EMPLOYMENT AND UNEMPLOYMENT IN A DEPRESSED LABOR MARKET: BRAZIL, IND.

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FEDERAL WORKS AGENCY
WORK PROJECTS ADMINISTRATION

F. C. HARRINGTON
Commissioner

CORRINGTON GILL
Assistant Commissioner

NATIONAL RESEARCH PROJECT

on

Reemployment Opportunities and Recent Changes
in Industrial Techniques

DAVID WEINTRAUB
Director

Studies of the Effects of Industrial Change on Labor Markets

EMPLOYMENT AND UNEMPLOYMENT IN A DEPRESSED LABOR MARKET: BRAZIL, IND.

by

Miriam E. West
Edward J. Fitzgerald
and
George L. Bird

WORK PROJECTS ADMINISTRATION, NATIONAL RESEARCH PROJECT
Report No. L-9
Philadelphia, Pennsylvania
April 1940

THE WPA NATIONAL RESEARCH PROJECT ON REEMPLOYMENT OPPORTUNITIES AND RECENT CHANGES IN INDUSTRIAL TECHNIQUES

Under the authority granted by the President in the Executive Order which created the Works Progress Administration, Administrator *Harry L. Hopkins* authorized the establishment of a research program for the purpose of collecting and analyzing data bearing on problems of employment, unemployment, and relief. Accordingly, the National Research Program was established in October 1935 under the supervision of *Corrington Gill*, Assistant Administrator of the WPA, who appointed the directors of the individual studies or projects.

The Project on Reemployment Opportunities and Recent Changes in Industrial Techniques was organized in December 1935 to inquire, with the cooperation of industry, labor, and governmental and private agencies, into the extent of recent changes in industrial techniques and to evaluate the effects of these changes on the volume of employment and unemployment. *David Weintraub* and *Irving Kaplan*, members of the research staff of the Division of Research, Statistics, and Finance were appointed, respectively, Director and Associate Director of the Project. The task set for them was to assemble and organize the existing data which bear on the problem and to augment these data by field surveys and analyses.

To this end, many governmental agencies which are the collectors and repositories of pertinent information were invited to cooperate. The cooperating agencies of the United States Government include the Department of Agriculture, the Bureau of Mines of the Department of the Interior, the Bureau of Labor Statistics of the Department of Labor, the Railroad Retirement Board, the Social Security Board, the Bureau of Internal Revenue of the Department of the Treasury, the Department of Commerce, the Federal Trade Commission, and the Tariff Commission.

The following private agencies joined with the National Research Project in conducting special studies: the Industrial Research Department of the University of Pennsylvania, the National Bureau of Economic Research, Inc., the Employment Stabilization Research Institute of the University of Minnesota, and the Agricultural Economics Departments in the Agricultural Experiment Stations of California, Illinois, Iowa, and New York.

Since September 1, 1939, the Project has been sponsored by the National Resources Planning Board, Executive Office of the President, Washington, D. C.

FEDERAL WORKS AGENCY
WORK PROJECTS ADMINISTRATION
1734 NEW YORK AVENUE NW.
WASHINGTON, D. C.

F. C. HARRINGTON
COMMISSIONER OF WORK PROJECTS

April 20, 1940

Colonel F. C. Harrington
Commissioner of Work Projects

Sir:

The depressed community with closed mills, widespread unemployment, and heavy relief rolls is a phenomenon of the American scene that has commanded increasing attention in recent years. The present report is designed, through an analysis of the labor market of Brazil, Indiana, to cast light on the way in which the unemployment situation developed in one such community, the types of unemployment problems that were created, and the reemployment problems that continued into a period when other regions were experiencing at least some measure of recovery.

During the 1920's, the history of the Brazil area was one of declining employment opportunities due to declining activity in a number of its industries. Only clay-working activity had been expanding appreciably but with the beginning of the general depression this industry also experienced a sharp decline. Employment in the clay-products industry dropped from an average of 1,565 workers in the peak year 1929, when it was the most important single industry in the city, to an average of 162 workers in 1933. Though later years saw some recovery, in 1935 an average of only 282 persons were employed in the clay-products plants. The long history of declining employment opportunity that had characterized the community, coupled with the depression problem of the clay-working industry, had had important effects upon the nature as well as upon the extent of the unemployment problem that existed in 1936.

This report shows that during a recovery year like 1936 unemployment was widespread in the community of Brazil. More than a third of the employables

were unemployed, and almost half of the households with some employables had at least one member unemployed or employed only part time. This widespread unemployment and underemployment covered a variety of situations, each of which presents different problems for a relief administration.

In the first place, the lack of employment opportunities in the region had led to the creation of a large, untapped reservoir of labor - new workers who had never succeeded in finding even a first job. These constituted 6 percent of the employables in the community but accounted for almost a fifth of its unemployed. Further, there was evident a tendency toward the emergence of a sizable group of chronically unemployed persons. This was reflected in the high proportion of the unemployed who had been out of work for long periods. Of those previously employed in the community who were unemployed in 1936, more than three-quarters had been without jobs for a year or more. A third had been continuously out of work for 5 years or more. Many of these were older workers. A large number of them were former clay workers who had been unable to find other employment in a labor market of restricted opportunity and large reserve forces, and had not been recalled to the clay-products industry. Others, from other industries, were workers whom the decline of the community's industrial life had gradually pushed into the unemployed group. The continued low level of activity in their own industries and their inability to find other work were transforming them into chronically unemployed persons.

In addition to these persons, there was a group who remained attached to one industry, even one plant, throughout their employment and unemployment. Because of an age, skill, or experience advantage these were the ones who were recalled whenever activity in their plant was resumed or expanded, but continued inactivity in a number of the plants meant heavy records of unemployment for many of the group.

Still another group in the community consisted of those workers, mostly the young, who had succeeded in entering actively into the labor market, but who had not made permanent connections with any one industry. Their youth enabled them to shift from one industry to another, and, as a result, they constituted a constantly fluctuating reserve for many industries. The continued low level of activity was, however, reducing

their chances of making any stable connection, and many of their number were chronically underemployed.

Finally, many workers, upon becoming unemployed, turned to self-employment, mostly in agriculture, small-scale mining, and trucking. The limited opportunities for gaining more than a bare subsistence by such attempts meant that this recourse to self-employment was for many workers a less than satisfactory adjustment.

In all, the situation that had developed in this depressed community - the widespread unemployment and underemployment, the inability of the younger workers to find places in the crowded labor market, and the increasing chronic unemployment of the older workers - presented a wide variety of social problems. Short of a tremendous expansion of local industrial activity, these problems can be met only by a relief and public work program calculated to care for the various types of unemployment that cannot be handled by existing security legislation.

Respectfully yours,

Corrington Gill
Assistant Commissioner

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PREFACE

The industrial activity of Brazil, Indiana, and what prosperity the community has enjoyed have centered about the exploitation of a succession of natural resources in which the region once was rich. Until about 1890 lumbering was one of its most important pursuits, supplementing the agricultural activity that had always been the backbone of the region. By the turn of the century this lumber resource was exhausted. The area in the meantime had turned to the rapid and intensive exploitation of the rich coal resources which underlay the county. The peak of activity in this industry, the peak of population in the area, and probably the peak of prosperity for the community was reached about 1910. Thereafter, as its coal industry declined, and with it the metalworking industries which had developed around it, the community came more and more to depend for the major part of its industrial employment upon the clay-products industry based upon the rich clay deposits in which the region abounded. The growing activity in this industry mitigated to some extent the downward trends in the others. But with its decline after 1930, unemployment in the community became widespread, the demand for relief mounted, and the community took on the characteristics of a depressed labor market.

This report is concerned with the labor-market characteristics of this depressed community in a recovery year, 1936, and with the analysis of the nature and development of the unemployment problems that faced the community at that time, problems which still face it, according to a report on a recent visit to the community by one of the authors.

The report was prepared by Miriam E. West, Edward J. Fitzgerald, and George L. Bird. Mr. Bird collected the field data and prepared information on the community's background. Miss West and Mr. Fitzgerald analyzed the data and wrote the report. The study was started under the administrative supervision of Francis M. Vreeland; the field work was completed and preliminary tabulations were prepared under the administrative supervision of H. Paul Douglass. The manuscript was edited and prepared for publication under the direction of Edmund J. Stone.

Acknowledgment is gratefully made to the plant officials and numerous civic leaders of the community of Brazil who so generously supplied advice and information essential to the completion of the report. A particular debt of gratitude is due to all the persons in the community who supplied the data upon which the report is based. The use made of the material and the conclusions drawn are solely the responsibility of the National Research Project.

DAVID WEINTRAUB

PHILADELPHIA
April 19, 1940

CHAPTER I

THE EMPLOYMENT SITUATION AND ITS DEVELOPMENT

INTRODUCTION

Brazil is the industrial center of Clay County, Indiana. In the fall of 1936 one-third of its employable population was unemployed and looking for work. Many of these persons had been unemployed continuously for the preceding 5 years and, with their families, had been on some kind of emergency relief. Moreover, in the 3 years between August 1933 and November 18, 1936, almost three-quarters of the population of Brazil Township had been on direct or work relief at one time or another, and over half the population of Clay County had received some form of relief.[1]

The problems reflected by these statistics originated to an appreciable extent in the sharp contraction in the activity of the clay-products manufacturing plants. At the time that the depression set in, these plants - manufacturing building tile, face brick, and conduits - were the important industrial enterprises of the community. In 1929 the average employment in the clay-products plants in Brazil and nearby Carbon was 1,565 persons. Two years later, however, this number had dropped about 50 percent, and by 1933 the average employment was only 162. Though the succeeding years saw some revival of clay-products manufacturing activity, employment in the fall of 1936 was still 60 percent below its 1929 peak.[2]

It is the labor market of this community, and more particularly that section of it associated with the clay-products plants, of which analysis is here made, with a view to throwing some light on the nature of the problems facing the persons in the region. The clay-products industry had been the latest of a series of industries to offer a relatively large volume of employment to the population. During its development most of the other industrial pursuits that have been of importance earlier

Note.- The authors wish to acknowledge their indebtedness to Franklin W. McCurdy, 3d, who was in charge of the field editing of schedules and the preparation of preliminary tabulations; Mabel L. Lober, who assisted in the collection of background information; Ludson Worsham, who assisted in statistical work; and David N. Cohen, who aided in the organization and analysis of the data used, prepared the final tables, and assisted in the completion of the manuscript.

[1] From special tabulations made by the staff of the National Research Project in November 1936, from data in the files of the County Office of the Governor's Commission on Unemployment Relief and the Brazil Township Trustee Office. According to their survey, the number of persons in families in Clay County receiving relief in one form or another at one time during the period August 1933 to November 1936 was equal to 51.7 percent of the 1930 population, and in the city of Brazil the number was equal to 71.2 percent of the population.

[2] Estimated from pay-roll data of clay-products plants during NRP survey.

Table 1.- AVERAGE NUMBER OF PERSONS EMPLOYED IN THE CLAY-PRODUCTS MANUFACTURING INDUSTRY, CLAY COUNTY, INDIANA, 1929-35[a]

Year	Number of -		
	Establishments	Salaried employees	Wage earners
1929	10	84	1,481
1931	8	n.a.	734
1933	5	22	140
1935	6	19	263

[a]Data are from a special tabulation prepared for the National Research Project by the U. S. Dept. Com., Bur. Census. The drop in number of persons employed is considerably less than shown by these figures, as the average reflects both the number of persons and the number of months of employment. During the depression the plants that operated usually worked only a few months in any one year. Though the figures refer to Clay County, investigation has indicated that the plants enumerated are those in Brazil and Carbon.

n.a. Data not available.

were declining and leaving a supply of unemployed labor on the market. Along with the decline in employment in manufacturing industries other than clay, there had been declining employment in both mining and agriculture, accompanied by a decrease in the population both in the towns and rural areas surrounding Brazil. Thus while the nature of the clay-products industry and the fluctuations in its demand for labor had their effects upon the recent character and fortunes of the community labor market, the problems of the community also had their roots in the past situation. The nature of the industries which had offered employment in the past - and their decline - played a part in determining the characteristics of the labor supply for clay products and in providing the setting for the problems that arose with the depression.

INDUSTRIAL DEVELOPMENT OF THE BRAZIL AREA

The Brazil industrial community comprises the city of Brazil, with a population in 1936 of 8,662 persons, the manufacturing area on the outskirts of the city, and the surrounding agricultural region lying within a half-dozen miles of the city proper. Included within this area is Carbon, with two brick and tile plants and with a 1936 population of 516 persons, and the small villages of Harmony and Knightsville, formerly mining centers and now dependent chiefly on Brazil industries for employment.

The entire area is in the extreme northern part of Clay County, and is a region that has been rich in the natural resources of lumber, coal, and clay. It is separated from Illinois only by Vigo County. Brazil

itself is located on the National Old Trails Highway (U. S. Highway Number 40) 16 miles east of Terre Haute, the nearest metropolitan city, and 52 miles from Indianapolis, the State capital. State Highway Number 59 passes north and south through the city, connecting it with Carbon on the northern edge of the county and with Clay City in the south.

The clay-products industry only began to assume its recent importance to the region and its labor market with the turn of the century. Even prior to that time, however, the agricultural activity of this predominantly rural area had been supplemented by other pursuits - lumbering, manufacturing, and coal mining. Each of these played an important role in the economic life of the area, drawing upon its natural resources, and supplying employment to sections of its population or drawing new population into the region. Successively each of them dwindled in importance, either leaving groups of unemployed workers on the market or being replaced by other activities which drew on the accumulated labor reserves. The activities of some of these industries, coal mining in particular, continue in some form into the present, supplementing the employment demand of the clay-products industry. Lumbering and coal mining have left an additional mark on the community in the form of decreased opportunity in agriculture due to the soil depletion which followed their hasty exploitation of the area's resources.

In a sense, agricultural activity has always been the backbone of the community's life. But the depletion of the fertility of the soil through imprudent farming methods, and erosion and the destruction of arable land by strip-mining operations, has meant a gradual decline in the rural population and decrease in the acreage of agricultural lands (see tables 3 and 4). In addition, for large sections of the agricultural population in the region, the income to be derived from the land has had to be supplemented by income from other sources. The agricultural population has thus formed an important source of the labor supply which has been available to a succession of industries throughout the history of the region. More particularly the coal-mining industry and most recently the clay-working industry have drawn either upon erstwhile farmers unable to maintain their hold upon the land, or upon part-time farmers anxious to supplement a meager income from the land. On the other side, in periods of industrial unemployment, many persons who earlier had left farming for employment in these industries have turned again to the land to supplement their uncertain industrial earnings.

In the early days of the community's history the fine hardwood with which much of the county was heavily timbered led to the development of

a widespread and profitable lumber industry which developed alongside farming and continued to offer employment up to the time when coal mining became significant. By 1890, however, most of the county's mature timber was gone and the industries centered around this resource had disappeared. Meanwhile, coal mining had been rising in importance.[3]

In 1852 the first coal was shipped out of the county to Indianapolis and the industrial era of the region really began. Coal production and employment mounted steadily, probably absorbing much of the labor no longer used by the declining lumber industry, drawing upon the surpluses of farm labor, and attracting other workers from outside. It reached its peak employment by 1905. Subsequently, with the exception of a brief spurt during the war period and shortly after, it declined steadily in importance to the community, its demand for labor falling more rapidly than its production (see table 2). Accompanying this decline in the past 20 years has been a shift from underground mining to strip-mining operations. In the process of rapidly exploiting this resource much of the coal estimated to underlie the county was wasted. Today, though mining is still carried on, there are no large mines operating in the Brazil region, and there is little likelihood that there ever will be. Some of the strip mines continue to be worked but there are indications that the present scale of strip-mining operations will shortly exhaust the potentialities of the region for this kind of mining and

Table 2.- EMPLOYMENT AND PRODUCTION, CLAY COUNTY COAL MINES, 1895-1936[a]

Year	Number of men employed	Average number of days worked	Tons of coal produced
1895	3,319	195	1,223,186
1900	2,780	192	1,165,302
1905	3,326	128	781,574
1910	1,727	220	980,016
1915	991	110	295,451
1920	1,633	180	1,370,402
1925	770	174	974,415
1930	752	178	942,954
1935	729	188	1,058,949
1936	886	166	1,077,917

[a]Data are from issues of *Mineral Resources of the United States* (U. S. Dept. Int., Geol. Survey and U. S. Dept. Com., Bur. Mines) and *Minerals Yearbook* (U. S. Dept. Com. and Int., Bur. Mines).

[3]Data used in this and succeeding sections on the industrial history of Clay County prior to 1908 have, unless otherwise indicated, been based on the volume by William Travis, *A History of Clay County, Indiana* (New York: The Lewis Publishing Co., 1909).

that many of the persons who now find employment in mining will be seeking employment in clay products or what other industries may be active in the region.

The iron and steel industry developed in Brazil alongside of mining between 1867, the date of the first blast furnace in Indiana,[4] and 1906, the year in which the last of Brazil's 10 plants closed down permanently. Like the lumber and coal industries, the iron and steel industry utilized resources found in the area - bog iron ore and coal. However, the native ores were relatively unimportant, the presence of the coal being the real drawing power. Employment in this industry rose rapidly to a peak of about 500 in the 1870's and thereafter declined to its disappearance point shortly after the turn of the century.[5]

The beginning of the rise of the clay-products industry at the turn of the century thus coincided with the peak of coal production and the virtual disappearance of lumbering and steel in the community. Although two small plants making pottery had been opened as early as 1859, total employment in all plants remained fairly constant and was under 50 persons until about 1890. Between 1890 and 1905 it rose to 950. In the same period employment in the coal mines had risen to over 3,000 men (see table 2). Thus during this period the two industries competed in the labor market. Thereafter employment trends in the two industries took opposite directions, that in coal mining declining and that in clay rising until 1930. Meanwhile the employment opportunities in iron and steel and in lumbering had disappeared. A metalworking industry, which had grown up about the same time as the blast furnaces, came, briefly, during the war period, to employ as many as 450 men, but after 1919 it too declined and after 1920 employment remained below 100. Between 1914 and 1929 about 200 men were employed in a woodworking industry which had been established in the region, but by 1930 it was giving work to fewer than 100 men.

POPULATION TRENDS

The population trends in the community and the changing size and characteristics of the labor supply reflect these trends in industrial production and in employment opportunity. The peak of population was reached between 1900 and 1910, the period of great activity in the coal mines

[4] E. T. Cox, *First Annual Report of the Geological Survey of Indiana, Made During the Year 1869* (Indianapolis, Ind.: Alexander H. Conner, State Printer, 1869), p. 72.

[5] Varying estimates of employment in iron and steel have been made. In 1870 there were in operation five iron and steel mills; by 1880 all but one of these had closed. For estimates on employment see Cox, *loc. cit.*, Travis, *loc. cit.*, and various Biennial Reports of the Bureau of Statistics, State of Indiana.

and of rising clay-products employment. Thereafter each census showed a decline in the county population, both rural farm and rural nonfarm. The number of persons in Brazil itself fell from 9,340 in 1910 to 8,744 in 1930 (see table 3). The complete house-to-house population count taken for this study between September 20 and November 30, 1936, showed a further drop to 8,662.

Table 3.- DISTRIBUTION OF POPULATION OF CLAY COUNTY, INDIANA, BY RESIDENCE, 1900-30[a]

Year	Total	Brazil	Rest of Clay County		
			Total	Incorporated towns	Unincorporated and rural farm
1900	34,285	7,786	26,499	5,350	21,149
1910	32,535	9,340	23,195	4,283	18,192
1920	29,447	9,293	20,154	3,851	16,303
1930	26,479	8,744	17,735	3,370	14,365
Percentage change, 1900-30	-22.8	+12.3	-33.1	-37.0	-32.1

[a]Data for 1900, 1910, and 1920 from *Fourteenth Census of the United States: 1920*, "Population" (U. S. Dept. Com., Bur. Census, 1921), vol. I; for 1930 from *Fifteenth Census of the United States: 1930*, "Population" (U. S. Dept. Com., Bur. Census, 1931), vol. I.

The rural population declined even more markedly as opportunity in agriculture and mining dwindled. In 1900 the rural inhabitants of Clay County numbered 26,499; in 1910, 23,195; in 1920, 20,154; and by 1930, only 17,735. Thus in 30 years the rural population declined by a third. The only indication of county population trends after 1930 is in the increase in rural farm population shown by the census, a rise of 20 percent from 8,781 in 1930 to 10,553 in 1935, though some of this increase may be due to differences in the methods of collecting data.[6]

LABOR SUPPLY AND EMPLOYMENT OPPORTUNITIES AFTER 1920

Subsequent to 1920 the Brazil region was economically dependent principally upon the relation between the supply of labor in the area and the demand for labor made by two industries in particular - the clay-working industry, which continued to expand up to 1930, and the coal-mining industry, which had already entered upon a period of decline. The dependence of clay, the more important of these two industries, upon

[6]*United States Census of Agriculture: 1935* (U. S. Dept. Com., Bur. Census, 1936), vol. II, p. 141.

national activity in the building industry made the community extremely susceptible to fluctuations in the general economy.

The supply of labor available in the community to meet the demands of these two industries was naturally large. During the war period employment in the region had been at its height. Coal mining and iron and steel working had still been in operation, and these with the rising clay-products industry offered some employment, so that by 1920, with the cessation of the after-the-war boom, there was an oversupply of workers in the face of a generally declining demand for labor.

The one industry in addition to clay and mining which made any substantial demand upon the employable population after 1920 was woodworking. Between 1916 and 1927, shortly after which it closed permanently, a furniture company employed an average of about 200 persons. Also, there was a wood-products plant which opened in 1920 and employed 150. It was removed to Marion, Indiana, when the factory burned down in 1928. Thus by the onset of the general depression this industry was no longer a source of employment. This brief expansion of woodworking after the war probably absorbed some of the men left without jobs because of the decline in the iron and steel shops. Later, the more skilled workers in these woodworking factories were said to have followed the industry elsewhere, but of the 162 workers on the last pay roll of the furniture company in 1927, 104, or 64 percent, were still living in Brazil, Harmony, or Knightsville in 1936. Some of these were absorbed into the clay-working plants in the years 1927-30.[7]

The metalworking industry, which, as has been noted, had been declining even before the post-war period, virtually disappeared as a factor of any importance in the labor market during the twenties. Its decline was associated with, and reflects, the decline in other local industries. The foundries and machine shops had supplied the local markets with machinery and pumps for the mines, with machinery of various sorts for the woodworking factories, with brick-cutting machinery, dies, and screens for the clay-products plants, and with repair services for the various industries. When mining began to decline, the market for mine machinery was closed (repair service employed six men in 1936); with the collapse of the woodworking industry in 1927-29, the woodworking machinery shops, employing not more than 25 persons at any one time, lost their markets; with the discontinuance in 1921 of service on the Chicago and East Illinois Railroad due to the decline in coal shipments, the car repair shops were removed.

[7]Survey made by staff of National Research Project, 1936.

Agriculture was likewise turning extra workers into the labor market. Between 1920 and 1925, it is true, agricultural production continued at a relatively high level, so that there was no decrease in the number of farms in Clay County; between 1925 and 1930, however, there was a decrease of 460 farms, or 18 percent, and the population in the unincorporated and rural areas decreased by nearly 2,000 persons or 12 percent, in the 1920-30 decade (see tables 3 and 4). Doubtless some of those leaving were driven out by the closing of the mines, but the major portion were probably the families of farmers. Thus agricultural labor also was seeking a market from 1925 to 1930. While it is not likely that much, if any, of this labor came to Brazil, since Brazil's population decreased by over 500 between 1920 and 1930, nevertheless, the fact of its leaving the farms is indicative of the need for job opportunities to supplement the declining farm income. Here, then, was another source of labor available for the shrinking number of jobs.

Table 4.- NUMBER AND ACREAGE OF FARMS, CLAY COUNTY, INDIANA, 1900-35[a]

Year	Number of farms	Acreage in farms
1900	2,489	212,036
1910	2,586	212,461
1920	2,414	204,441
1925	2,539	202,483
1930	2,079	181,096
1935	2,510	202,036

[a]Data for 1900 and 1910 from *Thirteenth Census of the United States: 1910* (U. S. Dept. Com., Bur. Census, 1913), vol. VI, p. 475; for 1920 and 1925 from *United States Census of Agriculture: 1925* (U. S. Dept. Com., Bur. Census, 1927), pt. I, p. 413; for 1930 and 1935 from same, *1935* (1936), vol. I, p. 123.

After 1930 there was an increase in the number of farms almost equal to the decrease of the previous 5 years, and a corresponding increase in the rural population, but many of the members of these returning farm families were available to the Brazil labor market in the attempt to supplement their farm incomes.

Employment in mining, expanding to meet the war demands, had added 642 workers between 1915 and 1920 (see table 2). As is well known, this rapid growth was characteristic of coal mining everywhere, so that when the war demand ceased the country was faced with an overexpanded coal industry and severe competition set in which reduced not only the number of miners who could obtain employment but also the number of days the mines worked per year. In Clay County these conditions brought about the closing of many of the large underground mines between 1920 and 1925,

the opening of small mines, and the development of strip mining, the net result of which was the reduction of mine employment by an average of some 800 to 900 men (see table 2). The small mines and the strip mines were said to be free not only from State regulation, but from union organization of the workers. More importantly, the strip mines produced coal with about one-third the labor per ton used in shaft mining.[8] These have been factors in enabling the small mines and strip mines to meet competition through lower labor costs.

From 1925 to 1929 all three types of mining held their own with little change, but with the falling off in the demand for coal after 1929 and the severe competition, the strip mines and the small mines practically displaced the larger ones. During this period over 300 miners lost their jobs in the large mines and a somewhat smaller number of jobs became available in the other two types of mines.[9] This does not mean, however, that the displaced miners found employment in the other types of mines, for they were in large part union men and the new jobs were offering nonunion conditions of pay and work. Moreover, many of the small mines offered opportunities for self-employment for men out of work in clay and agriculture who had or could get land where small-scale mining was practicable.

In all, then, while the clay-products industry had brought some Negro labor from outside during the years 1913-18, after 1920 the expanding demand for clay products could be met easily with the labor available from the closing of the steel-working plants and from mines which had closed prior to 1925. The supply available from the farm population increased markedly between 1925 and 1930, after which the clay-products industry itself offered opportunities for only a small percentage of its former workers.

The post-war expansion of Brazil's clay-products industry was directly related to the national expansion of building and construction activity in the twenties. The restriction of building during the World War and the growth of the automobile industry and the other new industries in the twenties laid the basis for a building boom which speedily developed in the years after the depression of 1921. The Brazil clay-products industry was in a particularly advantageous position with respect to this building boom. While in general the demand for clay products as structural building materials has been declining since 1909, demand for two

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[8] Cf. *Statistical Appendix to Minerals Yearbook, 1934* (U. S. Dept. Int., Bur. Mines, 1936).

[9] Cf. 1930-31 issues of *Mineral Resources of the United States* (U. S. Dept. Com., Bur. Mines) and 1932-35 issues of *Minerals Yearbook* (U. S. Depts. Com. and Int., Bur. Mines).

of these products had expanded phenomenally during this period. These were face brick and building tile, both of which can be used to advantage in the modern steel-framed, concrete-floored structure. Brazil, with a type of clay which produces a superior building tile and face brick, with the necessary coal at hand to burn these products, and with good railroad facilities east, west, north, and south, was in a position to sell her products in the expanding markets brought about by the national boom in industrial and city building. One of her plants was owned by the largest producer of face brick in the United States and another by a corporation supplying more than one-fifth of the building tile consumed in the United States, so that Brazil was not limited to a small local market. Another favorable factor was the extension of telephone lines which require large quantities of clay conduits. In fact it was large orders for these that kept the Brazil plants operating well into 1930 after other industries had declined. While the peak of employment and production in the clay-products industries generally was reached around 1926, in Brazil the production of conduits increased until 1929 and thus kept the level of employment in the local industry rising. As the demand for face brick fell off, production of tile, and especially conduits, increased.

Between 1920 and 1929 the industry added 600 workers, probably from the mining and farming population, bringing its employment in the peak year of 1929 to 1,800 or more, which corresponds roughly to the average of 1,565 recorded by the census for that year (see table 1 and footnote a to that table). By 1935, however, employment had fallen to an average of 282.

In addition, the trucking industry, which tended to assume importance in the later years of the twenties and in the thirties constituted a source of demand for a small amount of labor. In the first place, there was local trucking of coal from the mines to industrial and domestic consumers. A second type of trucking which increased was the delivery of clay products within a radius of several hundred miles. While most of the delivery seems to have been by railroad, especially over longer distances, shipments of brick and tile went by truck to St. Louis, Milwaukee, Indianapolis, Gary, and other Indiana cities. A third type of trucking brings into the Brazil area from outside such products as agricultural implements, automobiles and trucks, gasoline, and the like. In addition, one company was established to deliver trucks to any part of the United States. There was further expectation that the haulage of gasoline by trucks would give increasing employment in the future.

It was found from a survey made of six trucking companies operating in and through Brazil in 1936 that they were employing 145 persons from Brazil and neighboring towns - mostly drivers between 25 and 35 years of age - and that the number had increased from about 23 persons in 1932. It was estimated by the manager of one of the trucking companies that if the clay companies were operating at capacity, 100 more men would be needed for hauling clay, coal, and the finished products. In addition to the hauling done by trucking companies, it was said that much trucking in the locality was done by private individuals who owned trucks and supplemented their other income by hauling coal and clay.[10]

PURPOSE OF THE STUDY

The character of the Brazil industrial community, its long history of fluctuating employment opportunity, and its more recent dependence upon clay working provide the setting of the unemployment problem which in 1936 faced so large a proportion of its workers. The onset of the industrial depression added to the already developed unemployment in and around Brazil the problems that arose with a sharp contraction of the work opportunities in the important clay-products industry. Whereas in the preceding years the increasing activity of the clay-products plants had offset to some extent the declining demand for workers in other industries and reduced the unemployment problem, the decline in the demand for clay products that accompanied the depression served to intensify the community's unemployment problem in the 1930's.

In such a depressed-employment situation interest attaches particularly to the characteristics and composition of the labor market in a year of general recovery like 1936. What was the nature of the unemployment problem? How had it developed? What factors in the workers' equipment or experience were related to differences in their employment histories? What do their work histories tell of their attempts at adjustment? What, in the light of the answers to the above, is the nature of the reemployment problems?

This study was designed to answer these questions in as great detail as possible through an analysis first of the employment characteristics of the workers of Brazil and Carbon in the fall of 1936, and then of the detailed employment and unemployment records for 1926-36 of workers associated either with the important clay-products industry or with the community's other principal manufacturing and mining industries.

[10]Survey made by staff of National Research Project, 1936.

SAMPLING PROCEDURE[11]

In gathering the material for analysis in this study all the households in the city of Brazil and in the nearby community of Carbon were visited by interviewers. For every third Brazil household and for all Carbon households a schedule was filled out with such information as the age, sex, employment status, and present and usual industry, of all members. In the remaining Brazil households a briefer schedule was taken, designed merely to complete the population count and identify the industrial attachment of the employables.

In the selection of workers for a more detailed study of their characteristics and employment experience from 1926 to 1936, the attempt was made to sample all persons still in the Brazil area who had been regularly attached to the clay-products plants, all who had at some time between 1926 and 1936 worked in one of the clay-products plants but who had not been usually employed in the industry, and all persons in Brazil and Carbon who were or had been regularly attached to manufacturing industries other than clay, building and construction, coal mining, or motor transportation.

The sample of workers who, during the period 1926-36, were regularly or at one time associated with the clay-products industry was drawn principally but not exclusively from persons resident within the two communities of Brazil and Carbon. On the basis of the complete household inventory mentioned above, every person in these communities reported to have worked in clay-products manufacturing for a month or more at any time between January 1, 1926, and the date of enumeration, or who regarded clay working as his usual industry, was interviewed and a schedule taken containing questions on social and industrial characteristics, on first job, and on detailed work experience between January 1926 and the date of enumeration. Detailed work-history schedules were thus secured for 717 male workers in Brazil and 82 in Carbon with work experience of a month or more subsequent to 1925 in the clay-products plants or whose usual industry was clay. This group comprised, so far as could be determined, all such workers in the communities.[12]

Since an important proportion of the workers attached to the Brazil and Carbon clay-products plants are drawn from the agricultural and mining regions surrounding these cities, samples were also taken, though on a slightly different basis, of the clay workers inhabiting the regions

[11] For schedules, definitions of terms, and a more detailed statement of sampling procedure, see appendixes B and C.

[12] Work histories were also secured from 10 female workers in Brazil who had had some employment in the clay plants, but since these were so few and had worked in a clerical capacity, analysis of their experience is not attempted here.

immediately surrounding the cities. From pay-roll records of 10 of the clay-products plants in Brazil and Carbon, lists were made of workers who had been employed in the plants at selected times during the years 1926-36. Work-history schedules were then secured from 63 workers, or all such on the lists then resident in the nearby communities of Harmony and Knightsville, and from 158, or a 50-percent sample of those on the rural free delivery routes radiating out from Brazil. There is evidence that workers were commuting to the Brazil and Carbon plants from areas at a greater distance than it was possible to cover in this enumeration. For example, 22 percent of the persons on the 1936 pay rolls used were not located within the enumerating area defined. There is, however, little reason to suppose that the workers whose histories were not secured would differ in characteristics or experience from those interviewed, and the sample of clay workers may therefore be presumed to be representative of those clay workers in and around the cities of Brazil and Carbon in 1936.

In order to distinguish those workers forming the regular supply and reserve of the clay-products industry from those who were part of its less regular reserve, the samples of clay workers were further differentiated as to whether or not they regarded clay work as their usual work. Differentiation on such a subjective basis cannot, of course, be exact. Naturally, there are probably a few members of each group whom a different method of discrimination would have located in the other group. Nevertheless, the method used corresponds roughly to the distinction desired. The "usual clay workers", comprising 680 of the clay workers interviewed, are typical of those who have, in general, spent more than half their employed time in clay; actually, more than 92 percent of the usual clay workers from Brazil and Carbon had spent 50 percent or more of their working time in clay.

Those who did not regard clay as their usual work, the "sometime clay workers", comprising 340 of the clay workers interviewed, include some for whom clay working was supplemented by farming or coal mining, some who had worked in clay during the summer while getting an education, and still others, a small group, who had been frequently in and out of clay working while hoping to become permanently attached. The great majority of these sometime clay workers had but one job in the clay-products plants during the 10-year period. Of those in the labor market throughout the period 73 percent had only one job in clay, an additional 17 percent had two jobs in clay, 6 percent had three jobs, and 4 percent, or 9 of the 270 persons, had four or more jobs in clay. In addition, of the majority of all sometime clay workers (including those who entered

the labor market after 1925 or left before 1936), 85 percent secured their first jobs in clay prior to 1930, and 7 percent made their first attachment during the years of slight revival 1934, 1935, and 1936.

The third sample of workers here studied represents those persons resident in Brazil and Carbon only who were usually or at the time of enumeration attached to the other industrial pursuits of the community - nonclay manufacturing, building and construction, mining, and motor transportation - and who had not been employed in clay subsequent to 1925. In securing this material all persons in the one-third sample of Brazil's households and in all of Carbon's households covered by the comprehensive household schedule who reported their usual industry to be one of the above were interviewed with a detailed work-history schedule.[13] The sample of these workers used in the detailed analysis of work experience consists of 241 male workers in Brazil, comprising one-third of all male workers in the given pursuits, and 38 in Carbon, including all male workers in the given pursuits.

Table 5.- DISTRIBUTION OF PERSONS IN WORK-HISTORY SAMPLES, BY RESIDENCE[a]

Residence	Total	Usual clay workers	Sometime clay workers	Other industrial workers
Total	1,299	680	340	279
Brazil	958	477	240	241
Carbon	120	66	16	38
Knightsville and Harmony	63	40	23	-
Rural routes	158	97	61	-

[a]See appendixes B and C for definitions of terms and description of sampling procedure. Here and throughout the study the few women included in the original samples have been excluded from the tabulations.

The histories of the workers in this third sample can be considered representative of the histories of all male workers resident in the community who were attached to industries other than clay. Both its geographical and industrial limitations must, however, be recognized. It does not cover the very important group of young workers in the region who had made no attachment to any industry by the end of 1936, though it does include some whose attachment was made as late as August of that year. It does not cover those engaged in trade or service industries nor those workers in the mining industry and in agriculture who lived

[13]Although work histories in these industries were secured from 49 women in Brazil and 4 in Carbon, they are not included in the subsequent analysis.

outside the two cities and who had been, under some circumstances, important reserve forces for the community's industries.

PLAN OF THE STUDY

The following chapter deals with the employment situation and the character of the labor market in the fall of 1936. This is supplemented with an analysis of the social and occupational characteristics of the workers in the three samples selected for more detailed study, their employment status in the fall of 1936, and the relationship between their status and their characteristics. Chapter III analyses the 10-year work experience of the workers studied, the incidence of their employment and unemployment according to their industrial attachment and their occupational differences. Chapter IV is concerned with the mobility of the workers within the Brazil labor market, and the final chapter summarizes the findings of the analysis.

CHAPTER II

THE LABOR MARKET IN THE FALL OF 1936

INTRODUCTION

An outstanding characteristic of the Brazil labor market in the fall of 1936 was the extreme concern with the widespread unemployment and its long continuation. All classes of the population and virtually all kinds of business were affected.

At the time that this study was made 5 of the 10 clay-products plants in Brazil were operating. They employed about 500 persons. Both Carbon plants were operating, employing 100 persons. Coal mining in the region was in the doldrums except for some small-scale and strip mining operations. Small manufacturing shops and factories offered employment to no more than 500 men and women.[1] One-third of the community's employables were unemployed (see table 6). A fifth were on work relief. Almost half of the households with employables had at least one member unemployed or employed only part time. In these and in numerous other ways discussed in the following pages the community exhibited the results not only of a prolonged depression situation but also of a long history of fluctuating employment opportunity.

Household schedules incorporating material on the relevant personal characteristics of all members and on the present and usual occupations of all adult members of the households were taken in a random sample of one-third of Brazil's households and in all of Carbon's households.[2] Analysis of these provides a general picture of the character and status of the labor market in these cities. Similar material on the population of the nearby towns of Harmony and Knightsville, or on the rural residents around Brazil and Carbon, is not available. The following picture is, therefore, not of the total labor markets from which Brazil and Carbon drew their labor forces, but only of that section of it immediately within the cities themselves.

THE GAINFUL WORKERS IN BRAZIL AND CARBON

The Composition of the Population

Particularly notable in both Brazil and Carbon was the large proportion of households with no employables. There was also a related de-

[1] These were the few remaining small machine and repair shops; print shops; a cigar factory; a tomato-canning factory open only a few months in the year; a varnish concern; a small concern making bus bodies; an ice-cream plant; and a soft-drinks plant.

[2] In the remaining two-thirds of Brazil's households a special count was made of all persons. In all of Brazil there were 2,575 households containing 2,232 children under 16 years of age and 6,430 adults.

Table 6.- EMPLOYMENT STATUS OF PERSONS IN BRAZIL AND CARBON HOUSEHOLDS, FALL OF 1936[a]

Employment status	Brazil		Carbon	
	Number	Percent	Number	Percent
Total persons	2,931	100.0	516	100.0
Not in labor market	1,769	60.4	323	62.6
In labor market	1,162	39.6	193	37.4
Employed	778	26.5	164	31.8
Full time	698	23.8	155	30.0
Part time	80	2.7	9	1.8
Unemployed	384	13.1	29	5.6

[a]Based on table A-1.

ficiency in the number of employable persons as compared to the total population, and an unusually large number of persons of advanced age working or seeking work.

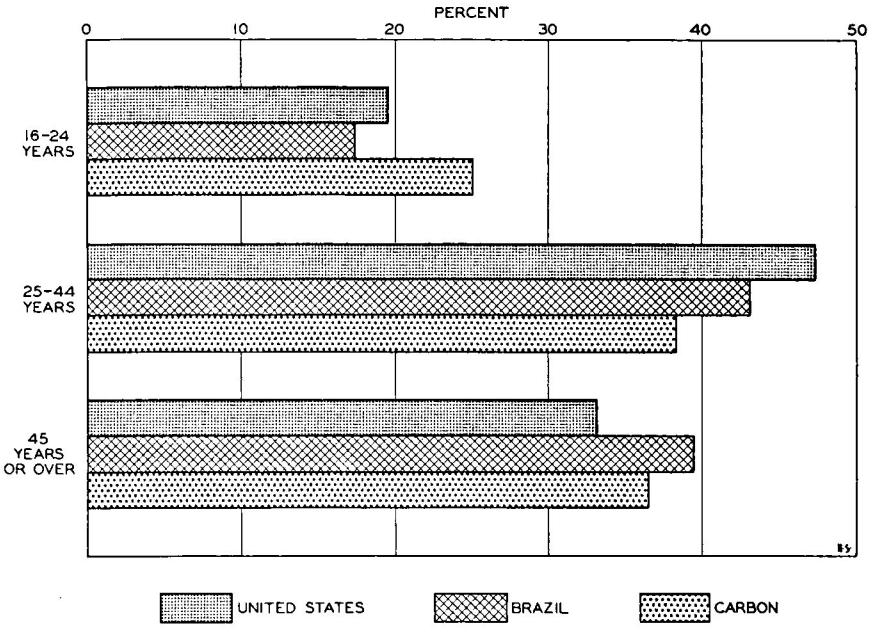
In the fall of 1936 the city of Brazil contained 2,575 households, covering a population of 8,662 persons. Of the households in the one-third sample surveyed, 10 percent contained no employables. This is double the proportion found by the National Research Project to have had no employables in the city of Philadelphia where similar material was collected in the same year. There only 5.2 percent of the households contained no employables.[3] The majority of Brazil's households (57 percent) reported only one employable person, and less than 10 percent reported three or more employables. Only 40 percent of the entire population of the city was reported as employable. There were over 2,200 children under 16 years of age and more than 3,000 adults not in the labor market.

This relative deficiency in employables in the community and the age distribution of the population reflect the region's long history of diminishing employment opportunities and the emigration of the younger employables. This emigration was the subject of much concern to those left in the community. As a result of it, the population, from an employment point of view, was aged.[4] Almost a fifth were 55 or over, as compared with about 12 percent of the United States population in 1930. Fewer than a third were under 20, as compared with 39 percent of the United States population. (See table A-1.)

[3]Gladys L. Palmer, *Employment and Unemployment in Philadelphia in 1936 and 1937*, Part I, "May 1936" (WPA National Research Project in cooperation with Industrial Research Department, University of Pennsylvania, Report No. P-3, Part I, Aug. 1938), table 2, p. 10.

[4]*Fifteenth Census of the United States: 1930*, "Population" (U. S. Dept. Com., Bur. Census, 1932), vol. III, pt. 1, table 7, p. 8.

Figure 1.- AGE OF EMPLOYABLE MALES IN THE UNITED STATES, BRAZIL, AND CARBON



BASED ON TABLE A-1 AND CENSUS OF POPULATION: 1930, V, 114 WPA - NATIONAL RESEARCH PROJECT L-58

The characteristics of Carbon's 1936 population reflected somewhat the same influences. Again there is notable a relative deficiency in employables. Eleven percent of its 150 households contained no employables; over 60 percent contained but one employable. In terms of persons, only about a third were reported as employable. Only 26 percent of its population was between 25 and 44, as compared with over 29 percent of the United States population.

Since in the succeeding chapters attention will be confined to the male workers associated with the clay-working and other industries of the community, particular interest here attaches to the ages of the male sector of the employable population. In November of 1936 the employable males in Brazil numbered approximately 2,700. Relatively fewer of these than in the United States as a whole were in the age groups usually considered most employable. Only 43 percent were between 25 and 44, whereas 47 percent of the United States male employables in 1930 were in this age group.[5] Forty percent were 45 years of age or older, 21 percent 55 or over, whereas in the United States as a whole less than

[5]For the age distribution of employable males in the Nation, see *ibid.*, vol. V (1933), pp. 408-9.

a third of the 1930 employable males were 45 or over and only 15 percent 55 or over (see figure 1).

The employable males in Carbon included an even higher proportion of both older and younger workers than did those in Brazil. A far smaller proportion of its employable males than was usual was included in the age group 25 to 44 - 38 percent as compared with 43 percent of Brazil's and 47 percent of the United States' 1930 employable males.

The Industrial Dependence of the Population

In the fall of 1936, as has been noted, a tenth of Brazil's households contained no employables. Of the remaining households, 21 percent were dependent upon the clay-products plants for the usual employment of one or more of their male members, and 17 percent were dependent upon coal mining. (See table A-2.) Of all the employable persons in the city (male and female), 14 percent looked to clay for their usual employment, 10 percent to coal mining, 16 percent to trade, and 2 percent to agriculture. Six percent were new workers not as yet attached to any industry, and the remaining half of the workers had usual occupations in a variety of manufacturing and other pursuits. (See table A-3.)

Considering the importance of clay-products manufacturing and coal mining as the community's largest employers of labor, the proportion reporting their usual attachment to be to one of these two industries appears smaller than might have been expected. This is due partly to the inclusion of women, of whom only comparatively few were employed in the clay-products industry - chiefly in clerical occupations. Moreover, the enumeration of households was taken after 5 years of widespread inactivity in the clay-products industry, when many plants had been entirely shut down and others had been open only for short intervals. Thus many of the workers who reported their usual attachment to be to some industry other than clay might at an earlier period have considered themselves usually attached to the clay-working industry. Coal mining had similarly been declining and for a longer period.

Carbon households reported a much higher degree of dependence upon clay working for usual employment. This may be attributed to the fact that clay working was the only industry of any size in the town and that in the fall of 1936 both of its clay-working plants were in operation. Eleven percent of the households contained no employables. Of the households with employables, 44 percent were dependent upon clay working for the usual employment of one or more of their male employables. Twenty-nine percent were dependent on coal mining, and 8 percent had some male

member who looked to agriculture for his usual employment. Of the employable persons in the community (male and female), 34 percent looked to clay working, 19 percent to coal mining, and 6 percent to agriculture. An additional 6 percent had not as yet succeeded in finding employment in any industry.

The Status of the Employable Workers

In the fall of 1936 one-third of Brazil's employable workers were completely unemployed. An additional 7 percent were partially unemployed. More than half of the completely unemployed workers were receiving aid through emergency work or work relief of some kind. In general, the unemployment in the community appeared to fall most heavily upon the youngest and oldest workers in the market. Whereas but 56 percent of the employables and 52 percent of the employed were under 25 or over 44 years of age, 64 percent of the unemployed were in these groups. (See table A-1.)

The unemployment of the younger workers is of particular significance in revealing an important aspect of the unemployment problem in the area, the problem that faces new entrants into a labor market which cannot even provide for its established members. Seventy-one persons in the sample of the Brazil labor market were new workers, that is, workers who had entered the labor market and were seeking work but had not succeeded in forming even a first attachment to any industry. These new workers, comprising 6 percent of the employable population, accounted for 18 percent of the unemployed. (See table A-3.) Similar groups in Bridgeport, Connecticut, Springfield, Ohio, and Lancaster, Pennsylvania, in 1934 comprised only from 3 to 4 percent of those employed or seeking work, and but 11 to 13 percent of those unemployed.[6]

The decline in clay-working activities accounted for the largest proportion, a fifth, of Brazil's unemployment. Of the workers usually associated with clay in Brazil, 46 percent were totally unemployed and an additional 6 percent were employed only part time. A third were on emergency work. The usual coal miners in the community, comprising a tenth of its labor force, accounted for 14 percent of its unemployment, 43 percent of them being wholly unemployed. An additional 3 percent were working part time. Trade, which accounted for 16 percent of the

[6]See the following series of articles by Florence M. Clark in *Monthly Labor Review*, Vol. 40: "Unemployment Survey of Bridgeport, Conn., 1934," No. 3 (Mar. 1935), pp. 627-8; "Unemployment Survey of Springfield, Ohio, 1934," No. 4 (Apr. 1935), p. 879; and "Unemployment Survey of Lancaster, Pa., 1934," No. 5 (May 1935), p. 1182.

employables, was represented among the unemployed by only 9 percent of the total.

The following tabulation summarizes briefly the relative position of each industry in supplying usual employment to the working forces of Brazil, and the proportion of the 1936 unemployment accounted for by the workers usually attached to each industry (see table A-3):

Usual industry	Percent	
	Employables	Unemployed
Total	100.0	100.0
Clay	14.3	19.8
Manufacturing other than clay	11.5	9.6
Trade	16.4	9.1
Coal mining	10.3	13.5
Other	40.7	27.9
Not reported	0.7	1.6
New workers	6.1	18.5

From this it is clear that the bulk of Brazil's 1936 unemployment problem arose directly from the decline of its major industries, clay and coal, and from the failure of these or any other industries to absorb the new workers.

Carbon presented, at least temporarily, a happier picture in the fall of 1936. Both clay-products plants were in operation at the time, and all but 2 of the community's 66 usual clay workers were employed. The 11 workers in the market who had not succeeded in getting employment in any industry, however, raised the level of unemployment somewhat. Of the 24 unemployed males in Carbon, 10 were under 25 and 9 were over 45. Again, though within this smaller community relatively fewer than in Brazil were out of work, the brunt of unemployment was borne by the oldest and youngest workers. (See table A-1.)

Much of the unemployment reported in both communities had been of long duration, as was reflected in the heavy relief load of the area. Of the previously employed males who were unemployed in the fall of 1936, over three-quarters had been continuously unemployed for more than a year, and a third for more than 5 years. This long unemployment was particularly characteristic of workers who regarded coal mining or clay working as their usual industry. Almost half of the unemployed who reported either of these as their usual industry had been continuously unemployed for more than 5 years, and over three-quarters had been unemployed for more than 2 years. (See table 7).

Table 7.- USUAL INDUSTRY AND DURATION OF UNEMPLOYMENT SINCE LAST JOB OF UNEMPLOYED MALES IN BRAZIL AND CARBON HOUSEHOLDS, FALL OF 1936

Residence and usual industry	Total	Months of unemployment since last job						
		0-5	6-11	12-23	24-35	36-47	48-59	60 or over
Brazil								
Total[a]	218	36	13	24	27	17	22	79
Clay	63	8	0	2	7	4	12	30
Coal mining	48	4	4	4	7	5	3	21
Other	107	24	9	18	13	8	7	28
Carbon								
Total[b]	14	1	3	4	2	2	1	1
Clay	2	0	0	1	1	0	0	0
Coal mining	3	0	0	1	0	1	0	1
Other	9	1	3	2	1	1	1	0

[a]Excludes 41 new workers and 58 persons who did not report duration of unemployment since last job.

[b]Excludes seven new workers and three persons who did not report duration of unemployment since last job.

Of the 14 unemployed males in Carbon who had been previously employed and who reported the duration of their current unemployment, 6 had been unemployed for more than 2 years and 1 for more than 5 years.

The household incidence of unemployment in the two communities further reveals the widespread unemployment that characterized the region in the fall of 1936. As has been noted, 10 percent of Brazil's households contained no employables. Of the remainder, only slightly more than 50 percent were unaffected by unemployment. Over a quarter (27 percent) of the households with any employables had no member employed; a third had no member employed full time; 39 percent had at least one member unemployed; and 47 percent had at least one member unemployed or employed only part time. In Carbon, the situation was somewhat better, although 7 percent of the households containing employables had no member working; 9 percent had no member employed full time; 19 percent had some member unemployed; and a quarter had some member either unemployed or employed only part time. (See table 8.)

In summary, then, these may be listed as the general characteristics of this depressed labor market in the fall of the recovery year 1936. There was a high percentage of households with no employable member. There was a high proportion of persons in the labor market who had never found even a first job. Older workers made up an unusually large part

Table 8.- EMPLOYMENT STATUS OF HOUSEHOLDS IN BRAZIL AND CARBON, BY NUMBER OF EMPLOYABLE PERSONS PER HOUSEHOLD, FALL OF 1936

Employment status of household	Total households[a]	Number of employable persons			
		1	2	3	4-5
Brazil					
Number	777	489	208	66	14
Percent	100.0	100.0	100.0	100.0	100.0
All members employed	61.0	67.3	54.8	37.9	42.9
Full time	53.4	60.3	43.7	36.4	35.8
Full and part time	3.0	0	10.1	1.5	7.1
Part time	4.6	7.0	1.0	0	0
Fewer than all members employed	11.8	0	26.9	43.9	50.0
Full time	9.4	0	21.1	37.9	28.6
Full and part time	0.9	0	0	6.0	21.4
Part time	1.5	0	5.8	0	0
All members unemployed	27.2	32.7	18.3	18.2	7.1
Carbon					
Number	135	93	29	10	3
Percent	100.0	100.0	100.0	100.0	100.0
All members employed	80.7	90.3	58.6	60.0	66.7
Full time	74.8	88.2	44.8	40.0	66.7
Full and part time	4.4	0	13.8	20.0	0
Part time	1.5	2.1	0	0	0
Fewer than all members employed	11.9	0	37.9	40.0	33.3
Full time	11.1	0	37.9	30.0	33.3
Full and part time	0.8	0	0	10.0	0
Part time	0	0	0	0	0
All members unemployed	7.4	9.7	3.5	0	0

[a]Excludes 88 households in Brazil and 16 in Carbon which had no employable persons.

of the labor supply and there was a high rate of unemployment for a recovery year, particularly unemployment of long duration with consequent heavy relief and WPA rolls.

THE WORKERS SELECTED FOR MORE DETAILED STUDY

It is from this general labor market, heavily burdened with unemployment and more particularly unemployment of long duration, and comprising a group of workers older than the average because of the community's long history of decline, that three groups - usual clay workers, sometime clay workers, and other industrial workers - have been selected for more detailed study. As has been indicated in the preceding chapter, the samples of usual clay workers and sometime clay workers have been

augmented by a selection of workers drawn from Harmony, Knightsville, and Brazil's rural routes. The status of these three groups of workers and their histories in the 10 years from 1926 to 1935 will further reveal the nature of the problem that had developed in the community and its effect upon those workers who had found some place for themselves in the labor market.

What were the characteristics of the persons constituting the three groups of workers selected for study? How did these compare with each other and with the characteristics of persons in the more general labor market heretofore described? What had been the industrial background of these workers? What was their position in the fall of 1936?

Age

As to age, the employable workers, usual or sometime, connected with the clay-products industry represented a selected group differing from the average employable male in Brazil and Carbon. In general, they tended to be the older workers of the market. The group of other industrial workers, however, more closely approximated in age the male employables in the two communities. All three samples include a small proportion of persons who had left the labor market; the majority were in the higher age groups, few being under 45 and two-thirds over 65. In the following age comparisons these are excluded.

Both groups of workers associated with the clay-products industry were notably deficient in younger workers, even for a community generally characterized by such deficiency. Whereas 18 percent of the employable males in Brazil and Carbon were under 25, only 6 percent of the usual clay workers and less than 5 percent of the sometime clay workers were in this younger age group. The majority of the clay workers, 52 percent of the usual clay workers and 55 percent of the sometime clay workers, were between 25 and 44. This compares with the 42 percent of Brazil and Carbon employable males in this middle group. A somewhat higher proportion of the usual clay workers than of the community forces were 45 or over, 42 percent as compared with 39 percent. Among the sometime clay workers this tendency to include a disproportionate number of older workers was not so marked; 40 percent of their number were 45 or over. (See table A-5.)

In the age distribution of the clay workers is reflected something of the history of clay working in the community. There is evident here the interrelation between the community's history of decline, determining the age characteristic of the total force from which workers have

been selected, and the more recent history of declining clay activity, leading to a higher proportion of older workers in these groups than within the supply of the community as a whole. The relatively high age level of the usual clay workers in particular reflects the decline of the industry's demand for labor, and the virtual closing of its doors to the younger workers who have been entering the labor market since 1929. These younger workers are not to be found in any numbers even among those who, though not usually employed there, had obtained some employment in the clay-products industry. Rather is this group of sometime clay workers most heavily weighted with more mature workers.

The age of the other industrial workers reflects slightly different influences. Forty-three percent of them were 45 or over, and 16 percent were under 25. The long history in the community of most of the industries in which they had been engaged, particularly coal mining, accounts for the high proportion of older workers. Of those who reported their usual occupation as coal mining, more than half were over 45 and more than a third over 55 (see table A-6). At the same time, the more recent shifts to strip mining and the opportunities offered by the numerous small mines opened in the region provided a chance for a few younger persons to find at least some employment. The increase in trucking activities provided similar opportunities.

Origins and Industrial Background

In general, all three groups of workers studied were composed predominantly of local-born persons and of persons whose employment had been almost exclusively within the region. Whatever importation of workers may have occurred was either early in the community's history or had been offset before 1936 by an exodus of such workers when activity declined.

Usual Clay Workers.- Less than 20 percent of the usual clay workers had been born outside of Indiana, only slightly more than 25 percent outside the area immediately surrounding Clay County. Yet even this does not adequately describe the close identification of these workers with employment in the Brazil area. Almost half of those born outside the region had come to it for their first job. Of all the usual clay workers reporting, only 17 percent had obtained their first jobs outside the neighborhood. (See table A-7.)

The evidence further indicates that for its supply of regular workers the clay-working industry had played little part in drawing even this small proportion of outside workers into the region. In the first place, it was primarily the older workers who had been born outside the region.

Most of those born outside the county had come into it for employment in the mines or for farming and had only subsequently found place in the expanding clay-working industry. In addition, 42 percent of those born prior to 1880, as compared with but 14 percent of those born after 1900, had come from the outside (see table A-4).

The decline in the activity of other industries in the region thus permitted the clay-working industry to build its labor force from workers already resident in the region. The only evidence of a recruiting or attraction of workers from outside the region directly to the clay plants is the presence of a small number of Negroes who may have been brought in during the wartime period.

The first jobs reported by the usual clay workers afford a further indication of the degree to which the clay-working industry was able to build its labor force from workers previously connected with other industries. Only 30 percent of those usually in clay and reporting this information had had their first employment in the clay-working industry. Another 14 percent had first worked in other manufacturing industries, 18 percent in coal mining, and 17 percent in agriculture. These figures reveal the extent to which the clay industry had drawn its forces from workers formerly associated with the declining mining and agricultural activities of the region. (See table A-8.)

The above interpretation is further reinforced by a consideration of the first jobs of the usual clay workers in relation to their age. Of those who were over 55 in 1936, more than half had begun their working life in agriculture or coal mining and presumably entered the clay-products industry in or after the first decade of the century when the number of coal miners declined by approximately 1,000 and the agricultural population by 2,957. Brazil's population meanwhile had increased by 1,554 and the number of clay workers by about 700.

In the age group from 35 to 54, representing those workers who presumably entered the labor market between 1896 and 1915, the first jobs of 28 percent had been in clay, corresponding to the expansion of this industry which took place in the first decade of this century. Agriculture and mining together accounted for 38 percent of the first jobs. Some of these workers probably shifted into clay products during the more recent clay-working boom of the twenties when coal-mining workers in the county declined by 881 and the rural population by almost 2,000.

Of those usual clay workers who had entered the labor market after about 1917, almost half had had their first job in the clay-working industry and fewer than 20 percent in agriculture and mining combined.

This reflects the greater opportunities offered to the then new workers by clay-products manufacturing in this period of its expansion, as contrasted with the diminishing opportunities in agriculture and mining.

Thus it would appear that the 1936 labor supply of the clay-products industry consisted of a large group of older workers who had been drawn into the industry when the employment opportunities in coal mining and agriculture declined and clay was expanding, plus those younger workers who entered the labor market when clay working was a growing industrial activity in the community.

Sometime Clay Workers.- The somewhat younger group of workers who may be regarded as constituting the labor reserve upon which the clay-products industry (and presumably the community's other industries) drew to meet peak demands for labor, were to an even greater extent workers identified with the community either as their place of birth or of first employment. Eighty-four percent were born in Indiana, and 78 percent in Clay County or contiguous counties. A somewhat larger percentage of these sometime clay workers than of the usual clay workers had also had their first employment in Clay County or its neighboring counties. Again, the fact that the small proportion of workers born outside the area tended to cluster in the older age groups points to the cessation of immigration into the region that accompanied its declining activity. (See table A-4.)

Coal mining was the principal pursuit of a large proportion of these workers. In 1936, 42 percent of them regarded it as their usual industry. More than half the workers 35 and over regarded mining as their usual industry, while only 16 percent of those under 35 did so. Of the workers resident in Brazil and Carbon, 39 percent had spent some part of the years 1926-35 in coal mining, and they averaged almost 3 years in that industry; in Harmony and Knightsville a much higher proportion, 64 percent, reported some time spent in mining but they averaged only 2 years per worker in this pursuit. In the rural areas 42 percent of the workers reported some time spent in mining, at which they likewise averaged about 2 years per worker. Because of the weighting of the sample in favor of the city residents, only a small proportion, 8 percent, of the total group reported their usual occupation to be farming. Of those workers resident on rural routes, 48 percent reported some time spent in farming and they averaged over 5 years per worker. (See table A-9.)

Thus, in respect to their geographical and industrial background, the persons constituting the reserve which had been tapped by the clay-products industry in peak years and seasons were largely similar to the

group constituting the regular supply of clay workers. They had been born in the region and, to a large extent, had spent their working life there. They had been initially or characteristically attached to other manufacturing industries, to coal mining, or to farming. Employment in coal mining had been scarce and intermittent, while the average income from farming had been low and declining. Many manufacturing industries had either withdrawn from the region or declined in importance, leaving their workers on the labor market. It was from this group that the reserve as well as the usual supply of clay workers was drawn. The reserve group differs from the regular supply in the degree to which it included persons with attachment to mining, and in the greater proportion of persons who lived in the rural regions outside Brazil. Coal miners and farmers seeking supplementary employment provided a good part of the reserve available to the clay industry.

Other Industrial Workers.- The group of workers of industries other than clay contained a slightly higher proportion of foreign-born. This was probably due to the fact that their sample included only city dwellers as well as to the fact that it contained more older workers. Also, a slightly smaller proportion, 79 percent, than in the clay groups had had their first jobs in Clay County and its contiguous counties (see table A-7).

In 1936, 41 and 27 percent, respectively, of these workers regarded coal mining and manufacturing other than clay as their usual industry. Since the sample was confined to workers resident in Brazil and Carbon, only 4 of the 279 workers reported agriculture as their usual pursuit. The majority had begun their working life in mining (30 percent), manufacturing other than clay (27 percent), or agriculture (12 percent). A few had been in trade, and a small proportion (5 percent) had started in clay products but had not been employed there subsequent to 1925. (See table A-8.)

The majority of those who regarded mining as their usual occupation had started out in mining, and an additional 12 percent of these usual miners had begun in agriculture. Two-thirds of those whose usual industry was in manufacturing other than clay had begun their working life in one of these manufacturing industries, and 7 of the 27 usually in building and construction work had begun in this industry.

From this evidence it would appear that the labor supply of the other industries of the Brazil region, while slightly less indigenous to the region than the usual clay workers, contained a very high proportion of workers whose industry of usual attachment was the same or corresponded

to the industry in which they had first secured jobs. Thus the non-clay industries had in 1936 a force characterized by a long attachment to them, and including few who had come from other pursuits. This is in marked contrast to the clay-working industry, which had drawn its workers from the dying or stagnant industries releasing labor into the market.

Occupational Distribution of the Clay Workers

Clay working is largely an unskilled process, and the majority of the workers here studied fall into the category of laborers concerned with the handling of materials or finished product rather than more directly with clay processing. This was particularly true of those workers who secured some employment in the clay-products industry during 1926-35 but did not regard it as their usual industry. Sixty-nine percent of these were employed as laborers in the clay plants, 16 percent as operatives, 13 percent were either skilled workmen or maintenance men, and but 2 percent were administrative or clerical employees. The usual clay workers, though exhibiting the same tendency, contained a slightly smaller proportion of laborers, 63 percent. Nineteen percent of them were operatives, 12 percent were skilled or maintenance workers, and 6 percent were administrative or clerical employees. (See table A-10.)

Workmen in the higher categories were proportionately more numerous among those of both groups resident in Brazil than among those living outside this center. Conversely, the laborers tended to be more numerous among those resident outside the center. This was true both of the usual workers and of those who had secured only occasional employment in the clay-products plants. Age and the occupational level of the workman were also related. In general among the usual clay workers the skilled and maintenance group contained more older workers, the operatives more younger workers. Three-quarters of the former group were 45 or over and 70 percent of the latter were under 45. The age distribution of the large group of laborers more closely approximated that of the workers in the community as a whole though as in all groups the deficiency of workers under 25 is notable. Forty-three percent were 45 or over, 49 percent between 25 and 44, and 8 percent under 25. The age differences according to occupational group among the sometime clay workers were less marked, though again the skilled and maintenance group tended to include more workers over 45 than the others. (See table A-11.)

Employment Status of the Workers Studied

Unemployment in the summer of 1936 among the workers selected for study was more evident than in the community at large. All three groups, the

regular clay workers, the sometime clay workers, and the other workers, reported more than a third of their number unemployed on August 1, 1936. Of those unemployed at the time of the interview, many had been unemployed for a long duration. Of those regularly or at some time in clay, 40 percent of the unemployed had been unemployed for 5 years or more and three-quarters had been unemployed 2 years or more. Of the unemployed other workers, a quarter had been unemployed for 5 years or more and two-thirds had been unemployed 2 years or more. (See table A-12.)

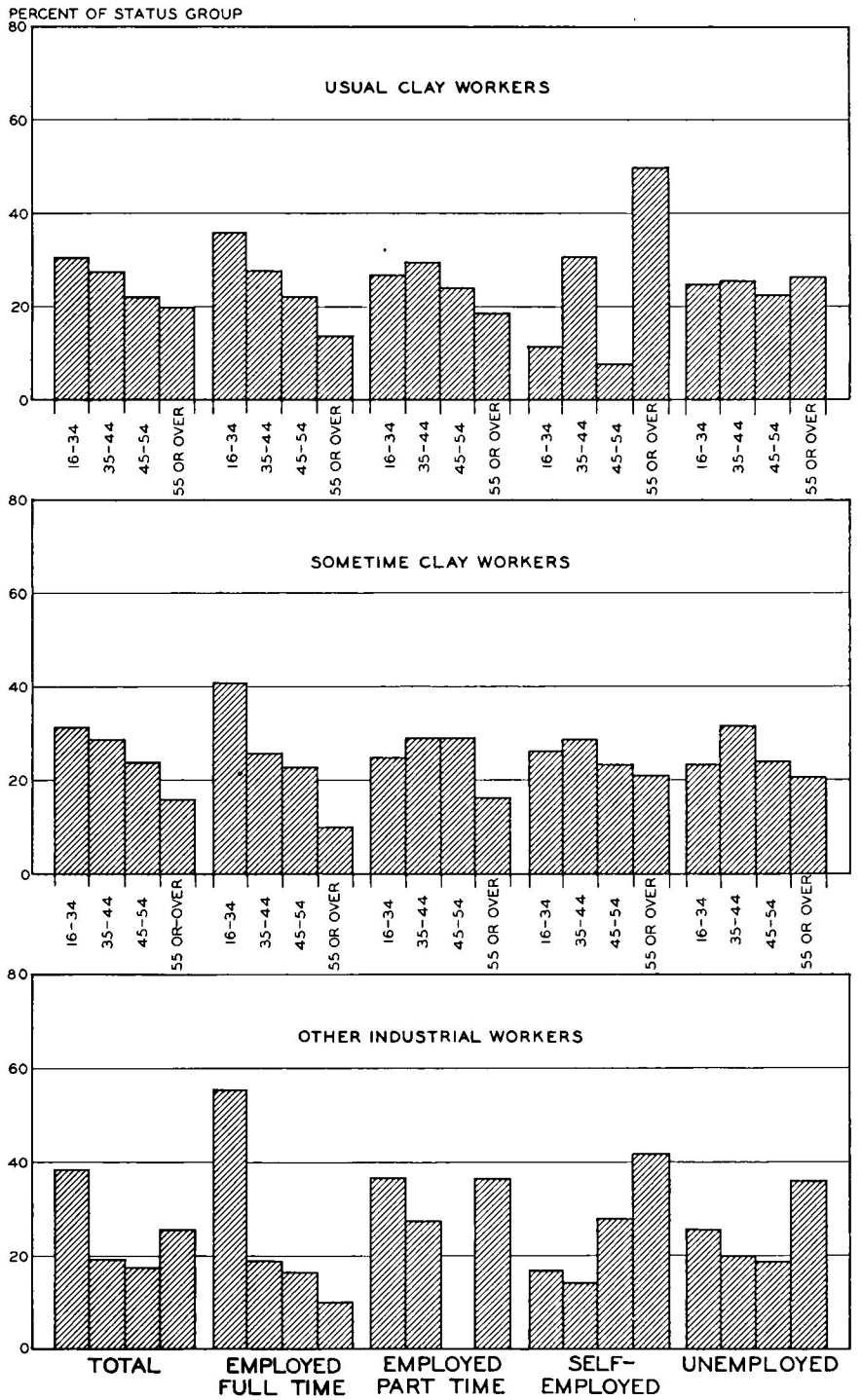
The sometime clay workers presented the least fortunate picture. Three percent of them had dropped out of the labor market and were no longer seeking work. Of the remainder, 39 percent were unemployed and seeking work. An additional 7 percent were employed on a part-time basis and 12 percent were self-employed. Much of the self-employment appears to have been an attempt to adjust to the situation on the part of those who could not find other employment. Thus only 42 percent were employed by others on a full-time basis. (See table A-14 and figure 2.)

Forty percent of the sometime clay workers employed by others on August 1, 1936, had only secured that employment in the 7 months between January 1 and August 1. An additional 17 percent had secured it in 1935. (See table A-16.) Twenty-nine percent of the jobs were in the clay-products industry, and 21 percent in mining, most of them undoubtedly in the strip-mining operations so rapidly exhausting the coal resources of the region. (See table A-5.)

The regular clay workers were in a somewhat better position. Four percent had dropped out of the labor market. Of the remainder, 35 percent were looking for work, 6 percent were employed only on a part-time basis, and 4 percent were in some form of self-employment. Thus 55 percent of those still in the labor market were getting full-time employment from others. (See table A-13.) Two-thirds of those employed by others had secured their employment in the year and a half preceding August 1, 1936. (See table A-16.) Eighty-four percent of those who were employed by others, or only half of all the usual clay workers, were employed in clay-products plants. The remaining 16 percent of the employed had found some place in the community's other industries; 3 percent were in coal mining, 3 percent in trade, and 1 percent in agriculture. (See table A-5.)

Of the workers of other industries a higher proportion, 8 percent, had dropped out of the labor market and were no longer seeking work. A third of those who were still available for employment were unemployed, and an additional 9 percent had only part-time employment. (See table A-15.) In general, those who were employed by others tended to have

Figure 2.- EMPLOYMENT STATUS AUGUST 1, 1936, BY AGE



BASED ON TABLES A-13, A-14, A-15

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been in that status for a longer period than either the sometime or usual clay workers. Two-thirds of them had secured the job they then had before January of 1936, half of them before 1935, a quarter before 1930. (See table A-16.) Of workers employed by others, the largest group, 38 percent, were in coal mining; a few had gone into trade. The remainder were scattered through a variety of manufacturing and other industries, no one of which was providing employment to more than a small percentage of the group. In general, this industrial distribution of employment for those employed on August 1, 1936, corresponds to that of the usual industry of the members of the group. (See tables A-5 and A-8.)

Age, Place of Residence, Occupational Level, and Employment Status

To some extent the August 1, 1936, employment status of the worker in each of the three groups studied appears to have been related to his age and to his place of residence. In addition, among the clay workers at least, his occupational level appears to have been an important element in his status.

Age and Employment Status.- In all three groups there was evident a tendency for the restricted number of employment opportunities available in clay and the other community industries in the summer of 1936 to be distributed among the younger workers within each group. This, it must be remembered, does not reflect an advantage for the younger workers in the labor market as a whole, but rather an advantage for those younger workers who had succeeded in forming some attachment to industry, most of them prior to 1929. The difficulties of those entering the labor market, particularly after 1929, in making an attachment have already been indicated in the high proportion of community unemployment accounted for by new workers.

The disadvantage of the older worker at this time was particularly noticeable among the workers of industries other than clay. Whereas 43 percent of all nonclay workers still in the labor market were 45 or over, 55 percent of the unemployed were in this older age group and more than a third were 55 or over. By contrast only 36 percent of the employed were 45 or over and a fifth 55 or over. Self-employment and part-time employment were particularly characteristic of all these other workers who were employed. Again in this less fortunate position[7] the older workers tended to be more heavily represented in proportion to their number than the younger workers. A third of the persons in the nonclay

[7]Since most self-employment reported was at subsistence farming or in small-scale independent coal mines, it must be regarded, in general, as an attempt to tide over periods of unemployment or to stave off dependence on the community, rather than as a satisfactory adjustment.

group were self-employed or employed part time. Of those who were attempting this type of adjustment, 57 percent were 45 or over, whereas but 26 percent of those who had full-time employment by others were the older workers. (See table A-15.)

Among the sometime clay workers the situation for the older worker was similar. In various ways the worker over 45 or even over 35 appeared at a disadvantage. In general it was the younger worker within the group who was employed. If employed, the older worker was more likely than the younger to have only part-time employment or to have gone into self-employment. Forty-five percent of the unemployed compared with 37 percent of all the employed were 45 or over. In addition, 32 percent of the unemployed compared with 27 percent of all the employed were between 35 and 44. The advantage of youth and the disadvantage of the worker as young as 35 show even more clearly when the age of the workers employed full time is considered. Forty-one percent of those who were employed full time were under 35, whereas of those in the labor market but not employed full time, only 26 percent were under 35. Looked at from a slightly different point of view, only 35 percent of those of this group who were still in the labor market and were 45 or over were employed full time, whereas 47 percent of those under 45 and 55 percent of those under 35 were receiving full-time employment. (See table A-14.)

As has been noted, employment in the clay-products plants accounted for little of what employment members of this group had in August of 1936. Again this was particularly true of the older workers. Only 25 percent of those who were employed by others and who were 45 or over were in clay products, compared with 31 percent of the employed under 45.

Among the workers usually associated with clay those 45 or over were again represented in higher proportions among the unemployed than among the employed. Approximately half of the unemployed were 45 or over, whereas only 37 percent of the employed (other than self-employed) fell into this older group. The disadvantage of the worker between 35 and 44, noted among the reserve group of sometime clay workers, did not extend to those of this age who regarded clay working as their usual occupation. Twenty-six percent of those unemployed and 28 percent of those employed were between 35 and 44. The advantage of the youngest workers, those under 25, was as marked for members of this group as among other groups. Whereas 8 percent of the employed were under 25, only 3 percent of the unemployed were in this youngest age group. (See table A-13.) Again it must be noted that this advantage of the youngest workers applies only to the relatively small proportion of them who had succeeded in breaking into this tight labor market.

Place of Residence and Employment Status.- The 1936 employment status of workers in the three groups tended also to vary with their location. Operation of the two clay plants in Carbon greatly reduced the unemployment both of that town's regular clay workers and of its sometime clay workers, while those in Brazil and in the rural and mining regions around Brazil were more heavily burdened with unemployment, though to different degrees. The greater recourse to self-employment among those workers on the rural routes outside the cities of Brazil and Carbon also produced differences in the employment status of the residential groups.

Among the usual clay workers, those in Carbon appeared most fortunate, those in Knightsville and Harmony least so. Only 9 percent of Carbon's usual clay workers were unemployed. By contrast, more than half, 55 percent, of the Knightsville and Harmony workers were seeking employment. Forty percent of the Brazil workers and 22 percent of those on rural routes were completely unemployed. To some extent the small volume of unemployment reported by the rural residents is a deceptive figure. Almost a third of those reporting employment were employed only part time or had turned to self-employment - most of it on the farms from which these workers had earlier come to the clay plants. Thus, in terms of full-time employment by others, only 55 percent were so employed, 46 percent in the clay plants. In this respect their status is similar to that of Brazil's usual clay workers and better than that of the Knightsville and Harmony members of this group.

Among the sometime clay workers those in Carbon again appear to have been in a favored position. Forty-four percent of them were getting full-time employment in the clay plants. This contrasts with 11 percent of Brazil's reserve clay workers, 13 percent of those in Knightsville and Harmony, and 9 percent of those on the rural routes. Four of Carbon's 16 sometime clay workers were unemployed, 3 were employed full time in industries other than clay, 1 was employed part time, and 1 was self-employed. On the rural routes, almost a third had gone into self-employment, and another 14 percent were employed part time, a few in the clay plants. Thus only slightly more than a quarter reported complete unemployment, but this figure represents a far less satisfactory adjustment for the entire group than the comparable figure reported by the Carbon group. In Brazil, 45 percent of the sometime clay workers were employed full time by others; another 13 percent were almost evenly divided into those employed part time and those self-employed. Forty-two percent were completely unemployed. In Knightsville and Harmony conditions were worst. While a higher proportion, 39 percent, than of the rural residents were employed full time, a far smaller proportion had

entered self-employment, 13 percent compared with 31 percent; almost half of Knightsville and Harmony's sometime clay workers were completely unemployed.

Comparisons for the other workers are possible only between those of Brazil and those of Carbon. Those in Brazil appear to have been more subject to complete unemployment than those in Carbon, one-third of those in the larger city, compared with one-quarter of those in Carbon, being unemployed. But this advantage may be more apparent than real. A fifth of Carbon's 35 employable other workers had only part-time employment, compared with but 7 percent of Brazil's.

From these comparisons, particularly those of the clay workers, it would appear that while the restricted number of opportunities in clay work affected the sometime workers more than the regular workers, the geographic location of the worker tended to some extent to offset this difference. The fact that the sometime clay workers in Carbon were employed by the clay plants in proportions almost as high or higher than the usual clay workers in Brazil, Harmony and Knightsville, and on the rural routes points first to the probability that attachment to a particular plant was of more importance than the relation to the clay industry in general. There is the additional possibility that, in the period of contracting opportunity, the distinction between the usual workers and the reserve of particular clay plants tended to become affected by considerations as to the workers' place of residence. The recourse of workers not fortunately located in this respect - those in Harmony and Knightsville and the rural regions - to self-employment or part-time employment, while it obscures the true extent of their problems, cannot be considered to represent a satisfactory adjustment.

Occupational Level of Clay Workers and Employment Status.- Perhaps the most important factor in the employment status of the usual clay workers was the occupational level of their attachment to the clay industry. The probability for the usual clay worker's having employment in clay on August 1, 1936, varied more with his status as a clerical or administrative worker, a skilled or maintenance worker, an operative, or a laborer, than with his age. His occupational level in clay also had its effect upon the probability of his having employment in other industries.

Fifty-nine percent of those usual clay workers whose occupations were administrative or clerical and who were still in the labor market were on the clay-products pay rolls of August 1, 1936. This was true of 54 percent of the skilled or maintenence workers, and of only 49 percent of

the operatives and 50 percent of the laborers. (See table A-17.) Thus it seems clear that proportionately more of the workers on the lower occupational levels than of those on higher levels had been, by August of 1936, laid off and not recalled into clay, while more of the skilled workmen necessary to maintain production even on a restricted basis had been either retained or reemployed with the slight rise of the recovery years.[8]

In view of the previous findings on the relation of age to occupational group and to employment status, it also seems clear that where the older worker succeeded in maintaining or regaining employment in the clay-products plants this was to an appreciable extent due to his skill or to his position in the production process. Lacking such advantages he was less likely than the younger worker to maintain or regain his place.

In terms of securing other employment, the workers on the higher occupational levels also appear to have been in a better position. Only 6 of the 15 clerical and administrative workers not in clay but still in the labor market were unemployed, whereas 53 percent of the skilled and maintenance workers, 68 percent of the operatives, and 78 percent of the laborers not in clay were unemployed and looking for work.

The clay occupation appeared less related to the clay employment of the sometime clay workers than it did to that of the usual clay workers. Though none of the six administrative and clerical workers in the group were employed in clay products, the laborer was just as likely to have employment in the clay-products plants as the skilled or maintenance worker. This is due to the fact that those who were on the pay roll had, in general, been hired at the time of the slight recovery in clay activity to replace those workers of the usual group whose age or other characteristics militated against their reemployment. Those who were not employed in clay, on the other hand, had in general been previously employed in clay but had been laid off with the contraction of activity after 1930. Interest in the employment status of the sometime clay workers according to their clay occupation attaches, therefore, principally to their employment outside the clay industry. In this respect the clerical and administrative workers were in the best position; all of them were employed. This compares with one-third of the skilled and maintenance workers not in clay, 48 percent of the laborers, and more than half the operatives, who were out of work.

[8] It is, of course, possible that a higher proportion of skilled than of other workers in the labor force of earlier years had migrated from the area. Data are not at hand to test this possibility.

SUMMARY

The Brazil area in the fall of 1936 was heavily burdened with unemployment. Its population was industrially aged, deficient in employables, and contained many aged dependents. Its working force had more than the usual proportion of workers over 45 and fewer than usual between 25 and 44, the age group generally regarded as most employable. Many of the households contained no employables, undoubtedly as a result of the emigration of younger workers during the region's long history of restricted and declining opportunity. The majority contained but one employable. In Brazil 40 percent of the households and in Carbon about 80 percent usually depended upon clay working, coal mining, or agriculture for the employment of one or more of their employable members. The rest of the employables were in trade or in other manufacturing industries, no one of which offered employment to many. The major part of the community's unemployment problem in 1936 thus arose from the decline of the important clay and coal industries, and from the failure of these or of any other industries to absorb the new workers. The large number of persons who had never been able to find jobs in any industry was particularly notable.

The workers who regarded clay as their usual industry were mostly native-born white workers, older than the average employable in the community, and including relatively more workers between 25 and 44 than did the community at large. Most of the workers had apparently been recruited from other industries, particularly coal mining and agriculture, as these industries released them into the labor market. Some had come initially into clay, entering the labor market in the time of this industry's greatest demand for labor. Relatively few were young. The majority were unskilled or semiskilled laborers when employed in clay. More than a third of them were unemployed, and most of these had had unemployment of long duration. Unemployment affected particularly the older and the less skilled of the workers. Once the first job had been obtained, the younger they were, the more likely they were to be still, or again, working in clay or to have secured employment in other industries. On the other hand, their occupational level tended to offset this in some cases. The more skilled worker or the worker necessary to the maintenance of even low levels of production was more likely than the laborer to be employed in clay or in other industries. Residence also affected the employment status, those in Carbon being more likely to be employed in clay than the others. This probably reflects the value of association with a particular plant, as distinct from association

with the industry in general, since both the Carbon plants were operating. Apart from this, residence in the rural regions provided the opportunity for avoiding unemployment to some extent through permitting resort to self-employment in farming or small-scale mining.

The workers who had some employment in clay during 1926-36 were, like the usual clay workers, native-born whites. They were, however, somewhat younger than the usual clay workers, including relatively fewer workers over 45 and more between the ages of 25 and 44. They also differed from the usual clay workers in that more of them had been originally or at some time attached to coal mining, and a larger proportion of them came from the rural regions outside Brazil and Carbon. They were more likely to be unskilled workers than were the usual clay workers and more likely to be unemployed or employed only part time in August of 1936. Of the employed the majority had secured their current employment during the years of upturn, 1935 and 1936, and were probably replacing the usual clay workers who had not been rehired. Those who did have employment were much younger than those who did not, younger even than the comparable group among the usual clay workers. The occupational level of their attachment to clay made less difference in their chances of being employed in clay at this time. It did, however, affect to some extent their chances of obtaining other employment, more of the skilled than of the less skilled tending to be employed. Again, the workers in Carbon were more likely than the others to have clay employment, and those on the rural routes to have turned to self-employment. It is also notable that the reserve group of Carbon clay workers were almost as likely to be employed in clay as the usual clay workers outside Carbon.

The workers of other industries, containing more older workers than the other two groups, also contained more workers born outside of the Brazil area, evidently workers who had come into it during its period of prosperity toward the end of the last century. The group also had more workers under 25, who were evidently either finding places in the new coal-stripping operations or trucking activity of the region, or replacing those workers who had dropped out of the labor market or been "released" into unemployment. Unlike the workers in the two clay groups, most of the workers in this group had begun their working life in the industry which they still regarded as their usual one. Insofar as they were older workers they would appear, therefore, to have been the more established workers - those who had been able to hold on to employment in the industry in which they had begun work. That their unemployment was no higher than that of the other groups was due to the fact that

many of the older workers withdrew from the labor market when they lost their jobs. In addition, those who were employed were more likely to have been employed for a long time, indicating that this group was less susceptible to short-term unemployment than the others. From another point of view, the separation into employed and unemployed seemed to have more permanent meaning for this group than for the others. The fact, to be noted subsequently, that those employed on August 1, 1936, had been characteristically those who had employment and the unemployed had been those with large volumes of unemployment also means that, once unemployed, a worker of this group had been less likely to regain employment. Age was the only measurable factor affecting their employment status in the fall of 1936. The older workers of this group were at a greater disadvantage relative to the younger than the older workers in either of the other groups. More of the workers over than under 45 were unemployed; more of those over 45 who were employed had only part-time employment; and more had turned to the doubtful adjustments of whatever self-employment was possible in the region.

CHAPTER III

EMPLOYMENT EXPERIENCE, 1926-35, AND SELECTIVE FACTORS

The widespread unemployment that characterized the labor market of the Brazil area in the fall of 1936 was not, as we have seen, a phenomenon of recent development. The unemployment of some of the workers extended far back into their history. Much of it derived from the chronic depression into which industries, formerly important to the community, had fallen. Perhaps the greatest part of it, however, derived from the collapse of clay-working activities in the early 1930's. Theretofore this industry had absorbed a good proportion of the labor forces released from other industries. Its collapse, coming on top of the depressed condition of the other industries, magnified and intensified the unemployment problem, precipitating into the community pool of unemployed large numbers of clay workers, many of whom were still unemployed in 1936.

The status of the workers in the fall of 1936 and the relation of certain factors to the distribution of what employment opportunities then existed have been considered in the preceding chapter. The changing fortunes of the workers over the 10-year period, as these reflected and influenced the character of the developing unemployment problem, and the selective factors that may be related to differences in the experiences of the workers, are the concern of this chapter.

What happened to those workers who had been looking to clay for their usual employment, and to the reserve who supplemented the regular clay supply? What is revealed by the employment records of those workers who still clung to industries other than clay despite progressively declining opportunity? How are differences in the employment experience of the three groups related to differences in the character of their situations at the time of the enumeration? What relation did age, place of residence, or occupation have to the differences in employment experience?

The first part of the chapter analyzes the volume and character of the employment and unemployment experienced in the 10 years, 1926-35, according to the nature of the industrial attachment of the workers studied - that is, whether they were usual clay workers, reserve clay workers, or other industrial workers. There follows a consideration of the distribution of employment among the persons in each group, and an analysis of the relation of this distribution to age, place of residence, and level of occupation.

EMPLOYMENT AND UNEMPLOYMENT, 1926-35

Though the records of all three groups of workers are alike in the heavy burdens of unemployment they show, there are particular differences in the type of employment experience and the volume of unemployment. Of their employable time in the 10-year period, each group spent only about half in full-time employment by others, and approximately a quarter of their time completely unemployed and seeking work. Year-by-year comparisons, however, show the record of the workers in industries other than clay to be one of steady deterioration, as each year more of their number slipped from employment into unemployment. The regular clay workers, on the other hand, were suddenly precipitated into the unemployed pool with the depression. From being the group with the least unemployment in the years 1926 to 1929, they became the group with the most unemployment after 1930. The reserve group of sometime clay workers falls between the other two. Prior to the depression years they had, as a group, more unemployment than the usual clay workers although less than the other workers. The depression increased the volume of unemployment experienced by the group but not as markedly as it did that of the regular clay workers. (See tables A-18, A-19, and A-20.)

More detailed analysis of the amount of time spent by members of each group in employment and unemployment over the 10-year period and of the nature of the employment and adjustments to unemployment will further illuminate these differences.

Time Out of the Labor Market

In each of the 10 years studied there were some workers in all three groups who reported themselves as not seeking work either part or all of the time. In a relatively small proportion of such cases, absence from the labor market was a temporary withdrawal due to illness or like causes. The bulk of the time spent out of the labor market was either time preceding entrance, in which the younger persons were at school and had not yet sought employment, or time after leaving, in which the older persons had given up the hope, or at least the search, for work.

In all, the usual clay workers were not in the labor market 7 percent of the time studied, the sometime clay workers 6 percent, and the other workers 18 percent. That much of this time was that of persons who did not enter the labor market until after the beginning of the period for which material was gathered is reflected in the fact that in all three groups more time was spent out of the labor market in the earlier than in the later years. The markedly higher proportion of time so reported by

the workers in industries other than clay is due to the fact that this group includes more younger and older workers than the other groups.

Although it is probable that some of the withdrawals from the labor market represent not so much voluntary retirement as an enforced acceptance of standards in the labor market which preclude the hope of reemployment, such absence from the labor market must be presumed to be largely voluntary and detailed analysis of the status need not be attempted here. In the succeeding discussion the time spent out of the labor market is excluded, and analysis is made of the distribution of only that portion of the time in which the workers regarded themselves as employable. Though it might have been desirable to exclude only the time when workers were definitely not available for employment and to include time when they were not seeking work simply because they knew they would not get it, such a refinement was impossible and would not appreciably alter the general analysis here presented.

Unemployment

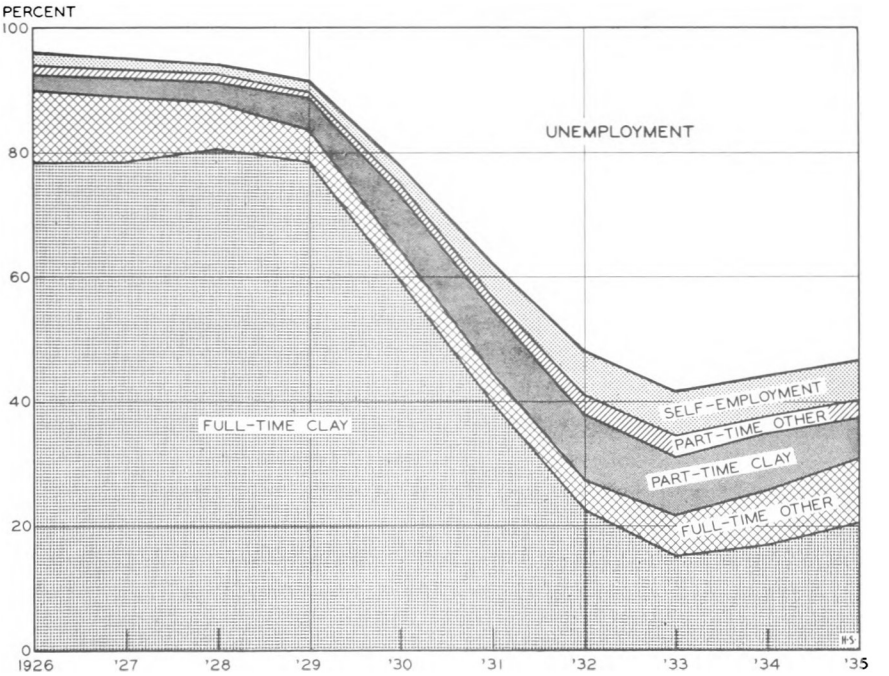
During the 10 years, 1926-35, the usual clay workers were unemployed and seeking work 31 percent of their employable time.[1] This compares with 28 percent of the employable time of the sometime clay workers and 24 percent of that of the other workers.

The regular clay workers, however, in contrast to the other two groups, had very little unemployment prior to the onset of the depression. In 1926 they were unemployed but 4 percent of their employable time. This increased somewhat even before the real depression period set in and by 1929 unemployment accounted for 9 percent of their employable time. In 1930, however, it jumped to 22 percent and thereafter their employment dropped steadily until, in the low year of the depression - 1933, the usual clay workers were unemployed 58 percent of their employable time. There is some indication that they shared to some extent in the subsequent recovery. The proportion of their time reported unemployed dropped slightly after 1933, although in 1935 they were still unemployed more than half their employable time. (See table A-18 and figures 3, 4, and 5.)

The history of the sometime clay workers presents a less favorable picture in the earlier years, though the depression years did not increase their unemployment as much as it did that of the regular clay workers.

[1] Total time minus time reported as "not in labor market" is considered employable time, and will be so referred to hereafter. Employable time thus includes time spent in full- and part-time employment, self-employment, and unemployment while seeking work. All subsequent distributions are of employable time, except where otherwise stated.

Figure 3.- EMPLOYMENT OF USUAL CLAY WORKERS, 1926-35



BASED ON TABLE A-18

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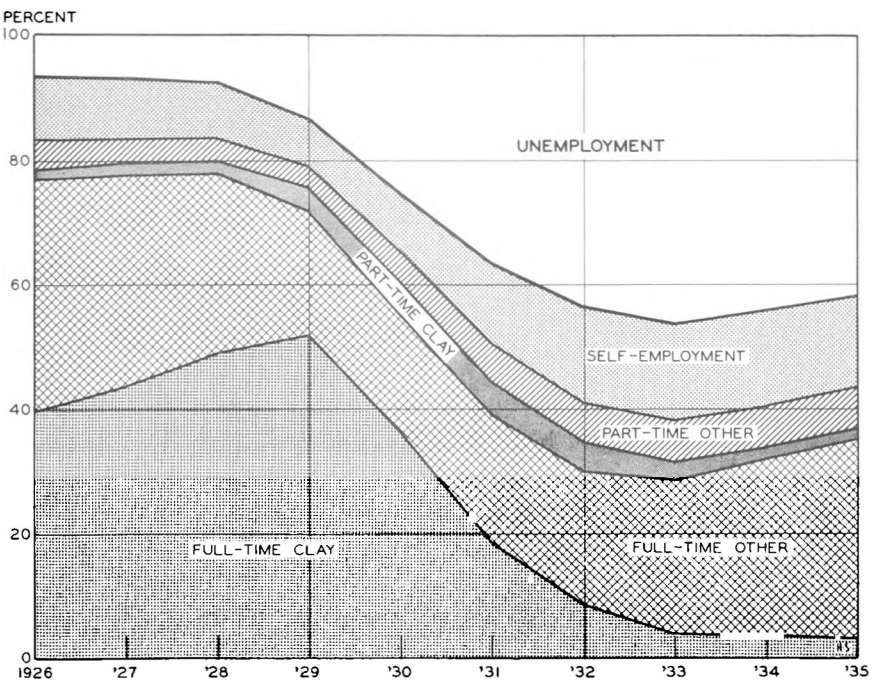
Figure 4.- EMPLOYMENT OF SOMETIME CLAY WORKERS, 1926-35



BASED ON TABLE A-19

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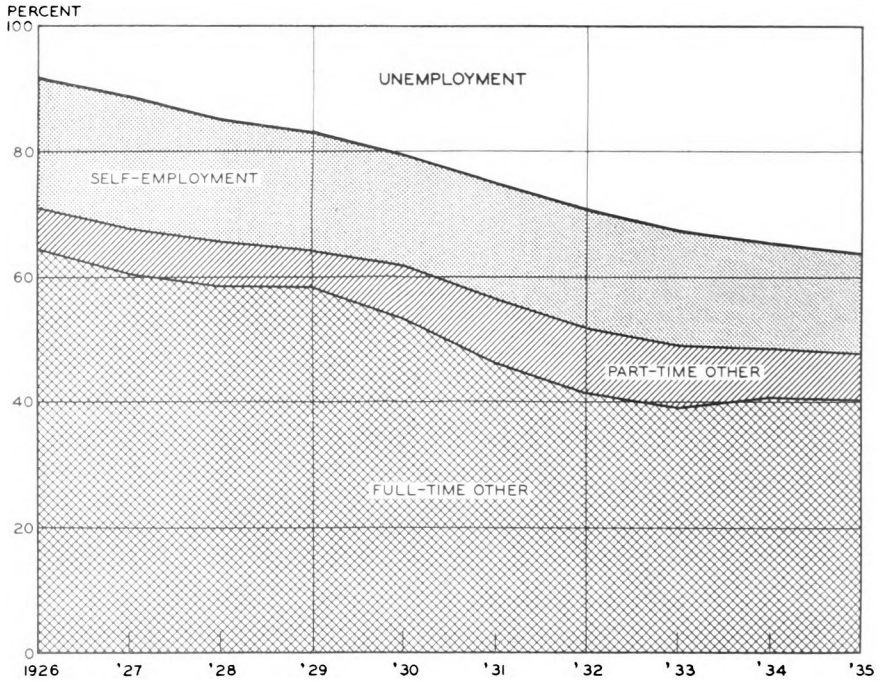
Figure 5.- EMPLOYMENT OF OTHER INDUSTRIAL WORKERS, 1926-35



BASED ON TABLE A-20

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This, as will be seen, was due primarily to their far greater recourse to self-employment and to employment in industries other than clay. After 1930 their clay employment had practically disappeared.

After 1926, when they were unemployed 7 percent of their employable time, the unemployment of this group was increasing steadily, and by 1929, the peak year of general prosperity, they were already unemployed 13 percent of their time. By 1933 the demand for the work of this group had reached its low ebb and they were unemployed 46 percent of their time. The later pick-up of employment in industries other than clay reduced their unemployment somewhat but they were still unemployed over 40 percent of the time in 1935. (See table A-19.)

The workers of other industries were unemployed over a seventh of the time they were available for employment in the 5 years 1926-30. Year by year there was a steady decrease in their employment and an increase in their unemployment. In 1926 they were seeking work 8 percent of their employable time; by 1929 unemployment accounted for 17 percent of their time and by 1935 it had mounted steadily to 36 percent of their time. In two respects their record is notable. In the first place the steady retrogression in their fortunes, antedating the onset of the depression and

continuing into the recovery period, distinguishes them from the usual and sometime clay workers. It is obvious that the problems of this group were not, as were those of the other two, depression problems primarily. They were a group whom diminishing opportunities in their industries were inexorably forcing into the reserve pool of unemployed, possibly unemployable. It is, however, notable that the group did not suffer as much as did the other two in the depression years in terms of the volume of unemployment reported. This is accounted for in part by the large number of the group who had turned to some form of self-employment, in part by the fact that the earlier decline of their industries had probably reduced forces to the point where those still employed were necessary if activity was to continue at all, and in part by the fact that on losing employment many of the older workers reported themselves as no longer seeking work. While this latter factor reduced the apparent contribution of the group to the community's unemployment problem, it is probable that many of the retired continued to represent a relief problem. (See table A-19 and figures 3, 4, and 5.)

Employment

The employment records of the three groups naturally complement these unemployment records, yet accurate evaluation and comparison of their experience require that certain significant differences in the character of employment be taken into account. Some of the work that each group had was not full-time but part-time work. Some of it was self-employment which, though it made it possible for the workers to avoid complete unemployment, may be presumed to represent in many cases a less satisfactory status than did full-time employment by others.[2]

Full-time Employment.- Over the full 10 years the regular clay workers had the best record with respect to full-time employment, 56 percent of their employable time being so occupied. The sometime clay workers had full-time employment for 52 percent of their time, and the other workers for 50 percent. Most of the advantage of the usual clay workers in this respect derives, however, from their predepression experience. In the 5 years, 1926-30, they were employed full time for 83 percent of their employable time. By contrast, the workers of other industries were employed full time in the same period for only 59 percent of their employable time, and the sometime clay workers for 72 percent. In the 5 years after 1930, however, the usual clay workers had full-time employment for only 30 percent of their employable time, the workers of other industries

[2] Cf. p. 32, ftn. 7 for nature of self-employment pursuits.

for 41 percent, and the sometime clay workers for 33 percent. (See tables A-18, A-19, and A-20.)

Comparison of the amount of full-time employment in clay for the two groups of clay workers reveals interesting differences. Up to 1930 the reserve group of sometime clay workers spent no more than 40 to 50 percent of their employable time working full time in the clay industry. The usual clay workers, on the other hand, spent about 80 percent of their time in full-time employment in clay. After 1929 full-time employment in clay for both groups dropped markedly. In the 5 years, 1931-35, the usual clay workers had such employment in clay for but 23 percent of their employable time. The low point was reached in 1933 when it dropped to only 15 percent of their time. Thereafter there was some pick-up and in 1935 they spent 20 percent of their employable time in full-time employment in the clay plants. For the sometime clay workers there never was a pick-up. The amount of full-time employment they secured in clay dropped rapidly after 1929 and continued to drop until in 1935 it accounted for only 3 percent of their employable time.

That, in view of this, the full-time employment record of the sometime clay workers was not worse than that of the usual clay workers is due to the fact that they secured employment in the community's other industries. By 1929 employment in industries other than clay had practically vanished as a factor in the usual clay workers' employment experience. In that year full-time employment in industries other than clay accounted for only 5 percent of the group's employable time. It declined even further in the following years and though it picked up slightly during the recovery period, such employment in 1935 still accounted for no more than 10 percent of their employable time.

With the sometime clay workers, on the other hand, full-time employment in industries other than clay was always an appreciable factor. In 1930, the year when they had the least such other employment, they still spent 19 percent of their employable time in full-time employment in other industries. By 1935 it rose to where it occupied 32 percent of their employable time. It is interesting that in the very years, 1930-33, when full-time employment in industries other than clay was declining for the group of workers in other industries, it was increasing for this reserve group of sometime clay workers. This is due to the fact that the younger members of the group of sometime clay workers were securing employment in the other industries, while more of the older workers in the other group were dropping into unemployment.

These comparisons of the full-time employment records of the three groups add to the findings on unemployment the fact that the tendency for

the usual clay workers to have become exclusively identified with the clay-products industry prior to 1930 operated to their disadvantage when it subsequently collapsed.

Part-time Employment.- Part-time employment is, of course, intermediate between employment and unemployment. Over the 10-year period it was of approximately equal importance to all three groups of workers, accounting for 9 percent of the employable time of the usual clay workers and 8 percent of that of the sometime clay workers and the other workers. For all three groups it assumed particular importance in the years 1930-32, when full-time employment opportunities were disappearing so rapidly. Thereafter it declined somewhat. Prior to 1929 it had been of little significance to the usual clay workers, most of whose time was occupied with full-time employment, but it had been of slightly greater importance to the sometime clay workers and to the other workers. For the usual clay workers part-time employment increased from 6 percent of their employable time in the first 5 of the 10 years studied to 12 percent in the second. For the sometime clay workers the increase was from 7 to 10 percent; for the other workers from 7 to 9 percent. Practically all of the part-time work secured by the usual clay workers was in clay working, whereas the major part of that secured by the sometime clay workers was in industries other than clay. From this it would appear that, in general, just as the usual clay workers got most of the full-time employment in the clay plants when there was any available, they also received more of whatever part-time work was available when activity was contracting. The sometime clay workers were not so favored. After the boom period during which many of them had been drawn into clay, they were, as a group, dropped from clay and had to turn to other industries for both their part- and their full-time employment, or become unemployed. (See tables A-18, A-19, and A-20.)

Self-Employment.- Like part-time employment, self-employment represented largely an alternative to unemployment. This is evident both from the way it increased with the decline in employment by others, particularly in the depression years, and from the nature of the industries in which the workers were self-employed. Among the workers of other industries a check of the industry of self-employment reported in selected years reveals that the bulk of it was in either building and construction or mining. The building and construction activity reported was largely that of occasional house-carpentry and other such odd jobs. The mining was the small-scale mining operations which developed as a depression alternative to unemployment. Among the clay workers, both usual and sometime, agriculture was the most common industry of self-employment,

especially for the rural residents. In the depression period small mining also assumed importance.

As will be seen, there is a considerable part of the workers of industries other than clay who had become more or less permanently self-employed. This accounts for the relatively high proportion, 19 percent, of the time this group spent in self-employment. While there was a decline from 20 percent in the first 5 years to 18 percent in the second, there was some increase during 1931-33 over 1930, indicating that to the group of permanently self-employed were added in those years some who resorted to self-employment when employment opportunities became even more scarce. (See table A-20 and figures 3, 4, and 5.)

For the usual clay workers self-employment never assumed any large proportions. Only 4 percent of the employable time in the 10 years was spent in self-employment - 2 percent in the first 5 years and 6 percent in the second - when a few of the usual clay workers were able to make use of this alternative to unemployment, primarily in agriculture or small-scale mining.

The group of sometime clay workers were self-employed for 12 percent of their time on the labor market, the amount decreasing during the first 4 years of the period studied, when their employment in clay was increasing, and assuming greatest proportions in the years when full-time employment was declining.

DISTRIBUTION OF EMPLOYMENT AND UNEMPLOYMENT[3]

Certain additional differences may be noted in the experiences of the three groups of workers when consideration is given not to the volume of employment or unemployment experienced by each group as a whole, but to its distribution among the individual members of the group - that is, the number of persons experiencing each status and the amount of time they spent in it. Such distribution naturally tends to reflect the aggregate experience of the group. Thus the usual clay workers, the group with the most unemployment in the 10 years, was also the group in which the greatest percentage of persons reported some unemployment. (See table A-23.) Two characteristics, however, particularly distinguish the sometime clay workers. In the first place, although a much smaller percentage of this group than of the group of workers of other industries reported long

[3]The following analysis is based upon frequency distributions of the experiences of those workers who had entered the labor market prior to 1926 and had not left it before August 1936. The others are excluded in order to insure comparability of time spent in the labor market. All averages of number of months of employment, unemployment, or self-employment relate only to the number in the specified group who spent any time in the given status.

records of self-employment, there is a sizable proportion of the group apparently able to alternate readily between employment by others and self-employment and thus escape actual unemployment. With the continued low level of opportunity for employment by others, it is possible that the depression translated many who might otherwise have been in this group into more or less permanently self-employed. In the second place, it is significant that though in the predepression period they had as a group less unemployment than the workers of industries other than clay, far more of their number suffered some unemployment, though it was of shorter duration. (See tables A-19, A-20, and A-24.) This would appear to be, in part at least, a reflection of their reserve status and of their consequently greater susceptibility even in good times to temporary fluctuations in the demand for labor. The relatively short-term unemployment of the larger proportion of unemployed in this group contrasts with the long-term (possibly permanent) unemployment of the smaller proportion, increasing in number, among the workers of industries other than clay.

A more detailed examination of the frequency distributions of the three groups of workers, and of the employed, self-employed, and unemployed in each group according to the number of months of employment, unemployment, and self-employment, presents the basis in fact for the above observations.

The Usual Clay Workers

Employment.- Practically all the usual clay workers had some employment by others during the 10-year period but the amount of such employment varied widely. Few had less than 4 years of employment; nearly half had less than 7 but more than 4, and 22 percent spent more than 9 of the 10 years employed by others. When the employment they had during the first 5 years is compared with that during the second, it is found that while in the former period there were only 2 workers who had no employment by others, in the latter there were 97, or 17 percent of the group. Furthermore, the average amount of employment by others, for those who had any, dropped from 50 out of the 60 months in the first period to 29 out of the 60 in the second. While 78 percent had had between 4 and 5 years of employment in the first period, only 28 percent had as much during the second. Thus, though in the depression years only a little more than a quarter of the workers were able to maintain a fair degree of security, the majority had to supplement their employment by self-employment or face unemployment. (See tables A-21 and A-24.)

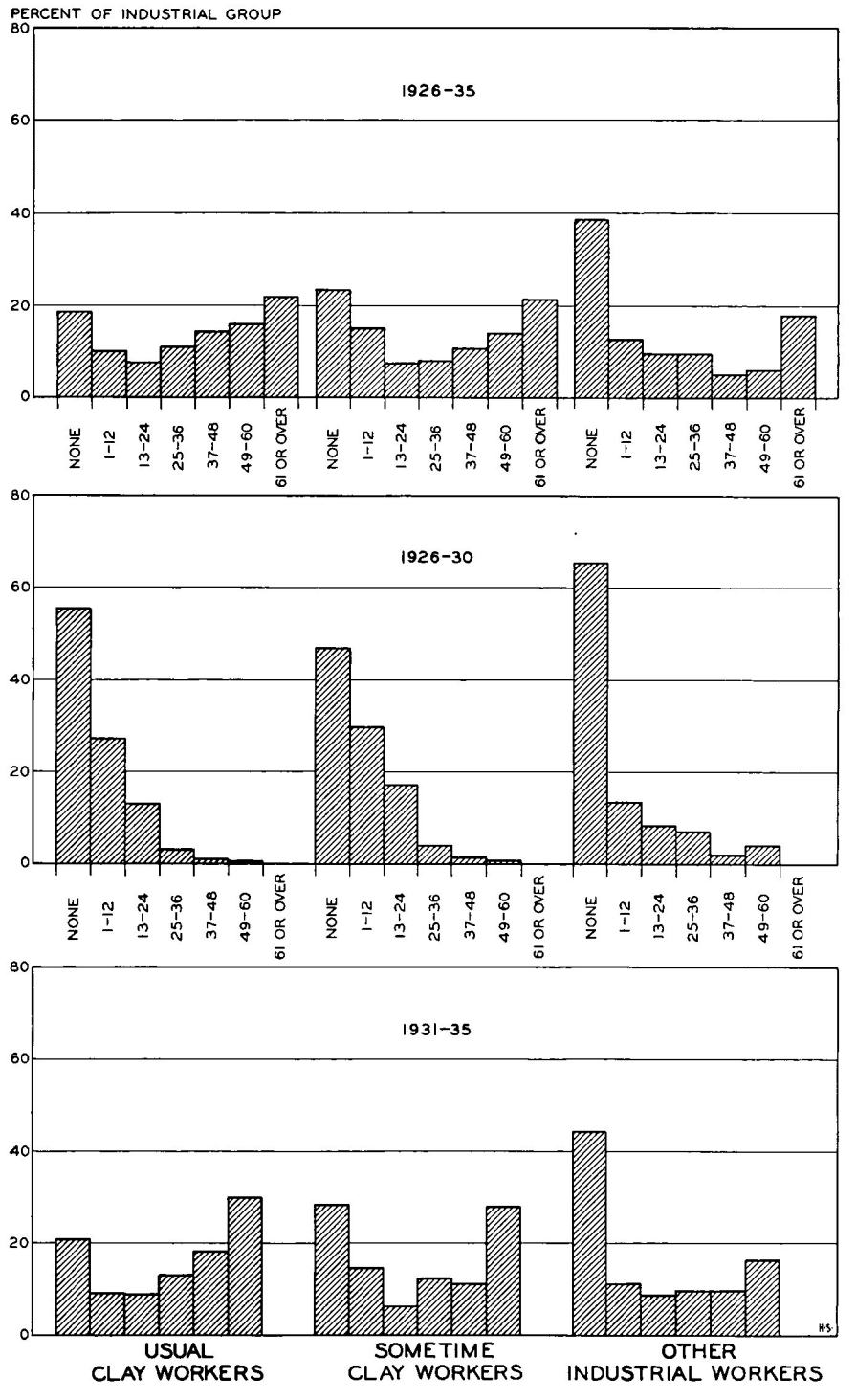
When the group is broken down according to their status on August 1, 1936, and records compared, the existence of the group which had been favored is evidenced again. In general, those workers who were in August of 1936 employed by others tended to be those with the greatest amount of such employment in the preceding 10 years; those who were unemployed had less, and those who were self-employed had the least. A third of those who were then employed had been employed for all or nearly all of the 10 years - that is, from 109 to 120 months. An additional third had been employed for from 6 to 9 years, and only 5 percent had been employed for less than 4 years. By contrast, 19 of the 22 self-employed workers had had less than 6 years of employment by others, and 7 had had less than 4 years. More than half of those who were unemployed had been employed by others for 5 years or less; almost a quarter for 4 years or less. Only 5 percent had been employed all or nearly all of the time. (See table A-21.)

Self-Employment.- As already noted, the usual clay workers as a group made very little use of self-employment to supplement the lack of employment. In the full 10 years only 16 percent had ever been self-employed; two-thirds of these had had less than 3 years of self-employment, and half less than 2 years. Only 7 percent had had some self-employment prior to 1931 and of these half had had not more than a year at it. In the 5 years from 1931 on, however, 14 percent had some self-employment and more than half of these had more than 2 years, a fifth more than 4 of the 5 years. (See tables A-22 and A-24.)

While all of those who were self-employed on August 1, 1936 (4 percent of the usual clay workers), had been self-employed for at least 1 month during the 10 years, only 12 percent of the employed and 14 percent of the unemployed had had any self-employment. Moreover, there were no records of long self-employment for any in either of these two groups. Evidently their self-employment had been an unsatisfactory or at least a temporary expedient. The majority of the workers who were self-employed on August 1, 1936, however, had had 4 years or more of self-employment. In all probability most of these had undertaken self-employment either just prior to or during the period of depressed activity in clay work, and had been unable or unwilling to get other employment. There would seem to be little likelihood of their getting back into clay, in view of the fact, to be discussed later, that most of them were older workers.

Unemployment.- More than four-fifths of the usual clay workers had some unemployment during the 10 years, and two-thirds of those with any unemployment had spent 3 years or more unemployed. About 10 percent had had

Figure 6.- NUMBER OF MONTHS OF UNEMPLOYMENT, 1926-35, OF ALL INDUSTRIAL WORKERS



BASED ON TABLES A-23, A-24

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more than 6 years of unemployment. Comparison of the unemployment experienced in the first 5 years with that experienced in the second reveals the marked increase both in the number who had unemployment and the average amount of unemployment experienced. Prior to 1931 more than half, 55 percent, had had no unemployment, and those who had been out of work averaged approximately a year of unemployment. In the 5 years following 1930, however, only a fifth escaped any unemployment, and the remainder had an average of more than 3 years out of the 5 unemployed, 38 percent between 4 and 5 years. (See tables A-23, A-24, and figure 6.)

The unemployed group of usual clay workers in the fall of 1936 (37 percent of the whole) had had an average record of 54 months of unemployment during the 10 years studied, as compared with an average of 45 months for those in the total group having any unemployment. There were relatively few with either short records, that is, under 3 years, or with long records, over 7 years. Three-quarters had had between 3 and 7 years of unemployment, and 40 percent had had over 5 years. In the other two groups of usual clay workers, the majority had short records of unemployment or had had no unemployment. Over a quarter of those who in August of 1936 were employed by others, and over a half of those who were self-employed, had had no unemployment.

In all, the evidence of these and the preceding measures appears to indicate that the depressed activity in clay gave rise to an unemployed group of usual clay workers whose chances of reemployment were diminishing through continued unemployment. Furthermore, self-employment appears to have been a practicable alternative for but a few in this group. The fact that those who were self-employed in 1936 had not been characteristically the group with heavy unemployment would appear to mean that those who were able to went into self-employment immediately or shortly after becoming unemployed. The rest had not been and probably would not be able to turn to self-employment.

The Other Industrial Workers

Employment.- Fifteen percent of the other industrial workers, a larger proportion than of either group of clay workers, had no employment by others in the 10-year period. This was due to the fact that many of the workers had turned to some form of self-employment prior to 1926 and were either continuously self-employed thereafter or went from self-employment to unemployment.[4] Of those who had any employment by others a relatively

[4]Four of the 30 persons in the group with no employment by others had become unemployed prior to 1926 and had never been reemployed, but still regarded themselves as available for employment. Fifteen were self-employed the entire 10-year period, and 11 had been either self-employed or unemployed throughout the period.

large proportion, 37 percent, had been so employed all or nearly all the time. The distribution of the remaining workers with any employment was fairly even according to volume of employment, and they did not tend, as did the usual clay workers and the sometime clay workers, to concentrate in the groups who had from 4 to 7 years of unemployment. (See table A-21.)

From the first 5-year period, 1926-30, to the second, 1931-35, the proportion of persons having any employment declined from 82 percent to 73 percent, and the average amount of employment experienced by those with any employment dropped from 46 months to 38 months. Thus in the first 5 years a smaller proportion of these workers than of the usual clay workers had some employment by others but they had a considerably higher average amount of employment. This was due primarily to the greater number of these other workers who were employed almost continuously throughout the period. Among the clay workers relatively few had been unaffected for long by the contraction of clay activity. (See table A-24.)

When the group of other workers is broken down according to their status on August 1, 1936, and records compared, it is seen that the great majority of those who were employed at that time had been employed almost continuously throughout the period studied. Almost half of those who were self-employed, on the other hand, had never had any employment by others in the period, and only a quarter of the remaining self-employed had had employment by others for more than 5 of the 10 years. A fifth of the unemployed had had no employment in the 10 years, and the volume of employment was fairly evenly distributed among the others. (See table A-21.)

Self-Employment.- With the group of other workers as a whole, self-employment, it has been noted, was an important factor. Almost a third of the workers included in the group resorted to it to some extent, twice the proportion of the usual clay workers. The average for those who had some self-employment was 74 months as compared with 33 months for the usual clay group. Moreover, a third of those who had any self-employment were self-employed for from 9 to 10 years, while among the usual clay workers there were only two with such long records. (See table A-22.)

Comparison of self-employment in the two 5-year periods shows a slight increase in the number having some self-employment (from 23 to 29 percent) but there was a marked decrease in the average amount of self-employment. In the second period the proportion with any self-employment who were so employed for more than 4 of the 5 years was 20 percent less than in the first period, and the proportion with under a year of self-employment had increased from 4 percent to 13 percent. Apparently the increasing loss

of hired employment caused some persons to resort to self-employment, at least temporarily. (See table A-24.)

That those who were self-employed in August of 1936 were normally a self-employed group is evident from a comparison of their records of self-employment with the records of those who were not so employed. During the 10 years, this group averaged 84 months of self-employment and over half of them had been continuously self-employed. Only 11 percent of those who were employed by others at this time had had any self-employment in the 10 years; 5 of these 10 persons had had under 3 years of self-employment, and 3 had had more than 4 years. A higher proportion of the unemployed, 28 percent, had had some self-employment. The average for the 20 persons in this percentage was 73 months of self-employment, or more than 6 of the 10 years. These facts indicate that the decline in the amount of self-employment from the first period to the second was due to some of the people's falling from self-employment to unemployment, rather than to their securing other employment. (See table A-22.)

Unemployment.- The workers of other industries who escaped any unemployment were a larger group than among the other two, comprising 39 percent of the whole. On the other hand, 5 percent of the workers who had any unemployment were unemployed almost continuously - that is, for more than 9 of the 10 years. In general, the remainder of the workers with any unemployment were dispersed evenly throughout the frequency distribution. (See table A-23.)

The proportion with unemployment increased from a third in the years prior to 1931 to more than half in the years following, and the average amount of unemployment these persons experienced increased from 2 to almost 3 years. Those reporting over 4 of the 5 years unemployed increased from 12 percent to 29 percent. Thus, though a smaller proportion of the other industrial workers than of the usual clay workers had any unemployment in either period, the average amount of unemployment for them was greater for the first period and less for the second period. (See table A-24.)

That unemployment had tended to become permanent for a group of the other workers is evident from a comparison of the records of those unemployed on August 1, 1936, with those who had employment on that date. The unemployed group (37 percent of the other workers) had an average of 51 months of unemployment, while the self-employed group who had had any unemployment had averaged only 26 months of it, and those employed by others, 34 months. Moreover, 55 percent of those employed by others had

had no unemployment (1926-35), compared with 70 percent of the self-employed and only 4 percent of the unemployed. Most of those who had unemployment in the employed and self-employed groups had been unemployed for less than 3 years, and the greatest number (aside from those who had never been unemployed) fell in the group which had from 1 to 12 months of unemployment in the 10 years; for the unemployed, the highest frequency group was the 25 to 36 months, and the frequencies continued relatively high to 7 years. In addition, 7 percent had been unemployed almost continuously. (See table A-23.)

Thus, in both clay groups and in the group of other workers there was evident a tendency for a distinct group of more or less permanently unemployed to have become distinguished from the remainder through the continuation of adverse conditions. A difference can, however, be noted in the process by which this had been occurring. This difference is reflected in the distributions according to the amount of unemployment experienced by those who were still or again unemployed in August of 1936. The workers of other industries who were unemployed at this time are distributed fairly evenly in a tabulation of the amount of unemployment incurred, while the usual clay workers are more markedly concentrated in the frequency classes comprising those with from 4 to 7 years of unemployment. Though all unemployment reported was not unemployment after a last regular job, much of it was, and the above dissimilarity indicates, if it does not demonstrate, that some of the workers of other industries had been losing their jobs each year, increasing the size of the unemployed group. This was apparently offset to only a slight extent by others who were finding jobs, as evidenced by the fact that fewer of them than of the clay workers with employment in the fall of 1936 had had records of unemployment in the preceding 10 years. On the other hand, most of the usual clay workers who became unemployed did so in the years 1929-32. Though others were added to their number in the ensuing years, those of this group who did not regain employment constituted the bulk of the unemployed clay workers, and the continuation of their unemployment was reducing the possibility of their finding jobs in the future. (See table A-23.)

This interpretation of the difference between the two groups is substantiated by a consideration of the year in which those unemployed in the fall of 1936 lost their last jobs. Whereas a relatively high proportion of the other industrial workers unemployed at that time had become so prior to 1929, and the accretions to this group were at a fairly uniform rate after 1929, the bulk of the usual clay workers had lost their last regular jobs between 1929 and 1932. (See table A-12.)

The Sometime Clay Workers

Employment.- The average employment of the sometime clay worker was less than that of the workers in either of the other two groups, 72 of the possible 120 months having been spent in employment by others. Approximately the same percentage as of the usual clay workers, however, had almost continuous employment. Few had less than 3 years of employment (13 percent), while over half had from 3 to 7 years. (See table A-21.)

Like the usual clay workers, almost all of the reserve group had had some employment by others in the first period but the average duration was less, 46 months compared to 50 for the usual clay workers; only 62 percent of them as compared with 78 percent of the others had more than 4 years employment out of the 5. In the second 5 years the number reporting any employment decreased to but 79 percent of the total, 21 percent having had no employment by others. This proportion securing any employment was smaller than that of the usual clay workers though larger than that of the other workers. The percentage reporting almost continuous employment in this period was somewhat greater than that of the usual clay workers, 34 percent compared with 28 percent. (See table A-24.)

As among the usual clay workers and the other industrial workers, there was evidently a small group of sometime clay workers more fortunate than the remainder. They were the ones who were still or again employed in the fall of 1936. Over the 10 years studied they had averaged 89 months of employment by others, and 39 percent of them had been almost continuously employed. This record is very like that of the usual clay workers in the same group. It applies, however, to a smaller proportion of the total group, and the remaining members of the group - those who were in the fall of 1936 self-employed or unemployed - had had on the average worse records than the comparable groups among the usual clay workers. (See table A-21.)

It may be noted further that while most of the long employment by others reported by the usual clay group was employment in clay, this was true of only a few of the sometime clay workers. Their long employment derived from a combination of clay and other employment. Thus while activity in clay gave the sometime clay workers a better record than the other industrial workers prior to the depression, and activity in other industries gave them a better record than the usual clay workers in the subsequent years, such employment in other industries was confined only to a select group of the sometime clay workers. The others fell below the usual clay workers during the depression years as well as during the previous period.

Self-Employment.- Self-employment for the sometime clay workers was more important than for the usual clay workers, but less important than for the other workers. Moreover, it was of less permanent character than for the third group. Of the sometime clay workers, 35 percent had some self-employment, but 30 percent of these had been self-employed for less than a year. The average was 42 months, considerably more than for the usual clay workers but considerably less than for the other workers. (See table A-22.)

In the first 5-year period a little more than a fifth of the sometime clay workers had some self-employment, averaging 25 months of it; during the second 5 years the proportion increased to 28 percent and the average length to 32 months. This increase in the second period was largely due to the larger number who reported more than 4 years of self-employment and to a lesser extent to an increase in those reporting 2 years or less. Thus, while there would seem to be a tendency toward self-employment as a more or less permanent form of adjustment, there is also evidence that some of the workers in this group used it as a temporary alternative to unemployment. (See table A-24.)

The tendency for self-employment to become the characteristic status for a proportion of this group was greater than among the usual clay workers, considerably less than among the other workers. The worker who was self-employed in the fall of 1936 had been so employed on the average approximately $5\frac{1}{2}$ years. A quarter had been self-employed more than 8 years, and a ninth more than 9. This latter group compares with more than half of the self-employed workers of industries other than clay and the 8 percent of the self-employed usual clay workers, who had been self-employed between 9 and 10 years. (See table A-22.)

In addition, a relatively high proportion of the sometime clay workers who were employed by others in the fall of 1936 had had some self-employment: 27 percent, as compared with 12 percent of the similar group of usual clay workers and 11 percent of the other workers. For most of these persons the self-employment had been of comparatively short duration. Of the unemployed a quarter had had some self-employment, two-thirds of them for under 3 years.

Comparison of these records of self-employment with those of comparable groups among the usual clay workers and the workers of industries other than clay indicates that while, for all three, self-employment was largely an alternative to unemployment, among some of the sometime clay workers it did not necessarily tend, as it did among nearly all of the usual clay and other workers who experienced it, to become either a

permanent form of adjustment or a prelude to unemployment. Some could apparently go from self-employment back into employment again. This was less true of either of the other two groups, who appear to have tended more to become either permanently self-employed or to sink from self-employment into unemployment.

Unemployment.- Three-quarters of the sometime clay workers spent some time during the 10 years unemployed and seeking work. This proportion is smaller than that of the usual clay workers, larger than that of the other workers. The average amount of unemployment experienced by those with any was similar to that experienced by the other two groups, 43 months, though the distribution was less even than among the workers of industries other than clay. Like the usual clay workers, the majority of this group had from 3 to 7 years of unemployment. (See table A-23.)

In general, the distribution of their unemployment is more like that of the usual clay workers than of the other workers. However, it is notable that even before 1931 a relatively high proportion of this group reported some unemployment: 53 percent, as compared with 45 percent of the usual clay workers and 35 percent of the other workers. Almost half of those who had some unemployment during this period had been unemployed more than a year. The relatively high proportion reporting some unemployment in this period is in part a reflection of the fact that this reserve group felt the contraction of clay employment earlier than did the usual clay workers. It also, however, indicates a susceptibility to short periods of unemployment in good times greater than that of either of the other two groups. (See table A-24.)

In the second 5-year period 72 percent of the sometime clay workers had some unemployment, and the average unemployment for these persons was 3 years. A proportion similar to that of the usual clay workers, 39 percent, had from 4 to 5 years of unemployment, but a far higher proportion, 20 percent as compared with 11 percent of the usual clay workers, had under a year. The difference is probably accounted for by those sometime clay workers who, after an interval of unemployment following clay contraction, went permanently into other industries.

The records of those who were unemployed and seeking work on August 1 of 1936 - 40 percent of the whole - are very similar to those of the corresponding group of usual clay workers. All but 2 percent of them were unemployed at some time during the period 1926-35 and they averaged 55 months of unemployment, as compared with an average of 32 months for the 71 percent of the employed workers who had had some unemployment. Like the unemployed usual clay workers, the unemployed of the reserve group

tended to have had long unemployment, most of them from 4 to 7 years; unlike the usual clay group, the employed group of sometime clay workers had a third of its members with unemployment records of a year or less. Thus it seems reasonable to suppose that among this, as among the other groups of workers, there was a sizable group for whom unemployment was tending to become chronic, but there was in addition a sizable proportion of the sometime clay workers even before the depression who were markedly susceptible to short-term unemployment.

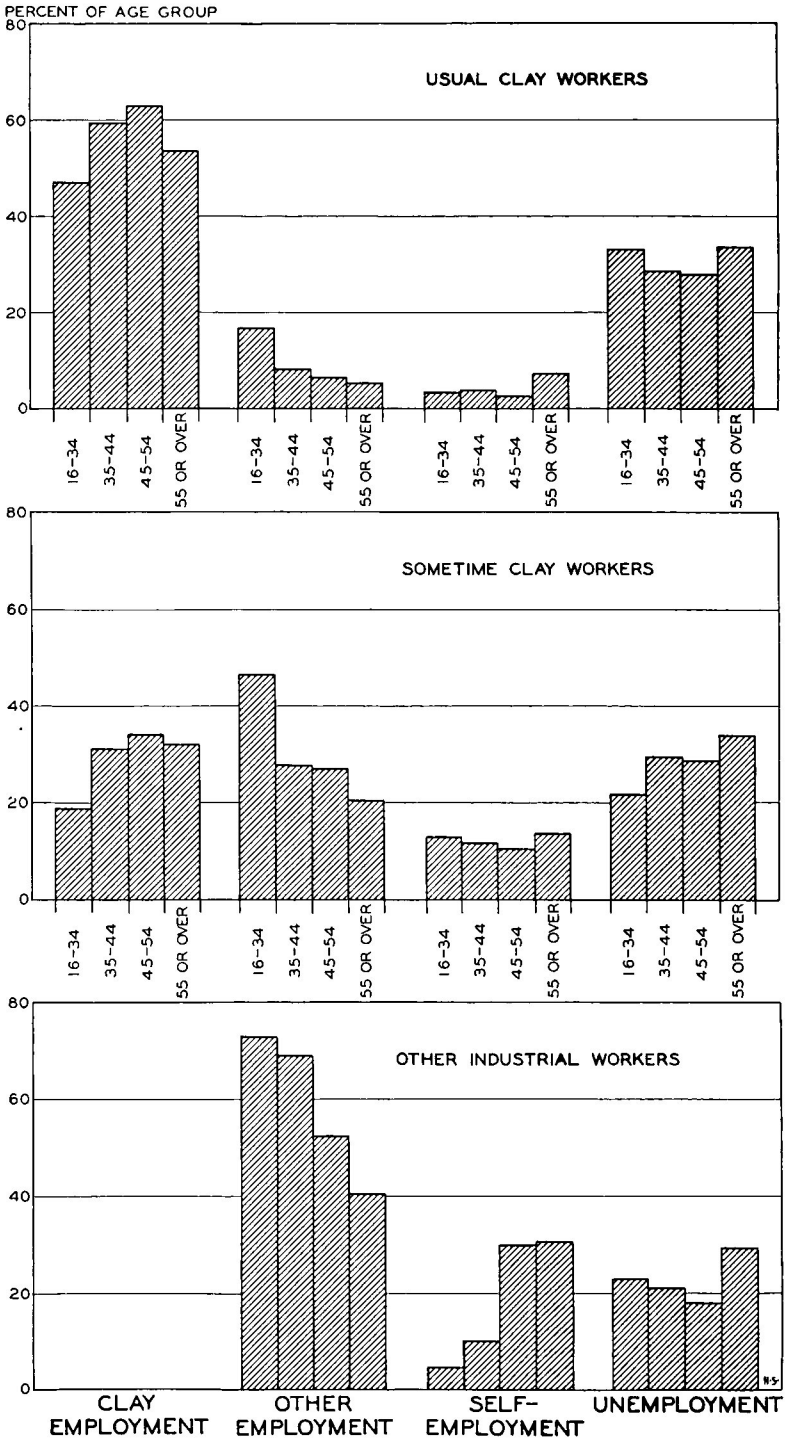
AGE AND EMPLOYMENT EXPERIENCE

The role of age in the experience of the workers studied differed according to the industrial group with which they were identified. Certain general similarities in the experience of workers of different age may, however, be noted before detailed analysis is undertaken. In general, advanced age was a definite handicap for the workers in all three groups. The older workers, those over 55 at the time of enumeration, had more unemployment on their records than the others. Their difficulty arose largely from their inability to find other employment when they had been separated from their usual source of employment. Furthermore, there is reason to believe that when such older persons were laid off there was less chance of their being rehired than there was for younger workers.

In addition, the youngest workers, those under 25 in particular, reported themselves to have been unemployed for more than the average proportion of employable time. Much of this unemployment was due to the difficulty of forming a first attachment, especially since many of these workers were entering the labor market during the period when employment opportunities were generally dwindling. It appears, however, that, except in the clay products plants, once such an attachment was formed, their youth tended to give them some advantage in holding their jobs. For employment in clay, however, the workers in the middle-age groups - from 35 to 54 - had the advantage, probably due to their greater experience and previous association with the plant. Except among the sometime clay workers, self-employment was largely the recourse of the older workers, for many presumably, in view of previous findings, after they had given up the hope of getting employment with others.

It must be reemphasized here that in talking of the younger worker, reference is made only to the younger worker who had succeeded in forming an attachment to some industry and is therefore included in the sample studied. Such younger workers are but a small part of the younger workers in the community who, as has been noted, faced, as a group, extreme difficulty in finding an initial place in the depressed labor market.

Figure 7.- EMPLOYMENT AND UNEMPLOYMENT, 1926-35, BY AGE



BASED ON TABLES A-25, A-26, A-27

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In the following consideration of the influence of the age factor upon the employment experience of the workers in the three groups, attention is given not only to the experience over the full 10-year period surveyed, but also to differences in the predepression years, 1926-29, and in the years 1932-35. Comparison of these periods provides additional material on the role of age in the workers' experience under varying conditions.

Usual Clay Workers

Among the usual clay workers the group between 35 and 54 had the most employment in clay during the 10-year period, averaging about 60 percent of their employable time in the clay plants. The workers 45 to 54 reported slightly better experience than those 35 to 44. The workers under 35, by contrast, spent only 47 percent of their time in clay, and those 55 to 64 only half of their time.[5] The younger workers, however, secured more work outside the clay plants than did the others, and the older workers resorted to more self-employment. As a result, the unemployment reported by those under 35 and over 55 was somewhat less than might otherwise have been expected, though still appreciably above that of the workers 35 to 54. (See table A-25 and figure 7.)

A similar pattern of relationship between age and employment experience prevailed in both the predepression and the depression years. However, it is worthy of note that whereas in the earlier period the workers who were, in 1936, 25 to 34 had a higher than average amount of unemployment, in the later period they had less than the average amount. Since the years of the first period were those in which many of them were just entering the labor market, it is apparent that much of their unemployment arose from the difficulties of getting a first job. This is further substantiated by the fact that the workers under 25, who were entering the labor market in the latter period, had at that time more unemployment than any group except those between 55 and 64.

Though self-employment increased for all ages in the depression period, it remained predominantly the recourse of the older worker. On the other hand, hired employment in industries other than clay went in both periods predominantly to the younger worker, the workers under 35 spending more than the average proportion of time in other industries, the older ones spending less.

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[5] Since, in general, the employment of the workers over 65 is overemphasized and their unemployment underemphasized, due to their retirement from the labor market upon losing their jobs, this group is generally not considered in the comparisons that follow. A similar distortion probably affects the records of the workers 55 to 64 but to a lesser extent. In general, due to the factors mentioned here and previously, it may be assumed that the unemployment of older workers is understated by the statistics.

It would appear from the above facts and from the evidence that the older the worker, up to 55, the more employment in clay he had had, that certain considerations other than age, such as experience or character of association, to some extent protected the worker of middle age, whereas the older worker lost out in the depression and the younger worker had difficulty in getting a first job. Once out of clay, however, both the older worker and the worker in the middle age groups found almost equal difficulty in securing other employment, such other employment going predominantly to the younger workers. Further, the fact, mentioned in chapter II, that in the fall of 1936 the worker under 25 was more likely than the older worker to be employed in clay indicates that of those whom the depression pushed out the older workers were more likely to be replaced than to be reabsorbed.

The Other Industrial Workers

Among the workers of industries other than clay, age played a different and somewhat more clear-cut role. Except for those workers under 25 who shared with the younger usual clay workers the difficulty of getting a first job on entering the labor market, the younger the worker the better his employment record. Furthermore, there was a more marked difference between the records of workers in the different age groups. The workers 25 to 34 had employment by others for more than three-quarters of their employable time, those 35 to 44 for slightly more than two-thirds, those 45 to 54 for little more than half, and those over 54 for about 40 percent of their employable time. Thus considerations other than age, such as experience, the value of which among the usual clay workers was evidenced by the better records of older workers up to 55, apparently were not of sufficient importance in nonclay employment to overcome the marked advantages of youth. (See table A-27.)

The younger workers were the favored group both in the predepression period, 1926-29, and in the years of depression. In the earlier periods the most favored position of the workers 25 to 34 in 1936 had been shared by those who were, in 1936, 35 to 44, workers in both these age groups then having been employed by others for over 80 percent of their employable time whereas those older had such employment for only about 60 percent of their time. That the workers 35 to 44 slipped from a favored position prior to the depression to a less favored position (compared with the workers 25 to 34) in the depression years indicates the premium placed upon comparative youth in securing or maintaining employment in the nonclay industries, particularly in the depression years. As among the usual clay workers, the decline from the predepression to the later

years in the amount of employment secured tended to be greater, the older the worker.

Self-employment, which, as has been noted, was of marked importance to the nonclay workers, was mostly a recourse of the older workers. During the 10-year period the workers 45 and over spent about 30 percent of their time in self-employment while the workers 35 to 44 were so employed 10 percent and the younger workers less than 5 percent of their time. In the predepression years practically all the self-employment reported was that of workers over 45, but during the years 1932-35 their self-employment dropped as some of the self-employed withdrew entirely from the labor market. At the same time there was some increase in the proportion of time the workers under 45 spent in self-employment as an alternative to unemployment. There was also some substitution of part- for full-time employment.

Because of this greater recourse to self-employment on the part of the older workers, their unemployment record does not adequately mirror their more difficult position in the labor market. When the time self-employed is excluded from the time on the labor market, and the division of the remaining time into time employed by others and time unemployed is considered, it is evident that the proportion of time unemployed increased with each age group beginning with those 25 to 34 and that there was a marked increase in the time unemployed for persons over 54. In the depression years those 25 to 34 spent less than a quarter of their time on the labor market (excluding time self-employed) seeking work; those in the age group 35 to 54 were unemployed 38 percent of their time, and those over 54, 61 percent. Thus it is evident that age played a decisive role in the experience of the workers of industries other than clay. It was the older worker who was principally affected by the contraction of job opportunities, and the younger worker who, if he did not retain his job, secured what other jobs came on the market.

The Sometime Clay Workers

As in the regular clay group and the group of other workers, the oldest and youngest of the reserve group of sometime clay workers, those under 25 or over 55, suffered appreciably more unemployment than the other members of the group. The workers 25 to 34 had the least unemployment and the most full-time employment. As among the usual clay workers, the older workers, except for those 55 to 64, had more clay employment than the younger workers. During the depression, clay employment for workers of any age dwindled so markedly that the members of the group were

dependent almost entirely upon employment in other industries or upon self-employment. (See table A-26.)

In securing or maintaining employment in industries other than clay, the younger workers had a pronounced advantage both in the predepression period and in the depression years. Those 25 to 34, accounting for only a quarter of the employable time of the group, obtained 36 percent of the total employment in industries other than clay prior to the depression and 40 percent of the employment in such industries between 1932 and 1935. Each of the older age groups in turn had less of such employment in both periods, and the discrepancy between their available time and the time they spent employed in clay was more marked.

Self-employment, it is notable, was not, as among the workers in the other two groups, primarily confined to older persons. All age groups reported roughly comparable proportions of their time to have been spent in self-employment, though in the depression years this proportion increased more markedly for the younger workers (up to 45) than for the older ones. The greater recourse to self-employment of the younger workers in this group was primarily due to the fact that it included rural residents who were self-employed in farming or mining prior to other employment or turned to these in unemployment, whereas rural residents were not included in the sample of other workers and were relatively less numerous among the usual clay workers.

Thus, comparing the records of the different age groups in the three industrial samples, it is clear that the general industrial situation in the community was tending to produce an unemployed population of older persons whose chances of reemployment were probably diminishing as time went on. Some of them turned to self-employment. The majority were the characteristically unemployed group. Whatever jobs came on the labor market in mining, trucking, or the other smaller industries of the community went primarily to the younger workers. Such jobs, however, were few and the new entrant into the labor market in particular had a difficult time finding place. This is evidenced not only by the high unemployment records of the youngest workers in these samples, but by the high proportion of community unemployment in August of 1936 accounted for by workers who were never able to get jobs and who were, therefore, not included in these samples. Contraction of clay-working opportunities also affected primarily the oldest workers, but consideration of factors of experience and skill offset to some extent the disadvantages of age in finding employment. This will be seen more clearly in the following discussion of the relation between the occupational level of the clay workers and their employment experience.

OCCUPATIONAL LEVEL AND EMPLOYMENT EXPERIENCE OF CLAY WORKERS

The occupational level bore a definite relationship to differences in the employment experiences of both the usual and sometime clay workers. Among the group of workers of industries other than clay, the number and diversity of occupations in the various industries represented, and the relatively small number of workers in any one occupational group or in any combination of occupations related by skill or other characteristics, preclude analysis of the significance of occupation to employment experience in the 10 years. Among the two groups of clay workers, however, four groups of workmen may be distinguished: clerical and administrative employees, skilled and maintenance men, operatives, and laborers.[6] For the usual clay workers this distinction is based upon the occupation reported to be the usual one; for the sometime clay workers, on the occupation of the longest job held in the clay plants during 1926–35.

With respect to employment in the clay-products plants, the higher the occupational level the more employment the worker was likely to have had in the 10-year period. Thus, among the usual clay workers, 52 percent of the comparatively small group of clerical and administrative workers, 24 percent of the skilled and maintenance workers, 16 percent of the operatives, and 9 percent of the laborers were employed in the clay plants all or nearly all the time during the 10-year period. The average administrative or clerical worker was employed in the clay industry for 93 of the 120 months in the 10-year period, and more than half of them were employed for over 9 years. The average skilled or maintenance worker was employed for 73 months and more than half of them were employed for more than 6 years. The average operative was employed for 68 months and almost half of them had under 5 years in clay, while the average laborer was employed for only 63 months. Thus it would appear that the restricted amount of employment offered by the clay plants during the 10 years went primarily to those administrative or skilled workers necessary either for the maintenance of the plant or for operation on a low level. Relatively few of the laborers maintained employment and most of them were employed only about half or less than half of the time. The fortunes of the slightly more skilled operatives had been a little better. (See table A-28.)

This apparent advantage of the workers of higher occupational level in maintaining employment derives principally from the way in which activity in most of the plants is organized. Some administrative and clerical workers usually have to be retained unless there is an absolute

[6] For details of the classifications see appendix D.

shut-down. Similarly, it is necessary under any conditions but absolute shut-down to retain a certain number of maintenance workers. The difference between operatives and laborers is that the same number of operatives is likely to be needed whatever the volume of output, that is, up to the capacity of each brick and tile machine, while the number of laborers required varies according to the amount of tile and brick to be handled. It is largely these variations in the volume of demand for each group of workers that account for the variations in their experience within the clay plants.

In terms of employment of usual clay workers outside the clay industry a slightly different pattern prevailed. Naturally, in view of their high employment records in clay products, relatively few of the administrative or clerical workers had any other employment or any unemployment. Of the 10 who did have other employment, 3 had more than 5 years of it, while of the 10 who had any unemployment, only 1 had more than 5 years of it. At the other extreme, more than half of the laborers had some other employment, only 14 percent of those with any having had more than 5 years, while almost 90 percent of them had some unemployment, a quarter of those with any having had over 5 years and the average with any having had almost 4 years. In terms of other employment the records of the operatives and the skilled and maintenance workers were little better, if any, than those of the laborers, though fewer of either group had any unemployment, due to their better records of clay employment. Thus it is clear that while the higher occupational level worked to the advantage of the workers in terms of maintaining (or regaining) clay employment, except perhaps for the small group of clerical and administrative workers it did little to help them in securing other employment. This other employment, as has been noted previously, went to the younger workers.

Roughly the same general relationship between occupational level and experience can be seen in the records of the sometime clay workers. In general, the lower the occupational level, the more unemployment the workman was likely to have had, and the less employment in clay. There is, however, one notable difference. More of the group of skilled and maintenance workers than of the laborers and operatives had other employment and the average amount of other employment was greater. It is clear that for this less permanently attached group the skill which they either brought to or acquired in the clay-products industry was of greater benefit than for the similar group among the usual clay workers in that it gave them an advantage over less skilled workers not only in

respect to clay employment but also in respect to employment in other industries. (See table A-29.)

PLACE OF RESIDENCE AND EMPLOYMENT EXPERIENCE

The employment records of the workers studied also varied to some extent with their place of residence, though the variation was less marked than that observed in relation to age or occupational level.

In general, among the usual clay workers, those on the rural routes had spent less of their employable time out of work than had any of the others. This was due primarily to the greater proportion of their time in which they were able to resort to self-employment. The workers in the small communities of Knightsville and Harmony, on the other hand, had the most unemployment in proportion to their employable time, and this was due to the relatively small proportion of their clay employment compared to that of the other groups. Whereas the workers in each of the other regions - Brazil, Carbon, and the rural routes - spent between 56 and 58 percent of their time in clay during the 10 years, those in Knightsville and Harmony had only 45 percent of their time so employed. Those in Carbon spent more of their time in part-time employment than did the others, probably because the plants in Carbon reputedly made a practice, particularly during the depression, of giving some part-time employment to many of their workers in each year, probably in an effort to keep forces available for any future revival that might occur. (See table A-30.)

Though the above differences with respect to the records of the usual clay workers held both for the period 1926-30 and for the period 1931-35, differences in the later period were more marked. In the period 1926-30 the workers in Brazil, Carbon, and on the rural routes had like proportions of their time employed in clay - approximately 80 percent - and those in Knightsville and Harmony had only 72 percent so employed. In the later period, however, while the workers in Brazil and Carbon worked respectively 33 percent and 38 percent of their time in clay, those on the rural routes worked only 29 percent, 13 percent at part-time employment, and those in Knightsville and Harmony only 16 percent, 6 percent at part-time work. The advantage of the Carbon workers over the Brazil workers was due to more part-time work. In general, the indications are that those workers within the cities tended, particularly in the depression period, to be favored for clay employment. Furthermore, what self-employment the usual clay workers had was largely obtained by workers resident in the rural regions around the cities. Other employment did not go to any distinct residential group particularly, except that more

of the Carbon workers' other employment was likely to be only part-time employment.

The records of the sometime clay workers reflect approximately similar tendencies, and what differences can be noted are occasioned primarily by differences in the aggregate experience of the groups, which have already been discussed.

Among the other workers, however, there are marked differences between the experiences of those resident in Carbon and those in Brazil. The other workers of Carbon spent in the 10 years only 42 percent of their employable time employed by others, an additional quarter self-employed, and a third of their time seeking work. Those in Brazil, on the other hand, spent 60 percent of their time employed by others, 18 percent in self-employment, and 22 percent seeking work. This reflects the difference in the amount of employment in nonclay industries available in the two communities. Such employment in Carbon was negligible even before the depression set in. The other workers of Carbon were employed in industries other than clay only 41 percent of their employable time during the years 1926-30. In the succeeding 5 years they were employed for approximately the same proportion of time but more of their employment was part time. In Brazil, on the other hand, whereas in the predepression years the other workers were employed for 69 percent of their time, in the years 1931-35 they were employed for only 52 percent of their time. From this it would appear that the situation of the nonclay workers in Carbon had, prior to the depression, reached a low level below which it would sink only very slowly, while in Brazil the nonclay industries were still in the period of decline. (See table A-30.)

SUMMARY

The evidence presented in this chapter throws additional light on the character of the unemployment problem of the Brazil area in the fall of 1936. The nature of this unemployment problem varied according to the kind of industrial attachment of the workers in the community and reflected the effect of different economic tendencies. For those workers attached to nonclay industries, and faced with a long-term tendency of those industries to decline, there was, from 1926 on, a contraction in the amount of their time which employment occupied. The regular clay workers, a section of the labor market which had either earlier accomplished the transition from other industries to the rising clay-products industry or because of their youth had found their first jobs therein, were able to avoid heavy unemployment until 1930. The collapse of the clay-working industry at that time sharply reduced the demand for their

labor and they were able to get very little employment in other industries. They were the depression unemployed. The third group of workers that have been distinguished were those who secured some employment in the clay industries (mostly before the depression) but who still regarded themselves as attached to the other industries. Up to the depression they had as a result better employment records than the workers of industries other than clay though not so good as the regular clay workers. They were, however, more susceptible as a group to short-term unemployment. After 1929 the collapse of clay working affected them more drastically than the usual clay workers, their employment in clay virtually disappearing. This disadvantage was compensated to some extent by the amount of employment they had in other industries, but this was not sufficient to keep them from being more heavily burdened with unemployment than the nonclay workers.

In all three groups these developments were reflected not in a general lowering of the amount of employment received by each worker, but in a differentiation of each group into the characteristically employed and the characteristically unemployed. Among the workers of industries other than clay the process was gradual, each year marking the transfer of more of the workers from the employed group to the unemployed group. Relatively few of these workers appear to have been able to find employment again once they became unemployed. Among the clay workers, on the other hand, the bulk of the unemployed group became so in the early years of the depression. Some of them subsequently found other employment or were rehired but for many unemployment became chronic. Some workers in each of the industrial groups distinguished turned to self-employment. Among the nonclay workers this occurred in general before the depression, even before 1926. Among the other two groups much of it began only in the depression.

In this differentiation, the age of the workers, their place of residence, and (among the clay workers) their occupational level played important parts. In general, the older the worker of industries other than clay the more unemployment he was likely to have had. In addition, those who lived in Carbon, slightly more remote from the center of employment, were likely to have had less employment than those in Brazil where there was somewhat more activity in nonclay industries. This distinction, however, was more or less wiped out with the depression when further contraction in Brazil's nonclay work brought the Brazil workers to about the same level as the Carbon workers.

Among the usual clay workers and the sometime clay workers, though the youngest had a conspicuous advantage with respect to employment outside

the clay industry, age became a barrier with respect to employment in clay only for the much older worker, the one over 55. Below that age, experience or other considerations appear to outweigh the age factor and the older worker appears to have had the preference. In addition, the workers on the higher occupational levels had more employment than those on lower levels, the laborers having the most unemployment.

The differences in the clay workers' records of clay employment according to their residence probably reflect primarily the advantage of attachment to a particular plant over more general experience in the industry. But it is clear that with the depression contraction of clay activity more of the employment tended to go to those within the cities of Carbon and Brazil and less to those outside. These, it is true, had greater opportunity for self-employment, but their unemployment was still somewhat higher than for those within Brazil and Carbon. In general, self-employment was the recourse of the older worker.

Thus the composite picture presented by the labor histories of these three groups of workers reflects the declining market for their labor, the decline being retarded to some extent prior to the depression by an increasing demand for labor in the clay-products plants, but accentuated during the depression by the sharp contraction of that demand. Except as his occupational level in the clay industry protected him to some extent, the older worker in the labor market faced unemployment of a more or less chronic character or had to resort to the dubious alternative of self-employment. In addition to the already noted failure of the community to absorb its new workers, the complex of developments was tending to produce in this community a chronically unemployed population older and less skilled than the average.

CHAPTER IV

INDUSTRIAL MOBILITY IN THE 10 YEARS, 1926-35

The industrial mobility of the workmen - that is, the degree to which they changed their employer or their industry when facing unemployment or for other reasons - is another measure that casts light upon the experiences of the persons studied and the differences in their fortunes. Particularly in a period when industrial opportunities are contracting, the ability of a displaced workman to find employment with another employer, in another industry, or perhaps even at another occupation, assumes significance. Such an ability naturally depends primarily upon the amount of activity in the labor market, though it also reflects differences in the characteristics or experience of the workmen. Long association with a particular plant or industrial process may reduce the chance of a workman's changing his pursuit. Similarly, advancing age may build barriers to such adjustment. The hope that activity in the usual pursuit may be renewed, often fostered by companies anxious to keep their forces intact, also may act as a deterrent to industrial mobility. The differences resulting from personal characteristics are, however, subordinate to the amount of opportunity existing for the accomplishment of such adjustments. Since, as has been noted, opportunities were generally declining in Brazil, the mobility of its labor market was undoubtedly restricted. However, particularly among the sometime clay workers, changes of employer and industry are notable as these workers, on the fringe of the clay-products labor market, attempted to adjust to the decline in the clay demand for their labor.

The first part of this chapter deals with the degree to which the workers in the three groups secured employment outside their usual industry. The second part considers such additional measures of mobility as the relation between the number of job separations, the number of industry shifts, and the number of changes in employers.

EMPLOYMENT OUTSIDE THE USUAL INDUSTRY

In terms of the number of persons who had employment outside their usual industry (including self-employment) and the amount of time spent outside it, the usual clay workers were the most immobile of the workmen studied, the nonclay workers next, and the sometime clay workers the least. This greater mobility of the sometime clay workers is in part to be accounted for by the fact that by definition they had had employment

both in their usual industry and in the clay industry. In addition, a good proportion of them had employment in industries other than clay or their usual. Their relatively greater mobility reflects their reserve status.

For the usual clay workers, employment outside the usual industry was, of course, employment outside of clay. It has, therefore, been considered in the preceding chapter. For purposes of comparison, however, the number of persons who secured employment outside of the clay industry and the amount of such other employment secured may be summarized here. Though few of the usual clay workers escaped at least one lay-off from the clay plants, half of them never had any employment outside the clay industry. A third had from 1 to 3 years of other employment and 16 percent had more than 3 years of employment in industries other than clay. In terms of time, the group spent less than a third (30 percent) of the time it was not in clay but still in the labor market, employed in other industries. (See table A-31.)

The workers of industries other than clay, on the other hand, spent somewhat more of their employable time outside of their usual industry. Fifty-four percent of them spent some time in industries other than their usual, and, in all, such employment accounted for a fifth of their employable time, or approximately half of their employable time not employed in the usual industry. Employment in industries other than their usual was most characteristic of those who were usually employed in manufacturing, least so of those who were in building and construction; 56 percent of the former group and 48 percent of the latter had some employment outside the usual industry. Furthermore, the building and construction workers who did have other employment averaged only 34 months of such other employment, while the manufacturing workers with other employment averaged 45 months in other industries. (See tables A-31 and A-33.)

In terms of the amount of time they spent employed in industries other than their usual, the sometime clay workers were the least permanently attached of the lot. Only a quarter of their employable time was spent in employment in their usual industry, whereas the usual clay workers and the other workers spent more than half of theirs in their usual industries. About 30 percent of their employable time was spent in clay work, and about 16 percent in work in industries other than their usual or clay. In terms of persons, almost three-fifths of them were at some time or other in industries other than their usual or clay, though the average amount of time spent in such other employment was appreciably less than that spent in employment in clay or in their usual industries.

The workers usually in coal mining and agriculture were more likely than the others to have alternated only between their usual industry and clay. (See tables A-31 and A-32.)

JOB SEPARATIONS AND EMPLOYER AND INDUSTRY SHIFTS

The degree of mobility of the workmen is more clearly seen in the relation between the number of job separations experienced and the number of times the workers changed industry or employer, or both. There were some workmen in each group who upon separation from their job remained unemployed either to the end of the period studied or until reabsorbed into the plant which they had left.[1] These workers plus those who were never separated may be regarded as the least mobile of the lot. In addition there were some workers within each group who shifted into another industry after a greater or lesser period of unemployment. These are the more mobile workers. Most changes of industry were, of course, also changes of employer, but there were some workers who changed employers though remaining attached to the same industry. These workers, though less mobile than those who changed their industry, are more so than those who remained attached to one employer consistently.

In general among all three groups of workers there was a high degree of immobility. While all but a small percentage of the workers in each group experienced at least one job separation in the 10 years, a high proportion remained attached to the same industry, even to the same employer, throughout the period and, on the average, those who shifted did so less often than they became separated. The ability to shift, restricted for all by the relative inactivity of the market, was related to the age of the workers, the younger in all groups shifting more than the older. It was also a factor, varying in significance, in the amount of employment and unemployment the workers secured in the 10-year period.

The following analysis, in addition to comparing the mobility of the three industrial groups studied, also compares the mobility of those who were employed in the fall of 1936 with that of those who were self-employed and unemployed. This classification, as has been seen, conveniently approximates, though is not identical with, one based upon the typical employment experience within the 10 years. The employed of 1936

[1] Since a job separation was defined as any change of status (except in hours of work) including a change in occupation, all job separations not involving changes of employer or industry are not necessarily separations into unemployment. The number of such changes of occupation within a plant without intervening unemployment was, however, small (less than 2.5 percent of all job separations) and for the purposes of the analysis presented here may be disregarded. All job separations may be regarded as separation from the plant of employment; however, since unemployment was not recorded unless it lasted 1 month or longer, job separations were not necessarily followed by unemployment even when the separation was involuntary on the part of the worker.

were, as a group, those who had been characteristically employed, the unemployed those who had been characteristically unemployed, and the self-employed those who had been or were becoming characteristically self-employed. In view of the age and occupational characteristics of each of the groups the comparison also permits additional inferences regarding the relation of these factors to their mobility.

The Usual Clay Workers

In general, the usual clay workers were, as a group, attached to their jobs, their employers, and consequently to their industry. When laid off they appear more likely to have remained unemployed than to have gained employment in another industry or plant. Those who could returned to their former employers with a resumption or expansion of activity. There were, of course, some who shifted into the clay industry during the years of activity in the plants and some who shifted out into other industries during the long period of depression, but the great majority made either no shift or at most shifted only once.

As might be expected in view of the previously noted fact that it was the younger rather than the older workers who had employment outside of clay, these younger workers were the mobile group with more changes in employers and industries than the older workers, those under 35 having averaged more than twice as many changes as those 55 and over. (See table A-34.)

The most stable section of the usual clay workers - those with no job separations in the 10-year period - were a small group, comprising only 8 percent of the total. These were the fortunate few who had continuous employment with one employer, and included two workers who reported continuous self-employment. Approximately a third of the workers reported only one job separation, another fifth had two, and 38 percent had three or more. Two percent had 10 or more job separations in the period. Thus the average for the group as a whole was 2.6 job separations per worker. (See table A-34.)

That many of these separations were followed either by long continuous unemployment or by reabsorption after a period of unemployment into the same industry, even into the same plant, rather than by a shift into another industry is evident in the relatively few changes in employer or industry that the members of the group made. Though at one time or another 92 percent of the group had at least one job separation, 42 percent of the group never shifted their employer and 51 percent never shifted their industry. Furthermore, whereas two-thirds of those with job separations had two or more separations, only 58 percent of those with

employer shifts changed employers two or more times, and only 54 percent of those with industry shifts changed industries two or more times. In terms of averages for the whole group, during the 10 years the usual clay workers had only 130 employer shifts and 109 industry shifts per 100 workers. This compares with 261 job separations experienced per 100 workers. (See tables A-35, A-36, and A-37.)

The typical usual clay worker may therefore be said to be one who had been laid off two or three times during the 10 years, but had changed his employer and industry only once. That changes in employers tended to involve also changes in industry is evident in the fact that there were only 21 more employer than industry shifts per 100 workers.

Roughly similar patterns of behavior are evident for the two periods 1926-30 and 1931-35. In each period about one-third of the workers had no job separations and about two-thirds had no employer or industry shifts. The immobility of the market in the first period was undoubtedly associated with relative stability of employment, and in addition many of the single shifts reported were shifts into the clay-products industry. In the second period the lack of mobility is unquestionably associated with unemployment. Considering averages, the number of job separations not associated with employer shifts was 52 per 100 workers in the first period, 79 in the second. It is probable that in the first period many separations were temporary lay-offs followed by reabsorption, while in the second more of them were followed by long continued unemployment.

In summary, then, the majority of the usual clay workers were either associated only with clay during the 10 years or entered clay from some other industry. They were laid off once or more, when activity in their plants declined or the plants closed down, and they either went back to the same plant or remained unemployed at least till the close of the period studied. The slight differences within the group with respect to mobility can be best seen by examining separately those who were employed, unemployed, and self-employed in the fall of 1936.

Employed Workers.- The workers who were employed by others on August 1, 1936, included nearly all those in the group as a whole who had not suffered any job separations.[2] This group, comprising 13 percent of the employed workers, naturally enhanced the picture of stability which the record of the employed group presents. In addition, however, a relatively large number of job separations were not associated with shifts

[2]Two of the self-employed workers had been continuously self-employed throughout the period studied.

either of employer or industry. Rather, there was an appreciable proportion of the employed group who, though they were laid off one or more times during the 10 years, secured no employment with other employers or in other industries but had to wait to be reabsorbed in the plants from which they had been laid off. This can be seen in a comparison of the number of job separations experienced with the number of employer shifts or industry shifts made. (See table A-38.)

In addition to the 13 percent of the employed workers who had been employed at one job throughout the 10 years, 47 percent had from one to two separations from jobs, and the remaining 40 percent had three or more. In spite of the fact that 87 percent of the group thus suffered at least one job separation and the average for the group as a whole was 2.6 separations per worker, 46 percent of the group made no employer shifts and 52 percent made no industry shifts. Thirty-seven percent made only one or two employer shifts, and only 17 percent made three or more. A third made one or two industry shifts, and 15 percent three or more. Thus, in terms of averages, while the group had 260 job separations per 100 workers, they made less than half as many employer or industry shifts. (See table A-38.)

On the whole, their record is one of comparative stability so far as movement from industry to industry or employer to employer is concerned. But only a small part of this stability is associated with a record of continuous employment. Much of it reflects, rather, attachment to a particular plant which persisted even through numerous lay-offs. Some found alternate employment either of a temporary nature or permanent, but the typical employed worker remained attached to his own industry even through periods of unemployment.

Self-Employed Workers.- The self-employed workers, a small group comprising only 4 percent of the usual clay workers, were the most mobile of the three groups. Only 2 of the 24 persons represented by the above percentage were self-employed throughout the 10 years and they made no shifts in the industry of their self-employment. Seventeen of the remaining 22 workers had two or more job separations in the period, 15 made two or more employer shifts, and 13 made two or more industry shifts. The group averaged 3.3 job separations and 2.5 employer shifts and industry shifts. Part of their greater apparent mobility is unquestionably due to their shift into self-employment from other employment, but in addition a high proportion of them appear to have had two or more jobs in different industries before their final shift into self-employment. This greater mobility over the other two usual clay groups may have been an important factor in the lesser amount of unemployment they suffered.

Unemployed Workers.- The unemployed usual clay workers comprised 37 percent of the usual clay workers on the labor market in the fall of 1936. They resembled the employed workers in their lack of mobility, but less of this appears to have been associated with high employment records. The experience of the majority of workers appears to have been that they changed employers and industries once or not at all, and then were laid off to remain unemployed for the duration of the 10-year period.

All of them had been laid off from their jobs at least once, a third of them only once, 30 percent twice, and the remainder three times or more.[3] Only 59 percent of the group, however, succeeded in finding employment with another employer, and half of these had experience with but one other employer and were later laid off and remained unemployed. The remaining third made two or more shifts in employer before falling into the unemployment status which persisted until the time of enumeration.

While few employer shifts were not also industry shifts, the ratio of employer shifts to industry shifts was somewhat higher for this group than for the employed group, indicating a somewhat more restricted mobility than for the employed group. In other words, the unemployed group on August 1, 1936, not only shifted less on the whole than the employed group but they tended also not to shift out of their industry.

For both the employed and the unemployed group, however, a high degree of industrial immobility is evident. In this contracted labor market their job separations were more likely to be followed by a period of unemployment than by any changing of employer or industry. For the more employable workers the period of unemployment might be shortened by renewed activity in the plant of previous employment. For the less employable ones a job separation resulted in long terms of what seems to be more or less permanent unemployment. Few in either group were able to shift their employer or industry as much as was necessary, if at all. The few in the self-employed group had been more mobile than the others, but this was in part due to their shifting between self-employment and employment by others.

The Other Industrial Workers

It is not possible to speak of a typical worker of industries other than clay in the same sense as to speak of a typical usual clay worker.

[3]Since some job separations occurred before August of 1936 but after 1935, they are not counted in the tabulation of separations occurring within the 10-year period. In general, however, it may be assumed that one of the separations reported by each of the workers was into the unemployment status reported on August 1, 1936.

In part this is because the other worker is not attached to any single industry but falls into a number of different industrial classifications; in part it arises from the fact that in this group there is a fairly large and relatively stable group of self-employed workers. With these qualifications in regard to the averages which are used to measure the mobility of this group, it is possible to say that industrially the other worker tended to be as immobile as the usual clay worker, but this seems to be associated with the extreme immobility of the self-employed and unemployed members of this group who changed industries less than once on the average during the 10 years. (See table A-40.) There is, on the other hand, somewhat less attachment to employers than among the usual clay workers, which is shown by more shifts of employers within the industry and fewer job separations unassociated with employer shifts. (See tables A-35, A-36, and A-37.)

Slightly over a sixth of the workers of industries other than clay were never laid off from their jobs, a third suffered only one lay-off during the 10 years, 20 percent had two, and less than 30 percent had three or more. Due both to the high proportion who were never separated and to the fact that relatively fewer of this group than of the usual clay workers had a large number of lay-offs, the average number of separations for the group was less than for the usual clay workers, 223 as compared with 261 per 100 workers. (See table A-35.)

They made slightly more employer shifts than the usual clay workers. Two-fifths of them never shifted their employer, but 28 percent of them shifted once, and a third of them changed employers two or more times. The group had an average of 151 employer shifts per 100 men, which means that 72 job separations were not associated with employer shifts. (See table A-36.)

Industry shifts, as with the usual clay workers, were less frequent than employer shifts. Over half never shifted their industry. An additional fifth shifted industry only once and only 28 percent shifted two or more times. The average was approximately 111 industry shifts per 100 men in the group, or approximately 230 per 100 men shifting. (See table A-37.)

During the second 5 years studied there were considerably fewer changes in employers and industries, as well as fewer job separations on the average, than during the first. This differs from the situation discovered among the usual clay workers and is undoubtedly a reflection of the fact that the marked increase before 1931 in the unemployed group of the workers of industries other than clay increased the number who, because

of continued unemployment, were incapable of either employer shifts or job separations. It is also notable that the number of job separations unassociated with employer or industry shifts increased somewhat in the second period over the first.

As among the usual clay workers, the younger workers were the mobile group. While half of the older workers, those 55 and over, had no shifts in employers, only a sixth of the younger workers, those under 35, had no shifts. The average for the older group was 0.85 employer shifts and for the younger group 2.71 for the 10-year period. The younger group accounted for 38 percent of the total shifts and the older group for only 19 percent. (See table A-34.)

Unlike the usual clay workers, those in the employed and unemployed groups of other industrial workers in the fall of 1936 show marked differences in the degree of mobility which they evidenced. Those who were employed by others include more of the more mobile workers, though this group contains a large group of immobile workers as well. The self-employed and unemployed, on the other hand, are composed in large part of the less mobile members of the nonclay group. An examination of the three classes will throw further light on this point.

Employed Workers.- The employed group of other workers had been more prone to change industries and employers than the employed usual clay workers, but less subject to job separations. A sixth of the employed other workers had never been laid off, but had had continuous employment from the time of securing their job to the end of the period. An additional third had had only one job separation and half had had two or more. The group averaged 245 job separations per 100 workers. However, 43 percent of the employed workers had made no shift in industry and 24 percent no change in employer. They, in other words, either remained employed or, on losing employment, remained unemployed until reabsorbed into their original plant or industry. They averaged 198 employer shifts and 138 industry shifts per 100 workers. Thus only 47 of the 245 job separations per 100 employed workers were unassociated even with an employer shift, as compared with 138 of the job separations per 100 employed usual clay workers. In other words, the high employment records of the employed other workers were associated with the immobility of those who maintained employment and the relatively high mobility of a small group of younger workers who were able to shift into other lines. (See table A-40.)

Self-Employed Workers.- The self-employed group presents a striking contrast to the self-employed among the usual clay and sometime clay

workers. While those self-employed were the most mobile of their respective groups, the nonclay self-employed were not only the most stable of the nonclay group but the most stable of all nine classes of workers. This is connected with the more permanent character that self-employment had already assumed among this class of workers. Of the 33 self-employed workers in this group, 13 never had a job separation, 16 never shifted employers, and 18 never shifted their industry. The average for changes in industry was 0.8 per worker, for changes in employer 0.9, and for job separations 1.2. Even those who had changes were less mobile than the other two groups of self-employed workers, the 17 persons changing employers making but 31 shifts. More than half of these are accounted for by their last shift into self-employment. Thus even the more mobile among them had, on the average, only two employers before shifting into self-employment.

Unemployed Workers.- Though the unemployed workers of industries other than clay were less stable than the self-employed group, they were less mobile than any of the remaining seven groups, and this is true in practically all respects. Eight percent of them had no job separations, and more than a third of them had one job separation.[4] As a whole, the group averaged 2.4 job separations in the 10 years. They made, however, only 1.2 employer shifts and less than one industry shift, on the average. Half of them did not shift employers at all and over 60 percent of them did not shift their industry. It is evident from this that the typical unemployed worker had but one employer and suffered one period of temporary unemployment before he was discharged into the pool of unemployed.

Comparison of the mobility records of these three groups of other industrial workers permits the following additional inferences about their characteristic experiences: the group that was characteristically employed consisted of two classes of workers - a mobile group of younger workers whose high employment records derived from their ability to shift employer and industry when laid off, and a somewhat smaller group of older workers whose high employment records derived from the fact that they were not laid off. The unemployed workers, on the other hand, were those workers, generally older, who on being laid off were not rehired and were unable to find employment with another employer or, even less probably, in another industry.

[4]The 8 percent who had no job separations were separated into unemployment after December 1935; the one separation of the other group mentioned was probably the one initiating the period of unemployment which persisted at least until the time of interview.

The Sometime Clay Workers

The sometime clay workers, who as a group are characteristically the reserve force of the market, were the most mobile of the three groups. Very few (1 percent of the workers) had permanent connections for the 10 years with any one employer, uninterrupted by separations from employment. More than a third of them had four or more separations from jobs, another 44 percent had two or three separations, and only a fifth had but one separation. The average number of separations was 357 per 100 workers or one more per worker than was true of the usual clay workers. (See table A-35.)

Only 13 percent of them never changed their employer, in contrast to the marked immobility of the usual clay and other workers, two-fifths of whom never had connection with more than one employer. Twenty-five percent of them changed employers four or more times. The group averaged 263 changes of employers per 100 workers. While an appreciable proportion of their separations are unconnected with employer shifts, the ratio of employer shifts to job separations still is higher than among the usual clay and nonclay workers, evidence of their greater mobility. (See table A-36.)

Both in averages and in distribution the number of industry shifts accomplished corresponds very closely to the number of employer shifts, and separate analysis need not be attempted. The fact that the ratio is so high, however, indicates that lack of attachment to an industry was far more characteristic of this group than of the usual clay or nonclay workers.

The number of shifts in employers and the number of job separations decreased considerably between the first 5 years and the second, but the ratio of job separations to employer shifts remained approximately the same. This is in contrast to the record of the usual clay workers whose job separations increased and whose mobility decreased with the depression. It further illustrates the fact that the sometime clay workers who were laid off were not rehired but tended more to find alternate employment, while more of the usual clay workers either remained unemployed or were rehired whenever activity in the clay plants was resumed or increased.

The younger workers, those under 35, were more prone to change their employers than the older workers, those 55 and over. While almost all of the younger workers changed employers at least once during the 10 years, a fifth of the older group made no change. Moreover, the younger workers had twice as many changes per worker as did the older workers. (See table A-34.)

The three groups of sometime clay workers, classified according to employment status in the fall of 1936, resemble each other more than do the corresponding groups among the usual clay and nonclay workers. There are, however, some characteristic differences between them. The unemployed group is the least mobile of the three with respect to all measures except job separations, while the employed group is the most mobile of all with the exception of the number of changes of industry. In this they are exceeded by the self-employed group. (See table A-39.)

Employed Workers.- Almost 60 percent of the employed workers had three or more job separations, a quarter of them having five or more. Two had as many as 16 job separations, each time changing employer and industry. A small group, 9 percent of all those employed, made no employer shifts, but 10 of the 12 workers included in this small minority had one or more job separations after which they returned to the same employer.

A relatively large group changed their employers and industries more than twice in the 10 years, 49 percent having three or more employer shifts and 44 percent three or more industry shifts. On the average, each member of the group was likely to have changed his employer three times during the 10 years and his industry 2.7 times. Thus they tended to change industry almost as often as they did employer, and had, on the average, 70 more job separations per 100 workers than they had employer shifts, indicating greater mobility than the employed usual clay workers, somewhat less mobility than the similar group of nonclay workers. Comparing the three employed groups, it would appear that whereas the high record of employment of the employed usual clay workers was associated with relative stability of employment, and that of the employed other workers was associated with the stability of some of the older workers and the mobility of the younger, that of the sometime clay workers was largely a reflection of their greater mobility.

Self-Employed Workers.- The self-employed group had the highest average number of shifts in industry of any of the nine groups. They averaged over three changes of industry per worker, all except one having changed industry at least once. Even the number of employer shifts was almost as high as for the employed workers, and in general they too changed industries as often as they changed employers. A few of them changed industry more often than they did employer, and this was due to changes in the industry of their self-employment. The average number of job separations was 3.5 per worker. Two facts - the high number of employer shifts and the high ratio of employer shifts to job separations - substantiate the impression previously gleaned from their records

of self-employment that many of these workers used self-employment as a supplement to employment and shifted readily from one to the other.

Unemployed Workers.- As has been pointed out, the unemployed were the least mobile of the sometime clay workers. All of them suffered at least one job separation, and more than half of them had three or more. Twenty-three percent of them had five or more. A fifth of them, however, made no changes in employer, and about half made more than one change in employer. A slightly higher proportion, 22 percent, made no industry shifts, and only about 46 percent made more than one change in industry. Thus most employer changes involved also industry changes and there were a few changes of employer within an industry.

In terms of averages the unemployed group had 345 job separations per 100 workers but made only 210 changes of employer and 188 changes of industry. The difference of 135 between job separations and employer shifts represents roughly the number of times, on the average, each 100 workers either became unemployed for the duration of the period or became temporarily unemployed, to be subsequently reemployed by the same employer.

SUMMARY

The statistical description of the mobility of the various sections of the labor market provides material, additional to that presented in the preceding chapter, on the experiences of the workers in the Brazil region and the character of the 1936 labor market as a result of those experiences. The wholesale decline in the activity of most of Brazil's industries had tended to freeze the market generally. Thus, though all but a small percentage of the workers in the three groups studied experienced at least one job separation during the 10 years, a high proportion of these separations were not followed by the securing of work with another employer or in another industry. More often they were followed by unemployment, which was cut short for some of the workers when renewed activity reabsorbed them into their old plants, but which for many continued to the day of enumeration.

A high degree of immobility was particularly characteristic of the usual clay workers. The typical worker tended to be attached to one plant within the clay industry. He was laid off when work slackened or when his plant shut down. Thereafter he was more likely to remain unemployed until reabsorbed than to find employment in another industry or even in another plant in the same industry. Some of the workers were reabsorbed either temporarily or more permanently with the pick-up of

business. It was the practice of clay plants, confirmed by interviews with factory managers, to keep lists of previous workers and to call these back with any rise in activity. But the pick-up in business was not great enough to reabsorb more than a small section of the workers. The others either had to find employment in other industries or face unemployment. Few could get other employment. Though all but 20 percent of the group were unemployed at one time or another, half never found employment out of clay. It was the younger workers who were able more readily to shift their employer or industry. It was the younger also, as has been noted previously, who tended to be reabsorbed into the clay-products plants. Thus the older worker, once he became separated, was under a twofold disadvantage. He was less desirable to his own industry and unable readily to shift into another. Continued unemployment was robbing him of what little value his experience still possessed and he was sinking into the pool of chronically unemployed.

The workers of industries other than clay consist, in contrast, of two groups distinguished according to their mobility. There were, in the first place, the younger group, the more mobile workers, who appear to have been able to shift employer and industry frequently when laid off. Together with the group of sometime clay workers these would seem to be part of the community's fluctuating reserve whose records show stretches of intermittent employment with many employers. They had not made entrance into the clay industry, but whatever jobs in the other industries came on the market went to them. Should extensive activity in the clay-products industry be resumed, some of these are, in all probability, the workers who would be recruited. The second group was of older and less mobile workers. It resembled more closely the usual clay workers in that it included, on the one hand, a group whose immobility was associated with relatively high employment records and, on the other, one with high unemployment records. The former group tended to maintain one job connection with but one employer throughout the period or to be self-employed continuously. The latter group also had only one job connection, but it was not maintained throughout the period; the worker sank instead into the unemployed pool. This immobile group, as has been noted in chapter III, was undergoing a continuous shifting as the unemployed sector received annual accretions from the employed group. Furthermore, because of the generally declining demand in the nonclay industries as distinguished from the fluctuating demand in the clay industry, they seem to have had fewer job separations accompanied by rehiring than the usual clay group. In all other respects, however, they were like the usual clay workers.

The sometime clay workers were the most mobile of the lot, shifting employer and industry frequently as they lost jobs. This is a reflection of their reserve status, but, like the usual clay workers and the stable group of other workers, this less attached group in the declining market furnished their contingents of older workers to the chronically unemployed.

CHAPTER V

SUMMARY AND CONCLUSIONS

THE INDUSTRIAL SETTING

Clay County, Indiana, was, in the fall of 1936, the scene of widespread unemployment and a heavy relief load. One-third of those in the population of the city of Brazil who would normally have been employed were seeking work, and many of these had been unemployed for long periods. In the 3 years preceding the time when this study was made, almost three-quarters of Brazil's population and half of Clay County's population had been receiving some form of relief at one time or another.

The problems presented by this situation were only partly ascribable to the depression. Even prior to the onset of the general depression the demand for labor in the community's industries had been generally declining. Some industries had completely disappeared. Others had declined almost to the vanishing point. A few were continuing on a reduced basis. Notable among these was coal mining, which earlier had been the dominant industry of the community but which began to decline in importance about the turn of the century; after a brief spurt of activity following the war, it declined appreciably. By the twenties the more stable form of operation in shaft mines had virtually disappeared and its place was taken by the less stable strip-mining and smooth-scale operations. Agriculture had also come to be a source of income and employment for a diminishing, though still considerable, proportion of those workers living in the rural areas surrounding Brazil. A good number of those resident on farms had to supplement their earnings by whatever employment they could secure in the community's industries.

Prior to 1929 the one industry of any importance in the area which had been increasing in activity and employment was the clay-products industry. But its rise was brought to an abrupt halt with the general collapse in 1929 and its employment dropped to a fraction of what it had been. In the years 1934-35 it enjoyed some measure of recovery, but employment was still markedly below the predepression levels.

Thus, in its industrial origins, the unemployment problem of the region had a twofold nature. In part, it stemmed from the long-term decline in activity and employment opportunities in a number of fields which earlier had given support to an important section of the population. Imposed upon this was the collapse of the clay-working industry which, prior to the depression, had compensated to some extent for the

decline in other industries and had provided employment for some who were being displaced.

The objectives of this report on the Brazil industrial labor market have been, first, to analyze the nature of the labor market and its unemployment problem as it had developed in this depressed situation, and, second, to measure, insofar as it was possible, the relation between the industrial fortunes of the workers in the labor market and such factors as their age, work experience, occupational level, and geographic location, and, in the light of this analysis, to consider the reemployment problem that had been created. The questions asked were: What employment opportunities were there, who received what employment there was in the labor market, and what kinds of unemployment are subsumed under the general unemployment "problem"?

THE CHARACTER OF THE LABOR MARKET

The long history of diminishing opportunity in Brazil's labor market had had marked effects upon the character of the population, as well as upon the employment situation in the fall of 1936. The population still in the area was largely a residual group. Under the pressure of diminishing opportunity many of those who had been able had moved on to other regions in search of employment. This was particularly true of the younger employables in the market. It was reflected in the decline in population which the region in general, and Brazil in particular, had experienced; in the high proportion of the population that was not in the labor market; in the number of households with no employables; and in the relatively advanced age of the employables that were left. With the emigration of many of the younger workers the community was left with a working force containing an inordinately large proportion of persons who, in a labor market where the age distribution was more normal, would be regarded as unemployable because of their advanced age.

The heavy burden of unemployment that the region carried is shown by the fact that in the recovery year of 1936 more than a third of Brazil's employables were unemployed and almost half of the households that contained employables had some member either unemployed or employed only part time. The chronic nature of the unemployment problem that had developed is indicated by the fact that more than three-quarters of the previously employed who were unemployed had been out of work for a year or more and a third had been unemployed for 5 years or more.

A further and most important characteristic of the situation in the fall of 1936 was the high proportion, 6 percent, of Brazil employables who had never had any work. This group accounted for almost a fifth of

the community's unemployed at that time, and is an indication of the difficulty facing the young person in such a market.

THE INDUSTRIAL WORKERS

The workers sampled for more detailed study of work histories were those males still in the region who had made up the usual labor supply of the clay-products industry, those who had been its reserve and had secured some employment in it, and those who had been or were attached to the other manufacturing industries in the community or to coal mining, building and construction, or trucking. As were the workers in the community generally, they were largely native-born persons indigenous to the region or long resident in it. If any large body of workers had come into the region during the fairly recent expansion of clay activity, it had moved out again with clay's decline.

All three groups, the usual clay workers, the sometime clay workers, and the other industrial workers, were somewhat older than the average employable of the area, a reflection of the difficulty younger workers had had in recent years in making any attachment to industry. This was somewhat less true of the workers in industries other than clay than of those in either of the two clay groups. The group of workers of industries other than clay included proportionately more older workers than did the two clay groups. It also, however, included more younger workers. The younger workers were in large part those who had secured work either in trucking or in the strip and small mining operations which many were entering as a solution to the recent problems of unemployment.

All but a small proportion of the workers in all three groups had secured their first jobs in the Brazil region. The usual clay workers were largely a group that had been initially attached to industries other than clay but had later shifted into clay. Only a small proportion of them had started their working life in clay. Of the reserve group of clay workers, all were, by definition, usually attached to other industries. More of them than of the usual clay workers had been initially or characteristically attached to coal mining or to agriculture. In addition, proportionately more of them were resident outside of Brazil and Carbon. In both groups the majority of workers had unskilled occupations in the clay plants, but this was more true of the reserve group than of the usual group. In other words, what workers had been taken on for brief periods of work in the clay plants had been taken on to perform the less skilled operations in which training and experience counted for less.

Unlike the two groups of clay workers, the majority of the workers of other industries had started work in the industry which in 1936 they still regarded as their usual. For all but the youngest of the group this undoubtedly indicates that they had been the more stable or, from another point of view, the less mobile workers in the community.

EMPLOYMENT EXPERIENCE AND SELECTIVE FACTORS

The employment experience of the three groups of workers over the 10 years 1926–35 naturally reflected the historical developments which have been briefly outlined. The unemployment of the workers of industries other than clay increased throughout the years studied. For the usual clay workers and, to a lesser extent, for the sometime clay workers, however, there was some increase in employment up to the onset of the general depression. Thereafter, employment dropped precipitously and unemployment increased. For the sometime clay workers this latter tendency was offset to some extent by the ability of the younger among them to secure work outside the clay-products industry.

In the distribution of the generally declining volume of employment opportunity which the members of all groups faced, evidence can be seen of the nature of the selective process that was operating and of the way in which it affected the character of the 1936 labor supply. As in any similar industrial situation, the large and increasing number of unemployed that was the counterpart of the declining demand for labor permitted the application of more rigid standards of employability than might otherwise have been used. The market was crowded with reserve forces that could, under the existing technical level of production, be called upon to replace at least the less skilled of the workmen. As a result, certain workers who had been laid off when activity declined found themselves at a disadvantage, because of their age, their occupational level, or their lack of skill, in finding reemployment even when some degree of activity was resumed. They lost their usual employment, had difficulty in regaining it, and were unable to secure other employment because of the generally reduced demand for labor. In time, the fact of continued unemployment itself became or was becoming of importance in diminishing their employability. Whatever advantage a previous skill or experience might have had tended to become dissipated through disuse. In general, among all three groups it was the older rather than the younger worker, and the less skilled rather than the more skilled, who tended to be at a disadvantage, although the groups differed somewhat in the degree to which this was true.

The proportion of their employable time during which the workers of industries other than clay were employed diminished steadily from 1926 on and their unemployment increased. Four major categories of workers within this group can be distinguished. There was a stable group of employed, comprising 17 percent of the nonclay workers. These never suffered any separations, but worked for one employer or were self-employed to the end of the period surveyed. In addition, there was a large group, which had grown in size from year to year, of persons who lost their usual employment and remained unemployed. For some in this group unemployment had already become a chronic state; for others it was becoming so. A third group of the nonclay workers went into self-employment upon becoming unemployed, although some of these later gave up this attempt and became unemployed. The self-employment characteristically followed by many of this group can only be regarded as a disguised form of unemployment, an attempt to achieve subsistence and stave off or reduce the necessity of applying for relief. Thus only to a small degree can the condition of those who went into self-employment be said to be better than the fortunes of those who had already become chronically unemployed. A fourth group, consisting largely of workers under 35, shared with the first group the advantage of relatively high employment. For them, however, it derived not from the maintenance of tenure, but from the fact that they more easily found employment in industries other than their usual when they lost their usual employment. Their records are therefore spotted with short periods of unemployment.

In general, it was the older workers who bore the heaviest part of the unemployment of the group. Over the 10-year period the older workers worked less of their employable time than the others. They were less likely to be employed in the fall of 1936 and they had shown appreciably less mobility than those who were younger. In other words, it was the older workers who were making up the group of more or less chronically unemployed or characteristically self-employed, the younger who were maintaining employment with others or, when they were laid off, finding whatever other employment the market provided.

Among the usual clay workers a similar differentiation was evident, though it began only after 1929. Prior to that time employment of these workers increased. Thereafter all but a small proportion of them had some unemployment, the majority being laid off in the early years of the depression. Only a very small proportion (8 percent) escaped any job separations during the 10 years. From comparisons of the volume of employment and unemployment experienced, it would appear that to an

appreciable extent the younger workers again had the advantage. This was certainly true in respect to their finding other employment when laid off. To a large extent, what moves were made into other industries were made by the younger workers. It was somewhat less true with respect to regaining employment in the clay-products industry. There was a tendency toward the employment of the younger workers reflected in the age composition of those employed in the fall of 1936, but this was compensated, to a slight extent at least, by the value that was attached to experience in most of the plants. As a result, a worker who was not too old had almost an average chance of regaining employment in the clay-products industry, but the continued restriction in the amount of clay-producing activity meant that this average chance was not too good. The workers on the higher occupational levels had a better chance than those on the lower, and those resident in the cities, particularly in Carbon where clay-working activity had more definitely picked up, had a better chance than those outside the cities, though the latter resorted to a greater extent to self-employment.

In summation, a process similar to that evident among the workers of industries other than clay was, it appears, at work here. The contraction of clay-working activity produced a differentiation among the usual clay workers in which the oldest were projected into the pool of more or less chronically unemployed. Those slightly younger had better employment records, but their fortunes depended in large part upon the degree of activity in the clay-products plants. The continued low level of activity in the clay-products industry was transforming many of them into chronically unemployed. Only the youngest were able to shift with any degree of ease into other industries and to secure what jobs were coming on the market either in clay or in other industries. Like the similar group of other workers, their records were spotted with unemployment and their employment was of a more or less intermittent character due to the declining demand for labor.

The group of sometime clay workers was characteristically more mobile than the other two, and less attached to a particular industry. This was in part accounted for by the fact that what employment they had was divided between their usual industry and the clay-products industry. But many of them made additional changes. This was, of course, particularly true of the younger section of the group. Like the other two industrial groups studied, this group also contributed their older members to the growing pool of chronically or characteristically unemployed. As a whole, the group appeared in 1936 to have already taken on the

characteristics of a labor reserve which were becoming increasingly evident in the records of the younger of the usual clay workers and workers of other industries.

CONCLUSION

The various types of unemployment problems that existed in Brazil's 1936 labor market are not capable of exact statistical segregation. Yet the measurable differences in the volume and character of unemployment suffered by different workmen within each group, as well as differences in the degree of mobility evidenced, permit the adducing of certain conclusions about the types of unemployment problems that had developed out of the trends in industrial activity and the relation of these to the reemployment prospects of the workmen in the market.

Few workers in the labor market escaped any unemployment, but the character of their unemployment problems differed widely. In the first place, the restricted activity in the labor market created a situation in which a virtually untapped reservoir of unused labor was accumulating. The young persons on the farms and in Brazil and Carbon who were coming of age for work were entering a labor market already overcrowded with workmen of experience and skill. Their inexperience constituted a disadvantage that could only be overcome to the extent that activity expanded in the market or that they could replace other workers. In Brazil the unemployed new workers constituted, in 1936, 6 percent of the employable population and accounted for 18 percent of the community's unemployed.

At the opposite end of the age scale was the growing group of persons who had become or were becoming chronically unemployed. At least two-fifths of the unemployed of all three industrial groups surveyed might be said to belong to this category. By 1936 this proportion of the unemployed in all three groups had been unemployed for more than 5 years.

The workers of industries other than clay had been gradually falling into chronic unemployment throughout the 10-year period or even prior to it, while in the usual and sometime clay groups long periods of unemployment that were becoming chronic for some began with the contraction of clay-working activity in the early thirties. Catapulted into unemployment, they neither succeeded in finding other employment nor were they recalled to the plants of their previous attachment. Since, in general, the workers in this group of long-term unemployed were the older ones in the labor market, the possibilities of their reemployment were limited both because of their age and the long duration of their unemployment.

Between these two groups of unemployed lie two others, one an immobile group of workers with attachment to but one industry, even one plant. This group is composed primarily of workers from the group of usual clay workers. They were not young enough, in the face of the heavy competition in the market, to be able to move readily into another industry when the clay demand slackened. Nor had they yet reached the age where they were not called back to clay employment when conditions permitted. Their records, however, show fairly heavy unemployment, and with advancing age their susceptibility to fluctuations in the demand made by this one industry upon their employable time enhances the possibility that in a crowded labor market they will slip into the category of the permanently unemployed.

The fourth aspect of the unemployment problem of Brazil is reflected principally in the records of the sometime clay workers, though the younger of the usual clay and other industrial workers who lost their employment also fell into this class. They are the group whose employment is not dependent upon the demand of one industry, but who are a fluctuating reserve for many industries. What jobs come on the labor market go largely to them, but with declining demand for labor generally the possibilities of their securing such employment have naturally been restricted. Furthermore, many of the jobs that do appear are not characterized by any stability or security. With the continuation of depression conditions many of them are perforce failing to make any established connection with an industry, and their reserve character is thus being perpetuated. Some are passing beyond the age where their youthfulness permitted the mobility that heretofore proved an advantage. Like the other groups, therefore, this one has been adding some of its number to the ranks of the chronically unemployed.

The trend in this labor market has thus been toward increasing unemployment, affecting most of the employable population and, for a considerable section, tending to become a more or less permanent condition. In addition, a marked tendency toward self-employment as an alternative to unemployment is notable, particularly in farming, small mines, and trucking (largely associated with the mining activities). There is little reason to believe that these can be satisfactory means of gaining a livelihood since consideration of farming conditions has shown a very low average farm income for Clay County, and small-scale mining cannot usually be more than supplementary to other sources of income. Under these conditions, much of the increasing self-employment in the midst of declining natural resources and industrial activity must be considered

another aspect of the community's unemployment problem rather than a solution of it.

What, then, are the indicated prospects of recovery and reemployment and how will they affect the labor supply available? All indications are that agriculture, mining, and industry other than clay will continue to decline or to remain stagnant. Unless new industries should come in to take advantage of the available supply of labor, only expanded activity in the clay-products industry can retard the downward course of employment and the mounting relief rolls. But even when it was near its peak, in 1930, the clay-products industry supplied less than one-fourth of the usual jobs of those having gainful occupations outside of agriculture in Clay County. Thus a return of this industry to fuller activity would affect but one section of the labor market and would probably not even touch the growing group of chronically unemployed.

APPENDIXES

Note.- Tables A-1, A-2, A-3, and A-4 are compiled from the household schedules (NRP Form #1000). The others are compiled from the work-history schedules (NRP Form #20).

Table A-1.- AGE, SEX, AND EMPLOYMENT STATUS OF PERSONS IN BRAZIL AND CARBON HOUSEHOLDS, FALL OF 1936

Residence and age	Total			Not in labor market			In labor market														
							Total			Employed									Unemployed		
										Total			Full time			Part time					
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total[a]	Male	Female
Brazil																					
Total	2,931	1,455	1,476	1,769	543	1,226	1,162	912	250	778	595	183	698	550	148	80	45	35	384	317	67
Under 16	753	384	369	753	384	369	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 or over	2,178	1,071	1,107	1,016	159	857	1,162	912	250	778	595	183	698	550	148	80	45	35	384	317	67
16-19	209	119	90	128	59	69	81	60	21	38	27	11	31	23	8	7	4	3	43	33	10
20-24	216	106	110	79	9	70	137	97	40	86	57	29	76	48	28	10	9	1	51	40	11
25-34	438	218	220	162	6	156	276	212	64	203	150	53	188	144	44	15	6	9	73	62	11
35-44	386	190	196	157	10	147	229	180	49	164	127	37	149	118	31	15	9	6	65	53	12
45-54	351	176	175	153	7	146	198	169	29	130	111	19	124	109	15	6	2	4	68	58	10
55-64	304	146	158	144	15	129	160	131	29	100	79	21	88	73	15	12	6	6	60	52	8
65 or over	257	112	145	188	53	135	69	59	10	47	40	7	33	31	2	14	9	5	22	19	3
Not reported	17	4	13	5	0	5	12	4	8	10	4	6	9	4	5	1	0	1	2	0	2
Carbon																					
Total	516	262	254	323	87	236	193	175	18	164	151	13	155	143	12	9	8	1	29	24	5
Under 16	151	75	76	151	75	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 or over	365	187	178	172	12	160	193	175	18	164	151	13	155	143	12	9	8	1	29	24	5
16-19	35	18	17	17	3	14	18	15	3	11	11	0	8	8	0	3	3	0	7	4	3
20-24	58	30	28	25	1	24	33	29	4	27	23	4	27	23	4	0	0	0	6	6	0
25-34	63	34	29	26	0	26	37	34	3	34	32	2	32	30	2	2	2	0	3	2	1
35-44	69	34	35	32	1	31	37	33	4	34	30	4	33	29	4	1	1	0	3	3	0
45-54	67	36	31	30	1	29	37	35	2	33	31	2	33	31	2	0	0	0	4	4	0
55-64	33	20	13	12	0	12	21	20	1	19	19	0	18	18	0	1	1	0	2	1	1
65 or over	38	14	24	28	5	23	10	9	1	6	5	1	4	4	0	2	1	1	4	4	0
Not reported	2	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[a] Includes 224 persons in Brazil and 9 in Carbon who were on emergency work.

Table A-2.- HOUSEHOLDS IN BRAZIL AND CARBON, BY USUAL INDUSTRY OF MALE MEMBERS, FALL OF 1936

Usual industry of one or more males	Brazil		Carbon	
	Number	Percent	Number	Percent
Total households[a]	777	100.0	135	100.0
Clay	153	19.7	53	39.3
Clay and coal mining	9	1.2	5	3.7
Clay and agriculture	4	0.5	1	0.7
Coal mining	117	15.0	33	24.5
Coal mining and agriculture	3	0.4	1	0.7
Agriculture	25	3.2	9	6.7
Other	466	60.0	33	24.4

[a]Excludes 88 households in Brazil and 16 in Carbon which had no employable members.

Table A-3.- USUAL INDUSTRY AND EMPLOYMENT STATUS OF EMPLOYABLE PERSONS IN BRAZIL AND CARBON HOUSEHOLDS, FALL OF 1936

Residence and usual industry	Total	Employed			Unemployed		
		Total	Full time	Part time	Total	Seeking work	Emergency work
Brazil							
Total	1,162	778	698	80	384	160	224
Clay	166	90	80	10	76	20	56
Manufacturing other than clay	134	97	85	12	37	18	19
Building and construction	38	23	20	3	15	7	8
Trade	191	156	144	12	35	17	18
Coal mining	120	68	65	3	52	17	35
Agriculture	23	11	8	3	12	3	9
Other[a]	315	257	234	23	58	28	30
Self-employment	96	74	60	14	22	4	18
Not reported	8	2	2	0	6	1	5
New workers[b]	71	-	-	-	71	45	26
Carbon							
Total	193	164	155	9	29	20	9
Clay	66	64	64	0	2	1	1
Manufacturing other than clay	8	4	4	0	4	1	3
Building and construction	1	1	1	0	0	0	0
Trade	13	12	10	2	1	1	0
Coal mining	36	33	28	5	3	3	0
Agriculture	12	9	8	1	3	2	1
Other[a]	38	34	33	1	4	2	2
Self-employment	8	7	7	0	1	1	0
New workers[b]	11	-	-	-	11	9	2

[a]Approximately one-fourth in local, State, and Federal governments; one-half in professional and personal services; and one-fourth in insurance, public utilities, and miscellaneous industries.

[b]Not previously employed.

Table A-4.- PLACE OF BIRTH AND AGE[a]

Place of birth	Total	Under 35	35-54	55 or over
	Usual clay workers			
Total[b]	678	201	328	149
Clay and contiguous counties	499	173	240	86
Brazil	152	65	70	17
Carbon	33	21	12	0
Rest of Clay County	197	56	99	42
Contiguous counties	117	31	59	27
Rest of Indiana	52	10	21	21
Rest of United States	116	18	61	37
Foreign	11	0	6	5
	Sometime clay workers			
Total	340	103	177	60
Clay and contiguous counties	266	88	142	36
Brazil	88	41	37	10
Carbon	7	2	5	0
Rest of Clay County	127	32	76	19
Contiguous counties	44	13	24	7
Rest of Indiana	21	3	13	5
Rest of United States	41	12	18	11
Foreign	12	0	4	8
	Other industrial workers			
Total	279	98	97	84
Clay and contiguous counties	193	77	68	48
Brazil	71	35	26	10
Carbon	10	8	1	1
Rest of Clay County	57	19	21	17
Contiguous counties	55	15	20	20
Rest of Indiana	26	5	10	11
Rest of United States	48	16	19	13
Foreign	12	0	0	12

[a]Includes 52 Negroes (35 usual clay workers, 12 sometime clay workers, and 5 other industrial workers).

[b]Excludes one person who did not report age and one person who did not report place of birth.

Table A-5.- EMPLOYMENT STATUS AUGUST 1, 1936, BY AGE

Relation to clay and age	Total	Not in labor market	In labor market										
			Total	Employed									Unemployed
				Total	Clay	Manufacturing other than clay	Building and construction	Trade	Coal mining	Agriculture	Other	Self-employment	
Usual clay workers[a]	679	26	653	424	334	7	5	12	12	4	24	26	229
16-19	9	0	9	6	6	0	0	0	0	0	0	0	3
20-24	32	0	32	27	26	0	0	0	0	0	1	0	5
25-34	160	1	159	110	83	3	0	9	1	4	7	3	49
35-44	179	1	178	119	94	1	2	2	5	0	7	8	59
45-54	150	6	144	92	81	0	2	0	4	0	3	2	52
55-64	102	0	102	55	36	3	1	1	2	0	5	7	47
65 or over	47	18	29	15	8	0	0	0	0	0	1	6	14
Sometime clay workers	340	10	330	201	47	26	9	17	35	1	28	38	129
20-24	15	0	15	7	3	2	0	0	0	0	2	0	8
25-34	88	0	88	66	17	13	1	11	7	0	7	10	22
35-44	96	1	95	54	13	3	5	3	13	0	6	11	41
45-54	81	2	79	48	10	6	2	2	11	1	7	9	31
55-64	46	1	45	21	2	2	1	0	4	0	5	7	24
65 or over	14	6	8	5	2	0	0	1	0	0	1	1	3
Other industrial workers	279	23	256	170	0	42	7	7	51	1	26	36	86
16-19	15	0	15	8	0	1	2	0	2	0	3	0	7
20-24	25	0	25	22	0	6	1	2	10	0	2	1	3
25-34	58	0	58	46	0	15	0	2	17	0	7	5	12
35-44	52	3	49	32	0	11	3	2	8	0	3	5	17
45-54	45	1	44	28	0	7	1	0	7	0	3	10	16
55-64	48	5	43	25	0	2	0	1	4	1	6	11	18
65 or over	36	14	22	9	0	0	0	0	3	0	2	4	13

[a]Excludes one person who did not report age.

Table A-6.- USUAL INDUSTRY AND EMPLOYMENT STATUS AUGUST 1, 1936, BY AGE OF OTHER INDUSTRIAL WORKERS[a]

Age	Total		Coal mining								Other	
			Total		Employed by others		Self-employed		Unemployed			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	256	100.0	104	100.0	57	100.0	9	100.0	38	100.0	152	100.0
16-19	15	5.8	6	5.8	4	7.0	0	0	2	5.3	9	5.9
20-24	25	9.8	11	10.6	10	17.5	0	0	1	2.6	14	9.2
25-34	58	22.7	16	15.4	13	22.8	1	11.1	2	5.3	42	27.6
35-44	49	19.1	16	15.4	9	15.8	0	0	7	18.4	33	21.7
45-54	44	17.2	19	18.3	7	12.3	3	33.3	9	23.7	25	16.5
55-64	43	16.8	22	21.1	9	15.8	5	55.6	8	21.0	21	13.8
65 or over	22	8.6	14	13.4	5	8.8	0	0	9	23.7	8	5.3

[a]Excludes 23 persons not in the labor market on August 1, 1936.

Table A-7.- LOCATION OF FIRST JOB AND PLACE OF BIRTH

Relation to clay and place of birth	Location of first job								
	Total	Clay and contiguous counties					Rest of Indiana	Rest of United States	Foreign
		Total	Brazil	Carbon	Rest of Clay County	Contiguous counties			
Usual clay workers[a]	660	546	258	41	174	73	35	74	5
Clay and contiguous counties	488	468	213	36	154	65	10	10	0
Brazil	149	141	106	2	29	4	3	5	0
Carbon	33	31	2	18	9	2	2	0	0
Rest of Clay County	193	190	76	6	92	16	1	2	0
Contiguous counties	113	106	29	10	24	43	4	3	0

Rest of Indiana	52	26	13	2	8	3	22	4	0
Rest of United States	109	47	32	3	7	5	3	59	0
Foreign	11	5	0	0	5	0	0	1	5
Sometime clay workers[a]	333	291	99	8	143	41	14	25	3
Clay and contiguous counties	262	255	89	6	128	32	3	4	0
Brazil	88	85	42	0	34	9	1	2	0
Carbon	7	6	1	2	3	0	0	1	0
Rest of Clay County	124	122	33	3	77	9	1	1	0
Contiguous counties	43	42	13	1	14	14	1	0	0
Rest of Indiana	21	14	3	0	4	7	6	1	0
Rest of United States	40	15	7	2	5	1	5	20	0
Foreign	10	7	0	0	6	1	0	0	3
Other industrial workers[a]	274	217	88	8	74	47	27	26	4
Clay and contiguous counties	192	179	75	6	59	39	10	3	0
Brazil	70	66	44	0	17	5	3	1	0
Carbon	10	10	2	2	5	1	0	0	0
Rest of Clay County	57	53	18	3	25	7	3	1	0
Contiguous counties	55	50	11	1	12	26	4	1	0
Rest of Indiana	24	10	3	1	2	4	12	2	0
Rest of United States	46	20	10	0	6	4	5	21	0
Foreign	12	8	0	1	7	0	0	0	4

[a]Excludes 1 usual clay worker who did not report place of birth; and 19 usual clay workers, 7 sometime clay workers, and 5 other industrial workers who did not report location of first job.

Table A-8.- INDUSTRY OF FIRST JOB, BY USUAL INDUSTRY

Relation to clay and usual industry	Total	Industry of first job							
		Clay	Manufacturing other than clay	Building and construction	Trade	Coal mining	Agriculture	Other	Self-employment
Usual clay workers[a]	667	203	92	21	45	122	116	63	5
Sometime clay workers[a]	337	46	49	10	17	135	35	39	6
Manufacturing other than clay	70	12	30	3	4	12	5	3	1
Building and construction	11	0	2	5	1	1	2	0	0
Trade	23	6	6	1	2	3	1	4	0
Coal mining	143	14	6	1	2	101	8	11	0
Agriculture	27	4	0	0	2	7	12	1	1
Other	35	5	3	0	6	5	3	13	0
Self-employment	28	5	2	0	0	6	4	7	4
Other industrial workers[a]	273	14	73	11	24	83	34	28	6
Manufacturing other than clay	74	2	50	0	4	6	6	6	0
Building and construction	26	2	7	7	3	1	2	3	1
Trade	8	0	2	0	4	0	2	0	0
Coal mining	113	6	9	2	10	65	13	8	0
Agriculture	4	0	0	0	0	0	4	0	0
Other	17	1	1	0	1	4	1	9	0
Self-employment	31	3	4	2	2	7	6	2	5

[a]Excludes 13 usual clay workers, 3 sometime clay workers, and 6 other industrial workers who did not report industry of first job.

Table A-9.- NUMBER OF MONTHS IN COAL MINING AND AGRICULTURE, 1926-35, AND RESIDENCE[a]

Industry and number of months	Usual clay workers[b]				Sometime clay workers[b]				Other industrial workers[b]	
	Brazil	Carbon	Knights-ville and Harmony	Rural routes	Brazil	Carbon	Knights-ville and Harmony	Rural routes	Brazil	Carbon
Coal mining										
Persons reporting	397	50	33	87	192	15	22	50	178	18
None	350	33	23	65	119	7	8	29	103	7
1-12	22	7	4	13	26	3	5	9	12	2
13-24	10	7	0	7	12	2	3	4	8	2
25-36	10	3	4	1	7	0	2	3	7	2
37-48	5	0	1	0	7	1	3	3	5	1
49-60	0	0	0	1	7	1	1	1	8	3
61 or over	0	0	1	0	14	1	0	1	35	1
Mean number of months of persons reporting 1 or more months[c]	18.1	15.8	25.8	13.7	34.2	30.6	23.7	22.6	62.5	39.3
Agriculture										
Persons reporting	397	50	33	87	192	15	22	50	178	18
None	378	49	29	54	179	13	20	26	170	13
1-12	10	0	1	9	4	2	1	4	3	1
13-24	4	0	1	4	5	0	0	2	1	3
25-36	3	0	1	3	1	0	0	1	2	1
37-48	1	0	0	3	1	0	0	2	0	0
49-60	0	0	0	7	0	0	1	2	1	0
61 or over	1	1	1	7	2	0	0	13	1	0
Mean number of months of persons reporting 1 or more months[c]	18.0	/	/	38.9	25.0	/	/	62.5	29.1	18.6

[a] Excludes 79 usual clay workers, 46 sometime clay workers, and 56 other industrial workers who entered the labor market after January 1926; and 26 usual clay workers, 10 sometime clay workers, and 23 other industrial workers who were not in the labor market on August 1, 1936.

[b] Excludes eight usual clay workers, five sometime clay workers, and four other industrial workers who did not report number of months in coal mining and agriculture.

[c] Computed from more detailed break-down.

/ Base too small for calculation.

Table A-10.- OCCUPATIONAL GROUP OF CLAY WORKERS, BY RESIDENCE

Residence and occupational group	Usual clay workers		Sometime clay workers	
	Number	Percent	Number	Percent
Total	680	100.0	340	100.0
Administrative and clerical	38	5.6	6	1.8
Skilled and maintenance	84	12.3	44	12.9
Operatives	131	19.3	54	15.9
Laborers	427	62.8	236	69.4
Brazil	477	100.0	240	100.0
Administrative and clerical	34	7.1	5	2.1
Skilled and maintenance	56	11.7	31	12.9
Operatives	101	21.2	40	16.7
Laborers	286	60.0	164	68.3
Carbon	66	100.0	16	100.0
Administrative and clerical	1	1.5	0	0
Skilled and maintenance	9	13.6	3	18.8
Operatives	6	9.1	3	18.8
Laborers	50	75.8	10	62.4
Knightsville and Harmony	40	100.0	23	100.0
Administrative and clerical	0	0	0	0
Skilled and maintenance	7	18.0	4	17.4
Operatives	8	20.0	4	17.4
Laborers	25	62.0	15	65.2
Rural routes	97	100.0	61	100.0
Administrative and clerical	3	3.1	1	1.6
Skilled and maintenance	12	12.4	6	9.8
Operatives	16	16.5	7	11.5
Laborers	66	68.0	47	77.1

Table A-11.- OCCUPATIONAL GROUP OF CLAY WORKERS, BY AGE

Relation to clay and age	Total	Administrative and clerical	Skilled and maintenance	Operatives	Laborers
Usual clay workers[a]	679	37	84	131	427
16-24	41	1	0	6	34
25-34	160	8	5	41	106
35-44	179	13	16	45	105
45-54	150	9	28	22	91
55-64	102	4	24	13	61
65 or over	47	2	11	4	30
Median age	42.7	42.3	52.5	39.1	42.0
Sometime clay workers	340	6	44	54	236
16-24	15	1	1	0	13
25-34	88	2	5	16	65
35-44	96	1	17	19	59
45-54	81	2	12	13	54
55-64	46	0	5	3	38
65 or over	14	0	4	3	7
Median age	42.0	35.0	44.4	40.8	41.8

[a]Excludes one administrative and clerical worker who did not report age.

Table A-12.- DURATION OF UNEMPLOYMENT SINCE LAST JOB, BY AGE OF WORKERS UNEMPLOYED ON AUGUST 1, 1936[a]

Relation to clay and age	Total	Months of unemployment since last job									
		1-6	7-12	13-24	25-36	37-48	49-60	61-72	73-84	85-96	97 or over
Usual clay workers[b]	210	15	12	18	22	26	28	38	37	10	4
Under 35	39	5	3	2	4	8	5	8	2	1	1
35-54	110	8	8	11	14	13	14	21	16	5	0
55 or over	61	2	1	5	4	5	9	9	19	4	3
Sometime clay workers	114	17	10	8	11	10	16	13	19	8	2
Under 35	15	2	3	1	2	2	0	1	4	0	0
35-54	72	12	7	3	8	5	11	6	12	6	2
55 or over	27	3	0	4	1	3	5	6	3	2	0
Other industrial workers[b]	74	7	10	9	11	8	9	8	2	1	9
Under 35	10	2	1	2	1	2	1	0	0	0	1
35-54	33	4	5	4	7	2	4	2	1	1	3
55 or over	31	1	4	3	3	4	4	6	1	0	5

[a] Excludes 18 usual clay workers, 15 sometime clay workers, and 11 other industrial workers who entered the labor market after January 1926.

[b] Excludes one usual clay worker and one other industrial worker who did not report number of months of unemployment since last job.

Table A-13.- EMPLOYMENT STATUS AUGUST 1, 1936, OF USUAL CLAY WORKERS, BY RESIDENCE AND AGE

Residence and age	Total	Not in labor market	In labor market									
			Total	Employed							Self-employed	Unemployed
				Total	Full time			Part time				
					Total	Clay	Other	Total	Clay	Other		
Total[a]	679	26	653	424	361	304	57	37	30	7	26	229
16-24	41	0	41	33	29	28	1	4	4	0	0	8
25-34	160	1	159	110	101	80	21	6	3	3	3	49
35-44	179	1	178	119	100	84	16	11	10	1	8	59
45-54	150	6	144	92	81	73	8	9	8	1	2	52
55 or over	149	18	131	70	50	39	11	7	5	2	13	61
Brazil[a]	476	23	453	272	234	190	44	27	22	5	11	181
16-24	23	0	23	18	15	14	1	3	3	0	0	5
25-34	108	1	107	69	65	50	15	4	1	3	0	38
35-44	117	0	117	75	60	47	13	9	9	0	6	42
45-54	112	6	106	62	56	50	6	6	6	0	0	44
55 or over	116	16	100	48	38	29	9	5	3	2	5	52
Carbon	66	0	66	60	58	56	2	0	0	0	2	6
16-24	12	0	12	9	9	9	0	0	0	0	0	3
25-34	15	0	15	15	14	13	1	0	0	0	1	0
35-44	20	0	20	18	18	18	0	0	0	0	0	2
45-54	15	0	15	15	14	13	1	0	0	0	1	0
55 or over	4	0	4	3	3	3	0	0	0	0	0	1
Knightsville and Harmony	40	2	38	17	16	14	2	0	0	0	1	21
16-24	2	0	2	2	2	2	0	0	0	0	0	0
25-34	12	0	12	6	6	5	1	0	0	0	0	6
35-44	16	1	15	7	6	5	1	0	0	0	1	8
45-54	4	0	4	1	1	1	0	0	0	0	0	3
55 or over	6	1	5	1	1	1	0	0	0	0	0	4

Rural routes	97	1	96	75	53	44	9	10	8	2	12	21
16-24	4	0	4	4	3	3	0	1	1	0	0	0
25-34	25	0	25	20	16	12	4	2	2	0	2	5
35-44	26	0	26	19	16	14	2	2	1	1	1	7
45-54	19	0	19	14	10	9	1	3	2	1	1	5
55 or over	23	1	22	18	8	6	2	2	2	0	8	4

[a]Excludes one person who did not report age.

Table A-14.- EMPLOYMENT STATUS AUGUST 1, 1936, OF SOMETIME CLAY WORKERS, BY RESIDENCE AND AGE

Residence and age	Total	Not in labor market	In labor market								
			Total	Employed							Unemployed
				Total	Full time			Part time			
					Total	Clay	Other	Total	Clay	Other	
Total	340	10	330	201	139	40	99	24	7	17	38	129
20-24	15	0	15	7	6	2	4	1	1	0	0	8
25-34	88	0	88	66	51	14	37	5	3	2	10	22
35-44	96	1	95	54	36	12	24	7	1	6	11	41
45-54	81	2	79	48	32	9	23	7	1	6	9	31
55 or over	60	7	53	26	14	3	11	4	1	3	8	27
Brazil	240	7	233	135	104	25	79	15	5	10	16	98
20-24	14	0	14	7	6	2	4	1	1	0	0	7
25-34	68	0	68	49	42	10	32	4	2	2	3	19
35-44	64	1	63	34	23	8	15	5	1	4	6	29
45-54	51	1	50	27	22	4	18	2	0	2	3	23
55 or over	43	5	38	18	11	1	10	3	1	2	4	20
Carbon	16	0	16	12	10	7	3	1	0	1	1	4
Knightsville and Harmony	23	0	23	12	9	3	6	0	0	0	3	11
Rural routes	61	3	58	42	16	5	11	8	2	6	18	16

Table A-15.- EMPLOYMENT STATUS AUGUST 1, 1936, OF OTHER INDUSTRIAL WORKERS, BY RESIDENCE AND AGE

Residence and age	Total	Not in labor market	In labor market					
			Total	Employed				Unemployed
				Total	Full time	Part time	Self-employed	
Total	279	23	256	170	112	22	36	86
16-24	40	0	40	30	25	4	1	10
25-34	58	0	58	46	37	4	5	12
35-44	52	3	49	32	21	6	5	17
45-54	45	1	44	28	18	0	10	16
55 or over	84	19	65	34	11	8	15	31
Brazil	241	20	221	144	99	15	30	77
16-24	27	0	27	20	18	2	0	7
25-34	51	0	51	40	34	2	4	11
35-44	50	3	47	31	21	6	4	16
45-54	41	1	40	26	16	0	10	14
55 or over	72	16	56	27	10	5	12	29
Carbon	38	3	35	26	13	7	6	9
16-24	13	0	13	10	7	2	1	3
25-34	7	0	7	6	3	2	1	1
35-44	2	0	2	1	0	0	1	1
45-54	4	0	4	2	2	0	0	2
55 or over	12	3	9	7	1	3	3	2

Table A-16.- YEAR OF OBTAINING LAST JOB OF WORKERS EMPLOYED BY OTHERS ON AUGUST 1, 1936

Year of obtaining job	Usual clay workers		Sometime clay workers		Other industrial workers	
	Number	Percent	Number	Percent	Number	Percent
Total	395[a]	100.0	163	100.0	134	100.0
1936	200	50.6	66	40.5	46	34.3
1935	67	17.0	27	16.6	21	15.7
1934	33	8.4	20	12.3	13	9.7
1933	22	5.6	14	8.6	8	6.0
1932	6	1.5	11	6.8	6	4.5
1931	7	1.8	8	4.9	4	3.0
1930	7	1.8	9	5.5	4	3.0
1929	0	0	3	1.8	7	5.2
1928	6	1.5	3	1.8	5	3.7
1927	2	0.5	0	0	3	2.2
1926	3	0.7	1	0.6	2	1.5
Before 1926	42	10.6	1	0.6	15	11.2

[a]Excludes three persons who did not report year of obtaining last job.

Table A-17.- OCCUPATIONAL GROUP AND EMPLOYMENT STATUS AUGUST 1, 1936, OF CLAY WORKERS

Relation to clay and occupational group	Total	Not in labor market	In labor market					
			Total	Employed				Unemployed
				Total	Clay	Other	Self-employed	
Usual clay workers	680	26	654	425	334	65	26	229
Administrative and clerical	38	1	37	31	22	5	4	6
Skilled and maintenance	84	6	78	59	42	13	4	19
Operatives	131	2	129	84	63	16	5	45
Laborers	427	17	410	251	207	31	13	159
Sometime clay workers	340	10	330	201	47	116	38	129
Administrative and clerical	6	0	6	6	0	5	1	0
Skilled and maintenance	44	1	43	31	6	18	7	12
Operatives	54	3	51	27	6	15	6	24
Laborers	236	6	230	137	35	78	24	93

Table A-18.- DISTRIBUTION OF MAN-MONTHS OF USUAL CLAY WORKERS, 1926-35[a]

Year	Total	Not in labor market	In labor market						
			Total	Employment					Unemployment
				Clay		Other		Self-employment	
				Full time	Part time	Full time	Part time		
1926-35, total	80,880.0	5,358.5	75,521.5	36,673.0	5,337.0	5,537.0	1,614.5	3,176.0	23,184.0
1926-30, total	40,440.0	3,257.5	37,182.5	27,901.0	1,766.0	2,873.0	506.0	716.5	3,420.0
1926	8,088.0	861.0	7,227.0	5,659.0	190.0	842.0	107.0	138.5	290.5
1927	8,088.0	704.0	7,384.0	5,789.5	224.0	775.0	97.5	123.5	374.5
1928	8,088.0	601.0	7,487.0	6,032.5	257.5	548.5	96.0	120.0	432.5
1929	8,088.0	565.0	7,523.0	5,916.0	406.5	359.5	77.0	121.0	643.0
1930	8,088.0	526.5	7,561.5	4,504.0	688.0	348.0	128.5	213.5	1,679.5
1931-35, total	40,440.0	2,101.0	38,339.0	8,772.0	3,571.0	2,664.0	1,108.5	2,459.5	19,764.0
1931	8,088.0	484.0	7,604.0	3,025.0	800.0	343.0	163.0	384.0	2,889.0
1932	8,088.0	445.5	7,642.5	1,702.0	825.0	376.0	235.0	533.0	3,971.5
1933	8,088.0	433.0	7,655.0	1,159.0	722.0	483.5	269.5	549.5	4,471.5
1934	8,088.0	382.0	7,706.0	1,307.0	709.0	667.0	226.5	494.5	4,302.0
1935	8,088.0	356.5	7,731.5	1,579.0	515.0	794.5	214.5	498.5	4,130.0

[a]Excludes six persons who did not report information on man-months in detail.

Table A-19.- DISTRIBUTION OF MAN-MONTHS OF SOMETIME CLAY WORKERS, 1926-35[a]

Year	Total	Not in labor market	In labor market						
			Total	Employment					Unemployment
				Clay		Other		Self-employment	
				Full time	Part time	Full time	Part time		
1926-35, total	40,680.0	2,462.0	38,218.0	9,707.5	1,190.5	10,139.5	1,984.0	4,610.0	10,586.5
1926-30, total	20,340.0	1,629.0	18,711.0	8,255.0	563.5	5,155.0	729.0	1,719.5	2,289.0
1926	4,068.0	565.5	3,502.5	1,386.5	58.0	1,304.5	157.0	360.5	236.0
1927	4,068.0	430.0	3,638.0	1,576.5	72.0	1,249.0	128.0	364.0	248.5
1928	4,068.0	292.0	3,776.0	1,851.5	78.5	1,092.5	122.5	346.5	284.5
1929	4,068.0	186.0	3,882.0	2,014.5	148.5	775.5	129.0	292.0	522.5
1930	4,068.0	155.5	3,912.5	1,426.0	206.5	733.5	192.5	356.5	997.5
1931-35, total	20,340.0	833.0	19,507.0	1,452.5	627.0	4,984.5	1,255.0	2,890.5	8,297.5
1931	4,068.0	171.0	3,897.0	724.0	204.0	793.0	238.5	496.0	1,441.5
1932	4,068.0	163.5	3,904.5	331.5	171.0	846.0	247.0	602.0	1,707.0
1933	4,068.0	147.5	3,920.5	144.0	112.0	980.5	258.5	609.0	1,816.5
1934	4,068.0	168.0	3,900.0	135.0	69.5	1,115.0	258.0	611.5	1,711.0
1935	4,068.0	183.0	3,885.0	118.0	70.5	1,250.0	253.0	572.0	1,821.5

[a]Excludes one person who did not report information on man-months in detail.

Table A-20.- DISTRIBUTION OF MAN-MONTHS OF OTHER INDUSTRIAL WORKERS, 1926-35[a]

Year	Total	Not in labor market	In labor market				
			Total	Employment			Unemployment
				Other than clay		Self-employment	
				Full time	Part time		
1926-35, total	33,120.0	5,936.5	27,183.5	13,535.0	2,218.0	5,037.0	6,393.5
1926-30, total	16,560.0	3,456.5	13,103.5	7,712.5	925.5	2,561.0	1,904.5
1926	3,312.0	731.0	2,581.0	1,659.5	170.0	534.0	217.5
1927	3,312.0	726.5	2,585.5	1,560.0	187.5	547.5	290.5
1928	3,312.0	703.5	2,608.5	1,524.5	182.5	510.0	391.5
1929	3,312.0	685.0	2,627.0	1,531.0	155.5	493.5	447.0
1930	3,312.0	610.5	2,701.5	1,437.5	230.0	476.0	558.0
1931-35, total	16,560.0	2,480.0	14,080.0	5,822.5	1,292.5	2,476.0	4,489.0
1931	3,312.0	598.5	2,713.5	1,248.0	283.5	499.0	683.0
1932	3,312.0	577.0	2,735.0	1,126.0	286.0	509.0	814.0
1933	3,312.0	512.5	2,799.5	1,092.5	275.5	513.0	918.5
1934	3,312.0	430.5	2,881.5	1,169.5	225.5	484.0	1,002.5
1935	3,312.0	361.5	2,950.5	1,186.5	222.0	471.0	1,071.0

[a]Excludes three persons who did not report information on man-months in detail.

Table A-21.- EMPLOYMENT STATUS AUGUST 1, 1936, AND NUMBER OF MONTHS OF EMPLOYMENT BY OTHERS, 1926-35[a]

Number of months of employment by others	Usual clay workers				Sometime clay workers				Other industrial workers			
	Total[b]	Employed by others	Self-employed	Unemployed	Total[b]	Employed by others	Self-employed	Unemployed	Total[b]	Employed by others	Self-employed	Unemployed
Persons reporting	567	334	24	209	279	131	36	112	196	91	33	72
None	3	1	2	0	2	1	1	0	30	0	16	14
1 or more	564	333	22	209	277	130	35	112	166	91	17	58
1- 12	3	0	1	2	9	1	5	3	9	2	1	6
13- 24	9	1	2	6	10	2	4	4	7	2	2	3
25- 36	11	2	1	8	16	2	3	11	8	4	2	2
37- 48	49	15	3	31	29	4	4	21	13	3	1	9
49- 60	94	34	5	55	41	11	7	23	13	1	6	6
61- 72	105	57	7	41	45	16	6	23	12	6	0	6
73- 84	79	44	2	33	32	19	3	10	9	1	1	7
85- 96	53	41	0	12	21	11	1	9	19	6	3	10
97-108	35	24	0	11	15	13	0	2	14	8	1	5
109-120	126	115	1	10	59	51	2	6	62	58	0	4
Median number of months of persons reporting 1 or more months	74.2	88.5	58.1	61.2	69.4	95.4	51.1	57.4	92.1	111.0	53.5	66.5
Mean number of months of persons reporting 1 or more months	77.5	87.5	55.1	63.9	71.8	89.1	48.7	58.9	81.0	96.9	54.5	63.6

[a] See table A-9, ftn. a.

[b] Excludes eight usual clay workers, five sometime clay workers, and four other industrial workers who did not report number of months of employment by others.

Table A-22.- EMPLOYMENT STATUS AUGUST 1, 1936, AND NUMBER OF MONTHS OF SELF-EMPLOYMENT, 1926-35[a]

Number of months of self-employment	Usual clay workers				Sometime clay workers				Other industrial workers			
	Total[b]	Employed by others	Self-employed	Unemployed	Total[b]	Employed by others	Self-employed	Unemployed	Total[b]	Employed by others	Self-employed	Unemployed
Persons reporting	567	334	24	209	279	131	36	112	196	91	33	72
None	474	294	0	180	182	96	0	86	134	81	1	52
1 or more	93	40	24	29	97	35	36	26	62	10	32	20
1-12	24	10	2	12	29	16	4	9	5	0	4	1
13-24	20	12	3	5	10	7	1	2	4	2	0	2
25-36	15	8	2	5	14	4	3	7	6	3	2	1
37-48	11	5	2	4	9	2	3	4	4	2	1	1
49-60	8	3	5	0	7	1	6	0	4	1	1	2
61-72	7	1	3	3	8	1	4	3	5	0	3	2
73-84	4	1	3	0	5	1	4	0	5	1	1	3
85-96	0	0	0	0	3	1	2	0	4	0	3	1
97-108	2	0	2	0	6	1	5	0	4	1	0	3
109-120	2	0	2	0	6	1	4	1	21	0	17	4
Median number of months of persons reporting 1 or more months	26.5	22.5	55.7	18.5	32.6	15.1	63.5	27.9	79.7	36.5	109.2	76.5
Mean number of months of persons reporting 1 or more months	33.4	26.4	56.5	24.0	41.9	27.2	64.5	30.6	73.8	44.9	83.7	72.5

[a] See table A-9, ftn. a.

[b] Excludes eight usual clay workers, five sometime clay workers, and four other industrial workers who did not report number of months of self-employment.

Table A-23.- EMPLOYMENT STATUS AUGUST 1, 1936, AND NUMBER OF MONTHS OF UNEMPLOYMENT, 1926-35[a]

Number of months of unemployment	Usual clay workers				Sometime clay workers				Other industrial workers			
	Total[b]	Employed by others	Self-employed	Unemployed	Total[b]	Employed by others	Self-employed	Unemployed	Total[b]	Employed by others	Self-employed	Unemployed
Persons reporting	567	334	24	209	279	131	36	112	196	91	33	72
None	106	90	13	3	65	38	25	2	76	50	23	3
1 or more	461	244	11	206	214	93	11	110	120	41	10	69
1- 12	57	44	2	11	42	29	3	10	25	13	4	8
13- 24	43	25	3	15	21	13	2	6	19	9	2	8
25- 36	63	44	4	15	22	13	0	9	19	7	1	11
37- 48	81	42	2	37	30	14	5	11	10	1	1	8
49- 60	91	53	0	38	39	13	1	25	12	2	1	9
61- 72	79	26	0	53	29	6	0	23	10	1	1	8
73- 84	34	8	0	26	20	4	0	16	11	3	0	8
85- 96	7	1	0	6	8	1	0	7	5	3	0	2
97-108	4	1	0	3	3	0	0	3	3	1	0	2
109-120	2	0	0	2	0	0	0	0	6	1	0	5
Median number of months of persons reporting 1 or more months	46.5	39.1	26.0	56.4	45.3	28.7	37.7	57.6	34.6	22.5	18.5	47.8
Mean number of months of persons reporting 1 or more months	44.9	38.2	25.1	53.9	43.3	31.6	29.5	54.6	42.9	34.4	25.8	50.5

[a] See table A-9, ftn. a.

[b] Excludes eight usual clay workers, five sometime clay workers, and four other industrial workers who did not report number of months of unemployment.

Table A-24.- NUMBER OF MONTHS OF EMPLOYMENT BY OTHERS, SELF-EMPLOYMENT, AND UNEMPLOYMENT, 1926-30 AND 1931-35[a]

Relation to clay and number of months	Employment by others		Self-employment		Unemployment	
	1926-30	1931-35	1926-30	1931-35	1926-30	1931-35
Usual clay workers[b]	567	567	567	567	567	567
None	2	97	525	485	314	119
1-12	5	122	21	21	154	51
13-24	11	108	9	18	74	50
25-36	23	64	6	16	17	74
37-48	86	43	3	9	5	103
49-60	440	133	3	18	3	170
Mean number of months						
Total workers	50.2	24.4	1.4	4.1	5.8	30.2
Workers reporting 1 or more months	50.4	29.4	18.6	28.3	13.1	38.2
Sometime clay workers[b]	279	279	279	279	279	279
None	3	58	217	200	131	79
1-12	13	65	24	23	83	40
13-24	14	38	7	11	48	17
25-36	28	28	14	8	11	34
37-48	50	15	9	10	4	31
49-60	171	75	8	27	2	78
Mean number of months						
Total workers	45.2	24.0	5.5	8.9	7.4	25.7
Workers reporting 1 or more months	45.7	30.3	24.8	31.6	13.9	36.9
Other industrial workers[b]	196	196	196	196	196	196
None	35	52	150	140	128	87
1-12	9	21	2	7	26	22
13-24	6	19	4	5	16	17
25-36	18	23	5	8	14	19
37-48	18	12	2	7	4	19
49-60	110	69	33	29	8	32
Mean number of months						
Total workers	38.0	27.8	10.8	11.5	7.7	18.3
Workers reporting 1 or more months	46.3	37.8	46.0	40.3	22.1	32.9

[a] See table A-9, ftn. a.

[b] Excludes eight usual clay workers, five sometime clay workers, and four other industrial workers who did not report number of months of employment and unemployment.

Table A-25.- MAN-MONTHS OF USUAL CLAY WORKERS, 1926-35, BY PERIOD AND AGE[a]

Period and age	Total	Not in labor market	In labor market						
			Total	Employment					Unemployment
				Clay		Other		Self-employment	
				Full time	Part time	Full time	Part time		
1926-35, total	80,760.0	5,358.5	75,401.5	36,612.5	5,337.0	5,477.5	1,614.5	3,176.0	23,184.0
Under 25	4,800.0	2,986.5	1,813.5	372.0	85.5	157.0	193.0	10.5	995.5
25-34	19,200.0	763.5	18,436.5	7,591.0	1,459.5	2,500.5	521.5	650.0	5,714.0
35-44	21,360.0	157.0	21,203.0	11,111.0	1,513.0	1,303.0	430.5	815.0	6,030.5
45-54	17,520.0	160.5	17,359.5	9,470.0	1,454.0	798.5	308.5	475.5	4,853.0
55-64	12,240.0	121.0	12,119.0	5,510.5	565.0	673.0	158.5	773.0	4,439.0
65 or over	5,640.0	1,170.0	4,470.0	2,558.0	260.0	45.5	2.5	452.0	1,152.0
1926-29, total	32,304.0	2,731.0	29,573.0	23,349.0	1,078.0	2,525.0	377.5	503.0	1,740.5
Under 25	1,920.0	1,740.0	180.0	104.5	0	14.0	23.5	0	38.0
25-34	7,680.0	682.5	6,997.5	4,514.0	232.5	1,279.5	177.0	144.5	650.0
35-44	8,544.0	23.0	8,521.0	7,190.0	227.5	560.5	133.0	62.5	347.5
45-54	7,008.0	36.5	6,971.5	5,934.0	339.0	387.0	42.5	20.5	248.5
55-64	4,896.0	45.0	4,851.0	3,820.0	210.0	274.0	1.5	178.0	367.5
65 or over	2,256.0	204.0	2,052.0	1,786.5	69.0	10.0	0	97.5	89.0
1930-31, total	16,152.0	1,010.5	15,141.5	7,516.5	1,488.0	679.5	291.5	597.5	4,568.5
Under 25	960.0	626.5	333.5	121.0	30.0	0	37.5	0	145.0
25-34	3,840.0	62.0	3,778.0	1,818.5	458.0	287.5	50.5	141.5	1,022.0
35-44	4,272.0	17.5	4,254.5	2,235.5	409.5	150.5	103.0	98.0	1,258.0
45-54	3,504.0	7.5	3,496.5	1,830.5	395.5	138.5	61.5	78.5	992.0
55-64	2,448.0	33.5	2,414.5	1,048.0	113.5	97.5	39.0	171.5	945.0
65 or over	1,128.0	263.5	864.5	463.0	81.5	5.5	0	108.0	206.5
1932-35, total	32,304.0	1,617.0	30,687.0	5,747.0	2,771.0	2,273.0	945.5	2,075.5	16,875.0
Under 25	1,920.0	620.0	1,300.0	146.5	55.5	143.0	132.0	10.5	812.5
25-34	7,680.0	19.0	7,661.0	1,258.5	769.0	933.5	294.0	364.0	4,042.0
35-44	8,544.0	116.5	8,427.5	1,685.5	876.0	592.0	194.5	654.5	4,425.0
45-54	7,008.0	116.5	6,891.5	1,705.5	719.5	273.0	204.5	376.5	3,612.5
55-64	4,896.0	42.5	4,853.5	642.5	241.5	301.5	118.0	423.5	3,126.5
65 or over	2,256.0	702.5	1,553.5	308.5	109.5	30.0	2.5	246.5	856.5

[a]Excludes six persons who did not report information on man-months in detail and one person who did not report age.

Table A-26.- MAN-MONTHS OF SOMETIME CLAY WORKERS, 1926-35, BY PERIOD AND AGE[a]

Period and age	Total	Not in labor market	In labor market						
			Total	Employment					Unemployment
				Clay		Other		Self-employment	
				Full time	Part time	Full time	Part time		
1926-35, total	40,680.0	2,462.0	38,218.0	9,707.5	1,190.5	10,139.5	1,984.0	4,610.0	10,586.5
Under 25	1,800.0	585.5	1,214.5	142.0	3.5	334.0	98.5	92.5	544.0
25-34	10,560.0	699.5	9,860.5	1,677.0	265.0	4,175.0	547.5	1,334.5	1,861.5
35-44	11,520.0	519.0	11,001.0	3,200.0	235.0	2,472.5	586.5	1,285.5	3,221.5
45-54	9,600.0	155.0	9,445.0	2,727.0	490.0	1,993.5	550.5	986.0	2,698.0
55-64	5,520.0	159.0	5,361.0	1,487.0	130.5	883.5	201.0	820.5	1,838.5
65 or over	1,680.0	344.0	1,336.0	474.5	66.5	281.0	0	91.0	423.0
1926-29, total	16,272.0	1,473.5	14,798.5	6,829.0	357.0	4,421.5	536.5	1,363.0	1,291.5
Under 25	720.0	498.5	221.5	103.5	0	28.0	18.5	10.0	61.5
25-34	4,224.0	632.0	3,592.0	1,125.5	28.5	1,629.5	154.0	366.5	288.0
35-44	4,608.0	185.5	4,422.5	2,228.0	63.5	1,240.0	174.0	330.0	387.0
45-54	3,840.0	68.0	3,772.0	2,065.0	189.0	845.5	120.0	334.0	218.5
55-64	2,208.0	54.5	2,153.5	915.0	71.0	530.0	70.0	299.5	268.0
65 or over	672.0	35.0	637.0	392.0	5.0	148.5	0	23.0	68.5
1930-31, total	8,136.0	326.5	7,809.5	2,150.0	410.5	1,526.5	431.0	852.5	2,439.0
Under 25	360.0	54.5	305.5	37.0	0	81.0	30.5	21.5	135.5
25-34	2,112.0	34.0	2,078.0	450.5	98.5	688.0	146.0	250.0	445.0
35-44	2,304.0	96.0	2,208.0	739.0	61.5	348.0	87.0	234.0	738.5
45-54	1,920.0	17.5	1,902.5	516.0	187.5	248.0	125.5	158.0	667.5
55-64	1,104.0	27.0	1,077.0	347.5	44.0	108.5	42.0	165.0	370.0
65 or over	336.0	97.5	238.5	60.0	19.0	53.0	0	24.0	82.5
1932-35, total	16,272.0	662.0	15,610.0	728.5	423.0	4,191.5	1,016.5	2,394.5	6,856.0
Under 25	720.0	32.5	687.5	1.5	3.5	225.0	49.5	61.0	347.0
25-34	4,224.0	33.5	4,190.5	101.0	138.0	1,857.5	247.5	718.0	1,128.5
35-44	4,608.0	237.5	4,370.5	233.0	110.0	884.5	325.5	721.5	2,096.0
45-54	3,840.0	69.5	3,770.5	146.0	113.5	900.0	305.0	494.0	1,812.0
55-64	2,208.0	77.5	2,130.5	224.5	15.5	245.0	89.0	356.0	1,200.5
65 or over	672.0	211.5	460.5	22.5	42.5	79.5	0	44.0	272.0

[a]Excludes one person who did not report information on man-months in detail.

Table A-27.- MAN-MONTHS OF OTHER INDUSTRIAL WORKERS, 1926-35, BY PERIOD AND AGE[a]

Period and age	Total	Not in labor market	In labor market				
			Total	Employment			Unemployment
				Other than clay		Self-employment	
				Full time	Part time		
1926-35, total	33,120.0	5,936.5	27,183.5	13,535.0	2,218.0	5,037.0	6,393.5
Under 25	4,800.0	3,466.5	1,333.5	659.0	66.5	34.5	573.5
25-34	6,840.0	599.5	6,240.5	4,308.0	480.5	297.5	1,154.5
35-44	6,240.0	243.0	5,997.0	3,493.5	649.5	593.0	1,261.0
45-54	5,160.0	130.0	5,030.0	2,384.5	246.0	1,498.0	901.5
55-64	5,760.0	551.0	5,209.0	1,629.0	569.5	1,484.0	1,526.5
65 or over	4,320.0	946.5	3,373.5	1,061.0	206.0	1,130.0	976.5
1926-29, total	13,248.0	2,846.0	10,402.0	6,275.0	695.5	2,085.0	1,346.5
Under 25	1,920.0	1,874.0	46.0	26.5	0	0	19.5
25-34	2,736.0	484.5	2,251.5	1,701.5	177.0	52.0	321.0
35-44	2,496.0	40.5	2,455.5	1,854.0	142.0	225.5	234.0
45-54	2,064.0	48.0	2,016.0	1,144.0	60.5	620.0	191.5
55-64	2,304.0	213.5	2,090.5	911.0	268.0	572.0	339.5
65 or over	1,728.0	185.5	1,542.5	638.0	48.0	615.5	241.0
1930-31, total	6,624.0	1,208.5	5,415.5	2,685.5	513.5	975.0	1,241.5
Under 25	960.0	752.5	207.5	117.0	0	0	90.5
25-34	1,368.0	80.0	1,288.0	902.5	111.0	34.5	240.0
35-44	1,248.0	56.0	1,192.0	687.0	143.5	111.5	250.0
45-54	1,032.0	24.5	1,007.5	463.5	71.0	311.0	162.0
55-64	1,152.0	97.5	1,054.5	307.0	142.5	300.5	304.5
65 or over	864.0	198.0	666.0	208.5	45.5	217.5	194.5
1932-35, total	13,248.0	1,882.0	11,366.0	4,574.5	1,009.0	1,977.0	3,805.5
Under 25	1,920.0	840.0	1,080.0	515.5	66.5	34.5	463.5
25-34	2,736.0	35.0	2,701.0	1,704.0	192.5	211.0	593.5
35-44	2,496.0	146.5	2,349.5	952.5	364.0	256.0	777.0
45-54	2,064.0	57.5	2,006.5	777.0	114.5	567.0	548.0
55-64	2,304.0	240.0	2,064.0	411.0	159.0	611.5	882.5
65 or over	1,728.0	563.0	1,165.0	214.5	112.5	297.0	541.0

[a]Excludes three persons who did not report information on man-months in detail.

Table A-28.- NUMBER OF MONTHS OF EMPLOYMENT IN CLAY, EMPLOYMENT IN OTHER THAN CLAY, AND UNEMPLOYMENT, 1926-35, OF USUAL CLAY WORKERS, BY OCCUPATIONAL GROUP[a]

Number of months	Employment in clay					Employment in other than clay					Unemployment				
	Total	Administrative and clerical	Skilled and maintenance	Operatives	Laborers	Total	Administrative and clerical	Skilled and maintenance	Operatives	Laborers	Total	Administrative and clerical	Skilled and maintenance	Operatives	Laborers
Total persons	567	33	76	110	348	567	33	76	110	348	567	33	76	110	348
None	8	0	0	2	6	283	23	36	56	168	106	23	22	22	39
1 or more	559	33	76	108	342	284	10	40	54	180	461	10	54	88	309
1- 12	10	0	3	2	5	73	0	9	14	50	57	1	7	16	33
13- 24	25	1	4	3	17	59	4	9	11	35	43	3	6	9	25
25- 36	27	1	2	4	20	59	1	7	13	38	63	2	9	9	43
37- 48	73	1	8	18	46	37	1	8	6	22	81	2	9	13	57
49- 60	95	2	7	19	67	17	1	4	2	10	91	1	10	15	65
61- 72	115	2	13	19	81	17	1	1	2	13	79	1	8	14	56
73- 84	63	5	13	13	32	7	0	2	2	3	34	0	4	9	21
85- 96	41	1	7	6	27	8	1	0	0	7	7	0	0	0	7
97-108	27	3	1	6	17	4	1	0	2	1	4	0	1	2	1
109-120	83	17	18	18	30	3	0	0	2	1	2	0	0	1	1
Median number of months															
Total persons	65.2	108.8	73.4	64.9	62.4	1.1	0	3.6	0	2.4	38.6	0	28.5	35.2	43.7
Persons reporting 1 or more months	65.7	108.8	73.4	65.6	62.9	26.5	36.5	27.9	26.3	26.1	46.5	30.5	43.2	45.7	47.8
Mean number of months															
Total persons	67.3	92.9	73.1	68.1	63.4	15.9	14.0	16.1	16.2	16.0	36.5	10.0	30.4	35.2	40.8
Persons reporting 1 or more months	68.3	92.9	73.1	69.4	64.6	31.8	46.1	30.6	33.0	31.0	44.9	32.9	42.8	44.0	45.9

[a]Excludes 79 persons who entered the labor market after January 1926, 26 persons not in the labor market on August 1, 1936, and 8 persons who did not report number of months of employment and unemployment.

Table A-29.- NUMBER OF MONTHS OF EMPLOYMENT IN CLAY, EMPLOYMENT IN OTHER THAN CLAY, AND UNEMPLOYMENT, 1926-36, OF SOMETIME CLAY WORKERS, BY OCCUPATIONAL GROUP[a]

Number of months	Employment in clay					Employment in other than clay					Unemployment				
	Total	Administrative and clerical	Skilled and maintenance	Operatives	Laborers	Total	Administrative and clerical	Skilled and maintenance	Operatives	Laborers	Total	Administrative and clerical	Skilled and maintenance	Operatives	Laborers
Total persons	279	3	41	46	189	279	3	41	46	189	279	3	41	46	189
None	9	0	0	1	8	31	0	2	8	21	65	1	13	8	43
1 or more	270	3	41	45	181	248	3	39	38	168	214	2	28	38	146
1- 12	57	0	10	2	45	28	1	2	8	17	42	1	6	9	26
13- 24	49	0	9	9	31	19	0	1	3	15	21	0	3	2	16
25- 36	46	0	7	9	30	27	0	6	5	16	22	0	3	3	16
37- 48	38	1	3	10	24	40	1	6	4	29	30	1	4	7	18
49- 60	27	1	4	4	18	23	0	6	3	14	39	0	6	6	27
61- 72	32	0	6	6	20	25	1	3	3	18	29	0	4	6	19
73- 84	8	0	1	2	5	26	0	4	4	18	20	0	2	2	16
85- 96	3	0	0	1	2	23	0	5	5	13	8	0	0	3	5
97-108	2	0	0	1	1	17	0	3	1	13	3	0	0	0	3
109-120	8	1	1	1	5	20	0	3	2	15	0	0	0	0	0
Median number of months															
Total persons	30.9	/	27.1	38.9	28.7	46.9	/	55.5	34.1	47.1	30.8	/	18.5	38.2	31.6
Persons reporting 1 or more months	32.1	/	27.1	39.5	30.3	53.7	/	57.5	45.5	54.5	45.3	/	42.5	45.1	46.5
Mean number of months															
Total persons	35.6	/	33.8	42.6	33.7	50.6	/	58.9	41.1	51.4	33.2	/	27.0	35.7	34.3
Persons reporting 1 or more months	36.8	/	33.8	43.6	35.2	57.0	/	61.9	49.8	57.8	43.3	/	39.6	43.2	44.4

[a]Excludes 46 persons who entered the labor market after January 1926, 10 persons not in the labor market on August 1, 1936, and 5 persons who did not report number of months of employment and unemployment.

/Base too small for calculation.

Table A-30.- MAN-MONTHS, 1926-35, BY RESIDENCE[a]

Relation to clay and residence	Total	Not in labor market	In labor market						
			Total	Employment					Unemployment
				Clay		Other		Self-employment	
				Full time	Part time	Full time	Part time		
Usual clay workers	80,880.0	5,358.5	75,521.5	36,673.0	5,337.0	5,537.0	1,614.5	3,176.0	23,184.0
Brazil	56,520.0	3,564.0	52,956.0	26,193.0	3,624.0	4,228.0	1,002.0	1,508.0	16,401.0
Carbon	7,920.0	1,045.5	6,874.5	3,342.0	615.0	227.5	304.5	209.0	2,176.5
Knightsville and Harmony	4,800.0	331.5	4,468.5	1,831.5	160.5	431.5	17.0	253.0	1,775.0
Rural routes	11,640.0	417.5	11,222.5	5,306.5	937.5	650.0	291.0	1,206.0	2,831.5
Sometime clay workers	40,680.0	2,462.0	38,218.0	9,707.5	1,190.5	10,139.5	1,984.0	4,610.0	10,586.5
Brazil	28,800.0	2,023.0	26,777.0	6,862.5	441.5	7,983.0	1,729.5	2,173.0	7,587.5
Carbon	1,920.0	120.0	1,800.0	470.5	179.0	365.0	88.5	156.0	541.0
Knightsville and Harmony	2,640.0	9.0	2,631.0	538.5	195.5	547.0	18.5	258.5	1,073.0
Rural routes	7,320.0	310.0	7,010.0	1,836.0	374.5	1,244.5	147.5	2,022.5	1,385.0
Other industrial workers	33,120.0	5,936.5	27,183.5	0	0	13,535.0	2,218.0	5,037.0	6,393.5
Brazil	28,560.0	4,470.5	24,089.5	0	0	12,584.0	1,875.0	4,287.0	5,343.5
Carbon	4,560.0	1,466.0	3,094.0	0	0	951.0	343.0	750.0	1,050.0

[a]Excludes six usual clay workers, one sometime clay worker, and three other industrial workers who did not report information on man-months in detail.

Table A-31.- NUMBER OF MONTHS OF EMPLOYMENT AT USUAL INDUSTRY, OTHER THAN USUAL INDUSTRY, AND OF UNEMPLOYMENT, 1926-35[a]

Number of months	Usual clay workers[b]			Sometime clay workers[b]				Other industrial workers[b]		
	Employment at usual industry	Employment at other than usual industry	Unemployment	Employment at usual industry	Employment at other than usual industry	Employment at industries other than usual or clay	Unemployment	Employment at usual industry	Employment at other than usual industry	Unemployment
Total	567	567	567	258	258	258	258	168	168	168
None	8	283	106	69	4	109	52	20	78	61
1 or more	559	284	461	189	254	149	206	148	90	107
1- 12	10	73	57	40	21	41	38	10	13	19
13- 24	25	59	43	32	16	24	21	9	18	17
25- 36	27	59	63	27	30	27	22	15	7	18
37- 48	73	37	81	32	36	23	28	11	16	8
49- 60	95	17	91	12	48	11	38	15	7	12
61- 72	115	17	79	15	40	10	29	9	6	9
73- 84	63	7	34	8	22	7	20	7	7	10
85- 96	41	8	7	12	10	3	8	12	5	5
97-108	27	4	4	5	12	3	2	12	1	3
109-120	83	3	2	6	19	0	0	48	10	6
Mean number of months	67.3	15.9	36.5	29.5	55.0	19.0	34.9	65.0	25.8	28.7
Percent of employable time	56.2	13.3	30.5	24.7	46.1	15.9	29.2	54.4	21.6	24.0

[a] See table A-9, ftn. a.

[b] Excludes 8 usual clay workers, 5 sometime clay workers, and 4 other industrial workers who did not report number of months of employment and unemployment; and 21 sometime clay workers and 28 other industrial workers whose usual industry was self-employment.

Table A-32.- NUMBER OF MONTHS OF EMPLOYMENT AT USUAL INDUSTRY AND OTHER THAN USUAL INDUSTRY, 1926-35, BY USUAL INDUSTRY OF SOMETIME CLAY WORKERS[a]

Number of months	Total	Usual industry			
		Manufacturing	Coal mining	Agriculture	Other
	Employment at usual industry				
Total	258	52	134	25	47
None	69	9	48	6	6
1 or more	189	43	86	19	41
1- 12	40	7	29	1	3
13- 24	32	9	16	3	4
25- 36	27	8	11	0	8
37- 48	32	9	12	2	9
49- 60	12	4	3	1	4
61- 72	15	2	2	2	9
73- 84	8	1	4	2	1
85- 96	12	1	7	3	1
97-108	5	1	1	2	1
109-120	6	1	1	3	1
	Employment at other than usual industry				
Total	258	52	134	25	47
None	4	0	1	2	1
1 or more	254	52	133	23	46
1- 12	21	3	9	3	6
13- 24	16	4	8	1	3
25- 36	30	11	13	3	3
37- 48	36	3	23	3	7
49- 60	48	8	26	4	10
61- 72	40	9	20	3	8
73- 84	22	4	11	4	3
85- 96	10	2	6	0	2
97-108	12	5	5	1	1
109-120	19	3	12	1	3
	Employment at industries other than usual or clay				
Total	258	52	134	25	47
None	109	17	66	14	12
1 or more	149	35	68	11	35
1- 12	41	10	20	2	9
13- 24	24	2	12	5	5
25- 36	27	5	17	0	5
37- 48	23	5	8	3	7
49- 60	11	5	3	0	3
61- 72	10	1	3	1	5
73- 84	7	4	3	0	0
85- 96	3	2	0	0	1
97-108	3	1	2	0	0
109-120	0	0	0	0	0

[a]Excludes 46 persons who entered the labor market after January 1926, 10 persons not in the labor market on August 1, 1936, 5 persons who did not report number of months of employment, and 21 persons whose usual industry was self-employment.

Table A-33.- NUMBER OF MONTHS OF EMPLOYMENT AT USUAL INDUSTRY AND OTHER THAN USUAL INDUSTRY, 1926-35, BY USUAL INDUSTRY OF OTHER INDUSTRIAL WORKERS[a]

Number of months	Total	Usual industry			
		Manufacturing	Building and construction	Coal mining	Other
	Employment at usual industry				
Total	168	50	21	78	19
None	20	4	1	12	3
1 or more	148	46	20	66	16
1- 12	10	2	0	8	0
13- 24	9	4	0	5	0
25- 36	15	4	4	7	0
37- 48	11	4	1	4	2
49- 60	15	4	1	9	1
61- 72	9	2	2	4	1
73- 84	7	3	1	2	1
85- 96	12	4	0	4	4
97-108	12	3	5	3	1
109-120	48	16	6	20	6
	Employment at other than usual industry				
Total	168	50	21	78	19
None	78	22	11	38	7
1 or more	90	28	10	40	12
1- 12	13	2	1	6	4
13- 24	18	9	3	5	1
25- 36	7	1	1	3	2
37- 48	16	5	3	5	3
49- 60	7	3	1	2	1
61- 72	6	2	1	3	0
73- 84	7	2	0	5	0
85- 96	5	3	0	2	0
97-108	1	0	0	1	0
109-120	10	1	0	8	1

[a]Excludes 56 persons who entered the labor market after January 1926, 23 persons not in the labor market on August 1, 1936, 4 persons who did not report number of months of employment, and 28 persons whose usual industry was self-employment.

Table A-34.- NUMBER OF JOB SEPARATIONS, EMPLOYER SHIFTS, AND INDUSTRY SHIFTS, 1926-35, BY AGE[a]

Relation to clay and number of separations or shifts	Job separations			Employer shifts			Industry shifts		
	Under 35	35-54	55 or over	Under 35	35-54	55 or over	Under 35	35-54	55 or over
Usual clay workers[b]	119	316	131	119	316	131	119	316	131
None	3	35	8	26	149	64	34	180	73
1	22	101	52	33	73	33	33	66	29
2	27	63	38	17	46	19	12	35	16
3	18	47	18	20	27	8	20	18	7
4	14	26	5	8	8	3	9	6	2
5-6	20	18	5	10	10	2	8	8	3
7-9	13	18	4	5	2	2	3	3	1
10 or over	2	8	1	0	1	0	0	0	0
Mean number of separations or shifts[c]	3.45	2.52	2.06	2.10	1.12	1.01	1.85	0.88	0.87
Sometime clay workers[b]	56	171	52	56	171	52	56	171	52
None	1	2	0	3	21	11	4	24	10
1	4	37	13	8	46	14	6	55	16
2	8	40	21	9	39	17	13	35	17
3	13	31	9	11	25	5	12	31	4
4	10	22	4	9	21	2	9	9	2
5-6	14	15	2	12	6	1	9	5	3
7-9	3	14	3	3	8	2	2	6	0
10 or over	3	10	0	1	5	0	1	6	0
Mean number of separations or shifts[c]	4.23	3.65	2.58	3.48	2.61	1.77	3.16	2.43	1.67
Other industrial workers[b]	41	90	65	41	90	65	41	90	65
None	5	15	14	7	35	33	15	45	42
1	8	29	28	9	22	23	7	18	15
2	9	18	12	10	16	6	10	14	6
3	7	11	6	6	7	2	3	8	1
4	5	9	2	3	4	0	3	2	0
5-6	2	2	1	1	3	0	1	2	0
7-9	3	3	1	4	3	0	1	1	0
10 or over	2	3	1	1	0	1	1	0	1
Mean number of separations or shifts[c]	3.12	2.27	1.63	2.71	1.43	0.85	1.88	1.07	0.68

[a] See table A-9, ftn. a.

[b] Excludes one usual clay worker who did not report age; and eight usual clay workers, five sometime clay workers, and four other industrial workers who did not report number of separations and shifts.

[c] Computed from ungrouped data.

Table A-35.- NUMBER OF JOB SEPARATIONS, 1926-35, 1926-30, AND 1931-35[a]

Number of job separations	Usual clay workers[b]			Sometime clay workers[b]			Other industrial workers[b]		
	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35
Persons reporting	567	567	567	279	279	279	196	196	196
None	46	195	178	3	33	92	34	78	79
1	175	195	212	54	92	97	65	62	80
2	128	99	85	69	74	37	39	28	18
3	84	44	32	53	36	20	24	15	6
4	45	25	16	36	19	16	16	6	6
5-6	43	9	30	31	14	12	5	3	5
7-9	35	0	14	20	10	4	7	4	1
10 or over	11	0	0	13	1	1	6	0	1
Mean number of job separations[c]	2.61	1.18	1.43	3.57	2.13	1.44	2.23	1.19	1.04

[a]See table A-9, ftn. a.

[b]Excludes eight usual clay workers, five sometime clay workers, and four other industrial workers who did not report number of job separations.

[c]Computed from ungrouped data.

Table A-36.- NUMBER OF EMPLOYER SHIFTS, 1926-35, 1926-30, AND 1931-35[a]

Number of employer shifts	Usual clay workers[b]			Sometime clay workers[b]			Other industrial workers[b]		
	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35
Persons reporting	567	567	567	279	279	279	196	196	196
None	239	351	366	35	78	118	75	105	126
1	139	120	117	68	95	93	54	46	46
2	82	51	42	65	52	35	32	28	14
3	56	32	21	41	24	16	15	11	1
4	19	9	9	32	11	10	7	2	5
5-6	22	4	10	19	12	5	4	1	2
7-9	9	0	2	13	7	1	7	2	2
10 or over	1	0	0	6	0	1	2	1	0
Mean number of employer shifts[c]	1.30	0.66	0.64	2.63	1.56	1.07	1.51	0.88	0.63

[a]See table A-9, ftn. a.

[b]Excludes eight usual clay workers, five sometime clay workers, and four other industrial workers who did not report number of employer shifts.

[c]Computed from ungrouped data.

Table A-37.- NUMBER OF INDUSTRY SHIFTS, 1926-35, 1926-30, AND 1931-35[a]

Number of industry shifts	Usual clay workers[b]			Sometime clay workers[b]			Other industrial workers[b]		
	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35
Persons reporting	567	567	567	279	279	279	196	196	196
None	287	403	380	38	88	124	102	129	137
1	128	91	111	77	96	96	40	37	40
2	63	40	37	65	51	32	30	23	11
3	46	24	20	47	19	12	12	2	4
4	17	9	8	20	9	8	5	2	2
5-6	19	0	9	17	9	4	3	0	1
7-9	7	0	2	8	6	3	2	2	1
10 or over	0	0	0	7	1	0	2	1	0
Mean number of industry shifts[c]	1.09	0.49	0.60	2.44	1.44	1.00	1.11	0.62	0.49

[a] See table A-9, ftn. a.

[b] Excludes eight usual clay workers, five sometime clay workers, and four other industrial workers who did not report number of industry shifts.

[c] Computed from ungrouped data.

Table A-38.- NUMBER OF JOB SEPARATIONS, EMPLOYER SHIFTS, AND INDUSTRY SHIFTS, 1926-35, 1926-30, AND 1931-35, BY EMPLOYMENT STATUS AUGUST 1, 1936, OF USUAL CLAY WORKERS[a]

Employment status and number of separations or shifts	Job separations			Employer shifts			Industry shifts		
	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35
Employed by others	334	334	334	334	334	334	334	334	334
None	44	136	96	152	231	204	173	254	213
1	97	110	120	70	57	71	70	47	69
2	60	50	50	54	28	30	42	20	24
3	52	24	25	29	12	15	25	10	16
4	23	12	8	8	4	6	9	3	5
5-6	24	2	24	16	2	7	12	0	6
7-9	26	0	10	5	0	1	3	0	1
10 or over	8	0	1	0	0	0	0	0	0
Mean number of separations or shifts[b]	2.63	1.02	1.61	1.25	0.52	0.73	1.05	0.38	0.67
Self-employed	24	24	24	24	24	24	24	24	24
None	2	6	8	2	9	7	2	10	7
1	5	10	5	7	12	9	9	11	8
2	6	6	4	6	1	2	3	1	3
3	3	2	0	3	2	1	4	2	1
4	1	0	3	2	0	2	1	0	2
5-6	3	0	2	2	0	2	3	0	2
7-9	3	0	2	2	0	1	2	0	1
10 or over	1	0	0	0	0	0	0	0	0
Mean number of separations or shifts[b]	3.29	1.17	2.12	2.54	0.83	1.71	2.54	0.79	1.75
Unemployed	209	209	209	209	209	209	209	209	209
None	0	53	74	85	111	155	112	139	160
1	73	75	87	62	51	37	49	33	34
2	62	43	31	22	22	10	18	19	10
3	29	18	7	24	18	5	17	12	3
4	21	13	5	9	5	1	7	6	1
5-6	16	7	4	4	2	1	4	0	1
7-9	6	0	1	2	0	0	2	0	0
10 or over	2	0	0	1	0	0	0	0	0
Mean number of separations or shifts[b]	2.49	1.45	1.04	1.24	0.85	0.39	0.97	0.63	0.34

[a] Excludes 79 persons who entered the labor market after January 1926, 26 persons not in the labor market on August 1, 1936, and 8 persons who did not report number of separations and shifts.

[b] Computed from ungrouped data.

Table A-39.- NUMBER OF JOB SEPARATIONS, EMPLOYER SHIFTS, AND INDUSTRY SHIFTS, 1926-35, 1926-30, AND 1931-35, BY EMPLOYMENT STATUS AUGUST 1, 1936, OF SOMETIME CLAY WORKERS[a]

Employment status and number of separations or shifts	Job separations			Employer shifts			Industry shifts		
	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35
Employed by others	131	131	131	131	131	131	131	131	131
None	2	19	36	12	38	32	12	43	35
1	23	41	42	26	46	52	31	45	56
2	29	37	20	29	22	24	31	24	21
3	26	14	16	23	10	13	26	8	10
4	19	9	8	19	5	6	14	5	5
5-6	14	8	6	12	8	2	9	4	2
7-9	13	3	2	7	2	1	5	2	1
10 or over	5	0	1	3	0	1	3	0	1
Mean number of separations or shifts[b]	3.69	2.01	1.68	2.99	1.52	1.47	2.69	1.33	1.36
Self-employed	36	36	36	36	36	36	36	36	36
None	1	7	17	1	8	15	1	8	16
1	10	8	13	10	12	14	10	12	13
2	8	11	2	10	8	3	11	9	4
3	7	3	1	5	2	2	7	1	1
4	4	2	1	5	2	0	2	1	0
5-6	2	1	1	1	2	2	2	2	1
7-9	1	3	0	3	2	0	1	2	0
10 or over	3	1	1	1	0	0	2	1	1
Mean number of separations or shifts[b]	3.53	2.39	1.14	2.94	1.94	1.00	3.22	2.14	1.08
Unemployed	112	112	112	112	112	112	112	112	112
None	0	7	39	22	32	71	25	37	73
1	21	43	42	32	37	27	36	39	27
2	32	26	15	26	22	8	23	18	7
3	20	19	3	13	12	1	14	10	1
4	13	8	7	8	4	4	4	3	3
5-6	15	5	5	6	2	1	6	3	1
7-9	6	4	1	3	3	0	2	2	0
10 or over	5	0	0	2	0	0	2	0	0
Mean number of separations or shifts[b]	3.45	2.18	1.27	2.10	1.49	0.61	1.88	1.33	0.55

[a] Excludes 46 persons who entered the labor market after January 1926, 10 persons not in the labor market on August 1, 1936, and 6 persons who did not report number of separations and shifts.

[b] Computed from ungrouped data.

Table A-40.- NUMBER OF JOB SEPARATIONS, EMPLOYER SHIFTS, AND INDUSTRY SHIFTS, 1926-35, 1926-30, AND 1931-35, BY EMPLOYMENT STATUS AUGUST 1, 1936, OF OTHER INDUSTRIAL WORKERS[a]

Employment status and number of separations or shifts	Job separations			Employer shifts			Industry shifts		
	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35	1926-35	1926-30	1931-35
Employed by others	91	91	91	91	91	91	91	91	91
None	15	32	42	22	38	48	39	55	56
1	29	29	32	30	26	31	23	17	25
2	16	11	7	14	13	6	12	15	5
3	14	11	3	12	11	0	9	2	2
4	7	5	2	5	1	2	4	0	1
5-6	2	1	3	1	0	2	1	0	1
7-9	5	2	1	6	2	2	2	2	1
10 or over	3	0	1	1	0	0	1	0	0
Mean number of separations or shifts[b]	2.45	1.36	1.09	1.98	1.13	0.85	1.38	0.73	0.85
Self-employed	33	33	33	33	33	33	33	33	33
None	13	17	21	16	22	23	18	23	24
1	10	11	8	8	7	5	6	7	5
2	6	4	3	6	4	4	7	3	3
3	0	0	1	1	0	1	1	0	1
4	3	1	0	2	0	0	1	0	0
5-6	1	0	0	0	0	0	0	0	0
7-9	0	0	0	0	0	0	0	0	0
10 or over	0	0	0	0	0	0	0	0	0
Mean number of separations or shifts[b]	1.21	0.70	0.51	0.94	0.45	0.49	0.82	0.39	0.43
Unemployed	72	72	72	72	72	72	72	72	72
None	6	29	16	37	45	55	45	51	57
1	26	22	40	16	13	10	11	13	10
2	17	13	8	12	11	4	11	5	3
3	10	4	2	2	0	0	2	0	1
4	6	0	4	0	1	3	0	2	1
5-6	2	2	2	3	1	0	2	0	0
7-9	2	1	0	1	0	0	0	0	0
10 or over	3	1	0	1	1	0	1	1	0
Mean number of separations or shifts[b]	2.43	1.21	1.22	1.17	0.75	0.42	0.89	0.57	0.32

[a] Excludes 56 persons who entered the labor market after January 1926, 23 persons not in the labor market on August 1, 1936, and 4 persons who did not report number of separations and shifts.

[b] Computed from ungrouped data.

APPENDIX B

SCHEDULES AND DEFINITIONS OF TERMS

OCCUPATIONAL HISTORY SCHEDULE

WRP FORM #20

OCCUPATIONAL HISTORY SCHEDULE

I. NAME / ADDRESS — ENUMERATOR — SCHEDULE NO. — DATE — CLEARANCE DATA

II. AGE (A) | SEX (B) | RACE (C) | PLACE OF BIRTH: YEARS IN CITY, YEARS IN U. S. A. (D) | MARITAL STATUS (E) | SCHOOL GRADE COMPLETED (F) | AGE LEAVING SCHOOL / AGE BEGAN WORK (G) | H-1 USUAL OCCUPATION / H-2 USUAL INDUSTRY / H-3 YEARS AT USUAL | PRESENT EMPLOYMENT STATUS (I)

III. TOTAL TIME UNEMPLOYED (J) | TOTAL SEPARATIONS (K) | TOTAL EMPLOYER SHIFTS (L) | TOTAL OCCUPATIONAL SHIFTS (M) | TOTAL INDUSTRY SHIFTS (N) | AVERAGE LENGTH OF SERVICE PER JOB (O) | AVERAGE LENGTH OF SERVICE PER EMPLOYER (P)

IVa. EMPLOYMENT HISTORY PRIOR TO 1926

PERIOD BEGINNING MO.	PERIOD BEGINNING YR.	PERIOD ENDING MO.	PERIOD ENDING YR.	JOBS (OR UNEMPLOYMENT) OF MORE THAN ONE MONTH'S DURATION: OCCUPATION	INDUSTRY	NAME AND LOCATION OF EMPLOYER	REASON FOR CHANGE	CHARACTER OF EMPLOYMENT
				FIRST JOB				
				LONGEST JOB				

IVb. EMPLOYMENT AND UNEMPLOYMENT HISTORY 1926-1936

Q | R | S | T | U | V

WORKS PROGRESS ADMINISTRATION NATIONAL RESEARCH PROJECT

Note.- The reverse of the schedule provides for continuing the 1926-36 work history.

WPP FORM 1000

COMMUNITY HOUSEHOLD SCHEDULE

I	STATE	COUNTY	COMMUNITY	YRS. RES.	NAME	ADDRESS	OWNERSHIP AUTOMOBILE	ENUM DATE	FIELD EDIT	FIELD DATE	SCHED. ULE NO.

II	HOME OWNERSHIP A / A.1	HOUSEHOLD SUMMARY: FAMILIES	FAMILY PERSONS	NON-FAMILY PERSONS	EMPLOY-ABLES	EMPLOYED: 30 HRS. AND OVER	UNDER 30 HOURS: TOTAL	VOL.	INVOL.	UNEMPLOYED SEEKING WORK: TOTAL	PREV. EMP.	NOT PREV. EMP.	UNEMPLOYED NOT SEEKING WORK: TOTAL	UNDER 16 YRS.	16 YRS. & OVER	CODE	EDIT	INSP.	POST
	PART-TIME FARMING A-2	B	B.1	B-2	C	D	E	E-1	E-2	F	F.1	F.2	G	G.1	G.2	DATE	DATE	DATE	DATE

III	NAME AND RELATIONSHIP TO HEAD	SEX	AGE	NATIVITY AND RACE	MARITAL STATUS	SCHOOL GRADES COMPLETED	METHOD OF TRANS. AND MILES TO WORK	OCCUPATION	INDUSTRY	LOCATION	DATE LEAVING LAST REGULAR JOB LASTING MORE THAN 1 MO.	HRS. WORKED PER WEEK	EMPLOYMENT STATUS: PART TIME VOL. OR INVOL.	UNEMPLOYED P.E. OR W.P.E.	UNEMPLOYED NOT SEEKING WORK, REASON
								USUAL	USUAL	USUAL					
a.	HEAD							PRESENT	PRESENT	PRESENT					
								U	U	U					
b.								P	P	P					
								U	U	U					
c.								P	P	P					
								U	U	U					
d.								P	P	P					
								U	U	U					
e.								P	P	P					
								U	U	U					
f.								P	P	P					
								U	U	U					
g.								P	P	P					
								U	U	U					
h.								P	P	P					
								U	U	U					
i.								P	P	P					
	M	I	J	K	L	M	N	O	P	Q	R	S	S.1	S.2	S.3

WORKS PROGRESS ADMINISTRATION NATIONAL RESEARCH PROJECT

Note.- The reverse of the schedule provides for continuing section III.

DEFINITIONS OF TERMS

Usual Clay Workers: Usual clay workers is used to designate those workers who at enumeration considered the clay-products industry as their usual one.

Sometime Clay Workers: Sometime clay workers is used to designate those workers whose usual industry was not reported as clay but who were employed in the clay-products industry for 1 month or more after 1925.

Other Industrial Workers: Other industrial workers is used to designate those workers who were not employed for 1 month or more in clay after 1925, and whose usual or present (at enumeration) industry was building and construction, motor transportation, coal mining, or manufacturing other than clay.

Age: Age refers to that on last birthday prior to the date of enumeration.

Residence: Residence refers to that at the time of enumeration.

Place of Birth: For foreign-born persons the country of birth was recorded; for native-born, the State of birth; and for persons born in Indiana, the city and county.

Job: A job was defined as continuous paid service at one occupational assignment for one employer for 1 or more months. (Employment on emergency work did not constitute a job, since emergency work employment was classified as unemployment.)

First Job: The first job was defined as the first full-time paid job after leaving school permanently. Summer jobs between school sessions and any jobs held while the individual was out of school for a period of only 1 year or less were not counted as the first job.

Last Job: The last job is the current job for persons employed on August 1, 1936; for persons unemployed on August 1, 1936, the last job is that preceding this period of unemployment.

Usual Occupation: The usual occupation was defined as the occupation which the person considered his usual or customary occupation. In cases of doubt the longest work experience was considered as the usual occupation. Of two work experiences of equal length the more recent was used. For the sometime clay workers the occupation in the clay industry in which the person spent the most time between 1926 and 1935 was used.

Occupational Group: The usual and sometime clay workers were grouped by their usual clay occupation in accordance with the classification shown in appendix D.

Usual Industry: The usual industry was defined as the industry in which the person was normally employed. This was variously interpreted to be that including the longest, last, or best work experience. In cases of doubt the longest was used; if the experiences in two industries were of equal length the more recent was entered.

Employment Status: The employment status of the person or persons appearing on the schedule was determined by whether they were employed or unemployed on August 1, 1936. If a person worked on his own account he was considered as self-employed.

Employable: A person was considered as employable if he was 16 years of age or over and was either employed (including self-employed) or unemployed seeking work (includes those on emergency work).

Employment: Continuous full-time or part-time paid service, or self-employment, for 1 month or more constituted employment.

Unemployment: Unemployment, to be recorded, had to be likewise of a month's duration or longer. Unemployment periods included any time during which the individual was on emergency work or during which he did not have a job but was able and willing to work.

Emergency Work: Emergency work was used as an all-inclusive term to cover employment on work relief, Public Works Projects, or Works Program Projects, whether financed by the city, the State, the Federal Emergency Relief Administration, the National Recovery Act of 1933, or the Emergency Appropriation Act of 1935. Such employment was considered as time unemployed seeking work.

Time in Labor Market: Time spent in the labor market includes all employable time, whether employed or unemployed seeking work. Intervening periods when the person was unemployed not seeking work were not counted as time in the labor market. Date of entry into the labor market was counted as the date when the person first began to work or to seek work; unless the person specifically indicated otherwise, the date when he left school was taken to be the date at which he began his search for work.

Time Not in Labor Market: Time not in the labor market includes periods of 1 month or more during which the individual was not seeking work because of illness, strike, school attendance, retirement, or personal reasons such as household duties.

Employer Shift: An employer shift was defined as a change from a firm of one name to one of another, whether or not a period without work intervened. A change in the location of the plant alone was not considered

to be an employer shift; neither was a shift by a worker from one plant to another plant operated by the same firm.

Industrial Shift: An industrial shift was defined as a change from one industry to another, whether or not a period without work intervened.

Job Separation: Leaving one job to go to another, to become unemployed, or to experience a period of not seeking work was counted as a job separation. A change in the character of employment from full- to part-time or part- to full-time was not counted as a job separation, but a change from one occupation to another during continuous employment was counted as a job separation.

APPENDIX C

SAMPLING PROCEDURE

Enumeration of workers in Brazil, Carbon, Knightsville, Harmony, and surrounding rural routes was made by a staff of interviewers between September 28 and December 4, 1936. The selection of workers and households for interview and subsequent study was made in the following fashion:

Brazil: Enumerators visited every household in every dwelling in the city. In every third household a comprehensive interview was conducted and the material gathered was entered on a household schedule (NRP Form #1000; see appendix B) incorporating such material as the age, sex, employment status, and present and usual industry of all members. In all other households a brief schedule designed to complete the population count of the city and to identify industrial workers was filled out.

On the basis of all visits a work history (NRP Form #20; see appendix B) was taken of all persons in the community who reported the industry of their usual employment to have been clay or who reported that they had been employed in the clay plants for 1 month or more after 1925. These constituted the Brazil section of the clay workers, 477 men whose usual industry was clay and 240 whose usual industry was other than clay but who had been employed in clay for at least a month between January 1, 1926, and the interview date.

In addition, on the basis of the returns on the household schedules alone (i. e., for the workers in one-third of the households), work-history schedules were taken of all workers not included in the above, whose usual or present industry was building and construction, motor transportation, coal mining, or manufacturing other than clay. These, numbering 241 men, constitute a one-third sample of what are referred to as Brazil's other industrial workers.

Carbon: Household schedules were taken for all of Carbon's 151 households and thus a complete population count was obtained. Work-history schedules for all three groups were taken on the same basis as were the work histories of the clay workers in Brazil. Every Carbon resident whose present or usual industry was clay, who had at some time been in clay, or whose present or usual industry was one of those enumerated above is represented in one of the three samples. Thus there were obtained 66 schedules of male usual clay workers, 16 of male sometime clay workers, and 38 of male nonclay workers.

Knightsville, Harmony, and Rural Routes: Names of all men from these areas appearing on selected peak pay rolls, in the years 1926-36, of representative clay plants were obtained.[1] After duplications were eliminated, all such persons found to be living in Knightsville and Harmony were interviewed and work-history schedules taken. Of those on the rural routes every other one was visited to obtain a work-history schedule. The schedules were then separated, according to the usual industry reported, into 40 usual and 23 sometime clay workers in Harmony and Knightsville, and 97 usual and 61 sometime clay workers on the rural routes.

In addition, work-history schedules were secured, but not used, from 65 women in Brazil and Carbon, 14 of whom had at some time been in clay and 51 of whom had never been in clay. Since women workers constitute so small a part of the labor market in Brazil and Carbon, analysis of their histories was not attempted.

In summary, the sample of usual clay workers consists of 680 workers, 543 of whom were all such workers resident at the time in Brazil and Carbon, 40 of whom were all such workers who were on selected pay rolls and were resident at the time in Knightsville or Harmony, and 97 of whom were a 50-percent sample of all such workers who were on selected pay rolls and were resident at the time in the rural region outside Brazil and Carbon. Similarly, the sample of sometime clay workers aggregates 340 workers, of whom 256 were all such workers resident in Brazil and Carbon at the time, 23 were all such workers on selected pay rolls resident in Knightsville or Harmony at the time, and 61 were a 50-percent sample of all such workers on selected pay rolls resident in the rural regions at the time. The sample of nonclay workers represents only those resident in Brazil and Carbon - 241, or a one-third sample, of those in the former city and 38, or all, of those resident in the latter.

Because of the smallness of the groups outside the two cities it has been found desirable in this report to aggregate each industrial sample. Wherever this would tend to weight unduly certain factors that might be associated with place of residence the geographical groups have been analytically segregated. Where data are not thus separately presented, investigation has indicated that the residential factor was not significant.

[1] An aggregate of 62 pay rolls from 11 different plants was used. The smallest number of pay rolls obtained from a single plant was three, each in a different year. The largest number was 12, 11 of them in different years from 1926 to 1936.

APPENDIX D

OCCUPATIONAL GROUPS[1]

Administrative, Technical, and Clerical	Operatives	Laborers
Draftsman	Cement mixer	Timberman in clay mine
Ceramic engineer	Molder	Gate-shed worker
Official or manager	Pugger	Press feeder
Accountant	Pressman	Handler of green clay
General office worker	Mold maker	Boiler fireman
Pay-roll clerk	Hand finisher	Kiln firer
Shipping clerk	Form operator	Coal digger
Storekeeper	Brick-machine worker	Mule driver
Weigh boss	Former runner	Trucker
Salesman	Sorter and shader	Transfer man
Bookkeeper	Dry-pan operator	Coal hauler
Secretary	Wire maker	Wheeler
	Shaver	Off-bearer
	Floor worker	Loader
	Press runner	Kiln drawer
Skilled and Maintenance	Utility man	Tosser
	Machine worker	Clay digger and miner
Steam-shovel operator	Wet-pan operator	Kiln clinkerer
Electric-crane operator	Clay grinding machine operator	Roustabout
Hoister		Kiln cleaner
Die maker	Fitting brancher	Machine-room worker
Block carver	Drier in drying room	Scrapman
Locomotive engineer	Branch maker	Scrap worker
Stationary engineer	Branch sticker	Scrap-car cleaner
Foreman	Screen brusher	Hacker
Bricklayer	Wet-ware worker	Boxcar worker
Kiln repairman	Trimmer	Boxcar bracer
Carpenter	Brick cutter	Track layer and trackman
Electrician	Spray man	Teamster
Blacksmith	Finisher	Setter
Machinery repairman	Inspector	Stacker
General machinist	General handy man	Yard worker
Automobile mechanic	Sample picker	Bitten picker
Millwright	Brick drier	Day worker
Pipe fitter	Electric-car operator	Tunnel runner
General maintenance and repairman	General truck driver	Screen boy
	Kiln sealer	Bricklayer's helper
Burner	Crusher	Janitor
	Oiler	

[1] Occupational groupings are based on information contained in Max Ratner, "The Clay Products Industry in Ohio" (National Youth Administration in Ohio, Occupational Study No. 2, mimeo., Apr. 1938); *Fifteenth Census of the United States: 1930*, "Population" (U. S. Dept. Com., Bur. Census, 1933), vol. V, pp. 446-8; *Alphabetical Index of Occupations, By Industries and Social-Economic Groups, 1937* (U. S. Dept. Com., Bur. Census, 1937); and descriptions of jobs as described by plant managers.

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