930.
39. Market Milk Situation in Youngstown, Ashtabula, Warren, and Steubenville, Ohio.
40. Farm Produce Received in Trucks on the Columbus Wholesale Market, 1930.
41. Semi-Annual Index of Farm Real Estate Values in Ohio, January 1 to June 30, 1932.
42. Some Trends in Rural Social Organization in Four Ohio Counties.
43. Financial Operations of Ohio Farmer Owned Elevators During the Fiscal Year, 1930-31.
44. A Preliminary Report Dealing with Some of the Marketing Problems of the West Virginia Poultry Producers' Cooperative Association.
45. Farm Produce Received in Trucks in the Columbus Wholesale Market, 1931.
46. Milk Marketing Information on Ohio Markets, 1932.
47. Ohio Farm Land Acquired by Life Insurance Companies Thru Foreclosure in 1931.
48. The Estimated Gross Cash Income From the Sale of Agricultural Products From Ohio Farms by Counties - 1930 and 1931.
49. Semi-Annual Index of Farm Real Estate Values in Ohio, January 1 to June 30, 1932.
50. Financial Operations of Ohio Farmer Owned Elevators During the Fiscal Year, 1931-1932.
51. The Growth Cycle of the Farm Family.
52. Our System of Public Finance and The Services of Government.
53. Semi-Annual Index of Farm Real Estate Values in Ohio, July 1 to December 31, 1932.
54. The Agricultural Situation in Ohio: As Affected by a Changing Price Level.

