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

Volume Title: The Labor Force in Wartime America

Volume Author/Editor: Clarence D. Long

Volume Publisher: NBER

Volume ISBN: 0-87014-329-8

Volume URL: http://www.nber.org/books/long44-1

Publication Date: 1944

Chapter Title: The Labor Force before World War I and II

Chapter Author: Clarence D. Long

Chapter URL: http://www.nber.org/chapters/c6302

Chapter pages in book: (p. 27 - 32)

It must not be overlooked, of course, that the labor force data studied in this section are spotty or cover only a short period, and to some extent are stable as the result of census definition. Nevertheless the propensity to be 'in the labor force' seems one of the most stable elements in the labor market, varying hardly at all except in long, slow trends, requiring years to consummate. It may be that the peacetime propensity is based not upon mere impulse, but upon deeply rooted habits, on the size and composition of families, on institutions of child care, education, and old age dependency, on the concentration of population, and on the structure and geography of industry. The labor force evidently does not expand or shrink under ordinary economic pressures. If that is correct, one enters the study of wartime activity at least alive to the difficulties of manipulating the civilian labor force.

5 THE LABOR FORCE BEFORE WORLD WAR I AND II In 1941 the American labor force was, of course, bigger than in 1917. It also contained relatively fewer males and relatively more older people (Table 5). These differences sprang not only from changes in the size and composition of the population, but also from certain

	October 1916					October 1941*				
					% OF					% OF
	POPUL	ATION	LABOR	FORCE	POP. IN	POPUL	ATION	LABOR	FORCE	POP. IN
AGE		% of		% of	LABOR		% of		% of	LABOR
GROUP	(000)	total	(000)	total	FORCE	(000)	total	(000)	total	FORCE
					МА	LE				
10-24	14,336	17.9	7,709	19.0	53.8	17,802	15.9	8,300	14.8	46.6
25-44	16,068	20.1	15,602	38.4	97.1	19,940	17.8	19,400	34.7	97.3
45-64	8,395	10.5	7,750	19.1	92.3	13,660	12.2	12,400	22.2	90.8
65 & older	2,326	2.9	1,345	3.3	57.8	4,542	4.1	2,100	3.8	46.2
1 0 & older	41,126	51.5	32,406	79.7	78.8	55,944	50.0	42,200	75.5	75.4
					FRM	ALR				
10-24	14,365	18.0	3,532	8.7	24.6	17,711	15.8	4,700	8.4	26.5
25-44	14,874	18.6	3,376	8.3	22.7	20,386	18.2	6,100	10.9	29.9
45 & older	9,557	12.0	1,336	3.3	14.0	17,918	16.0	2,900	5.2	16.2
10 & older	38,796	48.5	8,243	20.3	21.2	56,015	50.0	13,700	24.5	24.5
				МА	LE AND) FEMA	LE			
1 0-44	59,643	74.6	30,219	74.3	50.7	75,839	67.7	38,500	68.8	50.8
45 & older	20,278	25.4	10,431	25.7	51.4	36,120	32.3	17,400	31.2	48.2
10 & older	79.922	100.0	40.649	100.0	50.9	111.959	100.0	55 900	100.0	40 O

TABLE 5

Population and the Labor Force, by Age Groups and Sex United States, October 1916 and 1941

SOURCE: U.S. Census. For details and my interpolations of Census population and labor force data see Appendices A and B. See also Table 1, note 1.

*See note to Table 4. The revisions may change the age distribution of this table somewhat. It is likely that they will increase the number of women in the labor force in October 1941 by something less than a million, for the tentative revisions have resulted in an increase for December 1941 of 800,000. changes in the living and working habits of its members, modifying their attitudes toward taking jobs.

The rise in the ratio of females to males in the labor force from one in four in 1916 to almost one in three in 1941 was due largely to demographic factors. Net immigration fell greatly and immigrant families were consolidated by the bringing of wives and daughters to this country. By 1941 the excess of males over females of working ages in the population, which had been as much as two and a quarter million in 1916, had disappeared. Meanwhile, there had been a rather striking drop in the 'refined' reproduction rate, as a consequence of which the number of children under 10 was the same (22 million) in 1941 as in 1916. With fewer children to take care of, women were free to work outside the home. In fact an inverse association has been found in the census figures between the proportion of married women in the labor market and the relative number of children under 10 in the population. The number of children under 10 per 1,000 married women fell from 1,077 in 1920 to 919 in 1930 to 717 in 1940, at the same time that the number of married women in the labor force per 1,000 rose from 90, to 117, to 154. The proportionality is not perfect. There is indeed no a priori basis for a perfect proportionality. But the inverse association does show a relationship between the willingness of women to take jobs and their freedom from domestic duties.

Other factors obviously contributed to this freedom. When women could buy what was formerly made at home they were freed from housework and at the same time could find a market for their gainful work outside the home. With modern gadgets and devices, cooking and household chores could be done in less time and by fewer women. But the fall in the number of births had been the main factor. During the preceding three decades, when the scientific care of children was being stressed, mothers spent more time on their children. Had the birth rate not fallen meanwhile, women might not have been released to the labor market, despite the increasing aid they could get from mechanical devices.²³

²⁸ Loring Wood has made an interesting comment: "It seems to me that you tend to neglect the importance of long-term trends in the female labor force propensities. An analysis of changes in age-specific propensities by *cohorts* reveals some very interesting results. The initial propensities (at age 20-24) for successive cohorts of women since 1890 show marked increases. But for each cohort the propensity declines with increasing age according to a pattern which is remarkably stable, pretty much independent of the initial propensity with which the cohort started. This tends, of course, to confirm your general thesis of stability, since it suggests that the labor-force propensity of each cohort is largely determined for the rest of its life by its propensity at the time it attained working age. . . ." The older age of the labor force has also been largely a demographic matter. With immigration no longer large and with the birth and death rates falling for several decades, the population has aged markedly. In 1941 persons over 44 were more than a quarter of the total population instead of a fifth, as in 1916; and the proportion of children under 10 had fallen from a fifth to a sixth. Thus the labor force in 1941 was older than in 1916 chiefly because the working-age population from which it was drawn was older, too.

But the greater age of the labor force was due also to economic and institutional factors operating through the labor force propensities of the various age groups. During the twenty-five years the propensities fell, on the whole, for males, and rose, on the whole, for females. The number in the age group 10-24 just about kept up with the total population. Its labor force propensity moved somewhat differently for males and females. For both, the crucial factor was school enrollment (Table 6).

The rise in the percentages of males enrolled in school just about matched the fall in the propensity of males to be in the labor force.

TABLE 6

		*******	•		
School, Mar	ital, and Labor United S	Force Stati	us of Males a	nd Females	14-24
	DODUL ATION	<i>(accs, 1)</i> 10		LADOR	
	14-24 ¹	SCHOOL ²	MARRIED	FORCE	TOTAL
	(000)		(percentage o	f population)	
		MALES	6		
1916 April	10,254	21.3		74.3	95.6
1940 April	13,091	34.6 ³		60.3 ⁴	94.9
1941 Oct. ⁵	13,162	34.23		63.1 ⁴	97.3
		FEMAL	F S		
1916 April	10,358	23.9	28.9	34.1	86.9 ⁶
1940 April	13,236	33.3 ³	27.7	33.2 ⁴	94.28
1941 Oct.5	13,228	35.58	7	35.54	7

¹ Age groups 10-13 were excluded from these comparisons because school attendance figures were not gathered by the monthly poll for that age group. Unlike labor force figures, they could not be treated as negligible. The whole age group had, therefore, to be left out.

² Not in the labor force.

³ The 1940 percentages, from the U.S. Census, are not strictly comparable with the 1941 percentages, from poll estimates.

⁴ Labor force percentages for April 1940 and October 1941 were computed from the monthly poll estimates after the armed forces had been added to the labor force.

⁵ See note to Tables 4 and 5.

⁶ The total contains duplications to the extent that some married women were also in the labor force. This differential duplication in 1940 over 1916 undoubtedly accounts for the higher total in the later year, for, with fewer children, more married women were in the labor force in recent than in former years.

7 Data not available.

As for females, the rise in school enrollment apparently offset the decline in the proportion of children that young women formerly had to take care of, for the female labor force propensity was almost unchanged.²⁴ The offsetting effect cannot be proved, unhappily, because the part of the child dependency identifiable with this female age group cannot be estimated for any year before World War I. But the percentage of married women 18-24 who had children under 10 fell from 60.2 in 1930 to 55.7 in 1940,²⁵ and must have fallen a good deal from 1916 to 1930 in view of the declining birth rate during the 1920's. In any case, the importance of childlessness in releasing women of this age group for work outside the home is obvious from Table 7.

TABLE 7

Labor Force Propensities of Women 18-24, by Child and Marital Status United States, April 1940

	POPULATION (000)	LABOR FORCE (000)	% OF POP. IN LABOR FORCE
Single	4,709	2,921	62.0
Married with husbands present			
Without children under 10	1,479	403	27.2
With children under 10	1,862	118	6.3

Bureau of the Census, Series P-18, No. 13.

The greatest change in the labor force propensity of any group during the quarter century was the drop for elderly men. Of a thousand males 65 and over, 116 fewer reported labor force status in 1941 than in 1916; of a thousand males and females, 257 reported labor force status in 1941, or 71 fewer than in 1916. The suspicion that the drop in the propensities of elderly persons is due to the extension of old age benefits derives a little plausibility, though no proof, from a test made by dividing the number in the labor force over 64 in October 1941 (2,400,000) only by that part of the population over 64 *not* getting old age benefits (7,129,000).²⁶ Thus refigured, the labor force propensity for October 1941 would have been 337. Without old age benefits, then, and in view of the slight rise in the propensity of the female component of the age

²⁴ It will be noted that the proportion of married young women hardly varied.

²⁵ The 1930 percentages are for housewives 18-24 without children in the East North Central Division; the 1940 percentages are for married women 18-24, husbands present, throughout the United States; Bureau of the Census, Series P-9, No. 13; P-18, No. 13.
²⁶ Instead of by the whole population over 64 (9,346,000). In October 1941, 2,217,000 persons were receiving some kind of old age assistance.

group, there might have been a small rise over the 1916 propensity of 328 in every thousand.²⁷

The greater relative drop in the propensity of elderly persons was outweighted by the drop for the more numerous school-age group—resulting in the older labor force of 1941. The shift to an older labor force, if it could be kept within limits, has some good points, though they are offset somewhat by the feminization. Some loss of vigor may be a cheap price for an older, more skilled and thoughtful labor corps.

Not only, however, was the labor force in 1940 older and more feminine than before World War I. It was also somewhat smaller, relative to the population. Had the age-sex propensities of two decades earlier held, the labor force of April 1940 would have been a million and a half bigger than it was.²⁸ By Pearl Harbor these propensities had been partly restored and the labor force was only a third of a million smaller than it would have been on the basis of propensities in World War I. This recovery in the propensities, however, veils a considerable reserve propensity in late 1941, chiefly of young males in school whose place in the labor force had been taken by females released from caring for children, and whom wartime conditions might induce to return. Among females the con-

²⁷ Loring Wood doubts the soundness of this explanation: (1) because old age assistance grants were small, made mostly on a need basis, they could not have had much effect on the labor force propensity; (2) apparently half the recipients were women, whereas women make up less than one-sixth of the persons over 64 in the labor force. (I could support his objection by adding that the female labor force propensity did not decline.)

Old age grants averaged nearly \$20 per month per recipient (Statistical Abstract, 1940, p. 379), not an inconsiderable sum in the 1930's. Inasmuch as an analysis by the Social Security Board found that four-fifths of the recipients in 1936-38 were living in household groups (Monthly Labor Review, July 1939, pp. 74-6), that more than this proportion were able to take care of themselves, and that "a substantial portion of the aged persons who are being added to the old-age assistance rolls comprise a new group of public dependents", the grants cannot easily be dismissed as causes of labor force

Since females constituted half the recipients it might be argued that the grants they received relieved many aged males of the burden of supporting their aged wives or sisters. On the other hand, the fact that labor force propensities of elderly women did not decline is troublesome and gives some support to Mr. Wood's objection. It is possible, however, that the effect of the grants to induce a decline was more than offset by the trend increase in female labor force propensities (see, however, Mr. Wood's remarks in footnote 23).

Mr. Wood cites the suggestion of a Social Security Board statistician that the decline in the labor force propensity of old persons may be due in part to the decline in selfemployment. As far as I know, comparable census statistics on self-employment by which to test this relationship do not exist before 1940.

²⁸ On the basis of the somewhat higher propensities computed from monthly poll estimates of the April 1940 labor force. cealed reserve propensity was even larger; for, as will be seen, females had not yet gone into the labor force as extensively as demographic factors would have suggested; i.e., a reserve existed that might be released by some powerful factor such as large scale induction.

6 Comparisons with German and British Propensities before World War II

Mere numbers of our allies' and enemies' labor forces are scarcely useful as inventories of war resources. Differences between countries in labor efficiency, equipment, techniques, the impressment of foreign workers, and so on, forbid the translation of numbers into war potential. But numerical comparisons do help us to judge what could be done, by compulsion or persuasion, to make full use of our own labor power.

When the United States entered this struggle the age-sex structure of its population was not as well adapted for war purposes as that of either Greater Germany or Great Britain, although both had 'hollow' age classes in the population about 20-24 due to the decline in the birth rate during World War I. In all three countries, to be sure, males in the working-fighting ages, 14-64, constituted the same percentage of the total population, 35. In the United States a relatively high proportion outside this age-sex group were children under 14 and a relatively low proportion females 14-64. Had the percentage distribution of our population by age and sex been the same as the British we would have had about four million fewer dependent children to occupy the energies of women in the working ages, and two and one-half million more women in the working ages.

Satisfactory comparisons of labor force propensities between the United States and Great Britain are not possible for a date more recent than the latest (1931) British Census (Table 8). Propensities in the two countries for males 25-64 and females 45 and older were similar; for males in the school and retirement ages and for females younger than 45, they differed rather widely. The differences are, however, readily explained. For males over 64, the United States propensity in 1930 was higher than the British in 1931 for the same reason perhaps that it was higher than the United States propensity in 1940: namely, that old age security in this country was almost non-existent in 1930. (Sec. 5).