

# Measuring the Effect of Defense Employment on Relief Loads

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IN THE LAST DAYS of May 1940, President Roosevelt officially initiated a huge armament program in the United States. Expenditures for armaments now form the major part of the Federal budget, whereas relief costs were the largest single items in Federal expenditures during the 7 years prior to July 1, 1940. Much interest, however, is still centered upon the relief programs, and there has been abundant discussion of what the effect of defense expenditures on relief has been and should be. Some persons have questioned why, with vastly increased expenditures for armaments, an expanded Army, and labor shortages a pressing problem, the general relief program alone should still be costing the States and localities about \$18 million monthly. On the other hand, others are concerned that excessive cuts in relief appropriations may have been made without proper relation to any real decline in the need for relief.

This paper is primarily concerned with the possible effects of the defense program on the size of the special assistance programs administered under the Social Security Act and on the general relief programs in the States. Separate analysis has been made of the available data on old-age assistance, aid to dependent children, and general relief for the period January 1940–November 1941. Aid to the blind is not included in the analyses because of the small volume of its case load.

## *Selection of Defense Areas for Analysis*

In order to test the relationship between defense activity and changes in general relief and in public assistance case loads, certain counties in which expenditures for armaments were greatest were selected as "defense areas." The areas selected were all those<sup>1</sup> in which the per capita

value of prime contracts awarded exceeded the average for the United States as a whole. They comprised 55 areas, covering 68 counties or independent cities, which included about 20 percent of the population of the United States.

Several reservations should be kept in mind when analyzing what has happened in these defense areas. In the first place, the speeding-up of armament production has had direct or indirect effects upon almost every county in the United States; no realistic division can therefore be made on the assumption that there is a large number of totally unaffected areas. Rather, the attempt has been to segregate the areas in which the effect has been relatively greater.

Even this separation has probably not been accurately made in all cases, because awards of prime contracts do not give a complete picture of defense expenditures. No adequate data are available on the geographic distribution of secondary or subcontracts. It seems probable that, if subcontracting had been included, the large amount being done in and around Pittsburgh, for example, would have classified it among the defense areas. The use of prime contracts as the sole basis of selection limits the scope of the data to areas of armament production, omitting from consideration such nonindustrial defense areas as the District of Columbia and the regions in which Army camps are located.

The migration of labor into defense areas makes it probable that any effects which increasing armament production has had upon relief rolls have been, to some extent at least, diffused into other areas. Childersburg, Alabama; Ravenna, Ohio; and Vallejo, California—to name only three—are examples of defense areas in which large plants have been put up but which have had to draw the majority of their employees from outside those areas because of sheer lack of population. In other defense areas, employees have been drawn from outside because of the need for special skills or because of existing barriers to hiring workers from given racial and nationality groups. In some

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<sup>1</sup> Seven areas were omitted, because the amount of relief given in them was insignificant. Population figures from the 1940 census. Data on contracts awarded, from the Office of Production Management, *Summary of Defense Contract Awards by Industrial Area, June 1, 1940 to June 30, 1941, July 14, 1941.*

instances, this influx of labor may have significantly affected the population base from which the per capita figures were obtained.

It should also be borne in mind that the data consist of the value of contracts awarded and not of wages and salaries paid. No data were available to show what expenditures have been made in fulfillment of the contracts or what proportion of such expenditures consisted of wages and salaries rather than of materials and profits.

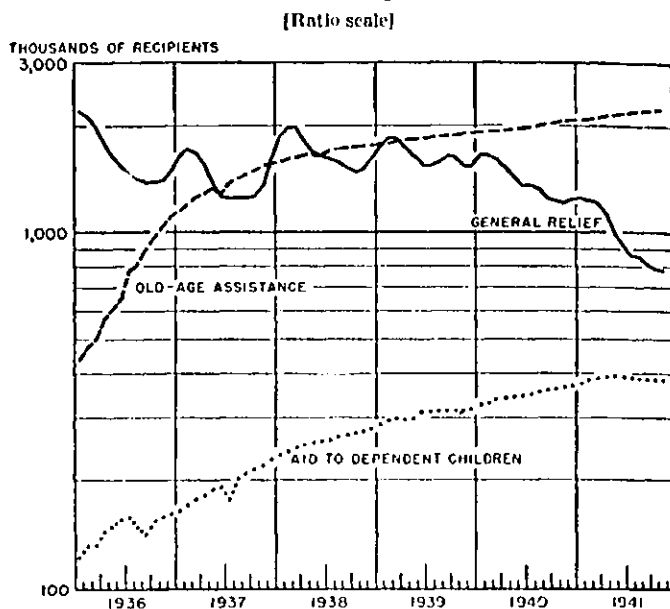
It should be noted, moreover, that each of the limitations mentioned tends to minimize rather than to exaggerate the differences between defense and other areas. Therefore, specific conclusions—such as the number of relief cases, if any, which a million dollar defense contract can be expected to take off the rolls for a year's time—are beyond the scope of this index of defense areas. The effects of defense employment and the relative size of these effects, however, should be ascertainable.

### Techniques Employed

From a simple inspection of case-load trends, little could be asserted with any confidence concerning the effects of the armament program upon old-age assistance, aid to dependent children, and general relief. None of the programs shows any definite break in trend in or about July 1940 which can, with any assurance, be attributed to defense activity. Looking at the smooth and almost uninterrupted rise in the number of recipients of old-age assistance, one might incline to the hypothesis that the number of needy aged had been little affected by defense employment (chart 1). One would be somewhat more hesitant to draw conclusions from an examination of the trend in the number of families receiving aid to dependent children, for, although the case load continued to rise during 1940 and the first half of 1941, the trend has taken a downward turn during the last few months. Is this a delayed result of the defense program, or is it a result of some other causes of different origin? It would be even more difficult to interpret the trend in general relief cases in terms of the effect of defense employment, for the downward trend, though definite, appears to have begun before rather than at the same time as the armament program of the United States.

Because it was recognized that areas other than the defense areas still had considerable defense employment, and that defense employment was

Chart 1.—Recipients of old-age assistance, aid to dependent children, and general relief in the continental United States, January 1936–November 1941



not the only factor which could have influenced the trend in assistance case loads in defense areas, no separate analysis of trends in the two groups of areas was made. Instead, for the purpose of eliminating the trend followed by case loads in both defense and other areas, the simplest sort of index was constructed for measuring the differences. A ratio was computed between the case load in the defense areas and the case load in the other areas in the same month. An index value of 100 was given to the average of the ratios for the first 6 months of 1940, which may be considered the pre-defense period. If, then, the case load in the defense areas increased or decreased at the same rate as the case load in the other areas, the index value would remain 100.

If the defense areas do not differ significantly from other areas in factors affecting assistance case loads except in the amount of defense employment, then the variation in the index is attributable to the defense program. In a few States administrative changes were known to have occurred, and adjustments were made for them. For example, the three States—Missouri, New Hampshire, and Pennsylvania—which lowered their age limit for eligibility for old-age assistance from 70 to 65 years were eliminated in computing the index for old-age assistance case loads.

No adjustment was made in the index to elim-

inate possible biases arising from priority unemployment. Two considerations indicate that the lack of this adjustment was not serious. First, the number of lay-offs because of priorities was relatively small during the period studied and should not affect the index significantly. The major effect of curtailments in nondefense production is expected after November 1941. Second, the possible effects on the index were largely eliminated by the even distribution of the lay-offs between defense areas and other areas. About 20 percent of the lay-offs occurring before December 9, 1941, in communities certified by the Office of Production Management as priority areas, were in defense areas, just as 20 percent of the population of the United States lived in these areas. In extending the index into the period when the full impact of priorities unemployment is felt, however, this factor would bear reexamination. It should be recognized, also, that other factors, for which no adjustments have been made, may have borne unequally on defense areas and other areas.

Whenever the data indicate that defense employment has had an effect, the trends in applications received and in cases closed may help in determining more precisely the nature of this effect. The number of cases accepted might be used instead of the number of applications, but changes in administrative policy and the amount of funds available for assistance affect the acceptance of cases to a greater degree than they affect applications. Data on applications have been used with full recognition of the wide differences in definition and, therefore, the noncomparability from State to State of any month's figures. It has been assumed, however, that the over-all trend has significance which State-by-State comparisons would not have.

### *Effects of Defense Employment on Old-Age Assistance*

Defense employment has had no noticeable effect whatever upon the number of old-age assistance recipients, according to the index. During the entire 23 months, January 1940 through November 1941, the index did not deviate from 100 as much as half a unit in either direction, a fluctuation which might easily be explainable in terms of random variations (table 1). This result is by

no means surprising. In terms of employability, aged recipients undoubtedly constitute the most marginal of the groups receiving assistance. There may be a tendency in some industries to keep on, if possible, employees who have grown old in the service, but once an aged man has lost a job his chances of getting another are not great.

**Table 1.—Index of the ratio of recipients of old-age assistance, aid to dependent children, and general relief in defense areas to recipients in other areas, January 1940–November 1941**

[Average ratio January–June 1940=100]

Year and month	Old-age assistance <sup>1</sup>	Aid to dependent children <sup>2</sup>	General relief
1940			
January.....	99.7	100.7	100.6
February.....	99.9	100.0	99.3
March.....	100.1	99.6	99.3
April.....	100.2	98.8	99.1
May.....	100.1	100.0	101.0
June.....	100.0	99.9	100.8
July.....	100.2	100.0	100.9
August.....	100.1	100.0	97.9
September.....	100.0	99.3	99.0
October.....	100.1	99.1	96.4
November.....	100.1	99.4	92.9
December.....	100.2	98.9	89.5
1941			
January.....	100.3	99.0	87.2
February.....	100.4	98.4	86.1
March.....	100.4	98.4	84.7
April.....	100.3	99.0	84.1
May.....	100.2	98.9	83.7
June.....	100.2	98.7	81.3
July.....	100.4	98.5	80.0
August.....	100.3	97.6	76.6
September.....	100.3	97.4	73.9
October.....	100.0	96.7	73.2
November.....	99.8	96.8	72.8

<sup>1</sup> Missouri, New Hampshire, Pennsylvania, and Washington excluded, because of administrative changes in provisions of the old-age assistance program.

<sup>2</sup> Mississippi, Pennsylvania, and South Dakota excluded, because of administrative changes in the program for aid to dependent children.

While it might be expected that certain indirect effects of increased employment, such as increases in the nonwage incomes of recipients or the increased ability of their relatives to give support, would decrease the number of aged recipients, such effects were not important enough to produce a significant change in the index.

The trends in applications and in closings bear out the same story. Except in the few States in which administrative or legislative changes in eligibility took place, the number of applications remained almost constant during the entire period. Though closings showed a slight seasonal fluctuation, they gave no evidence of either upward or downward trend when considered as a proportion of the open cases.

### *Effects of Defense Employment on Aid to Dependent Children*

Defense employment has had a small but definite tendency to reduce the number of families receiving aid to dependent children. There was no apparent effect upon the defense index until September 1940. After that time the index gradually declined to 97 in November 1941. This decline may be interpreted as indicating that the case load in defense areas in November 1941 was 3 percent smaller than it would have been if it had followed the trend in the other areas. It should be remembered that the method used tends to minimize rather than exaggerate the effect of defense expenditures.

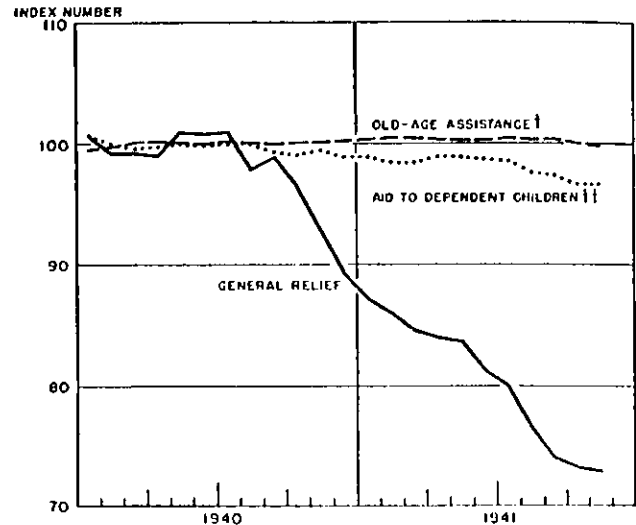
The tendency for the case load of aid to dependent children to decline is explainable in terms of both a slight decline in the number of applications received and an upward trend in closings as a proportion of the open case load. Thus, defense employment has tended to reduce need both among the families receiving assistance and among the families who were potentially eligible for assistance. At the present time, data are not available to show the extent to which members of families receiving aid to dependent children are being drawn directly into defense jobs, the extent to which they are going into private employment to replace others who have taken defense jobs, or the extent to which there has been an increase in the employment of relatives willing to support persons on assistance rolls.<sup>2</sup>

The likelihood that a member of a family receiving aid to dependent children will be able to work is greater than the likelihood that a recipient of old-age assistance will be employable. Some families receiving aid to dependent children are finding it possible to attain a more satisfactory standard of living through the employment of the mother or of older children in the family. The increased attainability of jobs and the failure of assistance payments to keep pace with the rising cost of living may be encouraging this trend. Important objectives of the program of aid to dependent children, however, are to enable the mother or other relative to remain in the home to care for dependent children and to enable the

<sup>2</sup> Data on closings in Pennsylvania show an increase both in employment and in contributions from relatives as reasons for closing. It is not certain that the experience in this one State may be taken as representative, inasmuch as Pennsylvania has had a stricter policy than many other States in regard to contributions from legally responsible relatives.

**Chart 2.—Index of the ratio of recipients of old-age assistance, aid to dependent children, and general relief in defense areas to recipients in other areas, January 1940–November 1941**

[Average ratio January–June 1940=100]



†Missouri, New Hampshire, Pennsylvania, and Washington excluded, because of administrative changes in provisions of the old-age assistance program.

††Mississippi, Pennsylvania, and South Dakota excluded, because of administrative changes in the program for aid to dependent children.

children to remain in school. It is unfortunate if the mother or other person responsible for the care of the children is employed and no proper provision is made for their care in the home or elsewhere. If the children are drawn into employment prematurely, they are likely to be poorly equipped to compete in post-war labor markets.

### *Effects of Defense Employment on General Relief*

In sharp contrast to the comparative lack of effect on the number of aged recipients and the small effect on the number of dependent children, defense employment played an important part in the sharp reduction in general relief case loads (chart 2). The index was subject to only minor fluctuations during the first half of 1940, but beginning with September 1940 it dropped decidedly and continuously, reaching a low of 73 in November 1941. In other words, general relief case loads in defense areas were 27 percent smaller than they would have been had they followed the trend of the other areas.

Although the defense areas are as a whole industrial areas, which are generally urban in

character, it does not appear that the variations in the index are properly assignable to differences between urban and rural general relief trends, if defense employment is omitted from the picture. Most of the largest cities in the United States were not included among the defense areas, because the per capita value of their prime contracts was below the average for the country as a whole. An index constructed on the basis of these largest cities, rather than of the defense areas, showed an upward trend. This movement was not caused by an increase in general relief case loads in these largest cities but rather by the fact that case loads in these cities did not decline as fast as in the country as a whole.

Unlike the case loads for aid to dependent children, those for general relief did not reflect the combination of decreasing applications and increasing closings. On the basis of reports from the 26 States for which data were available, applications dropped sharply. Closings also dropped in number, but they remained about the same proportion of the open case load throughout the

period. It is probable that employment opportunities have opened up for a large proportion of the relief families with employable members but have had little effect upon a relatively large and constant base of unemployable relief families. Insofar as this conclusion is true, there is no basis for expecting defense expenditures to continue indefinitely to reduce the general relief load.

#### *Conclusion*

The rolls of the several assistance programs have been affected in varying degrees by the development of the defense program. The extent to which they have been affected has depended on the proportion of employable recipients aided under the various programs. The fact that the defense program has resulted in a sizable reduction in the number of recipients of general relief does not necessarily mean that there is a prospect that expenditures for general relief will decline to much lower levels; nor does it mean that the need for assistance, in terms of coverage and adequacy, is now fully met.