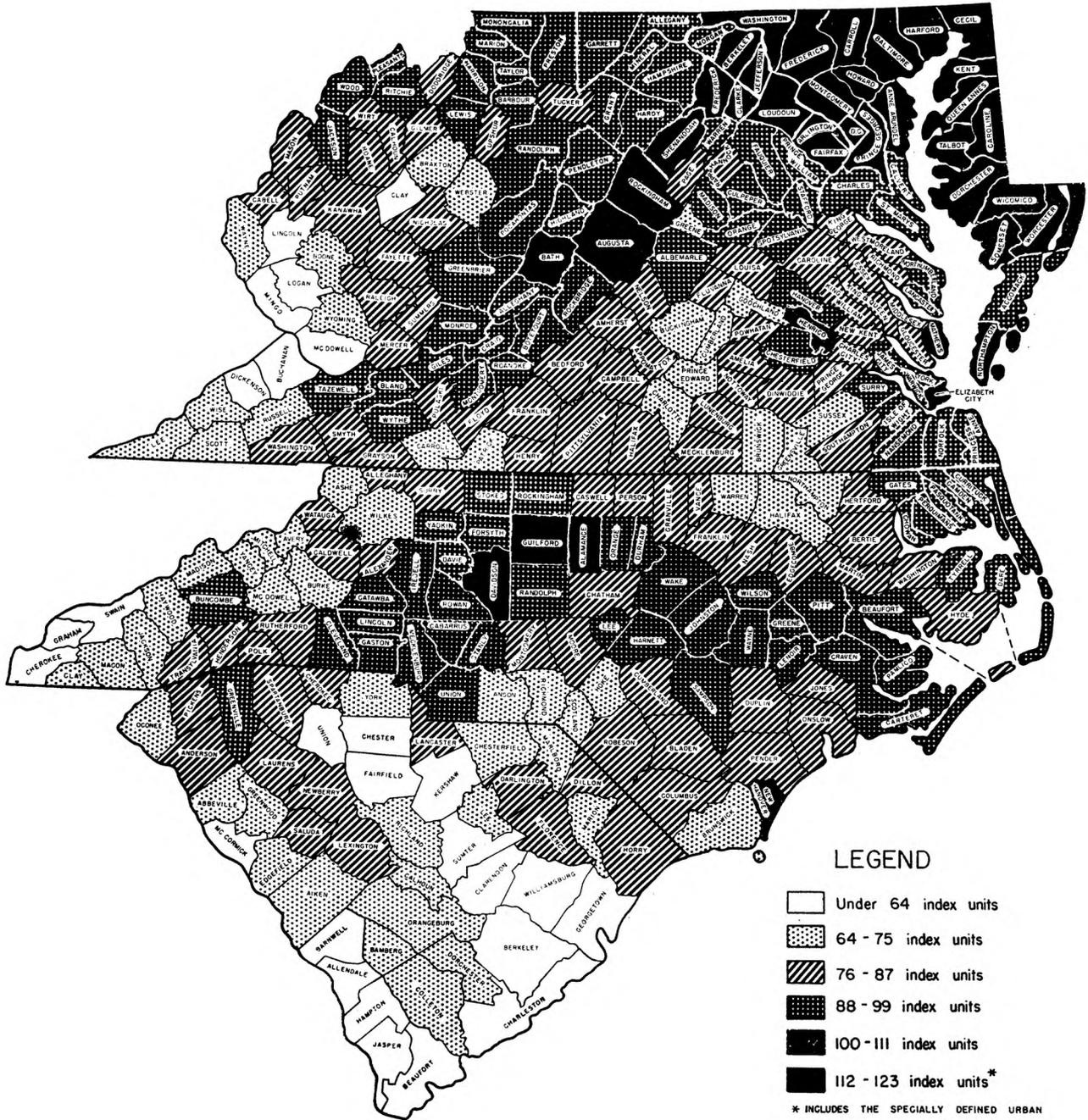




### RURAL-FARM LEVEL OF LIVING INDEX

(UNITED STATES AVERAGE = 100)

FIFTH FEDERAL RESERVE DISTRICT, BY COUNTIES: 1940



SOURCE: U. S. DEPARTMENT OF AGRICULTURE.

FEDERAL RESERVE BANK OF RICHMOND; NOVEMBER, 1944.

## Rural-Farm Levels of Living in the Fifth District

Theoretically, the concept of *level of living* is not a difficult one either to grasp or to define. The level of living of any family or community is the level of total well-being to which it is accustomed. This, then, embraces all the economic aspects of life as well as the emotional and intellectual aspects. The level of living of a community is the net result of the cultural environment of its people, their average income, the way they dispose of the income, their educational attainments, forms of recreation, and so forth. It is also the function of their physical environment, especially as it affects their means of making a living and their ease of contact with the goods, services, and ideas of the world beyond the limits of their community. Between any two communities, variations in any one or more of these contributory factors will result in relative differences in their respective levels of living; and a change in any one or more of these factors, within a single community, will result in an upward or downward alteration of its absolute level of living.

It is one thing, however, to speak of levels of living in the theoretical sense, and quite another to attempt the statistical measurement of a given community's level of living or the statistical comparison of the levels of living of two or more communities. Many of the more important ingredients of the total level of living are intangible, and are not subject to objective measurement. Furthermore, items which may be very important to one community may not be found in others, yet the only basis of comparison is one which utilizes *common* attributes which can be measured objectively. Finally, there is the mechanical difficulty of handling a vast number of different partial measurements, weighting them fairly according to their importance, and combining them into a mathematical value which is validly comparable with many other similar values, each applying to a single small area. This problem has challenged the attention of many students of economics and sociology, and, although it may never be *completely* solved, has resulted in several very useful measures of level of living, by one standard or another. In spite of many variations in specific instances, there has been a surprisingly close agreement between the findings of several workers in this field of study.

The United States Department of Agriculture has made a comprehensive study<sup>1</sup> of levels of living based on the Census of 1940. This is the most recent study of this kind which permits the implicit or explicit comparison of any county in the country with any or all others. The rest of this article will be based on this report.

### THE NATURE OF THE USDA STUDY

The USDA study was undertaken with a clear understanding of the difficulties and shortcomings of the statistical approach. In order to assure comprehensiveness and comparability between the final county indexes, it was decided that all the basic data be taken from the Sixteenth Census of the United States (1940). The problem became, therefore, one of selecting from this source

those items which would best measure the total well-being of all the counties of the nation and of combining these items into a valid index. The following five items were finally selected:

1. Percentage of occupied dwelling units with fewer than 1.51 persons per room.
2. Percentage of dwelling units with radios.
3. Percentage of farms with gross income of more than \$600.
4. Percentage of farms reporting autos of 1936 or later models.
5. Median grade of school completed by persons 25 years of age and over.

The use of the above five items to compose the index does not mean that the rural-farm level of living comprises only these five aspects of life. On the contrary, these items were selected after careful study and the application of many different criteria to the several hundred possible items found in the Census. Thus, each of the above items not only measures a concrete ingredient of total well-being or is logically related to an intangible one, but each final item also shows a very high correlation with every one of a large group of other items which could have been used. For example, in counties with large proportions of the dwelling units having fewer than 1.51 persons per room the degree of individual privacy is higher, there is more room for the amenities of life, people have more "things" about them to assist them enjoy life. Again, the presence of radios was found to correlate highly with the presence of electric lights, other electrical appliances, running water, et cetera. High incomes not only imply generally favorable economic environment, but also indicate the wherewithal to possess and enjoy the many goods and services which can only be purchased with money. Late model cars mean travel, contact with other people, widened recreational opportunity, and all the economic and social advantages which go with good roads. Finally, "—in a county where the median grade of school completed by rural persons 25 years of age and over is relatively high, the proportion completing college will likely be high also, probably the proportion of time spent by persons in reading will be high, and we should expect to find greater than average degree of participation in the various organizations of the rural communities of the county."<sup>2</sup>

With these five items properly weighted and combined, it became possible to assign to each county a final index number which measured its level of living in terms of the United States county average, rather than in terms of a set standard. Thus, this index is a relative rather than an absolute one. In selecting the final items, it was necessary to keep in mind the national scope of the comparisons, therefore the only items which could be used were those which were not merely sectional in their applicability. For this reason, certain items which might be the very best for use in a regional index had to be left out because they were not uniformly applicable to the

<sup>1</sup> Margaret Jarman Hagood, *Rural Level of Living Indexes for Counties of the United States, 1940* (USDA, Bureau of Agricultural Economics; Washington: October 1943) 43 pages, mimeographed.

<sup>2</sup> *Ibid*, page 2.

entire country. With respect to the Fifth District this becomes a definite limitation upon the meaning of the index. The degree of farm tenancy or the racial composition of the population for example are both excellent components of a measure of level of living in the Southeast; but they could not be used because neither is as good as a measure of the level of living in, say, the North Central States where an entirely different social and economic pattern of rural life is found. If an index were developed for the Fifth District alone, therefore, it might show different county relationships, within the District, from those shown by the USDA index.

#### THE GEOGRAPHICAL DISTRIBUTION OF LEVELS OF LIVING IN THE FIFTH DISTRICT

In comparison with the national county average of 100, the county averages of the Fifth District states are: Maryland, 108; Virginia, 86; West Virginia, 85; North Carolina, 84; and South Carolina, 69. However, as the accompanying map clearly demonstrates, a wide range of values will be found in each state. The extreme counties of the states, and their values, are:

MARYLAND—Kent, 122; Calvert, 92.

VIRGINIA—Fairfax and Loudoun, 112; Buchanan, 53.

WEST VIRGINIA—Ohio (not in the Fifth District), 114; Jefferson, 113; Logan, McDowell, and Mingo, 54.

NORTH CAROLINA—Guilford, 103; Swain, 60.

SOUTH CAROLINA—Greenville, 88; Beaufort, 46.

As an examination of the map indicates, there are some noteworthy features in the geographical distribution of rural-farm levels of living in this District. In the first place, a general North-to-South gradation is apparent. In the second place, the broad regions defined by differences of level of living tend to ignore state lines. In the third place, the several classes tend to group into somewhat compact clusters rather than to scatter widely. While it would be impossible to set forth all the causal forces which have led to the final pattern of rural-farm prosperity and poverty, some of the more important will be taken up below.

The population class which is under scrutiny in this connection is the rural-farm group, by Census definition. Since all the persons in this class reported themselves as living on farms, any factors which affect the profitability of a country's agriculture will strongly influence the level of living found therein. The most important determinants of the average net farm income per capita are the concentration of farm persons per unit of land, the fertility of that land, and the perfection of agricultural adjustment to the natural and economic environment. In this District, the most fertile soils *and* the lowest density of farm persons to arable land are found in the northeastern parts of Maryland and Virginia, and in the Great Valley of Virginia and West Virginia. Moving North and East from Tazewell County, Virginia, these two geographic regions of the District are clearly defined: almost without exception the counties so located have index values in excess of 88 and form a high-value back-

bone for the upper half of the District. While soils and farm population densities vary throughout the rest of the District, their effects are so modified by other factors that no clear effects may be seen. However, the depressed nature of the southern cotton economy during the thirties is reflected in the very low values found throughout most of South Carolina, and this is undoubtedly accentuated by the high rural population densities found in soil areas which have been deteriorated by long use under soil-depleting crops.

Throughout the entire District, one of the most consistent relationships is that found between the rural-farm level of living and the presence of the larger urban centers. In almost every instance, there is a distinctly higher level of living found in the vicinity of the larger cities and towns of the District than will be found in other similar counties farther removed from an urban center. While it is impossible to generalize about which is cause and which is effect, several things may be said concerning this relationship. Towns and cities develop for many different reasons, one of which is the presence of prosperous agricultural markets in the surrounding hinterland. In these latter cases, prosperous farming areas give rise to towns which serve their needs as sources of necessary non-farm goods and services, and as convenient markets for their produce. In many other cases, the town or city developed for reasons which, agriculturally speaking, are completely fortuitous. The presence of relatively important industrial raw materials, location with respect to important arteries of trade or transportation, the prior existence of some important governmental function at a particular location, et cetera, may have provided the nucleus around which an urban center grew. Regardless of how it came to develop, the presence of a large city is extremely important to the prosperity of the surrounding countryside, even though the absence of one does not necessarily cause a depressed agriculture. The city provides a ready market for many special agricultural commodities, such as dairy products and truck crops, and this market is so protected and so constant in its demand that it tends to insure a highly prosperous market agriculture. Then too, the city provides a great deal of extra, non-farm income through the part-time or full-time employment of members of the farm household. Finally, the presence of all the conveniences of life within the city acts as a stimulant and, by its example, tends to raise the standards of neighboring farm families.

Although all cities within the District do not seem to have this effect on their surrounding counties, the centers of Washington, Baltimore, Richmond, and the Hampton Roads cities appear to exert very strong influences. Then too, in the northern and western parts of West Virginia and throughout North Carolina, almost all the counties which rise above the surrounding regions either contain cities within their borders or are very close to cities and towns of 10,000 population or more. In South Carolina, this relationship is not so clear, but, even there, some larger cities exert noticeable influence on the levels of living in adjacent counties.

In many sections of the South, especially, during the last decade or so, there has been a considerable growth of

decentralized industry in rural regions. This has occurred for a number of different reasons which are beyond the scope of this paper. Regardless of whether they are found in cities, villages, or in the open country, industries create a surrounding community of specialized persons who *buy* their daily needs and whose income is not derived in competition with the region's agriculture. Thus, the decentralization of industry into the South's rural areas has tended to raise farm levels of living by injecting new income, by removing many persons from agriculture, and by providing new markets for local produce.

#### THE FUTURE

It has been shown that the index of rural-farm levels of living provided by the USDA is by no means definitive and is subject to distinct limitation when applied to the Fifth District. In spite of this, it does allow a more precise measurement of relative levels of well-being between the several counties of the nation, as well as the implicit comparison of Fifth District counties with the rest of the country. Space does not permit an exhaustive examination of all the root causes of the District's pattern of relative agricultural prosperity, as measured by this index, but enough has been set forth to show that these causes are basic to our regional way of life. It is worthwhile, therefore, to canvas some of the future prospects which are implied by the present situation.

So far as the absolute levels of living found in this District are concerned, their future values will depend on the future of the region and the nation. Developments which reduce the dependence of large segments of the population on agriculture, whether by a change of local occupation or by actual migration, will result in improvements in the levels of living of those left on the farms. The introduction of more efficient agricultural methods, or of new cash crops, also will raise the farm level of living. The same results will follow the opening of new markets, either local or distant, or the expansion of old ones; these can occur through improvements in our foreign trade, more national distribution of Southern farm products, continued growth of Southern cities, or the further growth of decentralized industry in this region. Finally, the attainment and maintenance of a high general level of prosperity will enhance farm life, for, in the last analysis, farm and city are but two aspects of the total economy, and prosperity in one eventually will be reflected in the other.

Should the above developments affect the agriculture of the country with general equality from region to region, the absolute levels of living in all will rise, but the relative levels (as measured by an index such as the one under discussion) need not be changed. The District's *relative* standing can not be raised by national improvements, but only by the solution of the many pressing problems which are particular to this region.

## Coal Mining Industry of the Fifth District

Coal mining is one of the most important industries in the northwestern part of the Fifth District. The coal map of the United States Geological Survey shows no coal in South Carolina, one small field (apparently not worked) in North Carolina, and a few small fields scattered over the eastern half of Virginia (not now of any commercial importance); active mining is concentrated in West Virginia, the western tip of Maryland, and southwest Virginia. Almost all the coal mined in this District is bituminous or "soft" coal. A little semi-anthracite is mined in Virginia, so little that it has been combined with bituminous for this discussion. Two main types of mining operations are found in this region, deep mining and stripping. The former is the type usually thought of as being characteristic of the industry, and consists of driving shafts into the earth in order to reach the beds, which are then worked by means of gradually expanding subterranean galleries. Strip or open-pit mining, on the other hand, is often practiced where the coal beds are near the surface, and consists of scraping or shoveling away the earth-cover and removing the exposed coal. Although implying entirely different working methods and surroundings, these two types of mining seldom will be differentiated herein.

#### THE IMPORTANCE OF COAL MINING IN THE UNITED STATES

According to the best estimates of geologists, there are sufficient coal reserves in the United States to last for the next several centuries at current rates of depletion, placing

this country among the most fortunate of the world in this respect. Since there is no reason to think that *all* coal reserves have been discovered or that means may not yet be found to mine coal now considered commercially non-recoverable, this country need not fear early exhaustion of this mineral. The future of the industry depends on so many currently unknown factors (for example: the substitutability of the several energy sources, the depletion of some competing fuels, possible discovery of entirely new uses for coal, alterations in the cost level of coal production resulting from changes in mining technology, etc.) that no attempt will be made herein to forecast it.

Two of the most important economic aspects of coal mining are the employment which it provides and the incomes which are derived from it. In 1940, this industry provided employment for approximately 527 thousand persons, or 1.2 per cent of total national employment. During the previous year, it produced products valued at \$731 million, or eight-tenths of one per cent of the year's total national product. Major attention herein will be given to these aspects of the industry.

#### BITUMINOUS COAL PRODUCTION

The United States Bureau of Mines provides a series of coal production statistics which is continuous and consistent for many years. In this discussion, annual production figures from this source will be utilized for the years 1917 to 1943. During the five years 1917-21, average annual national production of bituminous coal



was 516 million net tons, 19 per cent of which was produced within the Fifth District. During the period 1939-43, average annual production was 506 million net tons, 31 per cent of which was produced in this District. Over this entire period the national bituminous industry was subject to a trend of slow decline which was not shared by the Fifth District. This trend was downward both in absolute amounts of coal mined and in relationship to the national total of industrial production. For the period 1919-42, the Federal Reserve Board's index of industrial production shows that, while fluctuating approximately with total industrial production, bituminous coal production has been subject to a long-term relative decrease. If 1919 is taken as the base year for both series, total industrial production rose from 100 in that year to 153 in 1929, and fell slightly (to 151) in 1939; on the other hand, coal production rose from 100 in 1919 to 116 in 1929, and fell to 85 in 1939. In both series, the year 1938 was the pre-war low year. From 1938 to 1942, total industrial production more than doubled, while coal production rose by only 65 per cent. These relationships are not difficult to explain. In the first place, there has been a long-run relative decrease in the use of coal in this country brought about by (1) the increasing competition of other fuels and power sources and (2) increasing efficiency in the use of coal for all purposes. In the second place, the wartime expansion of total production has been accomplished more by the vast increase of employment and productivity in specific war-industries (such as aircraft and munitions) than by a general expansion of all the older peace-time industries (such as coal).

#### THE NATURE OF THE COAL MINING INDUSTRY WITHIN THE FIFTH DISTRICT

The first of the accompanying two maps shows all the known coal beds within the Fifth District except the small unworked bed in central North Carolina and a few doubtful ones in Virginia. This map also indicates the approximate total production of all counties in which active mining occurred during the calendar year 1939, which was chosen as representing a fairly typical prewar level of activity. The second map indicates the percentage-wise change in production between 1939 and 1943, most of which probably can be ascribed to the direct or indirect effects of the war. A comparison of these two maps leads to the conclusion that relatively moderate percentage increases have characterized the heavier producing counties, while both decreases and sharp increases in production have occurred in the counties with low volumes of production.<sup>1</sup>

Speaking of the characteristics of the coal mining industry in the Fifth District virtually means speaking of the industry in West Virginia. This state accounts for almost nine-tenths of the District's coal-mining activity, so that its characteristics dominate any District averages which may be struck. The following table indicates the relative importance of the three states to the District and the United States totals:

<sup>1</sup> It should be remembered that, while moderate relative to the large percentage changes which took place in counties with low production, the increases of the heavy coal counties constituted the greater part of the increase in total production taking place between these two years.

#### COAL PRODUCTION IN THE FIFTH DISTRICT

AREA	1939-43 Averages		
	Amount (1,000 net tons)	Per Cent of United States Total	Per Cent of Fifth District Total
Maryland .....	1,686	0.3	1.1
Virginia .....	17,148	3.4	10.9
West Virginia .....	138,117	27.3	88.0
Fifth District .....	156,951	31.0	100.0

Source: United States Bureau of Mines.

Since 1917, the states of the Fifth District have tended to follow somewhat divergent paths of coal production. Maryland's production shows a decreasing trend, moving from almost 5 million tons in the earlier year to about 2 million in 1943. At the same time, production in Virginia and West Virginia have almost doubled, in the former state from a 1917 figure of 10 million tons and in the latter from a 1917 figure of 86 million tons.

According to the Census of 1940, 129 thousand persons in the three coal states of this District listed coal mining as the industry of their employment. This comprised the following proportions of each state's total employment in that year: Maryland, 0.4 per cent; Virginia, 2.2 per cent; and West Virginia, 20.4 per cent. This same source shows that for the three decennial years of 1919, 1929, and 1939, the total employment of the three states' coal mining industry varied between 111 thousand and 120 thousand persons, of whom more than 90 per cent were classified as wage earners (that is, other than administrative, clerical, and supervisory workers). In Maryland, total employment declined during each decade; in Virginia it increased; while in West Virginia, 1929 was the year of highest employment, followed by 1939. The final selling value of the products produced by these persons and the proportion paid out to wage earners are shown in the following table:

#### VALUE OF PRODUCTS OF COAL MINING AND PROPORTION PAID-OUT AS WAGES, FIFTH DISTRICT; 1919, 1929, 1939

AREA	Value of Products (1,000 dollars)			Wages as Per Ct. of Value of Products		
	1919	1929	1939	1919	1929	1939
Maryland .....	8,196	4,745	2,978	65.7	65.6	69.6
Virginia .....	23,763	21,162	24,994	54.5	56.0	63.1
West Virginia .....	193,108	217,023	190,668	54.8	58.2	62.7
Fifth District .....	225,067	242,930	213,640	55.1	58.4	62.9

Source: Census of 1940: Mineral Industries, 1939.

It will be noted from this table that the share of total value received by wage earners tended to increase over each decade in each state.<sup>2</sup> Because of the uneven pace of the industry's development, geographically, it is hard to determine the true sequence of cause and effect in this connection, but a very probable explanation suggests itself, in view of known circumstances. The increasing competition of other fuels, or even other coal-producing regions, coupled with decreasing relative demand via improved combustion efficiency, caused the gradual mechanization (see below) of coal mines in this and contiguous regions. Mechanization presumably took place because the operators thought that the resulting reduction of labor costs would allow reductions in total costs of production

<sup>2</sup> It should not be assumed that the increases in each state have necessarily followed from the same causes. The changes in this proportion result from simultaneous changes in the volumes of employment and production and in the levels of coal prices and mine wages. These variables behaved differently in each state.

(net, after allowing for the new costs attendant on the use of the machinery) that could be used to restore competitive position and/or to maintain or increase profits per unit sold. Over this same general period, though with an appreciable time-lag, the gradual unionization of the industry took place, first in the northern areas, and finally in the southern ones (including most of this District). Since mechanization generally increases the productivity per manhour, and since miners are usually paid on a piece-rate rather than a time-rate basis, this would permit considerable reductions in the piece-rates paid machine miners without reducing their hourly wages. However, union membership included pick-miners (in unmechanized mines) as well as machine-miners, and the unions could not allow reductions in the piece-rate on pick-mined coal. Thus, in addition to their efforts generally to maintain employment and to better weekly mine wages, the unions strove to prevent the elimination of the non-mechanized mines by the competitively stronger mechanized mines. The net result was that, in union mines, the wage-rate for pick-mining remained at least at its previous level, while machine-mining rates were not reduced to the point of weekly-wage-parity. In non-union mines, rates tended to follow, although a relatively constant differential did exist. For the entire industry, the net effect was to increase total labor costs; but the same factors which had provided the initial incentive for mechanization now prevented the operators from passing this cost increase on in the form of higher coal prices at the mine-mouth. Finally, increasing union strength introduced such downward inflexibility to the general mine wage level as to prevent restoration of the operators' margin.

The above analysis should not be interpreted as a condemnation of either the mine operators or the mine unions. Trade-unionization is an established aspect of modern industry. In the short-run it is to be expected that the unionization of an industry will have some effects on costs of production, usually through its influence on wages, employment, and/or the length of the work-week. In the past, these factors have often resulted in increased costs of production relative to final prices of output, and in concomitant reductions in relative profits. This tendency is made more apparent by the fact that unionization does not affect every industry to the same degree at the same time. In the long-run, especially if the entire economy is finally and completely unionized to the same degree, many of these profit-inequities ultimately may disappear. In fact, under conceivable circumstances the effects of widespread unionization might be to increase total effective demand and so restore or even enhance operators' profits.

In this connection, it is interesting to note the relationship which exists between coal mining and other industries with respect to earnings. The Bureau of Labor Statistics has calculated the average weekly earnings of workers in certain industries or groups of industries, for the entire United States. Some idea of the relative level of earnings in coal mining between 1933 and 1941 may be obtained by expressing the average weekly earnings of coal miners as a percentage of the average weekly earnings of workers in all manufacturing industries. This proportion varied from a low of 82 per cent, in 1933, to a

high of 100 per cent (parity), in 1936. From 1934 forward, coal miners' earnings did not fall below 91 per cent of earnings of all manufacturing workers nor rise above 100 per cent.

If West Virginia is taken as representative of the industry in the Fifth District, there was little long-term change in either the money-wage of coal miners or its purchasing power (in terms of 1935-39 dollars) between 1925 and 1939. Wage figures published by the West Virginia Chamber of Commerce, taken from data of the Workmen's Compensation Fund, show cyclical movements of the average annual money-wage from its pre-depression high of \$1,650 (in 1925-6) to its depression low of \$703 (in 1932-3) to its post-depression high of \$1,324 (in 1936-7). When deflated in terms of the Bureau of Labor Statistic's Index of Cost of Living,<sup>3</sup> the range of variation is narrowed appreciably, and generally dropping costs of living tended to more than offset the slight downward movement of money-wages. Since the effects of the current war first became felt in 1939-40 in the form of longer hours and increasing overtime pay, money wages rose from an annual average of \$1,532, in that year, to \$2,649, in 1943-4, a much sharper rise than occurred in average costs of living. Thus, leaving out the trough-years of the depression, coal miners in this District have tended to receive a generally increasing real wage, even though the increase has not been drastic.

The relative wage levels, as between the three coal states of the District, is rather difficult to determine. However, taking the Census figures for 1939 as a basis of comparison and expressing each state's average annual wage as a percentage of the lowest one, the relative wage levels would be: Maryland, 100; Virginia, 106; and West Virginia, 129. It should be noted that the relationship is not at all constant over time and that, in 1929 (of the three decennial years), average wages in Virginia fell below those in Maryland.

One of the most important developments in this industry, since it affects employment, productivity, earnings, and costs, is the trend of mechanization. Regardless of whether or not operators have been able to profit by mechanization to the degree anticipated, there has been a steady increase in the application of machine processes to coal mining since 1919. According to the Census, the national average number of installed horsepower per wage earner in this industry increased from 3.9 to 9.0 during the two decades 1919-39. In the Fifth District the rate of increase lagged slightly behind the nation, but still almost doubled over this period. By 1939, West Virginia averaged just over 8 horsepower per wage earner, while Maryland and Virginia averaged about 5.5. This increase in mechanization followed advances in mine haulage, ventilation, loading and cutting, as well as in many miscellaneous processes. So far as the technology of mining is concerned, mechanical loading and hauling, on the one hand, and mechanical cutting, on the other, are the most important aspects of this development.

<sup>3</sup> This index series (1935-39=100) refers primarily to costs of living in the larger cities of the country, and is not designed to reflect the prices found in the mining communities of a small section of the nation. However, it can be assumed that the costs of living in the part and the whole probably tended to move along parallel paths, even though short-term fluctuations may not have been of the same order.

The mechanical cutting of coal was introduced in this country prior to 1890, and spread with considerable rapidity. By 1919, about three-fifths of all the coal mined underground was machine cut, in contrast with that mined by hand or "shot off the solid".<sup>4</sup> The proportion of machine cut coal rose to 78 per cent in 1929, and to 88 per cent in 1939. In this latter year, in the Fifth District, less than half the coal mined underground in Maryland was machine cut, while over 90 per cent was so mined in Virginia and West Virginia. In contrast to cutting, the loading and conveying of coal from the working face to the outside was not fully mechanized until about 1920. In 1923, the first year for which statistics are available, the Census found that only three-tenths of one per cent of the nation's coal mined underground was mechanically loaded. This proportion had risen to 7 per cent in 1929, and to 31 per cent by 1939. In this District, a definite lag is apparent. By 1939 there was only one mine in Maryland which reported mechanical loading of underground coal. In Virginia, 18 per cent of underground mined coal was loaded mechanically, and in West Virginia, 28 per cent.

The total value of products of coal mining is not only important to the wage earners employed in the industry, but is very important to the operators and to the total community (county, state, or nation) of which the industry is part. The income-importance of coal mining to the states of the Fifth District could best be measured in terms of the proportion which it contributed to the net income of the community, but this relationship cannot be measured exactly. In the first place, value of products is a gross figure and contains items (depreciations, taxes, etc.) which are duplicated elsewhere in the economy. In the second place, the total value of coal produced within any given state may not remain within the borders of that state, but may become income (through the disbursement of insurance premiums, royalties, dividends, etc.) of persons residing elsewhere. It seems logical to assume that, in an industry which is located in such a compact area touching on three contiguous states, there should be little variation in each state's proportion of gross value of product which should be deducted for

<sup>4</sup> This latter term refers to coal broken down by blasting at the working face without undercutting or otherwise weakening the mass. Because of the attendant dangers, this type of mining is prohibited in many states.

the above reasons. Thus, it is probably safe to compare Maryland, Virginia, and West Virginia on the basis of "gross value of coal" as a proportion of "net income payments to individuals". For Maryland, these proportions were .4 per cent, in 1929, and .3 per cent, in 1939; for Virginia, they were 2.1 and 2.5 per cent, respectively; while for West Virginia, they were 27.3 and 26.7 per cent, respectively. It will be noted that these proportions are quite similar to the proportions of total employment provided by the industry, given above.

Unfortunately, no material has been found which covers the net profit or loss accruing to coal mine operators in the District's coal-producing states. Even at the national level, a complete and realistic profit-loss accounting cannot be made. The United States Treasury Department has compiled the corporate income returns from this industry, for the national as a whole, and this constitutes the best known source of data. With reservations,<sup>5</sup> it will be used here. According to this source, the national bituminous coal industry showed net profits between 1917 and 1921, at least, but showed net losses from the early Twenties through 1939. In 1920, the industry's peak net profits approximated \$250 million, while the maximum net losses of 1932 totaled in the neighborhood of \$50 million. In 1940, the industry was again in the black, and it can be assumed that it has so remained. As was demonstrated earlier, the postwar future of the industry is subject to too many currently unknown forces to allow any projection of trend on the national level. Within this District, it is quite possible that the industry, since it was growing at the expense of the industry in the rest of the country, may have been more profitable than national figures would imply. But, in the absence of more exact information on this and on the national prospects, no prognostication is possible on this point, either.

<sup>5</sup>In many ways, income accounting for corporate tax purposes differs from accounting for business purposes. In the first place, many coal mines are not incorporated; salaries, here, cover much which would be dividends to a corporation. Much the same may be said of the many family-owned corporations in the industry. In the second place, definitions often change under the law, with items allowed as expenses some years and not in others. In the third place, the depletion allowances under the law may be much larger than those usually taken in business accounting. This last is not as important for coal mining as it is for some other extractive industries, since the allowances have run in the neighborhood of 5 per cent, for many years. All in all, it is not felt that these reservations nullify the comparisons, and this source covers far more individual concerns than can be found in any other series.

## FEDERAL RESERVE BANK OF RICHMOND

(All Figures in Thousands)

ITEMS	Dec. 13 1944	Change in 11-15-44	Amt. from 12-15-43
Total Gold Reserves	\$ 973,346	+ 33,323	— 89,335
Other Reserves	12,423	— 114	— 5,557
Total Reserves	985,769	+ 33,209	— 94,892
Bills Discounted	550	+ 3,450	— 3,100
Industrial Advances	132	— 6	— 104
Gov't. Securities, Total	1,193,887	+ 40,198	+ 578,302
Bonds	63,779	+ 6,074	+ 66,003
Notes	79,536	+ 27,960	+ 24,249
Certificates	217,545	+ 36,295	+ 38,980
Bills	833,027	— 30,131	+ 581,076
Total Bills and Securities	1,194,569	+ 36,742	+ 575,098
Uncollected Items	155,340	— 1,359	— 1,483
Other Asscts	12,454	— 85	— 3,863
Total Assets	\$2,348,132	+ 68,507	+ 474,860
Fed. Res. Notes in Cir.	\$1,488,441	+ 45,379	+ 362,650
Deposits, Total	716,960	+ 35,991	+ 108,519
Members' Reserves	635,087	+ 9,208	+ 112,508
U. S. Treas. Gen. Acct.	33,897	+ 28,651	+ 9,627
Foreign	44,726	— 3,257	— 13,260
Other Deposits	3,750	+ 1,389	— 356
Deferred Availability Items	120,189	— 13,208	+ 495
Other Liabilities	701	+ 98	+ 355
Capital Accounts	21,841	+ 247	+ 2,841
Total Liabilities	\$2,348,132	+ 68,507	+ 474,860

## 41 REPORTING MEMBER BANKS—5th DISTRICT

(All Figures in Thousands)

ITEMS	Dec. 13 1944	Change in 11-15-44	Amt. from 12-15-43
Total Loans	\$ 358,725	+ 64,606	+ 83,271
Bus. and Agric. Loans	143,946	+ 5,478	+ 9,917
Real Estate Loans	48,292	— 843	+ 1,287
All Other Loans	166,487	+ 59,971	+ 74,641
Total Security Holdings	1,608,962	+ 157,567	+ 266,885
U. S. Treas. Bills	121,535	+ 37,028	— 10,417
U. S. Treas. Certificates	313,354	— 3,770	+ 47,610
U. S. Treas. Notes	305,105	+ 67,709	+ 136,350
U. S. Gov. Bonds	799,242	+ 56,621	+ 124,894
Obligations Gov. Guaranteed	16,007	+ 78	— 29,196
Other Bonds, Stocks and Sec.	53,719	+ 99	— 2,356
Cash Items in Process of Col.	106,435	— 10,942	+ 7,491
Due from Banks	185,490	+ 31,121	+ 26,808
Currency and Coin	41,922	+ 4,827	+ 4,441
Reserve with F. R. Bank	336,519	+ 10,162	+ 59,072
Other Assets	68,303	+ 1,724	+ 2,636
Total Assets	\$2,706,356	+ 259,065	+ 450,604
Total Demand Deposits	\$2,217,566	+ 272,366	+ 384,751
Deposits of Individuals	1,180,446	— 37,987	+ 85,475
Deposits of U. S. Gov.	487,199	+ 314,917	+ 257,015
Deposits of State & Local Gov.	77,601	— 4,845	+ 2,124
Deposits of Banks	451,141	+ 90	+ 46,427
Certified & Officers' Checks	21,179	+ 191	— 6,290
Total Time Deposits	289,879	— 4,651	+ 47,263
Deposits of Individuals	276,036	— 4,687	+ 50,147
Other Time Deposits	13,843	+ 36	— 2,884
Liabilities for Borrowed Money	0	— 1,500	— 1,500
All Other Liabilities	81,630	— 6,509	+ 14,959
Capital Accounts	117,281	— 641	+ 5,131
Total Liabilities	\$2,706,356	+ 259,065	+ 450,604

\* Net figures, reciprocal balances being eliminated.

## DEPOSITS IN MUTUAL SAVINGS BANKS

8 Baltimore Banks

	Nov. 30, 1944	Oct. 31, 1944	Nov. 30, 1943
Total Deposits	\$292,785,086	\$291,932,451	\$256,586,779

## COTTON CONSUMPTION—FIFTH DISTRICT

In Bales

MONTHS	No. Carolina	So. Carolina	Virginia	District
November 1944	225,508	172,578	20,099	418,185
October 1944	214,597	163,951	18,602	397,150
November 1943	230,667	176,160	20,695	427,522
11 Months 1944	2,404,691	1,845,057	208,874	4,458,622
11 Months 1943	2,564,577	1,957,564	228,678	4,750,819

## DEBITS TO INDIVIDUAL ACCOUNTS

(000 omitted)

	November 1944	% chg. from Nov. 1943	11 Mos. 1944	% chg. from 11 Mos. 1943
Dist. of Columbia				
Washington	\$ 516,338	+ 16	\$ 5,343,246	+ 6
Maryland				
Baltimore	801,365	+ 9	8,378,542	+ 8
Cumberland	13,545	+ 18	145,360	+ 13
Frederick	13,159	+ 21	135,726	+ 16
Hagerstown	16,424	0	186,780	+ 10
North Carolina				
Asheville	24,841	+ 23	263,485	+ 15
Charlotte	131,694	+ 22	1,402,655	+ 13
Durham	106,333	+ 19	828,201	+ 15
Greensboro	39,917	+ 25	380,551	+ 8
Kinston	19,414	+ 99	122,681	+ 15
Raleigh	59,655	+ 22	601,293	+ 6
Wilmington	39,823	+ 15	418,120	+ 3
Wilson	31,750	+ 77	165,237	+ 13
Winston-Salem	83,544	+ 7	735,136	— 3
South Carolina				
Charleston	41,632	+ 11	430,711	0
Columbia	52,758	— 3	547,172	0
Greenville	46,509	+ 27	423,199	+ 2
Spartanburg	24,779	+ 19	242,994	+ 7
Virginia				
Charlottesville	18,679	+ 35	171,557	+ 29
Danville	37,526	+ 19	204,304	+ 10
Lynchburg	22,861	+ 3	232,909	+ 7
Newport News	23,240	+ 0	281,390	+ 1
Norfolk	122,799	+ 6	1,322,850	+ 1
Portsmouth	16,073	+ 7	173,499	— 3
Richmond	355,809	+ 7	3,642,937	+ 10
Roanoke	44,518	+ 17	457,414	+ 13
West Virginia				
Bluefield	21,753	+ 9	256,142	+ 15
Charleston	90,982	+ 24	908,354	+ 10
Clarksburg	17,135	+ 19	170,070	+ 17
Huntington	35,657	+ 38	344,808	+ 18
Parkersburg	19,574	+ 38	182,065	+ 16
District Totals	\$2,890,086	+ 13	\$29,099,888	+ 8

## COMMERCIAL FAILURES

PERIODS	Number of Failures		Total Liabilities	
	District	U. S.	District	U. S.
November 1944	1	75	\$ 8,000	\$ 3,008,000
October 1944	0	74	0	3,819,000
November 1943	2	155	110,000	2,402,000
11 Months 1944	13	1,129	\$ 760,000	\$29,856,000
11 Months 1943	45	3,076	1,100,000	43,284,000

Source: Dun &amp; Bradstreet.

## COTTON CONSUMPTION AND ON HAND—BALES

	Nov. 1944	Nov. 1943	Aug. 1 to Nov. 30 1944	Nov. 30 1943
Fifth District States:				
Cotton consumed	418,185	427,522	1,630,552	1,677,171
Cotton Growing States:				
Cotton consumed	738,458	754,874	2,885,603	2,992,643
Cotton on hand Nov. 30 in				
Consuming establishments	1,975,334	2,105,501		
Storage and Compresses	13,043,514	12,731,432		
United States:				
Cotton consumed	836,541	858,877	3,266,496	3,421,212
Cotton on hand Nov. 30 in				
Consuming establishments	2,209,694	2,389,227		
Storage and Compresses	13,185,606	12,950,983		
Spindles Active, U. S.	22,257,040	22,615,732		

## RAYON YARN DATA

	Nov. 1944	Oct. 1944	Nov. 1943
Rayon Yarn Shipments, Lbs.	47,800,000	47,000,000	42,900,000
Staple Fiber Shipments, Lbs.	13,800,000	14,500,000	13,900,000
Rayon Yarn Stocks, Lbs.	8,400,000	8,400,000	7,200,000
Staple Fiber Stocks, Lbs.	2,800,000	2,700,000	2,600,000

Source: Rayon Organon.

BUILDING PERMIT FIGURES		
November 1944		
	Total Valuation	
	Nov. 1944	Nov. 1943
<b>Maryland</b>		
Baltimore .....	\$ 532,930	\$ 654,595
Cumberland .....	1,946	20,080
Frederick .....	7,620	0
Hagerstown .....	12,455	4,005
Salisbury .....	43,091	12,934
<b>Virginia</b>		
Danville .....	\$ 9,135	\$ 4,117
Lynchburg .....	16,101	5,300
Norfolk .....	145,885	853,742
Petersburg .....	1,080	400
Portsmouth .....	20,540	27,395
Richmond .....	101,142	58,917
Roanoke .....	28,555	19,582
<b>West Virginia</b>		
Charleston .....	\$ 49,550	\$ 19,678
Clarksburg .....	1,971	1,160
Huntington .....	78,085	6,615
<b>North Carolina</b>		
Asheville .....	\$ 23,500	\$ 3,065
Charlotte .....	84,601	23,931
Durham .....	80,640	6,610
Greensboro .....	11,779	2,450
High Point .....	45,584	16,021
Raleigh .....	14,950	38,985
Rocky Mount .....	2,950	825
Salisbury .....	6,475	2,180
Winston-Salem .....	125,940	24,120
<b>South Carolina</b>		
Charleston .....	\$ 53,137	\$ 84,442
Columbia .....	34,840	3,990
Greenville .....	33,530	3,300
Spartanburg .....	6,590	26,245
<b>District of Columbia</b>		
Washington .....	\$ 1,436,467	\$ 1,200,935
District Totals .....	\$ 3,006,069	\$ 3,125,619
11 Months .....	\$28,602,221	\$42,704,188

RETAIL FURNITURE SALES		
Percentage Changes in Nov. and 11 Mos. 1944 Compared with Nov. 1943		
STATES		
Maryland (5)* .....	+ 3	- 1
Dist. of Columbia (5)* .....	+ 2	- 3
Virginia (24)* .....	+19	+ 6
West Virginia (11)* .....	+31	+ 7
North Carolina (20)* .....	+26	+13
South Carolina (13)* .....	+18	+ 3
Fifth District (78)* .....	+13	+ 4
INDIVIDUAL CITIES		
Baltimore, Md. (5)* .....	+ 3	- 1
Washington, D. C. (5)* .....	+ 2	- 3
Richmond, Va. (7)* .....	+16	+ 6
Charleston, W. Va. (3)* .....	+22	- 4
Charlotte, N. C. (5)* .....	+13	+ 8
Columbia, S. C. (4)* .....	+16	+ 1

DEPARTMENT STORE TRADE					
Richmond	Baltimore	Washington	Other Cities	District	
Percentage change in Nov. 1944 sales, compared with sales in 1943:					
+15	+10	+13	+20	+14	
Change in 11 mos.' sales in 1944, compared with 11 mos.' sales in 1943:					
+15	+ 7	+ 5	+16	+ 9	
Change in stocks on Nov. 30, 1944, from stocks on Nov. 30, 1943:					
+ 2	+ 4	+ 3	+14	+ 4	
Change in outstand'g orders Nov. 30, 1944, from orders on Nov. 30, '43:					
+11	+10	- 3	+32	+ 5	
Change in total receivables Nov. 30, 1944, from receivables Nov. 30, '43:					
+13	+13	+ 8	+12	+11	
Percentage of current receivables as of Nov. 1, 1944, collected in Nov.:					
61	62	57	62	60	
Percentage of instalment receivables as of Nov. 1, '44, collected in Nov.:					
36	39	29	39	33	
Maryland Dist. of Col. Virginia West Va. No. Caro. So. Caro.					
Percentage change in Nov. 1944 sales from Nov. 1943 sales, by States:					
+10	+13	+16	+24	+26	+20
Percentage change in 11 months' sales in 1944 from same period in 1943:					
+ 7	+ 5	+16	+15	+15	+12

CONSTRUCTION CONTRACTS AWARDED				
STATES	October 1944	% chg. from Oct. 1943	10 Mos. 1944	% chg. from 10 Mos. 1943
Maryland .....	\$ 4,426,000	-68	\$ 76,641,000	-13
Dist. of Columbia .....	3,142,000	+62	23,435,000	-11
Virginia .....	5,955,000	-55	96,257,000	-35
West Virginia .....	1,277,000	- 6	21,623,000	+32
North Carolina .....	1,551,000	-57	37,805,000	-52
South Carolina .....	192,000	-94	18,713,000	-56
Fifth District .....	\$16,543,000	-56	\$274,474,000	-31

Source: F. W. Dodge Corp.

WHOLESALE TRADE, 244 FIRMS					
LINES	Net Sales compared with		Stock compared with		Ratio Nov. collections to accounts outstand'g Nov. 1
	Nov. 1943	Oct. 1944	Nov. 30 1943	Oct. 31 1944	
Auto Supplies (12)* .....	+15	- 7	+23	+ 3	95
Drugs & Sundries (9)* .....	+ 9	- 3	+23	+ 7	142
Dry Goods (8)* .....	+ 8	-18	- 2	- 5	80
Electrical Goods (10)* .....	- 9	- 9	- 5	+ 1	65
Groceries (77)* .....	+ 7	+ 2	+10	+ 4	153
Hardware (15)* .....	+12	- 6	+19	+ 2	105
Industrial Supplies (10)* .....	+34	+ 3	+10	- 3	109
Paper & products (7)* .....	- 7	-12	-22	- 1	93
Tobacco & products(10)* .....	+ 1	0	+12	- 2	150
Miscellaneous (86)* .....	+ 3	- 2	-13	+ 1	128
District Average(244)* .....	+ 5	- 3	+ 4	+ 2	109

Source: Department of Commerce.  
\* Number of reporting firms.

TOBACCO MANUFACTURING				
	Nov. 1944	% change from Nov. 1943	11 Mos. 1944	% change from 11 Mos. '43
Smoking and Chewing tobacco (Thousands of lbs.) .....	26,775	+ 5	227,221	- 6
Cigarettes (Thousands) .....	20,554,494	-15	221,434,152	- 6
Cigars (Thousands) .....	446,325	+ 4	4,000,464	- 9
Snuff (Thousands of lbs.) .....	3,954	+20	38,581	- 2

AUCTION TOBACCO MARKETING				
STATES	Producers' Tobacco Sales, Lbs.		Price per Hund.	
	Nov. 1944	Nov. 1943	1944	1943
North Carolina .....	182,150,833	90,146,647	\$44.54	\$42.98
Virginia .....	50,281,240	38,512,789	44.71	42.93
Fifth District .....	232,432,073	128,659,436	\$44.58	\$42.97
Season through .....	887,706,790*	681,994,844*	43.20*	*40.64

\* Includes sales on South Carolina markets.

SOFT COAL PRODUCTION IN THOUSANDS OF TONS						
REGIONS	Nov. 1944	Nov. 1943	% Change	11 Mos. 1944	11 Mos. 1943	% Change
West Virginia .....	13,058	12,110	+ 8	152,270	145,080	+ 5
Virginia .....	1,569	1,420	+10	17,872	17,822	+ 0
Maryland .....	139	123	+ 9	1,797	1,700	+ 6
5th District .....	14,766	18,653	+ 8	171,939	164,602	+ 4
United States .....	50,215	44,643	+12	573,070	538,769	+ 6
% in District .....	29.4	30.6	....	30.0	30.6	....

