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## CHAPTER 13

# OVER-ALL STABILITY VERSUS INTERNAL VARIATION IN A NATION'S LABOR FORCE PARTICIPATION 

"A mighty maze, but not without a plan!" pope, Essay on Man

## Statistical Relationship between the Exodus of Males and the Entrance of Females

Partictpation rates of the over-all labor force in the five countries and in the rural and urban areas of the United States have changed rather little over the last half century. This comparative stability has been upheld in spite of occasional wide variations in unemployment and great increases in income per worker and per capita, and whether or not adjustment was made for changes in the composition of the population.

Why has over-all participation kept within such narrow limits, in view of the great changes in internal composition? Has the decrease in participation of one group been systematically interrelated with the increase in that of another?
Some interrelationship may be seen from Chart 29, where male participation is plotted from the base line for each country and area and female participation from the ceiling line. In all the places except Germany, the decline in male participation has been associated in a general way with the rise in female participation.
It would not have been prudent to attach great significance to these associations. Two strong trends in labor force participation over the decades-a declining one for males and a rising one for femalescould produce this correlation. A real test was to correlate the deviations from these trends. Correlation was not practicable for the decade deviations, because of "random" variations due to interview error and to changes in the censuses in concept, measurement, and technique. But it was practicable for the broad "early" and "recent" periods. The early period ranges from 1911 through 1931 in Great Britain and Canada, from 1890 through 1930 in the United States, from 1896 through 1926 in New Zealand, and from 1895 through 1925 in Germany. The recent period takes in the census years from the end of the early periods through 1951 in Britain and Canada, 1950 in the United States, 1951 in New Zealand, and 1950 in Germany. In the United States the change in male participation during 1890-1930, minus

Association between Labor Force Participation Rates of Females and Males: 5 Countries, Various Years, 1890-1951

Number in labor force per 1,000 in same population group.
Standardized for age on basis of United States population in 1940, except as noted.


CHART 29, concluded

that throughout the entire period 1890-1950, was +6 (per 1,000 male population 14 and older). For females the analogous result happened to be -4 (per 1,000 female population 14 and older). Similar computations of male and female deviations were made for the recent period and for all of these periods in the other countries (Table 57).

## TABLE 57

Deviations of Changes per Decade in Male Labor Force Participation for Early and Recent Periods from Those for Entire Period, Associated with Similarly Computed Deviations in Female Labor

Force Participation, 5 Countries, Various Periods, 1890-1951
(per 1,000 of same sex 14 and older in the population)

|  | Males 14 and Older |  |  | Females 14 and Older |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\text { Eeriod }}{\text { Early }}$ | Entire Period | Deviation of Rate for Early from That for Entire Period | Early <br> Period ${ }^{\text {a }}$ | Entire Period | Deviation of Rate for Early from That for Entire Period |
| United States | -10 | -16 | +6 | +10 | +14 | -4 |
| Great Britain | -8 | -12 | +4 | +7 | +11 | -4 |
| Canada | -8 | -12 | +4 | +12 | +18 | -6 |
| New Zealand | -18 | -19 | +1 | +9 | +12 | -3 |
| Germany to 1939 | -3 | -7 | +4 | +35 | +31 | +4 |
| to 1950 b | -3 | -8 | +5 | +35 | +15 | $+20$ |
| : | Recent Period ${ }^{\text {c }}$ | Entire Period | Deviation of Rate for Recent from That for Entire Period | Recent Period ${ }^{\text {c }}$ | Entire Period | Deviation of Rate for Recent from That for Entire Period |
| United States | -29 | -16 | -13 | +24 | +14 | +10 |
| Great Britain | -16 | -12 | -4 | +15 | +11 | +4 |
| Canada | -17 | -12 | -5 | +24 | +18 | +6 |
| New Zealand | -20. | -19 | -1 | +16 | +12 | +4 |
| Germany to 1939 | -16 | -7 | -9 | +21 | +31 | -10 |
| to $1950{ }^{\text {b }}$ | -14 | -8 | -6 | -9 | +15 | -24 |

Source: Chapter 8, Table 28; Chapter 6, Table 11; Appendix A.
$\cdot$ Great Britain and Canada, 1911-1931; United States, 1890-1930; New Zealand, 1896-1926; Germany, 1895-1925.
b 1895-1939: Boundaries after World War I, without the Saar. 1939-1950: Federal Republic of Germany, without Berlin.
${ }^{\text {e }}$ Great Britain and Canada, 1931-1951; United States, 1930-1950; New Zealand, 1926-1951; Germany, 1925-1950.

The correlation of the deviations from trend in participation between males and females was inverse, but it was not significant unless Germany was excluded. ${ }^{1}$ Excluding Germany, the correlation was fairly high ( -0.94 ) and was significant on the 95 per cent level: there were also mildly significant correlations in participation rates between women 25-64 and men 45-64 and 65 and older (Table 58). But sig-

[^0]TABLE 58
Correlation between the Deviations of Changes per Decade in Male Labor Force Participation for Early and Recent Periods from Those for Entire Period, and the Analogous Deviations in Female Labor Force Participation, 5 Countries, Various Periods, 1890-1951

|  | Coefficient of correlation <br> Four Countries <br> Five Countries ${ }^{\text {a }}$ |  |
| :---: | :---: | :---: |
| (excluding Germany) |  |  |

The five countries: United States, Great Britain, Germany, Canada, and New Zealand.

Source: Data for computations, Appendix A; periods studied, Table 57.

* Significant on the 68 per cent ( $\pm \sigma$ ) level.
** Significant on the 95 per cent ( $\pm 2 \sigma$ ) level
* Germany, 1895-1939.
nificant correlations of participation rates could not be found between females and boys 14-19.

All in all, these associations are not highly impressive. Nevertheless, with or without Germany, they were inverse in all but one correlation between female and male age groups (females, 25-44 and males 14-19) and may perhaps merit some attempt at explanation of how such an interrelationship might exist.

## Why Did Female Participation Rise While Male Participation Declined?

The great increases in female participation were not demonstrably associated with changes either in real disposable incomes of equivalent adult males or in the ratio of female to male earnings. Any judgments as to what did cause female participation to rise in the amounts and at the times it did must be highly tentative, in view of the inquiries of Chapter 7. These inquiries were speculative and provide at best an hypothesis, testable only when there are better statistical materials.

The hypothesis is that the increases in female participation over 60 years were due primarily to four factors:

1. The release of many women from the home as a result of the great decline in the ratio of the civilian population to the number of working-age females. The decline was due to a reduction in the birth rate and a rise in the female survival rate; and it occurred in a way that enabled millions of females, previously needed at home, to enter the labor force.
2. Labor saved in own home housework with the extended use of household appliances and the purchase of food and clothing formerly produced at home. The saving was probably too fragmentary and too scattered among females to have been responsible for many full-time female additions to the labor force. It was doubtless a marginal or contributing factor in many cases, though it most likely resulted in a higher standard of leisure and of family care. Still it was quantitatively important and, if it does not explain why females increased in the labor force, it may at least help to explain why their participation did not decline as income increased over time.
3. The expanding employment opportunities for females, arising with the extensive development of clerical occupations and service industries, and occurring pari-passu with the great increase in educational attainment of the average female, which qualified her for such employment. ${ }^{2}$ This factor might not have moved women into the labor force if they could not have been spared at home, but it provided the demand.
4. The shorter workweek, making it easier for females to hold jobs and still carry out their household responsibilities which, though lightened, demanded a good deal of time and energy on the part of many women. (Reductions in the workweek were closely timed to the increase in female participation in the four countries for which data on hours were available.)
If declining household and child-care responsibilities, rising educational attainment, and shrinking hours of work had something to do with the increasing tendency of women to seek gainful jobs, we are led to the next link in the relationship between female participation and labor force behavior-that the large-scale entrance of females (chiefly aged 20-64) may in turn have been an active influence in the withdrawal of young and elderly persons.
It has been seen that men 45 and older reduced their participation by

[^1]sizable amounts, and men 65 and older by far more--even more than young men and teen-age boys. This decline has not been closely related to the rise in real incomes (at least, since 1930), or to the extension of pensions and of social security (at least, before 1940), or to any discoverable deterioration in average physical ability to work (compared with men of the same age in earlier decades). It does not seem assignable to changes in self-employment opportunities, to rapidity of technological advance, or to the level of unemployment: There is a possibility that it has been due to a tightening in company rules and practices against hiring or keeping older workers; but it has not been definitely established that these rules have been more extensive than several decades ago when elderly men were in the labor force in much larger proportions. In any case it seems doubtful that employers would have been so ready to part with this source of labor supply unless there had been new souirces, namely women, available to take its place.

Is it possible that the older men were to a large extent displaced by the entrance of better trained women, available at lower wages? There is some circumstantial support for such a thesis. At both the 1940 and 1950 censuses the participation of men was closely related at a moment-of-time to the amount of their education; for men with education below high school, years of schooling seemed far more important than age in determining participation (Chapter 9 ). A great decline occurred between 1910 and 1950 in the number of years of school completed by elderly men relative to the number completed by women $20-24$ or 25-44. And a strong moment-of-time tendency was observable at the 1940 and 1950 censuses for women with education above high school to be in the labor force in larger proportions, the more years of schooling they had achieved.

Why would the influx of women into the labor force displace elderly men rather than depress the relative wages of women? Far from declining, the ratio of wages of women to those of men rose, but it might have risen even more-as a result of far better education and greatly expanded job opportunities for females in industry-had it not been held down by the very great rise in the ratio of females in the labor force.

How to explain the relation between the influx of women and the decline in participation of young people? As to young males the decline occurred in all five countries and in both recent and early periods, and was reflected fairly closely in greater school attendance in the countries for which data were available. Some of the rise in school attendance may have been cultural and institutional in origin and may have happened regardless of increases in income or in the female labor force. But many teen-agers may have stayed in school as a result of
being squeezed out of the labor force by mature, better trained women. Employed sisters, mothers, and wives would also have helped to pay for the education of brothers, sons, and husbands. ${ }^{3}$ Similarly, many elderly men have retired at earlier ages because of financial help from working daughters or wives and, in some cases, because their female dependents have become self-supporting.

## An Attempt to Explain the Stability of the Over-All Labor Force in View of the Declining Hours of Work

But even if the declining participation of males was systematically interrelated with the rising participation of females, we should still have to explain why the two tendencies offset each other so completely as to leave the combined rate nearly stable. Have there been some economic or social forces at work to maintain the almost unchanging over-all rate despite rising income? We examine a number of possible explanations.

One explanation might be that man's aspiration tends to rise as fast as his income, so that instead of increasing his leisure, he strives for the things, e.g. better houses and cars, that a higher income can provide. Then, too, people live and spend competitively and their standard of living goes up with their income.
But in actual fact people have also increased their leisure: this leisure has taken the form of less working hours for the average labor force member.

In each of the four countries offering reasonably satisfactory data on the "standard," "normal," or "full-time" workweek, there have been marked reductions in the number of hours which the average labor force member has been called upon to work (Table 59). The workweek, weighted by the number of persons in the major industry groups (including agriculture, domestic service, and government), declined per decade by about 4.2 hours in the United States between 1890 and 1950, 3.3 hours in Great Britain between 1911 and 1951, 3.5 hours in Canada between 1921 and 1941, and 3.2 hours in Germany between 1895 and 1950 ( 3.1 hours between 1895 and 1939). The greater reduction in the United States was partly the result of the considerable transfer of workers out of long-hour industries, notably agriculture-shifts which did not seem to be responsible for significant differences in the length of the workweek in the other three nations. Standardization for

[^2]the shifts lowered the decrease per decade in the United States to 3.5 hours. Considering the roughness of the statistics, reductions in the workweek per decade have been much the same among the four countries measured in hours. In percentages (Table 59, line 3), they varied somewhat, ranging from 4.9 per cent per decade in Germany during 1895-1939 (or 5.3 per cent during 1895-1950) to 8.3 per cent in Great Britain (1911-1951).

Have reductions in hours been associated with increases in income? We seek the answers to this question in a number of additional computations in Table 59. First, we compute real income per hour (line 4). Second, we compute the percentage increases in income per hour for each decade date (line 5). Finally, we compute the percentage reduction in hours associated with a rise of 1 per cent in income per hour (line 6).
In all four countries, there were percentage decreases in hours associated with percentage increases in real disposable income per hour. For the entire periods they were: -0.27 in the United States, -0.34 in Canada, -0.62 in Great Britain, and - 0.53 in Germany during 1895-1939 (or - 0.91 during 1895-1950). The fact that the decreases relative to income increases were less similar among the four countries than the reductions in hours when not related to income would suggest that hours tended to fall at a certain rate per decade whether income was rising slowly or rapidly. And the lack of uniformity from one decade to another (line 6) further suggests that decreases in hours were not systematically associated with increases in income, at least in the short run. It would seem that shorter hours have at times been clearly precipitated by depressions and wars; for example in the 1930's they seem to have been instituted mainly to spread the smaller demand for labor among more workers. Of course the desire for a shorter workweek may well have been building up during the 1920's when income was rising but hours were stable. Or again, the greater demand for labor during World War I seems to have given workers, whether organized or unorganized, the bargaining and political power to win the leisure that income rises, before and during the war, had enabled them to afford. Nevertheless, higher incomes may have played a role in the long run-say, by creating the conducive social, political, and economic atmosphere. We therefore inquire why increased leisure, in the long run, took the form of a reduction in hours and not in over-all participation? Stated in another way, why did the participation of males fall just enough to be offset by the increase in the participation of females? In particular, why didn't the labor force participation of men 25-64 -the primary working ages-decline substantially instead of only

## TABLE 59

Changes in Hours in Standard or Full-Time Workweek of the Labor Force Associated with Changes in Real Disposable Income per Hour, 4 Countries, Various Periods, 1890-1951

|  | 1890 | 1900 | 1910 | a. United states, 1890-1950 |  |  |  | Average Change per Decade |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 1920 | 1930 | 1940 | 1950 | $\begin{aligned} & 1890- \\ & 1930 \end{aligned}$ | $\begin{aligned} & 1930- \\ & 1950 \end{aligned}$ | $\begin{aligned} & 1890- \\ & 1950- \end{aligned}$ |
| 1. Hours in standard work week | 66 | 62 | 57 | 53 | 52 | 43 | 41 | - | - |  |
| 2. Changes in hours, number | - | -4 | -5 | -4 | -1 | -9 | -2 | -3.5 | -5.5 | -4.2 |
| 3. Changes in hours, per cent | - | -6.1 | -8.1 | -7.0 | -1.9 | -17.3 | -4.7 | -5.8 | -11.0 | -7.5 |
| 4. Real disposable income per hour a (1929 dollars) | 0.294 | 0.373 | 0.478 | 0.539 | 0.769 | 1.025 | 1267 | - 8 | -11.0 | - |
| 5. Change in income, per cent | - | +26.9 | +28.2 | +12.8 | +42.7 | +33.3 | +23.6 | +27.7 | $+28.5$ | +27.9 |
| 6. Per cent change in hours per 1 per cent rise in income per hour (line $3 \div$ line 5 ) | - | -. 22 | -. 29 | -0.55 | -0.04 | -0.52 | -0.20 | -0.21 | -0.39 | -0.27 |


|  | b. great britain, 1911-1951 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Average Change per Decade |  |  |
|  | 1911 ${ }^{\text {b }}$ | $1921{ }^{\circ}$ | 1981 | 1939 | $1951{ }^{\text {d }}$ | 1911-1931 | 1931-1951 | 1911-1951 |
| 1. Hours in standard work week | 59 | 51.5 | 49.5 | 49 | 45 | - | - |  |
| 2. Changes in hours, number | - | -7.5 | -2.0 | -0.5 | -4.0 | -4.8 | -2.3 | -3.5 |
| 3. Changes in hours, per cent | - | -12.7 | -3.9 | -1.0 | -8.2 | -8.3 | -4.6 | -6.5 |
| 4. Real disposable income per hour a ( 1929 U.S. dollars) | . 388 | . 424 | . 476 | . 523 | . 703 | - | - | - |
| 5. Change in income, per cent | - | +9.3 | +12.3 | +9.9 | +34.4 | +10.8 | +22.2 | +16.5 |
| 6. Per cent change in hours per 1 per cent rise in income per hour (line $3 \div$ line 5 ) | - | -1.37 | -0.32 | -1.02 | -0.24 | -0.77 | -0.21 | -0.39 |

TABLE 59, continued


[^3]mildly? ${ }^{4}$ Possibly shorter hours offered a line of less resistance than withdrawal from the labor force-especially among primary workers. Several considerations may suggest this.

In the first place, while the total labor force has remained almost constant in relation to the population, the average number of workers per household has fallen from about 1.75 in 1900 to 1.38 in 1950, as shown in the following table:

|  | 1900 | 1930 | 1940 | 1950 |
| :--- | :---: | :---: | :---: | :---: |
| Labor force 14 and older (millions) | 28.1 | 48.7 | 52.8 | 60.1 |
| Private households (millions) | 16.0 a | 29.9 | 35.1 | 43.5 |
| Labor force per household (average) | 1.75 | 1.63 | 1.51 | 1.38 |

Source: Labor Force: Appendix A. Households: Census of 1900 (Special Reports), Supplementary Analysis and Derivative Tables, p. 379; Census of Population, 1930, Vol. VI, Families, pp. 7, 10; Current Population Reports, Bureau of the Census, Series P-20, No. 33, p. 15. The word "households" used in 1950 is synonymous with "families" at earlier dates.

- Source for 1900 data gave the distribution of all households, including quasifamily groups, by the number of persons per family. A percentage distribution of private families was computed after deducting all quasi-family groups from total families with seven or more members.

Note: Data were unavailable for 1910 and 1920.
This development has been the result of young and elderly men and women setting up separate and independent households. It is no doubt a reflection of the increasing well-being. But it also means that the way people have been choosing to live has made it more difficult for the labor force proportion to decline. There were no data on the distribution of families by number of workers in 1900; but in 1930, 1940, and 1950 almost seven in every ten families had only one worker or none at all. ${ }^{5}$ Over two families in every ten had two working members; for these families a complete withdrawal of one worker, perhaps an elderly person or a youth, without replacement by another, perhaps a woman, might have meant an inconveniently large loss of income. And the fewest families-one out of every ten-have in recent decades included

[^4]three or more workers. These were the only households moderately able to adjust to the withdrawal of one member from the labor force.
It can be argued, of course, that a person need not withdraw permanently from the labor force in order to reduce participation and increase leisure. A woman might work only nine months instead of a full year, a schoolboy during the Christmas holidays but not in the summer; a family head might take an unpaid vacation or advance his retirement. Such reductions are often inconvenient or dangerous. Many breadwinners, and even secondary workers might jeopardize their jobs by taking unpaid vacations; and the failure to seek new employment immediately after losing a job might destroy the only chance of finding one or result in a prolonged period of unemployment. For most persons an easier and safer way to more leisure is through a shorter workweek. Also, the new leisure can be spread over the year instead of being concentrated in undue amounts in certain months.

More important, the psychological demand for leisure is surely a personal affair. If rising income made people desire more leisure, it is likely that all the members of any family wished to share in any additional leisure. A shorter workweek for all could better satisfy this wish than the withdrawal of one member of the household from the labor force.

Has the expectation been realized? Or is it not true that reductions in the participation of males and increases in the participation of females have redistributed a large part of the burden of work from males (especially youths and older workers) to females (especially women 25-64)? So far as participation is concerned, there certainly has been such a shift. But so far as the total burden of work-gainful and un-gainful-is concerned, several other factors must also be considered.
There are no separate statistics on full-time hours for males and females. However, the great relative transfer of female workers since the turn of the century has been from long-hour occupations, such as domestic service and farm labor, into short-hour occupations, such as clerical work. The unskilled category, including laborers and servants, was the largest employer of females in 1910 but it was only the third largest in 1940 or 1950; the category of clerical and kindred work was the third largest employer of females in 1919 and in 1940 and 1950 it was the largest (Chapter 7). On the assumption that reductions in hours were the same for males and females in each of the countriesin the United States they must have been at least as much for females as for the whole labor force-male and female participation were multiplied by the length of the full-time workweek. For males, the weekly hours of labor force participation per 1,000 male population 14 and older showed a decline of 41 per cent in the United States during 1890 -

1950, 27 per cent in Britain during 1911-1951, 17.5 per cent in Canada during 1911-1941, and 28.7 per cent in Germany during 1895-1950. For females, the decline in hours seemed typically to have more than offset the increase in participation, with the result that over the same periods hours of female participation fell 5 per cent in the United States, 14 per cent in Britain, and 7 per cent in Germany. Only in Canada was an increase manifested, but it had occurred up to 1941, a war year. If hours of participation fell during the next decade to the levels of the United States, they were about the same in 1951 as in 1911.
The above computations suggest that the total time females devoted to gainful work may have run counter to the great rise in their labor force participation. Nevertheless, there was probably a relative redistribution of gainful work from males to females, since the declines for females were in all cases much smaller than those for males. Is such a development consistent with the premise that if people desire more leisure as an effect of rising incomes it is likely that all members of a family wish to share in this leisure?
The answer requires that account be taken of a second factor: the burden of nongainful work in the home. Illustrative computations in Chapter 7 indicated that a great decline in the size of families and the advance in technology for the home could easily have resulted in more leisure for the average housewife (see Table 21).
These developments still do not amount to an easing in the woman's burden of work as great, relatively, as that apparently realized by a man from reductions in both hours and labor force participation. But females may be more likely to work close to home and therefore spend less time in commuting, as suburbanization pushes the population farther from their jobs. ${ }^{6}$. And males very likely now bear a much greater part of the burden of home housework, shopping, and the many chores that go with "do-it-yourself" projects-painting, repairing, and so on. If these two developments could be measured in hours, it is possible that the reduction in total gainful and nongainful effort has not been very different between males and females. ${ }^{7}$
There still remains the question of why at least some workers or families might not have chosen to continue on a longer workweek and either not take the new leisure or take it in reduced participation. The answer is plain. Even had certain workers preferred an undiminished workweek (to allow one or more persons in their families to withdraw

[^5]altogether from the labor force), their wishes could scarcely have prevailed, unless they had been willing and able to hold a second job. For, if the great majority were able to win reduction in hours, the shorter workweek would have had to be standard for all workers in a factory or store.
So the shorter workweek may have offered a more convenient, flexible, and equitable "package" in which to obtain additional leisure evenly distributed among workers and over time as incomes rose gradually. Once working hours are reduced, all sorts of obstacles arise to prevent a revision upward. They tend to be frozen into laws on maximum hours and overtime pay; they become inherent in union agreements and factory shifts. Workers gradually buy or rent houses at distances that involve extensive commuting, and the pace of the work itself may increase so that a return to a longer workweek could be accommodated only by relaxing the intensity of effort. Even the employer himself may come to prefer the shorter week and to view a return to a longer week with little enthusiasm.

It would seem highly probable that the demand for leisure has been powerfully and irrevocably shunted toward fewer weekly hours of work and more rest periods and holidays for most persons, and not toward a downward trend in the proportion of population who work in a given week. In bringing about the past reductions in the workweek, the role of the unions, while considerable, has not been the dominant one. In the future, however, unions are likely to be much more important in initiating and pressing for shorter hours. For unions are far stronger now than during the years when most of the reductions occurred. Whether the demand for leisure arises from higher incomes or from the lack of demand for labor, a curtailment in the length of the workweek or additional rest periods, sick leaves, holidays, and vacations is likely to be more acceptable to unions than reductions in the size of the labor force, if only because the former means the possibility of getting higher than proportional wages for overtime at certain seasons of the year and in times of war emergency, or because declines in the labor force mean a loss of union membership and revenue from dues. It appears that any drop in labor supply will continue to take the form of fewer hours and perhaps less effort per hour, and that the over-all labor force will continue to stay rather close to its present and past percentages of working age population.

## Some Troublesome Questions That Still Remain

Two difficulties remain.
One is that participation over time was stable only for native whites and that it declined sharply for Negroes and the foreign-born-in the
case of Negroes, among females as well as among males. Perhaps the reason might lie in the greater improvement in the economic status of these groups relative to that of the native whites. There are no separate statistics on incomes of the foreign-born. However, since the huge immigration that occurred before World War I consisted mainly of the lowest economic class, and since a large proportion of the foreign-born obviously occupy very favorable economic and social positions at present, we may risk the assumption that their income has risen more sharply than that of the native whites. As for the Negro, there are no good income statistics before 1940, but it may be possible to make some judgment from mortality statistics. The fact that the death rate of nonwhites was relatively constant, at a level about half again as high as that of whites, between 1900 and 1930 makes it unlikely that the income of Negroes rose appreciably faster up to the latter year. ${ }^{8}$ In the 1930's and 1940's, however, the death rates of nonwhites fell considerably more than those of whites; by 1940 the excess had fallen to a third, and by 1950 to a sixth. The relative decline during the 1930's was surely not due to a higher earned income-for wage rates were low and unemployment rates high for colored people throughout that depression decade-but, rather, to the great extension of welfare facilities to the Negro under the New Deal. During the 1940's censuses show an enormous rise in the relative earnings of nonwhites: the median wage or salary income of colored males 14 and older rose from 41 per cent of those of white males in 1939 to 61 per cent in $1950 .{ }^{9}$ Negroes apparently benefited in two ways. Income rose more for the lesser educated workers and, since Negroes were more apt to be uneducated (and unskilled) the average Negro was more benefited than the average white by the great income redistribution of the 1940's. But the Negro also benefited as a Negro: age for age, the nonwhite males with education above the eighth grade (for whom there was undoubtedly a great denial of opportunity before World War II) manifested substantially greater increases of income than did the whites of the same educational attainment (Table 60).
But if the rise in income was greater for nonwhites and for the foreign-born than for native whites, and if Negroes and the foreignborn wished to work less as their income rose, why did their new leisure take the form of labor force reductions? The reasonable con-

[^6]TABLE 60
Median Income of Males by Age, Color, and Education Completed, United States, 1939 and 1949

|  | 19.39: |  |  |  | 1949 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\overline{\text { Native }}$ White | Index | Nonwhite | Index | White* | Index | Nonwhite | Index |
| 30-34 Years of Age |  |  |  |  |  |  |  |  |
| No school | \$ 376 | 100 | \$ 319 | 100 | \$1,328 | 353 | \$1,167 | 366 |
| 1-4 | 445 | 100 | 365 | 100 | 1,647 | 370 | 1,175 | 322 |
| 5-7 | 667 | 100 | 486 | 100 | 2,190 | 328 | 1,560 | 321 |
| 8 | 967 | 100 | - 613 | 100 | 2,631 | 272 | 1,818 | 297 |
| 9-11 | 1,227 | 100 | 667 | 100 | 3,026 | 247 | 2,059 | 309 |
| 12 | 1,443 | 100 | 714 | 100 | 3,380 | 234 | 2,227 | 312 |
| 13-15 | 1,625 | 100 | 759 | 100 | 3,680 | 226 | 2,456 | 324 |
| 16 or more | 1,960 | 100 | 1,036 | 100 | 4,344 | 222 | 2,667 | 257 |
| 35-44 Years of Age |  |  |  |  |  |  |  |  |
| No school | \$ 390 | 100 | \$ 355 | 100 | \$1,444 | 370 | \$1,063 | 299 |
| 1-4 | 541 | 100 | 412 | 100 | 1,827 | 338 | 1,240 | 301 |
| 5-7 | 841 | 100 | 541 | 100 | 2,423 | 288 | 1,598 | 285. |
| 8 | 1,170 | 100 | 689 | 100 | 2,893 | 247 | 1,975 | 287 |
| 9-11 | 1,435 | 100 | 706 | 100 | 3,276 | 228 | 2,146 | 304 |
| 12 | 1,727 | 100 | 813 | 100 | 3,606 | 209 | 2,400 | 295 |
| 13-15 | 1,882 | 100 | 879 | 100 | 4,104 | 218 | 2,443 | 278 |
| 16 or more | 2,432 | 100 | 1,118 | 100 | 5,381 | 221 | 3,142 | 281 |
| 45-54 Years of Age |  |  |  |  |  |  |  |  |
| No school | \$ 396 | 100 | \$ 293 | 100 | \$1,818 | 459 | \$ 962 | 328 |
| 1-4 | 583 | 100 | 370 | 100 | 2,022 | 347 | 1,205 | 326 |
| 5-7 | 859 | 100 | 540 | 100 | 2,525 | 294 | 1,636 | 303 |
| 8 | 1,195 | 100 | 667 | 100 | 2,973 | 249 | 2,038 | 306 |
| 9-11 | 1,481 | 100 | 667 | 100 | 3,294 | 222 | 2,167 | 325 |
| 12 | 1,810 | 100 | 865 | 100 | 3,798 | 210 | 2,286 | 264 |
| 13-15 | 1,885 | 100 | 909 | 100 | 4,315 | 229 | 2,417 | 266 |
| 16 or more | 2,500 | 100 | 1,100 | 100 | 5,891 | 236 | 3,166 | 288 |
| 55-64 Years of Age |  |  |  |  |  |  |  |  |
| No school | \$ 282 | 100 | \$ 264 | 100 | \$1,881 | 667 | \$ 792 | 300 |
| 1-4 | 418 | 100 | 334 | 100 | 1,821 | 436 | 882 | 264 |
| 5-7 | 661 | 100 | 500 | 100 | 2,160 | 327 | 1,313 | 263 |
| 8 | 930 | 100 | 577 | 100 | 2,585 | 278 | 1,800 | 312 |
| 9-11 | 1,203 | 100 | 594 | 100 | 2,956 | 246 | 1,824 | 307 |
| 12 | 1,574 | 100 | 694 | 100 | 3,508 | 223 | 2,118 | 305 |
| 13-15 | 1,500 | 100 | 900 | 100 | 3,706 | 247 | 2,188 | 243 |
| 16 or more | 2,143 | 100 | 999 | 100 | 5,429 | 253 | 2,688 | 269 |

[^7]jecture, expressed in Chapter 6, is that these groups were striving to follow the example of the native whites. A sameness in income for the various groups might well cause cultural attitudes to become the same also, dissolving differences in labor force tendencies. We saw in Chapter 12 that the labor force participation rates of Negro females tended not only to become more like those of the whites among the various cities, but also more like those of each other. The equalization need not, of course, have been due to the rapid rise in their income. The declines in Negro participation among the various cities were not related significantly to earnings of males of all classes in those cities (although separate earnings of colored males might have yielded such a relationship). It may instead have been due to a lowering, by 1950, of some of the social, occupational, industrial, and other barriers to the movement of colored persons. The social and economic mobility of the Negro might still flow in some degree from income changes, but one might expect that the flows would first be strained through the sieve of institutional changes and proceed at such different velocities in different communities as to lose their observable statistical connection with income changes.

Does this argument dispose of the previous one-that a reduction in full-time hours was an easier alternative than a reduction in participation? If Negroes and the foreign-born decreased their participation, why did the native whites not do likewise? Actually, the previous argument was not that a decline in participation was impossible, but that a shorter workweek was easier-at least for the native whites. For Negroes, a more rapid rise in income could not accomplish for them shorter hours than the whites were getting, since in most establishments the latter were dominant. The way for Negroes to acquire a more rapid increase in leisure than the whites as their income rose more rapidly, would have been to reduce their labor force participation which for decades had remained at uncomfortably high levelspresumably because of their low economic status. If these conjectures have merit, it might be supposed that as the remaining barriers to full participation in the economic life of the nation break down, the Negro will aspire in an increasing degree to the living and working patterns of any American in the same income group.
A second difficulty is to explain why the participation of whites has not been stable in a number of cities, even in some cities where the foreign-born whites were not significantly numerous. The greatest deviations from stability occurred during the 1940's. In two-thirds of the fifteen cities where white participation either rose, or showed: a decline of more than 25 per 1,000 white population 14 and older over the period between 1920 and 1950, the change was either largely or
entirely concentrated between 1940 and 1950. And these changes were found generally among both males and females. What is the explanation for this instability in the total labor force participation rate in many cities?
It is possible that those people who are committed to work prefer to live where pay and job opportunities are most satisfactory. Their movement would not result merely in some cities having an age and sex composition most likely to be in the labor force, for this factor has already been taken into account by standardization. Nor would it be reflected simply by a rapid rise in a city's population, for the study could discover no relation among cities between participation and population growth. Rather, those individuals who have higher labor force propensities than others of the same age and sex (but are not otherwise distinguishable according to objective characteristics) might move to localities where economic conditions are most favorable, leaving the people with relatively low propensities (for their age and sex) to work in areas of less favorable economic climate. This shift need not disturb the stability of participation of the nation as a whole.

In mild support of this thesis was a positive correlation among the cities between changes in the participation of whites from 1920 to 1950 and the level of real earnings of white males in $1949{ }^{10}$ (Chapter 12). But the correlation was not high. No association was found between the level of the white labor force in 1950 and the level of earnings of white males in 1949 (Chapter 4). Nor was there any relation between changes in participation of whites and changes in their unemployment during 1930-1950 (Chapter 12), or between changes in their participation from 1920 to 1950 and changes in the proportion of the labor force in manufacturing. (The proportion of whites in manufacturing can perhaps be regarded as an index of abundance of good job opportunities in a city, since manufacturing tends to pay the highest of any major industry group.) Wanting a really satisfactory explanation, the lower degree of labor force stability among many cities as well as among Negroes and the foreign-born must stand as an exception to the rather high degree of stability in the over-all participation of the nation. Until some adequate reason can be discovered, we postpone any final conclusion that stability during peacetime periods of reasonably high employment is a universal or necessary feature of the total labor force participation.

[^8]
[^0]:    ${ }^{1}$ A case might be made for excluding Germany on the ground that this nation, dismembered territorially and upset economically by two great military defeats, did not offer the ideal conditions of peacetime high employment for labor force stability.

[^1]:    ${ }^{2}$ The increase in female education was both absolute and relative to the educational attainment of older men, whose schooling was limited by the lack of adequate schools at the times and in the places of their upbringing, by their disinclination to attend, or by their parents' financial requirements.

[^2]:    ${ }^{3}$ Surveys made by various unions covering several thousand women members disclosed that up to a fourth of those who were married and separated or divorced gave the education of children as one of their chief reasons for working.

[^3]:    Source : Labor force, Appendix A; income, Appendix D; hours, notes to Chart 14.
    a Per adult-male equivalent employed based on three-year averages in 1929 U.S. dollars.
    Hours data are for 1019.
    Hours data are for 1919 .
    Hours data are for 1948 .
    ${ }^{\text {P }}$ Hours data are for data are for 1913-1914.

[^4]:    'Actually, the decline was balanced by the rise in the relative number of men of that age in the population, which resulted in increases-ranging from slight to substantial-in the ratio of male workers 25-64 to the total labor force 14 and older of both sexes in four of the five countries. Only in Canada was there even a slight decline in the ratio.
    ${ }^{5}$ Census of Population, 1930, Vol. VI, Families, p. 8; Current Population Reports, Bureau of the Census, Series P-50, Nos. 5, 29. The 1940 data given in the P-50 reports are based on sample returns from the 1940 census. The 1950 estimates are based on data from monthly sample surveys.

    An appreciable increase in 1940 and 1950 in the number of households with no workers was probably due mainly to the rise in the element of pensions, old age charity, social security, and perhaps personal savings-developments which have enabled many elderly men and women to set up or retain separate households after retirement.

[^5]:    ${ }^{6}$ There are no statistics which reveal whether the time spent in traveling longer distances by auto has been greater or less than the time formerly spent traveling shorter distances by bus or trolley.
    ${ }^{7}$ Nothing has been said here about school attendance, for the number of males and females in school has been much the same to the extent that statistics can be relied upon.

[^6]:    ${ }^{8}$ Death rates per 1,000 population by race and sex, for the death registration states: Statistical Abstract of the United States, 1952, Bureau of the Census, p. 67. Not to be overlooked, the death ratés of both whites and nonwhites fell rapidly during these years-that of whites from 17 per 1,000 in 1900 to 9.5 per 1,000 in 1950, and that of nonwhites from 25 to 10.9 per $1,000$.
    ${ }^{\circ}$ Current Population Reports, Income of Families and Persons in the United States: 1950, Series P-60, No. 9, p. 39.

[^7]:    Source: Census of Population: 1940, Educational Attainment by Economic Characteristics and Marital Status, Tables 29, 31; 1950, Education, PE No. 5B, Table 12.
    a For 1939 the years of school completed are 5-6 and 7-8. Computed for 1949 by subtracting data for nonwhites from all classes.

[^8]:    ${ }^{10}$ The lack of separate data on the earning of whites and nonwhites in 1919 prevented comparison of the changes in white earnings between 1919 and 1949.

