

A SEASONAL INDEX OF URBAN RELIEF *

It is customary in discussing changes in the trend of business and industry to explain that the changes represent significant variations free from seasonal influences. Data for the computation of a seasonal index of relief which can be used in the adjustment of the long-time relief trend have not been assembled until very recently. The former lack of data resulted from two principal causes: (1) Reliable monthly data were available for only a few years, and (2) changing administrative policies caused a shift of data from one relief program to another, which obscured seasonal variation.

The longest and the most complete collection of relief data is the series now published by the Social Security Board under the title "Relief in Urban Areas." This series of data, reported monthly from 116 urban areas, extends over a period of more than 9 years, from 1929 to the present time. The present series was established by combining in 1932 reporting systems previously operated by the Russell Sage Foundation and the United States Children's Bureau and was carried on by the Children's Bureau until July 1936 when it was transferred to the Social Security Board.

The advantages of this urban series over all other collections of relief data lie in the following facts: (1) The series was established prior to the depression period and therefore includes data on relief administered at the very peak of prosperity; (2) the series covers not only public relief but all aid rendered by private agencies, which were

*By Helen R. Jeter, Chief, and Herman W. Gruber, Division of Public Assistance Research, Bureau of Research and Statistics.

of considerable importance in the period prior to 1933 and become again important wherever there are shortages of public funds; (3) the series includes not only general relief but the types of public assistance administered under special statutory authority, such as that administered under the Social Security Act; and (4) the series includes data for the several work-relief programs such as those of the Civil Works Administration and the Works Progress Administration. The only important omissions are data for Federal agencies other than the Works Progress Administration which are considered to form a part of the Federal Works Program, for the Civilian Conservation Corps, and for the National Youth Administration. It is believed, however, that these omissions are relatively slight and do not affect the trend significantly.

The reported data for this series have been reviewed recently with considerable care. Through the cooperation of the local reporting agencies, the central collecting agents, and several Federal agencies, it has been possible to correct errors, to eliminate items excluded by definition, and to place this series on as sound a foundation as can be expected of a voluntary reporting system. The urban relief data, presented in table 1, are obtained from reports of more than 1,100 agencies located in 116 selected urban areas, including 129 cities of 50,000 or more population. The coverage of this series represents approximately 66 percent of the urban population and 37 percent of the total population of the United States.

Table 1.—Total amount of relief extended to cases in 116 urban areas of the United States, by years and by months, January 1929–March 1938

Month	Total amount of relief extended to cases in 116 urban areas									
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Total.....	\$40,282,706	\$74,450,425	\$175,664,675	\$316,393,327	\$526,834,782	\$919,075,278	\$984,418,041	\$1,200,325,030	\$1,050,991,153	\$305,069,167
January.....	4,010,048	5,418,345	14,691,662	24,845,042	36,063,473	115,925,129	86,218,809	105,247,702	91,811,072	91,003,627
February.....	4,048,007	5,500,869	15,387,093	27,102,273	38,803,406	103,345,160	78,039,015	100,571,323	94,929,339	100,652,381
March.....	4,099,956	5,932,202	10,965,327	30,169,178	44,680,261	111,325,675	80,797,106	110,393,993	97,333,567	110,413,099
April.....	3,810,295	5,697,221	14,378,164	25,618,788	41,883,947	62,718,833	79,682,146	105,430,260	94,169,119	.....
May.....	3,693,184	5,210,022	13,370,354	24,084,738	40,071,860	62,296,445	78,876,533	99,641,029	91,743,194	.....
June.....	3,529,678	4,883,897	12,123,210	24,150,929	39,345,260	59,903,136	73,713,705	96,260,428	88,203,181	.....
July.....	3,488,015	4,904,018	12,407,166	22,173,227	36,268,294	59,550,515	77,272,067	94,410,700	83,047,233	.....
August.....	3,512,764	5,067,183	11,476,523	24,070,140	38,038,690	65,155,513	75,811,464	93,931,444	79,390,882	.....
September.....	3,466,760	5,356,419	12,083,845	24,344,830	36,651,959	61,460,340	74,106,356	94,031,671	80,441,745	.....
October.....	3,694,900	6,189,506	13,371,871	25,404,333	38,929,712	68,038,013	84,994,179	97,124,793	81,050,412	.....
November.....	4,006,287	7,551,872	16,138,413	29,655,511	48,745,327	72,412,076	88,516,405	97,883,301	84,044,731	.....
December.....	4,873,912	12,078,280	23,132,327	34,708,338	86,662,601	77,784,543	105,701,036	98,798,386	90,679,675	.....

Table 2.—Simple monthly index of total amount of relief extended to cases in 116 urban areas, January 1929–March 1938

[Not adjusted for seasonal variation; average monthly amount 1935=100]

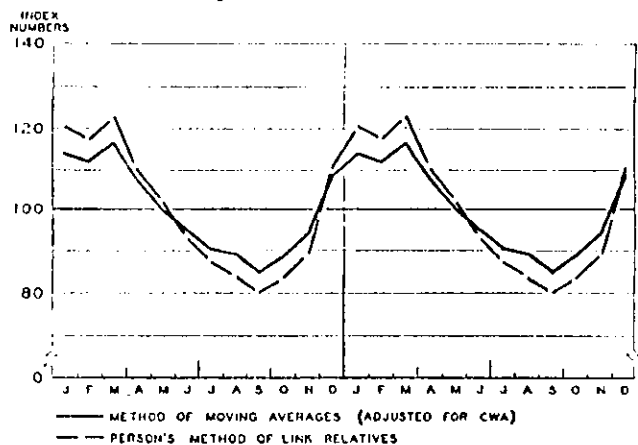
Month	Index of urban relief not adjusted for seasonal variation									
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January.....	4.9	6.6	17.0	30.3	43.9	141.3	105.1	128.3	115.0	115.7
February.....	4.0	6.7	18.8	33.0	47.3	126.0	95.0	120.0	115.7	122.7
March.....	5.0	7.2	20.7	35.8	54.4	135.7	98.5	134.0	118.0	131.6
April.....	4.0	6.0	17.5	31.2	51.0	76.4	97.1	128.5	114.7	.....
May.....	4.5	6.4	16.3	29.4	49.0	75.0	96.1	121.5	111.8	.....
June.....	4.3	6.0	14.8	29.4	48.0	73.1	80.8	117.3	107.5	.....
July.....	4.2	6.0	15.2	27.0	44.2	72.0	94.2	115.1	102.0	.....
August.....	4.3	6.2	14.0	29.3	46.4	70.4	92.4	114.5	96.8	.....
September.....	4.2	6.5	14.7	29.7	44.7	74.0	90.4	115.4	98.0	.....
October.....	4.5	7.5	16.3	31.0	47.4	82.0	103.0	118.4	99.5	.....
November.....	4.0	9.2	19.7	30.1	59.4	88.3	107.0	119.3	102.4	.....
December.....	5.0	15.4	28.2	42.4	105.5	94.8	128.8	120.4	110.5	.....

Simple or Unadjusted Index

A series of relative numbers not adjusted for seasonal variation is presented in table 2. These relative numbers form a simple index in relation to the average monthly amount of relief extended to cases for the calendar year 1935. This base period was chosen because all the assistance programs in operation at the present time were then in existence and because the era of violent month-to-month fluctuations in relief expenditures seems to have ceased with the initiation of a relatively stable work-relief program by the end of 1935. None of the monthly data for 1935 represents peak or low points; moreover, the computed index numbers for the months of maximum expenditures are not too high to preclude the expansion of this series. The use of a broader base period seemed inadvisable in view of the brevity of the period of 9 years for which the data are available.

This simple index indicates that in January 1934, when relief expenditures were the highest of this 9-year period, the amount expended was 41.3

Chart 1.—Index of seasonal variation in urban relief



percent above the average monthly amount expended during 1935. Since this peak occurred during the Civil Works Administration period, when an unknown proportion of the public relief expenditures in these urban areas included payments to persons not certified as in need of relief, the secondary peaks in March 1936 and March 1938 should be considered. In those 2 months, relief expenditures were 34.6 percent above the monthly average for 1935. Such a statement, however, ignores the fact that a figure for March is expected to be above the average for the year. A seasonal index is needed to indicate how much the figures for March 1936 and March 1938 exceeded the normal expectation or to reduce the figures for those months to ones which are significant of influences other than seasonal.

Determining the Index of Seasonal Variation

Seasonal indexes of urban relief, shown in table 3 and chart I, have been computed from the data in this series by two well-known methods. The first¹ is the method of median-link relatives, chained together and related to the average for the year. The use of the median in this method avoids undue influence of the Civil Works Administration period. The second method² em-

Table 3.—Monthly indexes of seasonal variation in urban relief (related to average for the year)

Month	Person's method of median-link relatives	Method of moving averages	
		Including Civil Works Administration	Adjusted for Civil Works Administration ¹
January.....	120.6	110.5	114.0
February.....	117.7	110.2	112.1
March.....	122.8	123.3	110.5
April.....	110.3	107.8	107.6
May.....	101.8	99.9	99.7
June.....	92.7	92.4	94.5
July.....	87.1	80.9	90.3
August.....	83.6	84.5	89.0
September.....	80.1	82.1	84.8
October.....	83.4	80.0	88.0
November.....	89.3	92.0	94.2
December.....	110.6	111.8	108.7

¹ Estimated figures were used for Civil Works Administration to avoid undue influence of that period on the seasonal index.

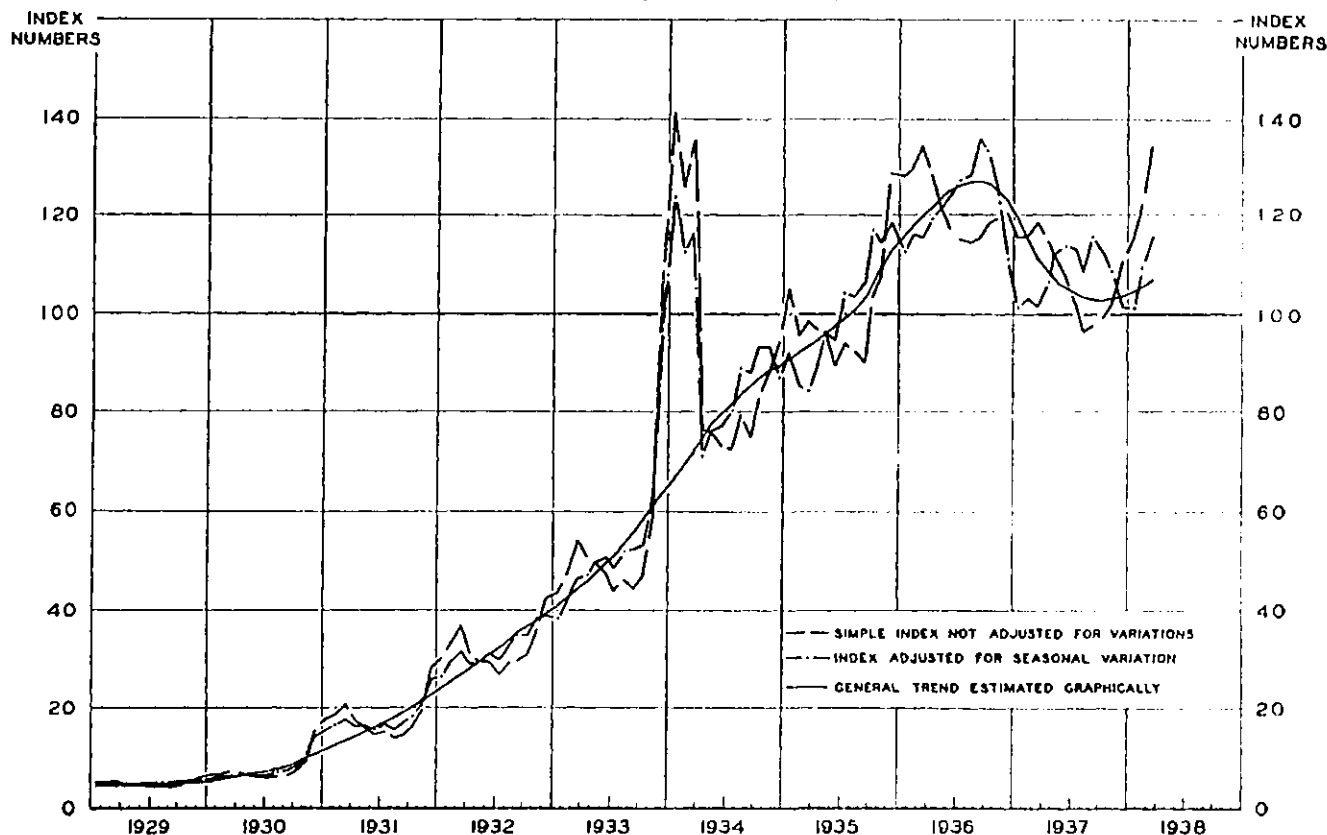
ploy moving averages. Since the influence of the Civil Works Administration period is magnified by the method of moving averages, estimated figures have been used to replace the reported data for that period in computing this index.

¹ Persons, Warren M. "Correlation of Time Series," *Journal of American Statistical Association*, Vol. XVIII, No. 142 (June 1923), pp. 713-720.

² Joy, Arnyess and Thomas, Woodlief. "Use of Moving Averages in the Measurement of Seasonal Variation," *Journal of American Statistical Association*, Vol. XXIII, No. 103 (September 1928), pp. 241-252.

Chart II.—Trends of relief in 116 urban areas, January 1929–March 1938

[Average monthly amount for 1935=100]



The seasonal indexes computed by both methods show a peak in March, which is reached by a steady ascent from September through January with a slackening in February just before the sharp rise in March. After March the curve sweeps steadily down to September. The slight dip in February may result either from the fact that February is nearly 10 percent shorter than January and March or that changes in administrative policies have taken place in February.

The March peak, however, is established beyond doubt. Although the reported data for most years indicate that the figures for December exceed the figures for March, this fact is the result of the general upward trend of relief which appears in a series of waves about a steadily rising curve. (See chart II.) The crest of each wave actually occurred in March in every year from 1929 through 1937 except in 1934 and 1935. In 1934, Civil Works Administration activity caused the peak to occur in January; in 1935, the Federal Emergency Relief Administration program also reached a peak in January.

There is less certainty about the actual timing of the low point. The trough of the wave occurs frequently in July or August, but a secondary trough is important enough to determine the low point of the seasonal index as September by all methods of calculation.

The Meaning of Seasonal Variation in Relief

The partly seasonal character of relief needs has been recognized in many communities where the standard family budget for the winter months includes larger amounts for fuel and clothing. Seasonal unemployment is also a factor influencing the seasonal index of relief, although in the data from many different geographic areas and from cities with establishments idle at different seasons of the year, the seasonal influences may tend to offset one another. Illness in dependent families may also reach a peak in the winter or early spring months.

The March peak is doubtless the cumulative effect of continued winter needs associated with the final exhaustion of savings after winter unemploy-

ment. The availability of public funds, particularly Federal funds, may influence the peak to some extent, but since the March peak occurred consistently in each year prior to the inauguration of the Federal relief program, this influence appears to be relatively unimportant.

The Application of the Seasonal Index

The chief use of the seasonal index is to eliminate merely seasonal influences from the monthly figures. Therefore a monthly index of relief, adjusted for seasonal variation, is presented in table 4 and chart II. These figures are free from the normal seasonal influences and indicate the significance of the amount of relief for each month in relation to the average monthly amount during 1935.

The peak for the entire 9-year period, as shown by this adjusted index, occurred in September 1936

Table 4.—Monthly index of total amount of relief extended to cases in 116 urban areas, adjusted for seasonal variation (by method of moving averages), January 1929–March 1938

Month	Index of urban relief adjusted for seasonal variation									
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January.....	4.3	5.8	15.7	26.6	38.5	123.0	92.2	112.5	101.4	101.5
February.....	4.4	6.0	16.8	29.4	42.2	112.4	85.5	115.9	103.2	109.4
March.....	4.3	6.2	17.8	31.6	46.7	116.5	84.5	116.5	101.8	118.5
April.....	4.3	6.3	16.3	29.0	47.4	71.0	90.2	119.4	106.6	.....
May.....	4.5	6.4	16.3	29.5	50.0	76.1	95.4	121.9	112.1	.....
June.....	4.0	6.3	15.7	31.1	50.8	77.4	95.0	124.1	113.8	.....
July.....	4.6	6.6	16.8	29.0	48.9	80.4	101.3	127.5	113.0	.....
August.....	4.8	7.0	15.7	32.0	52.1	80.2	103.8	128.6	108.8	.....
September.....	5.0	7.7	17.3	35.0	52.7	88.3	106.6	136.1	115.6	.....
October.....	5.1	8.5	18.4	35.0	53.5	93.6	116.9	133.6	112.3	.....
November.....	5.2	9.8	21.0	38.3	63.0	93.7	114.5	126.6	108.7	.....
December.....	5.4	14.2	25.9	39.0	97.0	87.2	118.5	110.8	101.6	.....

with an amount 36.1 percent above the average for 1935. This September figure, influenced largely by the Federal Works Program, is not only higher than the figures for March 1936 and March 1938—the secondary peaks of the simple index—but is higher than the Civil Works Administration peak in January 1934, which was only 23.9 percent above the 1935 average.

Thus, considering regular seasonal needs, the total public relief bill for September 1936 was extraordinarily high. What was the reason?

The Long-Time Trend and Cyclical Fluctuations

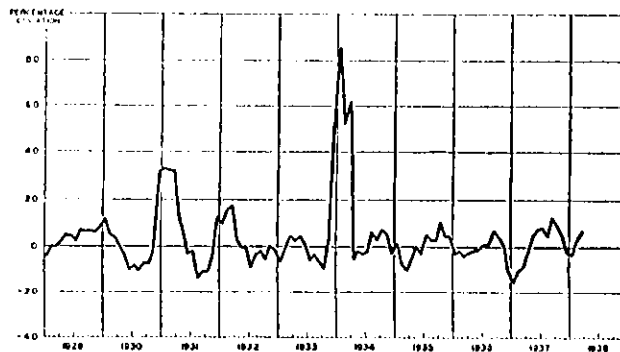
Adjustment for seasonal variation is but one of the corrections to be applied when the significance of any particular historical data is considered.

During the period from 1929 through the winter of 1935–36 there was a steady upward swing in the relief curve; after March 1936 the general direction became uncertain.

Although it is visually obvious, the mathematical determination of this general trend is not easy. None of the simple curve-fitting formulas proved useful. The trend is not a straight line but a curve with several points of inflexion. The most plausible curve was obtained by graphic smoothing and is shown in chart II. This general trend line indicates that the amount of relief extended to cases in September 1936 was higher than in any other month of the period, primarily because of the upward direction of the curve. Relief in September 1936 was 100 points above relief for September 1931 in relation to the average for 1935.

A 9-year period is too short for the final determination of a secular or long-time trend; it is not too short, however, to give definite evidence of marked and irregular temporary departures above and below the general direction. Such departures may be treated as cyclical fluctuations in relation to the general trend, and the significance of the September 1936 peak may be diminished by comparing it with other departures from the trend. These departures have been determined graphically and are presented in terms of percentage deviations in table 5 and chart III.

Chart III.—Percentage deviations from the general trend of relief in 116 urban areas, January 1929–March 1938



In this chart the general trend is shown as a horizontal straight line, since for the moment it is of no importance and only the temporary fluctuations above and below the trend are to be considered.

The most significant departure from the general trend was to be expected for the Civil Works Administration period. The total amount of relief

for January 1934 was 86 percent above the trend. The next most significant series of departures from the trend occurred in the winter of 1930-31, when private agencies in the urban areas paid out monthly amounts for relief two and three times their customary expenditures. The figure for January 1931 was 33.1 percent above the general trend. When expenditures for the month of September 1936 are considered in terms of deviations from the general trend, it is important to note that these expenditures were only 7 percent above those to be expected. This fact indicates that the September expenditures were not radical departures from the general trend but represented the peak of a long-time movement.

It is impossible at this time to determine whether the history of relief since September 1936 represents a temporary falling off from the upward relief curve which will reassert its general trend in the next few months. The reported figures from August 1937 seem to indicate this possibility. While the amounts reported for the

last few months seem high when viewed in the light of hopes for recovery during 1936 and 1937, they are not high when viewed as an extension of the general trend from January 1929 through March 1938. Moreover, when adjusted for seasonal variation, March 1938 appears less important than March 1936 and considerably less spectacular than September 1936. There is still a possibility that the downward trend which seemed to begin in the fall of 1936 may be continued during 1938.

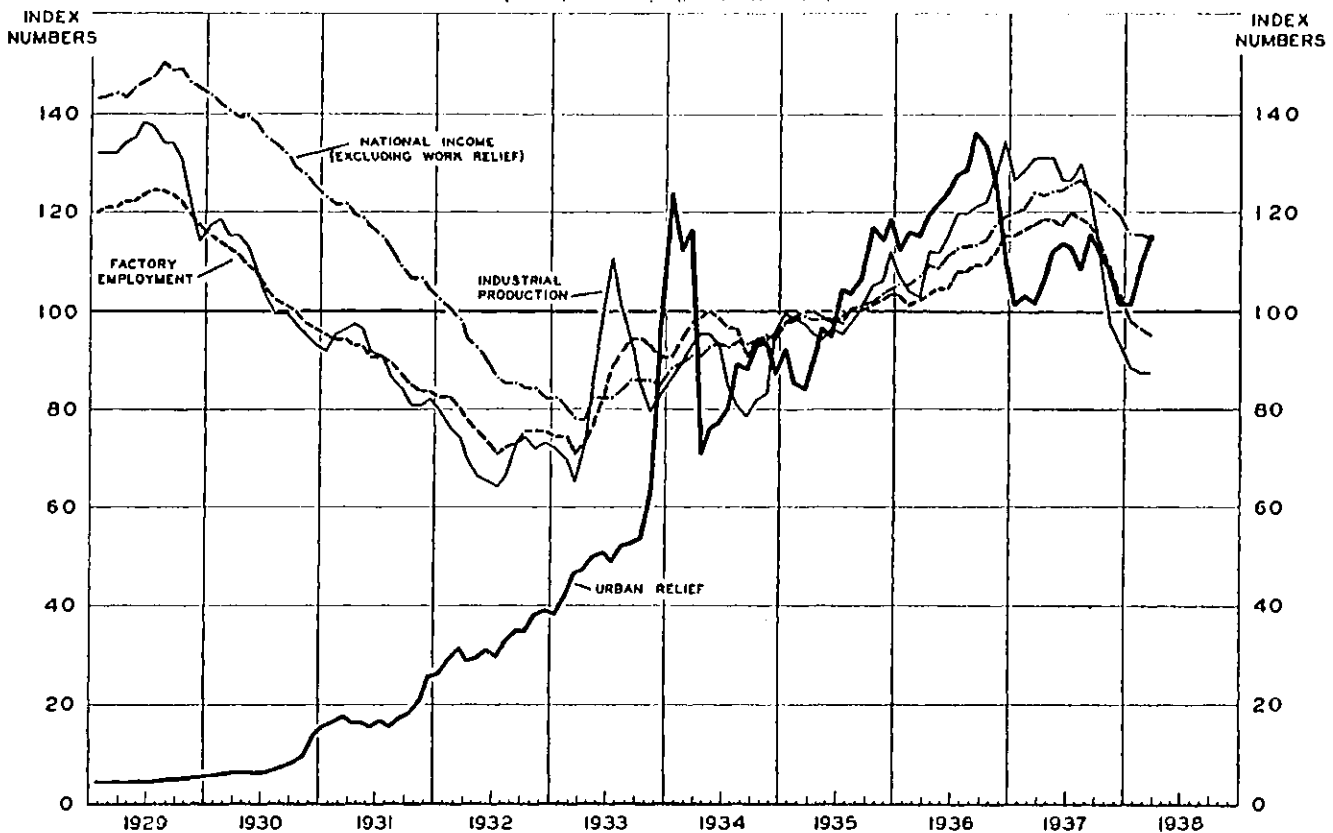
Relief and Indexes of Prosperity

An index of relief should be a complement to an index of business, industry, or wealth. As these latter curves rise, the curve of relief should fall.

Chart IV shows the index of urban relief compared with indexes for factory employment, industrial production, and national income, adjusted for seasonal variation. From 1929 through 1932 the three prosperity curves were steadily

Chart IV.—Index of relief in 116 urban areas compared with indexes of factory employment, industrial production, and national income, 1929-1938 † (all indexes adjusted for seasonal variation)

[Average monthly figure for 1935=100]



† Index of factory employment based upon data collected by the Bureau of Labor Statistics and adjusted for seasonal variation by the Federal Reserve Board; Index of industrial production prepared by the Federal Reserve Board; Index of national income estimated by the Bureau of Foreign and Domestic Commerce.

Table 5.—Percentage deviations from general trend of relief extended to cases in 116 urban areas, January 1929–March 1938

Month	Percentage deviations from general trend				
	1929	1930	1931	1932	1933
January.....	-4.5	+11.5	+33.1	+0.0	-6.0
February.....	1.0	+5.3	+32.3	+15.3	-1.0
March.....	1.0	+3.3	+31.0	+17.5	+4.5
April.....	+2.4	1.0	+12.4	+2.8	+2.8
May.....	+4.7	-4.5	+0.5	-.3	+4.2
June.....	+4.5	-10.0	-3.1	1.0	+1.8
July.....	+2.2	-5.3	-1.8	-8.8	-5.8
August.....	+6.7	-10.3	-13.7	-3.5	-3.5
September.....	+6.4	-7.2	-10.8	-2.0	-6.2
October.....	+6.3	-7.6	-10.7	-5.4	-0.3
November.....	+6.1	-2.0	-4.1	+1.3	+2.4
December.....	+8.0	+31.5	+12.6	-1.5	+51.6

Month	Percentage deviations from general trend				
	1934	1935	1936	1937	1938
January.....	+50.0	+1.3	-3.0	-15.3	-3.1
February.....	+02.2	-7.4	-1.0	-10.3	+3.4
March.....	+01.8	-9.0	-3.9	-8.5	+7.0
April.....	-5.2	-5.1	-2.3	-1.8	.....
May.....	-1.8	+1.1	-1.7	+5.0	.....
June.....	-3.1	-2.9	-1.0	+7.9	.....
July.....	-2.0	+5.0	+9	+8.2	.....
August.....	+0.3	+2.9	+1.3	+5.0	.....
September.....	+3.0	+3.2	+7.0	+12.2	.....
October.....	+7.3	+10.0	+5.4	+9.0	.....
November.....	+5.0	+4.8	+1.0	+5.2	.....
December.....	-2.9	+4.7	-10.0	-2.2	.....

¹ No deviation.

falling, and the curve of urban relief was steadily rising. After March 1933 the prosperity curves turned and pursued an upward trend until the middle of 1937. The relief curve, on the other hand, continued to rise during 1934, 1935, and 1936, even during the period of rising prosperity, and fell off temporarily only after September 1936.

The Effect of Rising Standards of Relief

The general upward trend of relief during this 9-year period also reflects changing relief standards. General relief administered by private agencies during the period prior to the depression was based generally upon standard family budgets computed at a subsistence or dependency level. Public relief in that period, however, was rarely determined in a scientific manner and was likely to consist of a grocery basket or a dole of a few dollars. The Federal Emergency Relief Administration introduced in 1933 a widespread use of a standard family budget, and (except for the Civil Works Administration period in early 1934) both public and private relief agencies administered relief at a subsistence level until late in 1935. Since the establishment of the Federal Works Program in 1935, wages paid on work projects have approached the hourly rates prevailing in

private industry. Although the number of hours that may be worked is limited to a "security wage," the total received for a month considerably exceeds the amount that was received formerly as general relief under a system of subsistence budgeting.³

The determination of average amounts of relief depends upon data on the numbers of families or households, which are not available without duplication for the urban relief series. Figures recently published concerning the total amount of relief received by persons in need in the United States, however, throw some light on changing standards in relief. From July 1936 to March 1938 the average monthly amount of public relief received per household ranged from \$37 to \$42. From July through November 1933, prior to the establishment of the Civil Works Administration, the average monthly amount of public relief reported by the Federal Emergency Relief Administration ranged from \$14 to \$17. Although this amount may have been supplemented either by private agencies or by local public agencies, it is probable that supplementation was not extensive in this period. Thus the standard of family relief has risen more than 100 percent since November 1933. The increase of more than 200 percent in the monthly amount of urban relief since July 1933 is less important when considered in connection with rising standards.

The chief factor in the rising standard of relief is the Federal Works Program. Figures recently published by the Senate Committee to Investigate Unemployment and Relief on average monthly amounts of assistance extended to cases under the several public relief programs now in existence are as follows:⁴

Type of aid	Average monthly amount per case during 1937
Works Progress Administration and other Federal agencies.....	\$50.45
National Youth Administration work projects..	15.32
Old-age assistance.....	18.89
Aid to dependent children.....	30.50
Aid to the blind.....	25.30
General relief.....	23.41
Rural rehabilitation grants.....	17.40

³ During 1934 and 1935 such budgets provided \$40.50 a month for a family of 4 in New Jersey, \$48 in New York City, \$47 in Cook County, Illinois, and \$53.50 in the State of Washington. The monthly earnings rates established by the WPA range from \$21 to \$60.50 and average \$55 for workers in the various skilled groups. See testimony of Harry Hopkins in *Hearings Before a Special Committee to Investigate Unemployment and Relief*, U. S. Senate, 75th Cong., 3d sess., Vol. 2, p. 1340.

⁴ Hearings, op. cit., p. 1442.

The monthly average for enrolled persons in the Civilian Conservation Corps, not shown in this report, was \$70. Since 52 percent of all public relief in the United States for March 1938 was extended by the Works Progress Administration and other Federal agencies participating in the Works Program, the influence of the average

amount of \$50.45 for that program is very great. On the other hand, the relief curve was steadily rising⁶ before the establishment of the Works Program in 1935, and the long-time trend cannot be attributed entirely to this one factor.

⁶ Goddes, Anna E. *Trends in Relief Expenditures 1910-35*. Works Progress Administration, Division of Social Research, Monograph X, 1937.

INTERCHANGE OF RELIEF INFORMATION AMONG DEPARTMENTS OF PUBLIC WELFARE OF LARGE CITIES, MAY 1938

City or county departments of public welfare administering general relief in 15 cities have reported for May in the special series for interchange of relief information among large cities. In California, under the State pauper act, the county governments administer general relief to unemployable cases, but the State Relief Administration administers a special fund for employable cases through its own county offices. Therefore, the tabulation for May includes two reports from each of the California cities represented—Los Angeles and San Francisco—and thus includes reports from 17 agencies.

Reasons for Opening Cases of General Relief

Loss of private employment in Buffalo, Chicago, Cleveland, Los Angeles, Newark, and Rochester accounted for over one-half the cases opened for general relief in these cities. (See table 1.) Cessation of unemployment compensation resulted in acceptance of nearly one-half the cases opened in Pittsburgh and significant proportions of cases opened in Milwaukee and Philadelphia. Loss of employment under the Works Progress Administration accounted for the acceptance of between 10 and 20 percent of cases opened for general relief in Newark, Philadelphia, and Pittsburgh.

Figures on cases opened because of chronic illness were not available in a majority of the cities; in others they were relatively unimportant, except in the District of Columbia and Baltimore where this reason accounted for about 12 percent and 9 percent, respectively, of the cases opened for general relief.

In addition to these specified reasons for opening cases, some data are available for the group included in table 1 under "Other." In Baltimore

about one-third of the cases approved for general relief were opened to supplement aid to dependent children. In Milwaukee necessity for supplementation of earnings resulted in the acceptance of a significant proportion of cases; in St. Louis reduction in earnings, loss or depletion of resources, and temporary illness or incapacity of the wage earner resulted in the addition of a large number of cases to general relief rolls.

Table 1.—Reasons for opening general relief cases in selected cities, May 1938

City or county agency	General relief cases opened during May 1938					
	Number	Percentage opened for specified reason				
		Loss of Works Progress Administration employment	Loss of private employment	Chronic illness	Cessation of unemployment compensation	Other
Baltimore.....	931	(1)	39.0	9.3	(1)	51.7
Buffalo.....	1,463	6.3	63.8	1.8	(1)	28.1
Chicago.....	5,992	7.3	86.6	(1)		30.1
Cleveland.....	1,300	7.8	50.2			42.0
Dist. of Columbia.....	104		1.2	12.2		85.6
Los Angeles: State Relief Adm.....	4,466	8.2	61.2	(1)	(1)	30.6
Milwaukee.....	4,577	3.5	42.9	(1)	8.6	45.0
Newark.....	1,685	12.8	67.1			20.1
New York.....	13,423	5.3	(1)	(1)	(1)	(1)
Philadelphia.....	9,050	17.6	41.1	(1)	20.2	18.1
Pittsburgh.....	7,757	10.1	35.7	(1)	48.6	5.6
Rochester.....	623	7.0	60.0	5.0	(1)	20.2
St. Louis.....	2,465	1.6	10.6	1.4		80.4

¹ Not reported separately.

¹ Data not available.

Reasons for Closing Cases

Transfer to Works Progress Administration, as shown in table 2, was the most important reason for closing cases during May in Chicago, Cleveland, Detroit, Los Angeles (State Relief Administration), Milwaukee, Newark, New York, Pittsburgh, San Francisco (State Relief Administration), and St. Louis.

Receipt of unemployment compensation re-