Capital Formation: Concepts, Measurement, and Controlling Factors, Studies in Income and Wealth, Volume Nineteen (in press)

Problems in the International Comparison of Economic Accounts, Studies in Income and Wealth, Volume Twenty (in press)

Regional Income, Studies in Income and Wealth, Volume Twenty-one (in press)

A special conference on consumption and economic development was held in October, and the November meeting of the Conference on Research in Income and Wealth was devoted to a review of the national income estimates of the Department of Commerce. The proceedings at these conferences are described in Part Two. The meeting of the Conference on Research in Income and Wealth, in March 1956, was concerned with an appraisal of the 1950 census income data (see Part Two).

Milton Friedman's book, *A Theory of the Consumption Function,* is in press, and George Garvy's exploratory report on research in income size distribution is being edited. For a report on the study of postwar capital markets and on the exploratory study of credit and savings facilities see Section 4.

3. *Wages, Employment, and Productivity*

UNION MEMBERSHIP BY STATE, 1939 AND 1953

The most important gap in American statistics of union membership has been the absence of data showing the distribution of membership by state and region. This deficiency has now been repaired. With the cooperation of union officials, who have made their records available to him, and the use of published union records, Leo Troy has constructed reliable estimates of union membership in each state for 1939 and 1953. The figures and the percentage increases are shown in Table 6.

TABLE 6

TRADE UNION MEMBERSHIP IN THE UNITED STATES, BY STATE, 1939 AND 1953

	Membership (thousands)		*Increase*
	1939	*1953*	*(per cent)*
United States	6,517.7	16,217.3	148.8
New York	959.8	2,051.8	113.8
Pennsylvania	738.6	1,540.7	108.6
California	424.0	1,392.5	228.4
Illinois	590.7	1,358.7	130.0
Ohio	429.3	1,162.6	170.8
Michigan	269.1	1,062.0	294.6
New Jersey	200.6	645.4	221.7
Indiana	176.7	569.6	222.4
Massachusetts	208.9	546.1	161.4
Missouri	180.0	510.5	183.6
Wisconsin	193.9	418.7	115.9
Washington	175.3	393.6	124.5
Texas	110.5	374.8	239.2
Minnesota	133.5	327.6	145.4
Connecticut	63.2	232.1	267.2
West Virginia	153.5	223.9	45.9
Maryland	58.5	203.6	248.0
Oregon	77.4	201.5	160.3
Tennessee	71.0	187.3	163.8
Alabama	63.9	168.3	163.4
Iowa	73.9	159.2	115.4
Virginia	68.4	156.1	128.2
Kentucky	84.7	155.1	83.1
Florida	43.6	135.9	211.7
Georgia	35.7	135.8	280.4
Louisiana	37.8	135.8	259.3
Kansas	39.3	130.8	232.8
Colorado	40.2	114.2	184.1
District of Columbia	71.1	107.8	51.6
Oklahoma	33.7	86.7	157.3
North Carolina	25.7	83.8	226.1
Rhode Island	24.7	82.8	235.2
Montana	39.8	72.5	82.2
Nebraska	27.1	68.6	153.1
Arkansas	25.0	67.9	171.6
Maine	15.2	58.9	287.5
Utah	21.3	56.9	167.1
Arizona	15.6	55.7	257.1
Mississippi	13.0	50.0	284.6
South Carolina	12.2	49.7	307.4
New Hampshire	10.6	43.1	306.6
Idaho	11.5	29.1	153.0
Delaware	5.8	25.8	344.8
New Mexico	8.8	25.0	184.1
Wyoming	14.4	24.2	68.1
Nevada	6.3	21.8	246.0
Vermont	8.5	19.6	130.6
South Dakota	6.1	17.4	185.2
North Dakota	7.9	17.3	119.0
Not distributed	411.4	458.5	

TABLE 7

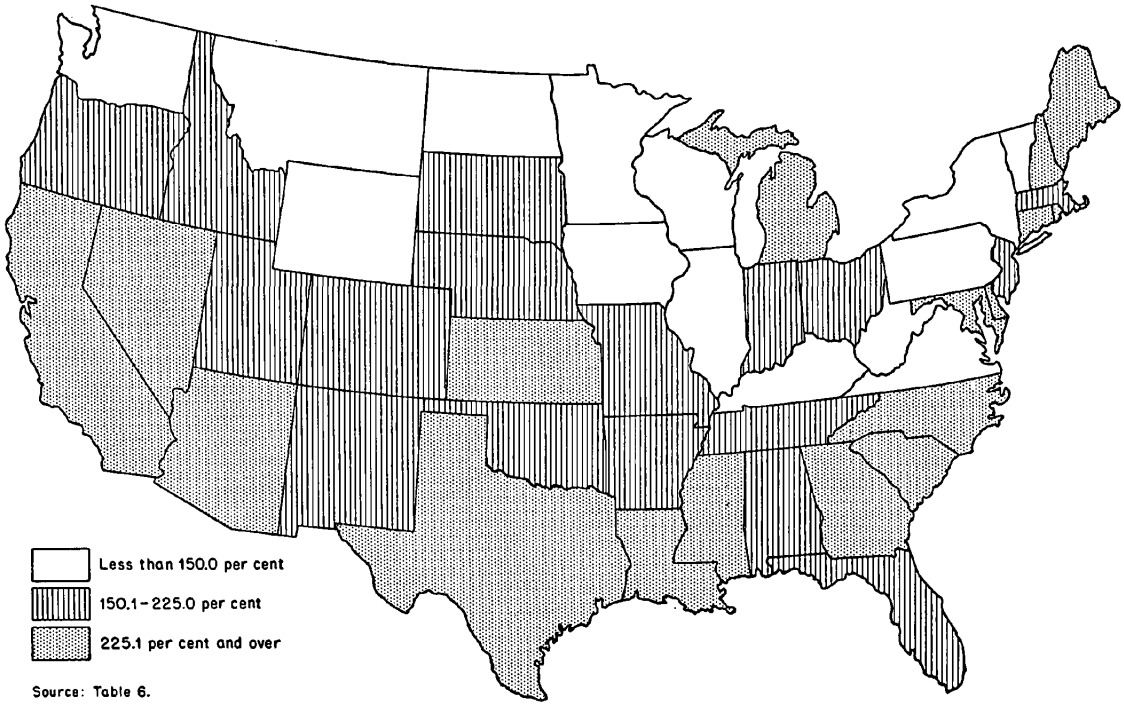
EXTENT OF TRADE UNION ORGANIZATION OF NONAGRICULTURAL EMPLOYMENT IN THE UNITED STATES, BY STATE, 1939 AND 1953

	Percentage Organized	
	1939	*1953*
United States	21.5	32.6
Washington	41.3	53.3
Montana	36.7	47.0
West Virginia	41.7	44.1
Michigan	20.0	43.3
Oregon	30.1	43.1
Indiana	21.7	40.0
Pennsylvania	27.6	39.9
Missouri	21.9	39.7
Illinois	25.9	39.7
Wisconsin	29.1	38.3
Minnesota	24.8	38.1
Ohio	24.4	38.0
California	23.4	35.7
New Jersey	16.1	35.2
New York	23.0	34.4
Nevada	18.2	30.4
Massachusetts	15.5	30.1
Wyoming	26.7	28.6
Colorado	17.6	27.8
Arizona	16.6	27.7
Rhode Island	10.2	27.4
Connecticut	11.3	26.5
Utah	19.3	26.3
Maryland	12.0	25.2
Iowa	17.3	25.0
Kentucky	22.5	25.0
Alabama	16.1	24.9
New Hampshire	7.3	24.6
Kansas	13.4	23.9
Tennessee	15.3	22.6
Idaho	13.7	21.5
Arkansas	12.7	21.5
Maine	7.2	21.4
District of Columbia	21.7	21.2
Nebraska	12.5	19.7
Louisiana	9.6	19.5
Vermont	11.4	18.9
Delaware	7.8	18.4
Virginia	12.8	17.4
Texas	10.3	16.7
Florida	11.3	16.2
Oklahoma	10.4	16.1
North Dakota	10.9	15.6
Georgia	7.0	15.0
Mississippi	6.5	14.7
South Dakota	7.1	14.4
New Mexico	11.2	14.2
South Carolina	4.0	9.3
North Carolina	4.2	8.3

Within the fourteen-year interval, total union membership in the continental United States increased by almost 9.7 million, or 148.8 per cent. Of the total increase, more than two-thirds (68.7 per cent) accrued to the ten states with the largest membership in 1953 (New York, Pennsylvania, California, Illinois, Ohio, Michigan, New Jersey, Indiana, Massachusetts, and Missouri); and less than 2 per cent, to the ten with the smallest membership (South Carolina, New Hampshire, Idaho, Delaware, New Mexico, Wyoming, Nevada, Vermont, South and North Dakota). Thirty-four states exceeded the average relative gain, while fourteen and the District of Columbia fell below it (Map 1). In general, there was a westward shift in membership from the Atlantic seaboard to the Middle West and the Pacific Coast regions.

Since absolute membership is only one measure of the size and strength of unions, Table 7 shows, for the same years, the percentage that union membership is of nonagricultural employment in each of the states. For the entire country, the proportion of nonagricultural employees who were organized rose from 21.5 per cent in 1939 to 32.6 per cent in 1953. In 1939, fifteen states and the District of Columbia exceeded the national average. In 1953, thirteen of those states (but not Wyoming, Kentucky, or the District of Columbia), and Michigan and New Jersey, were above the average (Map 2).

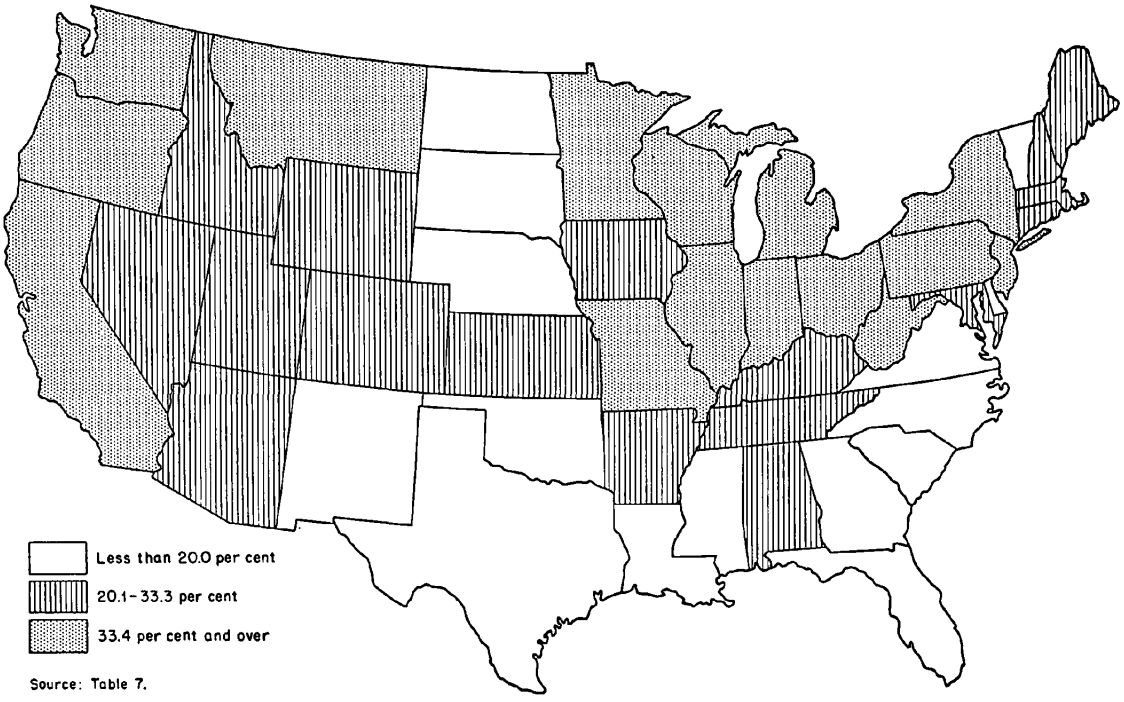
Union membership increased faster than nonagricultural employment in all states, lagging only in the District of Columbia. In twenty states, the growth of membership so far exceeded the growth of employment that their position in a scale of states ranked by the percentage of workers organized was higher in 1953 than it had been in 1939. The increase in organization was particularly great in Michigan, Indiana, Missouri, New Jersey, Massachusetts, Rhode Island, Connecticut, Maryland, and New Hampshire. On the other hand, the standings of such states as West Virginia, Wisconsin, Minnesota, Ohio, California, New York, Pennsylvania, Wyoming, Iowa, Kentucky, Virginia, Florida, New Mexico, and the



Source: Table 6.

MAP 1

Percentage Increase in Trade Union Membership, 1939-1953



Source: Table 7.

MAP 2

Extent of Trade Union Organization of Nonagricultural Employment, 1953

District of Columbia declined. Underlying the changes in the standings of the states were differences in the extent of organization of various industries and the relative importance of these industries in each state's total nonagricultural employment. Moreover, in a number of states, the ratio of membership to employment has remained small in most industries, despite the considerable gains in relative membership indicated by Map 2.

Sectionally, the most organized region of the United States in 1939 was the Pacific region (California, Washington, and Oregon); in 1953, it was the East North Central states (Ohio, Indiana, Illinois, Michigan, and Wisconsin). The difference in the extent of organization among the states was large in each year. In 1953, it ranged from a high of 53.3 per cent in Washington, to a low of 8.3 per cent in North Carolina, while New York and California barely exceeded the national average in either 1939 or 1953. The study on which this summary is based explores the characteristics of union membership and employment in the various states and helps to account for the changing status of union organization.

LEO WOLMAN

TRENDS IN WAGES AND PRODUCTIVITY IN THE UNITED STATES

A study of the long-run trends in money wages, in "real" wages, and in output per unit of labor and capital was begun in 1954 with the assistance of a grant from the Alfred P. Sloan Foundation. Reports on the several parts of this project follow.

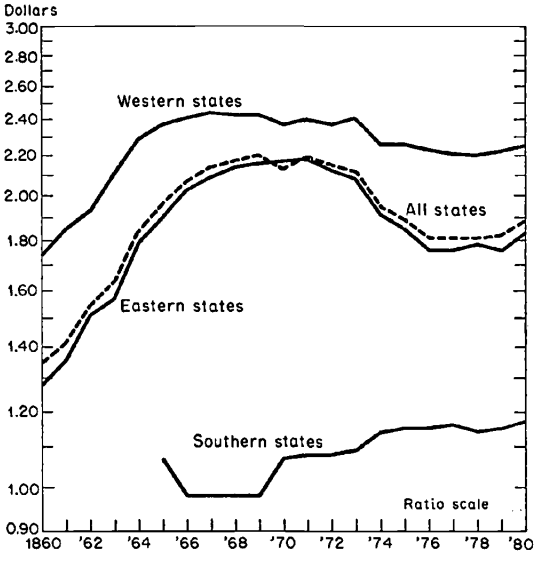
Wages, 1860-1890

I have completed the analysis of wages in manufacturing for the period ending in 1880, using the data contained in the *Weeks Report*, one of the volumes in the census of 1880. They were predominantly daily wage rates, rather than earnings, and were gathered for some one date each year from the payroll records of individual firms. In some ways they are less satisfactory than the wage data provided in the *Aldrich Report* made ten years later and covering the whole period 1880-1890, but the *Weeks Report* includes a much larger number of establishments, in a wider range of industries, and in many more states. In addition, it tells us more about how the wage materials were gathered, offers possibly better statistics on hours, and provides supplementary knowledge on strikes, methods of paying wages, and on whether wages include allowances for overtime, extras, and deductions.

In the analysis of these data, I have weighted the wages by the number of persons reported as gainfully occupied in the industry and the state in which the reporting establishments were located. These wage data, so weighted, were grouped by industry and region. They reveal the following behavior:

1. The average wage in manufacturing industries rose from $1.35 per day in 1860 to $1.88 per day in 1880 (Chart 1). (A rise of 53 cents or 39 per cent.)

CHART 1
Weighted Average Daily Wage of Nineteen Industries, by Regions, 1860-1880



NOTE: For sixty-nine establishments with data covering the whole period 1860-1880. The number of establishments was not constant for some of the intervening years owing to gaps in the data. Weighted by the number gainfully employed in each industry in each state, as reported by the decennial censuses. Source: Joseph D. Weeks, *Report on the Statistics of Wages in Manufacturing*, Dept. of the Interior, Census Office, 1886.

2. Wages moved very differently in the three major regions of the country. Throughout the twenty years, wages were highest in the western states and lowest in the southern states. Wages rose most in the East and least in the South, so that eastern wages, while always lying between southern and western wages, were closer to the former in 1860 but to the latter in 1880.

3. The rise was not continuous. During the twenty years, the average wage went through a large cycle: rising sharply during the Civil War, continuing upward to a flat peak in 1869-1871, and falling, first gradually then rapidly, to a flat trough in 1876-1878. The wage rate of $1.88 in 1880 was substantially below the peak wage of $2.15 in 1869-1871 and a few cents above the trough wage of $1.80 in 1876-1878.

4. Both eastern and western wages went through a major fluctuation during 1860-1880, but western wages responded less sensitively to both the Civil War and the depression of the 1870's. Southern wages manifested still different behavior, for they were only 18 per cent higher in 1880 than in 1860. However, data were available for only a small number of establishments in a small number of industries in the South, and for the Civil War years they were probably completely unreliable.

5. All the industries had higher average wages in 1880 than in 1860, but they varied widely in the degree of rise, the greatest increase having been 86 per cent (breweries and distilleries), and the smallest only 7 per cent (iron-foundries). In general, the largest increases were registered by those industries whose wages were below average in 1860. Nevertheless, the high wage industries in 1860 tended to be the high wage industries in 1880, and the low wage industries in 1860 to be the low wage industries in 1880, also.

6. There was little uniformity of cyclical behavior among the nineteen industries, but there seems to have been no tendency for wages to lag in their upturns and downturns behind the National Bureau reference dates – certainly for the 1873 reference peak and the 1878 reference trough.

7. Wages were also analyzed for five skilled occupations (blacksmiths, carpenters, engineers, machinists, and painters) represented in nine to twenty-six establishments and cutting across industry lines. These wages were remarkably close in absolute amount, and their average rise was the same as that of the average for the nineteen industries. Thus the change in the average wages in these nineteen industries does not seem to have been due in any important degree to a change in their occupational composition.

8. Wages were also analyzed for laborers in seventy-eight establishments, covering most industries. These rose only 29 per cent – less than wages in any of the five skilled occupations. The ratio of the wages of laborers to those of skilled craftsmen was 63 per cent in 1860 and 58 per cent in 1880. Paradoxically, nearly all of this widening of the differential occurred during the Civil War.

9. The *Weeks Report* provides a good deal of information on the number of hours constituting a day's work, though only at five-year intervals. They show that the weighted average work-day (ten and a third hours) was almost exactly the same in 1880 as it had been in 1860 and that the only significant departure from this average occurred in 1865, when the work day seems to have been almost eleven hours. Except during or just after the Civil War, the hourly and the daily wage rates apparently moved very closely together.

I am now investigating the behavior of wages during 1881-1890 – a period for which it is necessary to rely on the less comprehensive *Aldrich Report,* supplemented with data from the Bureau of Labor. I shall soon be free to compare changes in wages with variations in prices for the entire period 1860-1890. I hope also to be able to report on the response of wages to increases and decreases in employment and production and to throw some light on variations in wages in several other industries besides manufacturing – including building, mining, teaching, and agricul-

ture. I plan to submit the manuscript at the end of June.

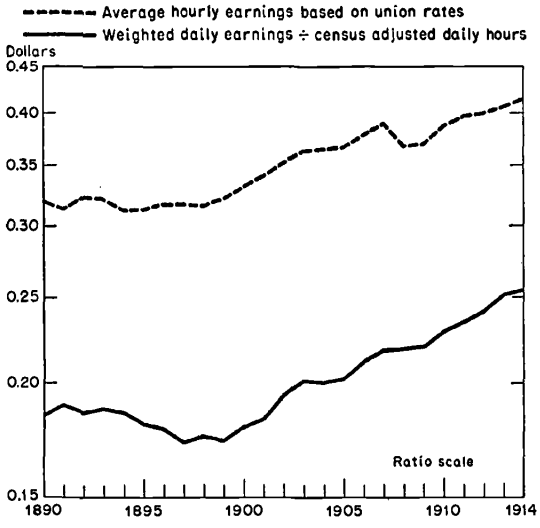
CLARENCE D. LONG

Wages 1890-1914

The collection and processing of money wage data for individual manufacturing industries, 1890-1914, has been completed. We still have to obtain an all-manufacturing wage series and evaluate the results. The methods used in preparing the wage series were described in last year's annual report. In addition to the industry series mentioned there, series for the following industries have been completed: malt liquors, glass, electrical machinery, pottery and clay products, chemicals, and foundries and machine shops. No hourly wage series were previously available for these industries during this period, except for a series for foundries and machine shops based on union rates.[1]

CHART 2

Hourly Earnings in Foundry and Machine Shops, 1890-1914



As Chart 2 shows, hourly earnings in foundries and machine shops, as estimated from establishment data, behave quite differently from the series based on the union rates reported to have been paid in that industry. Throughout the period our series is considerably lower than the union rate series, and its increase from 1890 to 1914 is 38 per cent as against 29 per cent for the union rate series.

The data on the cost of living compiled by state governments, which had earlier seemed to be promising, proved to be too fragmentary to use. We are now exploring the possibility of constructing a rent index from newspaper advertisements, indexes of the retail prices of clothing and home furnishings from mail order catalogues, and an index of the price of gas for household use from the records of utility companies. These seem to be the main avenues along which it may be possible to improve on present cost-of-living indexes for this period.

ALBERT REES
DONALD JACOBS

Wages since 1914

Hourly wages, using manufacturing wages as an example, have increased almost without interruption in the forty years between 1914 and 1955. Starting at 22 cents an hour in 1914, they had by November 1955 multiplied nearly nine-fold (to $1.93). On two occasions during this period, from 1920 to 1922 and from 1929 to 1933, they declined – by 7 cents an hour in the first instance and by 13 cents in the second.

Since the period as a whole was one of rising prices, it follows that real hourly earnings advanced much less than money earnings. Between 1914 and November 1955, the average factory laborer's real hourly wage increased three and one-quarter times – a remarkable advance in real wages in a period of less than a half-century. So strong was the upward pull in real wages that they advanced even during the depressions of 1920 and 1929, except for a small decline in 1932.

An interesting, and perhaps unexpected, feature of this record of mounting real wages is the variety of economic conditions under which real hourly earnings managed to rise. This is shown in the following tabulation:

[1] See Paul H. Douglas, *Real Wages in the United States, 1890-1926*, Houghton Mifflin, 1930, pp. 88, 89, and 96. Douglas' series is union rates, 1907-1914, extrapolated back to 1890 by payroll data.

Period	Percentage Increase In Factory Real Hourly Earnings
1914-1919	24
1919-1929	20
1929-1939	38
1939-1949	26
1949-November 1955	25

LEO WOLMAN

Productivity

Estimates of productivity and related variables are now largely completed for as many segments of the economy as it is feasible to cover. For thirty-three industry groups and for the economy as a whole, we have made estimates of total factor productivity and of the ratios of output to labor and to capital inputs separately from 1899 or earlier. Estimates of output per man-hour alone are available for several additional groups and for eighty individual manufacturing industries over the same period. Other industries are covered for shorter periods of time.

I presented a preliminary analysis of productivity trends based on the available estimates at a joint session of the American Economic and Statistical Associations, on December 29, 1955. The paper, *Productivity Trends: Capital and Labor*, will be published in a forthcoming issue of the *Review of Economics and Statistics* and reprints will be subsequently distributed by the National Bureau as Occasional Paper 53. Between 1899 and 1953 there were no declines in total productivity in the thirty-three industry groups, and but few negative changes in output per man-hour in the eighty industries. More than three-fourths of the average annual rates of change fell between 1 and 3 per cent. The dispersion of changes in the output-input ratios was much greater in shorter periods than over the fifty-four years as a whole. The variability in rates of change in the ratios over six subperiods was greater for the industry groups than for the economy, and still greater for individual industries.

Differences among industries in rates of change in total factor productivity were less than those in either output per man-hour or output per unit of capital input over the period as a whole and in each of the subperiods. Also, rates of change in total factor productivity varied less than those in either of the partial ratios. The explanation is that large (small) increases in output per man-hour were associated with, and no doubt partly attributable to, large (small) increases in capital per man-hour.

When the various industry groups and industries are ranked by rate of change in their output-input ratios in the subperiods, marked shifts in relative position of the groups and industries appear. There has been a fairly persistent tendency for industries with low rank to improve their relative position and for the erstwhile leaders to drop in the scale.

The final phase of the productivity trends study will involve an analysis of the interrelationships between productivity changes and connected variables – both those that are primarily casual and those that reflect the economic impact of productivity change at the economy and industry levels. Preliminary explorations have been undertaken into the relationship between relative changes in productivity and relative changes in factor prices, product prices, output, and employment, by industry.

Detailed technical notes on the sources and methods used in preparing the estimates of productivity and the component variables by industry, and for the economy as a whole, are now being written. When these are complete, the body of the report will be drafted.

JOHN W. KENDRICK

PRICES AND WAGES IN THE SOUTH, 1860 TO 1880

The slow economic recovery of the South after the Civil War raises several questions for study. As soon as a southern area was occupied by Union forces, the confederate dollar became worthless. How did prices react when one currency was wiped out and another substituted in its place? The breakdown of transportation immediately following the war was acute. What effect did this have on North-

South price differentials, and how long did it take to restore damaged transportation and communication facilities? The post-bellum South remained predominantly a producer of raw materials. What were the terms of trade facing the region during the two decades between 1860 and 1880? The end of the war brought a social upheaval in the South. Negroes – formerly slaves – became free men. What effect did Emancipation have on the prevailing wage rates? How did white wages compare with Negro wages? Skilled wages with unskilled? Southern wages with northern wages in the same trades, and wage movements with price movements?

My study falls into three parts: (1) a comparison of selected commodity prices in the South and in the North before and after the Civil War, (2) the construction and analysis of wholesale price indexes for the city of New Orleans and (3) an analysis of the structure and movement of money and real wage rates in different parts of the South and North.

Comparison of northern and southern commodity prices. My southern price quotations were taken from the market report section of the New Orleans *Prices Current* and my northern quotations from Anne Bezanson's *Wholesale Prices in Philadelphia, 1852-1896*.[1] To measure the price differential at a given date between New Orleans and Philadelphia, the difference in the price of the same commodity is expressed as a percentage of the New Orleans price. The average price differential of six commodities normally imported from New Orleans and three commodities normally exported from the city are presented in Table 8.

The Civil War ended for New Orleans when Captain David Farragut and a northern naval force captured the city in April 1862. New Orleans became a federal holding in the midst of Confederate territory, and for some time goods could not easily enter or leave the city. The price differentials that existed between New Orleans and Philadelphia were large, even though both cities were now in union hands. However, as time passed, and transportation and communications improved, these differentials steadily narrowed. By 1866, the prewar price differentials between New Orleans and Philadelphia had been re-established.

TABLE 8

AVERAGE OF PRICE DIFFERENTIALS BETWEEN NEW ORLEANS AND PHILADELPHIA, BY QUARTERS, 1860-1866

YEAR AND QUARTER	DIFFERENCE AS PERCENTAGE OF NEW ORLEANS PRICE	
	Six Imports[a]	*Three Exports*[b]
1860:		
I	+11.0	−13.5
II	+12.9	−19.0
III	+11.7	−26.4
IV	+11.3	−17.3
1861:		
I	+13.3	−24.8
1862:		
II	+69.2	−68.0
III	+58.8	−21.2
IV	+46.2	−18.7
1863:		
I	+34.3	−37.4
II	+34.4	−24.6
III	+33.4	−15.0
IV	+29.6	−13.1
1864:		
I	+14.5	− 8.2
II	+11.0	−18.7
III	+16.2	−12.3
IV	+28.6	−10.1
1865:		
I	+19.6	+ 0.5
II	+16.6	−13.1
III	+10.8	−17.8
IV	+18.8	−14.8
1866:		
I	+15.5	− 8.2
II	+ 1.8	−11.7
III	+ 7.8	−18.1
IV	+ 4.5	−22.0

[a] Lard, pork, salt, hay, flour, oats.
[b] Sugar, molasses, beef.

Detailed price indexes. The New Orleans price series will be used to construct the following fifteen price indexes:

1. All series
2. Products originating on American farms
3. Products other than those originating on American farms
4. Foods

[1] University of Pennsylvania Press, 1954.

5. Non-foods
6. Producer goods
7. Consumer goods
8. Goods entering into capital equipment
9. Articles of human consumption
10. All commodities other than of human consumption
11. Building materials
12. Nondurable goods
13. Durable goods
14. Raw materials
15. Processed goods

These indexes cover many of the same aspects of the economy investigated by Frederick C. Mills in his studies of more recent years.

Structure and movement of wages. With the aid of a grant from the Social Science Research Council, I was able to collect from manuscript sources 375 more or less complete wage series for thirteen different areas in the South. I have divided the wage quotations of each area into four classifications: foremen, skilled craftsmen, craftsmen's helpers, and unskilled labor. Both intra- and inter-area comparisons over time will be made. These southern wage series will also be compared to the northern wage series of Wesley C. Mitchell given in his *Gold, Prices, and Wages under the Greenback Standard*,[2] and also to my southern price series.

EUGENE M. LERNER

THE DEMAND AND SUPPLY OF SCIENTIFIC PERSONNEL

Our monograph, *The Demand and Supply of Scientific Personnel,* is in press. The table of contents is as follows:

Chapter

1 A General View of the Technological Professions
2 Demand and Supply: Methods of Analysis
3 Factors Influencing the Demand for Engineers and Chemists
4 The Supply of Engineers
5 Supply and Demand for Mathematicians and Physicists

There are also ten appendixes, including a survey of the available data on the earnings of engineers, their educational training, and so forth.

The supply of engineers has been drawn from three sources: engineering colleges, other college-trained persons, and the skilled labor force which receives most of its training through experience. In recent years, roughly 50 per cent of engineers have been engineering graduates, almost 10 per cent have been college graduates specializing in natural sciences, education, and so forth, and the remaining 40 per cent have been nongraduates.

The graduates of engineering schools have been a rising fraction of all college graduates: they were only one-thirtieth of the total at the beginning of this century but are now one-tenth. We have made various extrapolations of the trends of aggregate college enrollments and the fraction of engineering students and obtained estimates of the number of graduates in 1965 ranging between 50,000 and 60,000 — compared with 8,000 in the 1920's and 32,000 during the early 1950's.

The field of specialization of graduates of engineering schools has been found to be fairly responsive to the changes in the relative salaries of these specialties. If one assumes a two-year lag before changes in relative salaries cause changes in the composition of degrees, the two changes have been closely correlated in direction.

The nongraduate engineers were about two-fifths of all engineers in 1940 and 1950, and, of course, an even higher proportion in earlier times. There is relatively little information available on this group, partly because most surveys of the engineering profession are made by the professional societies, whose memberships are made up chiefly of graduate engineers. Approximately one-third of the nongraduates had some college training, and one-fourth had not completed high school. The scraps of evidence we possess suggest that these nongraduates are used relatively more often in management and construction, and less often in applied research, than the gradu-

[2] University of California Press, 1908.

ate engineers. The nongraduate engineers are so important and unstudied a component of the engineering profession that no wholly satisfactory comparison of supply and demand for engineers will be possible until this gap in our knowledge is closed.

DAVID M. BLANK
GEORGE J. STIGLER

OTHER STUDIES

Personal Income during Business Cycles, by Daniel Creamer, which deals in part with wages, unemployment compensation, and other forms of labor income, was published. Harold Barger's study of employment trends, productivity and costs, in wholesale and retail trade, *Distributions' Place in the American Economy since 1869,* also was published. *Trends in Employment in the Service Industries,* by George J. Stigler, and *The Growth of Public Employment in Great Britain,* by Moses Abramovitz and Vera Eliasberg, are in press. Also in press is the conference proceedings volume, *Measurement and Behavior of Unemployment.*

Gerhard Bry's book, "Wages in Germany, 1871-1945," is being prepared for publication, and Clarence D. Long's monograph, "The Labor Force and Economic Change," is being reviewed by the Board.

Other studies of employment and the labor market are reported by George H. Borts and by Gerhard Bry in Section 1. The reports by Moses Abramovitz and by Richard Easterlin in Section 2 deal with studies of productivity, income, and employment trends.

4. Banking and Finance

POSTWAR CAPITAL MARKETS

The Postwar Capital Market Study started operations in the summer of 1955 under a grant from the Life Insurance Association of America. The study's primary objective is an analysis of the structure and development of the American capital market in the decade 1946-1955 that ties a description of the institutional setting and a discussion of the major economic problems involved to an integrated statistical framework of the flow of funds through the capital market and of the assets and liabilities of financial institutions active in the market.

Two steps, partly overlapping, are planned. The first is the development of a set of balance sheets and of financial fund flow statements for all major groups of participants in the capital market – financial institutions as well as nonfinancial business enterprises, households, and governments. The second step will be the preparation of four monographs. Three of these, dealing with the main sectors of the capital market – the markets for government securities, for corporate securities and loans, and for nonfarm mortgage loans – are discussed below by their authors, Roland Robinson, Eli Shapiro, and Saul Klaman. Each study will deal with the underlying economic forces, the institutional setting (including the competition among financial institutions), government policies, gross and net yields, significant changes in these factors during the postwar decade, and important differences between the postwar and prewar periods.

In the fourth monograph, I shall try to tie the results of the other three studies into the framework of the whole saving and investment process, to deal with common problems such as developments in the investment banking machinery and the influence of interest and tax rate changes, and to link developments in the postwar decade to relevant trends during the preceding twenty to thirty years.

The basic statistics are being organized into three bodies of data:

1. Annual estimates of saving and investment for the years 1946 through 1955, continuing (and for 1946 through 1949 revising) those of *A Study of Saving in the United States.*[1] In addition to providing the back-

[1] Raymond W. Goldsmith, Princeton University Press, 1955.