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**UNITED STATES
DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.**

# Wages of Agricultural Labor in the United States[1]

By LOUIS J. DUCOFF, *agricultural economist*

**Bureau of Agricultural Economics**

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## INTRODUCTION

Farm-labor problems were catapulted into prominence by the Nation's need for maximizing agricultural production in time of war. Under the wartime conditions of a growing scarcity of labor and high farm incomes, farmers found it necessary to improve their competitive position in the labor market by raising the wages paid to farm laborers. Competition with nonagricultural employers and competition among farmers themselves for the limited supply of laborers led to a rapidly rising farm-wage level, beginning in 1941.

The agricultural situation in regard to manpower generated important issues in public discussion and led to various governmental measures and programs for assuring a farm working force adequate to produce the vitally needed food and fiber. Deferment of agricultural workers from military service, recruitment of farm laborers from domestic and foreign sources, and inauguration of measures for controlling job shifts from agriculture to other industries were among the steps taken to retain and supplement the farm working force. Although these measures were directed toward the problems of the farm-labor supply, they affected to some extent the movement of farm wage rates. In the absence of such measures, farm wages would undoubtedly have risen even more rapidly than they have.

The rise in farm-wage rates generated claims from some quarters that possible further expansions in production were being curtailed through high farm-labor costs and excessive labor turn-over. At the same time, others maintained that in the absence of such wage increases the drain of laborers to more attractive employment would have affected agricultural production far more seriously. Still others regarded the trend in farm wages as a necessary complement to the rising level of farm incomes and as a desirable readjustment in farm-wage conditions which had been substandard for many years.

Wage controls were instituted to stabilize agricultural wage rates for some crops and areas where excessive labor turn-over and rapid bidding up of wages threatened to interfere seriously with the harvesting of these crops. Experience thus far with farm-wage stabilization indicates the need for a careful balancing of the factors of supply, demand, and ability-to-pay in the crops and areas concerned, as well as consideration of similar conditions in competitive crops or areas and in opportunities for work off the farms. Similar problems affecting the question of agricultural wage rates are involved in other wartime measures for promoting agricultural production, as in the determination of "prevailing" wage rates to be paid to imported workers and workers transported from one State to another. An understanding of the interrelationships of farm wage rates with broad economic and social conditions which frequently extend much beyond the confines of any one area is important in the formulation of any program for dealing with agricultural wage problems under war or post-war conditions.

Many of the wartime problems of farm labor and farm wages stem directly from conditions that prevailed during peacetime.

The heavy out-migration of farm people and farm workers after 1940 in response to the opportunities for nonfarm jobs was a natural result of the depressed conditions these people experienced for many years before this war. Similarly, some of the resistance on the part of farmer employers to a rising level of farm wages was no doubt due to a sharp awareness of the contrast with the situation of just a few years ago when laborers were available in abundance at almost any wage. Many other wartime problems involving aspects of the agricultural labor supply and requirements and the ability to pay given wage rates are rooted in certain pre-war socioeconomic conditions of various areas. Drastic changes, now occurring within and outside of agriculture, appear to create a sharp cleavage between the known conditions of the past and the unknown conditions of the future. Hence an examination of current and historical developments should give a clearer view of the whole problem of wages and wage workers in agriculture.

This report begins with a review of certain structural aspects of agriculture as an industry, in order to delineate the sector of the agricultural economy that is primarily concerned with the employment and wages of hired farm workers. Succeeding chapters give information on the Nation's hired farm workers, the agricultural wage structure, and wages as a factor in the cost of agricultural production. The movement of wages and earnings of farm laborers is examined in the light of associated conditions in agriculture and industry and an appraisal is given of long-time and recent trends in agricultural wage conditions. Special aspects of wartime wage problems in agriculture are then considered. The report concludes with an examination of some of the problems involved in formulating policies aimed at retaining or advancing during post-war years the recent gains achieved by farmers and wage workers.

## 1. THE AGRICULTURAL INDUSTRY AND ITS EMPLOYING SECTOR

The character and magnitude of an industry's wage problems are considerably conditioned by the structural organization of the industry. Because of the preponderance of the family-enterprise unit in the structure of agriculture in the United States, an analysis of agricultural wages is essentially a study of economic conditions within only a special sector of the agricultural industry and the interrelationship between this sector and the rest of the agricultural economy. Although rigid lines of demarcation cannot be drawn, the sector of the agricultural economy which is importantly affected by problems of employer-employee relationships should be delineated. Some of the important structural characteristics of the agricultural industry and its component parts are described in this chapter.

Agriculture stands apart from all other major industries in many respects. A basic difference arises from its distinctive operations in producing living things—plants and animals—and deriving products directly from them. Patterns of agricultural pro-

duction are continuously being modified by the interplay of changing physical, biological, technological, and economic factors. The production process itself is affected by factors of soil types, climate, rainfall, pests, and diseases, and the development of new or improved varieties of crops or livestock, as well as by the variable economic factors of prices and production costs. The growth processes impose a time-table of labor demands which a farmer cannot easily modify. A farmer is thus dependent upon more factors beyond his control than is the nonagricultural entrepreneur.

Agriculture differs greatly from all other industries in the number and dispersion of its establishments. Even such widely distributed industries as retail and wholesale trade and service establishments of all types do not begin to approach in number of establishments agriculture's 6 million farms scattered throughout the whole breadth of the country. For example, the census showed that in 1939 approximately 1,970,000 separate establishments were engaged in retail and wholesale trade and about 650,000 service establishments. Manufacturing establishments in all industries numbered only 184,000.[2]

In fact, the 6,097,000 units which qualified in 1940 as farms by census definitions, were nearly twice as many establishments as were to be found in all other private industries and pursuits combined.[3] The fact that agriculture in the United States is essentially an industry of small-unit operations, carried on by millions of widely scattered, independent establishments, influences decidedly the volume of production, degree of competition, and existence of trade or labor organizations within the industry.

The distribution of farms among size groups is a structural aspect of prime importance in the study of agricultural wage problems. The basic and predominant organization of farms as family enterprises means that wage workers are found more frequently and are employed in greater numbers and for longer periods on farms which in their scale of operations exceed the ability of the operator and his family to perform all of the work required at the times of the year when needed. A corollary of this is that only a minority of all farm operators hire any workers even for a limited time during the year. The distribution of farms among size groups also reveals that many enterprises which the Bureau of the Census classifies as "farms" can hardly be considered as productive enterprises when judged directly by their value of production or indirectly by their land, equipment, and other production resources.

## Farms by Value of Products

The best single measure available of the differences in size of enterprise of agricultural establishments is the total value of annual output, as shown by the census figures on value of the farm

[2] Manufacturing establishments with a value of products in 1939 of $5,000 or more, according to the U. S. Census for 1940. Earlier censuses indicated that when coverage was extended to all manufacturing establishments with a value of products of $500 or more, the number was increased by about one-fourth.

[3] The census total of establishments in manufacturing, trade, services, construction, and mining was approximately 3.2 million. In addition there were approximately 348,000 producing oil and gas wells.

products sold, traded, or consumed at home during the year.[4] The value of output combines in a single measure an evaluation (under existing price conditions) of the results secured from the utilization of all input factors—land, labor, and capital—each of which taken alone is only a partial measure of size of operations. In agriculture, as in other industries, there are a great many small-scale establishments and a much smaller number of larger establishments, with the latter producing a very substantial part of the industry's total output of products. The extreme unevenness of the distribution of the total value of products on farms of different sizes of enterprise is shown in figure 1. Many farms are found in the smallest sized groups, with 56 percent of the farms in 1939 producing less than $750 worth of products per farm and only 5 percent in excess of $4,000 worth.
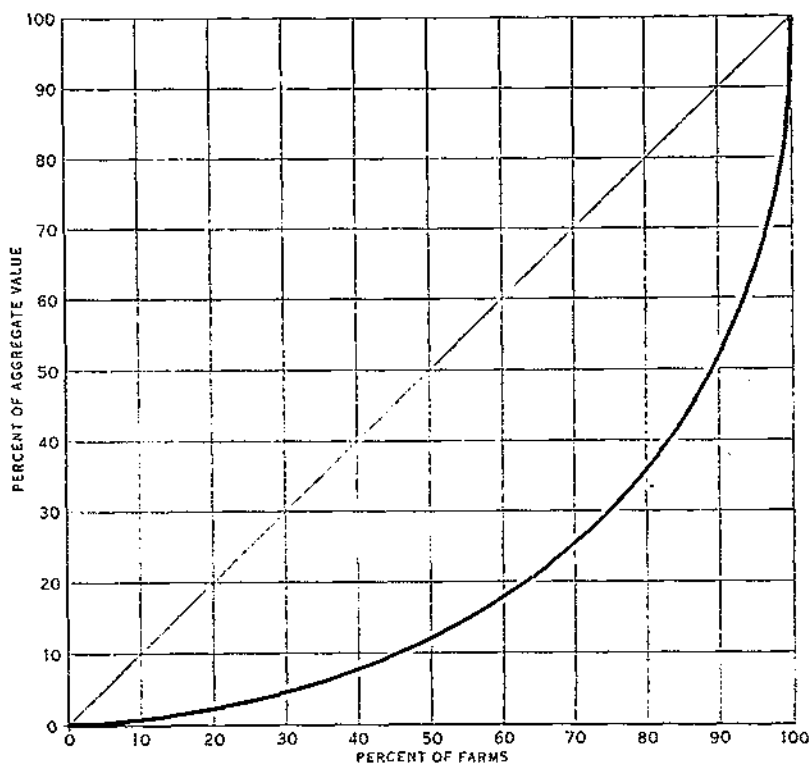


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**FIGURE 1.—Cumulative distribution of total value of agricultural products, United States, 1939. (From Census of Agriculture, 1940.)**

Theoretically, an absolutely equal distribution of gross income received in agriculture would be represented by the straight line instead of the curve shown in figure 1. The extent to which the

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[4] Of the 6,096,799 farms in 1940, 5,968,755 or 97.9 percent reported some production during 1939. In addition to these "classified" farms, 39,542 farms did not report on value of production and 88,502 reported no farm products sold, traded, or used by farm households. Throughout this chapter percentage distributions by value groups of farms are based on classified farms rather than on all farms.

actual curve departs from the straight line indicates the degree of unevenness of the existing distribution. The curve described by the distribution in 1939 of the total value of agricultural production, for example, indicates that the lower 50 percent of the Nation's farms produced only 12 percent of the total value of products sold, traded, or consumed by farm households, while the upper 10 percent produced 47 percent of the total value of agricultural products.

## Production Composition

The scale of farming operations is such an important consideration in connection with agricultural wage problems that other characteristics of agriculture as an industry will be examined in relation to a classification of farms by value of products. First, the composition of agricultural production in terms of major groups of products may be examined for differences to be found among farms of different sizes (table 1).

TABLE 1.—*Distribution of total value of agricultural products by type of product, for value groups of farms, United States, 1939*

| Value groups | All types | Live-stock | Dairy prod-ucts | Poul-try and poul-try prod-ucts | Other live-stock prod-ucts | Field crops | Vege-tables | Fruits and nuts | Horti-cultur-al spe-cialties | Forest prod-ucts | Farm prod-ucts used by farm house-holds |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Percent | Per-cent | Per-cent | Per-cent | Per-cent | Per-cent | Per-cent | Per-cent | Per-cent | Per-cent | Per-cent |
| All classified farms | 100.0 | 22.6 | 14.3 | 7.1 | 1.4 | 31.6 | 2.5 | 3.8 | 1.7 | 0.5 | 14.5 |
| $1–   $399 | 100.0 | 6.4 | 4.4 | 6.2 | .5 | 25.5 | 1.3 | 1.8 | .1 | .7 | 53.1 |
| $400–   $599 | 100.0 | 9.3 | 7.3 | 6.8 | .6 | 33.2 | 1.5 | 2.0 | .2 | .7 | 38.4 |
| $600–   $999 | 100.0 | 13.2 | 11.2 | 7.5 | .8 | 34.9 | 1.7 | 2.3 | .2 | .7 | 27.5 |
| $1,000– $1,499 | 100.0 | 17.4 | 15.9 | 8.0 | 1.0 | 33.7 | 1.9 | 2.5 | .2 | .7 | 13.7 |
| $1,500– $1,999 | 100.0 | 20.1 | 18.6 | 8.0 | 1.0 | 32.3 | 1.9 | 2.7 | .3 | .6 | 14.0 |
| $2,000– $2,499 | 100.0 | 21.6 | 19.1 | 7.8 | 1.0 | 33.5 | 2.0 | 2.8 | .4 | .5 | 11.3 |
| $2,500– $3,999 | 100.0 | 23.1 | 18.4 | 7.5 | 1.1 | 35.1 | 2.1 | 3.1 | .6 | .5 | 8.5 |
| $4,000– $5,999 | 100.0 | 25.4 | 16.6 | 7.0 | 1.2 | 36.1 | 2.4 | 3.9 | 1.2 | .4 | 5.8 |
| $6,000– $9,999 | 100.0 | 29.3 | 15.0 | 6.7 | 1.8 | 33.1 | 2.9 | 3.0 | 2.0 | .4 | 3.8 |
| $10,000–$19,999 | 100.0 | 34.8 | 13.1 | 6.1 | 2.6 | 26.4 | 3.7 | 6.6 | 4.1 | .3 | 2.3 |
| $20,000–$49,999 | 100.0 | 38.4 | 10.7 | 5.6 | 3.4 | 21.2 | 4.8 | 7.9 | 6.6 | .2 | 1.2 |
| $50,000 and over | 100.0 | 39.9 | 7.9 | 5.6 | 3.0 | 15.9 | 7.7 | 8.9 | 10.5 | .1 | .5 |

Compiled from reports of the 1940 Census of Agriculture, Bureau of the Census. For all types of farm products other than those used by farm households, the value figures relate to products sold or traded.

In some respects, the contrasts between the composition of agricultural production of farms with a very low value of products and those with very high values are striking. In the lowest value-of-products group, farm products used by farm households make up more than half of the total value of production, whereas on the farms of highest income the proportion is negligible. Livestock, which makes up less than 7 percent of the value of products in the lowest group, increases progressively until it reaches approximately 40 percent on farms with $50,000 or more in value of production per farm.[3] Production of vegetables, fruits and nuts, and horticultural specialties begin to comprise sizable fractions of the

[3] The high proportion of livestock products on farms with high gross income is in part due to the Census practice of crediting each farm with all sales made during a year, regardless of the length of time the livestock were on the farm.

total value of output only on farms in the highest gross income classes. In contrast, dairy and field crops comprise larger proportions of total value of production on farms in the middle range of income than on the very high- or very low-income farms. Poultry and poultry products make up a fairly constant proportion of agricultural production throughout the income range.

The subsistence character of many of the farms in the smallest value-of-output classes is indicated by the very large proportion of the value of their output consumed at home. Production for home use, however, consists entirely of commodities included in the types shown separately for marketed products. Many small farms engage in commercial production although on a very small scale, particularly in the case of cotton and tobacco farms. On farms with as low a gross value of output as $400 to $600, more than 60 percent of the value of their production was sold.

Contrasts between the very highest and the very lowest gross-income groups are marked, but for the great middle range of farms between income limits of $1,000 and $20,000 per farm, shifts in composition of production from one end of the range to the other are generally very gradual. For farms in this range, which produced 68.5 percent of all agricultural production and 72.4 percent of marketed products in 1939, the average distribution of production by type of products is rather similar, although the grouping of all field crops into a single category hides some important differences.

Farms with value of products of $20,000 or more in 1939 show considerable differences in average composition of production from farms in the middle range. However, the differences are not great enough to mean a fundamentally different pattern of average production composition. For example, livestock takes first place over field crops but the latter is the second most important source. Vegetables, fruits and nuts, and horticultural specialties become more important, but these three combined represent less than one-fourth of all production on these farms.

### Regional Distribution of Farms

There are decided regional differences in the proportion of farms that fall in the several value-of-production classes. These differences are shown in figure 2, in which the width of each bar is proportional to the number of farms in the specified value group. Eighty percent of all of the farms in the South produced less than $1,000 worth of products, and 41 percent produced less than $400 worth. Farms in the North Central States were concentrated more heavily in the higher income groups. In 1939 approximately half of the farms in this region were in the class producing less than $1,000 worth of products, one-third in the $1,000 to $2,500 class, and another 10 percent in the $2,500 to $4,000 class.

The Northeastern States, consisting of the New England and Middle Atlantic geographic divisions, had about the same number of farms as were to be found in the Western States, consisting of the Mountain and Pacific geographic divisions. There was a striking similarity between these two widely separated regions in the

distribution of farms among the several value-of-products classes, except that the Western States had a larger proportion of farms in the two highest income groups.
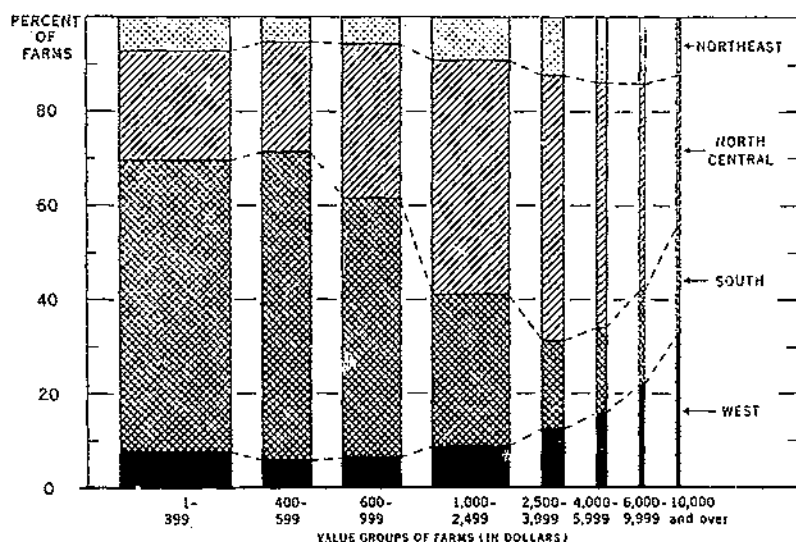


**FIGURE 2.—Regional distribution of farms in specified value groups, United States, 1939. (From Census of Agriculture, 1940.)**

## Farms by Major Source of Income

Some of the major differences in the predominant types of production carried on by the farms of each region are shown in table 2. There was a large proportion of subsistence farms in the South, with the major source of income in 1939 indicated as products of the farm consumed by the farm households. Forty-one percent of the farms in the South were in this category as compared with 33 percent in the Northeast, 22 percent in the North Central States, and 24 percent in the Western States. Of the farms on which some marketed products formed the major source of income, field crops represented the major source of the largest proportion of farms in the North Central States, South, and West, while dairy products represented the major source on the largest proportion of farms in the Northeast.[6]

## Farms by Tenure

A cross classification of farms in the different value-of-products classes by tenure of the operator [7] shows for 1939 relatively small differences in the distribution of farms within the two main tenure groups—full owners [8] and tenants other than sharecrop-

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[6] It should be kept in mind that there are important regional differences in the types of products included in the field crop category.

[7] See ANALYSIS OF SPECIFIED FARM CHARACTERISTICS FOR FARMS CLASSIFIED BY TOTAL VALUE OF PRODUCTS, U. S. Bur. Census, Bur. Agr. Econ., and Farm Security Admin. 221 pp., 1943.

[8] In accordance with census terminology, the tenure class "full owners" includes operators who do not rent any part of the farms operated. However, the farm of the full owner may or may not be mortgaged.

TABLE 2.—*Distribution of farms by major source of income, United States and major regions, 1939*

| Major source of income | United States | | Northeast | | North Central | | South | | West | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Farms | Percentage of total | Farms | Percentage of total | Farms | Percentage of total | Farms | Percentage of total | Farms | Percentage of total |
| | *Number* | *Percent* | *Number* | *Percent* | *Number* | *Percent* | *Number* | *Percent* | *Number* | *Percent* |
| All sources | 5,968,755 | 100.0 | 471,761 | 100.0 | 2,049,191 | 100.0 | 2,957,294 | 100.0 | 490,509 | 100.0 |
| Livestock | 726,162 | 12.2 | 15,336 | 3.3 | 508,649 | 24.8 | 133,453 | 4.5 | 68,724 | 14.0 |
| Dairy products | 619,006 | 10.4 | 145,193 | 30.8 | 352,068 | 17.2 | 65,168 | 2.2 | 56,577 | 11.5 |
| Poultry and poultry products | 217,570 | 3.7 | 53,406 | 11.3 | 81,710 | 4.0 | 48,037 | 1.6 | 33,757 | 6.9 |
| Other livestock products. | 20,251 | .3 | 1,985 | .4 | 5,966 | .2 | 6,793 | .2 | 6,407 | 1.3 |
| Field crops | 2,186,986 | 36.6 | 55,377 | 11.7 | 599,516 | 29.3 | 1,409,542 | 47.7 | 122,551 | 25.0 |
| Vegetables | 80,116 | 1.3 | 16,828 | 3.6 | 19,936 | 1.0 | 29,817 | 1.0 | 13,533 | 2.8 |
| Fruits and nuts | 133,685 | 2.2 | 14,670 | 3.1 | 19,379 | .9 | 34,957 | 1.2 | 64,670 | 13.2 |
| Horticultural specialties. | 18,950 | .3 | 5,553 | 1.2 | 5,963 | .3 | 4,186 | .7 | 3,243 | .7 |
| Forest products | 23,300 | .4 | 5,704 | 1.2 | 4,239 | .2 | 10,489 | .4 | 2,778 | .5 |
| Farm products used by farm households. | 1,942,729 | 32.6 | 157,545 | 33.4 | 452,663 | 22.1 | 1,214,252 | 41.1 | 118,269 | 24.1 |

Compiled from reports of the 1940 Census of Agriculture, Bureau of the Census.

pers. The proportions of farms operated by full owners and by tenants (exclusive of sharecroppers) were not greatly different in the low, middle, and high gross income classes. In the country as a whole, a somewhat higher percentage of farms was operated by full owners in the value-of-products classes of under $400 than by tenants (other than sharecroppers). This situation prevailed in all major regions of the country. Farms in the value-of-products classes of over $1,000 included 32 percent of all farms operated by full owners, but 36 percent of all farms operated by tenants (other than sharecroppers). The higher proportion of farms operated by owners in the lowest gross income classes reflects the many part-time and semi-retired owner-operators in these groups and many subsistence farming units with inadequate resources. Nearly two-thirds of the sharecropper units were in the value-of-products classes of under $600, compared with 60 percent of all operators other than sharecroppers in the South.

Farms operated by part owners and managers, which comprised only 10.1 percent and 0.6 percent respectively of all farms, were distributed to a greater extent among the higher value-of-products classes than were the other tenure groups. As part owners are operators who rent some land in addition to that they own, and as managers are usually found on farms with relatively large-scale operations, there is a preponderance of these tenure groups in the middle-to-high range of gross income, especially in the case of managers.

It is apparent that, with the exception of sharecroppers, the numerically important tenure groups—full owners and nonsharecropper tenants—show no marked differences in size of farming operations, and probably no marked differences in the amount of hired labor utilized. More striking differences would probably be shown between farms operated by owners and tenants if data were

available to classify such farms on a net-income basis or to classify their operators with respect to level of living or degree of security.

## Distribution of Workers

Because of the great number of establishments in agriculture, its workers are more dispersed than in any other industry. Fewer than 1 million out of the 6.1 million farms had more than two workers in March, 1940, and the average number of family and/or hired workers reported for all farms was only 1.59 workers per farm. An estimated distribution of the annual average number of farm workers is shown in table 3 and, for comparison, the distribution of total value of agricultural production. An undue proportion of the Nation's farm workers is on farms in the lower value-of-production classes. They are predominantly family workers, however, whereas hired workers tend to be concentrated on farms in the higher value-of-production classes.

TABLE 3.—*Distribution of farm workers in comparison with distribution of total value of products, United States, 1939*

| Value group | Value of products sold, traded, or used by the farm household [1] | Farm workers [2] | | |
|---|---|---|---|---|
| | | Total | Family | Hired |
| | *Percent* | *Percent* | *Percent* | *Percent* |
| All classified farms | 100.0 | 100.0 | 100.0 | 100.0 |
| $1– $599 | 10.9 | 35.8 | 42.5 | 13.0 |
| $600– $999 | 10.4 | 17.2 | 19.1 | 11.1 |
| $1,000–$2,499 | 27.8 | 25.9 | 25.8 | 26.2 |
| $2,500–$3,999 | 15.0 | 8.5 | 7.0 | 13.2 |
| $4,000–$9,999 | 18.7 | 7.8 | 4.7 | 18.0 |
| $10,000 and over | 17.2 | 4.8 | .9 | 17.6 |

[1] Compiled from reports of the 1940 Census of Agriculture, Bureau of the Census.
[2] Annual averages estimated from census data and Bureau of Agricultural Economics estimates of farm employment.

## Productivity of Workers [9]

Productivity of labor on farms of different sizes of enterprise shows marked differentials. For all farms reporting some production in 1939, the mean value of total agricultural production per farm worker is estimated at $772 (table 4). When allowance is made for the smaller amount of time put in by part-time operators, and for the smaller amount of time and the lesser work capacity of older operators and of unpaid family workers (who include a substantial number of women and younger persons), a "man-equivalent" employment figure can be derived for the value classes of farms. (See footnote 3 to table 4.) The man-equivalent employment figure provides a more valid basis for comparing worker productivity on the several value groups of farms.[10]

[9] For a full discussion of the differentials of agricultural labor productivity presented here and for similar estimates by major geographic divisions, see DUCOFF, L. J. and HAGOOD, M. J. DIFFERENTIALS IN PRODUCTIVITY AND IN FARM INCOME OF AGRICULTURAL WORKERS BY SIZE OF ENTERPRISE AND BY REGIONS. U. S. Bur. Agr. Econ. 54 pp., illus. 1944. (Processed.) The productivity measures in this section relate to all farm workers, both family and hired.

[10] Because unpaid family workers and part-time or semiretired operators comprise a greater proportion of the workers on the lower income farms, the adjustment to a man-equivalent basis reduces the employment on such farms by a greater percentage than the employment on the higher income farms.

TABLE 4.—*Total value of products, net returns for all labor, capital, and management and net returns for all labor and management per farm and per farm worker, by value-of-products classes, United States, 1939*

| Value group | Total value of products [1] | | | Net returns for all labor, capital, and management | | Net returns for all labor and management [3] | |
|---|---|---|---|---|---|---|---|
| | Per farm | Per farm worker | Per "man-equivalent" farm worker [2] | Per farm | Per "man-equivalent" farm worker [2] | Per farm | Per "man-equivalent" farm worker [2] |
| | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Dollars* |
| All classified farms | 1,309 | 772 | 951 | 656 | 476 | 501 | 364 |
| $1- $99 | 57 | 60 | 82 | −71 | −102 | −115 | −164 |
| $100- $249 | 173 | 151 | 200 | 35 | 41 | −7 | −8 |
| $250- $399 | 320 | 241 | 315 | 153 | 150 | 104 | 103 |
| $400- $599 | 491 | 332 | 424 | 266 | 230 | 205 | 177 |
| $600- $749 | 669 | 414 | 525 | 376 | 295 | 297 | 233 |
| $750- $999 | 865 | 514 | 644 | 466 | 355 | 362 | 269 |
| $1,000-$1,499 | 1,222 | 679 | 837 | 625 | 428 | 475 | 325 |
| $1,500-$1,999 | 1,726 | 894 | 1,087 | 918 | 534 | 639 | 402 |
| $2,000-$2,499 | 2,229 | 1,066 | 1,295 | 1,077 | 627 | 820 | 477 |
| $2,500-$3,999 | 3,111 | 1,361 | 1,590 | 1,512 | 777 | 1,160 | 600 |
| $4,000-$5,999 | 4,806 | 1,685 | 1,926 | 2,269 | 909 | 1,751 | 702 |
| $6,000-$9,999 | 7,498 | 2,097 | 2,312 | 3,650 | 1,125 | 2,857 | 881 |
| $10,000 and over | 22,989 | 2,755 | 2,850 | 12,948 | 1,605 | 10,572 | 1,311 |

[1] Value of farm products sold, traded, or used by farm households. This excludes rental value of dwelling and Government payments.

[2] The worker who in work capacity and labor-time input equals the average farm operator who is under 65 and does not work off the farm more than 100 days of the year.

[3] Net returns after deducting all production expenses and after allowing a return on invested capital, including the investment in livestock and machinery.

Estimates from Ducoff and Hagood. See footnote 0, p. 10.

The value of output per worker increases sharply and progressively on farms in the successively higher value-of-production classes (fig. 3). On a "man-equivalent" basis, the production per
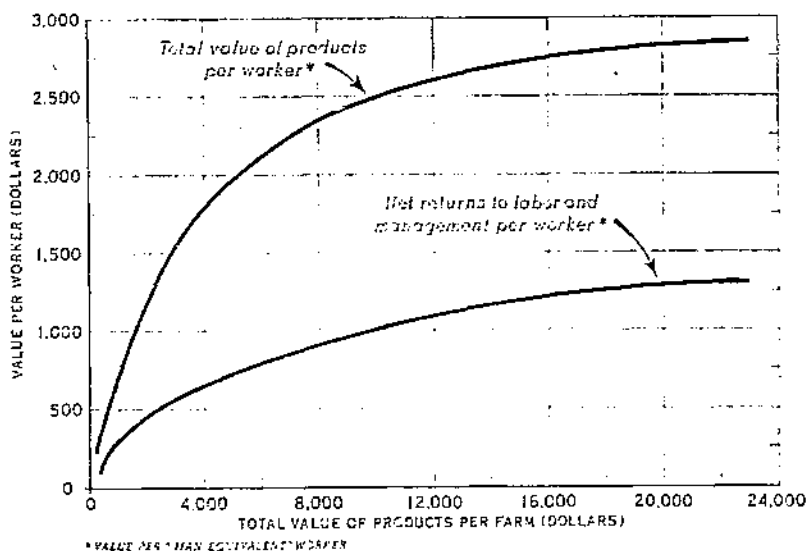


FIGURE 3.—Gross and net returns per farm worker, for farms classified by total value of products, United States, 1939. (Based on data from Census of Agriculture, 1940, and Bureau of Agricultural Economics farm income estimates.)

worker for all value groups of farms was $951 in 1939, but the figure varies all the way from $82 per worker in the lowest value group of farms to $2,850, or about 35 times as much in the highest group of farms (table 4).

The larger production per worker on farms in the higher value groups is associated with better resources and larger outlays per worker of capital and other nonlabor costs. When an estimate of all production expenses except labor costs is subtracted from the total value of production, the resulting figure when related to employment provides a measure of the net returns for all labor, capital, and management per worker. The average for all value groups of farms in the United States was only $476 during 1939, but on the farms with a value of products of $10,000 or more the net returns for all labor, capital, and management were $1,605 per worker. [11] The last two columns in table 4 indicate the net returns for labor and management alone, after an allowance for returns on capital investment has been deducted, those returns averaging $501 per farm and $364 per man-equivalent worker in 1939.

The high productivity of labor employed on farms in the higher value-of-production classes has important implications with respect to wage rates. The employment of the great majority of hired workers on the higher income and better equipped farms means on the average a greater output per hired worker in terms of gross or net value of production than the per worker output in the case of farms which are manned entirely by family labor.

## The Employing Sector

The relevance to wage problems of the various classifications of data presented for farms by value-of-production classes is indicated strikingly in figure 4, which shows the distribution by value-of-production classes of: (1) Total value of production, (2) number of farms, and (3) the cash farm wage bill. The share of the wage bill paid on farms in the higher value-of-production classes is far greater than the proportion of farms in these classes and moderately greater than the proportion of production on those farms. Nearly 90 percent of the Nation's farm wage bill in 1939 was paid on farms which individually had a value of products of more than $1,000, although farms with gross value of production of more than $1,000 made up about 35 percent of all farms. But this 35 percent of farms accounted for 79 percent of all agricultural production in 1939.

The importance of farms as employers of hired labor increases progressively in successively higher value-of-production classes. Farms in the highest class—the 1.0 percent which had a total value of production of $10,000 or more per farm—accounted for more than 30 percent of the entire cash farm wage bill. More than 20 percent of the wage bill was paid on farms in the next highest value-of-production class. In these two classes are only 5.2 percent of the Nation's farms, and not all of these reported expenditures for hired labor. Actually, 54.4 percent of the 1939 cash farm-wage bill was paid on only 266,000 farms in the value-of-

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[11] Based on man-equivalent workers.

production groups, of over $4,000, or on only 4.5 percent of all farms in the country.

Distributions of the cash farm wage bill by value-of-production groups of farms are shown for each of the major regions in figure 5, in which the width of each bar is proportional to the amount of the wage bill in each region. In general, the pattern is similar to that already shown for the United States as a whole, although the



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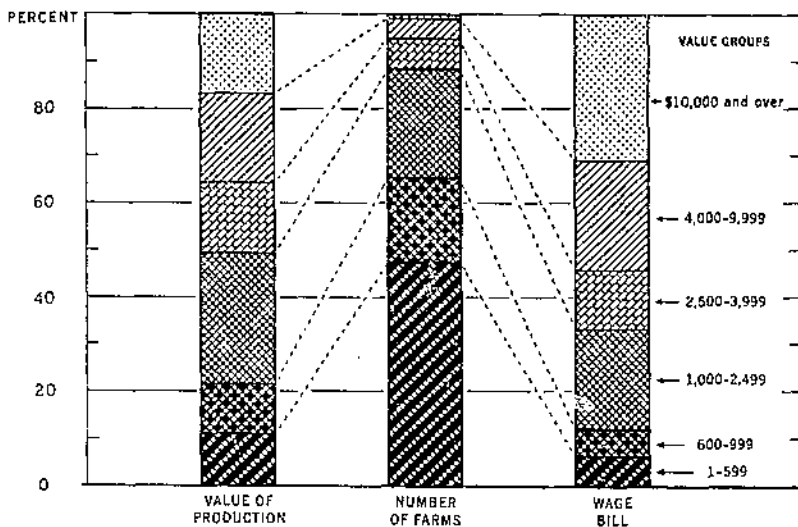
**FIGURE 4.—Distribution of total value of agricultural production, farms, and cash farm wage bill by value groups of farms, United States, 1939. (From Census of Agriculture, 1940.)**

concentration of farm-wage payments on farms in the highest value-of-production class ($10,000 and over per farm) is noticeably greater in the West and in the Northeast, and somewhat less in the North Central region. Conversely, a larger share of the wage bill in the South is paid on farms with gross value of production of less than $1,000 than on farms in other major regions. However, a far larger share of the farms in the South are in the lower value-of-products groups.

Census tabulations are not available for precisely the sector of farms which would be characterized as those on which hired labor is important. The tabulations by total value of products are the best approximation available, although these are more satisfactory for purposes of analysis of wage relationships in the highest classes, where a large proportion of all farms are hiring farms, than in the middle range. Because 85 percent of the farms in the value-of-production classes of $4,000 or more hired some labor in 1939, and because they accounted for nearly 55 percent of the wage bill, statistics for this group of farms may be used to characterize the most important group of the employing sector. In successively lower value groups, the percentage of farms hiring

was progressively smaller; hence the statistics for the lower value groups of farms do not reflect the conditions on employing farms.

The fact that the farms whose operators are the principal employers are almost wholly in the upper gross-income range, and are increasingly important as hirers in the progressively higher gross income groups, has significant implications for the types of economic data and analyses that are appropriate in a study of farm wage problems.[12] Farms that customarily hire any considerable amount of labor are at an average net-farm-income level much higher than the average for all farms. Wage expenditures are an



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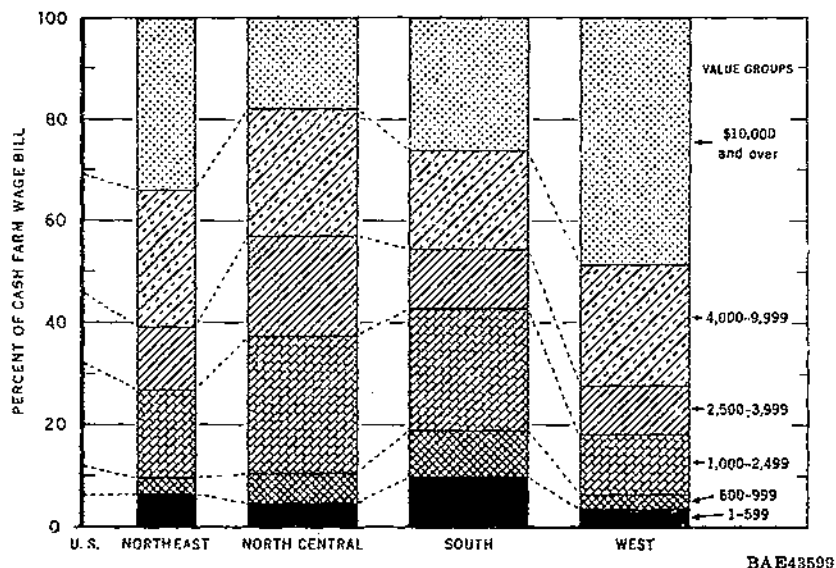
FIGURE 5.—Distribution of cash farm wage bill by value groups of farms, United States, and major regions, 1939. (From Census of Agriculture, 1940.)

infrequent and small or nonexistent item on a majority of all farms. The purpose of presenting some of the structural aspects of the agricultural industry in relation to gross value of production per farm has been to identify the "hiring" farms as a specialized sector of the agricultural economy with which this study is mainly concerned.

## Wartime Changes in the Agricultural Structure

There have been marked changes in agriculture during the 4 years since the last inventory of farms was provided by a Census of Agriculture. Food requirements of our armed forces and our allies, along with increased civilian buying power, called for a large increase in crop acreages and livestock numbers. With the

[12] Any averages relating to income, expenses, wages, employment, size of enterprise, etc., for all farms in the United States are inappropriate as averages for the hiring farms. For example, each of the 4 million farms in the lower value-of-production classes, which together account for only 12 percent of the wage bill, has just as much effect in determining the all-farm average as does each of the much smaller number of farms that are really concerned with farm wages as a production expense.

favorable weather and high yields of the last few years, the volume of agricultural production reached unprecedented levels. Meanwhile claims of the armed forces and war industry for manpower reduced the farm labor supply and the farm working force, necessitating increased efficiency in the use of farm labor. Although information on the extent of these changes and related shifts in the structure of the agricultural industry is not available in terms of the fairly precise distributions which would be afforded by a census, the direction of the changes and certain indications of their magnitude are clearly evident.

The number of farms in the United States has decreased since 1940. As cropland harvested and livestock numbers have increased, the average size of farm enterprises has expanded. Because the decrease in number of farms is due mainly to the migration of low income, marginal, and part-time farmers, there is reason to believe that farms in the lower value-of-production classes have decreased more than proportionately to their numbers.

These changes, together with a high level of prices received by farmers, have led to marked increases in gross and net income per farm. Between 1941 and 1942, it has been estimated that the medium net cash income of farm operators from farming rose from $440 to $980. [13] Although the larger farms had much greater increases of income in terms of dollars, the change in distribution of farms by total value of products or by net income was generally in the direction of favoring relatively the lower income groups. For example, the upper 10 percent of the farmers in 1941 received 45 per cent of the net cash income from farming, whereas in 1942 they received only 37 percent.

With agricultural production increasing and the number of all farm workers decreasing, the output per farm worker has shown decided increases during the last few years (table 5). Agricultural production per worker for the country as a whole has averaged 29 percent greater in 1940-44 than in 1935-39 and 71 percent greater than in 1910-1914. [14] These most recent gains in farm-labor productivity are a continuation, and perhaps an acceleration, of a long-time trend. Over the last three decades the gain in productive efficiency of agricultural labor shows an impressive record. [15] As a result, 14 percent fewer farm workers produced 46 percent more food and fiber in 1940-44 than in the 1910-14 period for a national population 41 percent greater. Underlying these gains in labor productivity is a record of progress in farm technology including, besides mechanization, improved varieties and strains of crops and livestock, more effective control of plant and animal disease and pests, improved cultural and farm-management practices, and in very recent years fuller utilization of the available working force. Some factors have operated in the direction of lowering labor productivity as less suitable land was brought under cultivation and as erosion took its toll, but these factors have been far more than offset by those operating to raise labor productivity.

13 BRADY, D. S. and HAGOOD, M. J. INCOME OF FARM FAMILIES. U. S. Bur. Agr. Econ. Agr. Situation 27 (8) : 9—11. 1943.
14 Based on the Bureau of Agricultural Economics indexes of agricultural production and farm employment.
15 See figure 22, p. 116.

TABLE 5.—*Index numbers of agricultural production per worker, in the United States and the major type-of-farming areas, 5-year averages, 1910-39, annual 1940-44*

(1924–29=100)

| Area [1] | 1944 [2] | 1943 [2] | 1942 | 1941 | 1940 | 1935-39 | 1930-34 | 1925-29 | 1920-24 | 1915-19 | 1910-14 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| United States: [3] | | | | | | | | | | | |
| Index I | 152 | 144 | 137 | 125 | 119 | 105 | 101 | 100 | 93 | 85 | 79 |
| Index II | | 132 | 133 | 121 | 116 | 106 | 101 | 101 | 91 | 87 | 84 |
| Corn Area | | 152 | 149 | 140 | 128 | 119 | 106 | 102 | 93 | 89 | 81 |
| Eastern Dairy | | 115 | 122 | 118 | 110 | 109 | 104 | 100 | 98 | 92 | 85 |
| Western Dairy | | 151 | 153 | 139 | 135 | 114 | 103 | 100 | 96 | 89 | 78 |
| Middle Eastern | | 121 | 127 | 114 | 111 | 102 | 97 | 101 | 96 | 95 | 85 |
| Eastern Cotton | | 128 | 119 | 107 | 120 | 116 | 105 | 103 | 85 | 104 | 111 |
| Delta Cotton | | 130 | 141 | 118 | 111 | 119 | 96 | 103 | 84 | 88 | 85 |
| Western Cotton | | 100 | 105 | 98 | 102 | 88 | 98 | 100 | 89 | 82 | 88 |
| Small Grain | | 129 | 135 | 120 | 94 | 78 | 93 | 100 | 96 | 86 | 74 |
| Range Area | | 130 | 129 | 125 | 118 | 101 | 95 | 102 | 99 | 86 | 74 |
| Northwestern | | 119 | 117 | 118 | 112 | 108 | 107 | 103 | 90 | 93 | 71 |

[1] The States included in the several areas are as follows: *Corn Area*—Illinois, Indiana, Iowa, and Ohio; *Eastern Dairy*—Connecticut, Massachusetts, New Hampshire, New York, Pennsylvania, and Vermont; *Western Dairy*—Michigan, Minnesota, and Wisconsin; *Middle Eastern*—Kentucky, Maryland, North Carolina, Tennessee, Virginia and West Virginia; *Eastern Cotton*—Alabama, Georgia, and South Carolina; *Delta Cotton*—Arkansas, Louisiana, and Mississippi; *Western Cotton*—Oklahoma and Texas; *Small Grain*—Kansas, Montana, Nebraska, North Dakota, and South Dakota; *Range Area*—Arizona, Colorado, New Mexico, Nevada, Utah, and Wyoming; *Northwestern*—Idaho, Oregon, and Washington. The following States are not included in any of the areas, but are included in the United States total: Maine, Rhode Island, New Jersey, Delaware, Missouri, Florida, and California.
[2] Preliminary.
[3] Index I for the United States is based on the Bureau of Agricultural Economics indexes of volume of agricultural production and of annual average farm employment. Index II for the United States and for each type-of-farming area is based on the Bureau of Agricultural Economics indexes of farm employment, and on the index of agricultural production prepared by the WPA National Research Project, for the years 1909-36. See BRESSLER, R. G., JR., and HOPKINS, J. A. TRENDS IN SIZE AND PRODUCTION OF THE AGGREGATE FARM ENTERPRISE. (WPA Natl. Res. Project, Rpt. A-6, July 1938) with extension through 1943 made by the Bureau of Labor Statistics. Trend and year-to-year changes are generally about the same in Index I and Index II and the actual differences observed are due partly to the difference in method of index construction used by the Bureau of Agricultural Economics and the National Research Project. The former utilized prices in the base period for weighting the individual commodities, whereas the latter utilized labor requirements weights in terms of man-hours per unit of production. The two indexes also differ in the treatment of production used for feed or seed.

Although the various type-of-farming areas have shown some irregularity in output per worker as a result of drought, pests, and in some areas rapid introduction of improved varieties of important crops, the upward trend in production per worker has been general in all areas except in the eastern cotton area. Increases have been especially marked in the corn area, both as a result of increased mechanization and of the introduction of hybrid corn. Production per worker in the corn area in 1940-43 averaged 75 percent greater than in 1910-14. Gains of more than 50 percent in output per worker during the period have also occurred in the western dairy area, the range area, the northwestern area, and the small-grain area. Greater gains in farm-labor productivity have occurred during the present war than took place in the World War I period. In general, also, areas which recorded large gains in the first war have been the ones to show the greatest increases in this war.

Recent changes in the size of the farm working force, number of farms, and income per farm or per farm worker have been in the direction of correcting in part some of the long-standing maladjustments in agriculture. The higher income level for farmers and wage workers has brought a greater proportion of both groups out of the substandard category. The reduction in the pressure of farm population upon the agricultural resources of the country has brought the man-land ratio into a more favorable balance. Farm wage rates have been favorably affected not only by the more prosperous condition of the agricultural industry as a

whole, but also by the removal of the surplus rural labor supply of unemployed and underemployed persons.

## 2. WAGE WORKERS ON FARMS

Many more people work for wages on farms than is commonly supposed from the current employment figures.  How many there are, who they are, where they live or come from, and what economic and social status they have—all these are important questions in understanding agricultural wage conditions. For it is these workers and their dependents whose income and living levels are directly affected by the changes in farm-wage rates.

### Numbers of Hired Farm Workers

The numbers of workers hired on farms of the United States in the various months of the year has averaged close to 2.5 million during 1939-43, or about one-fourth of the total farm employment.  The number at work changes greatly during the course of any year, from a low of approximately 1.6 million in January to a peak of about 3.2 million in early July or October.  Nearly half of all the hired farm workers are found in the three southern geographic divisions; this proportion holds both for the peak and the slack months.  Because of labor turn-over, even the highest monthly employment figure for the Nation as a whole understates the number of different persons who work for wages on farms at some time during the year.  In addition, the time of peak farm employment varies in the different regions and on different types of farms so that there is no one month or week in which a count would get all persons who work for wages during the year.

No data are available on the number of different persons working as hired laborers on farms during the course of a year.  However, related information from a recent survey of farm-labor utilization [16] suggests that an annual average hired farm employment of 2.5 million may have involved as many as 4 million persons who worked for wages on farms during at least some part of the year.  When their dependents are added, we find a total of some 6 to 8 million persons dependent wholly or partially for their income on agricultural wages.

The relative importance of hired workers varies in the several geographic divisions.  They make up a larger proportion of the farm working force in the Western and Northeastern States than they do in the South and in the North Central States (table 6).  In the Pacific States, where relatively large-scale farming and the production of special crops distinguish the area's agriculture, hired workers made up almost half (47 percent) of the 1943 annual average number of all farm workers.  In other parts of the United States hired workers comprised from one-sixth of the 1943 average number of farm workers in the East South Central States to one-third in the New England, Middle Atlantic, and Mountain States.

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16 DUCOFF, L. J. and HAGOOD, M. J. THE FARM WORKING FORCE OF 1943.  Bur. Agr. Econ. 15 pp.  1944.  (Processed.)

TABLE 6.—*Number of hired farm workers, United States and major geographic divisions, annual and quarterly, 1945*

| Area | Annual average | | January 1 | | April 1 | | July 1 | | October 1 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Number of hired workers | Percentage of total farm employment | Number of hired workers | Percentage of total farm employment | Number of hired workers | Percentage of total farm employment | Number of hired workers | Percentage of total farm employment | Number of hired workers | Percentage of total farm employment |
| | *Thousands* | *Percent* | *Thousands* | *Percent* | *Thousands* | *Percent* | *Thousands* | *Percent* | *Thousands* | *Percent* |
| United States: | 2,406 | 23.4 | 1,556 | 19.0 | 1,875 | 20.1 | 2,990 | 25.4 | 3,104 | 26.0 |
| New England ... | 82 | 32.9 | 52 | 25.1 | 62 | 27.8 | 111 | 39.5 | 106 | 38.4 |
| Middle Atlantic | 203 | 32.8 | 114 | 23.5 | 149 | 26.9 | 275 | 37.0 | 275 | 39.1 |
| East North Central | 266 | 18.0 | 186 | 15.1 | 212 | 15.0 | 332 | 21.7 | 312 | 21.3 |
| West North Central | 286 | 17.8 | 183 | 13.3 | 219 | 14.6 | 358 | 19.4 | 324 | 19.5 |
| South Atlantic | 403 | 23.7 | 324 | 22.1 | 397 | 22.8 | 541 | 23.5 | 509 | 25.9 |
| East South Central | 261 | 15.5 | 163 | 13.1 | 217 | 14.4 | 279 | 15.2 | 389 | 17.9 |
| West South Central | 430 | 24.5 | 301 | 21.5 | 333 | 21.0 | 543 | 26.6 | 571 | 26.2 |
| Mountain | 142 | 32.3 | 80 | 23.3 | 101 | 25.4 | 185 | 38.2 | 175 | 36.0 |
| Pacific | 273 | 47.2 | 153 | 36.0 | 185 | 38.0 | 356 | 53.1 | 359 | 51.9 |

The number of hired workers in the various areas, as well as the percentage they comprise of total farm employment, increases sharply with the season. There is a greater seasonal increase in hired workers than in family workers, in all geographic divisions and this increase is especially noticeable in the Pacific States. Characteristic patterns of seasonal changes in the employment of family and of hired farm workers in the three major regions are shown in figure 6.

## Types of Hired Workers

The great seasonal changes in numbers of workers hired on farms means that a great many farm laborers need to supplement their earnings by other kinds of jobs during the slack seasons. Many aspects of farm wage problems are accentuated for the seasonal farm laborers who work for varying periods on different farms. Except in periods of full employment, like the present, many of them are unemployed for some part of the year. For this group, the length of employment available in a year may be more important than the rate of pay, in affecting their annual earnings.

These seasonal workers are found more frequently and in greater numbers on fruit and vegetable, cotton, sugar beet, and other farms that have crops with high labor requirements. Many work in areas and on farms where the commercialization and to some extent the industrialization of agriculture have proceeded furthest. Practices and conditions of employment peculiar to the large-scale specialized farming found in California and in other States bear little resemblance to those traditionally associated with the personalized relations of the operator of a family-size farm and his hired man. Within the seasonal group, the migratory workers have additional problems of transportation, temporary housing, routing of their migration to coincide with changing

needs for laborers, and in many cases the housing and care of their families.

Precise information is not available on the numbers of hired farm workers falling into the broad classes of regular and seasonal workers, or within the seasonal group into migratory laborers and permanently resident seasonal laborers. Because the lines
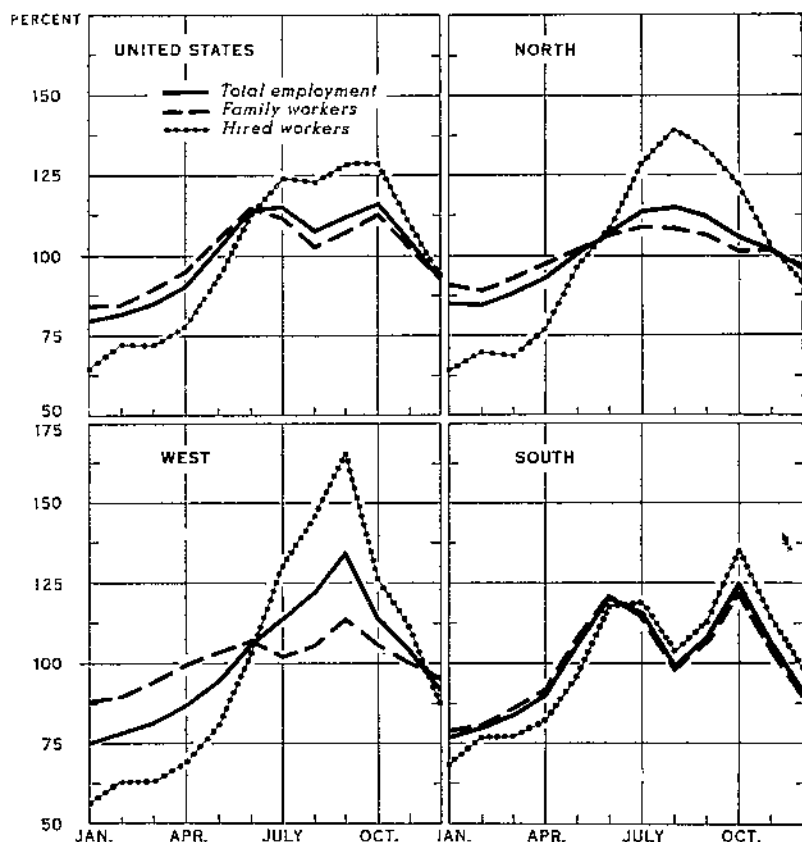


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**FIGURE 6.—Seasonal farm employment, United States and major regions, 1943. (Monthly employment of each class of workers computed as percentage of 12-month average, as indicated by Bureau of Agricultural Economics estimates.)**

of demarcation between the groups are not sharp, and because workers change from one group to another within a year, over-all estimates are necessarily very rough. It seems probable that in pre-war years there were around 1.0 to 1.5 million hired workers, each of whom was rather regularly employed on one farm for most of the year, and some 2 to 3 million other persons who at some time of the year might be classified as seasonal hired farm workers. Of the seasonal group, 0.5 million to 1 million were migratory workers, who moved with the harvest from one area

to another, and 1.5 to 2 million were nonmigratory seasonal workers who worked on farms for varying periods during the year. [17]

## Composition of Hired Workers

No census or survey taken at any one date provides information on all the persons who work for wages on farms in the course of a year. For all persons actually working as hired farm laborers in the last week of March, 1940, and for the unemployed whose last occupation was that of a hired farm worker, the census provides information on various characteristics. In that week approximately 2.2 million persons were classified as hired farm workers, including 1.9 million actually employed and 0.3 million experienced farm laborers seeking work. This group of 2.2 million includes all the year-round and most of the other "regular" hired workers who work less than the entire 12 months, but includes only a small part of the seasonal hired workers, both migratory and nonmigratory.

Although many women work on farms in the summer and fall, the year-round or regular hired farm working force is largely composed of men. In March, 1940, 95 percent of all hired farm workers were males (table 7). War has brought a decided increase in the number of women working on farms in all months, but most of this increase has been in family rather than hired workers. On the average, hired farm workers are younger than workers in other occupations. Half of the employed male farm laborers were below 30.3 years of age in 1940 as compared with a median age of 38.3 years for employed males in all occupations and a median age of 46.6 years for farmers and farm managers. For both males and females, the heaviest concentration of farm laborers was in the ages from 18 to 35, more than 55 percent of all hired farm laborers falling in this group.

TABLE 7.—*Age and sex of employed and unemployed farm laborers (wage workers) and farm foremen, March 24–30, 1940*

| Age | Total | | Males | | Females | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| All ages | 2,227,783 | 100.0 | 2,112,901 | 100.0 | 114,882 | 100.0 |
| 14–17 | 146,490 | 6.6 | 133,473 | 6.3 | 13,017 | 11.3 |
| 18–19 | 185,000 | 8.3 | 174,056 | 8.2 | 10,944 | 9.5 |
| 20–24 | 471,018 | 21.1 | 449,278 | 21.3 | 21,740 | 18.9 |
| 25–34 | 580,226 | 26.1 | 553,447 | 26.2 | 26,779 | 23.3 |
| 35–44 | 329,930 | 14.8 | 310,379 | 14.7 | 19,551 | 17.0 |
| 45–54 | 253,123 | 11.4 | 239,409 | 11.3 | 13,714 | 12.0 |
| 55–64 | 182,842 | 8.2 | 176,336 | 8.4 | 6,506 | 5.7 |
| 65–74 | 71,676 | 3.2 | 69,292 | 3.3 | 2,384 | 2.1 |
| 75 and over | 7,478 | .3 | 7,231 | .3 | 247 | .2 |

Compiled from U. S. Bur. Census, 16th Census, 1940, Population. Vol. III, The Labor Force, Pt. 1, Summary, Table 65. These figures exclude experienced farm laborers employed on public emergency work.

Approximately three-fourths of all hired farm laborers in March, 1940, were white (table 8). Negroes made up about 24 percent of all farm laborers although they comprise only about 15 percent of the entire farm population. In the case of female farm

laborers, more than 70 percent were Negroes and most of these were in the South.  All nonwhites other than Negroes—Japanese, Chinese, Indians, etc., totaled a little over 35,000, or less than 2 percent.  The group of white males was by far the largest of any —comprising more than 1.6 million of the entire group of 2.2 million.

Because a great many seasonal workers were not yet at work on farms at the time of the last census, the March, 1940, figures may understate the proportion of Negroes among the hired workers. Seasonal employment is not very great during March in the cotton areas of the South where Negroes make up such a large proportion of seasonal farm laborers.

TABLE 8.—*Race, residence, and marital status of employed and unemployed farm laborers (wage workers) and farm foremen, March 24–30, 1940*

| Classification | Total | | Male | | Female | |
|---|---|---|---|---|---|---|
| | *Number* | *Percent* | *Number* | *Percent* | *Number* | *Percent* |
| Race: | | | | | | |
| Total_____ | 2,227,783 | 100.0 | 2,112,901 | 100.0 | 114,882 | 100.0 |
| White_____ | 1,663,314 | 74.7 | 1,630,813 | 77.2 | 32,501 | 28.3 |
| Negro_____ | 528,872 | 23.7 | 447,977 | 21.2 | 80,895 | 70.4 |
| Other races_____ | 35,597 | 1.6 | 34,111 | 1.6 | 1,486 | 1.3 |
| Residence: | | | | | | |
| Total_____ | 2,227,783 | 100.0 | 2,112,901 | 100.0 | 114,882 | 100.0 |
| Urban_____ | 197,927 | 8.9 | 186,196 | 8.8 | 11,731 | 10.2 |
| Rural-nonfarm_____ | 475,445 | 21.3 | 450,608 | 21.3 | 24,837 | 21.6 |
| Rural-farm_____ | 1,554,411 | 69.8 | 1,476,097 | 69.9 | 78,314 | 68.2 |
| Marital status: | | | | | | |
| Total_____ | 2,227,783 | 100.0 | 2,112,901 | 100.0 | 114,882 | 100.0 |
| Single_____ | 1,069,953 | 48.0 | 1,029,202 | 48.7 | 40,751 | 35.6 |
| Married, spouse present_ | 935,311 | 42.0 | 894,152 | 42.3 | 41,159 | 35.8 |
| Married, spouse absent_ | 83,487 | 3.7 | 73,373 | 3.5 | 10,114 | 8.8 |
| Widowed or divorced___ | 139,032 | 6.3 | 116,174 | 5.5 | 22,858 | 19.9 |

Compiled from U. S. Bur. of Census, 16th Census, 1940, Population.   Vol. III, The Labor Force, Pt. 1, U. S. Summary, Tables 59, 62, 67, and 68.   These figures include 1,924,890 employed farm laborers and 302,893 who were seeking work but exclude the experienced farm laborers employed on public emergency work.

The census offers other material which aids in identifying the hired farm-laborer group.  About 70 percent of the persons classified as hired farm workers by the census lived on farms, 20 percent in other rural areas—open country and villages—and less than 10 percent in urban places of 2,500 or more.  These percentages relate in large part to the more-or-less regular workers who would be employed in March.  At harvest time there is a substantial increase in the number of farm workers whose regular residence is in urban areas.  The farm-laborer group has a much higher proportion of single persons than most occupational groups. Almost 50 percent of all male farm laborers in March, 1940, were single, as compared with only 25 percent of all employed males. Some 400,000 of these were living in the operator's household on the farm where they were working, while about 600,000 of the farm laborers living on farms were married and were heads of households.

There is a considerable overlap among the three classes of agricultural workers—operators, unpaid family workers, and hired workers. Sharecroppers and share tenants are customarily grouped with the operator category, although in terms of economic status there is often little difference between them and wage workers.

Many agricultural workers do not remain in any one category during the course of a year. Operators of low-income farms may also work for wages on other farms, and unpaid family workers may work for pay for a while on the family farm or on another farm.

The amount of this interchangeability among the classes of agricultural workers varies with the season. As wartime conditions have increased the dependence on local labor in most communities, members of farm families have more frequently helped on a paid or exchange basis on neighboring farms. One survey made in May, 1942, indicated that 53 percent of the reporting farmers expected to obtain their additional hired workers from farms in the neighborhood. [18]

Evidence of the shifting between the status of operator and hired laborer is provided by the census data for March, 1940, relating to operators who supplement their farming income by working for wages on other farms. Nearly 175,000 of the employed farm laborers reported that their usual occupation was farmer or farm manager. On the other hand, about 140,000 farmers reported that their usual occupation was paid farm laborer—these probably being operators who depend more on their earnings from work on other farms than on income from their own farming.

In the South there is a considerable degree of shifting from hired farm laborer to sharecropper status, and vice versa, from one year to another. During the decade 1930-40, a substantial part of the net decrease in sharecroppers was probably due to the fact that some plantation landlords found it more profitable to operate their land with wage labor. Often the same individuals remained on the plantations, living in the same houses and doing the same kind of work, but being paid on a wage basis. Since 1940 the decreased number of farm laborers has apparently led to some shifting back to the sharecropping system in an effort to insure greater stability in the work force.

Because of the short season many hired farm workers seek jobs off the farm for parts of the year. The types of such jobs available to those who live in rural areas vary in different localities. Work in textile mills, sawmills, lumber camps, mines, construction, and in certain manufacturing and food-processing establishments are the principal occupations.

In addition to the farm laborers who regularly live on farms, either in the operator's household or separately, and those who live in nearby rural or urban places, there are the migratory workers who come into areas at times of high seasonal needs. These are the workers who follow the crops in the principal fruit and vegetable areas and those who follow certain migratory routes in connection with the grain harvest in the Midwest or with the cotton harvest in the South. Numerically they are less important than the resident farm laborers, but their numbers have at times been swelled by the effects of depressions, drought, and accelerated mechanization of farm operations.

The agriculture of certain specialized areas, as in Arizona and California, has come to be heavily dependent upon migratory la-

borers. The problems of these workers, although basically similar to those of other farm laborers, have sometimes been accentuated by the presence among them of distinct race, nationality, or cultural groups and by the greater degree of insecurity and differential treatment attaching to their migratory status.

## Recent Changes in Composition of Hired Farm Workers

Since the outbreak of World War II, the composition of hired farm workers has changed. Most marked has been the altered age composition as many young men left farm work for industrial jobs or the armed forces. There were between 400,000 and 500,000 fewer men aged 18-37 working for wages on farms in early April, 1944, than in the last week of March, 1940, a decrease of more than 35 percent. Their loss has been partially offset by increases in other age groups. Table 9 shows the great changes in age composition. The age group 14-17, which comprised only 6.1 percent of all wage and salary workers on farms in 1940, now makes up 13.3 percent of the entire group. Similarly, each age group above those subject to military service comprises a higher percentage now than in 1940 with persons 65 years of age and over increasing from 3.6 percent in 1940 to 5.9 percent in 1944.

For certain other wartime changes there are no precise numerical estimates. In the summer and fall, women have been working on farms for wages in greater proportions. Some unpaid family workers have shifted to paid work on other farms, or have become paid workers on the family farms. The attraction of industrial and other jobs often made it necessary to pay this group wages as an inducement to remain on the home farm. On the other hand, some sons who were formerly paid wages have shifted to partnership or tenant status.

TABLE 9.—*Percentage composition of wage and salary workers employed in agriculture with respect to age, 1940 and 1944*

| Age groups | March 24-30, 1940 | April 2-8, 1944 | Age groups | March 24-30, 1940 | April 2-8, 1944 |
|---|---|---|---|---|---|
| | *Percent* | *Percent* | | *Percent* | *Percent* |
| 14 years of age and over | 100.0 | 100.0 | 35-44 | 15.4 | 17.8 |
| 14-17 | 6.1 | 13.3 | 45-54 | 11.4 | 13.1 |
| 18-19 | 7.8 | 7.7 | 55-64 | 8.1 | 9.3 |
| 20-24 | 20.9 | 14.7 | 65 and over | 3.6 | 5.9 |
| 25-34 | 26.7 | 18.2 | | | |

Data for 1940 compiled from U. S. Bur. of Census, 16th Census, 1940, Population, The Labor Force, (Sample Statistics) Occupational Characteristics. Estimates for April 1944 from Monthly Report on the Labor Force.

The proportion of hired farm laborers who are nonfarm residents has not changed substantially during the war years, because of a balancing of several changes. Migratory workers became substantially fewer; some took full-time industrial jobs, others entered the armed forces, and others ceased to be migratory workers because of transportation difficulties. To replace them, special groups have been used—workers imported principally from Mexico and Jamaica and the Bahamas, twilight armies of townspeople, soldiers on special leave, persons on vacations, high school

youths, college girls, and others.  But, in general, more of the farm work has been done by local persons, either rural residents or persons from nearby small towns.

In the South, there appears to have been a reversal of the 1930-1940 trend from sharecroppers to hired laborers, as plantation owners or managers have given sharecropper status to former hired laborers to assure a more continuous labor supply. [19]  In all parts of the country, fuller employment of farm workers has brought other kinds of changes in the composition of hired farm workers.  Some seasonal workers are now working a longer part of the year, replacing the farmers' sons who went into industry or the armed forces.  Some former migratory workers now find jobs nearby.  Operators of small farms often work for wages on neighboring farms.  In these and other ways underemployment of farm workers has been reduced.

### Status of Farm Laborers

The status of the people working as farm laborers today is the result of three historical streams in the development of our agriculture.  Perhaps of greatest influence was the apprentice wagehand—often the son of a neighboring farmer—who, in theory at least, saved his wages until he could climb to the next rung of the agricultural ladder which eventually led to ownership of a farm.  Throughout the Northeastern and North Central States, this regular hired man, whose status could approach that of the farmer's, has been for generations the predominant type of farm laborer.

In the South the prototype of the sharecropper and the hired farm laborer was the slave laborer, whose status was infinitely lower than that of the contemporary hired farm worker in the North.  In a regional culture markedly affected by slavery, there was in the years before the Civil War a carry-over of disdain for those who did manual labor, resulting in a very low status for white as well as for Negro farm laborers.

The third important type of farm laborer appeared more recently with the introduction of so-called industrialized operations into agriculture, that is, farming operations of a highly commercialized nature, conducted on a fairly large scale, and employing relatively large numbers of workers.  The seasonal laborers hired in gangs on big commercial farms are almost completely segregated culturally from their farmer-employers.  Between the status of the hired laborers who work on large-scale farms and the hired man who works alongside the farmer are gradations.  The status differences between the farmer-employer and his workers are fairly wide on commercial farms of moderate size.

The status of the hired man has declined with the increasing difficulty in moving up the agricultural ladder.  The status of the Negro farm laborer has improved since slave days, but is still affected by the vestiges of peonage not always left behind with a shift one rung up the ladder to sharecropper status.  The status of the worker groups hired on large-scale farms is far below that

19 GREENSHIELDS, E. L.   FARM TENURE CHANGES.   U. S. Bur. Agr. Econ. Agr. Situation 27 (9) :
20—23.  1943.

of organized labor groups in nonagricultural industries. Thus present hired farm laborers to a large extent have a culturally inherited status which has not been determined solely by low wage rates and earnings. Their status and wage rates are interrelated, each affecting the other. For example, in times of manpower scarcity the low status of the hired farm worker puts farmers at an additional disadvantage in competing for laborers with nonagricultural employers.

The line of cleavage in status between low-income farmers and farm laborers is blurred by the overlapping of the two groups. Considerably greater differences exist between the large and small farmers or between the regular, resident farm laborers and some groups of migratory workers than between the small farmers and many hired farm laborers. Moreover, in many farming areas, the low wages and annual earnings of the farm-laborer families, which stand in sharp contrast to those for nonagricultural wage workers, are received by families where the contrast with earnings of the neighboring families of small farmers is not nearly so great. Consequently, the difference in status may be less than the figures on earnings and income, given later, will suggest. Nevertheless, the several million people who depend primarily on earnings from farm labor have long been severely disadvantaged in comparison with almost any other occupational group in our economy.

### Distribution of Hired Farm Workers

More than half of the farmers in the United States are not affected by wage problems, since they carry on all their farming with family labor alone. Farms reporting any expenditures at all for hired labor during 1939 were only 37.1 percent of all farms. The number of farmers who were hiring labor in the 2 weeks reported by the last census were 893,000 or 14.6 percent in March and 1,110,000 or 18.2 percent in September (table 10). These figures indicate that probably somewhat less than one-fifth of the farms of the country, on the average, are hiring at any given time during the year. But there are marked regional differences in the farm-employment pattern (table 10).

TABLE 10.—*Percentage of farms hiring labor and reporting wage expenditures, United States and major geographic divisions, for specified periods*

| Area | March 24–30, 1940 | | Sept. 24–30, 1939 | | Percentage of farms reporting expenditures for hired labor during 1939 |
|---|---|---|---|---|---|
| | Percentage of farms reporting hired workers | Average number of hired workers per farm reporting | Percentage of farms reporting hired workers | Average number of hired workers per farm reporting | |
| | *Percent* | *Number* | *Percent* | *Number* | *Percent* |
| United States | 14.6 | 1.96 | 18.2 | 2.81 | 37.1 |
| New England | 20.1 | 2.05 | 24.8 | 3.05 | 39.1 |
| Middle Atlantic | 21.9 | 1.80 | 28.3 | 2.53 | 43.2 |
| East North Central | 15.5 | 1.46 | 20.5 | 1.77 | 39.9 |
| West North Central | 13.5 | 1.45 | 17.6 | 1.91 | 42.1 |
| South Atlantic | 17.2 | 2.29 | 19.5 | 2.83 | 35.7 |
| East South Central | 9.9 | 1.06 | 11.5 | 2.79 | 23.0 |
| West South Central | 12.6 | 2.34 | 15.4 | 4.39 | 35.8 |
| Mountain | 16.0 | 2.30 | 22.2 | 3.43 | 47.9 |
| Pacific | 18.3 | 2.94 | 22.2 | 5.10 | 53.8 |

Compiled from reports of the U. S. Bur. of Census, 1940 Census of Agriculture.

A striking feature of the employment structure in agriculture is the heavy concentration of hired workers on a very small proportion of all farms. In March 1940, almost a quarter of a million workers were hired on the 7,667 farms which had a total value of products of $10,000 or more in 1939 and which reported 10 or more hired workers. Thus one-tenth of 1 percent of all farms, or slightly less than 1 percent of the farms reporting hired labor, had nearly 13 percent of all hired workers.

Census data are available on number of farms hiring 10 or more workers only for farms with total value of products of $10,000 or more. Tabulations from a 2-percent sample of all farms do provide information on the number of farms reporting 1, 2, or 3 or more hired workers in the last week of March 1940.[20] Of the 893,000 farms which reported hired workers, 68 percent hired only one worker, 17 percent hired two workers and 15 percent reported three or more. The 131,000 farms with three or more hired workers, however, had nearly half (48 percent) of all hired workers. Only 31 percent of the hired workers on farms with total value of products of less than $4,000 were reported by farmers who hired 3 or more workers. The corresponding percentage for farms with total value of products of $4,000 or more was 75 percent.

Only fragmentary data are now available to indicate differences with respect to frequency of hiring among the several types of farms within a region or State. Sample data for a few States for June 1942, suggest some of the differences to be found among types of farms. Among the farms sampled in New York State, the dairy and livestock farms showed a higher percentage hiring two or more workers than farms deriving their major source of income from field crops (table 11). In Colorado, on the other hand, a

TABLE 11.—*Percentage of farms reporting two or more hired workers by type of farm for selected States, June 1942*

| Type of farm | New York | Nebraska | Colorado | Oregon | Arkansas | North Carolina |
|---|---|---|---|---|---|---|
|  | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* |
| All types reported | 15.4 | 8.5 | 25.1 | 12.9 | 20.5 | 21.4 |
| Livestock | 17.3 | 9.3 | 22.6 | 11.4 | 14.6 | 26.8 |
| Dairy | 15.2 | 8.7 | | 6.7 | 19.7 | 39.6 |
| Field crops | 13.9 | 9.1 | 34.2 | 13.2 | 27.7 | 25.6 |
| Fruit | | | 22.8 | | | |
| Family living | 9.6 | 3.0 | 5.5 | 2.4 | 7.6 | 11.0 |

Based on replies to special questionnaires received from farmers during the months of January–June 1942. Because of sample limitations the relative differences among the types of farms within the States are believed to be more indicative than the actual frequencies.

higher proportion of the farms producing sugar beets, beans, potatoes, and other relatively high labor-requiring field crops reported two or more workers in midsummer than the livestock or fruit farms in the State. Within the same type-of-farm class also, there are considerable differences among the States in the proportion of farms hiring two or more workers.

[20] See ANALYSIS OF SPECIFIED FARM CHARACTERISTICS FOR FARMS CLASSIFIED BY TOTAL VALUE OF PRODUCTS. United States Bureau of the Census, Bureau of Agricultural Economics, and Farm Security Administration. 221 pp., 1943.

The 1942 sample study also indicated that in midsummer, when the nature of farming operations in different States varies greatly according to the predominant farm type, the differences between areas in the percentage of hiring farms with three or more hired workers were much more pronounced than in a month like March. In New York and Nebraska, the percentages were 11.6 and 9.7, respectively, only moderately in excess of the percentages of hiring farms with three or more monthly hired workers in March, 1940, (7.0 percent for New York and 5.4 percent for Nebraska). However, the summer field-crop operations on cotton in Arkansas and on sugar beets in Colorado account in the main for the higher proportion of hiring farms in these States that have three or more hired workers in midsummer.

The net effect of wartime changes in the farm-employment structure has tended generally to increase the degree of concentration of hired workers. Available information indicates that the net decrease in number of hired workers has taken place mainly on family-size farms, and that the larger farms have been better able to retain or replace their hired workers than smaller farms. [21] On many farms where one regular worker was hired in the past, the family is now doing all the work with only very occasional hired help. On others where one or more workers were hired for the busiest season, families are handling all the work.

Heavy migration from farms has led in many cases to consolidation of farms, so that in general the decrease in number of farms together with the wartime expansion in crop acreage and livestock numbers has resulted in an increase, since 1939, in average size of operations on the farms that were already fairly important employers. As there has not been enough machinery to offset the higher labor requirements on farms that have expanded operations it is probable that the proportion of workers hired on relatively few farms may be even greater than before. Thus in analyses of the effects of wartime changes in farm wage rates, it must be borne in mind that, as in pre-war years, costs of hired labor in any appreciable amounts relate to only a small group of the Nation's farmers, who, however, are very important from the standpoint of production.

## 3. STRUCTURE OF FARM WAGE RATES

Hired farm workers do not generally receive the "average" wage rate. Individually they get different wages, some far above and some far below the average for all workers. In all industries the wage rates differ in amount and in method of payment among establishments, but in agriculture, where the "establishments" are widely dispersed farms, the possibilities of variations in rates and methods of payment are much greater. Even the State average rates at a given current date show nearly as great a range between the Southern and Western States as has obtained between the highest and lowest annual average farm wage rates for the country as a whole during the last 77 years of recorded information.

[21] See U. S. Bur. Agr. Econ. THE AGRICULTURAL MANPOWER SITUATION. 13 pp., 1942. (Processed.) and, LABOR AND OTHER FACTORS INFLUENCING DAIRY PRODUCTION IN THE LOS ANGELES MILKSHED, NOV. 1942 46 pp. 1943. (Processed.)

When farm-to-farm variations in wage rates within the separate 48 States are considered, together with the variations in rates paid individual workers on the same farm, the national pattern of wage variations becomes very complex. This pattern is referred to as the "structure" of farm wage rates.

The extent and nature of the variations among individual workers and farms have received less attention than the average rates. Most of these variations are obscured when we deal with an average wage rate for so large and heterogeneous an area as a whole State. They can be perceived best only when the distribution of workers at various wage levels above and below a given average is examined. Moreover, many specific wage problems—such as gauging the effects on production costs of changes in wage rates or the effects of a given minimum or ceiling wage rate—requires information on the distribution of the workers concerned by the rates they are receiving.

In general, the available data on farm wage rates are limited to State averages. For several States, sample data afford some indication of the variation in rates paid on individual farms within the given State. These are supplemented in this chapter by data on average farm wage rates for the Crop Reporting districts of the United States, each district being composed of a small group of counties. The factors responsible for the variations are difficult to isolate but a knowledge of the types of workers receiving different wages, the kinds of work they do, the kinds of farms they work on, the time of the year they work, the way they are paid, the things they get besides money, the area in which they work, and the prevailing labor-market situation, helps to explain the variations and to describe the wage structure.

### Methods of Payment

Many methods of payment of wages to farm laborers prevail. Methods of payment are frequently classified according to whether the laborer is paid on a time or a piece-work basis. During the year 1939, approximately four-fifths of all cash wages paid to farm laborers was paid by the month, week, or day, and the remaining fifth on a piece-work basis, including contract work (table 12).[22] Approximately 42 percent of the cash wages was paid to those hired on a day or week basis and 38 percent to those hired on a monthly basis.

The proportions of the 1939 cash farm wage bill paid by these methods varied considerably among regions. In the two Northeastern divisions, wages to those hired on a piece-work or contract basis were less than 10 percent of all wages paid, while in the West South Central, Mountain, and Pacific divisions, this type of payment made up around 30 percent of the cash wage bill. Cotton picking (usually paid by the hundredweight) in the South, sugar-beet work (usually paid on a per acre or per ton basis to contract labor) in the Mountain and other States, and harvesting of vege-

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[22] The census interpretation of the data on wage expenditures is that payment of wages to workers other than those hired by the month, day or week was entirely on a piece-work or contract basis. (U. S. Bur. of Census. 1940 Census of Agriculture, V. III, pp. 443, 447.) This implies that payment of wages on an hourly basis tended to be reported in some other time unit, presumably in the "day or week" category.

tables, fruits, and other specialized crops on the West Coast account for the higher proportion of the wage bill going for piecework or contract labor in these divisions.

TABLE 12.—*Distribution of cash wages paid to farm laborers, by class of laborer, United States and major geographic divisions, 1939*

| Area | Wages to all hired labor | Labor hired by the month | Labor hired by the day or week | Other hired labor (including piecework and contract work) |
|---|---|---|---|---|
| | *Percent* | *Percent* | *Percent* | *Percent* |
| United States | 100.0 | 37.5 | 41.6 | 20.9 |
| New England | 100.0 | 37.2 | 53.2 | 9.6 |
| Middle Atlantic | 100.0 | 49.9 | 40.4 | 9.7 |
| East North Central | 100.0 | 50.1 | 36.8 | 13.1 |
| West North Central | 100.0 | 47.9 | 34.4 | 17.7 |
| South Atlantic | 100.0 | 30.9 | 50.9 | 18.2 |
| East South Central | 100.0 | 29.1 | 57.4 | 13.5 |
| West South Central | 100.0 | 21.9 | 46.5 | 31.6 |
| Mountain | 100.0 | 44.7 | 28.0 | 27.3 |
| Pacific | 100.0 | 28.1 | 40.1 | 31.8 |

Compiled from reports of the U. S. Bur. of Census, 1940 Census of Agriculture.

Payment of farm wages on a time basis—month, day, or week—is the predominant method in every geographic division. Of the wages paid on this basis more than half was paid to laborers hired by the month in four of the geographic divisions, the East and West North Central, Middle Atlantic, and Mountain States, while in the other five divisions over half went to those hired by the day or week. In the three Southern divisions, where cotton and tobacco with sharp but irregular demands lead to much hiring on a time basis for periods shorter than a month, the majority of the laborers are paid by the day or week rather than by the month.

Methods of payment may be classified also according to whether the farm laborer receives as pay certain remuneration in addition to money. The forms of perquisites are varied; they may be board and lodging, meals alone, or only certain meals; housing with or without gardening privileges, fuel, vegetables, milk, or other farm products for food; clothing and sometimes minor items such as cold drinks and tobacco. The wage rate may also be affected by whether the employer or worker furnishes transportation to the place of work, or furnishes certain tools. Perquisites may take the form of privileges such as transportation (other than to work), being treated almost like a member of the household, use of the employer's tractor, truck, or other equipment on the hired man's own farm, and other informal arrangements. There are great regional variations in these practices; the high proportion of Negro farm laborers in the South, for example, has a definite effect on the nature of perquisites provided there.

A rough indication of the value of board received as pay is afforded by comparison of the Bureau of Agricultural Economics series on farm wage rates with and without board. In 1943, the average farm wage per month without board exceeded the rate with board by as much as $35 in the Pacific States and by as little as $12 in the East South Central States. Differences between the rates per day with and without board for the several major geo-

graphic divisions varied from $1.34 in the Pacific States to 44 cents in the East South Central division.

Wage information collected by a special farm labor inquiry for January, April, and June, 1942, was analyzed for six States covering a wide range in agricultural situations—New York, Nebraska, Colorado, Oregon, Arkansas, and North Carolina. These States represent several different types of farming and labor utilization, varied situations with respect to farm income, and regional differences in the effect of war upon agricultural employment and wages. The effect of the historic surplus of labor in the South is reflected in the low level of wages in Arkansas and North Carolina. Oregon illustrates an agricultural area affected by a rapid increase in war-industry jobs. The Nebraska data indicate the situation in somewhat isolated, mechanized, commercial farming areas, while New York with its dairy farming and marked metropolitan influence rounds out the picture of some of the important types of agricultural regions.

Table 13 shows the variations in frequency of the several types of payment indicated by the State samples. Monthly wages are most common in those States where livestock and dairying are

TABLE 13.—*Percentage distribution of hired workers, by methods of payment, selected States, 1942*

| Item | New York | | | Nebraska | | | Colorado | | |
|---|---|---|---|---|---|---|---|---|---|
| | Jan. | Apr. | June | Jan. | Apr. | June | Jan. | Apr. | June |
| | *Number* | *Number* | *Number* | *Number* | *Number* | *Number* | *Number* | *Number* | *Number* |
| Total workers | 808 | 501 | 564 | 464 | 299 | 391 | 388 | 540 | 608 |
| Distribution: [1] | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* |
| Total employment | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Month with board | 45.9 | 38.7 | 35.1 | 29.3 | 37.8 | 43.8 | 24.4 | 22.0 | 32.4 |
| Month without board | 19.7 | 23.7 | 23.8 | 8.2 | 18.7 | 12.8 | 28.3 | 23.5 | 21.2 |
| Day with board | 13.8 | 6.8 | 6.2 | 40.7 | 28.1 | 29.4 | 11.6 | 11.3 | 15.0 |
| Day without board | 6.8 | 15.2 | 11.2 | 8.4 | 9.0 | 9.7 | 11.8 | 19.3 | 15.3 |
| Hour with board | 4.8 | 2.4 | 14.7 | 8.9 | 1.4 | 1.5 | 1.3 | 3.3 | .6 |
| Hour without board | 9.0 | 13.2 | 9.0 | 4.5 | 5.0 | 2.8 | 22.6 | 20.6 | 15.5 |

| Item | Oregon | | | Arkansas | | | North Carolina | | |
|---|---|---|---|---|---|---|---|---|---|
| | Jan. | Apr. | June | Jan. | Apr. | June | Jan. | Apr. | June |
| | *Number* | *Number* | *Number* | *Number* | *Number* | *Number* | *Number* | *Number* | *Number* |
| Total workers | 490 | 596 | 600 | 1,314 | 1,143 | 2,681 | 890 | 1,432 | 2,169 |
| Distribution: [1] | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* |
| Total employment | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Month with board | 31.4 | 28.3 | 30.2 | 5.9 | 4.7 | 2.1 | 14.2 | 9.5 | 4.0 |
| Month without board | 8.8 | 7.7 | 9.0 | 4.2 | 3.8 | 1.9 | 8.4 | 6.2 | 2.9 |
| Day with board | 19.6 | 13.1 | 10.0 | 13.7 | 11.7 | 10.7 | 25.3 | 22.4 | 22.7 |
| Day without board | 10.4 | 10.1 | 9.2 | 60.9 | 71.2 | 78.7 | 33.3 | 40.0 | 52.2 |
| Hour with board | 10.2 | 3.9 | 5.0 | 1.5 | .5 | .4 | 6.6 | 4.8 | 3.2 |
| Hour without board | 19.6 | 36.9 | 36.6 | 13.8 | 8.0 | 6.2 | 12.0 | 17.1 | 15.0 |

[1] Piece rates are most commonly paid in connection with harvest operations. As the sample study was not continued beyond June, the information on piece rates was too limited to warrant summarization.
Based on replies to special questionnaires received from farmers during January-June 1942. The wage information related to wages paid on their own farms by reporting farmers.

dominant, whereas workers are frequently paid by the day or at piece rates in the Southern States where much of the work is highly seasonal. A considerable number of workers in Oregon

and Colorado are reported to be paid by the hour. Some are actually hired on an hourly basis where the work is for less than full days, but often workers hired by the day are reported in the "hour" category, since employers figure the rate as so much an hour for an 8- or 10-hour day; for example, $3 per day is considered 30 cents per hour for a 10-hour day.

Methods of payment are closely related to the extent and permanence of employment and to the race and marital status of the individual hired worker. In the Midwest, a farmer who operates a two-man unit frequently hires a single man to work through the crop season, paying him a monthly wage and giving him room and board. Often this is a neighbor's son. On many of the plantations in the South hired workers or "cash hands," especially those with a family of potential workers, are furnished a house so they will be available when needed. This is also a common practice in other parts of the country, particularly where a man with a family is hired "per month without board," but is provided a house, garden, and frequently other perquisites.

## Geographic Variations in Average Farm Wage Rates

Farm wage rates, like other economic indices, show great differences among the major regions and marked differences within the major regions. The regional and area variations in average farm wage levels are a result of the operation of current and historical factors which have produced rather distinctive types of agriculture and of labor practices. They are also the result of area differences in the location and development of various industries, in the population and labor supply, and in the institutions, traditions, and customs with which various population groups are more or less identified. In Chapter 5 an analysis of some of the factors associated with geographic differences in level of prevailing farm wage rates is given, whereas in this chapter the pattern of geographic variation is merely described.

Agricultural wage rates in the major geographic divisions exhibit regional variations which in general resemble the well-known pattern of differences with respect to economic development and population-resource balance. During the year 1943, as in other years, the Southern divisions had the lowest average rates and the Western divisions had the highest. Differences are great in other divisions. For example, the average rate per month with board, October 1, 1943, in the East North Central States was $60.50, whereas in the Pacific States it was $118. The average rate per day without board on October 1 for these two regions was $4.34 and $7.08, respectively. Similar regional differences are found in averages for the entire year (table 14).

The geography of wage rates shows a pattern not adequately reflected in the averages of major geographic divisions or even of States. Moreover, political boundaries of States do not necessarily coincide with areas delineated on the basis of common wage levels. Within States, there are marked differences in the levels of the different sections, as shown by the averages for groups of counties (Crop Reporting districts) in the two types of

TABLE 14.—*Farm wage rates, United States and geographic divisions, annual average, 1943*

| Area | Per month | | Per day | |
|---|---|---|---|---|
| | With board | Without board | With board | Without board |
| | *Dollars* | *Dollars* | *Dollars* | *Dollars* |
| United States | 61.91 | 72.85 | 2.87 | 3.27 |
| New England | 69.54 | 103.65 | 3.55 | 4.56 |
| Middle Atlantic | 60.09 | 89.81 | 3.34 | 4.26 |
| East North Central | 58.25 | 79.25 | 3.24 | 4.04 |
| West North Central | 66.25 | 85.75 | 3.03 | 4.56 |
| South Atlantic | 31.91 | 45.36 | 1.72 | 2.20 |
| East South Central | 30.61 | 42.16 | 1.58 | 2.02 |
| West South Central | 42.75 | 58.70 | 2.27 | 2.74 |
| Mountain | 80.14 | 107.57 | 3.86 | 4.77 |
| Pacific | 112.89 | 148.10 | 5.23 | 6.57 |

farm wage rates for October, 1943, (figs. 7 and 8). In Texas, for example, the reported average farm wage per month with board, varied from approximately $35 in the eastern part of the State to about $75 in the Panhandle area. Almost as great differences are shown between the average rates for southern and northern Illinois. Even in a State like Iowa, which is considered rather uni-
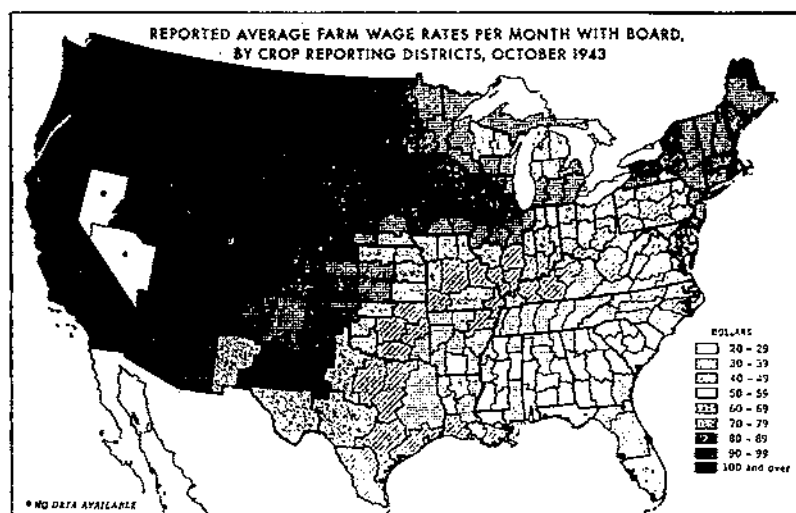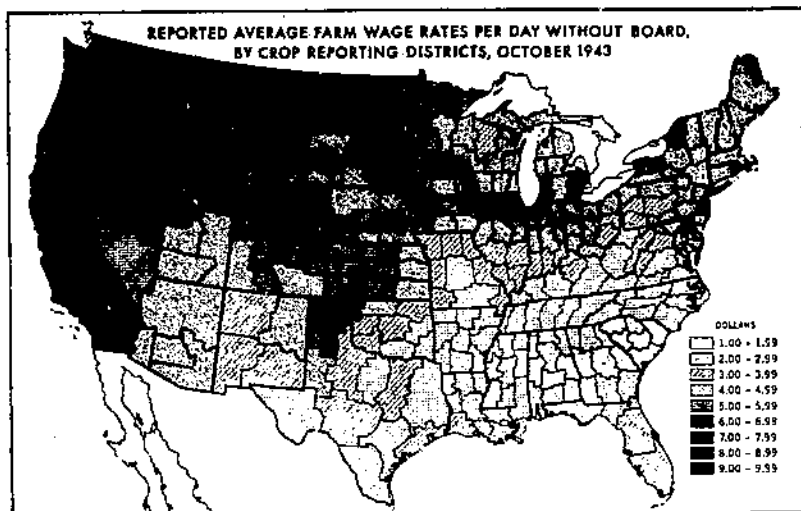


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FIGURE 7.—Most of the regular or nonseasonal workers on farms in the dairy, Corn Belt, and livestock areas are paid on a monthly basis. Within these areas there are marked differences in wage levels among the States and in different sections of the States.

form in its type of agriculture, there is a $20 spread in average wages per month with board from the southeast corner to the northeast. The day rates without board show corresponding differences within States.
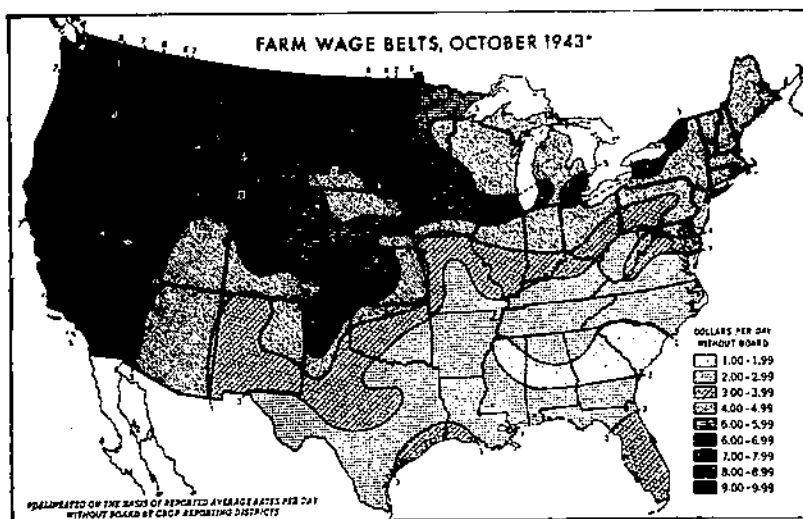
The regular and progressive geographic gradations in wage rates are clearly evident in figure 9, which is based on the map of day rates without board, by Crop Reporting districts. There is an

upward gradation in farm wage belts, starting from a low in the Southeastern States and becoming progressively higher as one proceeds northwestward across the country to the State of Wash-



BAE43521

FIGURE 8.—The geography of wage rates in agriculture shows a pattern not adequately reflected in the averages of major geographic divisions or even of States. Pronounced differences in wage levels exist in different sections of the States.



BAE43556

FIGURE 9.—Areas delineated on the basis of common wage levels do not coincide with political boundaries of States. In ...griculture, there are regular and progressive geographic gradations in wage rates, starting from a low in the Southeastern States. Successively higher wage belts follow in a northwestern course across the Great Plains, the Western range area, and the Pacific States.

ington. These low rates of between $1 to $2 a day without board in parts of the South relate to October, 1943, and are more than twice those paid in a pre-war year like 1939. In this oldest part of the Cotton Belt there is a high density of farm population, a high proportion of Negroes and sharecroppers, considerable worn-out land, and the associated conditions of low income and low living standards. Encircling this belt is the $2 to $3 per day belt which includes the rest of the South, except for Florida and parts of Texas and Louisiana.

Successively higher wage belts follow in a northwesterly course across the Great Plains, the Western Range area, and the Pacific States. The Northeastern and Middle Western areas and a part of the Corn Belt are in the $4 to $5 per day wage belt, which extends through eastern Kansas, parts of New Mexico, and Colorado, and most of Utah and Arizona. The highest wage belt, where wages were more than $9 a day, is in western Washington, encircled by a belt where wages of $8 to $9 a day were paid.

The map of wage belts, based on rates per day without board, does not give the most appropriate delineation in all areas, especially in the dairy areas, where monthly rates are more important. Figure 7 indicates more correctly the levels of prevailing wages for the Northeastern States in relation to those in other areas. But the general patterns are similar, with the areas of poorer land, lower farm income, lower living standards, and a relative labor surplus showing lower wage rates of both types.

TABLE 15.—*Piece rates paid farm workers for specified operations by States, 1942 and 1943*

| State | Picking 100 pounds seed cotton [1] 1943 | Picking strawberries, per quart | | Picking beans, per bushel | | Shearing sheep, per head June 1, 1942 | Cutting asparagus per pound June 1, 1943 |
|---|---|---|---|---|---|---|---|
| | | June 1, 1942 | June 1, 1943 | June 1, 1942 | June 1, 1943 | | |
| | *Dollars* | *Cents* | *Cents* | *Cents* | *Cents* | *Cents* | *Cents* |
| Illinois | 2.00 | | | | | | |
| Kansas | 1.05 | 3.0 | | | | 18 | |
| Maine | | | | | | | |
| New Jersey | | 3.7 | 5.0 | | | | 2.9 |
| Pennsylvania | | 2.5 | | 25 | | | |
| Ohio | | 2.6 | | | | 22 | |
| Missouri | 2.00 | 2.8 | | | | 23 | |
| Virginia | 1.80 | | 5.0 | | | | |
| North Carolina | 1.75 | 1.9 | 3.0 | 24 | 25 | | |
| South Carolina | 1.25 | | | 15 | 30 | | |
| Georgia | 1.30 | | | | 30 | | |
| Florida | 1.45 | 3.8 | | 35 | 36 | | |
| Kentucky | 2.00 | 2.8 | 3.8 | | | | |
| Tennessee | 1.80 | 3.0 | 4.2 | | | 25 | |
| Alabama | 1.40 | | | | | | |
| Mississippi | 1.70 | | | 22 | | | |
| Arkansas | 1.70 | 3.0 | | | | | |
| Louisiana | 1.50 | 3.4 | | 25 | 35 | | |
| Oklahoma | 1.95 | | | | | | |
| Texas | 1.80 | 3.7 | | | | 17 | |
| New Mexico | 2.00 | | | | | | |
| Arizona | 2.70 | | | | | | |
| California | 2.10 | | | | | | 2.8 |
| Idaho | | | | | | | |
| Washington | | 2.8 | 3.8 | | | | 2.5 |
| Oregon | | 2.8 | 4.0 | | | 15 | 3.5 |

[1] Includes rates paid for snapping bolls converted to seed-cotton equivalent.
Data for 1942 from U. S. Bur. Agr. Econ., Farm Wage Rates, Farm Employment and Related Data, January 1943; data for 1943 from U. S. Bur. Agr. Econ., Farm Labor Report, June and November 1943.

The geographic variations in wages appear also in piece rates. Interpretation of the factors making for variation in the piece rate for a particular operation on a given crop is more difficult than in the case of time rates, owing to the differences among States and areas in yields, field conditions, and varieties of the particular crop, and to the lack of standardization in the performance unit used for payment of the piece rate, and in the method of performing the operation. Daily earnings are affected by all of these variables as well as by the type and skill of the worker, so that differences in piece rates between geographic areas do not necessarily mean dissimilar daily earnings for workers of the same ability. The piece-rate differential among areas for a particular operation may represent only an allowance for differences in length of time required to perform the given unit operation, such as picking 100 pounds of cotton or 1 quart of strawberries. A summary of selected piece-rate data for recent dates, indicating State variation, is given in table 15.

### Variability of Farm Wage Rates

From the viewpoint of the farm laborer, the important figure is the wage rate he receives rather than the average of rates paid to all workers. To know how many workers receive wage rates which are some specified amount above or below the average is important when appraising the effects of changes in wage rates on production costs and in ascertaining the net shift of workers from one wage level to another.

Not all employers of farm labor (nor all workers) may be affected, for example, by an increase in average wage rates, since some who were already paying wages equal to the higher average level (or others) may not have increased wage rates at all. Similarly, the dispersion about their average of rates paid individual workers is relevant in anticipating the effects of setting floors or ceilings in wage regulation. Obviously the effects of a particular wage ceiling will depend to a considerable extent on the number of workers who received wage rates substantially above or below the ceiling adopted.

Some indications of the variability of wage rates within selected States for four common methods of payment were obtained in the Special Farm Labor Inquiry for 1942. From frequency distributions of wage rates, averages were obtained and certain measures of the variation of individual wage rates about their average (median or mean). In general, these figures indicate that approximately one-half the workers received wages differing from the median rate by no more than about 20 percent, although there are marked State differences in this percentage (tables 16 and 17). For example, one-fourth of the workers paid by the month with board on farms sampled in New York State worked at wages between $30.68 and $42.59 and one-fourth at wages between $42.59 and $52.61. Rates for this middle half of the workers fell within a range of approximately 25.8 percent of the median rate of $42.59. Rates for the lower and upper fourths of the workers were outside this range.

TABLE 16.—*Comparisons of level and variations of monthly wage rates with and without board, selected States, June 1942*

| Type of rate and State | Workers reported | Mean wage rate | Median wage rate | First quartile | Third quartile | Coefficient of variability [1] |
|---|---|---|---|---|---|---|
| | *Number* | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Percent* |
| Month with board: | | | | | | |
| New York | 198 | 41.41 | 42.59 | 30.68 | 52.81 | 25.8 |
| Nebraska | 171 | 46.83 | 47.75 | 35.00 | 55.00 | 20.9 |
| Colorado | 197 | 51.60 | 48.40 | 41.55 | 59.01 | 19.0 |
| Oregon | 181 | 68.12 | 60.61 | 49.73 | 70.74 | 17.3 |
| Arkansas | 56 | 22.64 | 22.34 | 17.82 | 26.85 | 20.2 |
| North Carolina | 106 | 21.47 | 20.65 | 14.88 | 25.56 | 25.9 |
| Month without board: | | | | | | |
| New York | 134 | 71.27 | 69.33 | 56.54 | 81.58 | 18.1 |
| Nebraska | 50 | 66.73 | 66.00 | 50.89 | 69.38 | 15.4 |
| Colorado | 129 | 71.03 | 71.54 | 60.12 | 78.98 | 13.2 |
| Oregon | 54 | 86.83 | 89.32 | 78.75 | 99.54 | 11.6 |
| Arkansas | 52 | 44.60 | 44.64 | 33.75 | 56.79 | 25.8 |
| North Carolina | 75 | 45.24 | 38.57 | 24.56 | 51.96 | 35.5 |

[1] Average of absolute differences of the first and third quartile from the median, expressed as a percentage of the median. Based on replies to special questionnaires received from farmers during January–June 1942. The wage information obtained related to wages paid on their own farms by reporting farmers.

TABLE 17.—*Comparisons of level and variations of daily wage rates with and without board, selected States, June 1942*

| Type of rate and State | Workers reported | Mean wage rate | Median wage rate | First quartile | Third quartile | Coefficient of variability [1] |
|---|---|---|---|---|---|---|
| | *Number* | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Percent* |
| Day with board: | | | | | | |
| New York | 35 | 2.11 | 1.98 | 1.48 | 2.18 | 17.7 |
| Nebraska | 115 | 2.19 | 2.05 | 1.61 | 2.46 | 20.7 |
| Colorado | 91 | 2.15 | 2.05 | 1.90 | 2.51 | 14.9 |
| Oregon | 60 | 2.92 | 2.62 | 2.23 | 3.62 | 26.5 |
| Arkansas | 287 | 1.24 | 1.15 | .99 | 1.46 | 20.4 |
| North Carolina | 594 | 1.22 | 1.17 | 1.00 | 1.41 | 17.5 |
| Day without board: | | | | | | |
| New York | | | | | | |
| Nebraska | 38 | 2.74 | 2.60 | 1.84 | 3.24 | 26.9 |
| Colorado | 93 | 2.97 | 2.94 | 2.50 | 3.45 | 16.2 |
| Oregon | 55 | 3.71 | 3.60 | 2.25 | 4.65 | 33.3 |
| Arkansas | 2,110 | 1.49 | 1.47 | 1.35 | 1.58 | 7.8 |
| North Carolina | 1,397 | 1.35 | 1.22 | 1.00 | 1.50 | 20.5 |

[1] Average of absolute differences of the first and third quartile from the median, expressed as a percentage of the median. Based on replies to special questionnaires received from farmers during January–June 1942. The wage information obtained related to wages paid on their own farms by reporting farmers.

The difference between the first and third quartiles shown in tables 16 and 17 provides an absolute measure of the dispersion of the specified type of farm wage rate in a given State, this range covering one-half of the rates for all workers reported. For a relative measure of the dispersion to be used in comparing States with very different median wage rates, such as New York and North Carolina, the average of the absolute differences of the first and third quartiles from the median has been expressed as a percentage of the median. In the case of the month-with-board rates for these States, the range between the quartiles in New York is twice that for North Carolina, but because North Carolina's median wage rate is only half that for New York the two States show approximately the same coefficient of variability.

In the case of workers hired to do a type of work in which individual skill is not especially important, the coefficient of variability tends to become very small. In Arkansas, for example, rates per day without board in June have a coefficient of only 7.8

percent, reflecting the relative uniformity of wage rates to cotton hoe hands. In Oregon, the coefficient of variability is 33.3 percent of the median rate due in part to the different kinds of tasks done by laborers hired by the day without board.

Because of the scarcity of information on the spread of wage rates, heavy reliance has been placed on averages in analyzing earnings and income of farm laborers and in problems connected with wage regulation. Repeated use of the average wage rate often causes the variations from the average to be overlooked. Where the average is either high or low, it is well to know the extent to which some groups of workers receive wages differing from it by a considerable amount. For example, the North Carolina median of $20.65 per month with board contrasts sharply with a rate of $60.61 for Oregon. Also, the much lower median for the North Carolina sample is accompanied by a greater variability in the rates. As a result, the lowest-paid fourth of the workers received less than $15 (72 percent of the median) in North Carolina, whereas in Oregon they received up to $50 (82 percent of the median).

## Variations in Wage Rates in Relation to Size and Type of Farm

Size of Farm.—Apparently the size of the farm enterprise affects the level of wage rates. On the basis of total value of production as a measure of size of operations, data from the 1940 Census on wages and hired employment in the different value groups suggest that larger farms may pay higher wage rates (table 18).

TABLE 18.—*Average annual cash wage cost per worker, by value groups of farms, United States and major geographic divisions, 1939*

| Value group | United States | New England | Middle Atlantic | East North Central | West North Central | South Atlantic | East South Central | West South Central | Mountain | Pacific |
|---|---|---|---|---|---|---|---|---|---|---|
| | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars |
| All farms | 329 | 448 | 390 | 369 | 368 | 210 | 152 | 226 | 509 | 659 |
| Classified farms [1] | 329 | 447 | 390 | 370 | 369 | 210 | 153 | 226 | 509 | 660 |
| $1- $249 | 148 | 406 | 193 | 183 | 220 | 103 | 61 | 140 | 249 | 285 |
| $250- $599 | 148 | 464 | 291 | 230 | 228 | 103 | 83 | 117 | 234 | 293 |
| $600- $999 | 162 | 274 | 188 | 297 | 224 | 126 | 101 | 133 | 274 | 366 |
| $1,000-$2,499 | 256 | 305 | 285 | 295 | 304 | 177 | 170 | 208 | 392 | 433 |
| $2,500-$3,999 | 338 | 381 | 287 | 405 | 377 | 245 | 193 | 251 | 472 | 529 |
| $4,000-$5,999 | 396 | 408 | 398 | 421 | 427 | 275 | 228 | 256 | 555 | 658 |
| $6,000-$9,999 | 454 | 450 | 518 | 592 | 536 | 283 | 304 | 275 | 621 | 758 |
| $10,000 and over | 583 | 659 | 693 | 707 | 571 | 404 | 279 | 344 | 669 | 868 |

[1] All farms reporting some value of products sold, traded, or used by farm households in 1939.

Based on data from ANALYSIS OF SPECIFIC FARM CHARACTERISTICS FOR FARMS CLASSIFIED BY TOTAL VALUE OF PRODUCERS, Bur. of Census, Bur. Agr. Econ., and Farm Security Admin. 1943. The annual average number of hired workers is estimated on basis of hired workers reported at the two census dates from the relation of April 1, and October 1 hired farm employment to annual average hired farm employment in the Bureau of Agricultural Economics series. The average annual cash-wage cost per hired worker represents average wage cost for 12 man-months of work. Such a man-year of hired labor is the common unit for all value classes, but the actual content of the man-year in terms of days of hired labor used may vary in the several value classes. Available data do not provide the necessary information on average number of days worked per month by the estimated monthly average number of workers to afford a measure of labor input in terms of days or hours.

For the United States as a whole the estimated annual cash-wage cost per hired worker was only $154 on farms with value of products of less than $1,000 as compared with $327 on farms with total value of products of from $1,000 to $10,000 per farm, and with $583 on farms of $10,000 or more value of products per farm.

This relationship is not due merely to the preponderance of Southern farms in the lower value-of-production classes and the low rates of farm wages in the South. In every geographic division the relationship between annual average cash-wage cost per hired worker and total value of products per farm is similar. In most areas the wage cost per worker is slightly higher in the very lowest income groups than in the next higher group. This is probably due to the fact that the very lowest groups contain many farms which are not bona fide low-income farms, being either rural residence for part-time or retired operators, farms which had partial crop failures during 1939, or farms which were just going into operation.

From the group of farms reporting a production per farm value of from $600 to $999 in 1939, every major geographic division shows a steady rise in the annual wage cost per hired worker in the progressively higher value groups. (A minor exception occurs in the East South Central States). Probably several factors cause such differentials. Farms with higher average production may hire more of those types of laborers who are generally paid at higher rates, they may pay higher rates on the average for a given type of labor, and the man-year of hired work involved may average more days. The relative influence of these factors in producing higher wage costs per man-year of hired labor on larger farms cannot be ascertained. Other data are needed before it can be learned conclusively whether operators of larger farms in a particular area pay for a given type of work and quality of worker a higher rate than do operators of smaller farms.

The only criterion of size of operation available from the 1942 sample study is the number of crop acres, which is not entirely satisfactory as a measure of size of enterprise in States where livestock and dairying are important, or where there are other predominant types of farms which utilize different acreages of cropland for comparable scales of operation. Moreover, many of the State samples for certain classes of wage rates by type of payment are so small that when broken down into size-of-farm groups the medians are subject to a considerable margin of sampling error.

For month-with-board wage rates, the correlation of wage level with size of farm is suggested by data for New York, Nebraska, and Colorado, but not by the information from Oregon and North Carolina (table 19). Undoubtedly type-of-farm differences tend to obscure the relationship of the level of wage rates with size of farm when comparisons are possible only on a crop-acre basis. In every State, however, the median wage reported on farms in the largest size group is higher than the median wage for all sizes. In New York the median wage for farms with 200 or more acres of cropland was 32 percent above the median wage rate for farms of less than 50 acres.

For monthly rates without board, the sample data by size of farm were available only for New York and Colorado; the other States have comparatively few workers paid in this way (table 20). Again the New York figures, which are from a sample predominantly of dairy farms, show a positive relationship between the wage level and size of farm, but the Colorado figures for June,

1942, show the highest average wage rates in the size class next to the largest. But similar figures for Colorado for the months of January and April show no consistent relationship between size of farm and wage level. The heterogeneous nature of agriculture in Colorado makes the cropland criterion of size of farm a poor indicator of differences in scale of operation for different types of farms.

TABLE 19.—*Farm wage rates per month with board, by size of farm, for selected States, June 1942*

| State and size of farm in crop acres | Workers reported | Median wage rate | State and size of farm in crop acres | Workers reported | Median wage rate |
|---|---|---|---|---|---|
| | *Number* | *Dollars* | | *Number* | *Dollars* |
| New York: | | | Oregon: | | |
| All sizes | 198 | 42.59 | All sizes | 191 | 60.61 |
| 0 to 49 | 32 | 37.50 | 0 to 49 | 22 | 47.50 |
| 50 to 99 | 85 | 40.21 | 50 to 99 | 28 | 55.83 |
| 100 to 199 | 61 | 47.04 | 100 to 199 | 45 | 64.50 |
| 200 and over | 20 | 49.50 | 200 to 299 | 12 | 62.50 |
| | | | 300 and over | 74 | 61.88 |
| Nebraska: | | | | | |
| All sizes | 171 | 47.75 | North Carolina: | | |
| 0 to 99 | (¹) | (¹) | All sizes | 106 | 20.65 |
| 100 to 199 | 32 | 44.17 | 0 to 19 | 11 | 23.75 |
| 200 to 299 | 30 | 46.50 | 20 to 49 | 39 | 19.87 |
| 300 and over | 105 | 49.05 | 50 to 99 | 35 | 19.56 |
| | | | 100 to 199 | 16 | 21.94 |
| Colorado: | | | 200 and over | (¹) | (¹) |
| All sizes | 197 | 48.40 | | | |
| 0 to 99 | 19 | 45.54 | | | |
| 100 to 199 | 43 | 46.34 | | | |
| 200 to 299 | 29 | 48.28 | | | |
| 300 and over | 106 | 50.40 | | | |

¹ Inadequate data.
Based on replies to special questionnaires received from farmers during January–June 1942. Wage information obtained related to wages paid on their own farms by reporting farmers.

TABLE 20.—*Farm wage rates per month without board, by size of farm, for New York and Colorado, June 1942*

| State and size of farm in crop acres | Workers reported | Median wage rate | State and size of farm in crop acres | Workers reported | Median wage rate |
|---|---|---|---|---|---|
| | *Number* | *Dollars* | | *Number* | *Dollars* |
| New York: | | | Colorado: | | |
| All sizes | 134 | 69.33 | All sizes | 129 | 71.54 |
| 0 to 49 | (¹) | (¹) | 0 to 99 | 21 | 71.87 |
| 50 to 99 | 23 | 64.60 | 100 to 199 | 42 | 70.11 |
| 100 to 199 | 65 | 67.00 | 200 to 299 | 18 | 75.00 |
| 200 and over | 36 | 71.45 | 300 and over | 48 | 71.59 |

¹ Inadequate data.
Based on replies to special questionnaires received from farmers during January–June 1942. Wage information obtained related to wages paid on their own farms by reporting farmers.

Only Arkansas and North Carolina samples contained sufficient workers to justify the tabulations to obtain medians for day rates with and without board, by size of farm (table 21). No clear trend is apparent in the case of Arkansas. Although the trend is somewhat irregular in North Carolina, there is a suggestion of a negative correlation of the day rates with size of farm. This may be partly due to the inadequacy of crop acres as a measure of size of enterprise for comparisons involving, as in this case, cotton and tobacco farms where a given cropland acreage may mean quite different scales of operation. Factors

operating in the direction of producing lower rates on larger farms may be the presence of other inducements to workers—employment for somewhat longer periods, better field conditions making the work easier, and possibly such conditions as workers' preference for working in groups, and in some cases perquisites.

In some situations piece rates are higher on small farms than on large. The following observation by William H. Metzler of the Bureau of Agricultural Economics is illuminating:

During January of the 1942-43 cotton picking season large growers on the west side of the San Joaquin Valley, California, were paying $2.50 per hundred pounds while small growers on the east side were averaging $2.75. Even with that differential... workers on the west side reported earnings of 91 cents an hour compared with 59 cents on the east side. The large operator has advantages in capital and equipment that enable him to put his soil in better condition, keep weeds down more effectively, and produce heavier yields. Workers usually prefer to work on such farms unless a sufficient wage differential is paid to make it worth their while to work on small farms. When both types of farms are held to the same wage rate the larger operator obtains his workers first and has some power of selection as to whom he will or will not hire, while the smaller operator must take those that remain.

Labor contractors with large crews prefer to work for the large operators who can keep their crews busy for an extensive period. Large family groups prefer to do the same. Neither care to break up their group if they can help it. They will go to the smaller jobs after the larger ones have been taken. Large growers have housing for seasonal workers much more frequently than the smaller ones. This advantage is capable of great stretching if the grower feels that it is necessary. He can expand housing to include lights, water, fuel, use of a milk cow, feed for the cow, milk, vegetables, fruit, gasoline, a trip to town once or twice a week, alcoholic stimulants, entertainment, or other items that will attract or hold workers.

TABLE 21.—*Farm wage rates per day, with and without board, by size of farm, for Arkansas and North Carolina, June 1942*

| State and size of farm in crop acres | Per day with board | | Per day without board | |
|---|---|---|---|---|
| | Workers reported | Median wage rate | Workers reported | Median wage rate |
| | *Number* | *Dollars* | *Number* | *Dollars* |
| Arkansas: | | | | |
| All sizes | 287 | 1.15 | 2,110 | 1.47 |
| 0 to 19 | 35 | 1.09 | 89 | 1.42 |
| 20 to 49 | 134 | 1.17 | 392 | 1.49 |
| 50 to 99 | 74 | 1.12 | 365 | 1.48 |
| 100 to 199 | 35 | 1.28 | 432 | 1.48 |
| 200 to 299 | | | 109 | 1.44 |
| 300 and over | 9 | 1.25 | 723 | 1.47 |
| North Carolina: | | | | |
| All sizes | 504 | 1.17 | 1,367 | 1.22 |
| 0 to 9 | 41 | 1.29 | 48 | 1.51 |
| 10 to 19 | 112 | 1.21 | 121 | 1.34 |
| 20 to 49 | 285 | 1.18 | 367 | 1.29 |
| 50 to 99 | 91 | 1.16 | 321 | 1.09 |
| 100 to 199 | 52 | 1.05 | 172 | 1.24 |
| 200 and over | | | 338 | 1.11 |

Based on replies to special questionnaires received from farmers during January-June 1942. Wage information obtained related to wages paid on their own farms by reporting farmers.

In Arkansas, the day rates in June were heavily weighted by payments to the most unskilled class—the hoe hands, cotton choppers, etc.  With plenty of such labor in the South, there was no necessity for one group of farmers to pay more than another group for this kind of work.  Consequently no marked differences appeared in the median wage rates for farms of different size.

Type of Farm—The type of farm as well as the size is a factor associated with differences in wage levels, since the type of enterprise determines the kinds of work, the skills required, and the duration of the work.  For June, 1942, estimates of average wage rates by type of farm for major geographic divisions have been developed from reports of about 50,000 farmers (table 22).  According to these indications, workers on vegetable farms and on livestock farms received the highest average wage per day without board for the country as a whole. The United States average is the same for livestock and vegetable farms ($2.10), but within the regions the averages for the two types differ. In New England, Middle Atlantic, and the Mountain divisions, the average daily rates on livestock farms were considerably higher than on vegetable farms, but the reverse was true in five other geographic divisions.

TABLE 22.—*Farm wage rates per day without board, by type of farm, United States and geographic divisions, June 1, 1942*

| Area | Live-stock | Dairy | Poultry | Field crops | Vege-tables | Fruits and nuts | Self-suf-ficing [1] | All farms |
|---|---|---|---|---|---|---|---|---|
| | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars |
| United States | 2.10 | 1.85 | 1.65 | 2.00 | 2.10 | 2.00 | 1.80 | 1.85 |
| New England | 3.80 | 3.10 | 2.35 | 3.30 | 3.10 | 3.10 | 3.30 | 3.15 |
| Middle Atlantic | 3.50 | 2.40 | 2.85 | 2.85 | 2.75 | 2.85 | 2.35 | 2.85 |
| East North Central | 2.45 | 2.70 | 2.70 | 2.70 | 2.95 | 2.70 | 2.15 | 2.60 |
| West North Central | 2.60 | 2.10 | 2.10 | 3.10 | 3.10 | | 2.10 | 2.55 |
| South Atlantic | 1.30 | 1.50 | 1.30 | 1.10 | 1.50 | 1.75 | 1.30 | 1.40 |
| East South Central | 1.20 | 1.20 | 1.00 | 1.20 | 1.40 | 1.30 | 1.20 | 1.20 |
| West South Central | 1.50 | 1.50 | 1.75 | 1.50 | 1.50 | 1.50 | 1.50 | 1.55 |
| Mountain | 3.00 | 2.50 | 2.50 | 3.00 | 2.75 | 2.75 | 2.50 | 2.75 |
| Pacific | 3.45 | 3.25 | 2.20 | 3.50 | 4.30 | 3.40 | 3.40 | 3.25 |

[1] A miscellaneous group of farms on which the major single source of income was represented by products grown on the farm and used at home.

Based on replies to special questionnaires received from farmers during January–June 1942.  Wage information obtained related to wages paid on their own farms by reporting farmers.

Outside of New England and the Middle Atlantic States, vegetable farms ranked first or second in level of day rates without board, being first in four geographic divisions, second in three divisions.  The June, 1942, day rates without board on fruit and nut farms were not greatly different from those on vegetable farms, except in the Pacific States, where they were substantially lower.

Somewhat surprisingly, the rate for workers on dairy farms is one of the lowest and is about the same as on the so-called self-sufficing farms.  But it must be recalled that workers hired on dairy farms at a day rate include many who are "picked up" for a day's or a few days' work.  Their work would be relatively unskilled.  This also applies to day workers on poultry farms, except

that their work is usually somewhat lighter, so that less able-bodied workers could be used if necessary.

## Variation Within Type of Farm

Special studies were made by the Bureau of Agricultural Economics in the fall of 1942 of the dairy labor situation in three milksheds, Los Angeles, Kansas City, and Jefferson County, Wis.[28] These studies illustrate the variation of wage rates for dairy workers within an area according to the special type of job performed, and the variation between areas in average rates of pay for the same type of work. The average monthly rate for all dairy workers on the farms surveyed in the Los Angeles milkshed was $180 a month, while it was only $83 in the Kansas City milkshed, and even less in Jefferson County, Wis. Within the Los Angeles milkshed, differences in monthly rates for the same jobs among the subareas of the milkshed were as follows:

| Type of job | Los Angeles dry-lot (dollars) | San Bernardino (dollars) | South San Joaquin Valley (dollars) |
|---|---|---|---|
| Hand milker | 179 | 155 | 141 |
| Machine milker | 209 | 155 | 147 |
| General dairy hand | 109 | 108 | 108 |

The Los Angeles study showed that for the same type of work the larger dairy farms generally paid higher rates even within the same subarea. The average monthly rates for two types of dairy workers in the dry-lot area of Los Angeles County were as follows:

| Size of dairy | Hand milker and stripper (dollars) | Machine milker (dollars) |
|---|---|---|
| All sizes | 179 | 209 |
| Less than 50 cows | 130 | |
| 50-99 cows | 171 | 202 |
| 100-199 cows | 181 | 204 |
| 200 or more cows | 204 | 215 |

The average wage rates of $179 for the hand milker and $209 for the machine milker in the Los Angeles dry-lot area covered a wide variation of individual rates. Even after certain "standards" were defined to exclude physically handicapped workers and to exclude others with unusual amounts of perquisites or special arrangements, the hand milkers on these so-called standard jobs received all the way from $140 a month to more than $240 a month, and the machine milkers from $160 to $300.

Such a spread in wages for the same type of work was in part due to the wartime scarcity of labor in the Los Angeles milkshed area and the practice of "bidding up" among dairymen for the available experienced workers. In October 1941, the rate for hand milkers on the largest dairies (200 or more cows) in the dry-lot area of Los Angeles was only 7 percent more than the average of $137 for all farms, whereas in October 1942, it was 14 percent above the average. These data, however, provide no basis of inference as to whether wartime influences in other areas and

[28] See the following processed publications by the U. S. Bur. Agr. Econ.: LABOR AND OTHER FACTORS INFLUENCING DAIRY PRODUCTION IN THE LOS ANGELES MILKSHED, NOV. 1942. 45 pp. 1943; THE DAIRY LABOR SITUATION IN THE KANSAS CITY MILKSHED, NOV. 1942. 45 pp. 1943; THE FARM LABOR SITUATION ON WISCONSIN DAIRY FARMS. 25 pp. 1942.

types of farms have led to greater variability in the wage rates paid individual workers for the same type of work.

Other wartime developments connected with the program of stabilizing farm wage rates have probably tended to reduce the variability in rates for crops and areas in which specific wage ceilings have been set by the War Food Administrator. (See Chapter 8.)

## 4. WAGES AS AN EXPENSE OF AGRICULTURAL PRODUCTION

Farmers' expenditures for hired labor or the farmers' wage bill have two aspects—one as an expense of production to farm operators, and the other as income to hired farm laborers. Both the income and the expense aspects of the wages paid are important in agricultural problems, whether these problems are considered on a national or on a broad regional basis, for farms of a given type or for individual farms.

### Hired Laborers' Share of the National Farm Income

During the 30 years preceding 1940, the annual wage bill, including value of perquisites furnished to hired farm workers, averaged slightly more than 1 billion dollars, with a high of 1.8 billion dollars in 1920 and a low of 0.5 billion dollars in 1933 (table 23). During the 30-year period, gross farm income averaged 10.8 billion dollars a year and expenses of production averaged 6.0 billion a year. The wage bill during these years amounted to 9.5 percent of gross farm income. In relation to net income received from farming by all persons engaged in agriculture (operators, unpaid family workers, and hired workers), wages averaged 17.6 percent in the period 1910-39.

TABLE 23.—*Farm wages in relation to gross and net farm income, 5-year averages, 1910–39, annual 1940–43, United States*

| Period | Gross farm income [1] | Net farm income to all persons engaged in agriculture [2] | Wages and perquisites to hired labor | | |
|---|---|---|---|---|---|
| | | | Amount | As percentage of gross farm income | As percentage of net farm income to all persons engaged in agriculture |
| | *Million dollars* | *Million dollars* | *Million dollars* | *Percent* | *Percent* |
| Annual: | | | | | |
| 1943 | 22,738 | 13,979 | 1,933 | 8.5 | 13.8 |
| 1942 | 18,474 | 10,820 | 1,566 | 8.5 | 14.5 |
| 1941 | 13,799 | 7,599 | 1,197 | 8.7 | 15.8 |
| 1940 | 10,962 | 5,617 | 1,000 | 9.1 | 17.8 |
| Averages: | | | | | |
| 1935–39 | 10,424 | 5,626 | 928 | 8.9 | 16.5 |
| 1930–34 | 8,343 | 3,508 | 736 | 8.8 | 21.0 |
| 1925–29 | 13,479 | 7,130 | 1,280 | 9.5 | 18.0 |
| 1920–24 | 12,372 | 6,162 | 1,301 | 10.5 | 21.0 |
| 1915–19 | 12,918 | 7,812 | 1,139 | 8.8 | 14.6 |
| 1910–14 | 7,491 | 4,417 | 784 | 10.5 | 17.7 |

[1] In addition to cash income from farm marketings, the gross income figure includes Government payments, value of farm products consumed at home, and rental value of dwellings, but does not include an adjustment for inventory changes.
[2] Represents the net after deducting from gross farm income all production expenses except wages and perquisites to hired labor. Thus it is the net income from farming to operator families and hired workers.

By 1943, the wartime rise in farm wage rates had increased the year's total wage bill to an estimated 1.9 billion dollars, the highest on record. Yet in relation to the net farm income of all persons engaged in agriculture, the total 1943 wage expenditures constituted a smaller percentage than in any of the preceding 33 years except in 1917-18 during the first World War, and in 1934 during the depression. The wage bill absorbed 13.8 percent of the 1943 net farm income as compared with 17.8 percent in 1940, or a low of 13.3 percent in 1918.

Differences in wage rates and in amounts of hired labor used in the several major geographic divisions bring about regional variations in the hired laborers' share of farm income. As the value of perquisites comprises a part of the laborer's remuneration, regional differences in the wage bill are partly affected by the prevailing perquisite practices in the areas.

Over the span of the last 30-odd years, perquisites have tended to comprise a smaller proportion of laborers' remuneration. In the period of 1910-14, perquisites made up approximately 30 percent of the total wage bill. Except for the depression years when the cash wage bill shrank relatively more than the value of perquisites, the relative importance of perquisites has declined steadily. By 1940, perquisites made up only 20.6 percent of the total wage bill and they continued to decline, the preliminary estimate for 1943 being 15.5 percent.

## Wages as an Expense of Production

Changes in farm wage rates can affect actual production expenses only in the outlays made for hired labor. [24] The effect of the changes in wage costs on total production expenses depends on the proportion that wages comprise of all such expenses. The relative importance of wages as an item of farm-production expenses varies with type of farm, size of farm, among areas, and over a period of time. So far as costs of production exert pressure on prices of agricultural commodities through producers' demands for higher prices to compensate for higher costs, the increase in total production expenses that can be associated with a given increase in wage costs is dependent on the ratio of hired labor costs to all production expenses. For example, if a farmer has to pay his labor 20 percent more in one year as compared with another, but if his wage expenses make up only 20 percent of his total production expenses, the 20-percent increase in wages would result in only a 4-percent increase in his total expenses.

From 1910 through 1934, wages showed a steady decline for each successive 5-year period in the percentage they made up of total production expenses. The proportion decreased from 20.3

[24] In an important sense, the real cost of production is not measured fully by the sum total of production expenses, which as customarily defined includes all direct operating expenditures and the overhead expenses for depreciation and maintenance of capital equipment. The total labor input is far greater than the man-hours or man-days of hired labor input, except on the very small proportion of farms which use hired labor almost exclusively. The input of the operator's and his family's labor, though not reckoned as an expense of production, does represent a "real" cost which the net returns from farming should reward if those engaged in agriculture are to attain an adequate level of living and to make the maximum contribution to the production of food. In a strictly economic sense, however, the effects of wage-rate changes on farm-production costs and farm income are limited to the actual wage expenditures for hired labor.

percent in 1910-14 to 14.0 percent in 1930-34 (table 24). An increasing proportion of expenses, however, went for farm machinery and equipment (including motor vehicles), which rose from 10.6 percent of total production expenses in the period 1910-14 to 17.4 percent in the period 1930-34.

With some recovery from the depression, both labor and machinery costs showed increased percentages of total production expenses. Overhead costs, which had lagged behind income changes during the depression, eventually declined both absolutely and relatively in the 1935-39 period, when labor, machinery, and other operating expenses costs were expanding.

TABLE 24.—*Distribution of agricultural production expenses by major categories United States, 5-year averages, 1910-39, annual 1940-43*

| Period | Production expenses | | Wages and perquisites to hired labor | | Farm machinery, equipment and motor vehicle costs | | | | Selected current operating costs[1] | | Overhead costs[2] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Maintenance and depreciation | | Operation of motor vehicles | | | | | |
| | Total | Percentage of total | Amount | Percentage of total | Amount | Percentage of total | Amount | Percentage of total | Amount | Percentage of total | Amount | Percentage of total |
| | *Million dollars* | *Percent* | *Million dollars* | *Percent* | *Million dollars* | *Percent* | *Million dollars* | *Percent* | *Million dollars* | *Percent* | *Million dollars* | *Percent* |
| Annual: | | | | | | | | | | | | |
| 1943[3] | 10,692 | 100.0 | 1,933 | 18.1 | 724 | 6.8 | 752 | 7.0 | 4,622 | 43.2 | 2,661 | 24.9 |
| 1942 | 9,220 | 100.0 | 1,566 | 17.0 | 706 | 7.6 | 752 | 8.2 | 3,827 | 41.5 | 2,369 | 25.7 |
| 1941 | 7,401 | 100.0 | 1,197 | 16.2 | 631 | 8.5 | 698 | 9.4 | 2,887 | 39.0 | 1,991 | 26.9 |
| 1940 | 6,345 | 100.0 | 1,000 | 15.8 | 568 | 9.0 | 624 | 9.8 | 2,425 | 38.2 | 1,728 | 27.2 |
| Averages: | | | | | | | | | | | | |
| 1935-39 | 5,730 | 100.0 | 928 | 16.2 | 404 | 8.8 | 546 | 9.5 | 2,026 | 35.4 | 1,736 | 30.3 |
| 1930-34 | 5,274 | 100.0 | 736 | 14.0 | 416 | 7.9 | 504 | 9.5 | 1,774 | 33.6 | 1,844 | 35.0 |
| 1925-29 | 7,630 | 100.0 | 1,280 | 16.8 | 450 | 5.9 | 631 | 8.3 | 2,701 | 36.6 | 2,478 | 32.4 |
| 1920-24 | 7,490 | 100.0 | 1,301 | 17.4 | 276 | 3.7 | 711 | 9.5 | 2,706 | 36.1 | 2,496 | 33.3 |
| 1915-19 | 6,245 | 100.0 | 1,139 | 18.2 | 135 | 2.2 | 544 | 8.7 | 2,373 | 38.0 | 2,054 | 32.9 |
| 1910-14 | 3,858 | 100.0 | 784 | 20.3 | 20 | .5 | 300 | 10.1 | 1,446 | 37.5 | 1,217 | 31.6 |

[1] Includes purchased feeds, livestock, fertilizer, lime, and miscellaneous expenses.
[2] Maintenance or depreciation of buildings, taxes, farm-mortgage interest, and rent paid to landlords not living on farms.
[3] Data for 1943 are preliminary.

For 1943, the total production expenses absorbed a smaller percentage of gross farm income than for any other year on record except 1917 and 1918, when the percentages were practically the same as in 1943. This, together with the record gross income level, resulted in the highest net income to operators ever realized. Only 47 percent of the gross farm income was required to meet 1943 production expenses, as compared with 58 percent in 1940 and 48 percent during the years 1915-19. Thus the proportion of the total gross farm income going to pay wages was smaller than in any of the 5-year averages between 1910 and 1939, despite the relatively large share of expenses going for wages.

The relative importance of wage costs in agriculture varies considerably among areas and by size of farm business. Available census and other data provided the basis for estimating total agricultural production expenses in major geographic divisions for farms classified by total value of products (table 25). Wage pay-

ments on all farms reporting some production averaged 10.6 percent of the total value of production and 17.5 percent of total production expenses for the United States during 1939. In the West North Central States where general overhead costs and operation of farm machinery make up a large proportion of expenses, labor costs represented the lowest proportion of total value of production and of total expenses, 6.8 percent and 10.2 percent, respectively. Extensive mechanization of farming operations in the West North Central States and the large proportion of farms operated primarily by family labor are both factors in the low ratio of wage costs to other production expenses.

At the other extreme were the Pacific States with wage costs showing the highest ratio. The production of crops that have high labor requirements, the large-scale farming, and the relatively high wages in the Pacific States led to hired labor costs which were 18.7 percent of the total value of production and 26.2 percent of total production expenses.

TABLE 25.—*Wages to hired labor as percentage of total value of agricultural production and of total production expenses, by value groups of farms, United States and geographic divisions, 1939*

WAGES TO HIRED LABOR AS A PERCENTAGE OF TOTAL VALUE OF PRODUCTION

| Value group | United States | New England | Middle Atlantic | East North Central | West North Central | South Atlantic | East South Central | West South Central | Mountain | Pacific |
|---|---|---|---|---|---|---|---|---|---|---|
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| All classified farms___ | 10.6 | 15.5 | 14.0 | 5.7 | 6.8 | 11.5 | 7.4 | 10.9 | 13.8 | 18.7 |
| $1-  $399__ | 6.8 | 18.1 | 15.2 | 8.2 | 6.4 | 6.4 | 3.3 | 5.1 | 12.7 | 19.0 |
| $400-  $999__ | 5.6 | 13.4 | 8.8 | 5.7 | 4.8 | 5.4 | 3.5 | 5.4 | 10.8 | 11.9 |
| $1,000-$2,499__ | 8.0 | 11.3 | 9.5 | 6.6 | 5.6 | 8.8 | 8.1 | 10.4 | 12.2 | 13.8 |
| $2,500-$3,999__ | 9.8 | 11.0 | 9.5 | 8.5 | 7.0 | 13.7 | 12.4 | 13.8 | 12.2 | 14.8 |
| $4,000-$9,999__ | 13.0 | 14.4 | 16.1 | 10.2 | 8.0 | 19.7 | 18.2 | 16.1 | 14.7 | 18.6 |
| $10,000 and over | 18.5 | 23.4 | 25.2 | 17.3 | 8.8 | 26.8 | 23.6 | 16.2 | 16.7 | 22.2 |

WAGES TO HIRED LABOR AS A PERCENTAGE OF TOTAL PRODUCTION EXPENSES

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| All classified farms___ | 17.5 | 23.9 | 22.4 | 14.3 | 10.2 | 22.8 | 16.6 | 20.1 | 20.2 | 26.2 |
| $1-  $399__ | 9.0 | 17.8 | 13.9 | 7.3 | 4.7 | 12.2 | 8.2 | 9.1 | 8.3 | 11.7 |
| $400-  $999__ | 11.0 | 19.7 | 15.0 | 8.9 | 6.1 | 15.2 | 11.0 | 14.2 | 11.1 | 14.2 |
| $1,000-$2,499__ | 13.7 | 18.5 | 16.7 | 11.6 | 8.5 | 19.9 | 17.2 | 19.3 | 14.8 | 18.1 |
| $2,500-$3,099__ | 16.0 | 16.8 | 16.4 | 14.8 | 11.5 | 24.4 | 21.4 | 21.0 | 18.7 | 20.4 |
| $4,000-$9,999__ | 20.0 | 22.7 | 24.1 | 16.9 | 13.0 | 27.7 | 24.8 | 23.7 | 22.6 | 24.9 |
| $10,000 and over | 29.8 | 37.9 | 40.1 | 30.4 | 14.1 | 36.0 | 29.8 | 27.5 | 28.5 | 35.9 |

Estimated from Census and Bureau of Agricultural Economics data. Estimates for "all classified farms" are adapted from NORCROSS, H. C., STATE ESTIMATES OF EXPENSES AND NET INCOME FROM AGRICULTURE, 1929, 1939-42. Bur. Agr. Econ., May 1944, with minor modifications to make them comparable with the estimates by value groups of farms.

Within major geographic divisions, the relative importance of wage costs varies by size of farm business. In the South Central States there is a steady upward progression in the importance of wage costs from the lowest to the highest value-of-production class as is shown in table 25. In the other divisions the costs of hired labor are relatively more important in the lowest value group than in the next to the lowest, probably because the farms with value of production of less than $400 represent a mixed group of some bona fide low-income farms, some part-time and retirement units, and some farms that had partial crop failure in 1939. Beginning with the group of farms with value of production of from $400 to $1,000 there is a clear upward trend in the relative im-

portance of wage costs shown by the successively higher value-of-products classes. This is true in the case of all divisions except the New England and Mountain States where the upward trend begins in higher value-of-products classes.

These marked differences in the importance of wage costs on farms of different size of enterprise confirm the point made in Chapter 1—that statistics for "all farms" are not satisfactory for analysis of relationships between wage costs and net income, when the data regarding income and expenses should relate to those farms which are actually "hiring" farms.

For comparison of wage costs with other expenses and with net income, estimates are presented in table 26 for the farms in each major geographic division with total value of products per farm of $4,000 or more in 1939. (See Chapter 1, p. — for a discussion of these farms as "hiring" farms). For the United States as a whole, the gross farm income from these farms (excluding Government payments and rental value of dwelling) is estimated to have been distributed as follows: 15.7 percent to hired labor, 48.1 percent for other production expenses, and 36.2 percent as net income to farmers. Thus of the $8,959 total value of production per farm in these income groups on the average, $1,404 went to pay for 2.7 man-years of hired labor at $521 per man-year, $4,307 went to pay for all other production expenses, and $3,248 was left for the farmer as the net return for his own and his family's labor and management and for his capital investment, or $2,305 for family labor and management alone.

TABLE 26.—*Allocation of gross farm income to hired labor, all other production expenses and net returns to family labor, capital, and management, on farms with gross value of production of $4,000 or more, United States and major geographic divisions, 1939*

| Area | Total value of products per farm | | Wages to hired labor per farm | | All other production expenses [1] | | Net returns per farm | | Wages per man-year of hired labor | Hired labor per farm |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Percentage of total | Amount | Percentage of total | Amount | Percentage of total | Amount | Percentage of total | | |
| | *Dollars* | *Percent* | *Dollars* | *Percent* | *Dollars* | *Percent* | *Dollars* | *Percent* | *Dollars* | *Man-years* |
| United States | 8,959 | 100.0 | 1,404 | 15.7 | 4,307 | 48.1 | 3,248 | 36.2 | 521 | 2.69 |
| New England | 9,042 | 100.0 | 1,689 | 18.7 | 3,964 | 43.8 | 3,389 | 37.5 | 527 | 3.20 |
| Middle Atlantic | 8,317 | 100.0 | 1,659 | 20.0 | 3,764 | 45.2 | 2,894 | 34.8 | 584 | 2.84 |
| East North Central | 7,263 | 100.0 | 908 | 12.5 | 3,408 | 46.9 | 2,947 | 40.6 | 633 | 1.43 |
| West North Central | 7,713 | 100.0 | 638 | 8.3 | 4,121 | 53.4 | 2,954 | 38.3 | 584 | 1.09 |
| South Atlantic | 9,440 | 100.0 | 2,207 | 23.4 | 4,665 | 49.4 | 2,568 | 27.2 | 369 | 5.98 |
| East South Central | 8,265 | 100.0 | 1,695 | 20.5 | 4,573 | 55.3 | 1,997 | 24.2 | 309 | 5.49 |
| West South Central | 10,627 | 100.0 | 1,716 | 16.2 | 4,944 | 46.5 | 3,967 | 37.3 | 344 | 4.98 |
| Mountain | 10,653 | 100.0 | 1,689 | 15.8 | 4,820 | 45.3 | 4,144 | 38.9 | 667 | 2.53 |
| Pacific | 12,338 | 100.0 | 2,590 | 21.0 | 5,587 | 45.3 | 4,161 | 33.7 | 713 | 3.63 |

[1] Includes: (1) Current operating expenses; (2) maintenance or depreciation on buildings (other than dwellings), motor vehicles, machinery, and equipment; and (3) taxes, farm-mortgage interest, and rent paid to all landlords except that portion of each allocable to dwellings.

Estimated from Census and Bureau of Agricultural Economics data. For methods of estimating, see appendix to DUCOFF, L. J. and HAGOOD, M. J. DIFFERENTIALS IN PRODUCTIVITY AND IN FARM INCOME OF AGRICULTURAL WORKERS BY SIZE OF ENTERPRISE, AND BY REGIONS. Bur. Agr. Econ. 74 pp. 1944. [Processed.] Government payments, rental value of farm dwellings, and inventory changes are not included in the gross farm-income figures.

The wage costs per man-year of labor reflect the broad geographic differentials in farm wage rates. On farms in the $4,000

and over production class, the southern divisions had the lowest wage costs, averaging $348 in 1939, and the Pacific States had the highest, $713. As the estimated man-years of family labor including that of the operator was very close to 1.0 on such farms, the wages for a man-year of hired labor can roughly be compared with the average net income from farming received during the year by the farmers who were hiring the laborers. On these "hiring" farms, the net returns to the farm family in 1939 averaged $3,138 in the three southern divisions and $4,161 in the Pacific States. If an allowance is deducted for a return on capital invested, the estimated net returns per farm for family labor and management on farms with gross value of products of $4,000 or more in 1939 were $1,668 in the southern divisions and $3,291 in the Pacific States. These figures illustrate for an important group of farmer-employers [25] the wide spread in average net income received by them and that received by their hired farm laborers—a spread which is greatly understated when all-farm averages are used to represent the farmer-employer's position in appraising his ability to pay wages.

### Type-of-Farm Differences in Hired Labor Costs [26]

Information on the variations in the importance of hired labor costs by type of farm is available only from special studies in limited areas. The results of certain studies are summarized in table 27. Costs of hired labor account for more than 30 percent of the total production expenses on the North Carolina and Virginia fruit farms, but only 21 percent on the Virginia tobacco farms and 7 percent on the Indiana cash-grain farms.

TABLE 27.—*Expenditures for hired labor in relation to production expenses, by type of farm, for selected areas and years*

| | | Expenditures for hired labor | |
| Type of farm and area | Year | Amount spent per farm | Percentage of total production expenses [1] |
|---|---|---|---|
| | | *Dollars* | *Percent* |
| **Fruit:** | | | |
| North Carolina—Sand Hill | 1933 | 2,125 | 33 |
| Virginia—Albemarle | 1935 | 2,737 | 31 |
| **Potato:** | | | |
| Virginia—Eastern | 1929 | 1,182 | 22 |
| **Tobacco:** | | | |
| Virginia—Pittsylvania | 1936 | 214 | 21 |
| **Cotton:** | | | |
| Texas—High Plains | 1936 | 506 | 18 |
| **Dairy:** | | | |
| Indiana—Northwest | 1939 | 375 | 11 |
| Virginia—Tennessee Valley Authority drainage area. | 1941 | 889 | 15 |
| **Livestock:** | | | |
| Nebraska—Dakota | 1940 | 581 | 16 |
| Illinois—McLean | 1941 | 230 | 8 |
| **General:** | | | |
| Indiana—Northeast | 1939 | 204 | 8 |
| Illinois—East Central | 1941 | 486 | 11 |
| **Cash Grain:** | | | |
| Indiana—Western | 1930 | 318 | 7 |

[1] Production expenses as used in this table include an allowance for net returns on capital investment.
Data taken from farm-income studies by State and Federal agencies.

[25] Eighty-five percent of the farms with a value of products of $4,000 and over in 1939, hired labor, paying 54 percent of the country's cash farm wage bill.
[26] This section of the chapter was contributed by G. T. Barton.

Several factors accounted for these differences. Variations in the amount of hand labor required in growing and harvesting the crop, or conversely the extent to which farm operations have been mechanized, together with the particular production requirements of the crops grown, account for some differences in the proportion that hired labor costs represent of total production expenses. Thus, Indiana cash-grain farms have been mechanized more than the fruit farms of Virginia and North Carolina, the Virginia tobacco farms, and the Texas cotton farms. This is particularly true with respect to harvesting.

Some of the variations in the relative importance of hired labor on the farms studied are due to differences in scale of operations, since a family-size farm of a given type would have a smaller proportion of its production expenses represented by wage costs than would a large-scale farm of the same type.

The distribution of man-labor requirements through the year and the size of the farm business are fundamental in determining how much of the labor requirements can be met by the farm family, and hence the proportion it is necessary to hire. A large part of the yearly work is concentrated during the relatively short harvest of the fruit, potato, and cotton farms. Much hand labor is required then and most of it must be hired. As labor requirements for harvesting, curing, and preparing for market on Virginia tobacco farms are spread out over a longer period, the family can do more of the work than is possible on other types of farms.

On the general, family-size farms and on many livestock farms in the Corn Belt, hired labor represents about 10 percent of all production expenses. Labor requirements are spread fairly evenly through the year, crop operations are mechanized, and the family can do most of the work except during harvest. Many dairy farms present a similar picture.

For each type of farm, however, as the size of the business increases—in terms of acres of crops, number of dairy cows, etc.— hired men become necessary and costs of labor assume an increasing proportion of total production expenses. The range of variation in the relative importance of wage costs in production expenses is still greater in the case of individual commodities. On the average, for example, a larger part of the production expense for tobacco, cotton, sugar beet, and peanut crops are for hired labor than in the case of grain and hay crops.

The relative importance of the cost of hired labor varies over a period of time. The estimates in table 28 indicate the changes during the last three decades on four types of farms. The farms for which the estimates were developed are considered typical family-operated commercial farms of the type and in the area specified. The estimates were developed in such a way as to reflect changes over a considerable period in size of farm and patterns of production for family-operated commercial farms.

The wheat farm and the hog-dairy farm present contrasting pictures of change. The relative importance of wage expenditures has declined on the wheat farms, as have total hours of labor required. The size of business, as measured by total output, doubled on the typical wheat farm from 1910-14 to 1940-42. This is pri-

TABLE 28.—*The changing importance of hired-labor costs in relation to total production expenses, on four types of family-operated commercial farms, during selected periods*

| Type of farm and item | Unit | 1910–14 | 1920–24 | 1930–34 | 1935–39 | 1940–42 |
|---|---|---|---|---|---|---|
| Wheat farm—Winter wheat area: | | | | | | |
| Hired labor cost as a percentage of total production expenses. | Percent____ | 8.7 | 13.0 | 5.2 | 2.6 | 2.4 |
| Total man-hours of labor_____ | Hours_____ | 3,013 | 4,556 | 3,777 | 3,056 | 2,012 |
| Man-hours of hired labor as percentage of total hours of labor. | Percent____ | 13.6 | 22.5 | 15.2 | 8.9 | 5.7 |
| Index of production (1910–14=100)____ | | 100 | 157 | 198 | 145 | 201 |
| Hog-dairy farm—Corn Belt: | | | | | | |
| Hired labor cost as a percentage of total production expenses. | Percent____ | 8.9 | 12.4 | 12.7 | 13.2 | 19.1 |
| Total man-hours of labor_____ | Hours_____ | 4,685 | 4,884 | 5,035 | 5,053 | 5,406 |
| Man-hours of hired labor as percentage of total hours of labor. | Percent____ | 13.1 | 15.9 | 21.6 | 22.5 | 28.5 |
| Index of production (1910–14=100)____ | | 100 | 168 | 122 | 125 | 151 |
| Dairy farm—New York: | | | | | | |
| Hired labor cost as a percentage of total production expenses. | Percent____ | 7.8 | 11.5 | 8.8 | 8.7 | 13.3 |
| Total man-hours of labor____ _____ | Hours_____ | 4,778 | 4,864 | 4,725 | 4,745 | 5,057 |
| Man-hours of hired labor as percentage of total hours of labor. | Percent____ | 11.6 | 13.4 | 12.8 | 14.2 | 20.1 |
| Index of production (1910–14=100)____ | | 100 | 110 | 127 | 129 | 150 |
| Cotton farm—Georgia: | | | | | | |
| Hired labor cost as a percentage of total production expenses. | Percent____ | 12.7 | 3.9 | 6.3 | 5.9 | 6.4 |
| Total man-hours of labor_____ | Hours_____ | 4,166 | 3,421 | 3,479 | 3,519 | 3,566 |
| Man-hours of hired labor as percentage of total hours of labor. | Percent____ | 16.3 | 4.8 | 7.8 | 7.1 | 9.1 |
| Index of production (1910–14=100)____ | | 100 | 55 | 73 | 74 | 84 |

These estimates relate to typical or "modal" commercial, family-size farms. For methods of deriving the estimates see GOODSELL, W. D. FARM ADJUSTMENTS AND INCOME ON TYPICAL CORN BELT FARMS. U. S. Dept. Agr. Cir. 688, 59 pp., illus. 1943. Production expenses as used in this table include an allowance for net returns on capital investment.

marily a result of the almost complete mechanization of wheat production with increased production per worker. The typical hog-dairy farm, on the other hand, has shown about a 50-percent increase in the size of its business, but a less than proportionate increase in total hours of labor required. Both the proportion that wage costs are of total production expenses and the proportion that hired labor input is of total labor input have more than doubled over the period.

The importance of hired labor as an item of production expenses on the Georgia cotton farm has decreased since the 1910–14 period as have the size of the business and the total labor input, because of a decline in acres of cotton on the typical farm, brought about chiefly by the ravages of boll weevil in the early 1920's.

These studies indicate the variability to be found in the effect of changes in wages on farm production expenses, and on net farm income. Even a substantial increase in wage rates can have only a minor effect on total production expenses on farms where hired labor costs make up only a small fraction of such expenses. However, on farms where these costs comprise substantially larger proportions of total expenses, a similar increase in wage rates could seriously affect the farmer's net income and his ability to keep on farming. Farm operators for whom wages are an important cost item are naturally very sensitive to changes in wage rates. Farmers on many family-sized farms who need to hire for only a few days at peak seasons are not appreciably affected even by marked increases in wage rates.

## 5. CHANGES AND DIFFERENTIALS IN FARM WAGE RATES IN RELATION TO ASSOCIATED FACTORS

The composite monthly farm wage rate for the country as a whole averaged $65.45 during 1943, and it is still rising. This figure is low when compared with current wage rates of almost any other industry, but it is the highest farm wage rate on record and represents a 114-percent increase since the pre-war year 1939.

On July 1, 1944, the farm wage rate index (seasonally adjusted) was 318 percent of the 1910-14 average. The previous record high was in 1920, during the boom following World War I, when the national index of farm wage rates was 242 percent of the 1910-14 average.

The rise in farm wages during World War II, which has been more rapid than during the period of World War I, invites an examination of the present and past relationships between wage rates and factors that normally determine their level. It raises the question of whether the factors responsible for boosting wage rates to their present levels are the same in wartime as those which affect farm wages in peacetime. It calls for an examination of the dynamics of farm wage rates.

The great differences among regions, States, and areas within States in their present levels and in recent changes of farm wage rates likewise give rise to questions of why there are such differentials within our country and whether they are likely to persist. The recent rise in farm wages, although recognized as a sorely needed gain for a disadvantaged group in our economy, prompts immediately the question of whether farmers can afford to pay such wages. An examination of the current situation regarding farm wage rates in the light of the past, and an examination of these related aspects are made in this chapter.

### Farm Wage Rates in Brief Review

The course of farm wage rates during the 30 years preceding the outbreak of the present war was marked by two great impacts: (1) The first World War and the decade following when farm wages were relatively high and (2) the depression during the first half of the 1930 decade. Although the rates were considerably higher during the last 5 years than the first 5 years of this 30-year period, these two phases—one of relative prosperity and one of severe depression—completely overshadowed any clear manifestation of upward trend. Since the outbreak of the present war, however, the rise which began as a recovery from the depression of the early 1930's has continued to a level which tops all previous experience in every area, with the 1943 average monthly wage rate 90 percent above the average rate for the 1910-39 period (table 29).

The current farm wage rates show great differences between States and regions. The weighted average of day and month rates prevailing in the Pacific States in April, 1944, was more than three times as great as that in the East South Central States. Among individual States, differentials are even more pronounced. California's average wage per month with board of $128 in April, 1944, was nearly five times as great as South Carolina's rate of $27,

TABLE 29.—*Composite farm wage rates, United States and geographic divisions, 1910–1939 period and 1943*

| Area | Composite farm-wage rate 1943 [1] | | Composite monthly farm-wage rate, average 1910-39 | Number of years during 1910-39 when composite wage rate was: | | | Highest average composite wage rate during 1910-39 [2] | | Lowest average composite wage rate during 1910-39 [3] | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Per month | Percent-age of 1910-39 average | | Within 20 per-cent of average | More than 20 percent below average | More than 20 percent above average | Per month | Percent-age of 1910-39 average | Per month | Percent-age of 1910-39 average |
| | Dollars | Percent | Dollars | Number | Number | Number | Dollars | Percent | Dollars | Percent |
| United States_____ | 65.45 | 189.6 | 34.52 | 9 | 11 | 10 | 59.88 | 173.5 | 21.10 | 61.1 |
| New England___ | 88.00 | 180.8 | 48.68 | 12 | 8 | 10 | 69.80 | 143.4 | 29.40 | 60.4 |
| Middle Atlantic. | 74.23 | 177.0 | 41.94 | 9 | 11 | 10 | 64.60 | 154.0 | 26.40 | 62.9 |
| East North Central. | 68.30 | 181.9 | 37.54 | 10 | 10 | 10 | 62.70 | 167.0 | 20.80 | 55.4 |
| West North Central. | 72.00 | 196.2 | 37.16 | 15 | 7 | 8 | 70.20 | 188.9 | 19.20 | 51.7 |
| South Atlantic__ | 40.10 | 159.2 | 25.19 | 10 | 11 | 9 | 44.60 | 177.1 | 15.40 | 61.1 |
| East South Central. | 37.80 | 159.3 | 23.73 | 10 | 10 | 10 | 43.10 | 181.6 | 13.90 | 58.6 |
| West South Central. | 52.70 | 183.4 | 28.74 | 12 | 10 | 8 | 55.40 | 192.8 | 17.40 | 60.5 |
| Mountain_____ | 84.50 | 197.5 | 42.79 | 19 | 6 | 5 | 73.90 | 172.7 | 25.80 | 60.3 |
| Pacific_____ | 128.50 | 233.1 | 54.28 | 10 | 11 | 9 | 87.70 | 161.6 | 34.90 | 64.3 |

[1] The composite rate is the weighted average monthly wage of rates per month and rates per day, converted to a month-ly equivalent.
[2] Relates to the 12-month average of 1920.
[3] Relates to the 12-month average of 1933 except in New England and Middle Atlantic divisions where lowest rate was in 1910.

while the day rate without board in Washington of $7.20 was four times as great as the rate of $1.80 in South Carolina.

In the 30 years between 1910 and 1939, the composite monthly farm wage averaged $34.52 for the United States as a whole. The most marked regional differences were between the Pacific States which had an average rate of $54.28 and the East South Central States with an average of $23.73. In about one-third of the 30 years, rates for the United States and for most of the major geographic divisions were within a 20-percent range of their average for the period; in about one-third they were 20 percent or more above their average; and in the remaining one-third they were 20 percent or more below their average. In every division the peak year was 1920, when the wage rate for the United States stood at $59.88, or 73.5 percent above the 30-year average, and in all but two of the divisions the low year was 1933, when the national monthly farm wage fell to a level of only $21.10.

Although all regions showed the same general pattern of movement in agricultural wage rates during the period, the swing up to the 1920 level and downward to the 1933 level was more extreme in the West North Central States than in any other region and was least extreme in the New England States. The wide fluctuations in income from wheat and other grains in the West North Central States as contrasted with the relatively more stable income from dairy, fruit, and vegetable products are partly responsible for these and other regional differences in wage trends. During the years 1939-43, the Pacific, Mountain, and West North Central States had the highest percentage rise over the 1910-39 average, and the three southern divisions showed lower percentage increases than the United States as a whole. Thus the divisions with

the highest wage rates had the greatest increase by 1943 and those with the lowest wage rates had the least increase.

Farmers, even more than farm laborers, have had marked economic gains during the last 4 years. Since 1939, cash income from farm marketings has risen from 7.9 billion dollars to 19.3 billion in 1943—an increase of 144 percent as compared with the increase of 114 percent in the level of farm wage rates (table 30). Expenses of production have risen much less than the gross income so that the net income realized by operators from farming increased from 4.5 billion dollars in 1939 to 12.1 billion in 1943, a gain of approximately 170 percent. The national net farm income in 1943, moreover, was received by fewer farmers and farm-family workers than in 1939, so that the income per farm or per family worker showed even greater increases.

In the Pacific States, the composite monthly wage rate nearly kept pace with the gross cash income from farming in terms of percentage change from 1939 to 1943 (table 30). In the Middle Atlantic States wage rates on farms increased relatively more during this period than did cash farm income. In the East South

TABLE 30.—*Composite farm wage rates, percentage increase, and percentage increase in cash farm income, United States. geographic divisions, and States, 1939 and 1943*

| Area | Composite monthly farm wage [1] | | | Percentage increase in cash farm income 1939 to 1943 [2] |
|---|---|---|---|---|
| | 1943 | 1939 | Percentage increase | |
| | *Dollars* | *Dollars* | *Percent* | *Percent* |
| United States: | 65.45 | 30.56 | 114 | 144 |
| New England: | 88.00 | 47.10 | 87 | 93 |
| Maine | 88.50 | 40.48 | 119 | 126 |
| New Hampshire | 85.20 | 47.47 | 79 | 76 |
| Vermont | 79.90 | 41.44 | 93 | 87 |
| Massachusetts | 91.40 | 49.71 | 84 | 85 |
| Rhode Island | 97.60 | 53.79 | 81 | 66 |
| Connecticut | 89.00 | 51.49 | 73 | 88 |
| Middle Atlantic: | 74.23 | 37.10 | 100 | 91 |
| New York | 79.40 | 37.48 | 112 | 92 |
| New Jersey | 82.10 | 42.15 | 95 | 90 |
| Pennsylvania | 65.30 | 34.70 | 88 | 90 |
| East North Central: | 68.30 | 34.40 | 99 | 135 |
| Ohio | 61.30 | 32.84 | 87 | 117 |
| Indiana | 63.00 | 32.17 | 96 | 143 |
| Illinois | 71.30 | 37.02 | 93 | 135 |
| Michigan | 71.50 | 34.92 | 105 | 113 |
| Wisconsin | 72.60 | 33.81 | 113 | 163 |
| West North Central: | 72.90 | 30.70 | 137 | 164 |
| Minnesota | 74.30 | 33.68 | 121 | 157 |
| Iowa | 78.20 | 35.17 | 122 | 174 |
| Missouri | 50.40 | 24.89 | 102 | 160 |
| North Dakota | 92.20 | 30.34 | 204 | 288 |
| South Dakota | 78.60 | 30.59 | 157 | 240 |
| Nebraska | 74.20 | 28.14 | 164 | 197 |
| Kansas | 68.90 | 28.37 | 143 | 188 |
| South Atlantic: | 40.10 | 21.40 | 87 | 131 |
| Delaware | 70.10 | 33.67 | 108 | 220 |
| Maryland | 63.89 | 33.71 | 89 | 115 |
| Virginia | 47.30 | 26.54 | 78 | 136 |
| West Virginia | 47.70 | 27.29 | 75 | 101 |
| North Carolina | 43.10 | 21.78 | 98 | 128 |
| South Carolina | 29.80 | 15.55 | 92 | 100 |
| Georgia | 31.20 | 15.80 | 97 | 154 |
| Florida | 47.50 | 22.01 | 116 | 133 |
| East South Central: | 37.50 | 19.80 | 91 | 157 |
| Kentucky | 46.70 | 24.89 | 88 | 140 |
| Tennessee | 38.00 | 20.27 | 87 | 154 |
| Alabama | 34.90 | 17.00 | 105 | 187 |
| Mississippi | 34.90 | 17.88 | 95 | 157 |

TABLE 30.—*Composite farm wage rates, percentage increase, and percentage increase in cash farm income, United States, geographic divisions, and States, 1939 and 1943*—Continued

| Area | Composite monthly farm wage [1] | | | Percentage increase in cash farm income 1939 to 1943 [2] |
|------|------|------|------|------|
|      | 1943 | 1939 | Percentage increase |  |
|      | *Dollars* | *Dollars* | *Percent* | *Percent* |
| West South Central: | 52.70 | 23.70 | 122 | 137 |
| Arkansas | 43.30 | 20.22 | 114 | 139 |
| Louisiana | 37.90 | 20.02 | 89 | 113 |
| Oklahoma | 59.80 | 26.88 | 122 | 123 |
| Texas | 59.20 | 25.41 | 133 | 148 |
| Mountain: | 84.50 | 38.30 | 121 | 138 |
| Montana | 99.70 | 41.15 | 142 | 181 |
| Idaho | 98.10 | 33.32 | 194 | 146 |
| Wyoming | 84.20 | 38.41 | 119 | 84 |
| Colorado | 76.50 | 32.71 | 134 | 143 |
| New Mexico | 60.60 | 29.98 | 103 | 114 |
| Arizona | 83.10 | 39.82 | 109 | 147 |
| Utah | 91.90 | 45.82 | 101 | 128 |
| Nevada | 84.40 | 43.51 | 94 | 85 |
| Pacific: | 126.50 | 51.40 | 146 | 152 |
| Washington | 130.00 | 45.74 | 184 | 170 |
| Oregon | 120.00 | 43.81 | 174 | 146 |
| California | 126.00 | 54.81 | 130 | 148 |

[1] The composite rate is the weighted average monthly wage of rates per month and rates per day converted to a monthly equivalent.

[2] Income from sales of farm products excluding Government payments.

Central division, where rates are generally lowest in the United States, they increased 91 percent while cash farm income increased 157 percent. In three-fourths of the States, the percentage increase in farm income exceeded that in wage rates between 1939 and 1943. Some of the richer farming States closely resembled some of the poorer ones in showing a much more rapid rise in income than in wage rates.

## Current and Past Relationship of Farm Wage Rates With Income and Other Factors

Of the various factors associated with changes in farm wage rates, farm income and farm prices have received the most attention. Farm income largely determines the farmers' ability to pay a given wage rate. It also is closely correlated with other factors making for changes in wage rates, such as the level of prices received by farmers, the wages and earnings of industrial workers, the level of nonagricultural activity and employment (and thus inversely with the available labor supply).

The United States index of farm wage rates shows a closer correlation with farm income (on a gross or net, total, or per worker basis) than with prices received by farmers. Yields and volume of sales at prevailing prices also influence the wage level. The net income of farmers under given price conditions changes more than proportionately with changes in volume of sales, because of the high proportion of fixed costs in agricultural production. Moreover, as the available wage rate index is essentially a measure of the price for a unit of time, whereas the price index is a measure of price per unit of product, any changes in labor productivity which altered the labor time required per unit of product

led to changes in the relationship between wage rates and prices during the 1910-43 period, thus lowering the degree of correlation.

In figure 10 indexes of farm income have been converted to a per worker basis in order to provide a measure somewhat more appropriate than aggregate income for comparisons with the index of wage rates. Because these rates tend to lag behind changes in farm prices and income, the price and income indexes shown represent averages of the indexes for the current and preceding year. The lag may be partly due to the fact that wage commitments in any year are to a large extent made before the realization of income from that year's production, and the wages are partly paid out of the preceding year's income. This 6-month lag appears to be sufficient to synchronize the wage-price-income changes at nearly all turning points of the last 33 years.
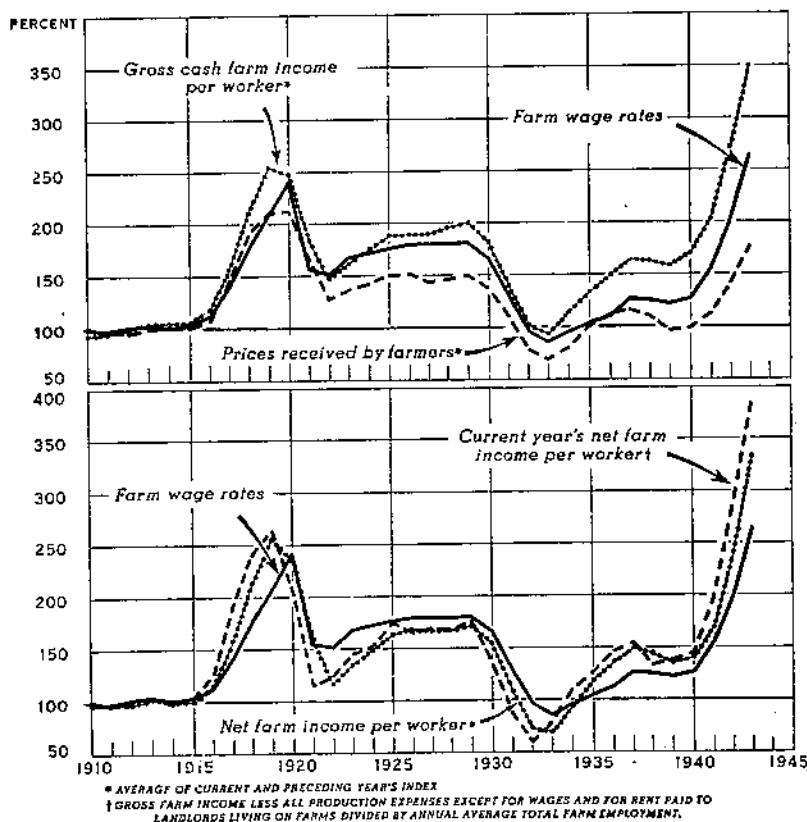


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FIGURE 10.—Farm wage rates, prices received by farmers, and farm income per worker, United States, 1910-43. Farm income estimates for 1943 are preliminary. (Index numbers, 1910-14=100.)

Historically, changes in farm-wage rates have followed fairly closely the changes in the lagged farm income per worker on a gross-or net-income basis, although the relationship was not uni-

form throughout this period. The slightly higher association of wage rates with gross than with net farm income, probably reflects the more immediate awareness of farmers of changes in gross cash receipts than in the net after subtracting all production expenses, including noncash and overhead costs.

There are distinct differences in the price-wage and income-wage patterns of movement shown in figure 10. In the period of World War I, wage rates rose by approximately the same percentage as prices received by farmers through 1919, and in 1920 reached a peak considerably higher relative to 1910-14 than the price index reached. Wage rates, however, did not rise so fast or to so high a level as either gross or net farm income per worker in the period 1914-20.

In the sharp depression following World War I (1921-22) wage rates on farms did not decline so much as prices received by farmers or as net farm income per worker, but did decline just as much as gross cash farm income per worker. The major difference to be noted between the wage-price pattern and the wage-income pattern is the fact that in nearly all years since the early 1920's the wage-rate index has remained above the price index (relative to 1910-14) but below gross cash farm income per worker.

The wage index stayed somewhat above the lagged index of net farm income per worker from 1922 through the depression of the early 1930's, but has remained below it every year from 1935 through 1943. The disparity between net farm income and farm wage rates in favor of the former widened considerably between 1935 and 1937; it narrowed slightly by 1939, but with the sharp wartime rise in farm income by 1943 it has widened more than at any previous time.

Farm wage rates tend to lag behind changes in farm income on both the upswing and the downswing of income conditions. They lagged behind farm income during the years of the first World War, but did not start to decline until a year after the 1919 peak in income was passed. From the depression low, they did not begin to rise until 1934, whereas farm income started rising in 1933. From 1933 to 1937, and again from 1940 to 1943, they did not increase so fast or so much as farm income, the lag being more noticeable in relation to gross cash than to net farm income per worker. Farm wage rates have lagged behind the gross and net farm income per worker more in the first 4 years of this war than in the corresponding years of World War I.

On the basis of the average relationship between wage rates and gross or net farm income per worker prevailing during the whole 33-year period for which the information is available, with an allowance made for the usual time difference of about 6 months between changes in income and the response in wage rates, the 1943 farm wage level suggested by the income relationship alone was still somewhat above the actual level reached in 1943.

Wage rates on farms are also influenced by factors other than farm income or prices received by farmers. The level of nonagricultural wages, employment and unemployment, and the volume of rural-urban migration are highly interdependent factors which affect agricultural wage rates by producing changes in the supply

of available farm labor.    A part of this supply consists of under-employed farmers and their families on subsistence or other farms that have inadequate resources.

When changes in the supply of farm laborers proceed in the same direction over a number of years, their cumulative effect becomes pronounced.  For example, the effect of the marked increase in the supply which took place in the early 1930's extended through the rest of the decade, depressing the general level of farm wages. The effect of the larger supply was augmented by a declining demand for labor on farms as a result of lower farm income and the increased use of machinery.  The resulting increase in the ratio of the farm-labor supply to the farm-labor demand which occurred between the 1920's and the 1930's probably had a greater effect in depressing the average wage level in the latter decade than did the year-to-year variations in farm income, prices, or industrial wages.

The course of movement of farm wage rates over the last three decades gives evidence of the slow but cumulative effect on the farm-labor supply of changes in volume of nonagricultural employment, and of farm-to-city migration.  Concurrently progress in mechanization of farming has decreased the demand for farm labor.  Recent trends in these factors have been such as to make for an increase in wage rates over and above the increase expected from the rise in farm income.  Despite the influence of these factors, wage rates in 1941, 1942, and 1943 have been at levels lower than those expected even on the basis of the 33-year average relationship with net farm income per worker.  The relatively favorable bargaining position of farm laborers which the reduced numbers have brought about has apparently not yet raised farm wage rates for the country as a whole above the point suggested by the long-time relationship between net income and wage rates.

Alternating cycles of agricultural prosperity and depression have been accompanied by varying degrees of disparity between farm income and farm wage rates, sometimes relatively more favorable to agricultural wage workers as in most of the 1920's, and at other times relatively more favorable to farm operators as since the middle 1930's.  The period 1910-14 has been considered as one in which there was a fair balance in income position of farmers, relative to that of other groups in the economy, and the re-establishment of a corresponding balance has long been the objective of public policies regarding farm prices and income.

In 1943 the level of farm wage rates was still about 20 percent under that which would have been reached if the 1910-14 ratio of these rates to *net* farm income per worker had prevailed in 1943, even after allowance is made for the usual lag between wage rates and net farm income. Similarly, the level of farm wages in 1943 was about 25 percent under that which would have been reached if the 1924-29 ratio of wage rates to net farm income per worker had held. [27]  The actual average farm wage rate in 1943 for the

[27] The period 1925-29 has been suggested in a recent report as more appropriate than any other base period for parity consideration between industrial labor and agricultural.  See BLACK, J. D. and GIBBONS, C. A.  THE WAR AND AMERICAN AGRICULTURE.  Rev. Econ. Statis. 26 : 20, 88, 1944.

United States was 6 percent below the rate indicated by the 1935-39 ratio of wage rates to net farm income per worker, a period when farm wages were depressed by large urban and rural unemployment and by the restricted outmigration of farm people during the depression.

Despite the sharply rising level of wage rates on farms during 1943 and the first half of 1944, it is doubtful whether the average rates for 1944 will exceed the levels suggested by the 1935-39 ratio of farm wage rates to net farm income per worker. The prospective 1944 average farm wage for the country as a whole will fall considerably short of re-establishing the 1910-14 or the 1924-29 ratio. Wage rates of farm workers in 1944 would have to average approximately 47 to 51 percent higher than in 1943 to reach the 1910-14 ratios of wages to net income per farm worker (family and hired) or per family worker, and even higher to reach the 1924-29 ratio. Corresponding ratios for 1935-39 would require an increase in the annual average wage rates of 25 to 27 percent from 1943 to 1944. From July 1, 1943, to July 1, 1944, rates increased 19.7 percent. Under present prospects for 1944 farm income level and other factors, it seems probable that the wage rates of farm laborers in 1944 may advance over the 1943 level by about 20 percent.

Current and past trends in farm wage rates in the various major geographic divisions have followed a pattern with respect to farm income which in general outline is similar to the national pattern. The available farm-income data are more limited for States and geographic divisions than for the country as a whole. Historical series are available only since 1924 and are limited to gross cash income.

In six of the nine geographic divisions the wage level in 1943 was still below that indicated by the 1924-43 average relationship between wage rates and gross cash farm income per worker. The Northeastern, North Central, South Atlantic, and East South Central divisions had average rates in 1943 that were 4 to 8 percent below the level suggested by their respective 1924-43 relationships with cash farm income per worker. In the South Atlantic division the actual average rate was farthest below the level so estimated, 8 percent as compared with 4 percent for the United States as a whole. In contrast, the Mountain, Pacific, and West South Central divisions had rates 3 or 4 percent higher than would have been expected on the basis of their historical relationships of wage rates and cash farm income per worker. This was due, no doubt, to a relatively more difficult labor-supply situation, caused by a more rapid expansion of industrial employment in the Pacific States and by a larger relative outmigration from farms in the other two divisions. Not until 1943, however, did the wartime rise in farm wages lead to a level in any geographic division higher than that suggested by the 1924-43 relationship with cash farm income per worker.

There are differences in the historical trends of farm wage rates and cash farm income in the several geographic divisions. In the West North Central, West South Central, and Mountain States, for example, the variations in rates from year to year have generally

followed closely the annual changes in cash farm income per worker throughout the 1924-43 period when allowance is made for a half-year lag in wage rates.  In the Middle Atlantic States the rates tended to be at a higher level during the 1924-29 period and at a materially lower level throughout the 1935-40 period than the wage level indicated by the 1924-43 average relationship with cash farm income per worker.  A similar lack of correspondence between income and wage rates in the 1924-29 and 1935-40 periods prevailed in the New England, East North Central, and Pacific States.  In the South Atlantic and East South Central States wage rates likewise moved above the income level in 1924-29 and below the income level in 1935-40, but to a greater degree than in other parts of the country.

A possible explanation for this higher farm wage level in relation to farm income during 1924-29 may be found in the sustained high level of employment and wage rates in industry along with the cumulative effects of heavy outmigration from farms during the 1920's.  A scarce supply of farm labor and relatively high industrial wage rates thus tended to sustain farm-wage rates during these years.

The opposite situation prevailed during most of the 1930's; extended unemployment and a slackened migration tended to depress farm wages.  In addition, continued mechanization of farming operations over the several decades had reduced labor requirements and aggravated the surplus labor situation.

The relative intensities with which all of these factors operated in the various geographic divisions produced differences in the degree of wage-income disparities.  In the West North Central States, for example, where the differential between wage rates and income was least in the two periods, net migration from farms declined considerably less between the 1920's and 1930's than in the South Atlantic division, where the wage disparities were greatest.

### Changes in Real Farm Wages

Changes in levels of farm wage rates and net farm income per worker during the last 33 years, which figure 10 indicates are quite marked, are greatly modified when the wage rates and net income are adjusted for changes in buying power of the farm laborer's or farmer's dollar.  The level of real farm wage rates has been remarkably stable since 1910 (fig. 11).

The correlation of farm wage rates with net farm income per worker is not nearly so close on an adjusted basis.  Both respond to major cyclical changes, although the adjusted rates respond generally less than the adjusted net farm income per worker.  In the first World War period real farm income per worker rose substantially above its pre-war level in 1917, 1918, and 1919, whereas real farm wage rates were above their 1910-14 average only in 1920, and in that year by just 9 percent.  After the short depression of the early 1920's, when real farm income fell more rapidly than real farm wage rates, the adjusted wage index maintained a level during 1923-30 averaging 10 percent above that of the 1910-14

period, while the adjusted index of net farm income per worker
held a slightly lower relative level.   After 1929, real farm income
dropped much more rapidly than real farm wage rates, but it
recovered more rapidly and has maintained a higher relative level
from 1934 to the present.



† INCLUDES FARM OPERATORS AND UNPAID FAMILY WORKERS.
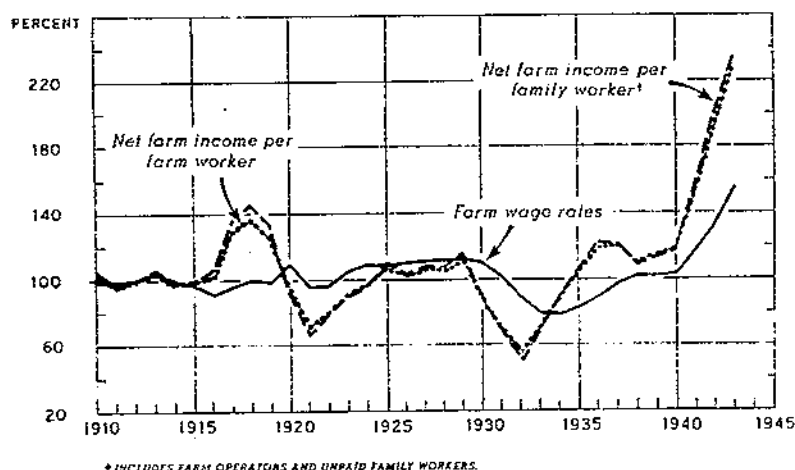
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**FIGURE 11.—Farm wage rates and net farm income per worker and per
family worker, adjusted for changes in living costs, United States, 1910-43.
Adjusted by the index of prices paid by farmers for commodities used in
family living. (Index numbers, 1910-14=100.)**

The course of real farm wage rates during the 33-year period
since 1910, even on an index-number or relative basis, suggests a
pattern which would be expected of a substandard wage that has
held to a subsistence level practically throughout the period.   Al-
though real farm wage rates showed little variation over the years
1910-30, they were stable at a level which yielded on the average
an annual wage income per hired farm worker of only $265 (in
1910-14 dollars), as compared with $410 net farm income per farm
family worker (see fig. 21, p. 116) and a considerably higher
amount per farm family worker on farms that hire labor.   The
fact that farm wage rates have declined in periods of depression
relatively less than farmers' income is partly due to the minimum
character of incomes derived from farm wages, which could
hardly have fallen lower and still provided earnings necessary for
sheer physical subsistence.

Evidence of the influence of labor supply in determining the
level of farm wages may be found in the behavior of real farm
wage rates in different periods of the last 33 years.   During the
1920's the heavy migration from farms and the high level of non-
agricultural employment led to real farm wage rates slightly
higher on a relative basis than real farm income.   Were it not for
the rapid progress of farm mechanization during these years,
which reduced the demand for labor, farm wages might have
risen to a higher level.   When the depression came, the farm labor
supply was greatly augmented by a return migration to farms and

even more by the suppression of the normal migration away from farms. This contributed to a sharp reduction in real wage rates on farms. The cumulation of a large unemployed and under-employed labor reserve in rural areas during the first half of the 1930's meant that it was not necessary for farmers to pay much higher real wage rates when their own incomes began to improve; hence the recovery in real wages was much slower than in real net farm incomes.

Not until the period of national defense began and migration from farms drained off some of the surplus laborers did real farm wage rates show any marked improvement. Although real net farm income per worker exceeded its 1929 level by 1936, real wage rates did not equal those paid on farms in 1929 until the rather marked rise occurred between 1940 and 1941. The fact that these rates have at least partially followed the rise in real farm income since the United States entered the war, in contrast to the situation in World War I, is probably due mainly to the much larger migration of workers from farms during World War II than during World War I.

### Factors Associated With State Variations in Farm Wage Rates

The factors associated with the changes in farm wage rates over a period of time are also involved in explaining some of the differences in wage levels prevailing in the various States at any given time. The more important factors are: State differences in income from agricultural production per worker, in the competitive wage level of nonagricultural occupations, in the labor supply on farms, and in the degree of dependence upon hired workers.

More than 80 percent of the variation between States in the July 1942, composite farm wage rates is associated with available measures of these factors. [28] A comparison of the actual composite wage rates in the various States with the rates estimated from a correlation analysis of farm wages with these four factors is shown in figure 12.

In a State in which there is close agreement between the estimated and actual farm wage rate, it merely means that the State shows a wage differential in relation to other States of a magnitude that can be accounted for largely in terms of the State's relative situation with respect to the factors mentioned. However, even a full "explanation" of existing wage differentials among States would not prove that the States' actual levels of wage rates are necessarily equitable or justifiable, nor would it prove any optimum relationship to farm income or other measures of ability to pay. The underlying pattern of average relationships between farm income and wage rates at a given date may be generally out of line with ability-to-pay criteria; hence the actual levels of wage rates in States, even though their variations were explainable, would like-

[28] Based on a multiple-correlation analysis of July 1, 1942, composite farm wage rates with the following factors: (1) Cash farm income (including Government payments) per farm worker in 1941; (2) hourly entrance wage rates of common labor in industry, July 1942; (3) rural-farm persons (14 years of age and over) per farm not employed in nonagricultural occupations, March 1940; (4) proportion hired workers comprise of total farm employment, June 1, 1942.

wise be out of line. Moreover, an analysis directed toward an ability-to-pay appraisal of wages would not include the effects on wage differentials of extraneous factors such as the labor supply and the wage rates in nonagricultural industries.
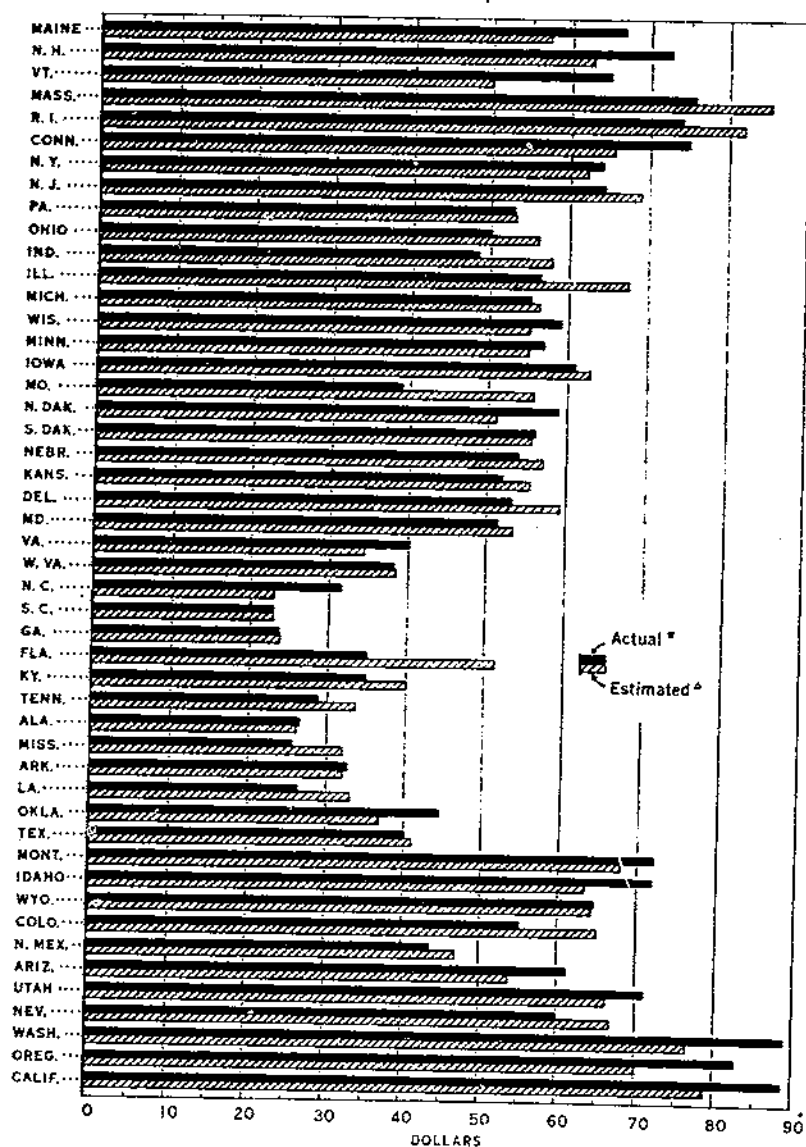


* REPORTED BY CROP CORRESPONDENTS
△ ESTIMATED FROM A MULTIPLE LINEAR REGRESSION ON FOUR RELATED FACTORS, SEE FOOTNOTE 25, CHAPTER 5

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FIGURE 12.—Actual and estimated composite monthly farm wage rates for States, July 1942.

If more adequate data were available for measuring the factor of labor supply and the factor of competitive nonagricultural wages, it is probable that a still fuller explanation of the variation in farm wage rates among States would be obtained. This would be particularly applicable in the case of the Pacific and most of the New England States where the influence of competing industrial wages is not adequately measured by hourly entrance rates of common labor in industry (the measure used in the analysis). In these areas the wartime industrial work available to experienced farm workers includes many kinds of jobs at the semi-skilled and skilled levels, which are paid considerably higher wages than common labor. Moreover, supplementary income of farm operators from nonfarm work in the New England and Pacific States probably results in a greater average difference than in other regions between net income from farming and the operator's total net income from all sources, and this has a bearing on the wages he can afford to pay.

In general, the observed State differences in farm-wage rates in July 1942, corresponded fairly closely with differences in related factors. South Carolina, with the highest value on the measure used to indicate the potential labor supply per farm, the lowest cash farm income per agricultural worker, and the lowest common-labor wage rate in industry, had the lowest farm wage rate of any State. In the Pacific States, especially in California, the high agricultural income per worker, the high level of competitive wage rates in industry, and the high degree of dependence on hired workers all combined to produce the highest farm wage levels among the States.

The supply of laborers actually or potentially available for farm work or for nonagricultural work has under present conditions a pronounced effect, directly or indirectly, on farm wages. Over wide parts of the South the wages are comparatively low as a result of relatively large numbers of laborers. On the other hand, in some States the scarcity of labor available for farm work together with unusually high industrial wages has tended to raise farm wages to a level higher than would be expected on the basis of considerations of farm income alone. For the country as a whole wage rates on farms during 1942 and 1943 were still below a level indicated by the 1935-39 ratio of wages to net farm income per worker. Relevant data for geographic divisions suggest that the areas where the current farm wage rates are still below the level indicated by the 1935-39 ratio include Southern as well as North Central States. In these areas farm wage rates would need to advance materially to have a higher ratio to income than existed in the 1935-39 period, when the rates were low relative to the level of farm income.

## Wage Rates in Relation to Farmers' Ability to Pay

The preceding analyses attempted to appraise current levels of farm wage rates for the country as a whole and for major geographic divisions in the light of historical relationships with farm income and related factors. Determining a "normal" wage-income

relationship from historical data means, in effect, an averaging together of periods that have dissimilar conditions and are characterized by varying degrees of disparity between farm income and wage rates. Moreover, it was observed that an appraisal of current wage levels in terms of their relationships to net farm income for any one of several 5-year periods leads to quite different results, depending upon the periods selected.

Evidently, past relationships of wage rates to farm income do not tell us specifically what wages farmers were or are now able to pay. Although historical relationships are sometimes used as "norms" in appraising a given wage level, actually the wage levels prevailing in a past period do not necessarily indicate the levels which farmers could have afforded to pay.

In no phase of analysis of farm-wage problems is the need for statistics on "hiring farms" greater than in considerations of ability to pay. The whole approach to the problem through index numbers of net farm income based on all farm averages (or on net income aggregates for all farms) involves two assumptions which need to be examined. [20] One assumption is that net income per farm on the hiring farms changes from year to year by the same percentage that net income for all farms does. This assumption probably overstates the favorableness of the income position of the "hiring" farmer in times like the present, when net farm income has been rising rapidly and probably by greater percentages on the lower and middle income farms than on the farms of higher income. Yet the "all-farm" aggregate income is so preponderantly from the higher income farms that its percentage change (or the "all-farm" average percentage change) cannot differ greatly from the percentage change of the higher income farms, and therefore the degree of overstatement of the change in position of the hiring farms cannot be very large.

The other assumption is that recent or current changes in farm wages can be appraised on the basis of the past relationship with farm income as to whether or not they are in reality "in balance" with changes in income per farm or per worker. Such interpretation tends to place a normative evaluation—a "rightness"—on the relationships between the two series which have been observed over a past period. The fact of the matter is, however, that a wage level indicated by historical relationships with a measure related to ability to pay can be characterized as being "in line" or "in balance" with ability to pay, or as "fair and reasonable" only on the ground that "that's the way it was in period such and such," or "that's the way it always has been." This obviously provides no answer as to the wage level that could have been paid in the past or that can be paid currently.

Before judgments could fairly be passed on whether present farm wage rates equal, exceed, or fall short of farmers' ability to pay, comparative statistics are needed on the actual net income of

the two groups—the employers of hired labor and the hired farm workers.

The nearest approximations available for a comprehensive coverage of farms are those developed from the special tabulations of material from the 1940 census for farms classified by total value of production and from supplementary data. [30]  Although these estimates do not permit a separate classification of hiring farms, their indication of the increasing importance of farms as hirers of wage labor as we go up the scale in value of production permits some inferences as to the income relations of the two groups.

Table 31 shows a distribution of the gross value of agricultural production during 1939 among hired labor, other production expenses, and the net returns per farm for groups of farms classified by total value of products sold, traded, or consumed at home, excluding Government payments.  In addition, it shows the average man-years of labor hired on farms of different size of enterprise and the estimated wage costs per man-year of hired labor.

TABLE 31.—*Allocation of gross farm income to hired labor, all other production expenses and net returns to family labor, capital and management, by value groups of farms United States, 1939*

| Value group | Total value of products | | Wages to hired labor | | All other production expenses | | Net returns to family labor, capital, and management | | Wage costs per man-year of hired labor | Hired labor per farm |
|---|---|---|---|---|---|---|---|---|---|---|
| | Amount per farm | Percentage of total | Amount per farm | Percentage of total | Amount per farm | Percentage of total | Amount per farm | Percentage of total | | |
| | *Dollars* | *Percent* | *Dollars* | *Percent* | *Dollars* | *Percent* | *Dollars* | *Percent* | *Dollars* | *Man-years* |
| All classified farms... | 1,399 | 100.0 | 138 | 10.5 | 653 | 49.9 | 518 | 39.6 | 349 | 0.40 |
| $1–   $99 | 57 | ......... | 11 | ......... | 128 | ......... | −82 | ......... | 175 | .06 |
| $100–  $249 | 173 | 100.0 | 13 | 7.5 | 138 | 79.8 | 22 | 12.7 | 153 | .09 |
| $250–  $399 | 320 | 100.0 | 18 | 5.6 | 167 | 52.2 | 135 | 42.2 | 152 | .12 |
| $400–  $599 | 491 | 100.0 | 27 | 5.5 | 225 | 45.8 | 239 | 48.7 | 166 | .16 |
| $600–  $749 | 669 | 100.0 | 35 | 5.2 | 293 | 43.8 | 341 | 51.0 | 164 | .21 |
| $750–  $999 | 865 | 100.0 | 52 | 6.0 | 399 | 46.1 | 414 | 47.9 | 185 | .28 |
| $1,000–$1,499 | 1,222 | 100.0 | 88 | 7.2 | 597 | 48.9 | 537 | 43.9 | 240 | .37 |
| $1,500–$1,999 | 1,726 | 100.0 | 141 | 8.2 | 878 | 50.9 | 707 | 40.9 | 292 | .49 |
| $2,000–$2,499 | 2,229 | 100.0 | 197 | 8.8 | 1,152 | 51.7 | 880 | 39.5 | 325 | .60 |
| $2,500–$3,999 | 3,111 | 100.0 | 304 | 9.8 | 1,599 | 51.4 | 1,208 | 38.8 | 367 | .93 |
| $4,000–$5,999 | 4,806 | 100.0 | 590 | 12.3 | 2,537 | 52.8 | 1,679 | 34.9 | 424 | 1.39 |
| $6,000–$9,999 | 7,498 | 100.0 | 1,048 | 14.0 | 3,848 | 51.3 | 2,602 | 34.7 | 478 | 2.19 |
| $10,000 and over | 22,989 | 100.0 | 4,258 | 18.5 | 10,041 | 43.7 | 8,690 | 37.8 | 595 | 7.16 |

Estimated from Census and Bureau of Agricultural Economics data.  Government payments, rental value of farm dwelling, and inventory changes are not included in the gross-income figures.

Only on farms with total value of production of less than $400 was the net income from farming per farm family less than the estimated annual wages earned by a farm laborer who had 12 months of work on such farms.  However, on farms with this size of enterprise, only about one-tenth of a man-year of labor was hired on the average during a year, and the average amount of wages paid per farm was only $15.  Not until the average value of production exceeded $1,250 did average wages paid during the year amount to as much as $100 per farm; not until it exceeded $2,250 did they amount to $200; and not until it exceeded $3,000

30 See Ducoff and Hagood, footnote 9, p. 10.  Tables 31 and 32 are derived from estimates presented in this report.

did they amount to $300. Only for farms with total value of production of $4,000 or more, did the average wage costs, including value of perquisites, absorb more than 10 percent of the value of products sold, traded, or consumed at home.

On farms with a value of products of $4,000 or more in 1939, wage expenditures and perquisites during the year required 15.7 percent of the total value of products and paid for an average of 2.7 man-years of hired labor at a cost of $521 per man-year. (See table 26.) The total wage bill on these farms averaged $1,404 compared with an average net return to family labor, capital, and management of $3,248. When an additional allowance is deducted for a net return on fixed capital investment and on investments in livestock and machinery, the net return to family labor and management per farm was $2,305 per farm. When related to the annual average number of family members working on these farms, the net annual returns to labor and management per farm family worker is estimated at $1,663 and at $2,193 on a "man-equivalent" labor input basis. [31] The latter figure may be compared with the annual average wage income of $521 for a laborer working 12 months on farms with total value of products of $4,000 or more in 1939.

Thus hired labor on these farms was remunerated at a rate approximately one-fourth (23.8 percent) as great as that for work done by the farmer and members of his family. A man-week or man-month of family labor, including the management of the operator, resulted in a labor return 4.2 times as great as the amount paid for a week or month of hired work.

If the labor of the farmer and the man-equivalent work of his family members is evaluated at the same rate of pay as his hired workers, the profit the farmer realized is estimated to have averaged in 1939 approximately $2,000 per farm for farms with a total value of production per farm of $4,000 or more. On the average this amount was cleared over and above all production costs, including an allowance on invested capital and an allowance for all work performed by the farmer and his family on the farm. It is obvious that on such farms in 1939, farm wage rates were not anywhere near a level approaching the maximum ability of the farmers to pay wages.

Most family-size commercial farms in 1939 had a total value of agricultural products of less than $4,000. The lower down on the value-of-production scale, the less frequently is hiring done, the smaller the average amount hired during a year, and the smaller the fraction that wages comprise of the total value of production. Application in the lower income groups of an ability-to-pay measure similar to that used for the farms in the category of $4,000 and over becomes less meaningful in the progressively lower value-of-production classes of farms. If very little hiring is done, even high wage rates can have little effect on the net income of the farmer.

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[31] The "man-equivalent" is defined as the worker who in work capacity and labor-time input equals the average farm operator who is under 65 and does not work off the farm more than 100 days of the year.

A comparison of the net returns to family labor and management on farms in the different value groups with the hypothetical annual earnings of a laborer who worked 12 months at the average wages prevailing on these farms is shown in table 32. This comparison might also be considered as a comparison of the rates of return per unit of time input of operator or family labor with the wages paid for an equal time unit. In each of the value classes of farms from $4,000 down to $600, the ratio of net returns for family labor and management to wages paid per unit of time exceeded one, but by a progressively smaller margin.

In other words, even farms with as low a gross income as $600 to $750 averaged a rate of net returns for operator and other family labor per week, month, or year which exceeded the wage earnings of hired laborers for a comparable period of work on such farms. The fact that hired laborers in 1939 were paid an average rate about equal to that for family workers on all farms, although much lower than that for family workers on farms that hired them, illustrates the inappropriateness of all-farm averages in considerations of ability to pay.

TABLE 32.—*Ratio of annual net returns to family labor and management per worker to wage cost per man-year of hired labor, by value groups of farms, United States, 1939*

| Value group | Net returns to family labor and management | | Wage cost per man-year of hired labor [2] | Ratio of (2) to (3) [1] |
| | Per family worker (1) | Per "man-equivalent" family worker [1] (2) | (3) | (4) |
|---|---|---|---|---|
| | *Dollars* | *Dollars* | *Dollars* | *Rates* |
| All classified farms | 279 | 379 | 349 | 1.06 |
| $1– $99 | −143 | −198 | 176 | |
| $100– $249 | −19 | −26 | 153 | |
| $250– $399 | 72 | 96 | 152 | .63 |
| $400– $599 | 135 | 178 | 166 | 1.07 |
| $600– $749 | 187 | 247 | 164 | 1.51 |
| $750– $999 | 221 | 291 | 185 | 1.57 |
| $1,000–$1,499 | 270 | 354 | 240 | 1.48 |
| $1,500–$1,999 | 344 | 451 | 292 | 1.54 |
| $2,000–$2,499 | 430 | 500 | 325 | 1.72 |
| $2,500–$3,999 | 594 | 772 | 367 | 2.10 |
| $4,000–$5,999 | 795 | 1,053 | 424 | 2.48 |
| $6,000–$9,999 | 1,399 | 1,722 | 478 | 3.60 |
| $10,000 and over | 5,342 | 6,982 | 595 | 11.73 |

[1] The worker who in work capacity and labor-time input equals the average farm operator who is under 65 and does not work off the farm more than 100 days of the year.
[2] The wage cost shown would result only if a full year of hired labor were used and paid for at the rates paid for the hired labor actually used. See table 31 for estimates of man-years of labor hired on the various value groups of farms.
[3] This comparison is more appropriate than one based on columns (1) and (3) because it approximately equates the labor-time input of the family worker with that of the hired worker.
Estimated from Census and Bureau of Agricultural Economics data.

There are differences among geographic divisions in the magnitude of the ratio of average rate of net returns for family labor to that for hired labor. However, in 1939 all geographic divisions showed the ratio to have been progressively greater than one for farms in the value-of-products classes beginning with those where the hiring of labor becomes of some importance. In the South, where comparatively more labor is hired in the middle and lower value-of-products classes of farms than in other areas, a ratio greater than one is found in all value classes above $250. [32]

[32] For geographic divisions estimates of net income from farming for farms classified by total value of products in 1939, see Ducoff and Hagood, footnote 9, p. 10.

## Ability to Pay on Selected Types of Family-Operated Commercial Farms [33]

In planning farm operations, a prime consideration of the operators of many family farms is to organize the size and intensity of the farm business in such a way that family workers will have relatively full employment through the year. But because of the seasonal nature of farming, such a farm organization may involve labor requirements which cannot be fully met by the operator and his family at certain peak seasons. Operators of these farms can afford to pay seasonal hired workers wages that exceed the annual average returns to all labor per hour or day. By so doing, they maximize the yearly labor returns of the family labor force.

Thus with respect to the factor of ability to pay, operators of medium and smaller-size farms often find it advantageous to pay wage rates to seasonal workers that are higher than the average returns for the labor time of the family. Such considerations do not apply equally to operators of larger farms which require hired men in addition to family workers throughout most of the year. Frequently, too, the prevailing wage rates for seasonal jobs are higher than general farm wages at the same or other times of the year. Factors accounting for this situation include the greater demand for laborers in peak seasons, and the fact that seasonal work is more difficult or must proceed at a faster pace than regular work.

On the other hand, from a production standpoint, larger farms are usually more efficient in the use of labor because they are more completely mechanized and because of certain efficiencies associated with a larger scale of business. As workers on larger farms are usually more productive, the operators of such farms on the average can afford to pay higher wages than operators of smaller farms. Such wage differentials seem to be reflected in the estimates of wage costs per man-year of hired labor shown in table 31 which, after the two lowest class intervals, show a regular upward progression on farms with higher value of production.

One approximation to the amount of wages farmers are able to pay in particular areas and types of farms is the value of the output attributable to hired labor. Such an approximation assumes that the farmer is able to pay what the laborer's time is worth to him. Determination of the value of the output which can be attributed to hired labor is a difficult problem for it involves dissociating the actually inseparable contributions to production of land, labor, capital, and management.

But if the assumption is made that all labor—family and hired—contributes to the net returns obtained from agricultural production in proportion to time input, then a measure of the ability to pay wages is provided by the "returns to labor" per hour or day of work—the net value of production left after all costs other than labor are deducted.

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[33] This section of the chapter was contributed by G. T. Barton who used estimates of farm income and expenses developed by W. D. Goodsell.

In the following section, this method of appraising ability to pay the prevailing wage rates by comparing them with net returns from farming to all labor (or to operator and family labor) is illustrated for several typical farms of specified types. The comparisons are made on an hourly-equivalent basis. The estimated income of these farms relates to an average family-operated commercial farm in counties where the specified type is preponderant. Because these farms are manned primarily by the family, any hiring is limited to relatively short periods. Estimated net returns from farming are therefore compared with prevailing wage rates more nearly appropriate for seasonal labor. Such rates are at somewhat higher levels than the yearly average.

In the case of the New York dairy type of farm, for example, the estimates relate to a farm organization which in 1939 utilized 89 man-days of hired work out of a total labor input of 500 man-days. The typical wheat farm in the winter-wheat area required only 17 man-days of hired work out of a total labor input of 293 man-days. The size of farm business in these two types of farms is suggested by the estimated value of products sold and consumed by the farm household, which was $2,821 for the New York dairy farm in 1939 and $2,374 for the winter wheat farm.

In 1942, all types of farms studied showed net returns per hour to all labor greater than the prevailing wage rates per hour (table 33). [34] Such a situation did not hold for all types of farms in all years, as is indicated by the figures for the year 1939 when prevailing wage rates exceeded returns per hour on 3 of the 11 types of farms. The association of low returns per hour with low wage rates, and vice versa, is also apparent for these types of farms.

Changes from 1910-14 to date, by 5-year periods, in farm-wage rates, ability to pay, and related factors for four types of farms are shown in table 34. Marked differences are found in the relation between wage rates and return per hour to all labor among the four types of farms. Average wage rates exceeded average returns per hour—hence the farmer and his family received remuneration for their labor at less than prevailing wage rates—during 4 of the 7 complete 5-year periods on the hog-dairy farm. On the wheat farm, however, average wage rates were less than the average returns per hour in every 5-year period.

When individual years are considered, the differences among the four types of farms are even more striking. Wage rates were greater than returns per hour for 20 years out of 33 on the hog-dairy farm, 17 out of 34 on the New York dairy farm, 10 out of 34 on the Georgia cotton farm, and only 4 out of 34 on the wheat farm.

On all of the types of farms, wage rates in 1942 and in 1943 were much lower than returns to labor per hour. In the case of typical wheat farms in the winter-wheat area, returns per hour to all labor were $1.65 and $1.91 in 1942 and 1943, respectively. The prevailing wage rates in the winter-wheat area on an hourly-

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[34] In addition to the returns for labor and management, operators were allowed a return on their capital investment in the estimates.

TABLE 33.—*Farm wage rates and net returns from farming to all labor per hour, selected types of farms, 1939 and 1942*

| Area and type of farm | 1939 | | 1942 | |
|---|---|---|---|---|
| | Returns to all labor per hour [1] | Wage rate per hour [2] | Returns to all labor per hour [1] | Wage rate per hour [2] |
| | *Cents* | *Cents* | *Cents* | *Cents* |
| Winter wheat—wheat | 40 | 21 | 165 | 37 |
| Winter wheat—wheat, grain-sorghum | 45 | 17 | 129 | 30 |
| Corn Belt—cash-grain | 42 | 21 | 102 | 32 |
| Winter wheat—wheat, corn | 3 5 | 20 | 74 | 36 |
| Dairy—New York dairy | 24 | 23 | 48 | 37 |
| Dairy—Wisconsin dairy | 22 | 26 | 47 | 32 |
| Corn Belt—hog-dairy | 19 | 21 | 45 | 31 |
| Corn Belt—hog-beef raising | 14 | 20 | 43 | 30 |
| Cotton—Mississippi Delta | 20 | 10 | 40 | 13 |
| Cotton—2-mule Georgia | 10 | 9 | 24 | 12 |
| Cotton—Black Waxy Texas | 14 | 13 | 26 | 19 |

[1] Net farm income after deducting all production expenses except wages to hired farm labor and after allowing a return on capital investment.
[2] Based on the rate per day without board.
[3] High-risk area; comparatively low yields in 1939.

TABLE 34.—*Farm wage rates and net returns from farming to all labor and to operator and family labor per hour, specified types of farms, 5-year averages, 1910–41, annual 1942 and 1943*

| Type of farm and area | 1910–14 | 1915–19 | 1920–24 | 1925–29 | 1930–34 | 1935–39 | 1937–41 | 1942 | 1943 [1] |
|---|---|---|---|---|---|---|---|---|---|
| | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Dollars* |
| Wheat Farm—Winter-Wheat Area: | | | | | | | | | |
|   Wage rate per hour, without board | 0.18 | 0.25 | 0.34 | 0.31 | 0.19 | 0.18 | 0.21 | 0.37 | 0.46 |
|   Returns to all labor per hour | .25 | .57 | .48 | .69 | .24 | .53 | .55 | 1.65 | 1.91 |
|   Returns to operator and family labor per hour [2] | .25 | .55 | .51 | .81 | .24 | .55 | .61 | 1.75 | 1.98 |
| Cotton Farm—Georgia: | | | | | | | | | |
|   Wage rate per hour, without board | .09 | .13 | .14 | .13 | .09 | .09 | .09 | .12 | .16 |
|   Returns to all labor per hour | .10 | .22 | .12 | .17 | .08 | .10 | .11 | .24 | .27 |
|   Returns to operator and family labor per hour [2] | .10 | .23 | .12 | .17 | .08 | .10 | .11 | .25 | .28 |
| Hog-Dairy Farm—Corn Belt: | | | | | | | | | |
|   Wage rate per hour, without board | .17 | .26 | .30 | .29 | .17 | .19 | .22 | .31 | (3) |
|   Returns to all labor per hour | .15 | .25 | .20 | .30 | .11 | .23 | .22 | .45 | (3) |
|   Returns to operator and family labor per hour [2] | .15 | .25 | .18 | .30 | .09 | .23 | .22 | .51 | (3) |
| Dairy Farm—New York: | | | | | | | | | |
|   Wage rate per hour, without board | .17 | .25 | .36 | .38 | .25 | .23 | .25 | .37 | .45 |
|   Returns to all labor per hour | .17 | .27 | .28 | .32 | .23 | .25 | .28 | .49 | .62 |
|   Returns to operator and family labor per hour [2] | .17 | .27 | .27 | .32 | .24 | .25 | .29 | .52 | .66 |

[1] Preliminary.
[2] All nonlabor costs plus wages paid to hired labor were subtracted from total farm income and the resulting net figure was divided by total hours worked by operator and unpaid family workers to obtain this figure.
[3] Data not available.

equivalent basis were only 37 cents and 46 cents in 1942 and 1943. On the New York dairy farm the estimated net returns for all labor were 49 cents and 62 cents in 1942 and 1943, compared with wage rates of 37 cents and 45 cents. On the cotton farm in Georgia, returns to all labor per hour in these 2 years were 24 cents and 27 cents compared with hourly-equivalent wages of 12 cents and 16 cents.

The changing relationships among wage rates, returns per hour to labor, and related factors since 1910 can be seen more clearly for two of the type-of-farm situations in figures 13 and 14. The New York dairy farm and the Corn Belt hog-dairy farm were chosen for illustrative purposes primarily because hired laborers are relatively more important in their operation than they are in

the case of the wheat farm and the Georgia cotton farm.   Figure
13A and figure 14A show a comparison of the prevailing wage rates
on farms and returns per hour to the farmer and his family for
their labor and management, and the returns to all labor.   On the
New York dairy farm, the returns per hour to the farmer and
his family have been above the wage rates paid to hired hands
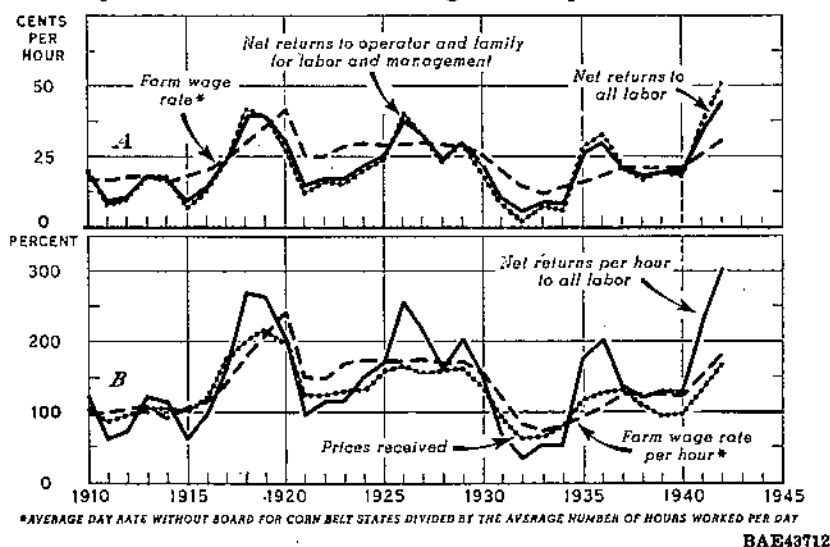


FIGURE 13.—Estimated returns per hour of man-labor on typical commer-
cial family-operated New York dairy farms, and related factors, 1910-43.
(Index numbers, 1910-14 = 100.)
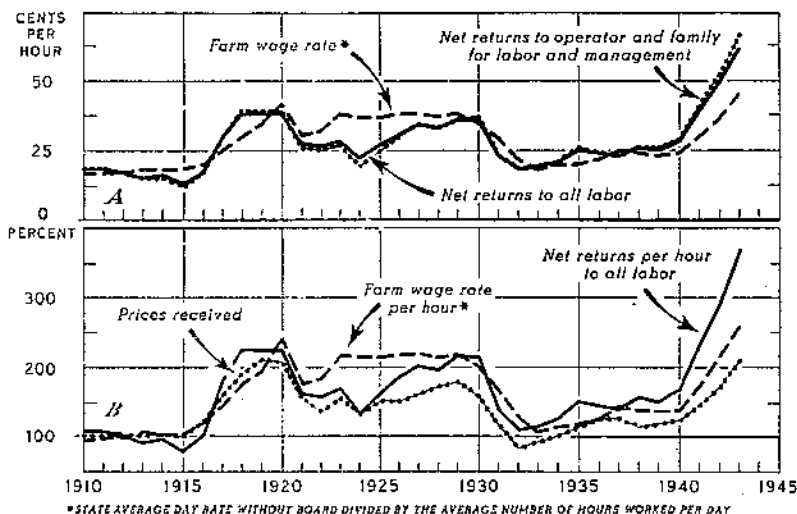


FIGURE 14.—Estimated returns per hour of man-labor on typical commercial
family-operated Corn Belt hog-dairy farms, and related factors, 1910-42.
(Index numbers, 1910-14 = 100.)

since 1935. On the hog-dairy farm, returns per hour to the farmer and his family were above wage rates in 1935 and 1936, below them for 1937 through 1940, and again above in 1941 and 1942.

Figure 13B, and Figure 14B show the movements in the index of wage rates, returns per hour to all labor, and prices received. As might be expected, the index of returns per hour to labor fluctuates much more than do the indexes of wage rates and prices received; this is particularly so on the hog-dairy farm. On both types of farms the level of wage rates is more stable than the level of prices. The tendency for wage rates to lag behind changes in both returns and prices is evident for most of the period, however. Although prices have not risen so fast as wage rates in the present war period, returns have risen more rapidly than either, as a result of favorable yields and increased production.

During this war, prices received by farmers have risen considerably but net farm income has risen even more, as a result of the extremely good yields and the fact that expenses of production increased much less than the increases in prices and gross income. In other words, farm wage rates, at least for the type-of-farm situations under consideration, can rise at a faster rate than farm prices and still be well within the limit of farmers' ability to pay during a period like the present.

## 6. WAGE RATES IN AGRICULTURE AND INDUSTRY

Entirely aside from the question of whether farm wages are in balance with farmers' income as judged by past relationships, a very practical problem faced by farmers is that of obtaining labor at wages that are satisfactory to the workers and within the farmers' ability to pay. In doing this farmers must compete with nonagricultural employers as well as among themselves. The level of nonagricultural wage rates thus influences the prevailing level of farm wages. Moreover, wartime problems of stabilization of nonagricultural rates tie in at certain points with changes in level of certain agricultural rates. What the relationship between agricultural and nonagricultural wage rates is and how it has changed are considered in this chapter.

In examining this relationship, there are no precise criteria by which to judge what the differentials should be between farm-wage rates and wage rates in industry. Some of the factors offsetting lower cash rates in agriculture as compared with industry are the receipt by some farm laborers of other remuneration (housing, room and board, garden facilities, or other perquisites) in addition to cash wages, and a lower cost of living in rural areas. However, many farm workers receive little besides their cash wages, and some live in urban areas, paying the same prices for commodities as industrial workers. Industrial workers, in turn, usually obtain or have access to more and better public services and facilities (hospitals, schools, libraries, and other educational facilities, recreation facilities and transportation). Beyond these are intangible values of the rural or urban environment for which individuals may have preference.

Even if the net balance of these factors should favor the agricultural workers, at most that would warrant only a small differential in wages for work that calls for comparable effort and skill. The presence of wage differentials much beyond any reasonable allowance for these factors must have other causes, such as the labor supply-demand ratio, the residual character of the agricultural labor market, the weak bargaining position of farm laborers and their relative immobility. The conditions of full employment in wartime have done much to lessen these disadvantages so that the relative wage differentials between agricultural and industrial workers characteristic of pre-war years and pre-war unemployment have narrowed.

## Farm Wage Rates and Hourly Earnings of Factory Workers

Hourly earnings of workers in manufacturing industries averaged $1.01 in the middle of April 1944, as compared with the farm wage per day (without board) of $3.58 on April 1, 1944, and $3.50 on January 1, 1944. At these rates, hired farm workers averaged approximately 37 cents an hour in April, 1944, but about 40 cents an hour in January, when the workday is somewhat shorter. Equivalent hourly earnings of farm workers paid by the month without board in April, 1944, were approximately 32 cents an hour. The rate per day without board is probably the most appropriate of the available agricultural wage series for comparisons with hourly earnings of nonagricultural workers. It is the most common mode of payment in agriculture, and it partially reflects hourly earnings of piece workers and of workers actually paid by the hour.

It should be recognized, however, that for certain groups of farm workers, particularly workers in some truck and fruit crops who are paid primarily on a piece-rate basis, the day rates may not fully reflect equivalent earnings per day.

The course of change in agricultural wage rates was roughly similar to that for industrial wage rates from 1910 to 1920, but departed greatly from it in years after 1920 (fig. 15). Despite the depressions of the early 1920's and 1930's, hourly earnings of factory workers have shown a clear-cut upward trend, with each year since 1936 setting a new high record. [35] In contrast, hourly earnings of farm laborers computed on the basis of day-without-board wage rates had a much steeper drop in 1921 and 1922; they improved only slightly in the generally prosperous period following, fell further than industrial wage rates during the depression, and recovered at a much slower rate. Although the rate of increase of daily farm wage rates has been very rapid since 1940, by 1943 the equivalent hourly earnings were still below those of 1920,[36] whereas average hourly earnings for factory workers in 1943 were 66 percent higher than they were in 1920.

[35] Hourly earnings of factory workers are derived from weekly earnings and hours worked during the week. Hence compensation for overtime at premium rates of pay is included in the average hourly earnings.

[36] The index of all farm wage rates (per day and per month) increased somewhat more rapidly after 1940 and in 1943 exceeded the 1920 level.

When hourly earnings are adjusted for changes in prices of goods used in family living, the steady upward trend in real wages of factory workers and the absence of such a trend in real wages of farm laborers become more apparent (fig. 15B). In very few of the years since 1913 did real hourly earnings for factory workers fail to show a steady increase, which amounted to 107 percent over the 1913 level by 1939 and to 149 percent by 1943. Except for the single year 1920, however, real hourly earnings of farm workers in no single year before 1941 exceeded the 1913 figure by more than 2 percent and in all years of the 1930's they fell far below.
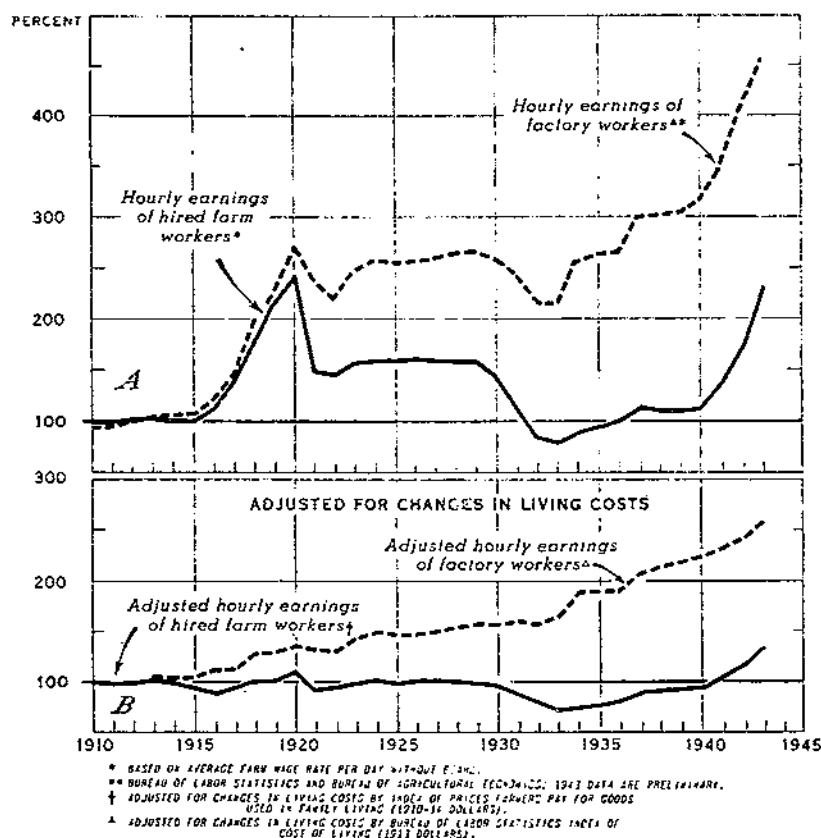
FIGURE 15.—Hourly earnings of hired farm workers and of factory workers, United States, 1910-43. (Index numbers, 1910-14 = 100.)

Comparison of the relative changes in agricultural and industrial wage rates during corresponding years of the World War I and World War II periods show that farm wage rates have advanced more rapidly during World War II than they did during World War I. Hourly earnings of workers in manufacturing industries, on the other hand, have increased more slowly than in

World War I.   In 1943 farm wage rates per day without board (and their equivalent hourly earnings) averaged 110 percent greater than in the first year of this war (1939) as compared with an increase of 78 percent from 1914 to 1918.   Hourly earnings in manufacturing industries, however, increased by only 49 percent from 1939 to 1943 as compared with an 83 percent rise from 1914 to 1918.   Because of the importance of overtime rates of pay in this war, the percentage increase in basic wage rates for factory workers is smaller than is indicated by the change in hourly earnings.

Differences between the two wars in their demands upon the Nation's resources and in the resulting effects on the agricultural economy must be taken into account when these comparisons are being interpreted.   Also important is a recognition of the depressed level of farm wages prevailing in 1939, both in absolute amount and relative to industrial rates.   Thus while hourly earnings of workers in manufacturing industries in 1939 were nearly 3 times as great as in 1914, farm rates per day without board were only 10 percent greater in 1939 than in 1914.   (The composite farm-wage rate index was 22 percent higher.)

In 1943, the annual average hourly earnings of farm laborers were approximately 33 cents, or only 34 percent of the average hourly earnings of 96 cents for factory workers (table 35).   Al-

TABLE 35.—*Average hourly earnings of farm laborers, workers in manufacturing industries, common labor in industry, and common labor in road building. United States, selected periods. 1910–44*

| Years | Average hourly earnings | | | | Hourly earnings of farm workers as percent of hourly earnings of— | | |
|---|---|---|---|---|---|---|---|
| | Farm laborers [1] | Workers in manufacturing industries [2] | Common labor in industry [3] | Common labor in road building [4] | Workers in manufacturing industries | Common labor in industry | Common labor in road building |
| | *Cents* | *Cents* | *Cents* | *Cents* | *Percent* | *Percent* | *Percent* |
| 1944 (April) | 36.9 | 101.2 | | 68.0 | 36 | | 54 |
| 1943 | 32.7 | 96.1 | | 71.0 | 34 | | 46 |
| 1942 | 24.9 | 85.3 | 63.5 | 58.0 | 29 | 39 | 43 |
| 1941 | 19.3 | 72.9 | 56.6 | 48.0 | 26 | 34 | 40 |
| 1940 | 15.9 | 67.0 | 50.7 | 46.0 | 24 | 31 | 35 |
| 1939 | 15.6 | 64.4 | 50.0 | 42.0 | 24 | 31 | 37 |
| 1935–39 | 15.0 | 60.8 | 47.0 | 40.4 | 25 | 32 | 37 |
| 1930–34 | 14.5 | 50.5 | 38.8 | 37.6 | 29 | 37 | 39 |
| 1925–29 | 22.8 | 55.4 | [5] 34.2 | 38.8 | 41 | 67 | 62 |
| 1920–24 | 24.4 | 52.3 | | | 47 | | |
| 1920 | 34.6 | 57.8 | | | 60 | | |
| 1919 | 30.3 | 47.7 | | | 64 | | |
| 1918 | 25.4 | 40.8 | | | 62 | | |
| 1917 | 19.8 | 31.1 | | | 64 | | |
| 1916 | 15.8 | 26.1 | | | 61 | | |
| 1915 | 14.4 | 22.9 | | | 63 | | |
| 1910–14 | 14.2 | 21.2 | | | 67 | | |

[1] Based on rates per day without board using a 10-hour workday as an annual average.
[2] Bureau of Labor Statistics and Bureau of Agricultural Economics.
[3] Bureau of Labor Statistics.
[4] Federal Works Agency, Public Roads Administration.
[5] 1926–29 average.

though this ratio of farm to nonfarm wage rates is higher than for any year since 1930, it is substantially lower than for any period before 1930 for which data are available.   The comparable

percentages were 41 percent in the 1925-29 period, 62 percent in the 1914-20 period, and 67 percent in the 1910-14 period. Thus, if farm wage rates had borne the same relationship to hourly earnings of workers in manufacturing industries during the year 1943 as they did during the World War I period, they would have had to average about 80 to 85 percent higher than they actually did in 1943.

### Farm Wage Rates and Wages for Common Labor

Farmers do not generally have to compete with all grades of wages in manufacturing industries. Although wartime demands for labor and the progress in simplification of industrial jobs have widened the range of occupations open to farm laborers, the industries that have always been important competitors (and still are) consist largely of a group which hires a high proportion of unskilled and semi-skilled workers.

Considerable supplementary employment for farm workers is provided by common-labor work in construction, transportation and other public utilities, and in various departments within the manufacturing industries. The labor supply customarily used by farmers is often shared by the industries that process or handle agricultural products. A special survey made in January 1944, showed that of all persons employed at nonagricultural work in that month approximately $2\frac{1}{4}$ million had worked on farms for some time during 1943. [37] Nearly 70 percent of these $2\frac{1}{4}$ million workers were at work in the following groups of industries: Manufacturing, 37 percent; construction, 8 percent; transportation, communication and utilities, 7 percent; and retail and wholesale trade, 17 percent. The manufacturing group included approximately one-quarter of a million workers who had worked on farms in 1943, but were employed in food, clothing, textiles, and leather manufacturing industries in January 1944.

Hourly earnings of farm laborers comprise a somewhat higher percentage of earnings of common labor than of all factory workers. In 1943, for example, hourly earnings for farm laborers were 46 percent of earnings for common labor in road building (table 35). Just as in the case of the comparison with all factory workers, this percentage represents an increase over that in the depression years of the 1930's, but is lower than the corresponding percentage for predepression years.

Although there have been marked advances in both farm and nonfarm wages in every area since war began, there have been considerable regional differences in the degrees to which relative increases in farm wages equaled or exceeded increases in nonfarm wages. In 7 of the 9 major geographic divisions, hourly earnings of farm workers showed a greater percentage increase from 1939 to 1943 than did hourly wage rates of common labor in road building. For the country as a whole hourly earnings of farm workers increased 110 percent compared with 69 percent for common labor in road building (table 36).

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[37] Ducoff and Hagood. See footnote 16, p. 17.

In the New England and the South Atlantic States wages for road building increased more rapidly from 1939 to 1943 than did farm wages per day without board.    In both of these divisions the increase in daily farm wage rates was much lower than the United States average, whereas the increase in wages to common labor in road building was above the United States average.

TABLE 36.—*Changes in average hourly earnings of hired farm workers and of common labor in road building, United States and geographic divisions, 1929, 1939, and 1943*

| Area | Hourly earnings of farm workers [1] | | | Hourly earnings of common labor in road building [2] | | | Percen tincrease | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Hourly earnings of farm workers | | Hourly earnings of common labor in road building | |
| | 1943 | 1939 | 1929 | 1943 | 1939 | 1929 | 1943 over 1939 | 1943 over 1929 | 1943 over 1939 | 1943 over 1929 |
| | Cents | Cents | Cents | Cents | Cents | Cents | Percent | Percent | Percent | Percent |
| United States | 32.7 | 15.6 | 22.5 | 71 | 42 | 39 | 109.6 | 45.3 | 69.0 | 82.1 |
| New England | 45.6 | 26.8 | 35.8 | 89 | 48 | 51 | 70.1 | 27.4 | 85.4 | 74.5 |
| Middle Atlantic | 42.6 | 22.9 | 35.2 | 93 | 52 | 43 | 86.0 | 21.0 | 78.8 | 116.3 |
| East North Central | 40.4 | 26.9 | 29.9 | 93 | 60 | 40 | 93.3 | 35.1 | 55.0 | 132.5 |
| West North Central | 45.6 | 19.8 | 29.9 | 78 | 45 | 38 | 130.3 | 52.5 | 73.3 | 105.3 |
| South Atlantic | 22.0 | 11.8 | 17.3 | 58 | 29 | 27 | 86.4 | 27.2 | 100.0 | 114.8 |
| East South Central | 20.2 | 10.3 | 15.4 | 56 | 29 | 26 | 96.1 | 31.2 | 93.1 | 115.4 |
| West South Central | 27.4 | 12.2 | 18.2 | 54 | 37 | 31 | 124.6 | 50.5 | 45.9 | 74.2 |
| Mountain | 47.7 | 22.6 | 31.1 | 86 | 56 | 46 | 111.1 | 53.4 | 53.6 | 87.0 |
| Pacific | 65.7 | 27.1 | 35.3 | 106 | 65 | 53 | 142.4 | 86.1 | 63.1 | 100.0 |

[1] Based on rates per day without board using a 10-hour workday as an annual average.
[2] Federal Works Agency, Public Roads Administration.

The improvement in farm wage rates in all of the major geographic divisions during the last 4 years appears great because farm wages were at a depressed level in 1939.    If the comparisons between farm and nonfarm are made with respect to percentage change since 1929, the picture is reversed.    For the United States as a whole, 1943 average hourly earnings of farm workers represented only a 45-percent increase over 1929, whereas 1943 hourly wage rates of common labor in road building were 82 percent higher than in 1929.    Although there was considerable variation about these percentages, the increase in common-labor rates from 1929 to 1943 was greater than the increase in farm rates within every geographic division.

Despite the upward trend since the depression in the ratio of hourly earnings of farm workers to hourly rates of common labor in road building, the ratio for the year 1943 was not so great as that of the 1925-29 period in any geographic division; in most of the divisions the 1943 ratio was substantially under that for 1925-29.

The level of farm wage rates during the first half of 1944 was substantially higher than the average for the year 1943.    The United States average farm wage per day without board was $4.06 in July, 1944.    Hourly earnings of farm laborers at this rate were 50 percent of the average hourly earnings of common labor in road building.    In the Pacific States the July farm wage rate per

day was $7.39, or the equivalent of 70 percent of the hourly earnings of common labor ($1.13 per hour)—the highest ratio in any major geographic division.  In three divisions—the South Atlantic, East South Central, and East North Central—the ratios were substantially under the national average of 50 percent.  Relatively high common-labor rates in the East North Central States and relatively low farm wage rates in the two Southern divisions account for these differences.

Persons who leave farms for work in urban areas frequently take jobs in construction and manufacturing industries that pay unskilled, common-labor rates.  Data by States on hourly entrance rates of common labor in 20 industries  (including 16 manufacturing industries, 3 groups of public utilities, and building construction, are indicative of the competitive wage situation which farmers face.  Comparable information for a more recent date than July 1942, is not available.  At that time, the farm wage per day without board, $2.45, was only 52 percent of the average entrance rate of common labor of $4.68, when converted to an 8-hour day basis (table 37).  In the New England States, the percentages were much higher than the United States average.

At the other end of the scale, 8 Southern States and Missouri had farm wage rates which were only 37 to 44 percent of the

TABLE 37.—*Wage rates of farm workers and of common laborers in industry, by States, July 1942*

| States | Farm wage without board per day [1] | Entrance rates of common labor | | Percentage farm wage rate per day is of common labor rate [3] | States | Farm wage without board per day [1] | Entrance rates of common labor | | Percentage farm wage rate per day is of common labor rate [3] |
| | | Hourly [2] | Per 8-hour day | | | | Hourly [2] | Per 8-hour day | |
|---|---|---|---|---|---|---|---|---|---|
| | Dollars | Dollars | Dollars | Percent | | Dollars | Dollars | Dollars | Percent |
| United States | 2.45 | 0.585 | 4.65 | 52 | West Virginia | 2.10 | 0.605 | 4.84 | 43 |
| Maine | 3.65 | .540 | 4.32 | 84 | North Carolina | 1.70 | .359 | 2.87 | 59 |
| New Hampshire | 3.90 | .575 | 4.60 | 85 | South Carolina | 1.15 | .355 | 2.84 | 40 |
| Vermont | 3.75 | .451 | 3.61 | 104 | Georgia | 1.25 | .365 | 2.92 | 43 |
| Massachusetts | 3.70 | .673 | 5.38 | 69 | Florida | 1.75 | .385 | 3.08 | 57 |
| Rhode Island | 3.80 | .683 | 5.46 | 70 | Kentucky | 1.75 | .585 | 4.68 | 37 |
| Connecticut | 3.90 | .620 | 4.90 | 79 | Tennessee | 1.45 | .433 | 3.46 | 42 |
| New York | 3.65 | .704 | 5.63 | 65 | Alabama | 1.35 | .429 | 3.43 | 39 |
| New Jersey | 3.60 | .691 | 5.53 | 65 | Mississippi | 1.30 | .372 | 2.98 | 44 |
| Pennsylvania | 3.20 | .722 | 5.78 | 55 | Arkansas | 1.60 | .390 | 3.12 | 51 |
| Ohio | 3.10 | .741 | 5.93 | 52 | Louisiana | 1.35 | .434 | 3.47 | 39 |
| Indiana | 3.00 | .722 | 5.78 | 52 | Oklahoma | 2.55 | .520 | 4.16 | 61 |
| Illinois | 3.25 | .810 | 6.48 | 50 | Texas | 2.05 | .429 | 3.43 | 60 |
| Michigan | 3.35 | .723 | 5.78 | 58 | Montana | 4.10 | .759 | 6.07 | 68 |
| Wisconsin | 3.30 | .730 | 5.84 | 57 | Idaho | 4.10 | .721 | 5.77 | 71 |
| Minnesota | 3.50 | .701 | 5.61 | 62 | Wyoming | 3.70 | .645 | 5.16 | 72 |
| Iowa | 3.70 | .659 | 5.27 | 70 | Colorado | 3.40 | .729 | 5.83 | 58 |
| Missouri | 2.30 | .764 | 6.11 | 38 | New Mexico | 2.40 | .492 | 3.94 | 61 |
| North Dakota | 3.40 | (4) | | | Arizona | 3.00 | (4) | | |
| South Dakota | 3.25 | .633 | 5.06 | 64 | Utah | 3.65 | .617 | 4.94 | 74 |
| Nebraska | 3.40 | .658 | 5.26 | 65 | Nevada | 3.50 | .621 | 4.97 | 70 |
| Kansas | 3.75 | .588 | 4.70 | 80 | Washington | 4.85 | .859 | 6.87 | 71 |
| Delaware | 2.95 | .514 | 4.11 | 72 | Oregon | 4.25 | .877 | 7.02 | 61 |
| Maryland | 2.90 | .618 | 4.94 | 59 | California | 4.50 | .811 | 6.49 | 69 |
| Virginia | 2.10 | .438 | 3.50 | 60 | | | | | |

[1] Bureau of Agricultural Economics.
[2] Bureau of Labor Statistics rates for adult male common laborers in 20 industries representing manufacturing, public utilities, and building construction.
[3] Since the length of workday for hired farm workers in July is longer than 8 hours this comparison overstates somewhat the relative level of the farm wage rate.
[4] Not available.

entrance rates for common labor in industry. Exclusion of Negroes from many industrial jobs in the South means that the Southern farmers have not felt local industrial competition so keenly for a great part of their labor supply. This has been a factor in the much lower-than-average ratio of farm wage rates to rates for common industrial labor in these Southern States.

## Farm Wage Rates and Wages of Workers in Industries that Process Farm Products

Because many establishments that process farm products (or prepare them for market) are located near the source of the products, these industries are likely to compete with agriculture for the workers available locally. The degree of competition is accentuated when there is coincidence in the demand for laborers for field and plant work and when the types of labor used are somewhat interchangeable. The competitive labor situation is common in the case of perishable crops which require rapid harvesting and processing, such as fruits and vegetables, sugarcane and sugar beets. Cotton ginning and crushing of oil-bearing seeds present a somewhat similar situation.

But many types of processing operations in the manufacture of foods and textiles are rather evenly distributed throughout the year. Flour milling, slaughtering and meat packing, and dairy-products manufactures are examples of industries that provide alternative employment opportunities in rural areas, although they do not present the same labor competitive situation that is found in highly seasonal processing industries.

Comparisons of agricultural wages with wages paid in processing or other industrial establishments should be made for localities in which the two actually compete for labor. However, only national comparisons are generally possible because most industrial rates are available only on an industry-wide basis. National comparisons are limited in value because farm wage rates are much more heavily weighted by the low wages in the South than are most industrial rates. About half of the Nation's hired farm workers are in the South, while even such widely distributed processing industries as canning and preserving, flour milling, or all the food industries as a group have much less than half of their workers in the South.

Some individual types of industries are concentrated in particular areas, as sugar-beet factories in the Mountain States or cottonseed and other vegetable-oil extracting establishments in the Southeast and Southwest. Differences in the geographic distribution of establishments need to be recognized when farm and nonfarm wage comparisons are made for selected industries.

The over-all figures on average hourly earnings for selected processing industries may first be examined for broad differences in trend and level relative to farm wage rates, before State and area differentials in farm-nonfarm wages are considered. The United States average farm wage rate and averages for two geographic divisions which roughly indicate the range of farm wage rates

are shown in table 38. Average hourly earnings of workers in all food industries combined were 85 cents in April 1944, as compared with approximately 37 cents for farm workers. Although this spread is exaggerated by the heavier weighting of the South in the farm wage rates, the average for food industries was not equaled by the farm wage rates even in the Pacific division, where farm wages are highest. Average hourly earnings in cotton-goods manufactures, an industry heavily concentrated in the South, attained a level of 62 cents in April 1944, as compared with the United States average hourly farm wage of 37 cents, or 27 cents in the South Atlantic States. Workers in tobacco manufacturers as well as in sawmill and logging had higher average earnings in April 1944, than workers in cotton-goods manufactures.

TABLE 38.—*Average hourly earnings of farm workers, United States and selected regions, and hourly earnings in industries processing agricultural or related products 1932-44*

| Year | Hourly earnings of farm workers [1] | | | Hourly earnings of workers in— [2] | | | |
|---|---|---|---|---|---|---|---|
| | United States | South Atlantic | Pacific | Food industries | Tobacco manufactures | Cotton-goods manufactures | Saw mills and logging camps |
| | Cents | Cents | Cents | Cents | Cents | Cents | Cents |
| 1944 (April) | 36.9 | 26.8 | 77.6 | 84.6 | 69.1 | 62.4 | 77.5 |
| 1943 | 32.7 | 22.0 | 65.7 | 79.9 | 64.3 | 59.6 | 72.2 |
| 1942 | 24.9 | 17.0 | 48.5 | 72.4 | 55.0 | 54.0 | 63.5 |
| 1941 | 19.3 | 14.1 | 33.5 | 65.1 | 52.0 | 46.4 | 55.0 |
| 1940 | 15.9 | 12.2 | 27.9 | 61.6 | 49.4 | 41.2 | 59.1 |
| 1939 | 15.6 | 11.8 | 27.1 | 61.8 | 47.6 | 38.6 | 47.6 |
| 1938 | 15.8 | 11.7 | 27.6 | 61.0 | 46.3 | 39.6 | 44.6 |
| 1937 | 16.1 | 11.8 | 29.1 | 58.7 | 44.5 | 41.3 | 43.8 |
| 1936 | 14.2 | 10.6 | 25.3 | 53.0 | 41.0 | 36.8 | 39.8 |
| 1935 | 13.3 | 10.1 | 23.5 | 52.0 | 39.9 | 37.6 | 38.7 |
| 1934 | 12.8 | 9.9 | 22.0 | 50.9 | | 37.8 | 38.9 |
| 1933 | 11.1 | 8.4 | 18.7 | | | 27.7 | 30.0 |
| 1932 | 12.0 | 8.9 | 20.8 | | | 23.9 | 30.6 |

[1] Bureau of Agricultural Economics. Based on rate per day without board, using a 10-hour work day as an annual average.
[2] Bureau of Labor Statistics.

The ratio of hourly earnings of farm laborers to those of workers in these several processing industries was higher in 1943 and in 1944 than during the years of the 1930's. However, the figures on all manufacturing industries suggest that the corresponding ratios in predepression years probably equaled or exceeded those of the present, although data on separate industries are not available for years before 1933.

Average hourly earnings of workers in six of the important types of food industries over approximately a decade are shown in table 39. The much lower wage level in cottonseed crushing (52 cents an hour in April 1944) than in any other of the industries was still considerably higher than the United States average farm wage rate, 37 cents on an hourly basis. In flour milling, sugar refining, and sugar-beet factories, the wages were 80 cents an hour or more in 1943, and have increased since then. In the case of butter production, and canning and preserving, average hourly earnings in April 1944, were 70 and 78 cents, respectively.

Before the war there was a considerable differential between farm wage rates and the higher rates paid in industries that process farm products. The wage differential existed even in the case of industries that perform first processing operations, such as canning or packing of fresh fruits and vegetables, cottonseed crushing, and butter making. The spread between farm and processing labor wage rates in 1939, as throughout that decade, was especially wide in many States because of the generally depressed level of farm wages. In other States relatively low wages in processing narrowed the spread between the two types of rates.

TABLE 39.—*Average hourly earnings of workers in selected food and processing industries. United States, 1932–44*

| Year | Canning and preserving | Flour milling | Butter production | Sugar refining | Beet-sugar manufacturing | Cottonseed crushing |
|---|---|---|---|---|---|---|
| | Cents | Cents | Cents | Cents | Cents | Cents |
| 1944 (April) | 77.5 | 82.8 | 70.2 | 82.5 | 90.4 | 52.0 |
| 1943 | 71.5 | 80.1 | 65.0 | 81.1 | 86.1 | 46.5 |
| 1942 | 62.0 | 72.0 | 57.9 | 74.5 | 77.9 | 39.9 |
| 1941 | 52.4 | 63.9 | 51.6 | 67.0 | 68.1 | 35.4 |
| 1940 | 46.5 | 61.1 | 48.6 | 64.6 | 61.4 | 33.5 |
| 1939 | 46.4 | 60.5 | 48.4 | 63.6 | 58.5 | 30.2 |
| 1938 | 45.4 | 59.3 | 48.3 | 61.3 | 57.8 | 26.0 |
| 1937 | 45.7 | 57.1 | 40.6 | 62.9 | 57.4 | 23.9 |
| 1936 | 39.3 | 53.6 | 44.3 | 57.9 | 49.5 | 22.0 |
| 1935 | 38.3 | 54.8 | | 56.8 | 49.8 | 22.8 |
| 1934 | | 53.5 | | 54.9 | 48.0 | 22.9 |
| 1933 | | 46.0 | | | 42.6 | |
| 1932 | | 45.3 | | | | |

Bureau of Labor Statistics.

Since the outbreak in Europe of the present war, farm wages in general have climbed from their low level more rapidly than have wages of workers in processing industries. As a result, the large differential in wages between farm and processing labor that existed in 1939 was considerably narrowed by October 1942. After that the extension of controls on nonagricultural wages by the National War Labor Board, together with the continued upward movement of farm wage rates, brought a further narrowing of the spread between farm and processing labor wages in some States.

In California, for example, the ratio of hourly earnings of farm workers to those of workers in the canning and preserving industry climbed from 0.63 to 0.85 from October 1939, to October 1943, as farm wages rose from $2.85 per day without board to $6.90, and as hourly earnings in the canning and preserving industry increased from 50 cents to 90 cents (table 40). In Indiana, the ratio increased steadily from 0.52 in October 1939, to 0.67 in October 1943. In Maryland, the ratio increased from 0.64 in October 1939, to 0.88 in October 1942, but declined by October 1943. Farm wages have also risen somewhat more rapidly since 1939 than wages in other types of processing such as cottonseed crushing and butter production. Nevertheless, a fairly wide spread between the average farm wages and the hourly earnings in such industries continued as recently as October 1943.

TABLE 40.—*Average hourly earnings of hired farm workers and of workers in specified processing industries, selected States, October 1939, 1942 and 1943*

| State and year | Hourly earnings of farm workers [1] | Hourly earnings in specified processing industries [2] | Hourly earnings of farm workers as percentage of hourly earnings in specified processing industries |
|---|---|---|---|
| | *Cents* | *Cents* | *Percent* |
| | | CANNING AND PRESERVING | |
| California: | | | |
| October 1943 | 76.7 | 90.2 | 85.0 |
| October 1942 | 61.1 | 77.2 | 79.1 |
| October 1939 | 31.7 | 50.0 | 63.4 |
| Maryland: | | | |
| October 1943 | 41.0 | 55.4 | 74.0 |
| October 1942 | 37.5 | 42.4 | 88.4 |
| October 1939 | 19.5 | 30.4 | 64.1 |
| Indiana: | | | |
| October 1943 | 40.5 | 60.4 | 67.1 |
| October 1942 | 34.6 | 56.0 | 61.6 |
| October 1939 | 20.0 | 38.5 | 51.9 |
| | | COTTONSEED CRUSHING | |
| Texas: | | | |
| October 1943 | 34.0 | 49.1 | 69.2 |
| October 1942 | 26.0 | 41.0 | 63.4 |
| October 1939 | 13.0 | 30.9 | 42.1 |
| Mississippi: | | | |
| October 1943 | 20.5 | 44.9 | 45.7 |
| October 1942 | 16.0 | 36.4 | 44.0 |
| October 1939 | 9.5 | 28.0 | 33.9 |
| | | BUTTER PRODUCTION | |
| Wisconsin: | | | |
| October 1943 | 44.0 | 65.4 | 67.3 |
| October 1942 | 37.5 | 54.9 | 69.3 |
| October 1939 | 20.5 | 46.8 | 43.8 |
| Iowa: | | | |
| October 1943 | 52.0 | 60.6 | 85.8 |
| October 1942 | 41.5 | 53.8 | 77.1 |
| October 1939 | 23.5 | 46.3 | 50.8 |

[1] Based on State average farm wage rate per day without board, using a 10-hour day in States other than California where a 9-hour day was used.

[2] Data for California from California Labor Statistics Bulletin, Div. of Labor Statistics and Law Enforcement, State of California; data for other States furnished by Bureau of Labor Statistics, U. S. Department of Labor. Changes in the composition of the reporting sample from one period to another have some influence on average hourly earnings.

Data compiled by State agencies on average hourly earnings of workers in processing and other manufacturing industries are brought together in table 41. These illustrate State variations in levels of farm and nonagricultural wages. The data from California are of special interest because farm wages there have been greatly affected by the intense competition for labor in war and other essential industries. Partly because of this, the program of stabilizing agricultural wages has been especially active in California.

The average farm wage per day without board in California was at a level of approximately $7 from October 1943, to the middle of 1944. At this level the hourly and daily earnings yielded by the general farm day wage are not materially different from the earnings of California seasonal workers in specialized crops paid at piece rates. For some individual crops, as asparagus, the earnings per day in the 1943-44 season averaged higher, whereas in other crops, such as cotton, they averaged less. Daily earnings per worker in the 1943 season of $7 to $9 are reported for workers in tomatoes, grapes, oranges, olives, walnuts, potatoes, other vege-

tables, and hay and grain work.  In cotton picking, which requires many workers, daily earnings for the 1943-44 season in California are reported to have averaged only $6.  Thus the average hourly earnings from the prevailing farm day rate in California appear to be appropriate for comparison with the average hourly earnings of workers in nonagricultural industries.

TABLE 41.—*Average hourly earnings of hired farm laborers and of workers in selected industries and States for specified months, 1941–44*

| State and industry | 1944 | 1943 | | | 1942 | | 1941 | |
|---|---|---|---|---|---|---|---|---|
| | April | October | July | April | October | July | October | July |
| | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars |
| **California:** | | | | | | | | |
| Agriculture [1] | 0.77 | 0.77 | 0.69 | 0.66 | 0.61 | 0.48 | -------- | 0.36 |
| All manufacturing industries [2] | 1.22 | 1.18 | 1.17 | 1.14 | 1.07 | 1.01 | -------- | .84 |
| Food and kindred products | 1.02 | .98 | .98 | .95 | .86 | .82 | -------- | .68 |
| Sugar beets | 1.16 | .98 | 1.02 | 1.03 | .87 | .91 | -------- | .84 |
| Canning and preserving fruits and vegetables. | .90 | .90 | .88 | .84 | .77 | .72 | -------- | .53 |
| Fish canning and packing | 1.02 | 1.00 | .07 | 1.01 | .98 | .92 | -------- | .73 |
| Dairy products | .94 | .89 | .86 | .85 | .83 | .81 | -------- | .67 |
| Meat products | 1.06 | 1.05 | 1.01 | .98 | .94 | .90 | -------- | .82 |
| Grain mill products | 1.05 | 1.06 | 1.05 | 1.02 | 1.01 | .91 | -------- | .82 |
| Tobacco manufactures | .88 | .86 | .80 | .77 | .74 | .70 | -------- | .64 |
| Textile mills—fabrics | .84 | .82 | .76 | .74 | .68 | .67 | -------- | .56 |
| Logging and sawmills | 1.19 | 1.17 | 1.15 | 1.05 | 1.01 | .97 | -------- | .84 |
| Aircraft and parts | 1.15 | 1.11 | 1.07 | 1.04 | .96 | .96 | -------- | .81 |
| Shipbuilding and repairing | 1.42 | 1.37 | 1.37 | 1.34 | 1.34 | 1.22 | -------- | 1.16 |
| **Indiana:** | | | | | | | | |
| Agriculture [1] | .40 | .40 | .38 | .34 | .34 | .30 | .26 | .26 |
| All manufacturing industries [2] | -------- | .99 | .96 | .94 | .90 | .86 | .80 | .78 |
| Dairy products | -------- | .62 | .59 | .56 | .55 | .50 | .46 | .44 |
| Slaughtering, meat packing | -------- | .81 | .88 | .84 | .76 | .74 | .72 | .66 |
| Tobacco manufactures | -------- | .84 | .52 | .52 | .44 | .42 | .36 | .35 |
| Planing and sawmills | -------- | .51 | .50 | .50 | .50 | .46 | .44 | .42 |
| **Pennsylvania:** | | | | | | | | |
| Agriculture [1] | .41 | .40 | .39 | .36 | .34 | .32 | .29 | .28 |
| All manufacturing industries [2] | -------- | .93 | .90 | .90 | .85 | .83 | .76 | .74 |
| Food products | -------- | .80 | .71 | .76 | .71 | .72 | .64 | .67 |
| Textiles | -------- | .74 | .78 | .70 | .86 | .64 | .60 | .57 |
| **Wisconsin:** | | | | | | | | |
| Agriculture [1] | .44 | .44 | .42 | .38 | .38 | .33 | .29 | .28 |
| All manufacturing industries [2] | -------- | .95 | .93 | 1.01 | .87 | .85 | .77 | .75 |
| Food and kindred products | -------- | .85 | .83 | -------- | .76 | .77 | .70 | .68 |
| Textile mill products | -------- | .72 | .69 | -------- | .64 | .65 | .58 | .56 |
| **North Carolina:** | | | | | | | | |
| Agriculture [1] | .27 | .25 | .23 | -------- | .20 | -------- | -------- | -------- |
| All manufacturing industries [2] | -------- | .64 | .64 | -------- | .57 | -------- | -------- | -------- |
| Lumber (including planing mills). | -------- | .52 | .50 | -------- | .48 | -------- | -------- | -------- |
| Tobacco products | -------- | .71 | .72 | -------- | .73 | -------- | -------- | -------- |

[1] Based on State average farm wage rates per day without board using a 10-hour day for States other than California, and a 9 to 9.5 hour work day for California.
[2] Nonagricultural hourly earnings compiled from reports issued by State agencies.  Data for Wisconsin exclude canning and preserving.

In October 1943, a time of peak operations both in field work and in processing establishments, the hourly earnings of farm workers in California averaged approximately 77 cents as compared with an average of 90 cents in fruit and vegetable canning and preserving, 89 cents in dairy products, and 98 cents in beet-sugar manufacturing.  Average hourly earnings of California workers in all food-manufacturing industries were 98 cents in October 1943, and $1.02 in April 1944.  Hourly earnings of California farm workers in April 1944, continued at the same level as in October 1943.

Because the hourly earnings of workers in food and other processing industries include payment for overtime at premium rates,

the actual spread between farm wage rates and basic or straight-time rates in these industries is narrower than indicated by the figures on hourly earnings. It is probable that hourly earnings at straight-time rates in fruit and vegetable canning in California in October 1943, may have been approximately equal to the average hourly earnings indicated by the farm wage rate per day without board. A similar relationship between farm and processing wages probably held with respect to dairy products, tobacco manufactures, and textile-mill products (fabrics).

Although a substantial differential continued in California between farm wages and wages in all manufacturing industries combined, the differential has disappeared or has greatly narrowed with respect to basic wage rates in the types of industries closely allied to agriculture which utilize similar types of labor.

Comparative hourly earnings from farm work and agricultural processing and other industries are also shown in table 41 for four other States, Indiana, Pennsylvania, Wisconsin, and North Carolina. In each of these States, and for every date shown, the average hourly earnings obtained from farm day rates are substantially lower than those from any of the industries shown, averaging about one-half in most cases. Unlike the situation in California, the differentials in these States between farm wage rates and wage rates in processing establishments have apparently not disappeared, even when allowance is made for inclusion of earnings at overtime rates.

## Wage Rates of Seasonal Farm Workers

For comparisons with hourly earnings of nonfarm workers, earnings of farm workers based on farm wage rates per day are not entirely satisfactorily in representing seasonal farm laborers who work in specialized crops at piece rates. The reported day rates may not fully reflect the equivalent daily earnings of workers in certain fruit, vegetable, or other crops where piece rates prevail or where employees are hired through labor contractors. [38]

Data for several States where the production of fruits and vegetables is important suggest that under recent conditions the hourly earnings from piece rates of workers hired for short periods in perishable, seasonal crops have averaged higher than the earnings from the prevailing day rates. Comparisons of hourly earnings of farm workers housed in labor-supply centers maintained by the Farm Security Administration with the average day rates in several States are shown in table 42. Practically all of the workers in these centers were seasonal workers whose earnings came mainly from specialized fruit and vegetable crops, much of the work being paid on a piece-rate basis. In many of the States, the hourly earnings of these workers in October 1942, were from 20 to 40 percent higher than from the prevailing day rate, with the differences in hourly earnings narrowing somewhat in 1943.

Prevailing piece rates paid for seasonal operations in sugarbeet work have also yielded average daily earnings higher than the

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[38] HALE, R. F., and GASTINEAU, R. L. RELIABILITY AND ADEQUACY OF FARM WAGE RATE DATA. U. S. Agr. Market Serv. [70] pp. 1940. (Processed.)

average rate per day without board in principal sugar-beet producing States (table 43). [30] This was generally true in 1943 as well as in 1939, although in the former year the differentials were less than in a prewar year like 1939.

TABLE 42.—*Comparisons of hourly earnings of seasonal workers in Farm Security Administration labor-supply centers with equivalent hourly earnings from prevailing farm wage rates per day without board, selected States, July and October 1942 and March 1943*

| State | Hourly earnings March 1943 [1] | | Hourly earnings October 1942 | | Hourly earnings July 1942 | | Hourly earnings of workers in FSA centers as percentage of hourly earnings from rates per day without board | | |
|---|---|---|---|---|---|---|---|---|---|
| | Workers in FSA centers | Based on rate per day without board [2] | Workers in FSA centers | Based on rate per day without board [2] | Workers in FSA centers | Based on rate per day without board [2] | March 1943 | October 1942 | July 1942 |
| | Cents | Cents | Cents | Cents | Cents | Cents | Percent | Percent | Percent |
| Arizona | 44.1 | 45.6 | 48.5 | 36.8 | | | 97 | 132 | |
| Arkansas | | | 26.8 | 20.5 | | | | 131 | |
| California | 72.5 | 65.6 | 70.6 | 61.1 | 56.1 | 47.8 | 111 | 116 | 117 |
| Connecticut | | | 48.1 | 40.5 | | | | 119 | |
| Delaware | | | 49.0 | 43.0 | | | | 114 | |
| Florida | 36.5 | 26.9 | 32.1 | 22.3 | 38.1 | 18.4 | 136 | 144 | 207 |
| Idaho | 50.5 | 48.5 | 59.7 | 48.5 | 48.2 | 41.0 | 104 | 123 | 118 |
| Maryland | | | 34.8 | 37.5 | 33.1 | 29.9 | | 93 | 114 |
| New Jersey | | | 50.9 | 40.0 | 49.3 | 36.0 | | 127 | 137 |
| New York | | | 52.0 | 42.5 | | | | 122 | |
| Oregon | | | 73.3 | 56.8 | 58.3 | 44.7 | | 129 | 130 |
| Texas | 33.4 | 26.0 | 35.6 | 26.0 | 24.1 | 20.5 | 128 | 137 | 118 |
| Virginia | | | 37.9 | 25.5 | | | | 149 | |
| Washington | | | 62.1 | 61.0 | 64.2 | 48.5 | | 102 | 132 |

[1] The April 1 farm wage rate per day without board was used for March 1943.
[2] Using a 10-hour day for States other than California, Arizona, Oregon, and Florida where a 9- to 9.5-hour day was used.
Bureau of Agricultural Economics and Farm Security Administration.

TABLE 43.—*Comparison of estimated average earnings per day in sugar-beet work for summer and fall operations with average farm wage rates per day without board, for selected States, 1939 and 1943*

| State | 1943 [1] | | | | 1939 | | | |
|---|---|---|---|---|---|---|---|---|
| | Blocking and thinning sugar beets [2] | Average farm wage per day without board July 1 | Harvesting sugar beets [2] | Average farm wage per day without board Oct. 1 | Blocking and thinning sugar beets [2] | Average farm wage per day without board July 1 | Harvesting sugar beets [2] | Average farm wage per day without board Oct. 1 |
| | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars | Dollars |
| Michigan | 5.00 | 4.30 | 5.82 | 4.70 | 3.33 | 2.25 | 3.94 | 2.25 |
| Minnesota | 5.45 | 4.70 | 5.51 | 5.50 | 3.64 | 2.35 | 3.64 | 2.55 |
| Nebraska | 5.45 | 4.60 | 6.00 | 5.10 | 3.64 | 1.95 | 4.40 | 1.80 |
| Colorado | 5.45 | 4.40 | 6.00 | 5.20 | 3.64 | 2.10 | 4.40 | 2.10 |
| Montana | 6.78 | 5.40 | 7.00 | 6.50 | 4.34 | 2.60 | 4.45 | 2.70 |
| Wyoming | 6.21 | 4.90 | 6.80 | 5.40 | 4.39 | 2.30 | 4.39 | 2.30 |
| Utah | 5.79 | 4.70 | 7.00 | 4.80 | 4.21 | 2.60 | 4.50 | 2.60 |
| Idaho | 5.79 | 5.40 | 7.00 | 6.30 | 4.21 | 2.50 | 4.50 | 2.55 |
| Washington | 5.79 | 6.80 | 7.25 | 8.00 | 3.95 | 2.60 | 5.00 | 2.75 |
| California | 5.66 | 6.15 | 7.25 | 6.90 | 3.82 | 2.30 | 4.38 | 2.85 |

[1] Because in some areas higher wage rates were paid in 1943 for sugar-beet work than minimum rates set by U. S. Dept. Agr., the daily earnings of sugar-beet workers were higher in relation to the general farm wage rate per day without board than the above figures suggest. On the other hand, daily earnings from sugar-beet work relate to experienced adult workers, whereas the wage rates per day without board are averages for all types of workers.
[2] Earnings per worker per day in the specified sugar-beet operations are estimates prepared by the Sugar Branch, War Food Administration, U. S. Dept. Agr. These estimates are based on the average performance in a 10-hour day of experienced adult workers under normal field conditions, and the wage rates for sugar-beet work set by the Dept. Agr.

[30] Wage rates for sugar-beet work referred to here are those set by the Department of Agriculture under the provisions of the Sugar Act of 1937.

There are indications, however, that under conditions of a plentiful labor supply the reported day rates may average higher than daily earnings of some workers from piece rates, while under conditions of labor scarcity the reverse may be true. The relative perishability of the crop and prevailing price conditions also affect the relation between daily earnings from the two types of wages. For example, in 9 of 13 important cotton-producing States, the estimated average daily earnings from cotton picking in 1943 exceeded the farm wage per day without board prevailing at cotton-harvest time (table 44). In 1939, however, when the available labor supply far exceeded the demand and when cotton prices were much lower, the average daily earnings of cotton pickers were lower than the prevailing day rates (without board) in 9 of the 13 States and were equal to the day rates in 2 other States. Apparently the shorter labor supply in 1943 and the need for picking the cotton crop within a limited time to assure retention of quality in the lint have caused cotton-picking rates to advance more rapidly since 1939 than the wage rates for the type of workers customarily hired by the day.

### Annual Wage Earnings of Farm Laborers and Industrial Workers

Comparisons over a long period of wage rates or of hourly earnings in agriculture and industry do not fully reflect changes in average weekly or annual wage income per worker because of changes in the length of workweek of industrial workers which have occurred over the last 33 years.

TABLE 44.—*Comparisons of average estimated daily earnings in cotton picking with average farm-wage rates per day without board, in principal cotton States, 1939 and 1943*

| State | 1943 | | | | 1939 | | | |
|---|---|---|---|---|---|---|---|---|
| | Rate for picking 100 pounds of seed cotton | Estimated daily earnings per adult picker [1] | Prevailing farm wage rate per day without board [2] | Daily earnings from cotton picking expressed as percentage of day rate | Rate for picking 100 pounds of seed cotton | Estimated daily earnings per adult picker [1] | Prevailing farm wage rate per day without board [2] | Daily earnings from cotton picking expressed as percentage of day rate |
| | Dollars | Dollars | Dollars | Percent | Dollars | Dollars | Dollars | Percent |
| Missouri | 2.00 | 3.50 | 3.30 | 106 | 0.75 | 1.31 | 1.45 | 90 |
| North Carolina | 1.75 | 3.06 | 2.50 | 122 | .60 | 1.05 | 1.20 | 88 |
| South Carolina | 1.25 | 2.19 | 1.65 | 133 | .50 | .88 | .85 | 104 |
| Georgia | 1.30 | 2.28 | 1.90 | 120 | .50 | .88 | .90 | 98 |
| Tennessee | 1.80 | 3.15 | 2.15 | 147 | .60 | 1.05 | 1.05 | 100 |
| Alabama | 1.40 | 2.45 | 2.10 | 117 | .50 | .88 | .90 | 98 |
| Mississippi | 1.70 | 2.98 | 2.05 | 145 | .60 | 1.05 | .95 | 111 |
| Arkansas | 1.70 | 2.98 | 2.45 | 122 | .60 | 1.05 | 1.05 | 100 |
| Louisiana | 1.50 | 2.62 | 2.25 | 116 | .55 | .96 | 1.10 | 87 |
| Oklahoma | 1.95 | 3.41 | 3.50 | 97 | .65 | 1.14 | 1.45 | 79 |
| Texas | 1.80 | 3.15 | 3.40 | 93 | .55 | .96 | 1.30 | 74 |
| New Mexico | 2.00 | 3.50 | 3.70 | 95 | .65 | 1.14 | 1.70 | 67 |
| Arizona | 2.70 | 4.24 | 4.55 | 93 | .90 | 1.48 | 2.05 | 72 |

[1] Estimated on basis of 175 pounds of seed cotton picked in a 10-hour day representing the season average performance of a mature picker. For Arizona, an allowance has been made for the smaller number of pounds of long-staple cotton picked per day.
[2] October 1.

An approximation of wage income per worker for a given period is afforded by dividing wage bill or pay-roll totals by the average employment for the period. Estimates for 1943 indicate that the annual average wage income of workers in manufacturing, mining, and railroads was $2,156 as compared with an average of $803 (including the value of perquisites received) per hired farm worker. Relative changes in the annual wage income of industrial and farm workers since 1910 are shown in figure 16.
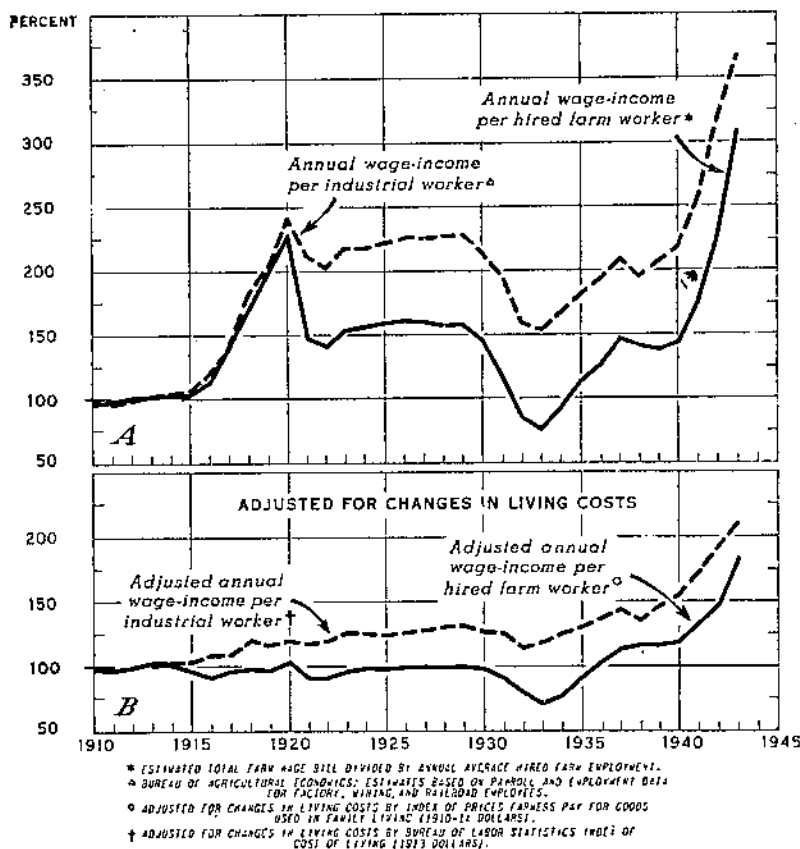


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**FIGURE 16.—Annual wage income per hired farm worker and per industrial worker, United States, 1910-43. (Index numbers, 1910-14 = 100.)**

The two indexes show the same general pattern as those for hourly earnings, but with less disparity between the two since 1920 than in the case of hourly earnings. Because of reduced length of industrial workweeks during the depression, annual wage income for industrial workers shows a steeper decline than do hourly earnings during the 1930's, with a more gradual recovery to 1940. With the lengthening of workweeks since war began, however, wage income to industrial workers has shown a steeper increase than hourly earnings. In the case of farm workers, the

annual earnings showed a more rapid recovery from the 1933 low than did hourly earnings, and also a more rapid rise since 1940. Nevertheless, in 1943 the hired farm worker's annual real wage income was only $472 in terms of 1910-14 dollars (or in terms of 1913 dollars), whereas industrial workers' real wage income was $1,233 in terms of 1913 dollars. (See fig. 21, p. 116).

The measure of income parity specified in the Agricultural Adjustment Act of 1938 aims toward a re-establishment of the 1910-14 ratio of the per capita net income received by persons on farms from farming to the per capita income of persons not on farms. Although this parity measure includes the wage income of hired farm workers who live on farms, it is almost entirely a measure of the comparative position of the farm income of operators and their families as against the income of the nonfarm population (in terms of the 1910-14 situation). Farmers' net income has exceeded the "parity" level since 1914 only in the World War I period (1917-20), and in the years 1935, 1937 and 1941-43 (fig. 17). In 1942, the per capita net farm income was 35 percent above the parity level, and in 1943 it was 43 percent above. (These figures include revisions which have not been incorporated in fig. 17.) In the long stretch between 1920 and 1935 and again from 1938 to 1940, income from farming stayed below the parity level, and dropped precipitously in the depressions of the early 1920's and 1930's.
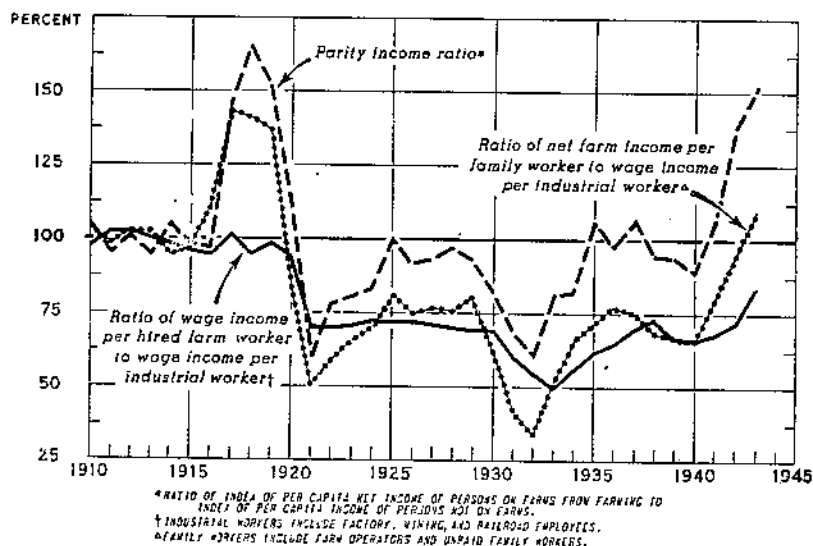


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FIGURE 17.—Parity income ratio and ratios of wage income per hired farm worker and net farm income per family worker to wage income per industrial worker, United States, 1910-43. (Index numbers, 1910-14 = 100.)

No "parity" measures exist for comparing the relative income position of hired farm workers with that of nonfarm wage workers. Data are not available for developing a parity measure for

hired farm workers that is strictly comparable to the farmers' parity standard. However, the degree of disparity between the average annual wage incomes of hired farm laborers and the corresponding average for industrial workers may be roughly measured by their current relationships in terms of the 1910-14 situation. [40] With the average income per industrial worker used as a standard, a similar comparison may be made of the average net income from farming per farm family worker. The courses of these two measures from 1910 to 1943 are shown along with the parity income index in figure 17.

For the index relating to hired farm workers, a value of 100 in a given year would mean that their average wage income bore the same relationship to the average wage income of industrial workers as existed in 1910-14. In the period 1910-14, however, wages of farm workers averaged only 46.5 percent of industrial workers' annual wages. Since the base period 1910-14, the ratio of the index of annual average wage income per hired farm worker to the index of average wage income per industrial worker has gone above 100 only in the one year—1917. Despite the sharp improvement in farm wage rates during the last several years, the ratio in 1942 was still only 72 percent and for 1943 only 80 percent.

In other words, to have reached a "parity-period" balance with industrial wage income, farm-wage earnings would have had to be 25 percent higher in 1943 than they actually were. As for farmers and their families, the ratio of net farm income per family worker to income per industrial worker in 1942 was 94 percent and in 1943, 105 percent of its 1910-14 value. To have reached a similar index in 1943, farm laborers would have had to receive wages 30 percent higher than they did. (The 1942-43 figures in this paragraph include revisions that have not been incorporated in fig. 17; except for 1943, all of the revisions were very minor.)

## 7. EARNINGS AND WELFARE OF FARM WAGE WORKERS AND THEIR FAMILIES

For a seasonal industry such as agriculture, in which the number of laborers hired in a peak month is about double that hired in a slack month, information on time worked and annual earnings is especially important. Many hired farm laborers do not have year-round work and must supplement their earnings by working at nonfarm jobs. Under wartime conditions jobs are generally easy to get during the part of the year when farm work is slack. In more normal times to find work during the off-season is a major problem.

The data on annual wage income of industrial or farm workers referred to in the preceding chapter are in terms of wages received by the average number of persons employed in the course of a year. As the number of different persons working during a year is much larger than the number in the annual employment average, the average wage income actually received by individual work-

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[40] The ratio of the index of wage income per hired farm worker to the index of wage income per industrial worker (employees in railroad, mining, and manufacturing industries) with 1910-14 as base period for both indexes.

ers is a lower figure.  The annual wages of industrial workers or of farm workers derived from pay-roll or wage-bill estimates, in conjunction with estimates of annual average employment are, in effect, estimates of wages per man-year of work.

The amount of wages per man-year of work is not a completely satisfactory substitute for average annual earnings of individual workers, since a man-year of work in any given industry may represent the work of more than one individual, depending on the duration of employment.  In agriculture especially, the irregularity arising from the seasonality of work leads to actual annual earnings that are considerably lower than the amount of wages per man-year of work.

No historical series exists to provide a basis of comparison of average annual income actually received by farm laborers with that of nonagricultural workers over a period of years.  The information on average wages per man-year of work in industry and agriculture (table 45) only approximates such a comparison.

TABLE 45.—*Comparisons of wages per man-year of work for industrial and agricultural workers, United States, 5-year averages, 1910–39, annual 1940–43*

| Period | Industrial workers [1] | Hired farm workers [2] | | | Farm wages as percentage of industrial wages |
|---|---|---|---|---|---|
| | | Total | Cash | Value of perquisites | |
| | Dollars | Dollars | Dollars | Dollars | Percent |
| Annual: | | | | | |
| 1943 [3] | 2,156 | 803 | 679 | 124 | 37.2 |
| 1942 | 1,847 | 616 | 503 | 113 | 33.4 |
| 1941 | 1,495 | 473 | 382 | 91 | 31.6 |
| 1940 | 1,273 | 390 | 310 | 80 | 30.6 |
| Average: | | | | | |
| 1935–39 | 1,149 | 362 | 282 | 80 | 31.5 |
| 1930–34 | 1,038 | 287 | 209 | 78 | 27.6 |
| 1925–29 | 1,316 | 433 | 323 | 110 | 32.9 |
| 1920–24 | 1,275 | 450 | 332 | 118 | 35.3 |
| 1915–19 | 877 | 394 | 281 | 113 | 44.9 |
| 1910–14 | 583 | 271 | 190 | 81 | 46.5 |

[1] Includes factory, mining, and railroad employees; estimates based on Bureau of Labor Statistics and Interstate Commerce Commission data on average employment and pay rolls.
[2] Total farm wages divided by annual average hired farm employment.
[3] Preliminary.

The comparison indicates that the farm laborer has fared much worse than the industrial worker during the last 34 years.  In the period 1910-14, farm wages per man-year of labor were only 46.5 percent of the average wages for industrial workers and the percentage declined steadily to a low of 27.6 percent during the 1930-34 period.  Since then, the relative position of farm laborers has improved somewhat.  Not until the year 1942, however, did farm wages per man-year of labor exceed the average for the 1925-29 period of 32.9 percent of average industrial wages.  Even though the percentage increased to 37.2 percent in 1943, this was still lower than that prevailing during the 1915-19 period.

In this comparison, no significant overstatement of the spread between farm and industrial wages per man-year can be attributed to the value placed on perquisites furnished farm hands.  Although farm products furnished to them have been evaluated on the basis

of prices received by farmers for farm products, the proportion that such perquisites comprise of the total wage bill is very small. The bulk of the perquisites is in the form of board, lodging, and housing, and it is not possible to learn whether the valuation is on the basis of the cost to the farmer or what might be the cost to the laborer were he to provide himself with similar accommodations.

The striking feature about the figures is that even though employment for 12 months of the year is assumed, the resulting hypothetical annual earnings for farm laborers have been and still are so low. In the 30 years preceding 1940, the average farm wages per man-year of hired labor amounted to only $368, including $271 in cash and $97 in perquisites. The amount has increased markedly since the war began in Europe, but the average wage per man-year of hired labor was only $616 in 1942 and $803 in 1943.

During the decade 1930-40 several sample studies of earnings of farm laborers were made in selected localities,[41] but differences in the methods used prevent national summaries or even regional comparisons in most cases.[42] The nearest approach to a national survey was a study made during 1935-36 in 11 counties representing the principal type-of-farming areas of the country.[43] When the results from these 11 counties are roughly weighted together, they show an average money income per farm-laborer family of about $268, including $227 as earnings from farm labor and $35 from nonagricultural work (table 46). The annual money income of farm-labor families included in the 11-county survey varied from an average of $127 in Fentress County, Tenn., a sub-

TABLE 46.—*Average money income of farm-laborer families by source of income, 11 sample counties of the United States, September 1935 to August 1936*

| County and State | Type-of-farming area | Average money income per family | | | |
|---|---|---|---|---|---|
| | | Total | Agricultural earnings | Nonagricultural earnings | Relief |
| | | *Dollars* | *Dollars* | *Dollars* | *Dollars* |
| Weighted average [1] | | 267.63 | 226.92 | 34.96 | 5.75 |
| Wayne Co., Pa. | Dairy | 355.31 | 285.96 | 68.04 | 1.31 |
| Livingston Co., Ill. | Corn | 317.47 | 286.36 | 21.56 | 9.55 |
| Hamilton Co., Iowa | Corn-hog | 316.70 | 292.57 | 19.11 | 5.02 |
| Lac Qui Parle Co., Minn. | Wheat | 209.82 | 185.26 | 21.07 | 3.49 |
| Karnes Co., Tex. | Cotton | 171.90 | 162.13 | 8.41 | 1.36 |
| Placer Co., Calif. | Deciduous Fruit | 572.19 | 529.75 | 34.94 | 7.50 |
| Concordia Co., La. | Cotton | 137.08 | 100.04 | 31.02 | 6.02 |
| Todd Co., Ky. | Tobacco | 191.08 | 168.60 | 19.10 | 3.38 |
| Pawnee Co., Kan. | Wheat | 261.89 | 212.05 | 42.38 | 7.48 |
| Archuleta Co., Colo. | Stock Range | 304.84 | 224.13 | 61.05 | 19.66 |
| Fentress Co., Tenn. | Self-Sufficing | 126.78 | 69.06 | 42.51 | 15.21 |

[1] Estimated by weighting county data in proportion to the total number of hired farm workers in the United States in each type-of-farming area represented by a county.
Based on an 11-county survey of agricultural labor conditions by Tom Vasey, U. S. Farm Security Administration and Josiah C. Folsom, Bureau of Agricultural Economics (see footnote 43, p. 91); adapted from statement of Paul S. Taylor in HEARINGS, SPECIAL COMMITTEE TO INVESTIGATE UNEMPLOYMENT AND RELIEF, United States Senate, 75th Cong., 3rd sess., February 28-April 8, 1938. Vol. 2, items 701-722.

41 For a list of studies and a summary of results see HOLCOMB, E. J. INCOME AND EARNINGS OF FARM LABORERS. U. S. Bur. Agr. Econ. 1940. (Processed.)
42 The Consumer Purchase Study of 1935-36 classified farm laborers and their families in the rural-nonfarm population and did not make separate tabulations of their income and expenditures.
43 VASEY, T. and FOLSOM, J. C. SURVEY OF AGRICULTURAL LABOR CONDITIONS. (for each of 11 counties.) U. S. Farm Security Admin. and Bur. Agr. Econ. 1937. (Processed.)

sistence-farming area, to $572 in Placer County, Calif., a deciduous-fruit area. In Wayne County, Pa., a dairy area, total annual money earnings of farm-laborer families were second highest, averaging $355.

Census data relating to the year 1939 provide for the first time, on a Nation-wide basis, information on annual income and amount of employment for individual farm laborers and on income and other indications of level of living for farm-laborer families.[44] For a more recent year, 1941, special tabulations of data gathered in the study of Family Spending and Saving in Wartime also provide some information on the annual earnings and value of family living for farm laborers, with comparable information for farm operators.[45]

### Individual Laborers' Incomes, 1939

The 1940 census information on wage and salary income of individuals is tabulated by the industrial or occupational classification of the individuals during March 24-30, 1940, the week immediately preceding the decennial census. Thus the 1939 income data to be presented for farm laborers relate only to persons who were actually working as paid farm laborers during the census week, to persons who had jobs as farm laborers but were not actually working because of sickness, weather, etc., or to unemployed persons (excluding those on public emergency work) who were seeking jobs and indicated that their last occupation was that of a paid farm laborer. [46]

Distribution of these farm laborers by annual cash wage and salary income is shown in table 47 and figure 18, with a similar income distribution of all other laborers (except mine) for comparison. Persons in nonagricultural occupations classified as laborers by the census are primarily persons doing common or unskilled labor in industries other than agriculture. The income differences between farm laborers and laborers in all other industries are striking. Nearly 75 percent of the male farm laborers earned less than $400 in cash during 1939, while only 37 percent of the nonagricultural male laborers earned as little as $400. Only 1.5 percent of the male farm laborers earned as much as $1,200 a year, compared with 15.1 percent of the other male laborers.

In the case of females, the discrepancies are much greater. More than half of the female farm laborers earned less than $100 during the year as compared with about 15 percent of the nonagricultural female laborers.

Several explanations should be made in interpretation of these comparisons. The first is that farm laborers often receive food, housing, fuel, etc., in addition to money wages. The estimate of

*EXCLUDING MINE LABORERS*

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**FIGURE 18.—Distribution of farm and nonfarm laborers by wage or salary income, United States, 1939 (From Population Census, 1940.)**

TABLE 47.—*Distribution of farm and nonfarm laborers, by sex and by wage or salary income, 1939*

| Wage or salary income class | Male | | | | Female | | | |
|---|---|---|---|---|---|---|---|---|
| | Farm [1] | | Nonfarm [2] | | Farm [1] | | Nonfarm [2] | |
| | Laborers | Percentage those reporting on income | Laborers | Percentage of those reporting on income | Laborers | Percentage of those reporting on income | Laborers | Percentage of those reporting on income |
| | *Number* | *Percent* | *Number* | *Percent* | *Number* | *Percent* | *Number* | *Percent* |
| Total | 2,112,901 | | 3,794,250 | | 114,882 | | 116,013 | |
| Not reporting on 1939 income | 64,815 | | 80,307 | | 4,264 | | 2,462 | |
| Reporting on 1939 income | 2,048,086 | 100.0 | 3,713,943 | 100.0 | 110,618 | 100.0 | 113,551 | 100.0 |
| $0– $99 | 360,370 | 17.6 | 492,686 | 13.3 | 58,105 | 52.5 | 17,485 | 15.4 |
| $100– $199 | 447,512 | 21.9 | 245,639 | 6.6 | 34,454 | 31.2 | 11,520 | 10.1 |
| $200– $399 | 715,111 | 34.9 | 621,289 | 16.7 | 13,543 | 12.2 | 22,722 | 20.0 |
| $400– $599 | 282,838 | 13.8 | 556,897 | 15.0 | 2,527 | 2.3 | 20,016 | 17.6 |
| $600– $799 | 133,263 | 6.5 | 514,977 | 13.9 | 1,195 | 1.1 | 20,686 | 18.2 |
| $800– $999 | 52,653 | 2.6 | 388,400 | 10.4 | 450 | .4 | 11,672 | 10.3 |
| $1,000–$1,199 | 24,594 | 1.2 | 333,200 | 9.0 | 158 | .1 | 5,970 | 5.3 |
| $1,200–$1,399 | 16,566 | .8 | 271,111 | 7.3 | 102 | .09 | 2,092 | 1.8 |
| $1,400–$1,599 | 7,261 | .3 | 152,250 | 4.1 | 28 | .03 | 747 | .7 |
| $1,600 and over | 7,885 | .4 | 137,494 | 3.7 | 44 | .04 | 641 | .6 |

[1] Wage workers.
[2] Excluding laborers in mines.
Based on data from United States Bureau of Census, 16th Census, 1940, Population, Vol. III, The Labor Force, Pt. 1; Summary, Table 72. The distributions shown are for experienced laborers in the March 1940 labor force (except persons on emergency work), by money wage and salary income received during 1939.

the Bureau of Agricultural Economics of the money value of perquisites to hired farm laborers during the year 1939 amounted to 200 million dollars, or about one-fourth as much as the total cash wages of 782 million dollars. However, if an allowance for perquisites is estimated as one-fourth of the wage and salary income

shown, the marked differentials in favor of the nonfarm laborers still remain. Thus, for example, by a 25-percent allowance for perquisites the medium total income for male farm laborers would be raised to $325, still only 56.1 percent of the male nonfarm laborers' median income.

The income comparison for farm and nonfarm laborers provided by these data probably understate somewhat the actual occupational differential. The group of persons classified as farm laborers in March, 1940, received some of their 1939 earnings from nonfarm work, while the group classified as nonfarm laborers received some of their earnings from farm work, although in neither case is the amount known either for individuals or for the groups of individuals. The differential would be larger than it is if it were possible to subtract from the farm-laborer group the earnings from nonfarm work (which were probably at a higher rate of pay than their farm work) and to do a corresponding subtraction of the earnings from farm work received by the nonagricultural laborers.

Because the 1940 census classified workers according to their status during the last week of March, a large, although unknown, number of seasonal farm laborers who worked in 1939 are not included in the farm-laborer group for which income information is available, and are not identifiable in other groups. On the basis of related census data and comparisons of the estimated aggregate earnings of the farm laborers enumerated with the estimate of the total farm-wage bill for 1939, it appears safe to assume that the farm laborers in table 47 comprise at least half of the total number of different persons working at farm work for wages in 1939. Moreover, they probably accounted for as much as three-fourths of the total time worked by all hired farm workers, since the excluded groups were mostly seasonal workers who averaged less time at farm labor during the year. Although it is difficult to appraise the effect of the partial coverage on the average level of annual earnings of farm laborers, the excluded groups probably had a lower average level of annual earnings than the laborers for whom information is available.

From distributions similar to those shown in table 47, median wage and salary income of farm and nonfarm laborers by sex have been computed for each major region (table 48). To provide some control on differences in income arising from differences in length of time worked, similar medians are also given for farm and nonfarm laborers who worked 12 months in 1939. These comparisons are shown for male laborers by regions in figure 19. In the West and the Northeast the median income for male farm laborers was just over half of the median income for nonfarm laborers; in the North Central region and in the South it was somewhat under half of the median for nonfarm laborers. For 12-month workers, the median income of male farm laborers represented a lower percentage of the median income of nonfarm laborers than in the case of all laborers.

Regional differences in medium income of farm laborers and of nonfarm laborers are great. Half of the male farm laborers in the
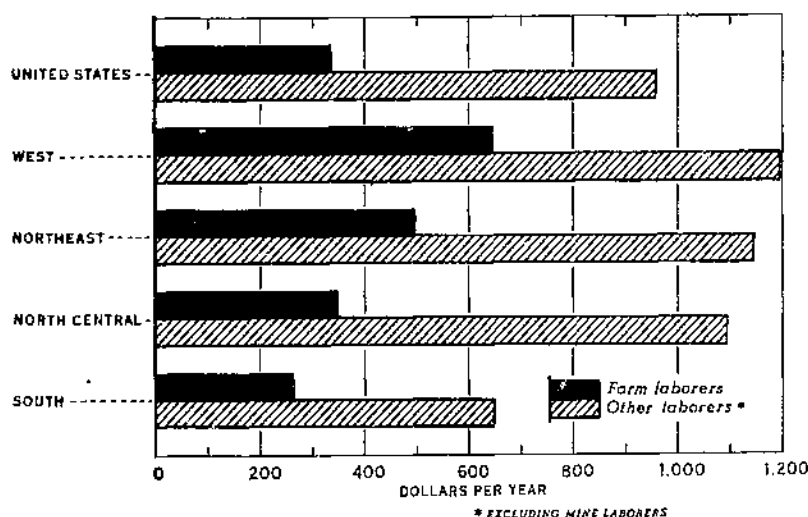
**FIGURE 19.**—Median wage and salary income of male farm laborers and other male laborers who worked 12 months in 1939, United States and major regions. (From Population Census, 1940.)

TABLE 48.—*Median wage and salary income received by farm and nonfarm laborers, by sex, United States and major regions, 1939*

| Region and sex of worker | Median wage and salary income | | | | | |
| | All laborers | | | Laborers working 12 months in 1939 | | |
| | Farm [1] | Nonfarm [2] | Farm as percentage of nonfarm | Farm [1] | Nonfarm [2] | Farm as percentage of nonfarm |
|---|---|---|---|---|---|---|
| | *Dollars* | *Dollars* | *Percent* | *Dollars* | *Dollars* | *Percent* |
| United States: | | | | | | |
| Males | 260 | 579 | 44.9 | 336 | 960 | 35.0 |
| Females | 95 | 450 | 21.1 | 160 | 726 | 22.0 |
| Northeast: | | | | | | |
| Males | 376 | 699 | 53.8 | 496 | 1,145 | 43.3 |
| Females | 234 | 526 | 44.5 | 378 | 771 | 49.0 |
| North Central: | | | | | | |
| Males | 236 | 670 | 42.1 | 348 | 1,093 | 31.8 |
| Females | 161 | 539 | 29.9 | 266 | 778 | 34.2 |
| South: | | | | | | |
| Males | 189 | 408 | 46.3 | 262 | 649 | 40.4 |
| Females | 89 | 310 | 28.7 | 145 | 571 | 25.4 |
| West: | | | | | | |
| Males | 406 | 740 | 54.9 | 640 | 1,186 | 54.0 |
| Females | 184 | 408 | 45.1 | 494 | 829 | 59.6 |

[1] Wage workers.
[2] Excluding laborers in mines.
Based on data from United States Bureau of Census, 16th Census, 1940, Population, Vol. III, The Labor Force, Pt. 1, Summary, Table 72. Medians were computed from distributions for all experienced wage or salary workers in the March 1940 labor force (except persons on emergency work) reporting on money wage and salary income received during 1939.

South who worked 12 months in 1939 received annual wages of less than $262 while in the West half received more than $646. For females the regional differentials are even greater, the median earnings for the 12-month farm laborers in the South being only 29 percent of the corresponding median for the West. Thus among laborers, the occupational group with lowest wages, the spread in

annual earnings is still wide, with marked differences between agriculture and industry, between the sexes, and among the major regions. The lower incomes for farm laborers of both sexes in the South, but especially for females, reflect race differentials as well.

Part of the differential in wage income between farm and nonfarm laborers is due to the fact that a greater proportion of farm laborers than of nonfarm laborers are in the South, where wages are generally low. In the case of females this is very important; it explains why the percentage which female farm laborers' median wage income comprises of that for nonfarm female laborers is lower for the United States as a whole than in any major region.

The income information in table 48 for laborers who had worked 12 months during 1939 indicates that the length of time worked does not vitiate comparisons of income made earlier. The median income for male farm laborers who worked 12 months in 1939 is only 35 percent of that for nonfarm male laborers who worked 12 months, as compared with 45 percent for all laborers, regardless of time worked. For female laborers, the median income for 12-month farm laborers is 22 percent of that for nonfarm laborers —almost identical with the corresponding figure for all female laborers, 21 percent.

The relatively low level of annual earnings of farm laborers is even more apparent if comparisons are not restricted to the laborer group in nonagricultural occupations. Table 49 gives comparisons of median income for all wage and salary workers employed in agriculture and for all wage and salary workers employed in nonagricultural industries. The agricultural workers for whom the medians are shown are mainly the farm laborers for whom data are given in table 48. [47] The medians indicate that agriculture as an industry in 1939 paid its wage and salary workers a median money income only about 30 percent as great as that paid by nonagricultural industries. This relationship was fairly constant for males and females and for 12-month workers as well as for all workers.

TABLE 49.—*Median wage and salary income received by agricultural and nonagricultural wage and salary workers, by sex, United States, 1939*

| Type of worker | Median wage and salary income of workers | | Agricultural as percentage of nonagricultural |
|---|---|---|---|
| | Agricultural [1] | Nonagricultural | |
| | *Dollars* | *Dollars* | *Percent* |
| All workers | 288 | 931 | 30.9 |
| Male | 298 | 1,001 | 29.8 |
| Female | 125 | 418 | 29.9 |
| Workers employed for 12 months in 1939 | 370 | 1,239 | 30.3 |
| Male | 378 | 1,407 | 26.9 |
| Female | 258 | 790 | 32.7 |

[1] In addition to hired farm laborers, this group includes farm managers and approximately 130,000 other wage and salary workers classified by the census as in agriculture.
Based on data from United States Bureau of Census, 16th Census, 1940, Population. The Labor Force (Sample Statistics), Wage or Salary Income in 1939, Tables 8, 9. Medians were computed from distributions for all experienced wage or salary workers in the March 1940 labor force (except persons on emergency work) who reported receiving some money wages or salary during 1939.

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47 The agricultural workers for whom medians are shown in table 49 differ from those in table 48 only by inclusion of farm managers and other wage and salary workers in agriculture and exclusion of persons reporting $0 income in 1939. This has the effect of raising the median income from $260 to $288.

## Family Income, 1939

The census material on 1939 income from wages and salaries has been compiled in such a way as to afford comparisons for families by occupation of head of household in March, 1940. The figures for family income do not represent solely earnings from the occupation indicated except in those cases where the head of the household was in the same occupation for the entire year 1939 as he was in March, 1940, and was the only wage or salary earner of the family during 1939, or in cases where all earnings from other family members came from the same occupation as that of the head of household.

In table 50 and figure 20 data are presented on family income from wages and salaries, with distributions for certain occupational-residence groups. Information regarding families who have a farm laborer as head of the household is available only for rural-farm resident families. The occupational classification of heads of nonfarm-resident households does not show farm and nonfarm laborers separately. Each group of families includes only those in which all workers were wage or salary workers.
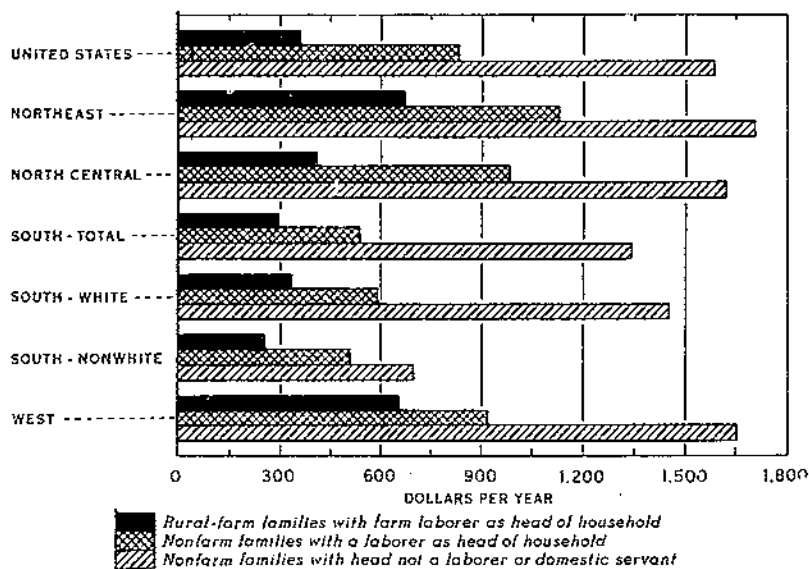


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**FIGURE 20.—Median wage or salary income for families of wage and salary workers by occupation of head of household, United States and major regions, 1939. (From Population Census, 1940.)**

In terms of family income, only domestic servants fare so badly as farm laborers, and in their case the value of food and housing received is probably greater than for farm laborers. The median money income from wages and salaries of farm-laborer families is only 43.5 percent of that for laborer families who do not live on farms, and only 22.9 percent of that for nonfarm families who do not have a domestic servant or a farm laborer as head of the household.

TABLE 50.—*Comparisons of wage and salary family income of rural-farm families with farm laborer as head of household and of nonfarm-resident families, for the United States and major regions, 1939*

| Area and race | Rural-farm families with farm laborer as head of household | | | Nonfarm families with head of household | | | | | | | | |
| | | | | Laborer [1] | | | Domestic servant | | | All other | | |
| | Median income | Percentage with income less than | | Median income | Percentage with income less than | | Median income | Percentage with income less than | | Median income | Percentage with income less than | |
| | | $200 | $1,000 | | $200 | $1,000 | | $200 | $1,000 | | $200 | $1,000 |
| | Dol. | Pct. | Pct. | Dol. | Pct. | Pct. | Dol. | Pct. | Pct. | Dol. | Pct. | Pct. |
| United States: | 363 | 23.8 | 93.4 | 834 | 6.7 | 59.2 | 339 | 29.9 | 88.7 | 1,586 | 1.4 | 23.0 |
| Northeast | 674 | 4.3 | 79.9 | 1,129 | 3.0 | 42.2 | 579 | 13.2 | 74.2 | 1,704 | 1.0 | 18.7 |
| North Central | 408 | 11.0 | 94.1 | 986 | 4.3 | 50.9 | 385 | 26.7 | 83.9 | 1,618 | 1.1 | 20.5 |
| South—total | 295 | 33.5 | 97.3 | 541 | 11.9 | 82.6 | 280 | 37.1 | 94.9 | 1,342 | 2.2 | 34.5 |
| White | 337 | 25.1 | 95.4 | 593 | 11.4 | 77.0 | 280 | 36.7 | 93.2 | 1,453 | 1.7 | 29.0 |
| Nonwhite | 254 | 41.1 | 98.8 | 507 | 12.4 | 87.7 | 279 | 36.7 | 95.1 | 697 | 5.7 | 76.1 |
| West | 655 | 6.0 | 81.6 | 922 | 5.5 | 54.8 | 460 | 22.7 | 83.6 | 1,650 | 1.4 | 20.7 |

[1] Including urban and rural-nonfarm families with a farm laborer as head of household.
Based on data from United States Bureau of Census, 16th Census, 1940, Population, Families, Characteristics of Rural-Farm Families, Table 8; Family Wage or Salary Income in 1939, table 7. Nonfarm families include urban-farm families. Wage and salary income figures relate only to money income. Medians are for families in which all workers in March 1940 were wage or salary workers and who reported some wage and salary income for 1939.

Again the regional and race differentials are striking within the farm-laborer group. More than 40 percent of the nonwhite farm-laborer families in the South had family wage and salary incomes of less than $200, whereas only 4.3 percent of farm-laborer families of the Northeast and only 6.0 percent in the West had family incomes this low.

In only the Northeast and the West did as many as about 20 percent of the farm-laborer families have a wage and salary income as large as $1,000. Even if a value of perquisites estimated at one-fourth of the income from wages and salaries be added to the medians shown, the resulting figures would indicate that in no region was the median family income of farm laborers sufficient to provide what would generally be considered an adequate level of living.

## Housing Facilities of Farm-Laborer and Farm-Operator Families, 1939

Figures on wage and salary income are not appropriate for comparing income of farm operators with income of other groups, since the income earned from operating a farm is excluded. Therefore, the census information does not lend itself to comparisons of the two main occupational groups within agriculture—operators and members of their families as against hired farm workers. However, material on housing and facilities is available for rural-farm families classified by occupation of head of household in March, 1940. The 4,487,120 rural-farm households in which the head was classified as a farmer or farm manager during March 24-30, 1940, represent the farm-operator families, and the 567,940 in which the head was classified as a farm laborer or farm foreman represent the farm-laborer families.

Comparisons for these two groups of families with respect to several housing items are shown in table 51. Almost without ex-

ception in every region the homes of farm operators are better than the homes of farm laborers. On most of the items the occupational differentials are not great, however, and they are overshadowed by race and regional differentials. It must be remembered that these occupational comparisons are not clear-cut employer-employee comparisons. The farm operator families include many more of the 2.4 million tenants and croppers than of the 0.9 million operators who were hirers of farm laborers in March 24-30, and possibly even more of the small owner-operators who did not hire. Undoubtedly, similar comparisons of housing of farm laborers with that of their employers as a group would show much more marked contrasts.

TABLE 51.—*Housing facilities of rural-farm families with farm laborer as head of household and with farm operator (farmer or farm manager) as head of household, United States and major regions, 1940*

| Item and occupation of head of household [1] | United States | Northeast | North Central | South | | | West |
|---|---|---|---|---|---|---|---|
| | | | | Total | White | Nonwhite [2] | |
| | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* |
| Owned homes with value more than $500: | | | | | | | |
| Farm laborer | 54.0 | 88.4 | 67.9 | 39.7 | 44.2 | 32.8 | 51.1 |
| Farmer or farm manager | 75.3 | 96.2 | 87.8 | 58.4 | 62.4 | 33.4 | 73.4 |
| Tenant homes with monthly rental of more than $5: | | | | | | | |
| Farm laborer | 43.3 | 91.2 | 75.1 | 23.9 | 35.5 | 13.8 | 79.4 |
| Farmer or farm manager | 54.2 | 96.0 | 85.4 | 35.1 | 45.4 | 19.0 | 87.7 |
| Homes with toilet or privy: | | | | | | | |
| Farm laborer | 88.6 | 99.5 | 96.4 | 83.8 | 88.0 | 79.9 | 95.6 |
| Farmer or farm manager | 91.8 | 98.6 | 97.4 | 86.3 | 88.6 | 79.9 | 96.0 |
| Homes with running water: | | | | | | | |
| Farm laborer | 13.5 | 42.4 | 10.9 | 5.0 | 9.0 | 1.2 | 44.2 |
| Farmer or farm manager | 16.9 | 48.9 | 13.0 | 7.6 | 10.1 | .5 | 49.5 |
| Homes not needing major repairs: | | | | | | | |
| Farm laborer | 63.2 | 73.2 | 66.6 | 59.1 | 59.6 | 58.6 | 73.6 |
| Farmer or farm manager | 67.7 | 76.3 | 72.6 | 62.2 | 64.6 | 55.8 | 74.2 |
| Homes reporting 1.00 or fewer persons per room: | | | | | | | |
| Farm laborer | 59.1 | 86.2 | 76.8 | 51.3 | 49.7 | 52.8 | 58.7 |
| Farmer or farm manager | 70.8 | 93.1 | 85.7 | 57.2 | 64.4 | 42.7 | 73.3 |
| Homes reporting electricity: | | | | | | | |
| Farm laborer | 22.6 | 66.8 | 32.8 | 7.7 | 12.4 | 3.4 | 58.7 |
| Farmer or farm manager | 29.8 | 66.2 | 39.2 | 14.7 | 19.2 | 2.2 | 57.2 |

[1] Major occupation during week of March 24-30, 1940.
[2] The inclusion of sharecroppers in the "farmer or farm-manager" classification is largely responsible for the reversal among nonwhites in the South of some of the differentials in housing facilities prevailing in all other regions between farm laborers and farmers or farm managers.
   Compiled from United States Bureau of Census, 16th Census, 1940, Population and Housing, Families, Characteristics of Rural-Farm Families, tables 2, 10, 11, and 13.

## Earnings of Farm Laborers, 1941

By 1941 farm wage rates had increased 25 percent over their 1939 level. Relative to conditions prevailing throughout the 1930-1940 decade, the year 1941 was by no means one of low farm income or low farm wage rates. War had already substantially reduced unemployment and had raised the general level of wages, prices, and income among all groups of the economy. Farm wage rates were 81 percent above their depression low in 1933 and 31 percent above their 1935-39 average. Furthermore, when allowance is made for changes in the price level of goods used by farmers in family living, the adjusted index of farm wage rates was higher in 1941 than in the previous peak years of 1920 and 1929.

Although it cannot be predicted what farm wage conditions may obtain in the years following the conclusion of the war, it is not likely that wages will remain at the peak war level attained later. Hence information on the 1941 situation may afford some basis for post-war thinking.

Special tabulations from the Study of Family Spending and Saving in Wartime have been made for a national sample of 223 farm laborers.[48] This sample does not represent all types of farm laborers working for wages, as it excludes those who are urban residents and those who are farm operators or members of a farm operator's family. Although the sample represents the most important segment of all farm laborers, it does not represent the entire group of farm laborers in the United States. Interpretation of the material must be qualified in the light of this fact. However, the results obtained are consistent with independent national estimates relating to farm-wage rates and farm employment for 1941. Moreover, the figures on individual laborer and family income for 1941 appear to be in reasonable agreement with the results of the more comparable studies for past years, when allowances are made for the changed wage levels and amount of employment provided.

The average amount of cash earnings per worker from farm labor during 1941 was $287 for the group studied. The average number of weeks worked in farm labor was 31, or 60 percent of the total weeks in the year [49] (table 52). An earnings figure very close to this is obtained from the average farm wage rate of $38.14 per month reported by the Bureau of Agricultural Economics for 1941, and the time reported worked by the laborers in the sample. At a monthly wage rate of $38.14, the annual earnings for the laborer working 12 months would be $458, but only $275 for the laborer working approximately 30 weeks. For the farm laborers included in the sample of workers who reported amount of time worked and earnings from farm labor, the average cash farm wages during 1941 was $9.65 per week worked. When allowance is made for the value of perquisites received by these farm laborers [50], the average total wage rate for this group was $10.83 per week actually worked. A comparable figure derived from the Bureau of Agricultural Economics estimates of the total farm wage bill and the annual average number of hired workers employed is $9.10 per week.[51]

[48] The tabulations presented on farm laborers involve all farm laborers included in the group designated as "rural-nonfarm" families in RURAL FAMILY SPENDING AND SAVING IN WARTIME, U. S. Dept. Agr. Misc. Pub. 520, 163 pp. The "rural-nonfarm" group on a residence basis excludes the "urban" group of families (families living in incorporated places of 2,500 or more population), and on an occupational basis excludes families receiving any entrepreneurial income from operating a farm during 1941 (designated as "rural-farm" families in the cited publication). As of April 1940, urban residents comprised only 7 percent of all farm laborers in the United States.

[49] Time worked in farm labor was reported in "weeks" without indication of the length of workweek.

[50] Allowance for perquisites derived from data on perquisites received by families of farm laborers related to number of farm workers and time worked.

[51] The total farm wage bill (including perquisites) of 1,197 million dollars divided by the annual average number of hired workers, 2,532,000, provides an estimate of $470 as the wages for 12 months of farm labor, or $9.10 when expressed as the wage cost per man-week. The higher average wage income of $10.83 may be due to the bias introduced through failure of more of the lower paid farm laborers to report both time and earnings or to exclusion from sample of farm laborers who live in cities or in farm operator's households.

TABLE 52.—*Length of time worked, yearly earnings, and weekly wage rates of 223 farm laborers by sex, 1941*

| Item | Unit | Total | Males | Females |
|---|---|---|---|---|
| Farm laborers studied | Number | 223 | 178 | 45 |
| Percentage who are heads of households | Percent | 52 | 62 | 11 |
| Mean age | Years | 32 | 35 | 27 |
| Average number of weeks employed in farm labor during 1941 [1] | Weeks | 31 | 35 | 13 |
| Average amount of money earnings from farm labor during 1941 [2] | Dollars | 287 | 341 | 64 |
| Average amount of cash farm wages per week worked during 1941 [3] | Dollars | 9.65 | 9.97 | 5.57 |

[1] Based on information from number reporting weeks worked at farm labor in 1941 as follows: Total, 191; male, 156; female, 35.

[2] Based on information from number reporting amount of earnings from farm labor in 1941: Total 212; male, 171; female, 41.

[3] Based on information from number reporting both weeks worked and amount of earnings in 1941: Total, 188; male, 154; female, 34.

From special tabulations made by the Bureau of Agricultural Economics of data from the Study of Family Spending and Saving in Wartime, through cooperation of the Family Economics Division of the Bureau of Human Nutrition and Home Economics, U. S. Dept. Agr.

If the average number of weeks worked in farm labor during 1941 by the sample of laborers studied is used as an estimate of the average time worked by all farm laborers, the annual average number of 2,532,000 hired workers estimated in the Bureau of Agricultural Economics series on farm employment actually represents 4,247,000 different individuals who worked at some time during 1941 as hired farm laborers. This estimate is consistent with a similar estimate for the year 1943 made on the basis of a Nationwide enumerative survey. Because on the average the hired farm laborer was employed in farm work only about 60 percent of the year, on the average, the number of different workers (exclusive of dependents) affected by farm wage rates and by other factors influencing their welfare is much larger than any number reported as currently employed.

Both in proportion of the year worked and in rates of pay, there were marked differences between male and female farm laborers in 1941. The female laborers covered by the survey worked on the average only a little more than one-third as long as males and during the weeks actually worked they received only slightly more than half as much pay. [52] Thus the annual cash earnings from farm work for females was only $64 compared with an average of $341 for males. The females were younger on the average than males, their mean age being 26.7 years compared with 35.0 years for males. They were less frequently heads of households—in only 11 percent, as compared with 62 percent for males.

When the farm laborers are grouped according to the net annual money-income class of their families in 1941, differences in age, weeks worked, earnings, and wage rates are evident among the several income classes. Male farm laborers in families where the net money income was less than $500 in 1941 were generally somewhat older, more often the head of a household, employed for a greater proportion of the year, but at a much lower wage rate than were male farm laborers in the higher family income groups.

[52] Their lower weekly wage is probably due partly, but not wholly, to a shorter workweek. The average length of workweek for all females working on farms in 1943 was 44 hours as compared with 59 hours for males. See Ducoff and Hagood, footnote 16, p. 17.

Among women the same differences generally held except with respect to age—the younger female farm laborers were found in the groups of the lowest family incomes.

The implications of the data on the amount of annual earnings for the level of living of workers and their dependents are made clearer when this information is presented on a family rather than on an individual-laborer basis. A distribution is shown in table 53 of the 134 families which included the 223 farm laborers by net money income of the family in 1941, along with the average value of family living. For comparison, similar information is shown for farm-operator families covered in the same survey.

Of the farm-laborer families surveyed, 81 percent had annual net money incomes during 1941 of less than $1,000, as compared with 59 percent of the operator families. This comparison understates the relative position of the laborer families, for they had less than half as great an average nonmoney income as did the families of farm operators. The value of family living of operator families, including both expenditures for family living and the value of items obtained without direct money outlay, exceeded that of farm-laborer families by an average of $434, or 48 percent.

TABLE 53.—*Distribution of a sample of farm-laborer and farm-operator families by net money income class, 1941*

| Annual net money income class | Farm-laborer families | | | | | | Farm-operator families | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of families | Percentage of total | Average value per family | | | Value of family living [1] | Number of families [2] | Percentage of total | Average value per family | | | Value of family living [1] |
| | | | Total income | Money income | Non-money income | | | | Total income | Money income | Non-money income | |
| | *Number* | *Percent* | *Dollars* | *Dollars* | *Dollars* | *Dollars* | *Number* | *Percent* | *Dollars* | *Dollars* | *Dollars* | *Dollars* |
| All classes | 134 | 100.0 | 914 | 675 | 239 | 910 | 762 | 100.0 | 1,655 | 1,134 | 521 | 1,344 |
| $0– $499 | 55 | 41.0 | 475 | 291 | 184 | 480 | 257 | 33.7 | 698 | 271 | 417 | 798 |
| $500– $999 | 53 | 39.6 | 992 | 723 | 269 | 987 | 193 | 25.3 | 1,268 | 737 | 531 | 1,250 |
| $1,000–$1,499 | 17 | 12.7 | 1,417 | 1,189 | 228 | 1,415 | 110 | 14.4 | 1,782 | 1,226 | 556 | 1,477 |
| $1,500–$1,999 | 9 | 6.7 | 2,180 | 1,771 | 409 | 2,120 | 81 | 10.6 | 2,306 | 1,701 | 605 | 1,806 |
| $2,000–$2,999 | | | | | | | 66 | 8.5 | 3,064 | 2,439 | 625 | 2,203 |
| $3,000–$4,999 | | | | | | | 28 | 3.7 | 4,491 | 3,776 | 715 | 2,551 |

[1] The value of family living is the sum of actual expenditures for family living plus the value of items obtained without direct money outlay, such as food produced for family use, value of occupancy of owned homes, and value of fuel, perquisites, etc.

[2] Total includes a few families with negative incomes and incomes of more than $5,000.

Information on a sample of 134 farm-laborer families from special tabulations made by the Bureau of Agricultural Economics of data from the Study of Family Spending and Saving in Wartime, through cooperation of the Family Economics Division of the Bureau of Human Nutrition and Home Economics. Information on a sample of 762 farm-operator families adapted from Rural Family Spending and Saving in Wartime. See footnote 45, p. 92.

In the case of farm-laborer families, the average value of family living almost exactly equaled the average total income in each income class, whereas in operator families the total income exceeded the value of family living by an average of $311 per family. Although the families of operators in the sample achieved an average net saving of $294 during the year, [53] living expenditures absorbed practically all the money income of farm-laborer families. Nearly one-fourth of all the sampled families received relief

[53] The difference of $17 between $311 and $294 is accounted for by the excess of expenditures for gifts and welfare over the value of inheritances and gifts received.

in some form during 1941, but only about half as great a proportion of the operator families did so.

Differences in the source of income that is not in the form of money are striking. Farm laborers' families produced hardly a third of the quantity of food for home use which was produced on the average by operators' families. Even when the value of food received as pay is combined with the value of home-produced food, the average annual value per laborer family of food consumed, although not purchased, was only $142 as compared with $335 per operator family. The laborer families also averaged a substantially smaller nonmoney income in the form of housing owned or received as pay than operator families. Since this kind of income of farm-laborer families represented a smaller proportion of the total value of family living than in the case of operator families, cash expenditures had to take care of a larger part of their cost of living. Thus money expenditures had to provide for 74 percent of the total value of family living for laborer families, as contrasted with only 61 percent in the case of operator families.

Differences in percentages of farm-laborer and operator families reporting various items used in family living are generally in line with the average differences in income. However, the difference between the percentages reporting expenditures for reading—80 percent of the farm-operator families as compared with 56 percent of the farm-laborer families—is probably higher than would be expected solely on the basis of higher mean income. Expenditures for automobile transportation were reported by 69 percent of the operator families but by only 51 percent of the laborer families. Somewhat higher percentages of operator families than of laborer families reported expenditures for such items as medical care, recreation, formal education, and miscellaneous family expenses.

In general, the patterns of consumption for the farm-operator and farm-laborer families are similar, as indicated by the percentage distribution of the value of family living among the major categories (table 54). Food comprised only a slightly higher percentage of the total value of family living for laborers, 45.5 percent as compared with 43.8 percent. However, cash expenditures for food were 39.0 percent of all expenditures for family living in the laborer families but only 30.4 percent in the operator families, even though the mean size of family was practically the same in both groups. This is more in line with the differences in proportion of expenditures going for food generally observed between groups of different average-income levels. Thus it is the higher value of home-produced food which brings the total value of food for operator families up to a percentage of total value of family living nearly equal to that for the laborer families. The average value of each specified item consumed is higher for operator families than for laborer families except for the minor items of tobacco and transportation other than by family-owned automobile.

Sources of the total family money income during 1941 are shown in table 55 for the farm-laborer families. More than two-thirds of all money income was received as earnings from farm labor of one or more members of the family, only 3 percent from relief, and nearly 30 percent from other sources, mainly from work

away from the farms. The proportion of total money income received as wages for farm work comprised 72 percent in the lowest income class, but only 61 percent in the class with incomes from $1,500 to $2,000.

TABLE 54.—*Comparison of value of family living by major categories, farm-laborer families and farm-operator families, 1941*

| Item | Farm-laborer families | | Farm-operator families | |
|---|---|---|---|---|
| | Average value per family | Percentage of total value | Average value per family | Percentage of total value |
| | *Dollars* | *Percent* | *Dollars* | *Percent* |
| Total value of family living | 910 | 100.0 | 1,344 | 100.0 |
| Food | 414 | 45.5 | 589 | 43.8 |
| Housing | 96 | 10.5 | 147 | 10.9 |
| Fuel, light, etc | 49 | 5.4 | [1] 85 | 6.3 |
| Other household operations | 18 | 2.0 | 34 | 2.5 |
| Furnishing and equipment | 39 | 4.3 | 72 | 5.4 |
| Clothing | 99 | 10.9 | 153 | 11.4 |
| Automobile | 75 | 8.2 | 103 | 7.7 |
| Other transportation | 10 | 1.1 | 6 | .4 |
| Personal care | 14 | 1.5 | 20 | 1.5 |
| Medical care | 35 | 3.8 | 60 | 4.5 |
| Recreation | 18 | 2.0 | 26 | 1.9 |
| Tobacco | 18 | 2.0 | 17 | 1.3 |
| Reading | 5 | .6 | 7 | .5 |
| Formal education | 6 | .7 | 8 | .6 |
| Miscellaneous family expense | 14 | 1.5 | 17 | 1.3 |

[1] All nonmoney value of household operation assumed to be fuel, light, and refrigeration.

Information on a sample of 134 farm-laborer families from special tabulations made by the Bureau of Agricultural Economics of data from the Study of Family Spending and Saving in Wartime, through cooperation of the Family Economics Division of the Bureau of Human Nutrition and Home Economics. Information on a sample of 762 farm-operator families adapted from Rural Family Spending and Saving in Wartime. See footnote 45, p. 92.

TABLE 55.—*Distribution of money income of 134 farm-laborer families by source and by net money income class, 1941*

| Annual net money income class | Money income | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | | Farm labor | | Relief | | Other [1] | |
| | Per family | Percentage of total | Per family | Percentage of total | Per family | Percentage of total | Per family | Percentage of total |
| | *Dollars* | *Percent* | *Dollars* | *Percent* | *Dollars* | *Percent* | *Dollars* | *Percent* |
| All classes | 675 | 100.0 | 453 | 67.1 | 21 | 3.1 | 201 | 29.8 |
| $0– $499 | 291 | 100.0 | 209 | 71.8 | 10 | 3.4 | 72 | 24.8 |
| $500– $999 | 723 | 100.0 | 504 | 69.7 | 22 | 3.0 | 197 | 27.3 |
| $1,000–$1,499 | 1,189 | 100.0 | 753 | 63.3 | 23 | 1.9 | 413 | 34.8 |
| $1,500–$1,999 | 1,771 | 100.0 | 1,073 | 60.6 | 83 | 4.7 | 615 | 34.7 |

[1] Income from all other sources, including earnings from nonfarm work.

From special tabulations made by the Bureau of Agricultural Economics of data from the Study of Family Spending and Saving in Wartime, through cooperation of the Family Economics Division of the Bureau of Human Nutrition and Home Economics.

Nearly 70 percent of the farm-laborer families produced some food for home use, with an average for all families of $114 worth during the year. About 40 percent of the families received housing in addition to cash wages, and about 22 percent received food as part of their pay. For those who received these perquisites the average value of housing received was $83 and of food received as pay was $127. But the total value of perquisites averaged only $61 a year for all farm-laborer families surveyed.

Selected information on such items as race, residence, size and number of workers of the families of farm laborers in the sample

is given for each income class in table 56.  Although 70 percent of the families produced food for home use during the year, only 52 percent of them actually lived on farms.  Nearly 19 percent of the families were nonwhite, and those tended to be concentrated in the lower income classes.  Nearly one-fourth of the families had received some relief during 1941, either direct or work relief, although the average amount received was very small.

The positive correlation of family size with income is striking. The highest income group had a mean family size of 6.67 family members and an average of 2.89 farm laborers, as contrasted with the lowest income group with an average of 2.75 family members and 1.20 farm laborers.  The dependence of the level of family income on the number of potential workers in the family and on the availability of jobs is obvious.

TABLE 56.—*Selected information on 134 farm-laborer families, by net money income class in 1941*

| Income class | Families | Percentage of all families in income class | | | Average number of persons per family | | Average number of weeks worked in farm labor | |
| | | Living on farms | Nonwhite | Received relief | Total | Working as farm laborers during 1941 | Per family | Per farm laborer |
| | *Number* | *Percent* | *Percent* | *Percent* | *Number* | *Number* | *Number* | *Number* |
| All classes............ | 134 | 52.2 | 18.7 | 23.9 | 3.99 | 1.66 | 52.0 | 31.3 |
| $0-  $499... | 55 | 54.5 | 29.1 | 25.5 | 2.75 | 1.20 | 44.6 | 37.2 |
| $500-  $999... | 53 | 49.1 | 13.2 | 26.4 | 4.75 | 1.92 | 54.1 | 28.2 |
| $1,000-$1,499... | 17 | 52.9 | 5.9 | 17.6 | 4.18 | 1.71 | 44.6 | 26.1 |
| $1,500-$1,999... | 9 | 55.6 | 11.1 | 11.1 | 6.67 | 2.89 | 99.7 | 34.5 |

From special tabulations made by the Bureau of Agricultural Economics of data from the Study of Family Spending and Saving in Wartime, through cooperation of the Family Economics Division of the Bureau of Human Nutrition and Home Economics.

For the group of 134 farm laborer families sampled in this survey, the average money income of $675 during 1941 had to support four persons.  More than two-thirds of the money income was received as earnings from farm labor, with an average of 1.66 farm laborers per family, working an average of 31.3 weeks each. The fact that the average value of family living falls short of the average total net income by only $4 shows that practically no savings were made on the average by these families during 1941.

This study indicates the change in economic circumstances of farm laborers accompanying the very substantial improvement by 1941 in general economic conditions.  The significance lies in the portent for the economic improvement of farm laborers that a progressively higher level of national income and employment could achieve.

This is suggested by a comparison of the average earnings of farm laborer families as shown in the 1941 study with the average for the 1935-36 studies. [54]  The 1935-36 studies showed an average money income for farm-laborer families of about $268, as com-

[54] Vasey and Folsom.  See footnote 43, p. 91.  Although the methods employed in these studies differed somewhat from those of the 1941 study, the money income results are roughly comparable.

·pared with $675 in the 1941 study. Annual earnings per family from agricultural work were $227 in 1935-36 and $453 in 1941. Earnings from nonagricultural work averaged only $35 in the earlier study and were in the neighborhood of $200 in 1941.

The increase of 43 percent in the agricultural wage level between 1935-36 and 1941, together with a similar increase in weekly earnings of workers in manufacturing industries, can account for a substantial part of the changes noted in the average family income of the groups studied. Yet the major part of the increase is probably due to the fuller employment of heads of the household and the employment of more members of the family for longer periods. For example, the 1935-36 studies showed that only about 23 percent of the families had more than one worker contributing to the family income, while the 1941 study showed 32 percent of the families with two or more workers in agriculture alone. The proportion of families with two or more workers in all occupations would be higher.

The marked correlation evident in 1941 between the size of family and number of workers was probably not present to the same extent in 1935, when some 10 million or more unemployed were in the country. The need of maximizing family earnings makes the economic welfare of farm-labor families especially sensitive to employment conditions which restrict or increase the extent to which family members can have gainful work.

An important implication of the data is that even in as favorable a year as 1941, farm-laborer families generally had a substandard income level, as did a large proportion of the farm-operator families. The $914 average total income (money plus nonmoney) of farm-laborer families was still insufficient to provide a budget at a "health and decency" level for a four-person family under the prevailing price conditions. [55]

Living costs increased in 1942 and 1943, but income and wages of workers in agriculture and industry increased more, so that by 1943 substantial gains over 1941 in the family-income level of farm laborers and other groups had occurred. An indication of the trend in the average weekly earnings of farm laborers from farm work is provided by the following estimates derived from other data of the Bureau of Agricultural Economics. The average wage cost per man-week of hired labor (including the value of perquisites) increased from $9.10 in 1941 to $11.85 in 1942, and to approximately $15.40 in 1943. The increase of 69 percent by 1943 over 1941, when adjusted for changes in living costs, represented a gain of 30 percent in the purchasing power of the weekly income. By 1943 there probably also occurred some further increase in the number of weeks worked per year by farm laborers. Despite these improvements, it is probable that a large proportion of farm-laborer families in 1943 still lived and worked under conditions which cannot be considered as adequate.

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[55] A minimum "health and decency" budget based on the studies of the Heller Committee for Research in Social Economics was estimated by the State Relief Administration of California as requiring $972 for a dependent family of 4.5 persons (California State Relief Administration, Migratory Labor in California, 1936). This budget estimate is based on 1935 prices and, if allowance is made for changes since 1935 in prices farmers pay for commodities used in living, the estimate would be raised to $1,027 in 1941 and $1,333 in 1943.

## 8. WARTIME REGULATION OF FARM WAGE RATES

Unprecedented demands for manpower by war industries and by the armed forces, together with expansion of agricultural production, have necessitated numerous adjustments in the wage and working conditions of hired farm laborers. Mobilization of the Nation's resources for total war set in motion a variety of manpower controls generally, and special measures in agriculture, directed toward stabilizing or maintaining the supply of farm labor.

These measures included deferment of certain agricultural workers from military service, controls on job shifts from agriculture to other industries by the War Manpower Commission, importation of farm workers from Mexico, Jamaica, and other countries in the Western hemisphere under international agreements, transportation of domestic farm labor from surplus to shortage areas, the use of war prisoners, and the detailing in emergency situations of some units of the armed forces for farm work. In the absence of such measures, particularly the deferment of farm workers, the situation would have been more difficult and its effect on farm wages more pronounced.

Farmers in general have responded to the combination of high farm income and high competing nonagricultural wages by increasing wage rates, granting more housing and other perquisites, and making other attempts to attract and retain laborers. The upward movement of farm wage rates has been a factor in the successful achievement of wartime food production goals by the Nation's farmers.

In some areas adjacent to war industry centers or dependent upon nonlocal sources of labor for seasonal operations, the competitive demands for labor have necessitated special measures to minimize any ill effect on production of unrestricted wage competition among farmers.

Government intervention in agricultural wage matters through 1943 was kept to a minimum, although regulations for controlling farm wages had been instituted and specific wage ceilings had been set in designated areas for several crops in California and for citrus fruits in Florida. In the early part of 1944, wage ceilings were set for additional crops in California with the prospect of extending the program of stabilizing farm wage rates to other crops and areas.

Compliance with the agreements negotiated with the countries from which workers have been imported has also required official determination of "prevailing wage rates" for particular crops and areas in which foreign laborers and other special groups of workers were employed.

Many problems were presented in determining the form wartime regulation of farm wage rates should take, the areas and crops in which such controls should be applied, and the factors to be considered in setting the rates. The nature of some of the problems has been indicated indirectly in the preceding chapters dealing with differences among areas in wage levels and in employment practices, the relationship between agricultural and non-

agricultural wages, the factors making for changes in wage rates, and the differentials found among sectors of the agricultural economy with respect to the labor supply and ability to pay wages. All of these have a direct bearing on the need for any wage regulation or the type of regulatory action required. In this chapter, developments in wartime regulation of farm wages are briefly reviewed in the light of experience with stabilization of farm wages.

## Stabilization of Farm Wages

The outbreak of the war in Europe and the resulting upward movement of wages and incomes led to the application of wage controls in industry as a part of a program for controlling inflationary movements in prices and the cost of living. Because agricultural wages had started their rise from a very low level and were considered substandard, it was considered necessary, in order to maintain an adequate supply of laborers to produce the record volume of food and fiber required, that these wages continue their upward movement.

Near the close of 1942, authority to control agricultural wage rates was delegated to the Secretary of Agriculture and later to the War Food Administrator by the Director of Economic Stabilization. Under the terms of the regulations issued, no employer could decrease wages or salaries paid to agricultural laborers below the highest salary rate or wage paid for such work between January 1, 1942, and September 15, 1942, without the approval of the War Food Administrator. But farm wages and salaries could be increased up to the level of $2,400 per year without the approval of the War Food Administrator unless otherwise determined by the Administrator in the case of particular crops, areas, or classes of employers.

Thus the program of stabilization of farm wages and salaries has consisted of three parts: (1) The setting of a minimum level below which wages and salaries of agricultural laborers may not be reduced; (2) general control of agricultural wages and salaries at or above the level of $2,400 per annum; and (3) the setting of specific maximum wage rates for particular crops and areas. Up to June, 1944, the War Food Administrator had set maximum wage rates for several crops in certain areas of California and Florida.

## Standards for Determining Wages Subject to General Control

The controls on industrial wage movements were applied on the general principle of holding wages and salaries at the level attained by September 15, 1942. Departures have been permissible only with the approval of the War Labor Board. In contrast with this "freeze" method, agricultural wages were allowed to be increased up to the $2,400 per annum level without approval unless the War Food Administrator had set a specific wage ceiling. This exemption of agricultural labor from the general wage and salary stabilization order was stated in the regulations of the Director of Economic Stabilization to be based on the following considera-

tions: "That the general level of salaries and wages for agricultural labor is substandard, that a wide disparity now exists between salaries and wages paid labor in agriculture and salaries and wages paid labor in other essential war industries, and that the retention and recruitment of agricultural labor is of prime necessity in supplying the United Nations with needed foods and fibers, . . ."

Since the formulation, in October, 1942, of the original regulations of the Director of Economic Stabilization relating to agricultural wages, certain modifications have been made affecting both the jurisdiction over agricultural labor and the wage level at which control is operative. These amendments mark a basic change in the criteria and standards for general wage stabilization in agriculture. Initially, the program was guided by an annual-earnings standard of $2,400 a year. This was a much higher level than that actually attained by the great majority of agricultural workers. In retrospect, it appears that the major intent of this standard was to permit the degree of flexibility of movement in agricultural wage rates necessary for the retention and recruitment of the laborers required for meeting war food-production goals. Except in the case of a relatively few year-round workers whose earnings approached this standard, the implied stabilization policy required little in the way of administrative implementation.

The amendments, however, redefined the $2,400 a year standard to mean "$200 a month, or the equivalent weekly, hourly, piecework rate or comparable basis." This redefinition did three things: (1) It substituted a rate concept for the previous earnings-per-year concept; (2) it set $200 a month or the equivalent thereof in shorter time units or in piece rates as the level at which general control of farm wages should begin; and (3) it made the general wage regulation applicable to seasonal workers as well as to regular farm workers.

The nature of the amendments indicates that no serious consideration was given to the retention of the annual-earnings standard, since a conversion of $2,400 a year to $200 a month disregarded the fact that the majority of hired farm laborers work on farms less than 12 months during a year and that their annual earnings from agricultural work are generally not evenly distributed in the different months. Available data indicate that a per annum wage standard of $2,400 which gave effect to the average duration of farm employment in 1943 would show a straight monthly equivalent of more than $300. The same data indicate that a conversion based on the total number of days worked on the average by hired farm workers in 1943 would be equivalent to nearly $14 per day.[66] The wages of many year-round farm laborers are lower in the slack part of the year than in the busy months, while in the case of seasonal workers there is much more of a lumping of earnings.

The Administrator's regulations governing general stabilization of farm wages provide no indication or guidance as to the basis to be used for converting the standard of $200 per month into equiv-

66 For relevant data on duration of farm employment, see Chapter 7 and DUCOFF. L. J. and HAGOOD, M. J. THE FARM WORKING FORCE OF 1943. Bur. Agr. Econ. 15 pp. 1944.

alent, daily, hourly, weekly, or piece rates. [57] The individual farmer who pays his laborers on a nonmonthly basis must ascertain for himself whether the rates he is paying, or contemplates paying, are equivalent to more or less than $200 a month. If the rates (inclusive of perquisites, bonuses, etc.) are equivalent to more than $200 a month and if these rates are higher than those paid by him during the year preceding December 9, 1943, until approval is obtained these rates will not be lawful. By varying for individual crops, operations, or enterprises, any one or more of such factors as hours worked per day, days worked per month, the valuation placed on perquisites, the amount credited as overtime payment, and in the case of piece rates the additional factor of the worker's performance per unit of time, the employer may arrive at almost any daily, hourly, or piece-rate equivalent that he wishes. The possible range in "equivalent" rates is so great that wage stabilization could be made quite ineffective.

The wide latitude now possessed by the individual employer of farm laborers in determining the equivalent of $200 per month makes enforcement of these regulations exceedingly difficult. It is anticipated that the program as a whole will place greater reliance for effectuating wage stabilization on specific wage ceilings for crops and areas than on the administration of the general wage and salary regulations.

## Operation of Specific Wage Ceilings

In April 1943, the War Food Administrator for the first time exercised his authority in setting specific maximum wage rates. He issued a wage-ceiling order relating to cutting and boxing of asparagus (for canning) covering five counties in California. Since then and up to June 1944, 10 other wage-ceiling orders have been issued. These 11 orders affected nine crops in California and citrus fruits in Florida.

Under the procedures used, the State Wage Board, appointed by the Director of the Office of Labor of the War Food Administration, holds public hearings and makes recommendations to the Director regarding the wage ceiling to be set by the Director or the War Food Administrator.[58] In the case of all specific farm wage ceilings set to the end of the fiscal year 1944, War Food Administration officials have followed a policy of establishing a wage ceiling only at the request of the growers concerned. Provisions incorporated by the Senate and House in the bill that appropriates funds for farm wage stabilization for the fiscal year ending June 30, 1945, specify that wage ceilings be set only if a majority of the producers of a commodity in the area affected request such action on the part of the Administrator.

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[57] The WFA Wage Board for the State of California, to whom complete authority for the administration in that State of the general wage and salary regulations was delegated by the War Food Administrator (Fed. Register 9: 6050), has issued general instructions for translating the $200 a month into equivalent rates (California War Board, War Letter No. 582). But these instructions do not provide a basis for meeting the difficulties discussed in this text.
[58] For a description of the functions and responsibilities of the State War Food Administration Wage Boards, see UNITED STATES WAR FOOD ADMINISTRATION, OFFICE OF LABOR, HANDBOOK FOR STATE WFA WAGE BOARDS. May 30, 1944. See also United States War Food Administration, Office of Labor, Memorandum No. 26, 8 pp. Jan. 26, 1944. See pp. 6-8.

Experience in California with the wage-ceiling orders of 1943 has been set forth in a series of reports issued by the Bureau of Agricultural Economics. [59] These reports indicate that the ceiling orders have assisted in stabilizing wage and employment conditions in connection with the crops affected and to some extent in other crops.    Operation of the wage ceilings was more successful in regard to some crops than to others.    Factors influential in determining the degree of success included wage level set, wage differentials among various operations in a crop, and degree of flexibility in policies followed with respect to wage adjustments above the ceiling rates.

In the case of some of the crops, the successful operation of the ceiling order was promoted by a satisfactory labor-supply situation and by the efficient operation of the farm-placement system of the Agricultural Extension Service.

In Florida growers of citrus fruit were apparently satisfied with the operation of the wage ceiling during the 1943-44 season, judging by the number of requests from growers for the issuance of a ceiling order for the 1944-45 citrus-fruit harvest.    But the wage order met with criticism from some worker groups. [60]

Initial experience with wage ceilings in California and in Florida indicates that there is no substitute for full, factual information as a basis for appraising the effects of a contemplated ceiling on all groups concerned—large and small farmers, owners and tenants, workers and labor contractors.    Difficulties arise if the information which the State Wage Board needs as a basis for recommending a ceiling rate and for guidance in administration of the ceiling is unduly weighted by the views and interest of one group as against another.    These difficulties may take the form of inadequate compliance or an artificial shortage of workers.

## Extension of Farm Wage Stabilization

The program of agricultural wage stabilization was being extended during 1944.    It is not possible to foretell yet how the agricultural wage stabilization program as a whole will work out. Much will depend on considerations of policy, administrative procedure, educational measures, and research and enforcement facilities that remain to be developed.    The program must be soundly conceived and selectively applied to situations in which there is a real need for stabilizing agricultural wages if it is to accomplish its twofold objective of contributing to (1) the Nation's efforts to stabilize prices and wages and (2) the maintenance and efficient utilization of the supply of workers required to produce the food and fiber called for by wartime goals.

Of even greater weight in the success of a program of stabilizing farm wages will be the extent to which administrative policies

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[59] These studies were made by William H. Metzler of the Bureau of Agricultural Economics. Berkeley, California, who has followed closely the operation of wage ceilings since they were placed in force.    The following processed reports were issued during 1943 and 1944: ANALYSIS OF THE OPERATION OF WAGE CEILING IN THE ASPARAGUS INDUSTRY, SACRAMENTO-SAN JOAQUIN DELTA, 1943, 56 pp.; ANALYSIS OF OPERATION OF WAGE CEILING ORDER FOR HARVESTING CANNERY TOMATOES, CALIFORNIA, 1943, 45 pp.; ANALYSIS OF THE OPERATION OF THE WAGE CEILING ON PICKING SUN-DRIED RAISIN GRAPES, CALIFORNIA, 1943, 46 pp.

[60] The Florida Citrus and Allied Workers Union Local 4, UCAPAWA, CIO, protested the wage scale set in the order issued by the Administrator.

at all levels steer a balanced course toward these objectives, unhindered by pressures from organized groups whose self-interests may lead them to attempt exploitation of the program for their own economic advantage.

In agriculture there is no tradition of collective bargaining between employers and employees as there is in industry. Hired farm workers are generally unorganized and inarticulate. Attempts at general wage stabilization may have quite different effects in agriculture than in industry. Effective representation of the point of view of industrial workers by strong unions, together with the tri-partite functioning of the War Labor Boards, facilitates the operation of wage stabilization in nonagricultural industries. Wage Boards appointed to adjudicate agricultural wage problems, consist of public officials who are not appointed on the basis of tri-partite representation. It is most important therefore for such boards to sift and weigh carefully the evidence and facts brought before it so that its decisions and recommendations may not be influenced by one-sided evidence.

Wage Boards in agriculture face extremely difficult tasks because of the lack of standardization in this field of jobs, operations, and employment practices, and the real dearth of factual information on agricultural and competitive wage rates, conditions of the labor market, cost, income, and other types of data that are basic to its decisions. These difficulties are further complicated by weaknesses in the regulations regarding farm wage stabilization, which on the one hand may make stabilization difficult to achieve and on the other for stabilization at too low a level.

## Other Forms of Wartime Regulation of Farm Wages

### DETERMINATION OF PREVAILING FARM WAGE RATES

Under the terms of the agreements negotiated by the United States Government with the Governments of Mexico, Jamaica, the Bahamas, and Newfoundland, workers imported from these countries for wartime farm work in the United States are to be paid the "prevailing wage rates" in the crops and areas involved. Payment of prevailing wage rates is also required in the case of domestic farm workers transported by the War Food Administration from one State to another.[61]

The War Food Administration prescribes the procedures by which determinations are made of prevailing farm-wage rates for the crops and areas where such labor is used. Although involving a form of governmental supervision over farm wage rates paid to special groups of workers, the determination of prevailing wage rates is basically different from the type of Government regulation of wage rates represented by the wage-stabilization program or any other wage-fixing program. The issuance of findings with respect to prevailing wage rates for particular crops and areas is incident to the recruitment, transportation, and placement of foreign and interstate labor.

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[61] Payment of "prevailing wage rates" is also required in counties where prisoners of war, soldiers assigned in units by the War Department, and Japanese evacuees on War Food Administration contracts are employed in farm work. Payments by farmers for the work of war prisoners and assigned soldiers is made directly to United States Treasury.

The Congressional Acts appropriating funds for this program placed certain responsibilities upon the State agricultural extension services for all phases of the intrastate labor recruitment and placement program and for the placement of interstate and foreign workers. Procedures for making such wage determinations include the setting up of County Farm Wage Boards which are required to hold a public hearing, to make such further investigation as the Board may deem appropriate, and to make findings and recommendations as to the prevailing wage rates. Such findings and recommendations are transmitted by the County Wage Board to the State director of extension, who, in turn, "determines" or issues the finding as to the prevailing wage rate. The County Wage Board is composed of the county agricultural agent, who serves as chairman, and four other members (from the County Farm Labor Advisory Committee) appointed by the County Agent. Hearings held by County Farm Wage Boards are informal and consist mainly of growers' testimony as to what they consider to be the "going" wage rates paid in the county for particular crops and operations.

From May 1943, when the Farm Labor Program under Public Law 45 began to operate, until the end of 1943, 1,020 County Wage Boards were set up in 42 States, and 1,398 hearings were held. During 1943, approximately 50,000 Mexicans, nearly 9,000 Jamaicans, and 4,000 Bahamians were imported for agricultural work. From January 1944, to the end of May 1944, approximately 47,000 foreign workers were in this country available for or actually engaged in farm work.

### FARM WAGE REGULATION FOR WORKERS IN SUGAR BEETS AND SUGARCANE

Minimum wage rates for farm workers employed in the production of sugar beets and sugarcane were set up in 1937, when the Sugar Act was passed. This act provided that the receipt of benefit payments by producers of sugar crops be made conditional upon the payment to labor of wage rates not less than those determined by the Secretary of Agriculture to be "fair and reasonable." The establishment of such rates is in effect a form of wage regulation, and it represents the only instance in which minimum wages have been provided by Federal legislation for farm workers in the United States. This regulation was not inaugurated as a wartime measure, but it has continued during the war and has recently been prolonged by the extension of the Sugar Act.

In peacetime, the determinations made by the Secretary of Agriculture of "fair and reasonable" wage rates for sugar-beet and sugarcane operations generally became the prevailing wage rates for the season. In wartime, the shrinking of the labor supply resulted in the payment by some growers of wage rates that were higher than the minimum specified in the wage determinations of the Secretary of Agriculture. Situations in which this has been the case probably occurred more frequently in 1942 than in 1943—partly because of the rapid depletion of the labor supply during 1942 and its relative stabilization in 1943 following various manpower measures for maintenance of the agricultural labor supply.

In general, the wage determinations for sugar crops have been guided by the customary relationships between wages and prices or income from sugar crops and, in recent years, by the principle that these determinations should not be unduly influenced by the pressure of a short labor supply on the wage-rate level. Partly because of these considerations the upward trend in general farm-wage rates between 1939 and 1943 has greatly exceeded the rate of increase in sugar-beet wage rates set by the Department of Agriculture, since the general farm wage rates have been affected by the reduced labor supply.

## 9. CONSIDERATIONS FOR POST-WAR AGRICULTURAL WAGE POLICY

This report of agricultural wages has examined the functional role of hired farm laborers in our economy, the rewards received by them for their labor, and their changing welfare in times of war and in times of peace—through periods of depression and years of prosperity. It has described the group of people who work for wages on farms, their numbers, their composition, their status, and their distribution.

Various aspects of the analysis can now be synthesized from the standpoint of their possible implications for the future welfare of hired farm laborers. A major purpose of the study was to provide a basis for understanding how the various wage conditions examined have affected, and may in the future affect, the lives and functioning of farm laborers as a body of people—a productive segment of our citizenry.

It is also in order to indicate more explicitly the interacting influence of factors within and outside of agriculture which determine in large part the economic conditions for both farmers and farm-wage workers.

Post-war social and economic policy affecting agriculture will no doubt be influenced by the twin objectives of full employment in peacetime and a progressively better balance in agriculture between population and resources. The keystone of post-war policy may become the conversion of wartime achievement of full employment into a peacetime reality.

To the extent that such goals are not achieved, there will be present the dangers of the recurrence of past conditions of unemployment and population pressures with their depressing effects on the wage and income conditions of all groups, and particularly on the level of living of farm laborers and of farmers. In the formulation of post-war social and economic policy, it is important that farm laborers do not again become the "forgotten men."

### The Record in Brief Résumé

Agriculture includes around 4 million people who work for wages on farms during at least some part of the year. These workers and their families comprise a group of 6 to 8 million persons who are wholly or partially dependent on agricultural wages for their income. A majority of the hired laborers are to be found on a small proportion of the farms, but it is on these farms that the

bulk of the country's food and fiber is produced. Hired laborers make up one-fourth of the farm working force, but as they are so heavily concentrated on the larger and more productive farms, their work makes possible much more than one-fourth of the total farm production.

People recorded in our statistics as hired farm laborers are in reality a mixture of lower income farmers, members of farmers' families, people who work part-time in towns and cities, and youths who attend school in the winter, as well as migratory workers who follow the crop harvests and year-round hired men. Hired farm workers are thus a broad segment of our population whose economic and social interest tie in at numerous points with those of the rest of the population.

Only in a period of national crisis brought on by war, however, has there been a recognition of the identity and importance of farm laborers in our economy. The changed conditions from those of a few years ago are epitomized by some marked contrasts. Gone is the spectacle of unwanted migrants traveling in jalopies from State to State in search of farm work. Instead, it has been necessary for the Government to bring in thousands of workers from foreign countries and to provide free transportation for them and for many domestic farm laborers in order to help meet seasonal needs in important production areas. Likewise, the inadequate wages of pre-war years that seemingly could not be raised to a minimum subsistence level may be contrasted with the rapidly climbing wage rates of certain farm workers on which ceilings are now being placed.

From the standpoint of public policy, the record over the three decades preceding this war is one of neglect of the interest and welfare of farm laborers. Despite their progressively rising level of productivity, their real wages and income were at a dead level in practically all years from 1910 to 1930 (figs. 21 and 22), averaging $265 a year in terms of 1910-14 purchasing power—an amount far below that required for a level of living consistent with health and decency. The ground lost during the depression in the real wage incomes of farm laborers was finally regained and a moderate improvement was recorded during the last few years before this country entered the war.

The absence of any substantial gain in the real wage income of farm laborers in the three decades preceding 1940 contrasts sharply with the trend in the average wage income of industrial workers, which rose progressively despite the depressing effects of mass unemployment in the 1930 decade. Real wage income per industrial worker climbed from an average of $600 in 1913 to $739 in 1930, to $857 in 1939, and to an average during the 4 years 1940-43 of $1,064 (in terms of 1913 dollars).

During the first World War farm wage rates rose to unprecedented heights but the cost of living climbed equally, so that farm laborers were no better off than before. Thus far in the present war, measures for controlling inflation are being applied more successfully. Consequently, real farm wage rates and wage income per hired worker have shown improvement. But wages of indus-

trial workers, which had been steadily rising since the years before World War I, have also improved. Therefore, the gap in real wages between farm and industrial workers is wider during this war than ever before.
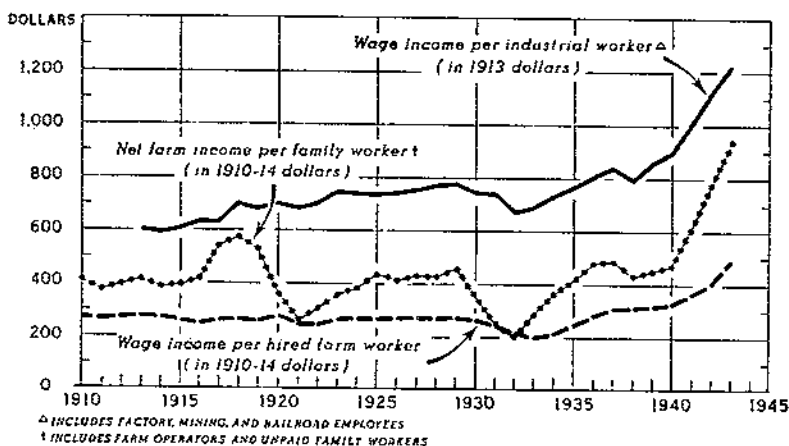
FIGURE 21.—Wage incomes of industrial workers and of hired farm workers and net farm income of farm family workers, adjusted for changes in living costs, United States, annual averages per worker, 1910-43. Income per industrial worker adjusted by the Bureau of Labor Statistics index of cost of living; income per hired farm worker and per farm family worker adjusted by the Bureau of Agricultural Economics index of prices paid by farmers for commodities used in family living. Estimates for 1943 are preliminary.
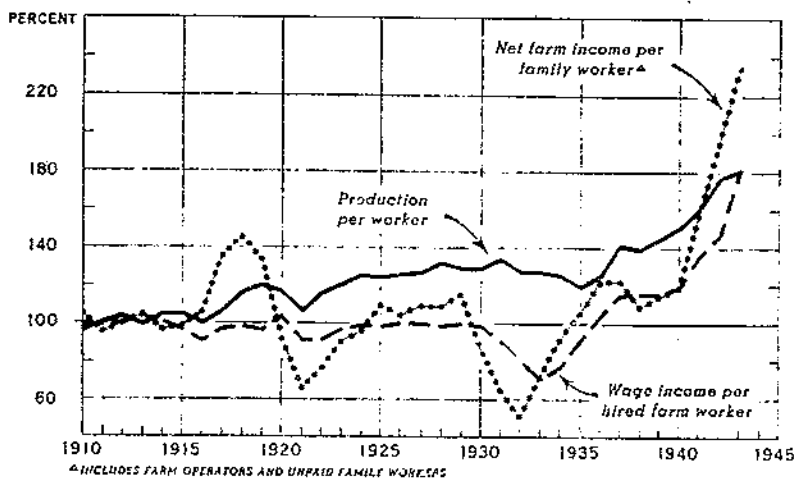
FIGURE 22.—Agricultural production per worker and income per farm worker, adjusted for changes in living costs, United States, 1910-43. Adjusted by the index of prices paid by farmers for commodities used in family living. (Index numbers, 1910-14 = 100.)

Although the average real net farm income per farm family worker (in terms of 1910-14 dollars) has fluctuated considerably

in the period of 1910-39, it declined to approximately the hired laborer's level only in the depression years of 1921, 1931, and 1932 (fig. 21). For the whole period 1910-39, real net income from farming per farm family worker averaged $400 while real farm-wage income (including perquisites) per hired worker averaged $263. In the last four years, 1940-43, the averages have risen to $700 for all family workers and $393 for hired workers (in terms of 1910-14 dollars).

In the various measures of social legislation enacted in the United States to protect workers from the hazards of accidents, old age, and unemployment, and to protect wage-and-hour standards, farm laborers have been excluded. Agricultural conditions are characterized by certain differences which would call for adaptations in the form and content of social legislation, but these differences have not prevented the extension of such legislation to agriculture in other advanced countries. In our own country, the various agricultural programs designed to improve the economic lot of farmers have given no explicit recognition of the rights of the wage workers to share in such benefits except in the single case of the Sugar Act, where the payment of fair and reasonable wages was made a prerequisite to receiving Government benefit payments.

Scientific and technological advances of the last three decades and diffusion of educational opportunities have manifestly improved and enriched the level and content of living for the population at large. The rural population, however, has shared less than proportionately in these national gains. Hired farm laborers and their dependents on the whole have benefited the least. By whatever criteria the comparative position of farm laborers is measured—in terms of housing standards, health standards, educational levels, or income levels—the results of the comparison testify to the disadvantaged position of these people in our economy. Moreover, that traditional hope and incentive of the hired man —who in years past usually looked forward confidently to climbing up the ladder through tenancy to farm ownership—seems to have been impaired rather than improved with the increasing commercialization of our agricultural economy.

### Some Underlying Conditions and Post-War Implications

Mobilization of the national economy for war has transformed it within a few years from a condition of operating much below capacity to one approaching a maximum. Manpower surpluses have been replaced by manpower shortages and a depressed agriculture has become prosperous, according to all past standards. But the present situation carries no guarantee against the return of those conditions which have for so long resulted in the disadvantaged position of farm laborers. Wartime experience by contrast underscores the basic nature of past maladjustments within our general economy and their effect on agriculture—that is, the under-utilization of our human and physical resources.

The crux of post-war problems is the question of whether full employment will be maintained when the Nation's productive capacity is turned to peacetime uses. Guidance is needed in im-

plementing a post-war program that will provide some degree of assurance of improving the economic welfare of farm laborers. Most relevant are the underlying factors that have played important roles in determining the economic welfare of farm laborers in the past.

From charts depicting the comparative economic levels of different segments of our economy, it is clear that the pattern of conditions for hired farm laborers is closely related to the pattern for farmers (fig. 10), and that both are dependent upon the level at which the rest of the economy is functioning. Maintenance of farmers' income at satisfactory levels is a prerequisite to establishing satisfactory farm wage levels in the post-war period. The welfare of both farmers and their hired workers is closely tied to general economic conditions in the country as a whole (fig. 23).
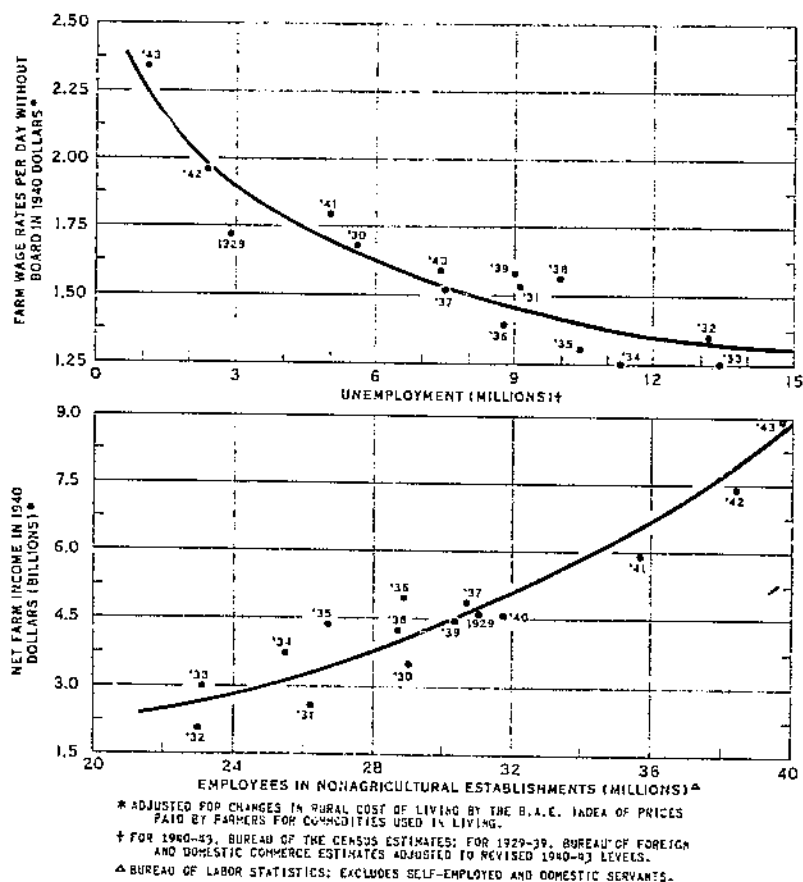


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FIGURE 23.—Relation of real farm wage rates and farm income to unemployment and employment, United States, 1929-43.

Real net farm income rises with increases in the volume of nonagricultural employment. In times of extensive unemployment,

farm wage rates are low both because of the pressure of a surplus labor supply and because of reduced farm income. Thus mass unemployment of more than 13 million persons during the depression was accompanied by farm wage rates of approximately $1.25 a day (in terms of 1940 dollars), and a very low level of real net farm income. Farm income climbed out of the depression and rose to successively higher levels with progressive increases in nonagricultural employment. The recovery of farm wage rates, however, was much slower, for considerable unemployment prevailed as recently as 1941. Farm wage rates attained a level of $2.35 a day (in 1940 dollars) only when unemployment was reduced to almost a minimum level. The significance of full employment to both farmers and hired farm workers is evident from the relationships shown in figure 23.

The interdependence between farmers' income and income received as wages by hired laborers means that the two change in the same direction. National and regional figures on farm income and farm wages indicate that this has been the case over the whole period for which information is available. Data are not available to indicate how close the relationship is in the case of those groups of farms which mainly comprise the employing sector. Although there is reason to assume such a relationship, the changes in net income for family labor and management on such farms and in annual wage income per hired worker occur at absolute levels which are greatly different.

It should be recognized that the comparative economic conditions of farmers who do the bulk of the hiring and of the workers they employ cannot be correctly appraised from farm-income data based on totals or averages for *all* farms. The all-farm average farm income reflects the depressed or impoverished conditions of a great mass of people who subsist on farms and who contribute very little to commercial production. It does not fairly represent that sector of our agricultural economy which furnishes the bulk of our agricultural production, the sector in which the problems of farm wages and wage workers are heavily concentrated.

The fact is that the major share of agricultural production and agricultural income is produced and received by only a small fraction of the farms and farmers. In 1929, it is estimated that the upper 10 percent of the Nation's farms produced 47 percent of the marketed products, while in 1939 the upper 10 percent of the farms accounted for 54 percent of the Nation's sales of farm products (fig. 24).

The concentration of hired workers on a small proportion of the farms is even more marked. In 1939 more than two-thirds (68 percent) of the cash wages was paid on only 9 percent of the farms in the United States. There are no comprehensive data to show the changes over a period of years in the amount of net farm income of the groups of farmers who are important employers of hired labor. That there is a big spread between the average net income of such farmers and the average for all farms is suggested by available data for 1939. In that year, the estimated net returns for family labor and management of farms with a gross value of

production of $4,000 or more, averaged $2,305 per farm as compared with $350 for all farms.
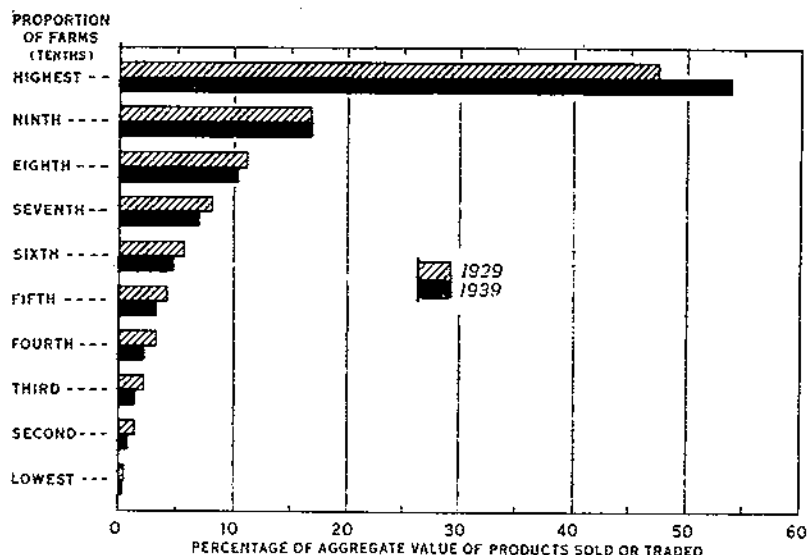


FIGURE 24.—Distribution of marketed agricultural products by farms classified according to total value of products, United States, 1929 and 1939. (Estimates based on data from Censuses of Agriculture, 1930 and 1940, respectively.)

Because agricultural wage problems affect primarily a special sector of agricultural producers, the essential nature of these problems cannot be brought into sharp focus until the conditions of farmers who in the main do the hiring of labor are disentangled from the conditions affecting the mass of low-income farmers. Formulation of sound agricultural wage policy requires such differential analyses in order to fit programs affecting agricultural wages to the problems peculiar to the employing sector of the agricultural industry.

But national policies with respect to post-war agriculture cannot afford to overlook the pressing problems of low-income farmers, with due recognition of the indirect effects of such problems on wage conditions. These indirect effects have two sources. On the one hand, because the demand for agricultural products under given conditions of national income is relatively inelastic, even the small production contributed by the mass of noncommercial farms tends to depress farm prices. On the other hand, a large underemployed population on farms tends to depress farm wage standards.

That the conditions of low-income farmers are similar to those of hired farm workers is suggested by the fact that in 1939 the average net returns for family labor and management for all farms, which is heavily weighted with low-income farms, was almost identical with the average wages of the hired man who worked a full 12 months.

Two aspects of the interdependence of agricultural income with nonagricultural income have a bearing on post-war policy regarding farm wages. The aspect usually considered in interpreting the relationship between the farm and nonfarm parts of the economy is that the greater purchasing power accompanying higher levels of employment in industry gives rise to an increased demand for farm products and thus produces a rise in agricultural prices and income. Another important aspect of the interrelationship, not always so explicitly realized, is the opportunity that expansion in nonagricultural employment gives to the farm population for jobs and improvement of their income, with or without migration.

During the 23 years since 1920, the farm population has had an average annual rate of natural increase of approximately 430,000 persons a year (from the excess of the number of births over deaths), and an even greater yearly increase in the number of persons of working age. Employment in agriculture has been decreasing as technological and other factors have stepped up the average productivity of farm workers and as certain processing functions have shifted from agriculture to manufacturing. Maintenance of the level of living of farm people has therefore been dependent upon a continual drawing off of the excess population each year. A sustained migration from farms has tended to mitigate the depressing effect on farm wages of an excess supply of labor.

Migration from farms is closely correlated with the available off-farm occupational opportunities. Since the amount of natural increase in the farm population changes only slightly from year to year, in comparison with the change in net migration from farms, the size of the farm population has varied inversely with the level of nonagricultural employment. This relationship is clearly indicated in figure 25, which shows high levels of farm population in years when nonagricultural employment was low, and low farm population when nonagricultural employment was high.

The pressure of farm population on agricultural resources has such a continuing influence on agricultural wage conditions that it constitutes another major factor to be considered in post-war agricultural wage policy. Areas of low farm wage rates frequently are areas in which the number of young people on farms reaching maturity each year is much greater than the number of jobs that become available for them.[62] The areas of low farm wage rates and high population pressure are also frequently areas in which the level of living is low.[63]

Slackening off of urban employment or the presence of large-scale unemployment in the non-farm population immediately slackens the rate of migration from farms. This, in turn, causes surplus population and labor supply to accumulate and aggravates the more-or-less chronic conditions of excess labor supply in areas of population pressure. The presence of a large unemployed and

underemployed farm-labor supply has exerted a persistent downward pressure on farm wage rates in the past. In addition, farm wages have been highly vulnerable to the recurring cycles of mass urban unemployment.
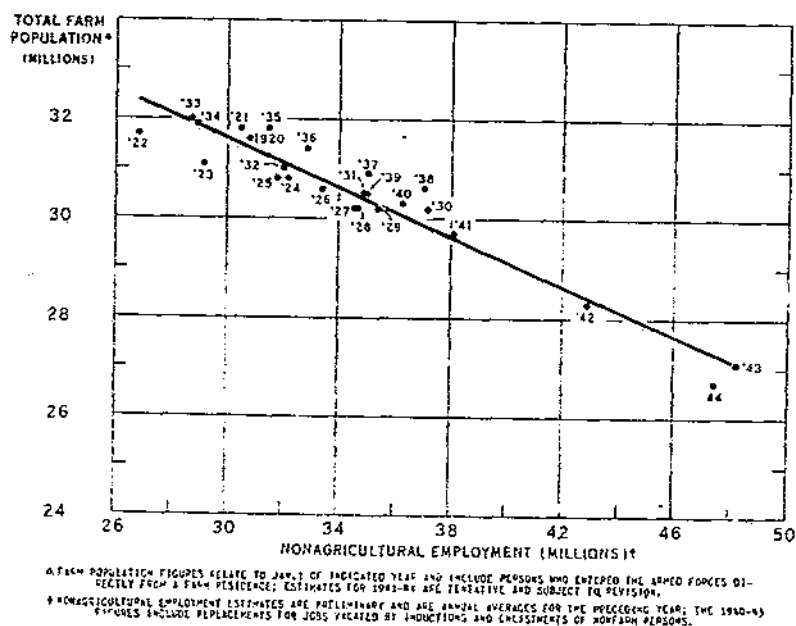


FIGURE 25.—Farm population in relation to nonagricultural employment, United States, 1920-44.

Even though migration from farms proceeded at a fairly rapid rate during the 1920's, it did not greatly relieve the pressure of population upon resources, for this factor was considerably offset by the high rate of natural increase. During the 1930 decade, migration from farms was offset completely by natural increase in the farm population. The number of people of working age living on farms increased even though the number actually working on farms was smaller at the end than at the beginning of the decade. As a result, when the 1940 census was taken about a million farm residents were unemployed, including persons on relief jobs.

There has been an unprecedented migration from farms during the present war. The current level of farm population is even lower than that which would have resulted if the 1916-30 trend had not been interrupted by the depression of the 1930's. By January, 1944, there were 15.7 percent fewer persons living on farms than in January, 1940. With this reduction of farm population, a better balance of population to resources has been established which has brought about a rise in the level of living of both farmers and farm laborers.

Should the movement back to farms after the war be great enough to bring the farm population up to its pre-war level, there

is little doubt that farm wage rates would fall sharply because of the pressure of the resulting surplus labor supply. The effects of this pressure would be intensified by the reduced demand for hired help that is likely to result through extensive post-war buying of new farm machinery. Regardless of what agricultural programs are fostered to maintain or improve the income of farmers, wages will be depressed if there is a large return of persons to subsistence farming who will be readily available for hire on farms or in local industries.

Even if there should be no extensive return to farms after the war, to achieve a desirable balance between farm population and resources in all areas of the country will require many years. It will require a long-time process of readjusting and absorbing of perhaps several millions of families from marginal subsistence farms into areas and occupations that will give them a better chance to develop and use their abilities.

In the years following the war, agricultural wage conditions will continue to be affected by the fluctuations in general economic conditions that are likely to mark the transition from full employment in wartime to a peacetime economy. So long as there is any prospect in the post-war situation of a farm-labor supply in excess of requirements, farm wages will inevitably be exposed to the harsh workings of competitive conditions, which will tend to depress them.

Under such conditions, farm workers will not be in a position to resist the downward pressure on their wages, partly because of the lack of effective organization among them and the inherent difficulties of organizing. Employers who may wish to maintain adequate wage standards, consistent with farm income and price conditions, may be forced to lower wages of their employees by the competition of other producers. It may be desirable, therefore, as a part of post-war agricultural wage policy, to invoke legislative support in behalf of farm wage standards. The Fair Labor Standards Act of 1938, which establishes wage standards for industrial workers in the United States, and the Agricultural Wages (Regulation) Act, in operation in Great Britain, may be helpful as guides in formulating legislation for the protection of agricultural workers in this country.

Although legislative measures can furnish some protection to wage standards in agriculture, other measures are needed to cushion the economic insecurity of farm workers—operators and wage hands alike. The extension of social security legislation to farmers and farm workers and of unemployment insurance to wage workers continue to be important post-war objectives.

Experience gained to date in the efficient routing and placement of farm workers, together with the wider use by farmers of Government employment services, will tend to facilitate the effective functioning of such services after the war. An adequate system of farm placement services can help to lessen the periods of unemployment of hired workers and of underemployment among some groups of farm operators. Similarly, guidance offered prospective migrants from farms, and assistance to some groups in

relocating in promising areas and occupations would help in achieving a better balance between rural population and resources.

The major task for post-war agriculture is to see that living levels are raised for millions of low-income farm people—farmers, tenants, sharecroppers, and hired farm laborers. This can be done progressively. Policies to achieve this will involve measures directed toward increasing consumption of agricultural products and toward making agriculture more efficient and better able to provide an adequate level of living to farmers and hired farm workers. The range of measures must be broad enough to deal with internal agricultural problems and external conditions affecting agriculture.

Any statement of national agricultural policy after the war may well incorporate the principle that such policy is directed toward furthering the welfare of all the people engaged in agriculture, " . . . Those who till the soil for hire as well as those who cultivate it as tenants or owners." [64] Post-war objectives for farmers of real parity with nonfarm people—parity of income, of public services, of housing, of health facilities, of security—must also embrace the principle of parity for hired farm workers.

Realization of parity objectives for agriculture with other industries should also imply a parity of responsibility to pay and maintain adequate wages and other conditions of employment. Only in such a course can the best interest of agriculture be furthered since it will provide the incentives and opportunities for young people and workers to choose or continue in an agricultural occupation.

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[64] In his Annual Report for 1937, p. 36, the Secretary of Agriculture enunciated this principle in defining the functions of the United States Department of Agriculture.

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