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

Volume Title: The Labor Force in War and Transition: Four Countries

Volume Author/Editor: Clarence D. Long

Volume Publisher: NBER

Volume ISBN: 0-87014-351-4

Volume URL: http://www.nber.org/books/long52-1

Publication Date: 1952

Chapter Title: Summary

Chapter Author: Clarence D. Long

Chapter URL: http://www.nber.org/chapters/c3130

Chapter pages in book: (p. 1 - 5)

## 1 SUMMARY

In five years of World War II up to April 1945 the equivalent of 25 million fulltime workers moved into civilian and military employments in the United States, raising the number of equivalent jobholders from 45 to 70 million, that is, to more than three for every two workers occupied in the spring of 1940.

These additions enabled civilian employments to augment their strength 13 million (nearly 30 percent) while the armed forces were calling up 12 million men. Over 5 million equivalent workers came from increases in hours, mostly overtime, nearly 8 million from reemployment of idle persons already in the labor force in 1940, 11.5 million from expansion in the labor force itself. The labor force includes wage and salary earners (on both public and private payrolls), employers, and self-employed persons whether full or parttime or seeking work.

Employed persons, including civilian and military, increased 42 percent in the United States, slightly more than in Canada, three times as much as in Britain, and four times as much as in Germany (counting in Germany active armed forces and 7 million foreigners; counting only citizens, the number of Germans mobilized for employment barely rose at all). The civilian employed increased a sixth in the United States and possibly a fifth in Canada. Britain and Germany were less fortunate. The former, with slower population growth and less prewar unemployment than the two North American nations, had suffered an actual diminution of about 4 percent by 1943 and 8 percent by 1945, made up in the earlier year by the average worker putting in 9 percent more hours. German civilian employed fell, by mid-1943, over a fifth below 1939; if foreigners are counted, a fifteenth. Compensating extensions in hours were minor. The workweek gained no more than 4 percent in the first 2 years and lost most of that by 1944.

The 11.5 million expansion in the wartime labor force of the United States was half again the combined increases of Great Britain, Canada, and Germany (even counting the foreigners pressed into work in that country). Part of the huge American rise was due to rapid population growth.

Excluding the part due to population growth, the labor force rose 8.5 million in the United States, 1.8 million in Britain, and 0.6 million in Canada. In relation to working age population, the American labor

force rose from 54.1 percent before the war to 62.3 percent at the war peak, or 8.2 percent compared with 6.8 in Canada and 4.7 percent in Great Britain. In some degree, however, the comparison with prewar is favorable to the United States and Canada and unfavorable to Great Britain, for the formers' labor force proportions were depressed in 1940 or 1939 whereas the latter's was expanded somewhat in view of the war mobilization already partly in effect. Based on the postwar (1947) labor force proportions, the wartime excess is 6.4 percent in the United States, 5.4 percent in Britain, and 5.1 percent in Canada.

On any basis of comparison Germany made the poorest record for getting wartime additions. Its labor force lost natives, even debiting it with no war deaths; counting foreigners, its expansion was still much less than that in the United States. This failure to get additional Germans to work or seek work cannot be attributed to emigration, Allied bombing, 'high' birthrates, small reserves of women in the peacetime labor force, or somewhat more complete mobilization at the start of the war.

The inflows to the labor force were dominated by the military draft. Until the armed forces were enlarged, the labor force expanded negligibly. With the demobilization of nine-tenths of the peak armed strength the United States labor force shrank eight-tenths of its excess over prewar (disregarding the population growth). United States additions to the labor force averaged for the war about 70 for every 100 men taken into the armed forces. The relation between the labor force and the draft was not uniform, however. Indeed its variations reveal the influence of unemployment. The number who moved into the labor force for each 100 conscripted by the armed forces was relatively large — between 70 and 119 — in the early part of the war when unemployment was shrinking rapidly, and relatively small — about 50 — in the last two years when unemployment was close to a minimum and therefore no longer declining. The average for the five years was 72, almost the same as for Canada during 1939-45. The ratios of labor force to armed force increases in the other two countries were very different: in Great Britain, 47 during 1939-43 and a substantial negative amount during the last two years; in Germany, zero or negative during 1939-44.

Females in this country were a bit over half the addition to the labor force (including the part due to the population growth), eight-tenths in Britain. Excluding the part due to population rise, for every

hundred females at work before the war the United States added 35, Britain 21, and Canada 19 (compared with 1941); Germany relinquished 1. For every hundred males the United States added 9, Canada 6, Britain 2, and Germany 0.3.

Besides increases in employment and hours, there were large transfers into more essential jobs. The major shifts to war production in all four countries probably occurred within industries. Nevertheless, there was no lack of inter-industry mobility. In the United States all industry groups except agriculture took on personnel during the first years. By 1943 industrial employment (manufacturing, mining, and construction) had exceeded 1939 levels by about half. By 1945 transportation had expanded almost three-fourths; services (government, professional, and domestic) over a fourth; trade, distribution, and finance held their own.

In Great Britain industrial employment went down after 1942; in 1945 it was below 1939, though the fluctuations were never wide. Agriculture, services, and transportation remained about the same during the six years, and commerce, trade, and finance lost heavily up to 1943. Britain built up its war industries and agriculture by severely curtailing domestic services, construction, trade, distribution, finance, and the manufacture of clothes, food, and beverages.

The Germans were less ingenious, or determined, than the British in restricting nonessentials. Throughout the war, domestic service, employing chiefly native Germans, was almost undisturbed. Agriculture and industry parted with workers at first, but by the war's end had just about gotten them back. Employment fell in most service industries, also in commerce, trade, and finance. Transportation made negligible gains.

Compulsion was not important in recruiting wartime labor. The United States never required civilians to work. Germany had universal conscription on paper but did not thoroughly enforce it until after the Allied landing, when it was too late to use the extra labor effectively. Half of Britain's additions were made before the National Service Act. Even after that, its policy was still persuasion. Coercion was not relied upon extensively until the last two years, during which, paradoxically, the labor force as a whole and essential employment were both declining.

Four factors may have influenced movements to the labor force: reserves of extra workers among students, housewives, and the elderly; numbers of young children, husbands, and brothers requiring care at

home and preventing girls and women from taking gainful work; liberality of government to dependents of fighting men; and strength of enemy blows. These explain the large proportion added to the labor force in the United States which had more females outside its peacetime labor force than the British or Germans, so that more could go into industry in wartime despite a higher proportion of child cares. It was less openhanded than Germany or Canada in caring for dependents, though by no means niggardly. And it avoided the German and Canadian practice of reducing dependents' allowances if they worked for pay.

Most additions came when the enemy was hitting hardest. In Britain six in ten of the labor force additions were made before the USSR was forced into the war; in this country two in three during the two years up to the Italian surrender in mid-1943; in Germany the few native workers after the Stalingrad disaster. Canada, an auxiliary belligerent, distributed its expansion fairly evenly throughout the first five years of the war.

The homewardbound forces of the three English-speaking victors trailed the exodus of civilians. The latter quit war industries first, shifting into less essential sectors as pipelines filled, then left the labor force itself as sisters, wives, and fiancees went home to await the returning warriors. The entire shrinkage of the labor force occurred in the United States between March 1945 and May 1946. It took longer in Canada and Britain but was about complete by early 1947.

Aside from the part due to population growth, the great bulk of the labor force excess over prewar turned out to be temporary in all three countries. (No satisfactory postwar comparisons can be made for dismembered Germany.) In America the labor force did not go all the way back to its 1940 proportion of the population, misleading many into believing it was still expanded from the war. This belief arose from failure to perceive that the labor force at the turn of the 1940's was somewhat depressed, probably by the widespread unemployment.

So far in the Korean conflict the labor force has shown indications of retracing its early World War II patterns by rising as the armed forces expand. However, its ratio to armed force recruitments was less than half that in 1941-42, possibly because in April 1940 the labor force proportion was depressed whereas in April 1950 it was already mildly inflated. During the four years ahead, if a major war comes, this country probably could, by drawing on its reserves inside and outside the labor force, conscript 9 million more men without diminishing the

civilian employment of 60 million in April 1951. It could get another 5 million equivalent workers by increasing hours. This 8 percent potential rise in civilian employment is less than the almost 30 percent increase in the five years after April 1940. Still, if it is assumed that the mobilization is now, relatively speaking, about where it was in the spring after Pearl Harbor, the effective employment yet possible is on a par with that realized after April 1942.

## 2 The Labor Force before World War II

In spring 1939 the United States had a little over 44 million employed and nearly 10 million unemployed. Its labor force, the sum of these two figures, was somewhat below what it would have been had the same proportion of working age population been at work or seeking work as in such years of peace and low unemployment as 1930 or 1947. A third of a million were in uniform. Germany by early summer had reduced unemployment to almost nil, restored its slightly depressed labor force to the same proportion of the population as in 1925, and mustered a military force which, though still far under its subsequent strength, was

- <sup>1</sup> My tables for the United States (1, A, and 2, A), which are based on Work Projects Administration and Bureau of the Census monthly sample surveys of about 25,000 households, do not begin until 1940 and, in order to keep clear of the summer influx, which is particularly large in this country, compare Aprils instead of mid-years. The labor force, armed forces, unemployment, and civilian employment in April 1939 are computed to be 54.1, 0.3, 9.7, and 44.1 million respectively. It was assumed that between April 1939 and 1940 the labor force rose 0.7 million from the growth in population. Armed forces and unemployed were taken from the Economic Almanac for 1950 (National Industrial Conference Board), p. 164; civilian employment was the residual.
- The proportion of population 14 and older in the labor force in April 1940, as revised by the Census to be comparable to the 1945 enumeration technique, was 54.1 percent, 1.8 percent below the 55.9 percent measured by the same technique in 1947 and 2.0 percent below the 56.1 percent in 1930. I revised the labor force in 1930 to make it comparable to the 1945 technique. With a working age population in 1940 of 101 million, this deficiency in the labor force proportion involves 1.8 million workers. Since the 1939 labor force is estimated by extrapolating backward from 1940 on the basis of mere population change, the estimated deficiency would be approximately the same. See Section 2 for an explanation of the 1945 measurement technique.
- <sup>8</sup> Leo Wolman has disclosed that early increases in employment claimed by the Nazis were really a statistical reclassification in which formerly idle persons doing makework comparable to the United States WPA were regarded as employed: 'The Meaning of Employment and Unemployment', The State in Society (Oxford University Press, 1940). By 1939 approaching war had probably made German employment reasonably genuine.