

# Labor-Force Reserves

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AS INDUSTRY EXPANDS under the impetus of war, it draws labor from among the unemployed and from groups which, but for the war, would not be engaged in gainful occupations. The new increments are of several kinds—the young who enter the labor force for the first time, those who have either completed or left schooling or training, the aged who reenter the labor force, the partially disabled and the handicapped who now can find jobs, housewives who had formerly been employed, and many others who have or have not formerly been in the labor force.

This report is addressed to some of the potentialities for further expansion of the labor force, particularly through the entrance of women into gainful employment.

When specific war plans take definite form, whether for the armed forces or for the production of munitions, the needs for labor can be foreseen with some precision, and the recruiting of personnel can go forward toward defined goals. But experience has amply shown that total needs cannot be reliably estimated by this method, because the nature and magnitude of the war effort change with the course of the war. Early forecasts of the needs for implements of war erred generally through being too low; some of the strains upon the labor supply which now impend were not foreseen then. It has therefore seemed wise to analyze our total potential human resources to meet industrial and military needs.

Estimates of the total potential labor supply with various kinds of subdivisions of the totals have been available for some time and from diverse sources. The special contribution of this study is in the statistical analysis of certain groups who, as need for their services arises, could augment the existing labor supply. This analysis was made possible by the availability from the family composition study of data concerning marital status and family and dependency relationships which could be applied to estimates of persons in the labor force and those not in the labor force. Data from the family composition study were used

because census data were not yet available. The family composition study is based on the family relationships of approximately 2.5 million urban persons, selected as a cross section of the urban population, and 150,000 rural individuals. The information was obtained in the winter of 1935–36 by the U. S. Public Health Service through a house-to-house canvass in 83 cities in 18 States and 23 predominantly rural counties in 3 States.<sup>1</sup>

The primary objective of this article is to estimate the number of single, married, widowed, divorced, and separated women according to age and the number of children they have and the age composition of the children as indications of the availability of these women to augment the labor force. These estimates will not only indicate the extent to which the labor force may be increased but should also furnish guides as to problems involved in progressive expansion of the labor force and the relative facility with which various groups can make adjustments in their family life and domestic duties to enter gainful employment. The statistics may also indicate the magnitude of social adjustments which should be foreseen and the nature of social provisions which should be made to enable desired expansions in the labor force.

## *Employment Status of Persons Aged 14 and Over*

Incidental to the primary purpose of this analysis, it has been necessary to develop estimates of the population of the continental United States for ages 14 and over according to age, sex, and employment status as of April 1, 1942. The assumptions underlying these estimates are presented briefly at the end of this article. The estimates are given in broad age classes in table 1, and the estimated increase in the labor force between April 1940 and April 1942 is summarized in table 2.

It is estimated that on April 1, 1942, there were 103.1 million persons aged 14 and over in the continental United States (table 1). Of these,

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<sup>1</sup> For analysis of data from this study, see Sanders, Barkev S., "Family Composition in the United States," *Social Security Bulletin*, Vol. 2, No. 4 (April 1939), pp. 9–13; other analyses have been carried from time to time in the Bulletin.

about 58.0 million, including about 84 percent of all males and 29 percent of all females aged 14 and over, were in the labor force, i. e., were employed in private or government work, including the armed forces, were on public emergency work, or were seeking work. Of the 45.1 million not in the labor force, about 8.1 million were attending school; 6.0 million were handicapped by age or physical defects or diseases; 1.3 million were institutionalized; and the largest segment, about 29.8 million, were "homemakers."<sup>2</sup> The last group contains by far the greatest part of the potential laborpower for future expansion of the labor force.

The 103.1 million were almost equally divided between males and females. A little more than 8 million of the males were not in the labor

<sup>2</sup> "Homemakers" includes the census classifications of females "engaged in own home housework" and "other"; 97 percent are estimated to be in the former category. See Bureau of the Census, *Instructions to Enumerators—Population and Agriculture 1940*, p. 56.

**Table 2.—Sources of increase in the labor force between April 1, 1940, and April 1, 1942, according to sex<sup>1</sup>**

[In thousands]

Labor force in 1940 and 1942 and source of increase	Total	Male	Female
Estimated number of persons 14 years and over in the labor force, Apr. 1, 1942.....	58,015	43,164	14,851
Number of persons 14 years and over in the labor force, Apr. 1, 1940 <sup>1</sup> .....	53,496	40,419	13,076
Total estimated increase, Apr. 1, 1940, to Apr. 1, 1942.....	4,520	2,745	1,775
Increases due to population changes.....	1,079	812	268
Increases due to added demand for labor.....	3,441	1,934	1,507
Males under age 65 (exclusive of school withdrawals).....	911	911	-----
Females under age 60 (exclusive of school withdrawals and delayed retirement, entry, or reentry into labor force over age 60).....	852	-----	852
Withdrawals from school.....	1,196	734	462
Males aged 65-74—delayed retirement and reentry into labor force.....	288	288	-----
Females aged 60-74—delayed retirement and entry or reentry into labor force.....	194	-----	194

<sup>1</sup> Totals represent sums of unrounded figures, hence may differ slightly from sums of rounded figures.

<sup>2</sup> Size of labor force differs from that given by the 1940 census, Release Series P-4, No. 8, because 1,789,144 persons of unknown employment status were distributed in accordance with percentage distribution for persons of known employment status on Apr. 1, 1940.

**Table 1.—Estimated number of persons 14 years and over in the continental United States, by age group, sex, and employment status, and percentage distribution by employment status, April 1, 1942<sup>1</sup>**

[In thousands]

Age group	Estimated number of persons							Percentage distribution						
	Total	In labor force	Not in labor force				Total	In labor force	Not in labor force					
			Total	Home-makers	In school	Unable to work			In institutions	Total	Home-makers	In school	Unable to work	In institutions
<b>Both sexes</b>														
Total.....	103,127	58,015	45,112	29,762	8,105	5,974	1,282	100.0	56.3	43.7	28.8	7.9	5.8	1.2
14-19.....	14,369	5,420	8,949	1,154	7,535	126	125	100.0	37.8	62.2	8.0	52.4	.9	.9
20-24.....	11,770	8,277	3,493	2,702	489	138	104	100.0	70.3	29.7	23.5	4.1	1.2	.9
25-44.....	40,618	26,104	14,424	13,330	81	504	441	100.0	64.5	35.5	32.8	.2	1.4	1.4
45-64.....	26,780	15,406	11,314	9,610	-----	1,333	370	100.0	57.8	42.2	35.9	-----	4.9	1.4
65 and over.....	9,591	2,649	6,942	2,886	-----	3,814	242	100.0	27.6	72.4	30.1	-----	39.8	2.5
<b>Male</b>														
Total.....	51,513	43,164	8,349	-----	3,999	3,527	823	100.0	83.8	16.2	-----	7.8	6.8	1.6
14-19.....	7,225	3,407	3,818	-----	3,076	64	78	100.0	47.2	52.8	-----	50.9	.9	1.0
20-24.....	5,783	5,359	424	-----	279	69	70	100.0	92.7	7.3	-----	4.8	1.2	1.3
25-44.....	20,105	10,525	670	-----	44	321	304	100.0	96.7	3.3	-----	.2	1.0	1.5
45-64.....	13,638	12,596	1,042	-----	-----	805	238	100.0	92.4	7.6	-----	-----	5.9	1.7
65 and over.....	4,672	2,276	2,396	-----	-----	2,269	127	100.0	48.7	51.3	-----	-----	48.6	2.7
<b>Female</b>														
Total.....	51,614	14,851	36,763	29,762	4,106	2,447	468	100.0	28.8	71.2	57.6	8.0	4.7	.9
14-19.....	7,144	2,022	5,122	1,154	3,850	62	47	100.0	28.3	71.7	16.1	54.0	.9	.7
20-24.....	5,987	2,918	3,069	2,702	211	69	28	100.0	48.7	51.3	46.1	3.5	1.2	.5
25-44.....	20,423	9,669	13,755	13,339	36	243	136	100.0	32.7	67.3	65.3	.2	1.2	.6
45-64.....	13,142	2,870	10,271	9,610	-----	529	132	100.0	21.8	78.2	73.2	-----	4.0	1.0
65 and over.....	4,919	373	4,546	2,886	-----	1,545	115	100.0	7.6	92.4	59.7	-----	31.4	2.3

<sup>1</sup> Totals represent sums of unrounded figures, hence may differ slightly from sums of rounded figures; percentage distributions computed from unrounded figures.

force. The group consisted exclusively of those in school, those unable to work, and a residual group of less than 1 million in institutions. The men not in the labor force are predominantly the very young and the very old—only about 1.1 million were in the age group 20–44. The outlook for further recruitment for the labor force from these 8.3 million men is limited.

Nearly 37 million women were outside the labor force; of these, about 29.8 million were homemakers, 4.1 million were in school, about 2.4 million were unable to work, and nearly half a million were in institutions. Appreciably more than half the 29.8 million homemakers were aged 20–44, and more than nine-tenths were under age 65. Obviously, this is the group from which most of the expansion of the labor force must come, and it is therefore important to explore further their marital and parental status. It will be of interest also to examine the marital and parental status of women who are already in the labor force.

#### Marital and Parental Status of Women in the Labor Force and of Homemakers

In addition to basic tables on marital and parental status of women derived from the urban and rural samples of the family composition study,

special tabulations were prepared using 10 percent of the urban sample to provide a more detailed analysis by employment status and by numbers of children in specified age groups. The respective ratios of single, married, and widowed, divorced, and separated women with specified numbers of children were applied to the estimated number of women in the labor force as of April 1, 1942, and to the estimated number of homemakers in urban and rural nonfarm areas. The rural sample was applied to estimates of rural-farm groups based on the 1940 census, without allowances for migration which occurred between 1940 and 1942. For the distribution of the number of women with children in specified ages, the 10-percent urban sample was used exclusively.

Of the nearly 15 million women in the labor force as of April 1, 1942, only about 3 million or less than 21 percent are married (table 3). Two-thirds of these married women have no children under 16 years of age, and of the remaining third more than half have only one such child. Only 15 percent of all the married women in the labor force have two or more children under age 16. About 3.8 million or 26 percent of the 15 million women are widowed, divorced, or separated.<sup>3</sup>

<sup>3</sup> For the rest of the article, the terms "widowed" or "widows" will be used to denote the group "widowed, divorced, or separated."

Table 3.—Estimated number of women 14 years and over in the labor force, by age group, marital status, and number of children under 16, and percentage distribution by marital status and number of children, April 1, 1942<sup>1</sup>

[In thousands]

Age group	Total	Married					Widowed, divorced, or separated					Single		
		Total	With specified number of children				Total	With specified number of children						
			None	One	Two	Three		Four or more	None	One	Two		Three	Four or more
Number														
Total.....	14,851	3,074	2,054	508	270	106	76	3,847	2,801	634	253	94	65	7,031
14-19.....	2,023	63	49	12	1	( <sup>2</sup> )	0	50	24	23	3	( <sup>2</sup> )	0	1,009
20-24.....	2,918	364	285	56	18	5	1	108	106	64	21	5	1	2,356
25-44.....	6,689	2,003	1,194	424	227	90	68	1,843	1,085	420	106	76	57	2,823
45-64.....	2,870	614	407	75	24	11	7	1,402	1,323	117	33	13	7	764
65 and over.....	373	30	29	( <sup>2</sup> )	( <sup>2</sup> )	0	0	263	262	1	( <sup>2</sup> )	0	0	80
Percentage distribution														
Total.....	100.0	20.7	13.9	3.8	1.8	0.7	0.5	25.9	18.9	4.3	1.7	0.6	0.4	53.4
14-19.....	100.0	3.1	2.4	.6	.1	( <sup>2</sup> )	0	2.5	1.2	1.1	.2	( <sup>2</sup> )	0	64.4
20-24.....	100.0	12.5	9.8	1.9	.6	.2	( <sup>2</sup> )	6.8	3.7	2.2	.7	.2	( <sup>2</sup> )	80.7
25-44.....	100.0	30.1	17.9	6.4	3.4	1.4	1.0	27.6	16.3	6.4	2.9	1.1	.9	42.3
45-64.....	100.0	21.4	17.3	2.6	.9	.4	.2	52.0	46.0	4.1	1.2	.4	.3	26.6
65 and over.....	100.0	7.9	7.9	( <sup>2</sup> )	( <sup>2</sup> )	0	0	70.6	70.4	.2	( <sup>2</sup> )	0	0	21.5

<sup>1</sup> Totals represent sums of unrounded figures, hence may differ slightly from sums of rounded figures; percentage distributions computed from unrounded figures.

<sup>2</sup> Less than 500.

<sup>3</sup> Less than 0.05 percent.

Nearly three-fourths of these have no children, and of those with children three-fifths have only one child under 16. More than 53 percent of the women in the labor force are single. Table 3 indicates the extent to which the female labor force is composed of single women, women with no children, or women with only one child under age 16.

The deterrent effect of family responsibilities upon the participation of women in the labor force is most apparent among those who have children under 5 years of age (table 4). The relatively small proportion who have children under 5 or 5-9 years of age is indicated by the following percentages, derived from table 4:

Marital status and number of children	Number	Percent			
		Total	At least one child under 5 years	No child under 5; at least one child 5-9 years	No child under 10; at least one child 10-15 years
Married women with—					
One child.....	568,000	100.0	25.7	24.6	49.7
Two children.....	270,000	100.0	28.9	39.3	31.8
Three children.....	100,000	100.0	30.8	40.6	22.0
Four or more children.....	70,000	100.0	67.9	30.8	5.3
Widowed, divorced, or separated women with—					
One child.....	334,000	100.0	18.8	21.8	59.4
Two children.....	253,000	100.0	21.7	37.2	41.1
Three children.....	94,000	100.0	24.5	48.9	26.6
Four or more children.....	65,000	100.0	43.1	50.8	6.1

In summary: of the 1.1 million married women in the labor force with one or more children under 16 years of age, only 30.1 percent have at least one child under age 5; 31.1 percent have no child under age 5 but one or more children aged 5-9; the balance, 38.8 percent, have no child under 10. Of the 1.0 million widows in the labor force with one or more children under 16 years of age, only 21.5 percent have at least one child under 5 years of age; 29.7 percent have no child under 5 but one or more children 5-9 years of age; the balance, 48.8 percent, have no child under 10 years of age.

Of the 29.8 million homemakers who constitute the principal potential supply for the future expansion of the labor force, almost 79 percent are married (table 5), in contrast to the less than 21 percent found among the women in the labor force (table 3). Of the married women not in the labor force (the homemakers), more than half—in

contrast to the third found in the labor force—have one or more children. Some 43 percent of these homemakers with one or more children have only one child; 29 percent, two children; 14 percent, three children; and 14 percent have four or more children under 16 years of age. Only 15 percent of the homemakers are widowed. Of these, 83 percent have no children under 16 years of age. Of those with one or more children, 53 percent have one child, 25 percent have two children, 12 percent have three children, and 10 percent have four or more children. Finally, only about 6 percent of the homemakers are single, in contrast to the more than 53 percent found among women in the labor force.

Table 6 gives the number of married and of widowed homemakers with one or more children under age 5, 5-9, and 10-15. The summary findings from the table are indicated below:

Marital status and number of children	Number	Percent			
		Total	At least one child under 5 years	No child under 5; at least one child 5-9 years	No child under 10; at least one child 10-15 years
Married women with—					
One child.....	5,473,000	100.0	38.1	20.5	41.4
Two children.....	3,642,000	100.0	45.6	31.4	23.0
Three children.....	1,812,000	100.0	54.1	36.2	9.7
Four or more children.....	1,727,000	100.0	74.4	24.3	1.3
Widowed, divorced, or separated women with—					
One child.....	391,000	100.0	21.0	15.3	63.7
Two children.....	186,000	100.0	23.4	31.4	45.2
Three children.....	85,000	100.0	30.6	43.5	25.9
Four or more children.....	74,000	100.0	51.3	41.9	6.8

Of all the 12.7 million married homemakers with one or more children under 16 years of age, 47.5 percent have at least one child under 5 years of age, 26.4 percent have no child under 5 but at least one child aged 5-9, and 26.1 percent have children 10-15 years of age. Of the 738,000 widowed homemakers with one or more children under 16 years of age, 25.8 percent have at least one child under 5 years of age, 25.3 percent have no child under 5 but one or more children in ages 5-9, and 48.9 percent have children aged 10-15.

The greater relative frequency of young children among homemaker mothers compared with mothers in the labor force is emphasized in the summary percentages of mothers with one or more children under 5, 5-9, and 10-15 years of age, according to the marital and labor-force status of the mother:

Marital status	At least one child under 5 years	No child under 5; at least one child 5-9 years	No child under 10; at least one child 10-15 years
In labor force:			
Married.....	30.1	31.1	38.8
Widowed, divorced, or separated.....	21.5	29.7	48.8
Homemakers:			
Married.....	47.5	26.4	26.1
Widowed, divorced, or separated.....	25.8	25.3	48.9

### Labor Potential

If a large proportion of the mothers with young children can be persuaded to participate in the labor force, provision must be made for the care of their children, especially for those less than 5 years of age.

The analysis of the marital and parental status of the homemakers indicates that there are nearly 2 million single persons, among whom a large fraction may be available for gainful work provided they live in areas where there are suitable

opportunities for employment and appropriate inducements. It should be noted that less than 1.5 million of these are in ages 14-44; the remainder are older and as a group probably less adaptable to gainful work (table 5). Furthermore, an unknown proportion of these single women may have family responsibilities, such as caring for aged or disabled members of the family or caring for young children in the household. Next to the single group, the group with the highest potential recruitment to the labor force are the married women who have no children under 16 years of age. There are nearly 11 million of these, though less than 4.5 million are less than 45 years of age. About half the group are aged 45-64, and nearly 1 million are aged 65 and over. In view of the likelihood that married men without children will be drafted in increasing numbers, it is probable that many of the younger women in this group will be in need of gainful work and will be available for

Table 4.—Estimated number of married women and of widowed, divorced, or separated women 14 years and over in the labor force, by age group and by number and age group of children under 16, April 1, 1942<sup>1</sup>

[In thousands]

Number of children and age group	Married						Widowed, divorced, or separated					
	Total	14-10	20-24	25-44	45-64	65 and over	Total	14-10	20-24	25-44	45-64	65 and over
Total.....	3,074	63	304	2,003	614	30	3,847	50	108	1,843	1,492	263
Women without children.....	2,054	49	285	1,194	497	20	2,801	24	106	1,085	1,323	262
Women with children.....	1,020	14	80	809	117	(?)	1,046	26	91	757	170	1
No child under 5 and—												
None 5-9:												
One 10-15.....	282	0	(?)	216	65	(?)	377	0	2	268	106	1
Two 10-15.....	86	0	(?)	65	20	(?)	104	0	0	70	25	(?)
Three 10-15.....	24	0	0	17	6	0	25	0	0	17	8	0
Four or more 10-15.....	4	0	0	1	3	0	4	0	0	2	2	0
One 5-9:												
None 10-15.....	140	0	9	122	9	0	138	(?)	18	100	10	0
One 10-15.....	70	0	(?)	67	2	0	65	0	1	59	6	0
Two 10-15.....	29	0	0	26	3	0	30	0	0	20	4	0
Two 5-9:												
None 10-15.....	36	0	1	34	1	0	29	0	3	25	1	0
One 10-15.....	8	0	0	8	1	0	10	0	0	9	1	0
Three 5-9:												
None 10-15.....	6	0	0	6	1	0	6	0	(?)	6	0	0
Four or more, at least one 5-9.....	28	0	0	26	3	0	33	0	0	28	5	0
One child under 5 and—												
None 5-9:												
None 10-15.....	146	12	46	86	1	0	119	23	44	52	1	0
One 10-15.....	15	0	0	14	1	0	10	0	0	9	1	0
Two 10-15.....	7	0	0	7	1	0	2	0	0	2	0	0
One 5-9:												
None 10-15.....	41	0	5	36	0	0	27	0	8	18	1	0
One 10-15.....	7	0	0	7	0	0	5	0	0	5	0	0
Two 5-9:												
None 10-15.....	12	0	(?)	12	0	0	6	0	(?)	6	0	0
Two children under 5 and—												
None 5-9:												
None 10-15.....	22	1	11	11	0	0	18	3	9	6	0	0
One 10-15.....	1	0	0	1	0	0	1	0	0	1	0	0
One 5-9:												
None 10-15.....	8	0	2	6	0	0	5	0	2	3	0	0
Three children under 5 and—												
None 5-9:												
None 10-15.....	4	(?)	3	1	0	0	4	(?)	3	1	0	0
Four or more children, at least one under 5.....	44	0	1	41	1	0	28	0	1	27	(?)	0

<sup>1</sup> Totals represent sums of unrounded figures, hence may differ slightly from sums of rounded figures.

<sup>2</sup> Less than 500.

such work if suitable opportunities for employment are offered to them.

Next perhaps in the order of proportionate availability for the labor force are the married women and the widows who have only one or two children over age 10 (table 6). There are 3.4 million women in these two groups, of whom 57.3 percent are less than 44 years old and almost none are over 65. It may be assumed that persons in these groups are more likely to be prospective gainful workers than widows without children, since nearly half of the approximately 4 million widows without children are aged 65 and over. The homemakers in certain broad classes in the order of their probable availability for gainful work are listed as follows:

Marital status and number of children	Women (in thousands) in age group			
	Total	Under 45	45-64	65 and over
Total.....	29,762	17,255	9,611	2,886
Single.....	1,893	1,432	317	144
Married, without children under age 16.....	10,726	4,346	6,408	972
Married, with not more than two children, and none under 10 years of age.....	3,102	1,831	1,267	4
Widowed, divorced, or separated, with not more than two children, and none under 10 years of age.....	334	138	193	3
Widowed, divorced, or separated, with no children under 16.....	3,739	288	1,689	1,762
All other homemakers.....	9,958	9,221	737	0

One may hazard some guesses as to the number that the groups listed above and the remaining employment groups, including the 8 million males, could yield to the labor force if the demand for additional workers continued to mount; if 10-12 million men, including many married men with dependents, were drafted into the armed forces; if there were a vigorous administrative policy of using our human resources to the maximum; if wages were very attractive and provision were made for the care of young children through day nurseries and other expedients; and if there were other inducements for women to engage in gainful work. Under such circumstances, perhaps 75 percent of the single homemakers; 50 percent of the married homemakers with no children under 16; 35 percent of the married and the widowed with not more than two children and none under 10 years of age; 25 percent of the widows who have no children; and 10 percent of all the remaining homemakers might enter the labor force. These would mean an increase of about 10 million; probably another million or a million and a half could be derived from the remaining employment-status groups—those attending school and those “unable to work.” The institutional group is not likely to make any contribution except through prison labor, and even there the contribution is bound to be small. In

Table 5.—Estimated number of women homemakers 14 years and over, by age group, marital status, and number of children under 16, and percentage distribution by marital status and number of children, April 1, 1942<sup>1</sup>

[In thousands]

Age group	Total	Married					Widowed, divorced, or separated					Single		
		Total	With specified number of children					Total	With specified number of children					
			None	One	Two	Three	Four or more		None	One	Two		Three	Four or more
Number														
Total.....	29,762	23,381	10,726	5,473	3,642	1,812	1,727	4,478	3,739	391	188	85	74	1,893
14-19.....	1,154	403	255	177	28	3	1	37	14	20	2	1	0	654
20-24.....	2,762	2,268	849	855	300	132	42	94	31	42	15	4	2	400
25-44.....	13,339	12,324	3,242	3,321	2,763	1,470	1,530	637	244	162	114	57	59	378
45-64.....	9,610	7,340	6,408	1,117	461	208	155	1,945	1,689	164	56	23	13	317
65 and over.....	2,886	977	972	4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	1,765	1,762	3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	144
Percentage distribution														
Total.....	100.0	78.0	36.1	18.4	12.2	6.1	5.8	15.0	12.6	1.3	0.6	0.3	0.2	6.4
14-19.....	100.0	40.1	22.1	15.3	2.4	.2	.1	3.2	1.2	1.7	.2	.1	0	56.7
20-24.....	100.0	82.1	30.7	31.0	14.1	4.8	1.5	3.4	1.1	1.5	.6	.1	.1	14.5
25-44.....	100.0	92.4	24.3	24.9	20.7	11.0	11.5	4.8	1.8	1.2	.9	.4	.5	2.8
45-64.....	100.0	76.5	56.3	11.6	4.8	2.2	1.6	20.2	17.0	1.7	.6	.2	.1	3.3
65 and over.....	100.0	33.8	33.7	.1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	61.2	61.1	.1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	5.0

<sup>1</sup> Totals represent sums of unrounded figures, hence may differ slightly from sums of rounded figures; percentage distributions computed from unrounded figures.

<sup>2</sup> Less than 500.  
<sup>3</sup> Less than 0.05 percent.

this respect, the contribution of men will be more significant. Thus the expected contribution to the labor force by women could be 11.0-11.5 million, provided suitable opportunities for work were available.

Another approach for guessing the maximum number of women who can be obtained to augment the labor force would be on the basis of the highest proportion of women found in the labor force in certain cities as given by the 1940 census. Using this approach, the Bureau of Employment Security has estimated the proportion of women in specified ages who may be available for gainful work.<sup>4</sup> These ratios applied to the estimated number of women in ages 14 and over in the United States give an estimate of 22.5 million women ultimately in the labor force. This total

<sup>4</sup> For a brief statement of the method used in these estimates, see "Estimating the Potential Expansion of the Female Labor Force in Urban Areas" in the Employment Security section of this issue.

would seem easily attainable under the circumstances assumed above, involving an increase of only 7.6 million over the number estimated as already in the labor force on April 1, 1942. If one takes the highest proportion of women in the labor force for each specified age group in any city shown by the 1940 census—exclusive of Washington, D. C.—the estimate of the possible number of women in the labor force becomes 23.8 million. If one takes the highest observed percentages, including Washington, D. C., the total becomes 25.0 million—or an increase of about 10.1 million over the number already in the labor force on April 1, 1942.

Another rough guide as to the maximum availability of women for the labor force may be found in foreign experience both for World War I and for the present war. In 1913, 28.4 percent of the membership of German workers' sickness insurance were women—some 4.1 million persons;

Table 6.—Estimated number of married women homemakers and of widowed, divorced, or separated women homemakers, by age group and by number and age group of children under 16, April 1, 1942<sup>1</sup>

[In thousands]

Number of children and age group	Married						Widowed, divorced, or separated					
	Total	14-19	20-24	25-44	45-64	65 and over	Total	14-19	20-24	25-44	45-64	65 and over
Total.....	23,381	463	2,268	12,324	7,340	977	4,478	37	94	637	1,045	1,765
Women without children.....	10,726	255	840	3,242	5,408	972	3,739	14	31	244	1,680	1,762
Women with children.....	12,655	208	1,419	9,083	1,940	5	738	23	63	393	266	3
No child under 5 and —												
None 5-9:.....												
One 10-15.....	2,266	2	3	1,279	977	4	249	0	0	97	140	3
Two 10-15.....	836	0	1	546	280	( <sup>2</sup> )	85	0	0	41	44	( <sup>2</sup> )
Three 10-15.....	176	0	0	117	60	( <sup>2</sup> )	22	0	0	12	11	( <sup>2</sup> )
Four or more 10-15.....	22	0	0	15	7	( <sup>2</sup> )	5	0	0	1	3	( <sup>2</sup> )
One 5-9:.....												
None 10-15.....	1,120	3	72	921	125	( <sup>2</sup> )	60	0	6	39	14	0
One 10-15.....	810	0	3	673	134	0	44	0	0	32	12	0
Two 10-15.....	402	0	1	205	105	0	23	0	0	16	7	0
Two 5-9:.....												
None 10-15.....	334	0	12	308	14	0	15	0	1	14	0	0
One 10-15.....	205	0	1	181	22	0	13	0	0	9	4	0
Three 5-9:.....												
None 10-15.....	48	0	1	47	( <sup>2</sup> )	0	1	0	0	1	0	0
Four or more, at least one 5-9.....	420	0	1	328	91	0	31	0	0	25	6	0
One child under 5 and —												
None 5-9:.....												
None 10-15.....	2,087	172	780	1,120	15	0	82	20	36	26	( <sup>2</sup> )	0
One 10-15.....	210	0	2	191	17	0	5	0	0	5	0	0
Two 10-15.....	113	0	1	104	9	0	3	0	0	3	0	0
One 5-9:.....												
None 10-15.....	781	1	84	690	6	0	20	0	3	16	( <sup>2</sup> )	0
One 10-15.....	214	0	2	206	6	0	7	0	0	7	1	0
Two 5-9:.....												
None 10-15.....	252	0	12	238	2	0	6	0	1	6	0	0
Two children under 5 and —												
None 5-9:.....												
None 10-15.....	671	27	288	355	1	0	19	2	10	6	0	0
One 10-15.....	30	0	1	27	2	0	0	0	0	0	0	0
One 5-9:.....												
None 10-15.....	251	( <sup>2</sup> )	58	192	1	0	7	0	2	5	0	0
Three children under 5 and —												
None 5-9:.....												
None 10-15.....	121	2	56	62	0	0	3	1	1	( <sup>2</sup> )	0	0
Four or more children, at least one under 5.....	1,285	1	41	1,186	57	0	38	0	2	33	3	0

<sup>1</sup> Totals represent sums of unrounded figures, hence may differ slightly from sums of rounded figures.

<sup>2</sup> Less than 500.

in 1915 this number had increased to 6.0 million; by 1918 it had reached the peak of 7.5 million.<sup>5</sup> In 1942, according to the present estimates, 25.6 percent of all persons in the labor force are women. It is conceivable that the number of women in the labor force in the United States could increase proportionately as much as the increase in the female membership of German sickness insurance funds, leading to an estimate of 26.8 million—an increase of 12.0 million. It may be assumed that, because of our sparser population and concentration of industries in certain areas and the lesser degree of regimentation, we may be unable to use our human resources as efficiently as Germany and therefore we may fall somewhat short of this goal. But it would seem reasonable that we can anticipate an increase of between 7 and 12 million women in the labor force and possibly of 1.5–2 million men, if all necessary measures short of compulsion are taken to facilitate their entry.

Whether we are able to approach only the minimum of this range or the maximum will be determined largely by the degree to which labor demand is widespread throughout the Nation so that those available for work can find suitable

work in their communities; another important factor will be the effectiveness with which public opinion is mobilized. The importance of residence in relation to areas in need of workers is very great. In this respect, women in rural-farm areas are a special group, not only because they are available only for agricultural employment but because many of them are in fact in the labor force, in that their contribution is essential to the management of the farm. It is of interest, therefore, to indicate even crudely the number and the marital and parental status of women listed as homemakers in rural-farm areas. These are given in table 7, the estimates having assumed no urban-rural migration between 1940 and April 1, 1942. On the basis of these estimates, a somewhat higher proportion of these homemakers than of all the homemakers in the country are married, and a higher proportion are single. Among the married homemakers a higher proportion have children, and more of those with children have two or more children.

Unless our labor shortage becomes so acute that provision is made for large-scale migration of potential workers to areas experiencing acute labor shortages, very large segments of potentially available labor power cannot be used. But

<sup>5</sup> Die Krankerversicherung 1934, Statistik des Deutschen Reichs, Vol. 484, Berlin, 1936.

Table 7.—Estimated number of women homemakers 14 years and over in rural-farm areas, by age group, marital status, and number of children under 16, and percentage distribution by marital status and number of children, April 1, 1942<sup>1</sup>

[In thousands]

Age group	Total	Married					Widowed, divorced, or separated					Single		
		Total	With specified number of children					Total	With specified number of children					
			None	One	Two	Three	Four or more		None	One	Two		Three	Four or more
Number														
Total.....	7,022	5,013	2,376	1,200	840	532	605	743	576	87	43	17	20	667
14-10.....	479	177	94	70	11	1	1	15	6	7	1	1	0	287
20-24.....	791	603	193	210	127	54	19	28	11	.11	5	1	1	160
25-44.....	2,985	2,723	567	610	557	405	585	131	46	34	25	10	16	131
45-64.....	2,227	1,872	1,286	309	145	72	61	286	231	33	12	6	4	69
65 and over.....	540	237	236	1	(*)	0	0	282	282	1	0	0	0	20
Percentage distribution														
Total.....	100.0	79.9	33.8	17.1	11.9	7.6	9.5	10.6	8.2	1.2	0.6	0.3	0.3	9.5
14-10.....	100.0	36.9	19.7	14.6	2.3	.2	.1	3.2	1.4	1.5	.2	.1	0	59.9
20-24.....	100.0	76.2	24.4	26.6	16.1	6.8	2.3	3.6	1.4	1.4	.6	.1	.1	20.2
25-44.....	100.0	91.2	19.0	20.4	18.6	13.6	19.6	4.4	1.5	1.2	.9	.3	.5	4.4
45-64.....	100.0	84.1	57.7	13.9	6.6	3.3	2.7	12.8	10.3	1.5	.5	.3	.2	3.1
65 and over.....	100.0	44.0	43.8	.2	(*)	0	0	52.3	52.2	.1	0	0	0	3.7

<sup>1</sup> Totals represent sums of unrounded figures, hence may differ slightly from sums of rounded figures; percentage distributions computed from unrounded figures.

<sup>2</sup> Less than 500.  
<sup>3</sup> Less than 0.05 percent.

whether or not the need ever becomes so urgent, a substantial number of women with young children could be drawn into the labor force, if appropriate provisions were made for the care of their children. Consideration of these and similar programs cannot be deferred to the future. While there is as yet no great labor stringency from the standpoint of the Nation as a whole, acute stringencies in certain areas are already apparent, and the number of such areas will presumably increase in the months to come. If acute shortages are to be avoided, the necessary plans should be drawn up in good time. Early action is essential since, in addition to developing appropriate provisions to make the women available for gainful work, allowance must be made for training time, since the vast majority will have no prior work experience or at least none of recent date or in requisite lines of work. It is hoped the data presented here on marital and parental status will be of some value in the development of policy and plans.

### Technical Notes

#### *Population Estimates*

The changes in population for specified age-sex-race groups were obtained by subtracting from the (medium) population estimates of the National Resources Committee for 1945 the estimates for 1940.<sup>6</sup> These differences were converted into percentages, using the 1940 estimates as the base; four-tenths of the change thus obtained—2 years out of 5—was applied to the 1940 population given by the census in specified age-sex-race groups to estimate the population changes for the continental United States from April 1, 1940, to April 1, 1942. Adding these to the population enumerated in 1940 by the census gave the estimate of the population for April 1, 1942.

#### *Increase in the Labor Force Through Population Changes and Added Demand for Labor*

To determine the increase in the labor force as a result of population changes, the proportion of persons in the labor force in 1940 (after the proportionate distribution of those with unknown employment status), in specified age-sex groups, was applied to the estimated population of 1942; the result gave an increase of 1.1 million in the estimated labor force from 1940 to 1942. Those with unknown employment status were distributed proportionately, since it seemed improbable that all of them were outside the labor force. This distribution of the "unknown" increased the number of persons in the labor force in 1940 from 52.8 million to 53.5 million.

1. *Increase of males in the labor force (including the armed forces).*—In determining the increased proportion of males

<sup>6</sup> National Resources Committee: Population Statistics 1. National Data, October 1937, pp. 9-13, table 1.

in ages under 65 in the labor force in 1942 over 1940 (exclusive of persons who withdrew from school to participate in the labor force), use was made of the increase in the number of applications for social security account numbers in 1941 over that in 1940. At the end of 1941, about 60 million account numbers had been issued. After subtracting from this the estimated number of persons with account numbers who had died since 1936 and the number who had retired as beneficiaries under old-age and survivors insurance, and making liberal allowances for duplicate account numbers, it would seem that at the end of 1941 there were more than 56 million account-number holders.

One could therefore assume that, with certain important exceptions, most persons who are more or less attached to the labor force already have account numbers, whether or not they are now working in covered employment. To the extent that this situation is approximated—and it is being approached very rapidly—any substantial increase in the annual number of applications for social security account numbers must indicate the entry of new workers into the labor force above the normal entry to take care of the annual turn-over. In other words, the number of applicants for account numbers can be considered to be composed of:

A. Normal turn-over cases which will remain essentially constant from year to year.

B. Shifts of noncovered persons who are in the labor force but without account numbers. This group should diminish progressively, approaching zero.

C. Enlargement of the labor force. It follows that before B has become relatively stationary, approximating zero, the applications for account numbers in 1 year will be less than applications for a preceding year unless C is large.

In 1940 there were 439,000 fewer male applicants for account numbers than in 1939. If employment conditions had remained the same, one would have anticipated a larger decrease in the number of applicants for account numbers in 1941 than the 1939-40 decrease; instead there was an increase of some 623,000.<sup>7</sup> Therefore, the number of applications for account numbers in 1941 was at least 1.1 million in excess of what would have been expected, an indication that there were many more than the normal number of new entrants into the covered labor force during the year 1941. These increases cannot be attributed merely to turn-over, since the number of both males and females with taxable wages was increasing progressively throughout 1941. Nor could these increases be accounted for merely in terms of a shift from noncovered to covered employment, since there is evidence that the number of workers in noncovered industry has not decreased.<sup>8</sup> Of the 1.1 million, some 600,000 were in ages over 20. There were, no doubt, additional workers entering the labor force, including the armed forces, who did not obtain account numbers within the first year of their entry into

<sup>7</sup> Excludes account-number holders of unknown age; therefore differs slightly from figures in table 5, Old-Age and Survivors Insurance section of this issue.

<sup>8</sup> Data on number and estimated earnings of persons in noncovered employment from U. S. Department of Commerce, Division of Foreign and Domestic Commerce.

the labor force or who already had account numbers. Assuming that there were at least some 200,000 of these, we have a net of 800,000 increase in the labor force in the ages 20-64. This increase would be still larger if the increment in the labor force for the first quarter of 1942 were taken into account.

With respect to the various groups not in the labor force, it was assumed that the greater part of this net increase must have come from males listed in the last census as "engaged in own home housework" (some 200,000 in ages 20-64) and from the group listed as "other" (about 500,000 in ages 20-64). The census definitions of these categories are as follows:

"Engaged in own home housework" includes persons "primarily occupied during March 24-30 with own home housework, even though she (or he) may work for pay during the canning season, or Christmas season." "Other" includes: "(a) persons who work only during a short season of the year, such as a professional football player, and who were neither working nor seeking work during the week of March 24-30, 1940; (b) retired persons still able to work; (c) persons who choose not to work; and (d) persons able to work who for any other reason were not working, not seeking work, and without a job."

It was assumed that persons in these two groups were those most likely to be drawn first into the labor force; for the sake of simplicity both groups were completely transferred to the labor force for all ages under 65, giving a net increase of males in the labor force of 911,000. It is more reasonable to believe that some residue was left and that part of the increment in the labor force must have come from a shrinkage of the group "unable to work." But this assumption would have necessitated several intermediary guesses, which could be avoided if it is reasonably valid to assume that the general size of the increase was approximately correct and that most of it came from the two categories mentioned. To test the reasonableness of this estimated shift, the proportion of males in each quinquennial age group in the estimated labor force for 1942 was compared with the corresponding 1930 ratio of male gainful workers. It was found that in all age groups except that under 25 the ratios for 1930 were higher than for 1942, a finding which seemed reasonable, since the 1930 census did not count as gainful workers persons who were seeking work but who had had no prior work experience.

2. *Increase of females in the labor force.*—It was assumed that the increase from 1940 to 1941 of about 414,000 in the number of female applicants for account numbers in ages 20-59 represented the increased participation of women in covered employment in the labor force. The increase in the first quarter of 1942 was ignored to allow for turn-over and the higher rates at which women without account numbers may have shifted from non-covered to covered employment. To the increment derived from the larger number of applications was added an estimate of the number of women who entered the labor force for the first time without applying for account numbers. To estimate this number, use was made of the proportion which women with taxable wages in an average quarter of 1940 in the different age groups were of

the total number of women in the labor force. This ratio gave an estimated increase of 242,000 women who had entered the labor force because of the increased demand for labor and who had not applied for account numbers. Thus the total increase in the labor force was 656,000 women in ages 20-59, still exclusive of groups that withdrew from school to become engaged in gainful work; most of the latter were under 20 years of age. With respect to the group under age 20, it was assumed that 15 percent of the "homemakers" in ages 16-19 and 10 percent of those in ages 14-15 had also entered the labor force. The result was a total increase of 852,000 women shifting from the "homemakers" group to the labor force.

3. *Increase resulting from school withdrawals.*—In October 1941 the U. S. Office of Education surveyed, through mailed questionnaires, the decrease in public-school enrollment between October 1940 and October 1941. When the estimated decrease reported by communities of specified size was weighted, an average decrease of 3.5 percent in high-school enrollment was obtained. The junior high schools and elementary schools also showed decreases, though smaller than that observed for high schools. It was assumed that the decreases in high-school enrollment were all among pupils aged 14 and over, and it was further assumed that 20 percent of the high-school population was in ages under 14. On these bases the decrease among persons in ages, roughly, 14-18 was 4.3 percent. It was assumed that the rate of withdrawal for males was  $1\frac{1}{2}$  times that for females. On applying this rate to the 1940 school population the estimated percentage of withdrawals from school was found to be 3.4 for females and 5.1 percent for males. Even though the aggregate withdrawal rate from elementary schools and junior high schools was less than from high schools, it was believed that withdrawal of persons aged 14 and over from these schools was much higher than the withdrawal rate from high schools. On this basis the withdrawal rate for all persons in ages 14-18 was increased to 5 percent for females and 7 percent for males for the period October 1940-October 1941. These percentages gave an estimated withdrawal of 269,000 males and 194,000 females in ages 14-18. It was assumed that the withdrawal for the entire period, April 1, 1940-April 1, 1942, was twice as large as the withdrawal for 1940-41; and the estimates were accordingly 539,000 males and 387,000 females or a total of 926,000. All those who withdrew are assumed to have entered the labor force, including the armed forces. No allowance was made for decreases in the population in ages 14-18 from 1940 to 1942.

A recent publication<sup>9</sup> on the decrease of enrollment in colleges indicates an average decline of 9.2 percent in enrollment for 1941 compared with 1940. On this basis it was assumed that the withdrawal rate from school for those in ages 19-44 must have been at least 10 percent from 1940 to 1941.<sup>10</sup> It was further assumed that the rate of withdrawal among males was twice as large as among females. When these proportions were applied to the

<sup>9</sup> "Statistics of Attendance in American Universities and Colleges," *School and Society*, Vol. 54, No. 1407 (Dec. 13, 1941), pp. 539-540.

<sup>10</sup> A study made in 1941 by the Bureau of Labor Statistics, U. S. Department of Labor, concerning decreased college registration also yielded an estimate of approximately 10 percent.

1940 school population aged 19 and over, it was estimated that some 98,000 males and 37,000 females withdrew from school between October 1940 and October 1941. Again, it was assumed that the withdrawal for the 1940-42 period was twice as high as the estimated withdrawal for the period 1940-41. Therefore, the total decrease was taken as 195,000 for males and 74,000 for females. The aggregate school withdrawal for all age groups was 734,000 for males and 462,000 for females or a total of nearly 1.2 million.

4. *Increase of the aged in the labor force.*—For aged males, adjustments were made for ages 65-74, since the groups "engaged in own home housework" and "other," from which most of the additions would have come in younger ages, had been entirely shifted to the labor force and it was deemed unwarranted to make further adjustments at this time for the group "unable to work" in ages under 65. It was assumed that the increase in the labor force had resulted from (a) retardation in retirement, and (b) return to the labor force after retirement. To estimate the effect of delayed retirement on the increase of the labor force, it was assumed that, on the average, the proportion of persons in the labor force for a specified age would be the ratio of persons 2 years younger found in the 1940 census. These proportions for ages 63-72 were applied to the total male population at each single year of age for ages 65-74 to obtain an estimate of the labor force for ages 65-74. The difference between the estimates thus obtained and the 1940 census was assumed to indicate the results of 2 years' delay in retirement; since it was assumed that the increased labor demand has in general been effective for a year and a quarter only, five-eighths of the increase computed above, or 168,000, was taken as representing the actual net increase in the labor force.

To estimate the number of males returning from retirement it was necessary first to estimate the number of persons who had retired. Ratios were obtained from the family composition study for the age groups 65-69 and 70-74 of those "retired" to the sum of the "retired" plus the "disabled." For each of the two age classes, the ratios obtained were applied to the estimated number of persons classed as "unable to work" plus "other" obtained by applying the census ratios to the population estimate for April 1, 1942. This procedure was followed on the assumption that, under the census definition, many retired persons in advanced ages reported themselves as "unable to work" and only a fraction of them reported themselves in the class "other." This adjustment gave for each age group an estimate of the retired males—a total of 1.2 million.

Data obtained from old-age and survivors insurance records were used to estimate the proportion of retired persons who had returned to covered employment between April 1, 1940, and April 1, 1942. On December 31, 1941, out of 222,817 primary beneficiaries entitled to benefits, 20,000 or 9 percent were employed in covered jobs during the month. On the basis of this evidence, it was guessed that at least 10 percent of the 1.2 million retired males in ages 65-74 or about 120,000 persons had returned to the labor force. This estimate combined with that for persons who postponed retirement gave a total of 288,000 males in

ages 65 and over as the addition to the labor force as of April 1, 1942.

The increase of the labor force through greater participation of females in ages 50-74 was estimated in parallel fashion. It was assumed that only 8 percent of the females in ages 50-74 not in the labor force had entered the labor force after April 1, 1940. The estimated total increase for women in these ages was 194,000—105,000 from postponing retirement and 89,000 new entrants and reentrants in the labor force.

5. *Recapitulation of the increases in the labor force.*—Table 2 recapitulates these increases and shows the comparative size of the labor force in 1940 and 1942. Since the preliminary estimates were completed, they have been checked against other available estimates. The over-all estimate of the labor force—58 million—is believed reasonable. There has probably been an overestimation of school withdrawals but somewhat of an underestimation of the number of males and females in intermediate ages, and possibly of females in older ages who have entered the labor force. These differences are so minor, compared to the totals, that recomputing the estimates would not have been warranted.

#### *The Family Composition Study*

Data used in the family composition study are based on schedules obtained by the U. S. Public Health Service in conducting the National Health Survey. The schedules were filled out by a house-to-house canvass in the winter of 1935-36 in 83 cities and 23 primarily rural counties in Georgia, Missouri, and Michigan. The urban sample included cities from 18 different States. (See footnote 1.)

In the present estimates developed by applying data from the family composition study both the urban and rural samples were used. With respect to the number of children in specified ages under 5, 5-9, and 10-15, a 10-percent urban sample was the only basis. In the family composition study, married women included only women living with their husbands; women in households from which the husband was absent or missing were classed as "separated" and combined within the category "widowed, divorced, or separated." Only such children were enumerated in the family as were living with the family; children attending school or away from home were omitted. The term "children" comprised natural children, adopted children, or foster children under 16 years of age.

There may be some objection to the appropriateness of having applied the data from the family composition study to the present analysis, because of the passage of time since that study was made. There are indications that marriage rates have continued to increase since 1935 and there has been a perceptible upward change since 1937 in the birth rate. The estimates of women with children under 5 years of age may therefore be somewhat low, and similarly the estimated proportion of married women in the population; but, on the whole, it is doubtful that the consequent error from these elements of possible bias could be such as to affect substantially the over-all end results. Moreover, as the war continues, marriage rates are likely to decline sharply and the birth rate is also

likely to fall, thus giving results which may be expected to come into closer harmony with the estimates given here on the basis of 1935-36 observations.

In this connection, an estimate of the number of persons under 16 years of age obtained from the family composition study was found to be nearly 5 percent lower than an estimate of the population in these ages based on the estimates of the National Resources Committee and the 1940 census. This underestimate would have been less if a higher proportion of inmarried women and women with children were assumed in the 1942 labor force, as would have been reasonable.

A more important limitation concerns the comparability

of the marital and parental status of women in the labor force in 1942 and of gainful workers in 1935-36. Undoubtedly the marital and parental composition of women who would not have been in the labor force but for the present exigency differs from that of women regularly in the labor force. The size of the errors on these scores is probably more serious, and they probably operate to give a somewhat lower proportion of married women in the labor force in 1942 than would be found if an enumeration were made. But even these errors are probably too small to distort the resulting estimates as a gauge of the general magnitudes involved, which are sufficient for policy-forming purposes.