

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: The Labor Force Under Changing Income and Employment

Volume Author/Editor: Clarence D. Long

Volume Publisher: Princeton University Press

Volume ISBN: 0-87014-064-7

Volume URL: <http://www.nber.org/books/long58-1>

Publication Date: 1958

Chapter Title: Males in the Labor Force over Time

Chapter Author: Clarence D. Long

Chapter URL: <http://www.nber.org/chapters/c2623>

Chapter pages in book: (p. 144 - 158)

## CHAPTER 8

# MALES IN THE LABOR FORCE OVER TIME

### *Behavior of the Male Labor Force*

IN ALL five countries studied for approximately the last forty- to sixty-year periods, the male labor force, whether or not standardized for age composition, failed to rise as rapidly as the male population<sup>1</sup> and as a result showed a decrease per 1,000 male population in each country (Chart 15). Agreement among the five countries was reasonably close: most of the decreases were between 10 and 20 per decade for each 1,000 males of working age (Table 28), and almost without exception, accelerated in the recent period. Standardization of the labor force for age composition sharpens the decline a bit in the United States and modifies it in the other countries (changes in unstandardized data were not shown for the other countries) but on the whole makes scarcely any difference. The explanation is that the labor force participation rate does not differ much between elderly persons and teen-agers, or between men above middle age and youths in their early twenties, so that the age changes largely cancel out. Much greater variations have occurred in age composition. While men 25-44, the central age group, remained virtually unchanged throughout as a share of the male population (and of the male labor force), there were changes among the younger and older ages. The proportion of boys aged 10-13 fell from about an eleventh to a sixteenth of the total male population in the United States, in New Zealand, and in Germany, and that of young men 14-24 fell from a fifth to a sixth in all five countries. Also throughout the five countries the share of men aged 45-64 expanded enough to offset the shrinkage of that of youths aged 14-24; and the proportion of men 65 and older of the total male population doubled typically from 4 per cent in 1890 to 8 per cent in 1950. The composition of the labor force has reflected not only these changes in the population, itself, but also the impact of changes in the propensity of these various age groups to be in the labor force.

The effect of changing rural-urban residence can be measured only for the United States. Although in this country the movements of population from rural to urban areas have been on the largest scale, their

<sup>1</sup> In each of the five nations studied—the United States, Great Britain, Canada, New Zealand, and Germany—males have at various times over the past half century been more than half or less than half the population. But only in West Germany after World War II did the proportion of males and females become sufficiently out of balance to affect the labor force appreciably. In that country in 1946 there were scarcely more than two males for every three females aged 14 and older in the population.

## CHART 15

### Males 14 and Older in the Labor Force per 1,000 in Same Population Group: 5 Countries, Various Years, 1890-1951

Standardized for age, and for other differences as noted, on basis of United States population in 1940.

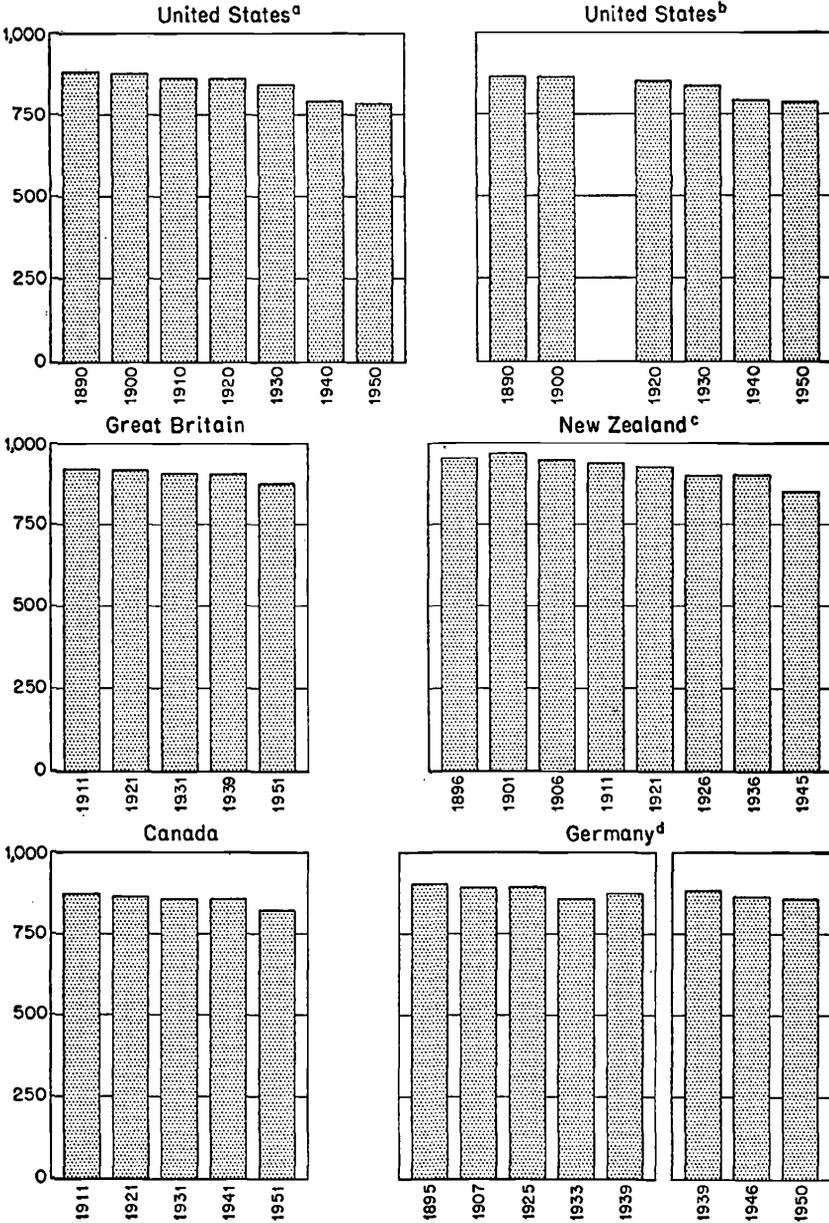
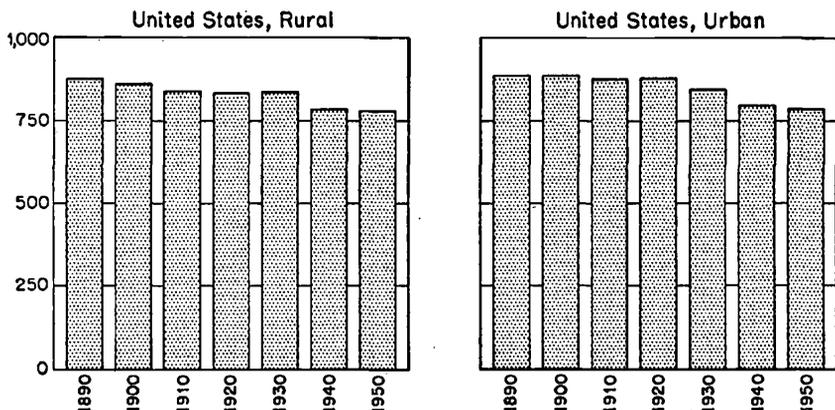


CHART 15, concluded



<sup>a</sup> Standardized for rural-urban composition as well as age.

<sup>b</sup> Standardized for rural-urban composition, color, and native-foreign composition, as well as age.

<sup>c</sup> Males 15 and older.

<sup>d</sup> For 1895-1939, boundaries after World War I, without the Saar; 1939-1950, Federal Republic of Germany, without Berlin.

Source: Appendix A.

TABLE 28

Average Per-Decade Changes in Male Labor Force, 5 Countries, Various Periods, 1890-1951

	Change per 1,000 Male Population of Same Age (number)					
	14 & Older	14-19	20-24	25-44	45-64	65 & Older
A. ENTIRE PERIOD						
United States:						
1890-1950	-14	-29	-15	-8	-12	-54
1890-1950 <sup>a</sup>	-17					
1890-1950 <sup>b</sup>	-16	-29	-15	-7	-12	-49
Rural areas, <sup>a</sup> 1890-1950	-16	-18	-4	-9	-15	-54
Urban areas, <sup>a</sup> 1890-1950	-17	-41	-24	-7	-9	-44
Large cities, <sup>a</sup> 1900-1950	-19					
Native white, <sup>a</sup> 1890-1950	-14	-21	-14	-6	-11	-70
Foreign-born white, <sup>a</sup> 1890-1950	-23	-64	-31	-7	-11	-51
Colored, <sup>a</sup> 1890-1950	-27	-43	-21	-15	-21	-73
Great Britain, <sup>a, c</sup> 1911-1951	-12	-66	-3	-0.3	+3	-62
Canada:						
1921-1951 <sup>a</sup>	-13	-39	-2	-1	-4	-66
1911-1951 <sup>a</sup>	-12	-41	-1	-2	-10	-34
New Zealand:						
1901-1951 <sup>a, d</sup>	-24	-25		-2	-22	-126
1896-1951 <sup>a, d</sup>	-19	-22		+0.4	-16	-106
Germany:						
1895-1939 <sup>a</sup>	-7	+5	+3	+2	-11	-66
1895-1950 <sup>a</sup>	+8	-17	-3	-2	-4	-58

TABLE 28, continued

	Change per 1,000 Male Population of Same Age (number)					65 & Older
	14 & Older	14-19	20-24	25-44	45-64	
B. EARLY PERIOD						
United States:						
1890-1930	-8	-40	-5	-0.3	-3	-39
1890-1930 <sup>a</sup>	-11					
1890-1930 <sup>b</sup>	-10	-42	-7	+0.3	-2	-33
Rural areas, <sup>a</sup> 1890-1930	-9	-26	-1	-2	-3	-36
Urban areas, <sup>a</sup> 1890-1930	-11	-58	-11	+2	-0.3	-31
Large cities, <sup>a</sup> 1900-1930	-12					
Native white, <sup>a</sup> 1890-1930	-9	-34	-4	+0.5	-2	-36
Foreign-born white, <sup>a</sup> 1890-1930	-17	-75	-7	-0.5	-4	-45
Colored, <sup>a</sup> 1890-1930	-10	-31	-2	-2	-5	-34
Great Britain, <sup>a, c</sup> 1911-1931	-8	-31	-3	-1	+1	-45
Canada:						
1921-1931 <sup>a</sup>	-4	-84	0	+9	+29	-26
1911-1931 <sup>a</sup>	-7	-66	+1	+3	+2	+19
New Zealand:						
1901-1926 <sup>a, d</sup>	-28	-25		-4	-22	-158
1896-1926 <sup>a, d</sup>	-18	-19		+0.3	-12	-115
Germany, <sup>a</sup> 1895-1925	-3	+5	-0.3	+1	-1	-38
C. RECENT PERIOD						
United States:						
1930-1950	-26	-6	-36	-24	-31	-84
1930-1950 <sup>a</sup>	-30					
1930-1950 <sup>b</sup>	-29	-4	-32	-23	-32	-80
Rural areas, <sup>a</sup> 1930-1950	-29	-2	-10	-22	-40	-91
Urban areas, <sup>a</sup> 1930-1950	-29	-6	-50	-24	-27	-71
Large cities, <sup>a</sup> 1930-1950	-31					
Native white, <sup>a</sup> 1930-1950	-25	-7	-79	-18	-28	-88
Foreign-born white, <sup>a</sup> 1930-1950	-35	-42	-78	-19	-26	-63
Colored, <sup>a</sup> 1930-1950	-61	-68	-6	-42	-53	-151
Great Britain, <sup>a, c</sup> 1931-1951	-16	-102	-3	+1	+6	-80
Canada, <sup>a</sup> 1931-1951	-18	-17	-3	-7	-21	-87
New Zealand, <sup>a, d</sup> 1926-1951	-20	-25		+0.4	-22	-94
Germany:						
1925-1939 <sup>a</sup>	-16	+7	+9	+4	-31	-126
1925-1950 <sup>a</sup>	-14	-43	-6	-4	-7	-83

Source: Appendix A.

<sup>a</sup> Labor force standardized for age composition on the basis of population of the States in 1940.<sup>b</sup> Labor force standardized for rural-urban composition and, in the case of age group 14 and older, for age composition on the basis of population of the United States in 1940.<sup>c</sup> Age groups are available only for 14-17 and 18-24.<sup>d</sup> Boys under 15 not included; 15-24 grouped together—no separate data available for age groups 14-19 and 20-24.

## MALE LABOR FORCE OVER TIME

effects on the average proportion of the nation's population in the labor force have been negligible, not only for the whole period studied (1890-1950) but for any individual decade. The young and the old, the only groups whose tendencies to be in the labor force differed significantly between rural and urban areas, did not constitute enough workers to exert much influence on the total.

### COLOR AND NATIONAL ORIGIN.

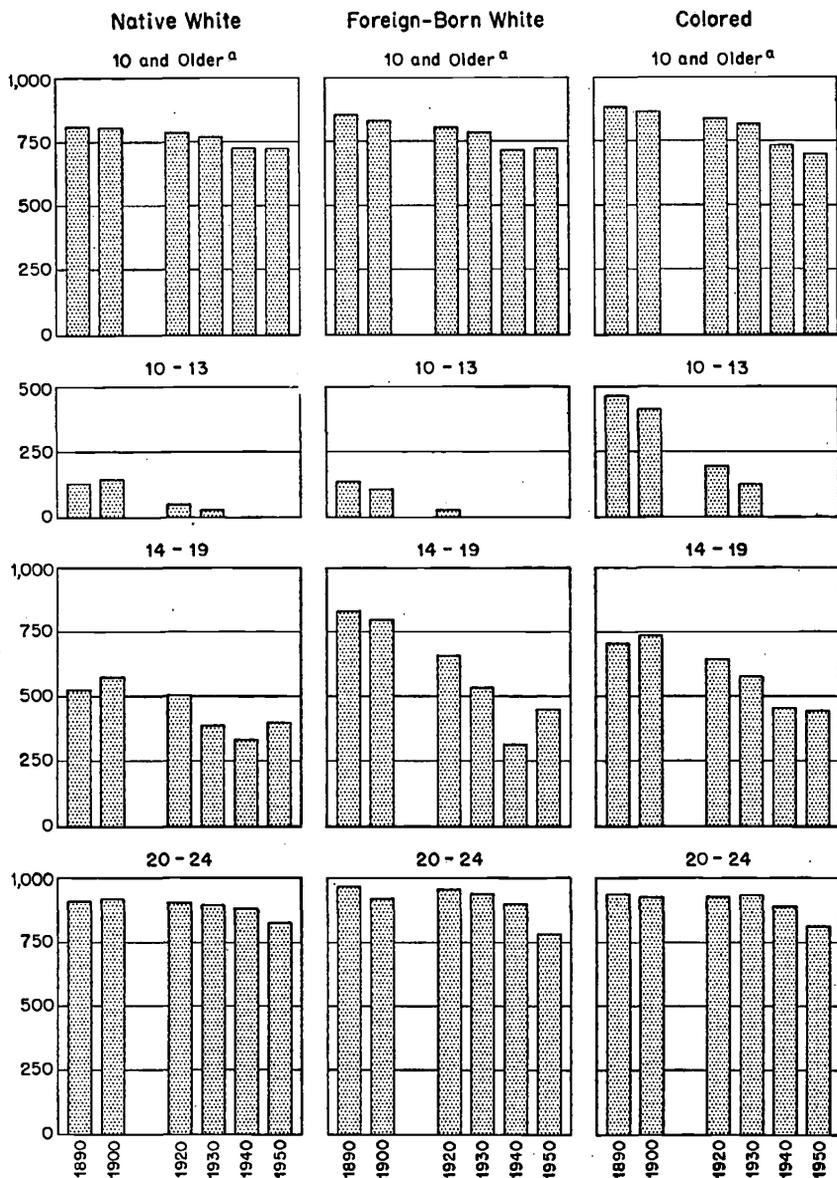
In 1890 Negro and foreign-born males both had a substantially stronger tendency to be in the labor force than did native white males. The tendency was found among all males aged 10 and older (standardized for age), and it was strongest in the case of boys and older Negro men (Chart 16). This higher tendency continued for the Negro males up to 1930. It still held in 1940 but their share of the total labor force was reduced more than that of native whites in all age groups, no doubt because of the greater incidence of unemployment among the colored (Chapter 10). And by 1950 the rate of participation of Negroes had fallen below that of native whites for all males combined and for men aged 25-64; for the young and elderly, it was about the same as the rate of the native whites. The fact that the decline among the colored was nearly double that among native whites over the half century is especially interesting, but the attempt to explain it is reserved until Chapters 11 and 12. In spite of disparities in level, differences in trend, and variations in the ratio of foreign-born to the total population, these minority groups have not had much effect on the participation of all classes in the labor force (Table 29). Their combined effect ranged from raising the labor force participation rate by 18 per 1,000 males 14 and older in 1890 to reducing it by a very slight 3 per 1,000 in 1950. The data on native whites, which provide the equivalent of standardizing for color and national origin, show that the decline in the proportion of native white males in the labor force was about seven-eighths as great as the decline for all classes of males.

### *Changes in Male Labor Force in Relation to Changes in Income*

Changes in the male labor force and changes in real disposable income from all sources (per adult-male equivalent employed) between census years and between three-year averages over various periods ranging from 1890 to 1951, were compared for the five nations. Income data and the methods used were the same as those applied in studying the relation between changes in female labor force and changes in income over time, and are discussed in Chapter 6. For the four English-speaking nations over the entire period, income figures yielded by the three-year

### CHART 16

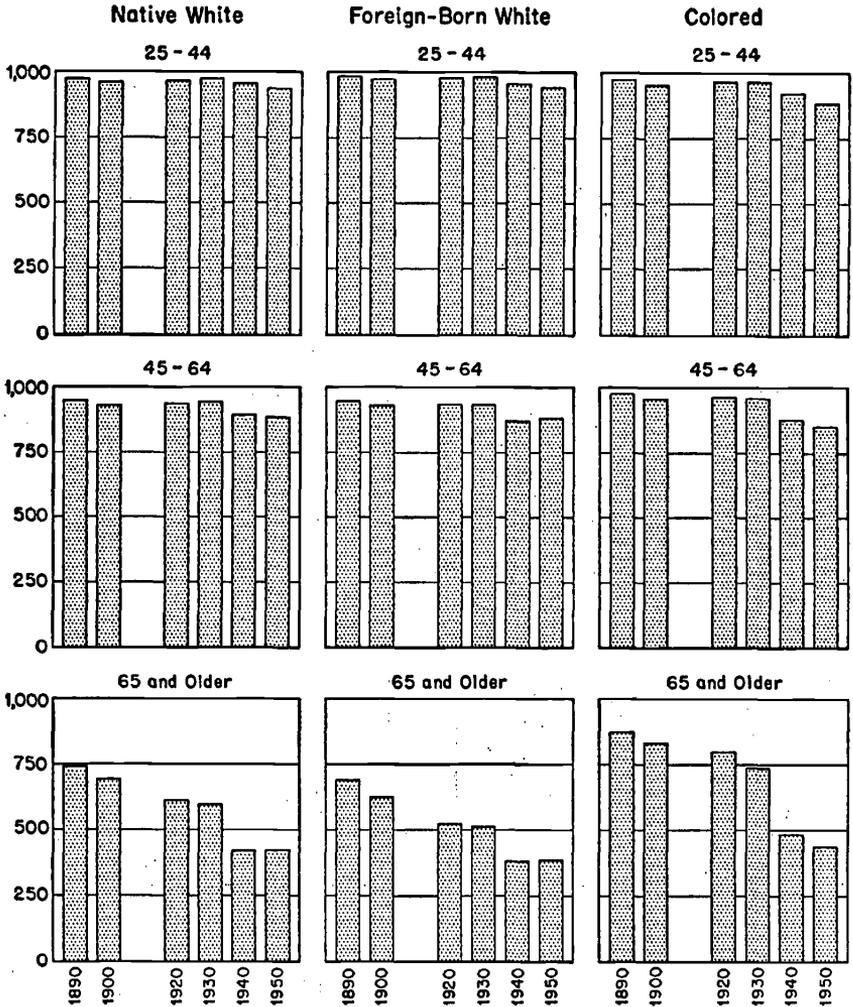
Native White, Foreign-Born White, and Colored Males in the Labor Force  
per 1,000 in Same Population Group: by Age Group, United States,  
Census Dates, 1890-1950



(chart continues on next page)

CHART 16, concluded

Native White, Foreign-Born White, and Colored Males in the Labor Force per 1,000 in Same Population Group: by Age Group, United States, Census Dates, 1890-1950



\* Standardized for age on basis of male population of United States in 1940.  
Source: Appendix A.

MALE LABOR FORCE OVER TIME

TABLE 29

Effect of the Foreign-Born and Negroes on Rate of Male Participation in Labor Force, United States, Census Dates, 1890-1950

	1890	1900	1920	1930	1940	1950
<i>Rate of Participation</i> <sup>a</sup>						
1. All classes	827	817	787	775	723	718
2. Natives (white & nonwhite)	820	814	783	774	724	718
3. Whites (native & foreign-born)	819	810	781	771	722	721
4. Native whites	809	805	775	768	723	721
<i>Method No. 1</i>						
5. Effect of foreign-born (line 1 minus line 2)	+7	+3	+4	+1	-1	0
6. Effect of colored (line 2 minus line 4)	+11	+9	+8	+6	+1	-3
7. Combined effect (line 1 minus line 4, or line 5 plus line 6)	+18	+12	+12	+7	0	-3
<i>Method No. 2</i>						
8. Effect of foreign-born (line 3 minus line 4)	+10	+5	+6	+3	-1	0
9. Effect of colored (line 1 minus line 3)	+8	+7	+6	+4	+1	-3
10. Combined effect (line 8 plus line 9)	+18	+12	+12	+7	0	-3
<i>Discrepancy between Methods</i>						
11. Effect of foreign-born (line 5 minus line 8)	-3	-2	-2	-2	0	0
12. Effect of colored (line 6 minus line 9)	+3	+2	+2	+2	0	0

Source: Appendix A.

<sup>a</sup> Number of males aged 10 and older in labor force (standardized for age composition on the basis of population of the United States in 1940) per 1,000 males of same age group, color, and place of birth.

averages were not significantly different from those of census years, whether expressed in terms of dollars or related to per-decade changes in the labor force (Table 30). In the early and recent periods, the differences were greater.<sup>2</sup> But, again, the differences were not significant for the four English-speaking nations with the exception that in Great Britain in the earlier period, the per-decade increase in income per worker was cut to nearly half and the decline in the male labor force per \$100 rise in income nearly doubled, compared with the changes between census years.

<sup>2</sup> In the United States the reason was that the dividing date (1930) bordered on the depression of the 1930's so that the averaging in of some of the more prosperous years of 1928 and 1929 with the income figure for 1930 raised the increase of the earlier period and lowered the increase of the recent period.

TABLE 30

Average Per-Decade Changes in Male Labor Force per 1,000 Males 14 and Older, Associated with Average Per-Decade Increases in Income between Census Years and Three-Year Averages, 5 Countries, Various Periods, 1890-1951

	Change in Income <sup>a</sup> (Dollars) between:		Change in Labor Force <sup>b</sup> per \$100 Increase in Income <sup>a</sup> between:		Per cent Change in Labor Force <sup>b</sup> per 1 Per Cent Increase in Income <sup>a</sup> between:	
	Census Years (1)	3-Year Averages <sup>c</sup> (2)	Census Years (3)	3-Year Averages <sup>c</sup> (4)	Census Years (5)	3-Year Averages <sup>c</sup> (6)
<b>Entire Period</b>						
United States	296	282	-6	-6	-0.12	-0.12
Great Britain	113	114	-11	-11	-0.15	-0.15
Canada	268	288	-5	-5	-0.09	-0.09
New Zealand	342	322	-7	-7	-0.13	-0.13
Germany	33	20	-21	-35	-0.19	-0.30
1895-1950	7	-7	+114	-114	+1.03	-1.01
<b>Early Period</b>						
United States	255	267	-4	-4	-0.07	-0.07
Great Britain	30	17	-27	-47	-0.34	-0.61
Canada	80	71	-5	-6	-0.08	-0.09
New Zealand	218	228	-13	-12	-0.18	-0.17
Germany	-43	-44	7	7	0.06	0.06
<b>Recent Period</b>						
United States	377	311	-8	-10	-0.24	-0.28
Great Britain	196	210	-8	-8	-0.13	-0.12
Canada	363	396	-5	-5	-0.10	-0.09
New Zealand	460	412	-4	-5	-0.09	-0.10
Germany	196	172	-8	-9	-0.07	-0.08
1925-1950	66	41	-21	-34	-0.20	-0.31

## MALE LABOR FORCE OVER TIME

The same does not hold for Germany. For that nation the average income compared with the 1950 labor force actually rested on only two years, since there were no data for 1948. Nevertheless, the effect of including 1949 in the average was to convert a small per-decade rise in income into a small per-decade decline (1949 incomes were apparently much below those of 1950). The quantitative difference was not great, but the whole direction of movement was altered and the signs of the changes in labor force associated with the change in income were reversed. On the whole, it is probably best to disregard the German income changes as being unreliable: the territorial coverage has varied three times, explicit data on disposable income were not available for post-World War II years, and income comparisons over time are highly suspect for an economy as disrupted by war and military defeat as Germany's. It is not certain, therefore, what the quantitative change has been in German income per worker or whether the income change has been upward or downward.

The labor force-income analysis reveals that the proportion of males aged 14 and older in the labor force declined in all five countries during periods when annual real personal income (after income taxes) per employed adult male were rising. In the United States—as a nation, and in its urban and rural areas and large cities—the male labor force declined by 5 to 8 persons per 1,000 males aged 14 and older for each \$100 increase in income. Much the same association was manifest in Great Britain, Canada, and New Zealand (income translated into United States dollars of constant purchasing power).

The association with income per worker seemed closer when expressed in percentages. For the entire period, a 1 per cent rise in real income was typically associated with a decline of 0.1 to 0.2 per cent in the labor force (the dubious comparison for Germany deviated significantly from this pattern). For the period since 1930, the United States as a whole and its urban areas showed a much greater decline in the male labor force relative to income per worker than they did in the earlier period. Canada revealed about the same changes in the two periods and Britain and New Zealand manifested recent changes that were substantially smaller than the earlier ones.

### Notes to Table 30

Source: Appendixes A and D.

<sup>a</sup> Real disposable income from all sources per adult-male equivalent employed, in 1929 U.S. dollars.

<sup>b</sup> Labor force was standardized for age composition on the basis of population of the United States in 1940.

<sup>c</sup> Average of each census year and the two preceding years.

## MALE LABOR FORCE OVER TIME

### INCOME PER CAPITA.

Labor force participation may also be influenced by changes in income relative to consumer needs, which cannot be measured precisely, for people vary widely in their physical and social requirements for food, clothing, and shelter, depending on their age, sex, occupation, and income level. Although there is no satisfactory way of taking account of these differences, male labor force participation was compared with income per capita among the five nations and over the same periods of time studied for the comparisons with changes in income.

The results for the entire period show that in the United States about 16 males left the labor force (per 1,000 males 14 and older in the population) for each \$100 rise in personal disposable income per capita—an exodus equivalent to a fall of 0.11 per cent in participation for each 1 per cent rise in income per capita. Except for Germany, which had a substantially larger relative decline, the results for the other countries were not very different from those of the United States.

For the recent period, the decrease in male participation showed the same comparatively uniform relation to increases in per capita income that was seen for the entire period; in fact, the degree of uniformity extended even to Germany for 1925–1939 (though not for 1925–1950). But for the early period all such uniformity was lacking. The declines in male labor force relative to increases in income per capita varied enormously from nation to nation, in a much wider range than that revealed by the comparisons with income per worker, with the principal variations again occurring for Great Britain and Germany.

### *Boys and Young Men*

The proportion of young people under 25 who now participate in the labor force is much lower than it was fifty years ago. Boys have reduced their participation more than girls; children under 14, more than youths of high school age; and the latter, more than men of college age.

The reduction for boys aged 14–19 was sizable in all the countries studied except Germany and varied rather widely—from 18 to 66 per 1,000 per decade. The decline as a whole was generally greater in foreign countries than in the United States, and was most marked in Great Britain. In the United States it was especially noticeable for foreign-born and Negro boys and for boys in urban areas, and it has been sharp since 1930 for Negro boys. The decline for Britain was concentrated in the period after World War II, and that for Germany in the period since 1939. Otherwise, most of the shrinkage in the participation of teen-age boys seems to have occurred before 1930.

## MALE LABOR FORCE OVER TIME

The decline for males aged 20-24 was generally smaller and mostly confined to the United States—where it has been heavy due to the recent rise in enrollment in institutions of higher learning. Also in the United States it has been much more acute in urban than in rural areas, and among the foreign-born and Negroes than among native whites.

The outflow of youths from the labor force was fairly well matched by the inflow into the classroom, at least in the United States, Canada, and Great Britain, where school attendance was reported or could be estimated by sex. It is not certain, however, that the rise of school attendance was the cause of the reduction in the labor force. Conceivably both developments may have been caused by some independent factor such as income, with school attendance rising as the young people no longer needed to work. In virtually all the countries and periods, participation of boys and young men in the labor force declined while income was rising.

However, among the countries in all periods the percentage changes in the labor force per 1 per cent rise in income have displayed very little uniformity. For boys aged 14-19 they ranged from +0.14 per cent in Germany (1895-1939) to as high as -0.86 per cent in United States urban areas or -2.33 per cent in Germany (1895-1950); for young men aged 20-24 they varied from -0.01 per cent in Canada to -0.36 per cent in Germany.

In the United States, the very marked change may have been owing, somewhat, to the movement of farm families to urban areas; in the cities the child labor laws were stricter and job opportunities for children were sparser—as revealed by the “voice of the farmers”:

“The children of farmers are, as a rule, kept from school during the summer (spring) months to help along the work of the farm. . . . The children of town laborers get more schooling, because in these later years it is more difficult to find employment for them.”<sup>3</sup>

The migration to the city was, of course, made possible as the advance in productivity reduced the labor requirements of agriculture. But it was also doubtless stimulated by the higher urban wages.<sup>4</sup> And the high and increasing urban wages must, in turn, have contributed to the extension of elementary, secondary, and advanced education by motivating parents to do without children's earnings and to vote for higher

<sup>3</sup> *Fourth Biennial Report*, Iowa Bureau of Labor Statistics, 1890-1891, pp. 58-96.

<sup>4</sup> There has undoubtedly been a large shift from rural-farm to rural-nonfarm areas which would reduce demand for child labor even in rural areas. A smaller absolute number of children under 16 were employed in agriculture in 1930 than in 1870. In 1900, the proportion was 1 in every 9 children aged 10-16; three decades later, it was only 1 in 30.

## MALE LABOR FORCE OVER TIME

taxes to finance more schools, which at the turn of the century were often inadequate.<sup>5</sup> In fact, investigations by state bureaus of labor statistics give the impression that had there not been a considerable rise in incomes, the textbook might scarcely have triumphed over the plow or the workbench in the competition for the nation's children.

"As for children under 14 years of age we prefer not to employ them at all, as it is only now and then you will find one to keep their work up properly, but their parents often plead with us to take them with the plea that they must have them at work and other mills will work them. . . ." <sup>6</sup>

". . . if we drive the children out (as we often threaten to do), the mothers tell us they will have to go also. The children waste more than they do good, and we prefer not having them if we could get rid of them." <sup>7</sup>

Still more evidence on this score is the finding of the National Industrial Conference Board that in 1924 every second or third child who left the classroom to take a job did so in order to supplement the low income of his family.<sup>8</sup> It is not impossible also that many children left school and began work without being aware that their action was dictated by financial need, as their friends and relatives also commonly left school at an early age. High school attendance could not have become the norm for teen-agers without a considerable rise in incomes. Some tendency for higher real incomes to be associated in the short-run with reduced labor force participation of the young may be seen in Chapter 11. The labor force participation of persons aged 14-24 was partially correlated with real disposable personal income per equivalent adult-male employed worker, holding unemployment and armed forces constant. These associations—constructed from quarterly averages of monthly data and analyzed in two periods 1940-46 and 1946-52—were significant but they were also modest, and analogous associations with real hourly earnings were even more modest.

In any case economic developments can hardly have been the sole cause of the greater trend toward education. A field investigation thirty years ago by the United States Department of Labor found that one in three youngsters was then leaving school for lack of interest.<sup>9</sup> Although

<sup>5</sup> Testimony of David Blaustein, in *Report of the Industrial Commission on the Relations and Conditions of Capital and Labor Employed in Manufactures and General Business*, Government Printing Office, Washington, 1901, Vol. XIV, p. 128.

<sup>6</sup> *First Annual Report*, North Carolina Bureau of Labor Statistics, 1887, p. 148.

<sup>7</sup> *Third Biennial Report, 1888-1889*, Maryland Bureau of Industrial Statistics and Information, p. 81. See also *Twenty-first Annual Report*, 1912, p. 20.

<sup>8</sup> *Employment of Young Persons in the United States*, National Industrial Conference Board, 1925, p. 5.

<sup>9</sup> "Summary of the Report on Condition of Woman and Child Wage Earners

## MALE LABOR FORCE OVER TIME

numerous instances were uncovered in which boys and girls took jobs to relieve desperate home conditions resulting from illness, alcoholism, death, or desertion, there was no absence of cases where children worked because of their dislike for school, desire for money, or their parents' indifference to education.

"At the home of a little girl of thirteen the surroundings point to a comfortable condition of life where the father earns \$9 per week; the mother, \$8; while the earnings of the child are \$4 per week; the board paid by an aunt, and additional earnings from an older son, make the weekly income about \$30. . . . There is no question but that the child at work could have received a better education without stint to the family."<sup>10</sup>

The significance of noneconomic factors is exemplified also in Great Britain, where income was relatively ample, and yet a high proportion of youngsters left school at an early age.<sup>11</sup> Although at any given time a smaller proportion of young people tends to seek employment if adult income is high (Chapter 4), over time the tendency does not seem to be immediately or strongly influenced by economic forces, though economic forces may well be an ultimate determinant.<sup>12</sup>

### *Men Aged 25-64*

Of the 60 million members of the United States labor force in 1950, 57 per cent were men aged 25-64. The proportion was nearly the same in the United States," Bulletin 175, Bureau of Labor Statistics, Women in Industry Series, No. 5, 1916, pp. 264-265. A study by the Maryland Bureau of Labor Statistics yielded similar results.

<sup>10</sup> *Twelfth Annual Report*, Maryland Bureau of Statistics and Information, a study by the Baltimore branch of the Consumers' League, 1903, pp. 117-119.

<sup>11</sup> The trend was modified somewhat in 1948 when the school-leaving age was raised by one year. The Education Act of August 3, 1944 (*The Public General Acts and the Church Assembly Measures of 1944*, London, The Council of Law Reporting, pp. 220-332, and *Keesing's Contemporary Archives*, Bristol, Vol. V, 7103/A) extended the age of compulsory school attendance from the end of the thirteenth to the end of the fourteenth year. Although the Act went into effect officially on April 1, 1947, its full effect was not realized until January 1949, when the number of pupils between 14 and 15 was 480,127, compared with 389,900 in January 1948 and 150,101 in January 1947. The law contemplates a future rise in the school-leaving age to the end of the fifteenth year ("Education in 1949," *Ministry of Labour Gazette*, London, August 1950, p. 266).

<sup>12</sup> George Stigler has found that "if we classify states by per capita income and the racial composition of children—both of which are in a sense more fundamental and persistent than school age legislation—within the cells there is no evidence of a correlation between legislation and school enrollments. . . . Our brief study suggests . . . that the influence of legislation is a relatively weak factor, whose presumptive significance comes largely from the correlation of maximum age in the statute with incomes and racial composition," *Employment and Compensation in Education*, National Bureau of Economic Research, Occasional Paper 33, 1950, App. B.

## MALE LABOR FORCE OVER TIME

in Canada and New Zealand, but in Great Britain and Germany it was lower because of the active female participation and the depletion of the male populations in the two World Wars. An overwhelming majority of men have tended to work, in all five countries over long periods. Nevertheless, men aged 25-44, who had maintained their rate of participation in the labor force at about 97 per cent from 1890 through 1930, reduced it to 95 per cent in 1940, and to 92.9 per cent in 1950. Men aged 45-64, who had maintained their proportion in the labor force at 94 per cent during the five decades through 1930, lowered it to 88.7 per cent in 1940 and to 87.7 per cent in 1950. This stability for five decades followed by a decline in the last two decades characterized the behavior of men in both rural and urban areas.<sup>13</sup>

The reduction in the labor force participation of men in the United States was greater than in the four foreign countries, and it was confined almost entirely to the recent period. Undoubtedly it occurred because more men aged 25-34 were attending college, graduate school, or vocational school. Roughly 700,000 fewer men of these ages were in the labor force in April 1950 than there would have been if the labor force had formed the same proportion of the population as in 1930. At the beginning of the school year, in October 1949, the school enrollment of men aged 25-34 was close to 500,000.<sup>14</sup> How much the enrollment in 1949-1950 exceeded that in 1929-1930 is a matter of guesswork<sup>15</sup>—though it is likely that the excess was large, since 93 per cent of those 25 and older who started school in the fall of 1949 were veterans. Reduced activity in the labor force was not, however, confined to men aged 25-34. It was also observable for men aged 35-44 in recent decades and for men aged 45-64—in both the early and the recent period. In fact, the reduction for men aged 45-64 was greater in some of the countries or areas than that for youths of 20-24.

<sup>13</sup> Before 1950 some labor force experts believed that the decline from 1930 to 1940 was due to the change in the technique of measurement in the 1940 census. It should be difficult to hold to this position now that the 1950 census, which used virtually the same technique as that of 1940, has revealed just as great a decline between 1940 and 1950.

<sup>14</sup> Some had doubtless dropped out between October 1949 and April 1950, and of those who stayed in, some were in the labor force part time.

<sup>15</sup> The census of 1930 did not report students aged 25 and older, possibly because they were not numerous enough to warrant separate classification.