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Interregional Differentials
in Per Capita Real Income Change

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The relationship between regional differentials in per capita income and other economic and demographic factors has been the subject of many investigations, and considerable attention has been given to the analysis of regional trends in income payments. Lack of information about regional price movement and interregional differences in price levels has precluded the analysis of differentials in "real" income payments. Most analytical studies, therefore, have been developed in terms of regional trends and levels relative to the national average.[1]

This paper attempts the development of state and regional price indexes appropriate for adjusting current dollar state income payments for geographical differences in the movement of prices over time and presents estimated state per capita income adjusted by these indexes for price change over a twenty-five-year period. Indexes based on the deflated per capita income series are indicators of regional change in the purchasing power of per capita income to buy goods and services, pay taxes, and save, and offer oppor-

[1] See, for example: (1) Charles F. Schwartz, "Regional Trends in Income Payments," *Survey of Current Business*, Dept. of Commerce, September 1948, and other articles in this publication by Charles F. Schwartz and Robert E. Graham, Jr.; (2) Frank A. Hanna, "Cyclical and Secular Changes in State Per Capita Incomes, 1929–1950" (August 1954), "Contribution of Manufacturing Wages to Regional Differences in Per Capita Income" (February 1951), and "Age, Labor Force, and State Per Capita Incomes, 1930, 1940, and 1950" (February 1955), all in *Review of Economics and Statistics;* (3) Herbert E. Klarman, "A Statistical Study of Income Differences Among Communities," *Studies in Income and Wealth, Volume Six,* National Bureau of Economic Research, 1943; (4) Clement Winston and Mabel A. Smith, "Sensitivity of State Income Payments to Nation's Total," *Survey of Current Business,* January 1946; (5) Henry M. Oliver, Jr., "Income, Region, Community-Size and Color," *Quarterly Journal of Economics,* August 1946; and (6) John L. Fulmer, "Factors Influencing State Per Capita Income Differentials," and Jesse W. Markham, "Some Comments Upon the North-South Differential," both in *Southern Economic Journal,* January 1950.

tunity for further studies of change in state income payments. No attempt was made to construct the interregional price indexes that would be required to adjust income payments for geographical differentials in price levels.

Development of State Price Index Series, 1929–1953

Table 1 and Chart 1 present the estimated United States average price indexes for the country as a whole and for the urban and rural sectors which resulted from the combination of all data that went into the state price index estimates. In Table 1 they are compared

TABLE 1

Estimated and Published Consumer Price Indexes,
United States, 1929–1953

$(1947-1949 = 100)$

| | | | | PUBLISHED | |
| | | ESTIMATED | | Consumer Price Index [a] | Prices Paid by Farmers [b] |
YEAR	Total	Urban	Rural		
1929	72.5	73.2	67.2	73.3	63
1930	70.2	71.1	64.6	71.4	59
1931	63.5	64.7	57.7	65.0	51
1932	56.8	58.1	51.0	58.4	43
1933	54.7	55.1	50.9	55.3	44
1934	57.3	57.3	54.4	57.2	50
1935	58.8	58.8	55.7	58.7	51
1936	59.3	59.4	55.9	59.3	51
1937	61.3	61.7	57.1	61.4	52
1938	59.8	60.5	55.2	60.3	50
1939	59.0	59.7	54.6	59.4	49
1940	59.3	60.1	54.7	59.9	50
1941	62.5	63.3	57.8	62.9	53
1942	69.4	70.2	65.2	69.7	61
1943	74.0	74.4	71.5	74.0	68
1944	75.5	75.8	74.1	75.2	72
1945	77.5	77.5	77.4	76.9	75
1946	83.9	84.0	83.6	83.4	83
1947	95.7	95.5	97.0	95.5	97
1948	102.8	102.8	102.6	102.8	103
1949	101.5	101.7	100.3	101.8	100
1950	102.9	103.1	101.5	102.8	101
1951	111.0	111.1	110.0	111.0	110
1952	113.4	113.7	111.6	113.5	111
1953	114.0	114.4	111.6	114.4	111

[a] Bureau of Labor Statistics.
[b] Dept. of Agriculture.

with the two major price series—the Bureau of Labor Statistics consumer price index (CPI) and the Department of Agriculture prices paid by farmers (PPF) for commodities used in family living.

CHART 1

Estimated Consumer Price Indexes, United States, 1929–1953

Index (1947-49=100)

Source: Table 1.
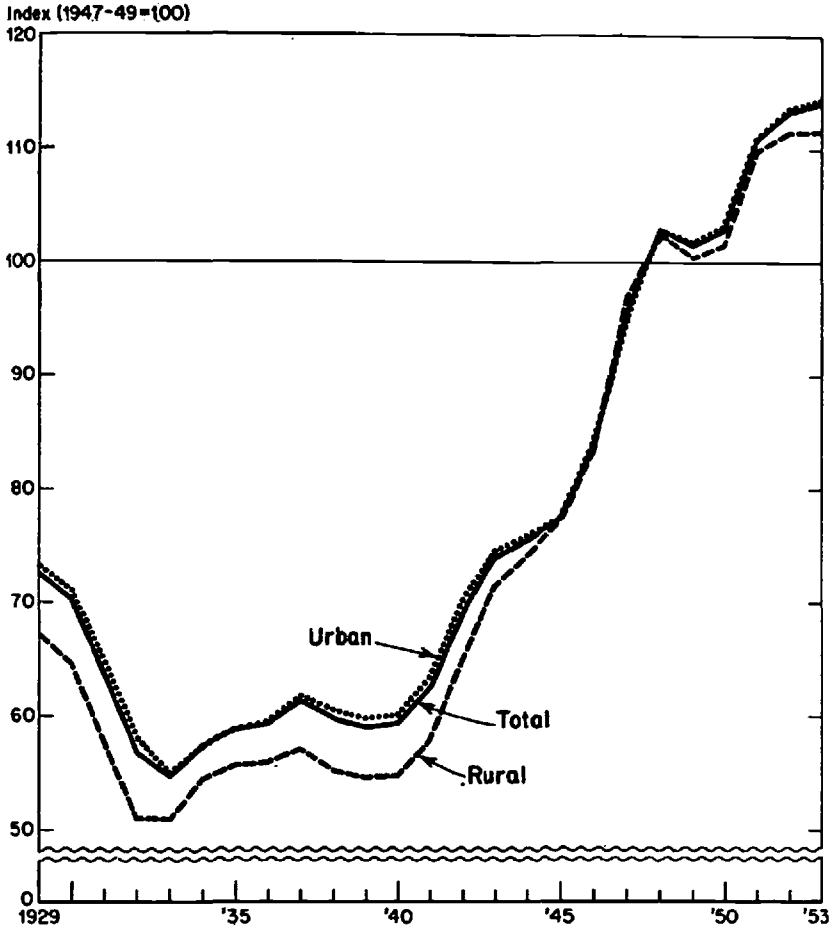
STATE URBAN PRICE INDEXES

In estimating urban price indexes for each state, five major steps were taken:

1. Collection of existing local price indexes from all sources known
2. Adjustment of price series compiled by the National Industrial

Conference Board to establish closer comparability with BLS series
3. Estimation of indexes for all items, based on existing local food price indexes
4. Combination of available index series (including adjusted and estimated indexes) to state average indexes for the years for which any information is available
5. Estimation of state indexes for other years, by imputation from price movements for nearby states

Sources of Price Index Series. The availability of local price indexes varies considerably from state to state. No indexes could be discovered for Nevada or Vermont; and only unpublished BLS price data, covering a two-year period, are available for one city each in North Dakota, Idaho, and Wyoming. On the other hand, state indexes for the total period 1929–1954 are available for Pennsylvania and Massachusetts, and a considerable number of city indexes are available for Ohio, California, and a few other states.

The major source of price indexes is the BLS. In all, some price information was available to the authors from this source for 112 localities in 125 index series. The NICB provided price series for 65 places, for 39 of which BLS series are also available for some periods. State agencies and universities contributed price series for 7 states and 32 localities, 8 of which are covered by the BLS and the NICB to some degree. Price indexes covering the entire period 1929–1954 are available for 25 cities located in 19 states and the District of Columbia. Indexes for 7 more cities are available for the period 1929–1952, and these add 3 states to the list for which price information has been recorded over an extended period.

Only 4 local agencies (3 state departments of labor and 1 university) are currently engaged in the calculation of indexes for all consumer prices. Three universities and 1 state department of labor calculate indexes of change in retail food prices. All-items indexes are calculated for the states of Massachusetts, New Jersey, and Pennsylvania. Indexes are also calculated for 3 cities in Pennsylvania and 6 cities in Louisiana. Retail food price indexes are calculated for the states of Kansas and Montana, and for Miami, Florida and Albuquerque, New Mexico, and 10 cities in Pennsylvania. Fuel price indexes are also calculated for the 10 Pennsylvania cities.

Other agencies which previously calculated consumer price indexes include the departments of labor in Michigan and Utah, and the University of Toledo.

The BLS is currently publishing price indexes for 20 large cities. Price information has been collected since 1952 for 26 additional

small cities, but the amount of data obtained is considered insufficient for the calculation and publication of index numbers for these places. The NICB calculates and publishes price indexes currently for 40 cities.

Table A-1 (in the appendix) lists the 229 price series for 162 cities and 7 states available for use in estimating state indexes, and gives the sources of these data.

Adjustment of NICB Indexes. Index methodology employed by the BLS, the NICB, and local agencies in the calculation of price indexes is basically the same. Most indexes produced by local agencies correspond very closely with BLS series in their composition and construction, and they were used without adjustment in the development of estimated state indexes. However, because of differences in methods of price collection and the lists of items priced, indexes compiled by the BLS and the NICB are not entirely comparable. Where indexes were available from both sources for the same city and periods, the BLS data were used in the state estimates. Available indexes compiled by the NICB, which were the only source of data for a city, were included in the state estimates after adjustment.

For the period 1939–1952, index series for the same twenty-six cities were compiled by both the NICB and the BLS. Comparison of these series on a 1947–1949 = 100 base shows that in general the NICB indexes are higher from 1939 through 1947 and lower from 1948 through 1952, increasing less than the BLS indexes over the period. A comparison of the two indexes (Table 2) for all cities combined describes this general pattern and suggests that ratio adjustments to the NICB series might bring them into close correspondence with the BLS indexes.

In testing this possibility, it was found that ratio comparisons for the twenty-six individual cities varied significantly from city to city, so that the use of an average ratio to adjust all the NICB indexes introduced substantial error in the resulting series. Differences in the index series of the two agencies for cities within the same region were very similar, however, and satisfactory results could be obtained through the use of ratios available for the nearest comparable city. All NICB data used in the state estimates were adjusted in this manner to correspond more closely with levels of the BLS series.

There is no doubt that better results could be obtained if adjustments were applied to the components of the NICB indexes. Major differences between the BLS and NICB indexes lie in the measurement of change in prices of clothing, house-furnishings, and miscel-

TABLE 2

Bureau of Labor Statistics and National Industrial Conference Board
Consumer Price Indexes, United States, 1939–1952

| Year | (1947–1949 = 100) | | Ratio |
	NICB	BLS	
1939	62.6	59.4	0.949
1940	63.1	59.9	0.949
1941	66.4	62.9	0.947
1942	73.4	69.7	0.950
1943	77.6	74.0	0.954
1944	78.6	75.2	0.957
1945	79.9	76.9	0.962
1946	85.2	83.4	0.979
1947	96.4	95.5	0.991
1948	102.5	102.8	1.003
1949	101.1	101.8	1.007
1950	102.4	102.8	1.004
1951	110.4	111.0	1.005
1952	113.2	113.5	1.003

laneous goods and services, and some investigation has been made into the reasons for these differences.[2] Given time, a more sophisticated methodology for adjustment could be based on this knowledge.

Estimates of All-Items Indexes Based on Food Price Series. For twenty-six localities, only food price indexes are available for some periods, and for ten cities both food and fuel indexes are calculated. These are valuable data, since there is a consistent relationship between the movement of food prices and prices of all goods and services other than foods combined, over the 1929–1953 period. On a 1947–1949 = 100 base, the United States food index was lower than the all-items index from 1929 to 1946, and moved around the all-items index from 1946 to 1953. In general, food prices were more volatile than those for other items over the entire period, changing at a more rapid rate over cyclical periods. This general pattern was consistent from city to city, and city ratios of food indexes to all-items indexes corresponded closely with the ratio for the country as a whole.

For localities for which only food indexes were available, all-items indexes were estimated by weighting together the food index for the city and the index of all items less foods for the United States. A

[2] See, for example, Horace B. Horton and George K. Batt, "Report of Industrial Members of the President's Committee on the Cost of Living," *Report of the President's Committee on the Cost of Living,* Office of Economic Stabilization, 1945.

similar procedure using indexes for foods, rent, and fuels was employed by the BLS in estimating indexes for selected small cities in the war years 1940–1944. These estimated indexes were used in the present calculations. Tests of the procedure on cities for which both food and all-items indexes are available show a close correspondence between estimated and calculated indexes in almost every case.

Combination of Local Data to State Urban Averages. City indexes available for any period during the years 1929–1954 (either from the original source or as a result of the estimating procedures described above) were combined to estimate state urban indexes. For this purpose, weights derived from various family expenditure survey results and census population counts were utilized. For the years 1929–1939, weights were based on expenditure data from the 1934–1936 surveys of family expenditures,[3] and population data from the 1930 census; for 1950–1954, expenditure data from the 1950 survey of consumer expenditures [4] were used with 1950 census figures; and for 1940–1949 the expenditure weights were averages of the 1934–1936 and 1950 surveys (with more weight given to the earlier surveys) and population weights were based on the 1940 census. For BLS index cities, expenditure weights were already available in usable form. For other cities, expenditures were estimated on the basis of survey data for cities most comparable in size, location, and income level. City indexes were combined for whatever periods they were calculated. When a series was started or discontinued, the city weights were adjusted so that the state average was not affected by the change in the number of series used.

Some information covering the period 1929–1952 (when the BLS revised its list of cities) was available for 32 cities and 2 states. This included two or more locality indexes or the state average in each of 9 states located in 5 regions; and one locality index in each of 13 states and the District of Columbia, located in all 7 regions. Data for the entire period 1929–1954 were available for 8 cities in the Central region, 6 in the Middle East, 4 each in the Southeast and Far West, and only one city each in the Northwest, Southwest, and New England regions (for the states included in these regions, see Table A-2).

To round out estimates for all states for all years from 1929 to 1954, the movement of prices for missing periods was imputed from estimated state indexes for a nearby state in the region. For ex-

[3] *Money Disbursements of Wage Earners and Lower-Salaried Clerical Workers, 1934–36,* Bureau of Labor Statistics, Bulls. 636–641, 1940–1941.

[4] *Family Income, Expenditures, and Savings in 1950,* preliminary report, Bureau of Labor Statistics, Bull. 1097 (Revised), June 1953.

ample, estimated indexes for North Carolina for the years 1929–1940 and 1952–1954 reflect the movement of the Tennessee index; indexes for Mississippi for the same periods were imputed from Alabama. Indexes for Idaho, Nevada, North Dakota, Vermont, and Wyoming for the entire period 1929–1954 were borrowed from neighboring states.

PRICE INDEX FOR THE RURAL POPULATION

Sufficient published information was not available for estimating price change for the rural population by state or region. The PPF index is published for the total United States by the Agricultural Marketing Service of the Department of Agriculture, and no state or regional indexes are calculated. Comparable series, compiled by state agencies in the Agricultural Estimates Organization are available for Maryland, Montana, and Wisconsin, and some work on PPF indexes has been done for Iowa, South Dakota, and Idaho.

In the course of compiling the United States PPF series, the Department of Agriculture calculates average prices by state and region for most commodities included in the index. Since about 1935, some average prices for selected food items have been published in issues of *Agricultural Prices,* and since 1948, publication of state average prices for selected foods and clothing has become a fairly regular feature of the price bulletin. However, chiefly because expenditure data for weighting purposes are not available, no attempt is made by the Department to combine state or regional data.[5]

The PPF index is not a complete index in that it does not include rents and other housing costs (other than building materials for houses) and it does not include medical care, personal care, and other services.[6] Also, it is a farm series and does not pretend to represent the price experience of the rural nonfarm population. Even in the event that a regional breakdown of the index were available, adjustments would be necessary to include these missing elements in the development of an estimated index for the total rural sector.

For the purposes of this paper, the only estimate that could be made with the data at hand was one for the total rural population

[5] The Agricultural Marketing Service agreed to make price data available to the authors for use in this paper. But lack of appropriate weights, and time to carry out necessary calculations with estimated weights, dictated against an attempt to develop state rural indexes at this time.

[6] See Dorothy S. Brady and Roger F. Hale, "Comparison of Changes in the BLS Cost-of-Living Index and BAE Index of Prices Paid by Farmers for Commodities Used in Family Living," *Report of the President's Committee on the Cost of Living,* Office of Economic Stabilization, 1945.

for the years 1929–1953.[7] This was done by combining the food, clothing, and house-furnishings components of the PPF series with the housing, fuels, and miscellaneous services groups of the CPI. Expenditure weights for combining these components were developed for the years 1929–1941 by combining the rural farm and nonfarm expenditure patterns obtained in the expenditure surveys of 1935–1936 [8] and 1941.[9] The other sets of weight factors, one for the years 1942–1946 and one for the years 1947–1953, were based on adjustments to the survey data suggested by trends of farm family spending patterns developed by the (then) Bureau of Human Nutrition and Home Economics for the Agricultural Outlook Conference of 1953.[10] In selecting the three components of the farm series, the assumption is made that prices obtained by the Department of Agriculture for these goods are typical of prices paid by the total rural population. For the other groups, the BLS and NICB data are the only available. The BLS indexes were used, in line with the choice of BLS over NICB data in the development of state urban series discussed earlier.

Over the entire period 1929–1953 the farm price series increased 76 per cent while the BLS urban index rose 56 per cent (Table 3).

TABLE 3

Percentage Change in Urban, Rural, and Farm Prices, 1929–1953

Period	Urban Prices [a]	Prices Paid by Farmers [b]	Estimated Rural Prices
1929–1933	−25	−30	−24
1933–1940	+ 8	+14	+ 7
1940–1945	+28	+50	+41
1945–1953	+49	+48	+44
1929–1953	+56	+76	+66

[a] Bureau of Labor Statistics, CPI.
[b] Dept. of Agriculture.

[7] In an effort to obtain regional indexes for the rural population, an attempt was made to develop series from 1929 to 1953 for three regions. Food and clothing prices, published in *Agricultural Price* bulletins, were combined for the years 1943–1953 to estimate price movements for these groups. All other price data were based on the combination of available BLS group indexes for small cities in these regions. The results resembled the estimated rural price index used in this paper, and showed expected regional variations to some degree. However, there was no basis for judging these results or evaluating their accuracy with any degree of confidence.

[8] *Family Expenditures in the United States*, National Resources Planning Board, June 1941.

[9] *Family Spending and Saving in Wartime*, Bureau of Labor Statistics, Bull. 822, 1945.

[10] *Rural Family Living*, Dept. of Agriculture, Bureau of Human Nutrition and Home Economics, October 1952.

Much of this difference could be attributed to the absence of services in the farm series during the war years, when commodity prices increased at a much more rapid rate than did service prices. During other years within the period, the two series moved within a relatively narrow band. The estimated rural index for all goods and services increased 66 per cent over the twenty-five-year period, reflecting the slower rate of change in rents and services while showing also the influence of the higher relative importance given to the three major groups of farm prices.

ESTIMATED STATE INDEXES

The authors' decision to use the estimated rural index in the development of total state index series for each state was based on two considerations: (1) the movement of prices in rural and urban communities differed significantly, chiefly during the war period, and both movements should be reflected in proportion to their importance in state totals; and (2) the estimated rural series was the best estimate for every state that could be produced at this time, short of a major calculation project.[11]

[11] Prices paid by farmers for ten clothing items for the years 1943–1953, published in *Agricultural Prices*, were combined by census region to study interregional differences in price movement for this group. Estimated average price increases over the eleven-year period ranged from 64 per cent in the middle Atlantic region to 79 per cent in the mountain region, and in all other regions prices increased from 68 to 73 per cent. Percentage price changes for these ten items over shorter periods between 1943 and 1953 also showed significant differences:

	1943–1945	1945–1950	1950–1953	1943–1953
Rural farm (clothing prices paid by farmers, ten items):				
New England	13	41	8	72
Middle Atlantic	15	32	8	64
East North Central	20	33	8	73
West North Central	15	44	3	70
South Atlantic	20	30	8	72
East South Central	18	30	7	66
West South Central	20	31	7	68
Mountain	17	38	11	79
Pacific	14	34	11	69
Urban (BLS clothing index):				
Boston, Mass.	14	24	6	49
Philadelphia, Pa.	14	25	7	53
Detroit, Mich.	11	27	6	49
Chicago, Ill.	12	37	7	65
Baltimore, Md.	16	21	8	51
St. Louis, Mo.	8	35	5	54
Atlanta, Ga.	10	38	10	67
Houston, Tex.	7	43	7	64
Portland, Oreg.	9	32	5	51
Los Angeles, Calif.	9	28	5	48

The rural index was therefore combined with each estimated state urban index to derive total indexes by state. Weights used for this purpose (for the periods 1929–1939, 1940–1949, and 1950–1953) were developed from expenditure survey data and census population counts. The urban weights were based on expenditure data for all cities for which index series were available for any period during the years 1929–1953. As in the derivation of weights for combining city index series, survey data from the studies of 1934–1936 and 1950 were used with appropriate population data. Estimated average urban expenditures for each state were calculated by combining all available city expenditures with population weights. The resulting averages were weighted by the total urban population in the state.

Rural weights for the years 1929–1939 were derived from the 1935–1936 study of consumer purchases.[12] Average expenditures of farm families in twenty states were used to estimate expenditures for all other states. Survey data for later years were used for the few states for which they are available. For most states, weights for 1940 forward were based on the 1935–1936 aggregate expenditures adjusted to 1940 and 1950 by changes in aggregate farm income, as estimated by the Department of Commerce.

The United States urban and rural weights, combining population counts and expenditure levels, were distributed as follows:

Period Used	Urban	Rural
1929–1939	71.0	29.0
1940–1949	86.7	13.3
1950–1953	84.4	15.6

United States:

Clothing prices paid by farmers, ten items	18	33	7	68
PPF index (clothing)	21	31	7	71
CPI (clothing)	13	29	7	55

It is apparent from these calculations that there was a significant difference in the movement of rural and urban prices for clothing over this period. It seems apparent also that interregional variation in rural price changes and intercity variations in changes in urban prices are significantly different from the variance between total urban and total rural price change. It is assumed, therefore, that the average change in prices paid by farmers is a better estimate for any region or state than an estimate based on urban prices within the region.

Comparable calculations, using published food prices paid by farmers over a shorter period, lead to the same conclusion, although a sufficient number of prices were not available for food items to develop satisfactory indexes.

[12] *Family Income and Expenditures,* Farm Series, Dept. of Agriculture, Misc. Pub. 465, 1941.

EVALUATION OF RESULTS

The state price indexes presented in Table A-2 for the years 1929–1953 were developed from published index series, except for the use of unpublished indexes for twenty-six small cities (for the last two years) which were estimated from BLS records. In all, some index data, published by the BLS, the NICB, or state agencies and universities, were available for 162 separate urban places. The number of cities covered by these indexes varied considerably from year to year. For the war period 1940–1945, which was covered most adequately, 178 indexes for large and small cities (including duplications) were available, while for the years 1929–1935, the only city indexes on record are those produced by the BLS for thirty-two large cities. Only the national index and a few state indexes of prices paid by farmers were available for the rural farm population, and no price information was found specifically for the rural nonfarm sector.

Published urban price indexes, of course, represent only the change in prices paid by urban wage-earner and clerical-worker families. They were used throughout this study to represent price change for the total urban population. There is no satisfactory evidence available that would indicate whether any adjustment for this deficiency is necessary or what direction such adjustment would take if warranted.[13]

These state indexes, therefore, are composites of this varying amount of partial information about the average movement of prices for all goods and services combined, weighted together to reflect average change in prices by state and region. They are offered as the result of a gross estimating procedure which used available price index data known to the authors, and they are conditioned by judgment decision on the part of the authors in the development of weights and imputation patterns. Although their main purpose is to reflect interstate differences in the movement of prices, to some extent differentials in price change from state to state have been dampened by the choice of methodology. For example, the estimated United States average movement of prices paid by the rural population is reflected in each state index, although interstate

[13] Simple reweighting of group, subgroup, or even item price change computed for a wage-earner and clerical-worker family index does not provide sufficient evidence of probable differences in the average change in prices experienced by other groups of the population. In addition to expenditure weight patterns for single consumers, families at the extremes of the income range, and other population groups, the calculation of component indexes for the total population would require the measurement of price changes for the different kinds and qualities of goods and services used by the population subgroups.

differences in price changes in rural areas may be very significant.

The methodology followed in the development of these series ignores most of the technical and theoretical considerations that have been discussed by students of the deflation process.[14] The estimates go directly to the total and do not provide the component index series required for deflation of components of income which represent varying proportions of the total over time. No consideration was given to the inherent deficiencies in the published price indexes as valid deflators of income data, e.g. quality changes and the differential movement of prices for goods at different quality levels. No attempt was made to introduce adjustment to the BLS indexes for the understatement of price change during the war period, estimated by the President's Committee on the Cost of Living and the Stabilization Director to be about 5 index points on the national index. It may well be that refinement of the process would not substantially change the results of deflation, but there is no statistical evidence to support such a conjecture.

The weighted average of the state price indexes differs substantially from the Department of Commerce implicit price deflator for personal consumption expenditures. Reasons for these differences have not been investigated.

A general conclusion may be drawn upon inspection of the state price indexes that as the result of basic economic factors operating nationwide, there has been a remarkably close correspondence between regional and state price movement over the period studied, and that this was probably more true in the prewar rather than postwar years. State indexes measure the average movement of prices in large geographic and population areas within which significant differential changes in locality prices were taking place. The same factors causing variations in price change, although they cannot be clearly identified, are most probably present in each area, though perhaps not in the same proportions. In the aggregation of differential price movements over large state areas, variations are smoothed over and only the differential effects and values of the factors operating in each area are revealed in the average. One might expect, therefore, that interstate variations in price changes will be much less pronounced than differences observed in locality data.

On the other hand, there is a large degree of correspondence between the dispersion of price change reflected by the state indexes and the amount of price index information that went into their construction. Estimated price decreases from 1929 to 1933, by state,

[14] See, for example, John H. Smith, *Statistical Deflation in the Analysis of Economic Series*, University of Chicago Press, 1941.

ranged from 18 to 30 per cent; but thirty-nine out of the forty-nine indexes measured a change of from 23 to 25 per cent. This was the period for which the least amount of price information was available. Over the war period 1940–1945, for which many more price series were calculated, estimated increases in state average prices ranged from 26 to 37 per cent, and only twenty states fell in the modal range of 31 to 33 per cent increase. The one chief feature of these state indexes may well be the extensive possibilities that exist for their improvement and the effort that their publication may stimulate toward this improvement. The indexes are in no sense presented as a final product. Many sources of unprocessed price data, and perhaps calculated price index series not known to the authors,[15] might fill in some of the temporal and spatial gaps in the information used for the 1929–1953 period, and an intense review and reprocessing of existing family expenditure data might well provide a more satisfactory system of weights.

More important, however, are the possibilities for future years. The BLS and other governmental agencies have long recognized the great need for expansion in local price program coverage and for more frequent studies of consumer expenditure patterns. The Bureau's plans of years past, which are still in the realm of fancy and hope, called for price indexes for one hundred or more cities, and continuing expenditure surveys in three or more cities a year. These plans were not entirely visionary. They originated through awareness of a growing need for more local price statistics and were thwarted only because sufficient funds were not forthcoming. It is not unreasonable to look forward in the near future to the existence of continuing price studies for perhaps hundreds of localities. A great advance in this direction will be made, perhaps without additional funds, by improved efficiency in price collection and index calculation techniques now contemplated by the BLS and by closer cooperation and elimination of duplicating efforts on the part of other index makers.

In this attempt to develop state price indexes for the period 1929–1953, the major areas for which lack of data handicapped the work were, in order of their importance:

1. State or regional price data for rural farm and nonfarm communities over the entire period
2. Urban price data for states in the western regions over the entire period

[15] The authors will appreciate receiving knowledge of price series not included in this report and suggestions that can be used to improve the estimates.

3. Price series for the 1929–1935 period for small cities
4. Expenditure weights for rural farm and nonfarm families in the war and postwar years
5. Information about causal relationships between price change and economic and demographic characteristics of communities
6. Information about the price experience of urban populations other than wage-earner and clerical-worker families

The dearth of necessary information for some regions and time periods places serious limitations on the validity of the state estimates to discriminate differentials in price change with the same degree of confidence for every state. As a guide in the use of the state indexes, the authors offer their evaluation of the reliability of the figures. Table A-3 presents a relative quality-rating diagram based on the amount of necessary price and weight information that was used to represent the total state population. In tabular presentation of the results, calculated indexes have been rounded to whole numbers in recognition of the lack of their significance to more places.

There is no doubt that the accuracy of the results could be improved if additional sources of data are discovered. However, except for greater use of available rural data, there is little chance that these gaps can be filled easily. We can hope only that a more intensive search will reveal some price information for this period not now known generally to exist, and for better estimating techniques using increased knowledge of price relationships for current periods. Rural prices for commodities bought by farmers are available in the records of the Department of Agriculture. These data could be combined with estimates of change in prices paid for services, to develop regional price series for the rural population for prewar years (for which some expenditure-weight data are available for scattered surveys). For war and postwar periods, the absence of rural expenditure patterns presents a difficult estimating problem.

Estimates of state urban price indexes presented in Table A-4 are somewhat more indicative of interstate differentials in price changes than are the index numbers for urban and rural combined, which reflect only the estimated national average movement of rural prices. However, for use as deflators of state income payments, the estimated state price indexes are perhaps most appropriate, since they include, in addition to urban price data, an estimate of the differential movement in commodity prices paid by the rural community (as measured by the PPF index). Since rural prices of commodities

used in family living advanced more than urban prices from the depression through the war years (see Chart 1 above), the inclusion of an estimate of their movement over the period covered introduces an adjustment to the level of the state indexes in the right direction at least.

Findings

The authors, having devoted all of their time to the calculations, must leave it to others to discover whether the state price indexes will contribute anything to the large body of knowledge already at hand or assist in explaining regional differentials in income payments. A measure of the value of these calculations will be the degree to which they are used successfully (until better figures are produced) as an additional factor in the analysis of income trends and variations. Evaluation of the results can be provided only through attempts to fit the data into the gap that has handicapped some researchers in their studies of income and other related economic factors. The following description is drawn simply from the tabular data.

REGIONAL VARIATIONS IN PRICE CHANGE

The cyclical peaks and troughs in the movement of prices over the 1929–1953 period occurred in the same year in every state. The low point of the Great Depression was reached in 1933, followed by recovery to 1937. Prices fell in every state in the recession years 1938–1939 and again in 1949. On the average, prices fell about 6 per cent per year between 1929 and 1933; increased a little more than 1 per cent per year to 1940, over 6 per cent per year from 1940 to 1945, and almost 6 per cent per year in the postwar period to 1953. The greatest rate of change occurred between 1945 and 1948, when prices advanced 36 per cent, or 12 per cent per year.

Variations in price change from state to state formed a pattern associated with these general shifts in rates of price movement. In periods of rapid change in prices, interstate variance in price change increased; in periods during which price changes were relatively smaller, the variation in price change between states narrowed. Annual changes in state price indexes from 1930 to 1934 varied within a range of from 4 to 6 per cent, and from 1946 to 1948 they varied over a range of 5 to 6 per cent (Table 4). On the other hand, state price changes varied within 2 to 3 per cent from 1934 to 1940, 1942 to 1946, and 1951 to 1953.

The regional classification used by the Department of Commerce in presenting state income data and adopted for this paper does not

TABLE 4

Percentage Change from Previous Year in State Prices, 1930–1953

YEAR	AVERAGE	RANGE From	To
1930	—3	—2	—4
1931	—10	—6	—12
1932	—11	—8	—13
1933	—4	—2	—6
1934	5	3	7
1935	3	1	4
1936	1	0	3
1937	3	2	5
1938	—2	—1	—3
1939	—1	0	—3
1940	1	—1	2
1941	5	3	7
1942	11	9	14
1943	7	6	9
1944	2	1	3
1945	3	1	4
1946	8	6	9
1947	14	11	17
1948	7	4	9
1949	—1	0	—4
1950	1	0	3
1951	8	4	9
1952	2	1	3
1953	0	—1	2

Source: Based on Table A-5.

appear to be entirely appropriate to discriminate groups of states having similar price movement. In general, however, prices in the southeastern states decreased more than in most other states in the depression period, advanced more rapidly in the war years, and lagged behind in the general postwar price rise. The four far western states behaved more like a homogeneous group than did states in other regions and showed a distinct difference in price movement in many years. In 1934, 1942, 1947, 1948, and 1951, years in which the dispersion in price change among the states was high, far western states were among those showing either the highest or lowest price change from the preceding year. From year to year the District of Columbia was almost consistently among states registering the smallest annual price change. Prices in the New England states dropped less than the average in the depression years and advanced less than the average in the postwar period, but made the sharpest advance of all average regional price increases in the recovery period

1933–1937. Other regional patterns, not so obvious as these, are discernible in the figures in Table A-5, which show state and regional price changes from the previous year, and Table A-6, which presents price changes over cyclical periods. State variations in price change are shown in Table 5.

TABLE 5

Frequency Distribution of State Average Change in Prices over Cyclical Periods, by Region, 1929–1953

(*number of states*)

Percentage Change	United States	New England	Middle East	South-east	South-west	Central	North West	Far West
1929–1933								
−18	1		1					
−22	3	2	1					
−23	14	3	3	1		1	5	1
−24	15	1	1	1	2	3	4	3
−25	10		1	6	2	1		
−26	2			2				
−27	3			1		2		
−30	1					1		
1933–1940								
+15	1					1		
+14	2	2						
+12	1	1						
+11	2	1						1
+10	3					2	1	
+9	13			3	2	2	5	1
+8	18		3	7	2	1	3	2
+7	5		2	1		2		
+6	2		2					
+5	2	2						
1940–1945								
+37	2			1			1	
+36	2			2				
+35	7		1	2			2	2
+34	5		1	4				
+33	5			2	1		2	
+32	7	1			1	1	2	2
+31	8	2	1		1	3	1	
+30	5	1	1		1	2		
+29	2		1			1		
+28	5	2	2			1		
+26	1						1	

TABLE 5 (continued)

(number of states)

Percentage Change	United States	New England	Middle East	South-east	South-west	Central	North West	Far West
			1945–1953					
+54	1					1		
+52	1					1		
+51	1					1		
+50	3				1	1	1	
+49	8		1	1	1	2	2	1
+48	6		1	1		1	2	1
+47	3		1					2
+46	10			4	2	1	3	
+45	9	3	1	4			1	
+44	3		2	1				
+42	1	1						
+40	1	1						
+38	2	1	1					

Source: Based on Table A-6.

Over the entire period 1929–1953, prices in the United States advanced about 57 per cent. Regional price change over this twenty-five year period ranged from 62 and 61 per cent in the Far West and Northwest to 55 and 54 per cent in New England and the Middle East. The greatest over-all price increases occurred in six states in the Northwest and Far West, and in Maryland (65 per cent or more); in the remaining states in the Northwest and Far West, price increases ranged between 60 and 64 per cent. Increases in most of the New England and Middle Eastern states ranged from 52 to 56 per cent, but Delaware, Connecticut, New Hampshire, and the District of Columbia were up 60 to 63 per cent. In the Southeast, prices averaged from 56 to 62 per cent higher in 1953 than in 1929, while in the Southwest the price movement was in a slightly narrower range. Prices in all except one of the Central states rose between 56 and 60 per cent during the twenty-five-year period.

RELATIONSHIP BETWEEN PRICE AND INCOME CHANGE

The movement of prices over cyclical periods between 1929 and 1953 differed from changes in per capita income in two major respects: (1) the rates of change (and therefore the amplitudes of cycles) were much lower, except over the postwar price inflation period 1945–1948; and (2) at the turns, prices tended to lag behind income.

There was no time in the preparation of this paper to test for correlation between state price and per capita income changes. Exam-

ination of Table A-5, which shows annual percentage changes in both series, suggests that coefficients of correlation would vary considerably depending on the time periods selected for measurement and would show some regional variation in the amount of correlation between price and income change in the selected periods.

Lag in the movement of prices behind per capita income is, of course, observable in the average United States price and income series. This was general nationwide and is more apparent in the state data. From 1932 to 1933, when the average change in both series was down, per capita income decreased relatively little in most states and increased in fourteen States, while prices continued to fall in all states. In the recession of 1938–1939, in every state prices continued down in 1939 while per capita income increased after substantial drops in 1938. And into 1940, prices remained relatively constant while the rate of increase in per capita income accelerated.

At the end of the war in 1945 and 1946, per capita income leveled off generally and decreased in many states, while prices continued up at an increasing rate. In 1949, both series turned down, except for scattered continued advances in per capita income in some states. In the following pre-Korean-War year, small price increases were associated with rather sharp advances in per capita income. In 1953, when the current period of relative stability in prices began, no clear pattern of relationship between price and income change was apparent. In eleven scattered states, mostly in the Northwest, where per capita incomes were lower than in the preceding year, prices continued to increase at a slow rate. On the other hand, in three New England states showing constant or falling prices, per capita income increased.

REGIONAL DIFFERENTIALS IN "REAL" PER CAPITA
INCOME CHANGE

Table A-7 presents state and regional per capita income payments from 1929 to 1953 deflated by the estimated price indexes calculated for this paper, and Table A-8 presents these data in index form on a 1929 = 100 base. Chart 2 compares the movement of prices and per capita income in current and 1947–1949 dollars from 1929 to 1953 for selected states.

In terms of 1947–1949 dollars, average United States per capita income advanced 60 per cent from 1929 to 1953, compared with an increase of 151 per cent in the current dollar per capita figures. Real gains in income of 111 per cent and 94 per cent in the Southeast and Southwest, respectively, were more than double comparable

advances of about 40 per cent in New England, the Middle East and the Far West, and one-third and one-half more than the increases of 78 and 65 per cent in the northwestern and central regions. The greatest gain in purchasing power of per capita income was registered in South Carolina, which had the lowest per capita income of all states in 1929. There is a high correlation over all forty-eight states and the District of Columbia between increases in the real income series from 1929 to 1953 and the level of per capita income in 1947–1949 dollars at the beginning of the period. Within this relationship, New York and the District of Columbia, starting at the highest levels of per capita income, registered the smallest advances, the District of Columbia gaining only 8 per cent over the entire period.

From 1929 to 1933, real income fell more in the northwestern and central regions than in other sections of the country, while New England and some of the southeastern states were least affected by the depression. By 1940, all but a few states had regained their losses in buying power of per capita income. Recovery came quickest in the Southeast, where by 1936, most states had advanced above their 1929 level. However, from the depression through the prewar years, greatest gains were made in northwestern and central states. In the war years 1940–1945, the southern and northwestern states won the greater part of their twenty-five-year improvement with per capita income in 1947–1949 dollars increasing over 85 per cent in these regions. This compared with an average increase of only 40 per cent in New England states. The District of Columbia shared none of these wartime gains in purchasing power, which ranged from 21 per cent in Delaware to 114 per cent in South Dakota. States having the highest advance in real per capita income also experienced the highest increase in prices during this period.

From 1945 to 1950, the rise in prices exceeded or equaled increases in per capita income in every state except Delaware and the District of Columbia, the only places where postwar gains in real per capita income were achieved. In New Mexico price increases canceled out the total gain in per capita income in this period, and in other states real per capita income decreased from 2 to 16 per cent. These measurements veil the greater decreases that accompanied the recession of 1949. In the post-Korean-War period, real per capita income continued to fall in several northwestern states, resulting in an increase of less than 3 per cent in the West, while other sections of the country advanced toward or exceeded their wartime peaks. The District of Columbia suffered a substantial loss

CHART 2

Income and Price Indexes, United States and Selected States, 1929–1953

CHART 2 (continued)

Index (1947-49 = 100)

South Carolina

——— Current dollar income
••••••••••• Real income
—————Prices

1929   '35   '40   '45   '50   '53
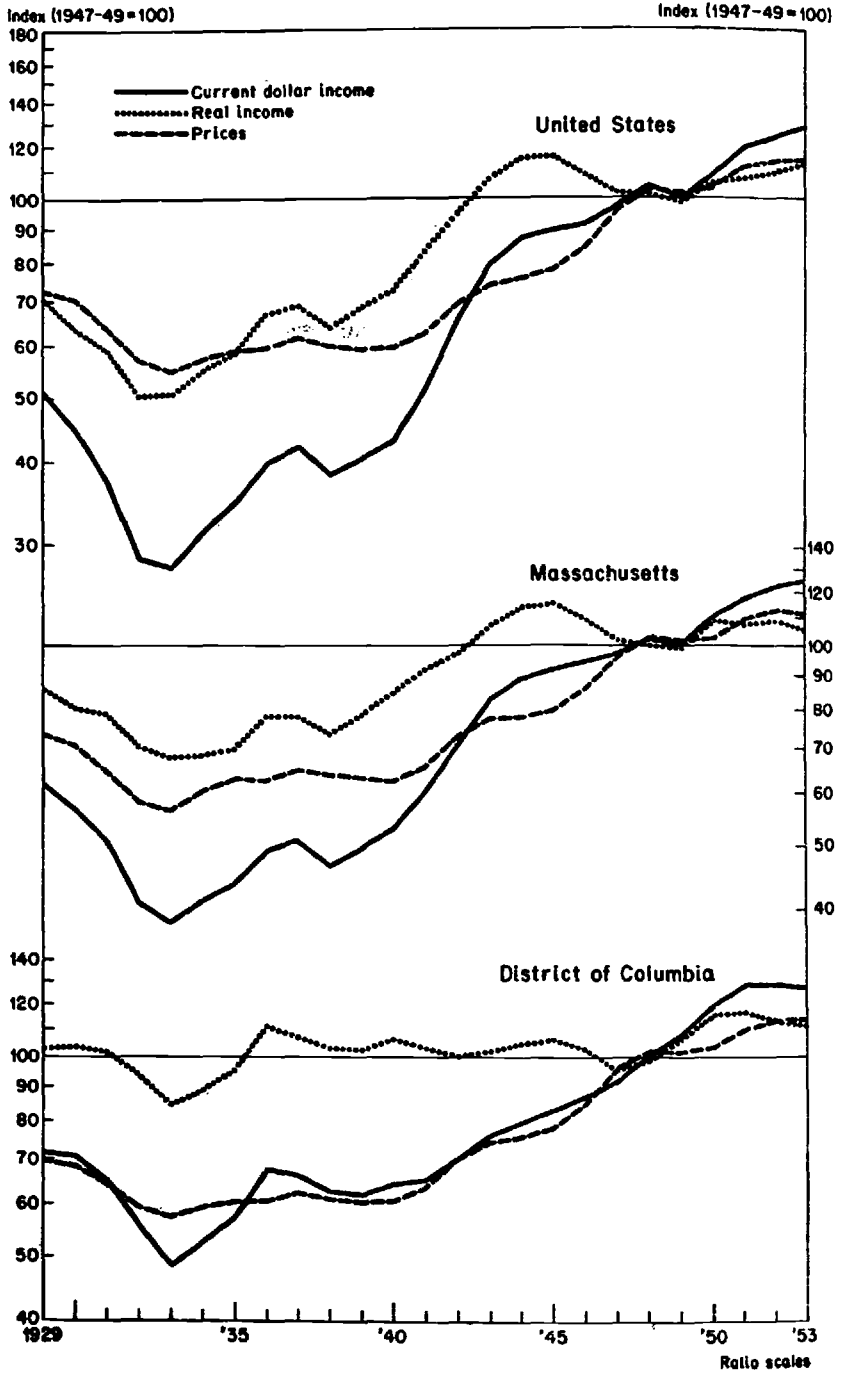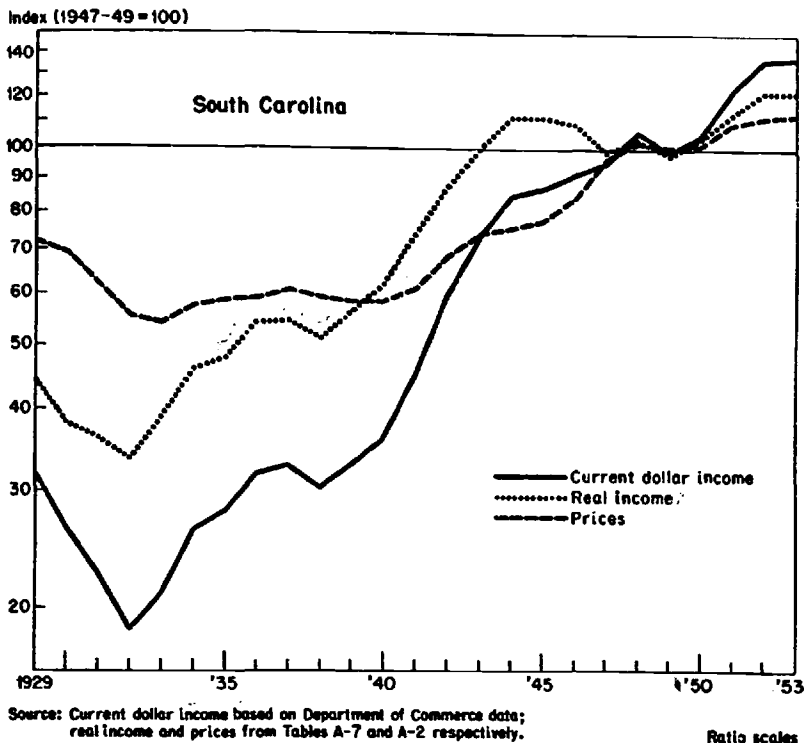
in real per capita income from 1951 to 1953 and ended up no better off than it was in 1936.

CHANGE IN RELATIVE POSITION OF STATES TO THE NATIONAL AVERAGE

Availability of the deflated state per capita income series does not add materially to knowledge about the relative per capita income position of the states to the national average, which has already been subjected to some investigation.[16] Variations in price change between states were not of sufficient magnitude to shift the position of most states from their relative levels in terms of current dollar per capita income, which changed so dramatically over the twenty-five-year period. Only in a few cases were percentage changes in relative position of the states from 1929 to 1953 significantly different from those calculated with current dollar figures. In 1953, Delaware, Connecticut, New York, Nevada, and the District of Columbia, in that order, held the top per capita real income position relative to

[16] See, for example, Charles F. Schwartz, "Regional Trends in Income Payments," *Survey of Current Business*, September 1948.

the national average. Mississippi, Arkansas, Alabama, and the Carolinas were at the bottom of the array. In terms of 1947–1949 dollars, the dispersion of relative per capita income positions had narrowed considerably over the twenty-five years, shifting from a range of from 182 per cent for the District of Columbia and 41 per cent for Mississippi in 1929 to a range of 137 to 49 per cent in 1953. The District of Columbia experienced the greatest downward change (−32 per cent) in relative position, while South Carolina's relative position to the national average improved 74 per cent. In the twenty-five years Mississippi, while improving its place relative to the average, never relinquished its lowly rank among the states.

Table A-9 presents state and regional indexes of per capita income in 1947–1949 dollars, based on the United States as 100; and Table A-10 shows the average change in these state relative positions from 1929 to 1953. These indexes, of course, must be used with awareness that the income figures on which they are based have not been adjusted for variations in the level of prices from state to state. Although some adjustment could be attempted, based on existing studies of intercity differences in price level, only the roughest approximations to true differentials in real income could be expected.

Relative cost of living indexes for fifty-nine cities at March 1935 prices, published by the Works Progress Administration,[17] indicate that a fair correlation existed between relative price levels and the per capita income position of states. It can be anticipated, therefore, that adjustments to state per capita income for differences in price level would tend to reduce interregional differentials further. Taking the WPA indexes for Washington, D. C.; Philadelphia, Pittsburgh, and Scranton to represent Pennsylvania; Memphis and Knoxville to represent Tennessee; Los Angeles and San Francisco to represent California; and Mobile and Birmingham for Alabama; the following comparison was made of 1935 per capita income in current dollars and adjusted for price change and level differences:

State	In Current Dollars	Adjusted for Price Change to 1947–1949 Dollars	Adjusted for Variation in Price Level from U.S. Average
District of Columbia	955	1,581	1,409
California	617	1,055	990
Pennsylvania	510	881	854
Tennessee	260	455	476
Alabama	213	371	403
Alabama (D.C. = 100)	22.3	23.5	28.6

[17] Margaret L. Stecker, *Intercity Differences in Costs of Living, March 1935, 59 Cities*, Works Progress Administration, Division of Social Research, 1937.

CONCLUSIONS

Only after the attempt is made to develop state and regional price indexes for past years can one conclude that an attempt would be somewhat foolhardy. The neglect of wide areas in past programs of price and expenditure data collection and processing has resulted in serious gaps in the body of statistical data necessary for these measurements. Therefore, only rough estimates of differentials in price movements can be obtained and no satisfactory adjustment for differences in price level can be made for years already past.

The inventory of available price data highlights the course taken in the progress of price studies to date. Major activity in this field has been directed toward solving practical and usually urgent problems; problems of the wage earner in war industry centers, problems of protective tariffs, problems of price control and farm parity legislation, problems of validating the use of one price series to impute movements to many unknown areas—large cities to small cities, for example—and now, problems of the low-income groups and the aged. Very little has been done in the nature of pure research into price statistics without any other motive than perhaps to make possible ready answers to many urgent problems before they arise.

It can be readily demonstrated that the amount of price information going into the creation of modern price series is in excess of the quantity of observations required. Valid and reliable estimates of price change can be compiled using smaller probability samples of items and reporters. A movement in this direction, accompanied by continued improved efficiency in methods of data collection and processing, would free funds and energy for much-needed price work in uncovered areas and would permit the collection of a large body of local price information for a variety of analytical studies. Expanded price research in the future would help fill the gaps in historical records by providing the knowledge about price relationships needed for design of better estimating techniques.

APPENDIX: TABULAR SUMMARY

TABLE A-1

Localities for Which Price Indexes Are Available for Years between 1929 and 1954

State and City	Agency [a]	Type of Index [b]	Dates Calculated
Alabama			
Birmingham	BLS	A	1929–1952
Birmingham	NICB	A	1939–1954
Gadsden	BLS	A	1940–1944
Mobile	BLS	A	1929–1952
Arizona			
Glendale [c]	BLS	A	1953–1954
Globe	BLS	A	1939–1944
Phoenix	BLS	A	1941–1945
Arkansas			
Camden [c]	BLS	A	1953–1954
Jonesboro	BLS	A	1940–1944
Little Rock	BLS	F	1935–1952
Little Rock	BLS	A	1940–1944
California			
Lodi [c]	BLS	A	1953–1954
Los Angeles	BLS	A	1929–1954
Los Angeles	NICB	A	1939–1954
Sacramento	NICB	A	1939–1951
San Diego	BLS	A	1940–1946
San Francisco	BLS	A	1929–1954
San Francisco-Oakland	NICB	A	1939–1954
San Jose [c]	BLS	A	1953–1954
Vallejo-Benicia	BLS	A	1940–1944
Colorado			
Denver	BLS	A	1929–1952
Denver	NICB	A	1939–1954
Connecticut			
Bridgeport	BLS	F	1935–1952
Bridgeport	BLS	A	1940–1946
Bridgeport	NICB	A	1939–1954
Middletown [c]	BLS	A	1953–1954
New Haven	BLS	F	1935–1952
New Haven	BLS	A	1940–1944
New Haven	NICB	A	1939–1951
Torrington	BLS	A	1940–1944
Delaware			
Wilmington	NICB	A	1939–1954
District of Columbia			
Washington	BLS	A	1929–1954

[a] BLS = Bureau of Labor Statistics, NICB = National Industrial Conference Board, SDL = state department of labor, and SU = state university.

[b] A = all items, F = food only, and FF = food and fuel.

[c] Indexes not published.

State and City	Agency [a]	Type of Index [b]	Dates Calculated
Florida			
Jacksonville	BLS	A	1929–1952
Miami	d	F	1941–1954
Georgia			
Atlanta	BLS	A	1929–1954
Atlanta	NICB	A	1939–1954
Macon	NICB	A	1939–1949
Savannah	BLS	A	1929–1952
Idaho			
Sandpoint [c]	BLS	A	1953–1954
Illinois			
Anna [c]	BLS	A	1953–1954
Chicago	BLS	A	1929–1954
Chicago	NICB	A	1939–1954
Joliet	NICB	A	1942–1949
Mattoon	BLS	A	1939–1944
Peoria	BLS	F	1939–1952
Peoria	BLS	A	1940–1944
Rockford	NICB	A	1942–1949
Springfield	BLS	F	1935–1952
Indiana			
Bloomington	BLS	A	1939–1944
Evansville [c]	BLS	A	1953–1954
Evansville	NICB	A	1942–1954
Garrett [c]	BLS	A	1953–1954
Indianapolis	BLS	A	1929–1952
Indianapolis	NICB	A	1939–1954
South Bend	BLS	A	1940–1946
Iowa			
Cedar Rapids	BLS	F	1941–1952
Clinton	BLS	A	1939–1944
Des Moines	NICB	A	1939–1954
Shenandoah [c]	BLS	A	1953–1954
Kansas			
State index	SDL	F	1930–1954
Wichita	BLS	F	1941–1952
Wichita	BLS	A	1940–1946
Kentucky			
Louisville	BLS	F	1935–1952
Louisville	BLS	A	1940–1944
Louisville	NICB	A	1939–1951
Middlesboro [c]	BLS	A	1953–1954
Louisiana			
Alexandria	SU	A	1953–1954
Baton Rouge	SU	A	1947–1954
Lake Charles	SU	A	1947–1954
Monroe	SU	A	1946–1954

d University of Miami.

State and City	Agency [a]	Type of Index [b]	Dates Calculated
New Orleans	BLS	A	1929–1952
New Orleans	NICB	A	1939–1954
New Orleans [e]	SU	A	1953–1954
Shreveport	SU	A	1947–1954
Maine			
Portland	BLS	A	1929–1952
Maryland			
Baltimore	BLS	A	1929–1954
Baltimore	NICB	A	1939–1954
Massachusetts			
State index	SDL	A	1929–1954
Boston	BLS	A	1929–1954
Boston	NICB	A	1939–1954
Fall River	BLS	F	1935–1952
Fall River	NICB	A	1939–1951
Michigan			
State index	SDL	A	1941–1953
Battle Creek	BLS	A	1939–1945
Battle Creek	SDL	A	1950–1953
Detroit	BLS	A	1929–1954
Detroit	NICB	A	1939–1954
Flint	SDL	A	1950–1953
Grand Rapids	NICB	A	1939–1954
Grand Rapids	SDL	A	1950–1953
Kalamazoo	SDL	A	1950–1953
Lansing	NICB	A	1941–1954
Lansing	SDL	A	1950–1953
Marquette	SDL	A	1950–1953
Muskegon	NICB	A	1941–1951
Muskegon	SDL	A	1950–1953
Pontiac	SDL	A	1950–1953
Saginaw-Bay City	SDL	A	1950–1953
Minnesota			
Duluth	NICB	A	1939–1954
International Falls	NICB	A	1945–1949
Minneapolis	BLS	A	1929–1954
Minneapolis	NICB	A	1939–1954
St. Paul	BLS	F	1935–1952
St. Paul [f]	NICB	A	1939–1949
Mississippi			
Jackson	BLS	F	1941–1952
Vicksburg	BLS	A	1940–1944
Missouri			
Kansas City	BLS	A	1929–1954
Kansas City	NICB	A	1939–1954
St. Louis	BLS	A	1929–1954
St. Louis	NICB	A	1939–1954

[e] Continuation of BLS series.
[f] Combined with Minneapolis in 1950.

State and City	Agency [a]	Type of Index [b]	Dates Calculated
Montana			
State index	SU	F	1950–1954
Butte	BLS	F	1935–1952
Nebraska			
Falls City	BLS	A	1940–1944
Grand Island [e]	BLS	A	1953–1954
Omaha	BLS	F	1935–1952
Omaha	BLS	A	1941–1946
Omaha	NICB	A	1939–1951
Nevada			
New Hampshire			
Laconia [e]	BLS	A	1953–1954
Manchester	BLS	A	1935–1952
New Jersey			
State	SDL	A	1942–1954
Newark	BLS	F	1935–1952
Newark	BLS	A	1940–1944
Newark	NICB	A	1939–1954
Trenton	NICB	A	1941–1951
Vineland	BLS	A	1939–1944
New Mexico			
Albuquerque	[g]	F	1950–1954
Los Alamos	BLS	A	1949–1950
New York			
Buffalo	BLS	A	1929–1952
Buffalo	NICB	A	1939–1951
New York	BLS	A	1929–1954
New York	NICB	A	1939–1954
Oswego	BLS	A	1939–1944
Rochester	BLS	F	1935–1952
Rochester	BLS	A	1940–1944
Rochester	NICB	A	1939–1954
Syracuse	NICB	A	1941–1954
North Carolina			
Goldsboro	BLS	A	1940–1944
Winston-Salem	BLS	F	1935–1952
North Dakota			
Grand Forks [e]	BLS	A	1953–1954
Ohio			
Akron	NICB	A	1939–1954
Canton [e]	BLS	A	1953–1954
Cincinnati	BLS	A	1929–1954
Cincinnati	NICB	A	1939–1954
Cleveland	BLS	A	1929–1954
Cleveland	NICB	A	1939–1954
Columbus	BLS	F	1935–1952
Dayton	NICB	A	1939–1951

[g] University of New Mexico.

State and City	Agency [a]	Type of Index [b]	Dates Calculated
Newark [c]	BLS	A	1953–1954
Ravenna [c]	BLS	A	1953–1954
Toledo	NICB	A	1939–1951
Toledo	h	A	1945–1951
Youngstown [c]	BLS	A	1953–1954
Youngstown	NICB	A	1939–1949
Zanesville	BLS	A	1939–1944
Oklahoma			
Madill [c]	BLS	A	1953–1954
Shawnee [c]	BLS	A	1953–1954
Stillwater	BLS	A	1940–1944
Oregon			
Portland	BLS	A	1929–1954
Portland	NICB	A	1939–1954
Pennsylvania			
State index	SDL	A	1929–1954
Bellefonte	NICB	A	1947–1948
Connellsville	SDL	A	1941–1954
Erie	NICB	A	1939–1954
Johnstown	SDL	A	1941–1954
Lancaster	SDL	A	1941–1954
Lebanon	BLS	A	1939–1945
Lewistown	NICB	A	1942–1946
Philadelphia	BLS	A	1929–1954
Philadelphia	NICB	A	1939–1954
Pittsburgh	BLS	A	1929–1954
Pittsburgh	NICB	A	1939–1954
Scranton	BLS	A	1929–1954
Allentown	SDL	FF	1941–1954
Altoona	SDL	FF	1941–1954
Du Bois	SDL	FF	1941–1954
Erie	SDL	FF	1941–1954
Harrisburg	SDL	FF	1941–1954
Oil City	SDL	FF	1941–1954
Pottsville	SDL	FF	1941–1954
Reading	SDL	FF	1941–1954
Williamsport	SDL	FF	1941–1954
York	SDL	FF	1941–1954
Rhode Island			
Providence	BLS	F	1935–1952
Providence	NICB	A	1939–1951
South Carolina			
Charleston	BLS	F	1935–1952
Charleston	BLS	A	1940–1944
Chester	BLS	A	1939–1944
South Dakota			
Watertown	BLS	A	1940–1944
Tennessee			
Chattanooga	NICB	A	1939–1954

h University of Toledo.

State and City	Agency [a]	Type of Index [b]	Dates Calculated
Knoxville	BLS	F	1941–1952
Knoxville	BLS	A	1941–1944
Knoxville	BLS	A	1948–1952
Memphis	BLS	A	1929–1952
Memphis	NICB	A	1939–1951
Oak Ridge	BLS	A	1947–1953
Texas			
Corpus Christi	BLS	A	1940–1944
Dallas	BLS	F	1935–1952
Dallas	BLS	A	1940–1944
Dallas	NICB	A	1939–1954
Houston	BLS	A	1929–1954
Houston	NICB	A	1939–1954
Utah			
State index	SDL	A	1946–1948
Salt Lake City	BLS	F	1935–1952
Salt Lake City	SDL	A	1946–1948
Vermont			
Virginia			
Front Royal	NICB	A	1942–1946
Lynchburg [c]	BLS	A	1953–1954
Newport News	BLS	A	1940–1944
Norfolk	BLS	A	1929–1952
Pulaski [c]	BLS	A	1953–1954
Richmond	BLS	A	1929–1952
Richmond	NICB	A	1939–1954
Roanoke	NICB	A	1942–1954
Washington			
Richland	BLS	A	1950–1954
Seattle	BLS	A	1929–1954
Seattle	NICB	A	1939–1954
Spokane	NICB	A	1939–1951
Walla Walla	BLS	A	1939–1944
West Virginia			
Charleston [c]	BLS	A	1953–1954
Clarksburg	BLS	A	1939–1944
Huntington [c]	BLS	A	1953–1954
Huntington	NICB	A	1942–1954
Parkersburg	NICB	A	1945–1946
Wisconsin			
Green Bay	NICB	A	1942–1951
Madison [c]	BLS	A	1953–1954
Milwaukee	BLS	A	1935–1954
Milwaukee	NICB	A	1939–1954
Oconto	BLS	A	1940–1944
Wausau	NICB	A	1939–1949
Wyoming			
Rawlins [c]	BLS	A	1953–1954

TABLE A-2

Consumer Price Indexes, by State and Region, 1929–1953

(1947–1949 = 100)

Region and State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
United States average	72	70	64	57	55	57	59	59	61	60	59	59	62
New England:	72	69	63	57	55	59	62	62	64	62	62	62	65
Connecticut	69	67	61	55	53	57	59	60	62	61	59	61	64
Maine	72	70	64	58	56	59	60	60	62	60	59	59	62
Massachusetts	73	71	64	58	56	60	63	63	65	64	63	62	66
New Hampshire	68	66	60	54	52	56	58	58	60	58	58	59	62
Rhode Island	70	68	62	56	54	58	60	61	63	62	61	62	64
Vermont	72	70	64	57	56	59	60	60	61	60	59	59	62
Middle East:	73	71	65	59	56	58	59	60	62	60	60	60	63
Delaware	70	69	63	56	55	58	59	59	61	59	59	59	62
District of Columbia	70	68	64	59	57	59	60	61	62	61	60	61	64
Maryland	69	67	61	55	53	56	57	58	59	58	57	58	61
New Jersey	74	72	66	60	57	59	60	61	63	62	61	62	64
New York	74	72	66	60	57	59	60	60	62	60	60	61	63
Pennsylvania	73	70	63	56	54	57	58	59	60	59	58	58	61
West Virginia	72	70	63	56	55	58	60	60	62	60	59	59	63
Southeast:	71	69	61	54	53	56	58	58	60	58	57	58	61
Alabama	72	70	62	54	53	56	57	58	60	58	57	57	61
Arkansas	71	69	61	54	53	57	58	58	60	58	58	58	61
Florida	72	69	62	55	53	56	57	58	59	58	57	58	62
Georgia	72	69	62	55	53	56	58	58	60	58	57	57	61
Kentucky	71	69	61	54	53	57	58	58	60	58	58	58	62
Louisiana	69	67	60	54	53	55	57	57	59	57	57	58	61
Mississippi	72	69	61	54	53	56	58	58	60	58	57	57	61
North Carolina	71	68	61	54	53	57	58	58	60	58	57	57	61
South Carolina	72	69	62	55	54	57	59	59	61	59	58	58	61
Tennessee	70	68	60	54	52	56	57	57	59	57	57	57	60
Virginia	71	69	62	56	54	57	59	59	60	58	58	58	62
Southwest:	72	70	63	56	55	58	59	60	61	60	59	60	62
Arizona	73	70	63	56	55	58	60	60	62	60	59	60	63
New Mexico	71	69	62	55	54	57	58	59	60	59	58	58	61
Oklahoma	72	70	63	56	54	58	59	60	61	60	59	59	62
Texas	72	70	63	56	55	58	59	60	62	60	60	60	62
Central:	73	70	63	56	54	56	60	59	61	59	58	59	62
Illinois	73	71	64	56	54	56	58	58	60	59	58	58	61
Indiana	72	70	62	56	54	57	58	59	61	59	58	59	63
Iowa	72	70	63	56	54	57	59	59	61	59	58	58	62
Michigan	74	71	63	54	58	55	57	59	62	61	59	60	63
Minnesota	70	68	62	56	54	57	58	59	61	60	59	59	62
Missouri	72	71	64	57	55	58	59	60	61	60	59	59	62
Ohio	71	70	62	56	54	56	58	59	61	60	59	59	63
Wisconsin	75	73	66	58	54	56	58	59	61	59	58	58	62

Region and State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Northwest:	70	68	62	55	54	57	58	59	61	59	58	58	61
Colorado	69	67	61	55	54	56	58	58	61	59	58	58	61
Idaho	68	66	59	53	53	55	56	57	59	58	57	57	60
Kansas	69	67	61	55	52	56	58	59	61	59	58	58	60
Montana	70	68	61	55	54	56	58	59	60	59	58	58	61
Nebraska	75	73	66	58	57	60	62	62	64	62	61	62	63
North Dakota	69	67	60	53	52	56	57	57	59	57	57	57	60
South Dakota	69	66	60	53	52	56	57	57	59	57	57	57	60
Utah	71	69	63	56	55	57	59	59	62	60	59	60	63
Wyoming	69	67	60	54	53	56	58	58	60	58	57	57	60
Far West:	71	69	63	57	54	56	58	58	60	59	59	59	62
California	72	70	63	57	55	56	58	58	61	60	59	59	62
Nevada	72	69	62	56	54	57	58	58	60	59	58	58	62
Oregon	68	66	60	54	52	54	56	57	59	58	58	58	61
Washington	70	68	62	56	54	56	57	58	60	59	59	59	63

Region and State	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
United States average	69	74	76	78	84	96	103	102	103	111	113	114
New England:	72	77	78	79	85	96	103	101	102	109	112	112
Connecticut	72	77	78	79	85	97	103	100	101	108	112	112
Maine	70	74	76	78	83	96	102	101	102	109	112	112
Massachusetts	73	78	78	80	86	96	103	101	102	110	112	112
New Hampshire	69	74	75	77	83	96	103	101	102	109	111	112
Rhode Island	70	74	76	79	84	96	103	101	104	108	110	109
Vermont	70	74	76	78	83	96	102	101	102	109	112	112
Middle East:	70	74	76	78	85	96	103	101	102	110	112	113
Delaware	69	74	75	77	83	96	103	102	102	111	112	112
District of Columbia	70	75	76	78	85	96	102	102	103	110	113	114
Maryland	68	73	74	77	83	96	102	102	103	110	113	114
New Jersey	70	75	76	79	86	95	104	101	102	110	113	114
New York	70	75	76	78	85	96	103	101	102	110	112	112
Pennsylvania	68	72	74	78	83	96	102	101	103	112	113	113
West Virginia	70	74	76	80	86	98	103	99	102	107	109	110
Southeast:	68	74	75	77	84	96	103	101	102	110	112	113
Alabama	68	73	75	77	83	97	103	101	102	111	113	114
Arkansas	69	73	75	77	83	96	103	101	103	111	113	113
Florida	69	75	76	79	85	97	103	101	104	112	114	113
Georgia	68	73	75	78	83	96	102	102	103	112	115	116
Kentucky	68	73	74	77	83	97	103	100	102	109	111	111
Louisiana	68	74	75	76	83	97	103	101	101	109	111	112
Mississippi	68	74	75	78	84	97	103	100	102	110	112	113
North Carolina	68	73	75	78	84	97	103	101	103	111	112	113
South Carolina	69	74	76	78	84	97	103	101	101	109	112	113
Tennessee	67	73	75	77	83	96	102	101	102	110	112	112
Virginia	69	74	75	77	83	96	102	102	103	111	113	113
Southwest:	69	74	75	78	83	96	103	102	105	113	115	116
Arizona	70	74	76	78	84	95	103	102	103	111	114	115
New Mexico	68	73	75	78	83	96	103	102	102	110	112	113
Oklahoma	68	73	75	78	83	96	102	102	105	113	114	116
Texas	69	74	76	78	83	96	103	102	105	113	115	116
Central:	69	73	75	77	83	96	103	102	103	112	114	115
Illinois	68	72	74	75	82	95	103	102	103	112	114	115
Indiana	70	74	75	77	82	96	103	101	102	110	112	114
Iowa	69	74	75	77	83	96	103	102	104	112	114	114
Michigan	71	75	76	78	84	96	103	101	104	113	115	117
Minnesota	69	73	74	76	82	95	103	102	103	111	114	115
Missouri	69	74	75	77	83	96	103	101	103	111	114	115
Ohio	70	74	76	78	84	96	103	101	102	110	112	114
Wisconsin	68	73	74	76	82	96	103	101	104	114	117	117
Northwest:	68	73	75	77	83	96	103	101	103	111	113	113
Colorado	68	73	74	76	82	95	103	102	103	112	114	114
Idaho	69	74	75	78	84	96	103	102	103	112	114	114
Kansas	68	73	75	77	82	96	103	100	102	111	113	112

TABLE A-2 (continued)

$(1947-1949 = 100)$

Region and State	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
Montana	68	73	75	77	83	96	103	102	102	110	112	112
Nebraska	70	74	76	77	84	96	103	101	102	110	113	113
North Dakota	67	72	74	77	83	96	103	101	102	111	113	113
South Dakota	67	72	74	76	83	96	103	101	102	111	113	113
Utah	70	74	76	78	84	94	103	102	103	112	114	115
Wyoming	68	72	74	76	83	96	103	102	103	111	114	114
Far West:	70	74	76	78	84	96	102	102	103	111	114	116
California	70	74	76	78	84	96	102	102	102	111	114	116
Nevada	69	74	76	79	85	94	103	102	103	112	115	116
Oregon	70	74	76	78	84	95	103	102	103	112	114	115
Washington	70	75	76	78	84	95	103	102	104	112	115	116

Evaluation of State Consumer Price Indexes

Region and State	Rating [a]						
	1929– 1934	1935– 1938	1939– 1944	1945– 1949	1950– 1952	1953	25 Years
United States	7	7	8	8	8	7	8
New England:	7	8	8	8	8	7	8
Connecticut	2	4	5	4	4	3	4
Maine	4	4	4	4	4	2	4
Massachusetts	9	9	9	9	9	9	9
New Hampshire	2	5	5	5	5	3	4
Rhode Island	2	6	6	6	4	2	4
Vermont	2	2	2	2	2	2	2
Middle East:	8	8	8	9	9	9	8
Delaware	2	2	9	9	7	7	6
District of Columbia	10	10	10	10	10	10	10
Maryland	9	9	9	9	7	7	9
New Jersey	2	3	4	9	9	9	6
New York	8	8	9	9	8	8	8
Pennsylvania	9	9	9	9	9	9	9
West Virginia	2	2	3	3	3	4	2
Southeast:	4	5	6	6	5	4	5
Alabama	6	6	7	6	5	4	6
Arkansas	2	4	4	4	3	2	3
Florida	4	4	5	5	4	3	4
Georgia	6	6	6	6	5	4	6
Kentucky	2	6	6	5	5	2	5
Louisiana	7	7	6	8	7	7	7
Mississippi	2	2	4	3	3	2	3
North Carolina	2	2	3	3	3	2	3
South Carolina	2	4	4	3	3	2	3
Tennessee	5	5	7	7	7	3	6
Virginia	6	6	7	6	5	4	6
Southwest:	3	4	4	4	4	4	4
Arizona	2	2	6	2	2	5	3
New Mexico	2	2	2	2	5	5	3
Oklahoma	2	2	2	2	2	2	2
Texas	3	4	5	4	4	4	4
Central:	6	7	7	8	8	6	7
Illinois	8	8	8	8	8	7	8
Indiana	4	4	5	4	4	4	4
Iowa	2	2	4	4	4	3	3
Michigan	7	7	8	9	9	7	8
Minnesota	8	8	8	8	8	8	8
Missouri	9	9	8	8	7	7	8
Ohio	5	6	7	7	7	6	6
Wisconsin	2	6	6	6	6	6	5

	RATING [a]						
Region and State	1929–1934	1935–1938	1939–1944	1945–1949	1950–1952	1953	25 Years
Northwest:	6	7	7	7	7	5	6
Colorado	8	8	8	8	7	7	8
Idaho	2	2	2	2	2	2	2
Kansas	9	9	9	9	9	9	9
Montana	2	4	4	4	9	9	5
Nebraska	2	6	7	6	6	2	4
North Dakota	2	2	2	2	2	3	2
South Dakota	2	2	2	2	2	2	2
Utah	2	7	6	9	6	2	5
Wyoming	2	2	2	2	2	2	2
Far West:	7	7	7	7	6	6	7
California	7	7	7	7	6	6	7
Nevada	2	2	2	2	2	2	2
Oregon	8	8	8	8	7	7	8
Washington	6	6	7	7	6	5	6

[a] Relative quality based on a rating of 10 for an all item index (BLS Standard) for the total population.

TABLE A-4

Consumer Price Indexes for Urban Areas, by State and Region, 1929-1954
(1947-1949 = 100)

Region and State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
United State Average	73	71	65	58	55	57	59	59	62	60	60	60	63
BLS-CPI ª	73	71	65	58	55	57	59	59	61	60	59	60	63
New England:	72	70	64	58	56	60	62	62	65	63	62	62	65
Connecticut	69	66	60	55	53	57	59	60	62	61	60	61	65
Maine	73	71	66	61	59	61	61	61	62	61	60	61	64
Massachusetts	73	71	64	58	57	61	63	63	65	64	63	62	66
New Hampshire	68	66	60	54	52	56	59	58	60	59	59	59	62
Rhode Island	70	68	62	56	54	58	60	61	64	62	61	62	64
Vermont	73	71	66	61	59	61	61	61	63	61	60	61	64
Middle East:	74	72	66	60	57	58	60	60	62	60	60	60	63
Delaware	71	70	64	58	55	58	60	60	61	60	60	60	63
District of Columbia	70	68	64	59	57	59	60	61	62	61	60	61	64
Maryland	69	67	62	56	53	56	58	58	59	58	58	58	62
New Jersey	74	73	67	61	58	60	60	61	63	62	61	62	64
New York	74	72	66	61	57	59	60	60	62	60	60	61	63
Pennsylvania	74	71	64	57	55	57	58	59	61	59	58	58	61
West Virginia	72	71	64	58	56	58	59	60	61	60	59	61	64
Southeast:	72	70	62	58	53	56	58	58	60	58	58	58	62
Alabama	74	72	63	55	52	55	57	58	60	59	58	58	62
Arkansas	73	72	64	57	55	58	59	60	62	60	60	60	64
Florida	72	69	62	56	53	56	57	57	60	58	57	58	62
Georgia	72	70	62	56	53	56	57	58	59	58	57	58	62
Kentucky	72	70	63	56	54	57	58	58	61	59	58	58	63
Louisiana	69	67	60	55	53	55	57	57	59	58	58	58	62
Mississippi	74	72	62	55	52	55	57	57	60	58	58	58	63
North Carolina	71	69	62	55	53	56	58	58	60	58	58	58	62
South Carolina	76	73	66	59	56	59	60	61	63	62	61	61	64
Tennessee	70	69	62	55	53	55	57	57	59	58	57	57	61
Virginia	71	70	64	58	55	58	59	59	61	59	59	59	63
Southwest:	74	72	65	58	55	58	60	60	63	62	61	61	64
Arizona	77	76	69	62	59	60	62	62	65	65	64	64	69
New Mexico	74	72	65	59	55	59	60	60	63	62	61	61	63
Oklahoma	75	73	67	60	56	60	61	61	64	63	62	62	65
Texas	74	72	65	59	55	59	60	60	63	62	61	61	63
Central:	74	72	65	57	54	56	58	59	61	60	60	60	63
Illinois	76	73	67	59	54	54	57	58	60	60	59	59	62
Indiana	73	71	64	57	54	57	58	59	61	60	59	60	63
Iowa	72	71	65	58	55	57	59	60	62	60	59	60	63
Michigan	75	72	63	55	52	55	57	59	63	62	60	60	64
Minnesota	71	69	64	58	55	57	59	60	62	61	61	61	64
Missouri	74	72	66	59	56	58	60	61	63	61	60	60	63
Ohio	71	70	63	57	54	56	58	59	61	60	60	60	63
Wisconsin	77	75	68	60	55	56	59	60	62	60	59	59	62

$(1947-1949 = 100)$

Region and State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Northwest:	71	70	64	58	55	57	59	60	62	61	61	61	63
Colorado	70	68	62	57	54	56	58	59	62	60	59	59	62
Idaho	68	67	60	55	52	54	56	57	60	59	58	58	62
Kansas	69	67	62	57	54	56	59	60	62	61	60	60	62
Montana	71	70	64	58	55	57	59	60	62	61	61	61	64
Nebraska	79	77	70	63	60	62	64	64	66	65	65	65	66
North Dakota	71	69	64	58	55	57	59	60	62	61	61	61	64
South Dakota	70	68	63	57	54	56	58	59	61	60	60	60	64
Utah	72	70	64	59	56	57	60	60	63	62	61	61	64
Wyoming	70	68	62	57	54	56	58	59	62	60	59	59	62
Far West:	72	70	63	58	55	56	58	58	61	60	60	60	63
California	72	70	64	58	55	56	58	58	61	60	60	60	63
Nevada	73	71	65	59	56	57	58	59	62	61	61	61	64
Oregon	68	67	60	55	52	54	56	57	60	59	58	58	62
Washington	71	70	64	58	55	57	58	58	61	61	60	60	63

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$(1947–1949 = 100)$

Region and State	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
United States average	70	74	76	78	84	96	103	102	103	111	114	114	115
BLS-CPI [a]	70	74	75	77	83	96	103	102	103	111	114	114	115
New England:	73	77	78	80	86	96	102	101	102	109	112	111	112
Connecticut	73	77	78	79	85	96	103	100	101	108	112	112	112
Maine	72	76	76	78	83	96	102	101	102	108	111	112	112
Massachusetts	73	78	78	79	86	96	102	101	101	109	112	111	112
New Hampshire	70	75	76	77	83	96	104	101	102	109	111	112	112
Rhode Island	70	75	77	79	85	96	104	101	104	108	109	108	109
Vermont	72	76	76	78	83	96	102	101	102	108	111	112	112
Middle East:	70	74	76	78	85	96	102	101	102	110	112	113	113
Delaware	70	75	75	77	83	95	103	102	102	111	113	113	113
District of Columbia	70	75	76	78	85	96	102	102	103	110	113	114	114
Maryland	69	73	74	77	83	95	102	102	103	110	113	114	115
New Jersey	71	75	76	79	86	95	104	101	101	110	113	113	114
New York	70	74	76	78	85	96	102	101	102	109	111	112	112
Pennsylvania	69	73	74	76	83	96	102	101	103	111	113	113	114
West Virginia	72	75	77	81	86	99	102	98	100	106	108	109	110
Southeast:	69	74	76	77	83	96	102	101	102	110	113	113	113
Alabama	69	74	76	77	83	97	103	101	102	111	113	115	115
Arkansas	71	74	76	77	83	96	102	101	103	111	113	113	113
Florida	70	75	77	79	85	97	103	101	104	111	113	112	113
Georgia	69	74	75	77	83	96	102	102	103	113	116	117	116
Kentucky	69	73	74	77	83	96	103	100	102	108	110	111	110
Louisiana	69	74	75	76	83	97	102	101	101	109	111	112	113
Mississippi	70	75	76	79	84	97	103	101	103	111	113	113	112
North Carolina	69	74	76	77	84	97	102	101	103	111	112	113	112
South Carolina	72	76	77	79	85	96	103	101	101	109	112	113	112
Tennessee	68	74	75	77	83	96	102	102	103	111	112	112	111
Virginia	71	75	75	77	82	96	102	102	103	111	113	113	112
Southwest:	71	75	76	78	83	95	102	102	106	114	116	117	117
Arizona	75	77	78	79	85	93	104	103	104	112	115	117	117
New Mexico	71	74	76	77	83	95	102	102	102	110	113	113	113
Oklahoma	70	74	76	78	83	95	102	102	106	114	115	117	116
Texas	71	74	76	77	83	95	102	102	106	114	115	117	116
Central:	70	74	74	76	83	95	103	102	104	112	114	116	116
Illinois	69	72	73	75	82	95	103	103	104	112	114	115	117
Indiana	70	74	75	77	82	95	103	101	102	110	111	114	114
Iowa	70	74	75	77	83	95	103	102	105	113	115	115	115
Michigan	71	75	76	78	84	96	102	101	104	113	115	117	118
Minnesota	70	73	74	76	82	95	103	102	103	111	114	115	117
Missouri	70	74	75	77	83	96	103	102	103	111	115	116	116
Ohio	70	75	76	78	84	96	104	101	102	110	112	113	114
Wisconsin	69	73	74	76	82	95	103	101	104	114	117	118	118

Region and State	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
Northwest:	70	74	76	77	83	95	103	102	104	111	114	114	115
Colorado	69	73	75	76	82	95	103	102	103	112	114	115	115
Idaho	71	75	76	78	84	95	104	102	104	112	114	115	114
Kansas	69	73	76	77	82	96	104	101	103	111	114	113	113
Montana	70	75	76	77	83	95	103	102	103	109	112	112	113
Nebraska	72	75	76	77	84	95	103	101	103	110	113	114	114
North Dakota	70	73	74	76	82	95	103	102	103	111	114	115	115
South Dakota	69	72	74	75	82	95	103	102	103	111	114	115	115
Utah	71	75	77	79	84	94	103	103	104	112	115	116	116
Wyoming	69	73	75	76	82	95	103	102	103	112	114	115	115
Far West:	71	75	76	78	84	95	102	102	103	111	115	116	116
California	71	75	76	78	84	96	102	102	103	111	115	116	116
Nevada	72	76	78	79	85	93	104	104	105	113	116	119	119
Oregon	71	75	76*	78	84	95	104	102	104	112	114	115	115
Washington	71	75	76	78	84	95	102	102	104	112	114	116	116

* Bureau of Labor Statistics Consumer Price Index.

Percentage Change from Previous Year in per Capita Income and Prices, by State and Region, 1930–1953

Region and State		1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
United States:	income	−12.4	−16.1	−24.0	−3.2	+14.1	+9 5	+15.4	+5.6	−9.3	+5.9	+6.7	+20.5
	prices	−3.2	−9.5	−10.6	−3.7	+4.8	+2.6	+0.9	+3.4	−2.4	−1.3	+0.5	+5.4
New England:	income	−8.4	−10.9	−20.8	−5.2	+9.1	+7.3	+12.6	+3.8	−9.1	+6.2	+6.6	+18.8
	prices	−3.5	−8.4	−10.0	−2.8	+7.1	+3.9	0	+3.6	−2.4	−1.1	0	+5.2
Connecticut	income	−9.6	−12.7	−23.0	−3.2	+12.0	+8.9	+15.0	+6.6	−12.1	+7.6	+8.6	+26.7
	prices	−3.6	−9.3	−10.0	−2.6	+7.1	+3.9	+1.0	+3.5	−1.5	−2.6	+2.4	+5.9
Maine	income	−4.6	−12.4	−22.4	−0.8	+8.2	+8.6	+12.1	+2.1	−8.2	+5.3	+5.1	+14.3
	prices	−3.1	−8.5	−9.6	−2.3	+5.0	+1.2	+0.3	+2.3	−3.1	−1.3	+0.5	+4.9
Massachusetts	income	−8.0	−10.5	−19.5	−6.9	+8.0	+6.2	+12.5	+3.4	−8.1	+6.2	+6.5	+14.4
	prices	−3.5	−8.9	−9.9	−2.9	+7.3	+4.1	−0.3	+3.7	−2.2	−0.9	−1.1	+5.3
New Hampshire	income	−8.1	−8.0	−23.4	−0.5	+13.8	+5.0	+8.4	+3.3	−5.5	+3.2	+2.7	+19.2
	prices	−3.5	−9.4	−10.0	−2.4	+7.3	+3.9	−0.3	+3.4	−3.3	−0.2	+1.0	+5.1
Rhode Island	income	−9.9	−9.4	−19.1	−5.2	+7.5	+9.2	+10.4	+3.3	−10.5	+6.1	+4.9	+25.3
	prices	−3.4	−8.9	−9.9	−3.1	+7.2	+4.3	+1.2	+3.8	−2.4	−1.5	+1.2	+3.6
Vermont	income	−9.8	−12.2	−22.5	−4.9	+13.1	+10.6	+14.1	−1.6	−7.9	+6.4	+6.6	+22.1
	prices	−3.2	−8.8	−9.9	−2.1	+5.4	+1.4	+0.5	+2.2	−3.1	−1.3	+0.3	+5.1
Middle East:	income	−9.2	−14.7	−23.0	−4.7	+11.4	+6.3	+14.1	+4.1	−8.9	+5.2	+6.1	+15.8
	prices	−3.0	−8.6	−9.7	−4.1	+3.9	+1.4	+1.0	+2.8	−2.3	−1.0	+0.8	+4.7
Delaware	income	−17.1	−9.8	−24.0	−1.7	+14.2	+8.2	+18.3	+6.0	−14.2	+13.0	+15.2	+13.9
	prices	−2.3	−9.0	−10.4	−2.8	+5.5	+2.3	+0.7	+2.4	−2.5	−0.7	+0.2	+5.3
District of Columbia	income	−1.0	−1.7	−14.9	−13.0	+8.7	+9.0	+17.7	−1.5	−5.7	−1.2	+4.2	+1.3
	prices	−1.7	−6.1	−7.8	−3.2	+3.5	+1.7	+0.5	+2.6	−2.2	−0.8	+0.5	+4.8

Region and State		1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Maryland	income	−7.4	−11.4	−20.3	−4.1	+11.8	+6.3	+13.9	+6.4	−6.5	+6.7	+11.7	+19.4
	prices	−2.2	−8.6	−10.1	−3.3	+5.2	+2.1	+0.9	+2.2	−2.2	−0.9	+0.3	+6.4
New Jersey	income	−8.2	−13.6	−22.0	−8.7	+10.1	+7.0	+13.0	+5.3	−6.8	+6.7	+7.4	+13.2
	prices	−2.7	−8.1	−8.1	−5.1	+3.5	+1.4	+1.3	+3.8	−2.2	−1.1	+1.0	+3.2
New York	income	−9.1	−14.9	−23.0	−4.0	+9.5	+5.4	+12.7	+2.9	−8.1	+4.3	+4.7	+15.2
	prices	−2.7	−7.9	−8.8	−5.1	+3.3	+1.4	+0.5	+2.5	−2.0	−0.7	+1.2	+4.3
Pennsylvania	income	−10.3	−16.3	−25.5	−3.5	+14.5	+7.6	+16.5	+5.9	−12.1	+6.5	+6.8	+18.8
	prices	−4.1	−10.1	−11.4	−2.3	+4.8	+1.6	+1.7	+2.7	−2.8	−1.5	+0.5	+5.5
West Virginia	income	−15.3	−14.5	−22.3	+1.5	+23.0	+4.9	+17.5	+3.7	−11.5	+2.4	+5.6	+20.3
	prices	−3.0	−9.9	−10.5	−2.5	+6.0	+2.4	+0.7	+2.2	−2.9	−1.2	+0.2	+6.3
Southeast:	income	−18.9	−15.8	−18.7	+2.1	+22.6	+8.8	+15.8	+3.0	−7.4	+5.6	+6.3	+25.5
	prices	−3.2	−10.7	−10.9	−2.6	+6.2	+2.5	+0.7	+2.4	+2.9	−1.0	+0.3	+6.3
Alabama	income	−23.9	−17.7	−18.8	−0.6	+27.9	+8.1	+18.8	+1.2	−9.0	+3.9	+10.7	+33.2
	prices	−3.6	−11.6	−12.0	−2.6	+6.1	+2.7	+0.7	+3.6	−3.0	−1.2	0	+6.8
Arkansas	income	−30.8	−16.1	−13.6	−0.7	+18.4	+13.3	+20.6	+1.2	−5.2	+4.2	+2.4	+32.5
	prices	−3.0	−10.8	−11.3	−1.8	+6.4	+2.3	+0.7	+2.9	−3.3	−1.0	+0.2	+6.6
Florida	income	−11.0	−15.8	−20.9	−5.2	+19.5	+10.8	+17.5	+5.2	−6.1	+5.7	+6.3	+12.1
	prices	−4.1	−9.9	−11.3	−3.3	+5.8	+2.0	+0.7	+2.9	−2.9	−1.2	+0.9	+7.0
Georgia	income	−16.7	−17.2	−16.7	+5.8	+22.5	+7.8	+12.9	+1.0	−7.0	+3.6	+9.0	+23.4
	prices	−3.8	−10.4	−11.2	−2.4	+5.6	+2.3	+0.7	+2.6	−3.2	−0.9	+0.5	+5.9
Kentucky	income	−18.3	−15.5	−22.7	+0.5	+17.6	+11.1	+18.1	+5.9	−12.9	+4.9	+3.7	+19.8
	prices	−2.8	−10.8	−11.2	−2.3	+6.4	+2.5	+0.7	+2.7	−3.0	−1.2	0	+7.3

Region and State		1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Louisiana	income	−17.2	−13.1	−23.1	−3.5	+21.2	+6.3	+15.4	+4.8	−1.4	+3.8	+0.8	+20.2
	prices	−3.2	−10.8	−9.2	−2.6	+5.1	+3.1	0	+2.8	−2.4	−0.5	+0.9	+5.7
Mississippi	income	−30.0	−25.1	−12.6	−1.6	+31.7	+9.3	+23.2	−5.0	−10.6	+8.6	+1.5	+41.2
	prices	−3.8	−11.3	−11.8	−1.9	+6.4	+2.5	+0.5	+3.3	−3.2	−1.2	+0.2	+6.8
North Carolina	income	−17.5	−16.1	−17.8	+16.5	+23.4	+6.7	+8.9	+6.1	−7.4	+6.6	+2.6	+26.6
	prices	−3.1	−10.7	−11.3	−2.0	−6.4	+2.5	+0.5	+2.9	−3.2	−1.2	0	+6.8
South Carolina	income	−17.1	−14.8	−17.4	+13.6	+25.1	+6.2	+14.4	+3.1	−8.0	+8.3	+10.0	+24.7
	prices	−3.8	−10.5	−11.1	−2.0	+6.1	+2.3	+0.7	+2.7	−2.6	−1.2	0	+4.8
Tennessee	income	−18.9	−17.3	−20.9	+2.7	+26.8	+7.9	+16.2	+3.0	−10.0	+5.4	+7.1	+30.1
	prices	−2.7	−10.7	−11.1	−2.6	+6.3	+2.5	+0.5	+3.0	−2.9	−1.4	+0.2	+6.0
Virginia	income	−13.0	−11.2	−15.4	−3.6	+18.8	+9.8	+13.3	+3.1	−6.2	+5.8	+10.7	+25.4
	prices	−2.8	−9.8	−10.5	−2.5	+5.7	+2.4	+0.5	+2.2	−2.8	−1.2	+0.2	+6.9
Southwest:	income	−19.0	−19.4	−21.8	+4.2	+13.0	+10.8	+15.5	+11.2	−6.5	+4.0	+3.6	+20.2
	prices	−3.0	−10.0	−11.2	−2.7	+5.9	+2.4	+0.5	+3.2	−2.3	−1.0	+0.2	+4.9
Arizona	income	−17.1	−19.6	−29.1	−3.0	+22.4	+10.2	+19.7	+13.4	−9.5	+5.7	+3.0	+23.4
	prices	−3.6	−10.3	−10.6	−1.8	+5.1	+2.4	+0.3	+3.2	−2.6	−1.0	+0.2	+6.0
New Mexico	income	−15.9	−17.7	−27.5	+2.1	+22.4	+13.3	+21.3	+7.0	−8.8	+5.9	+5.9	+22.6
	prices	−3.2	−10.2	−11.3	−2.0	+6.0	+2.6	+0.5	+2.9	−2.6	−1.2	+0.2	+5.2
Oklahoma	income	−22.6	−21.9	−22.9	+6.6	+8.8	+14.2	+13.5	+12.2	−8.7	+4.0	+5.0	+18.5
	prices	−3.2	−10.0	−11.3	−2.3	+5.9	+2.6	+0.5	+3.0	−2.4	−1.2	+0.2	+5.4
Texas	income	−17.6	−18.5	−20.5	+3.6	+13.6	+9.2	+15.7	+10.8	−5.4	+3.6	+3.0	+20.1
	prices	−2.8	−9.8	−11.0	−3.0	+5.7	+2.6	+0.5	+3.2	−2.1	−1.2	+0.3	+4.7

Region and State		1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Central:	income	−15.0	−17.8	−26.6	−3.8	+15.8	+14.1	+16.4	+7.9	−11.5	+8.4	+6.9	+23.0
	prices	−2.9	−10.1	−11.5	−4.5	+4.7	+3.2	+1.2	+3.8	−2.3	−1.5	+0.5	+6.0
Illinois	income	−17.2	−18.9	−27.2	−5.5	+13.2	+11.3	+16.0	+9.7	−10.9	+8.9	+8.2	+18.7
	prices	−3.1	−9.8	−12.0	−4.8	+3.9	+3.6	+0.7	+3.6	−2.3	−1.4	+0.5	+5.1
Indiana	income	−15.8	−17.5	−26.9	0	+18.6	+11.7	+19.4	+8.5	−11.6	+10.2	+9.3	+29.4
	prices	−2.9	−10.6	−11.0	−3.1	+5.0	+2.8	+1.0	+3.4	−2.3	−1.7	+0.9	+6.3
Iowa	income	−7.7	−23.0	−36.1	+4.0	−6.2	+47.5	+9.5	+11.0	−2.5	+10.6	+3.8	+26.1
	prices	−2.6	−9.9	−10.8	−3.0	+5.1	+2.6	+0.9	+2.9	−2.8	−1.4	0	+6.0
Michigan	income	−18.4	−17.3	−24.1	−8.9	+30.7	+15.2	+15.6	+8.7	−18.8	+10.5	+9.0	+21.3
	prices	−3.9	−11.8	−13.4	−4.6	+5.6	+4.4	+3.0	+5.6	−2.1	−2.5	+0.5	+6.2
Minnesota	income	−9.0	−15.9	−26.1	−4.1	+12.7	+16.5	+17.4	+5.7	−5.2	+4.9	+2.6	+17.3
	prices	−2.7	−8.5	−10.1	−3.9	+5.0	+2.6	+1.2	+3.7	−2.1	−0.8	+0.2	+5.2
Missouri	income	−10.8	−15.6	−24.3	−3.4	+10.7	+10.7	+14.5	+3.2	−6.8	+6.8	+4.1	+22.5
	prices	−2.5	−9.8	−10.5	−3.5	+4.7	+2.8	+0.8	+2.8	−2.6	−1.2	+0.2	+5.1
Ohio	income	−14.7	−16.6	−27.1	−0.5	+17.4	+11.9	+17.9	+8.0	−14.2	+8.8	+6.5	+26.3
	prices	−2.0	−10.1	−10.4	−3.8	+4.3	+3.4	+0.9	+3.4	−1.8	−1.2	+0.5	+6.3
Wisconsin	income	−15.0	−19.3	−25.3	−4.0	+14.4	+15.7	+17.2	+5.4	−8.6	+4.1	+6.4	+26.0
	prices	−2.7	−9.8	−12.2	−5.7	+3.3	+3.7	+1.5	+3.6	−3.1	−2.2	+0.5	+5.5
Northwest:	income	−8.8	−21.1	−31.8	+1.1	+14.7	+16.4	+15.5	+7.1	−8.2	+4.0	+8.9	+24.8
	prices	−2.8	−9.5	−10.5	−2.5	+5.4	+3.0	+0.9	+3.2	−2.8	−1.2	+0.2	+4.6
Colorado	income	−9.4	−18.5	−24.8	−1.8	+11.9	+9.6	+19.7	+7.9	−10.7	+6.3	+3.2	+18.6
	prices	−2.7	−9.1	−10.0	−3.1	+4.1	+3.6	+1.2	+3.9	−3.0	−1.2	0	+4.8

(continued on next page)

Region and State		1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Idaho	income	−12.2	−26.2	−28.3	+0.4	+25.6	+11.2	+20.1	+9.4	−8.6	+1.2	+8.0	+25.0
	prices	−3.1	−10.3	−10.3	−2.6	+5.4	+2.9	+1.1	+3.5	−2.2	−1.0	0	+6.1
Kansas	income	−6.4	−19.3	−33.6	−3.4	+15.5	+13.1	+17.2	+8.9	−11.2	+0.3	+10.4	+30.5
	prices	−2.9	−9.4	−9.9	−3.1	+6.0	+3.6	+1.0	+3.1	−3.0	−1.4	−0.2	+4.3
Montana	income	−18.6	−19.8	−26.2	0	+33.4	+17.6	+13.0	+5.3	−9.8	+5.5	+11.7	+19.1
	prices	−3.0	−9.7	−10.4	−2.2	+4.8	+3.2	+0.9	+3.1	−2.6	−1.2	+0.5	+5.0
Nebraska	income	−2.3	−22.6	−40.4	+9.6	+1.5	+26.5	+13.0	+3.3	−6.8	+3.4	+8.8	+19.2
	prices	−2.8	−10.1	−10.8	−2.7	+5.4	+2.7	+0.2	+2.9	−2.8	−0.8	+0.5	+3.1
North Dakota	income	−15.4	−28.3	−23.3	+5.0	+7.9	+31.2	+11.5	+11.0	−9.3	+7.6	+13.8	+45.4
	prices	−3.5	−9.8	−11.0	−1.7	+6.1	+2.3	+0.7	+3.0	−2.9	−1.0	+0.2	+5.4
South Dakota	income	−8.4	−24.3	−40.8	+0.6	+34.9	+17.7	+7.8	+4.1	+3.9	+10.4	+7.7	+29.9
	prices	−3.2	−9.8	−10.9	−2.1	+6.1	+2.5	+0.7	+2.8	−2.7	−0.9	0	+6.3
Utah	income	−12.5	−19.4	−27.2	−0.4	+13.8	+15.7	+15.7	+9.5	−5.4	+2.1	+8.4	+24.4
	prices	−2.8	−9.3	−10.1	−3.0	+4.6	+3.5	+0.5	+3.5	−2.8	−1.0	+0.7	+5.2
Wyoming	income	−9.9	−16.8	−28.0	−0.5	+17.9	+9.7	+14.9	+2.2	−4.1	+5.6	+6.5	+16.6
	prices	−3.2	−9.7	−10.6	−2.0	+5.3	+3.0	+0.9	+3.4	−3.2	−1.2	0	+5.1
Far West:	income	−10.4	−17.2	−25.1	−3.3	+12.7	+9.0	+19.8	+4.4	−7.3	+4.5	+8.5	+23.4
	prices	−2.9	−9.6	−9.5	−3.9	+3.3	+2.5	+0.9	+3.9	−1.5	−1.0	+0.3	+5.5
California	income	−9.7	−16.9	−24.9	−4.1	+11.2	+8.6	+19.0	+4.8	−7.2	+3.8	+8.9	+20.6
	prices	−3.2	−9.6	−9.4	−3.8	+2.7	+2.6	+0.5	+4.3	−1.6	−1.0	+0.2	+5.5
Nevada	income	−6.9	−13.3	−27.4	−6.7	+19.7	+14.8	+13.8	+4.9	−12.0	+18.9	+6.1	+9.6
	prices	−3.4	−10.1	−10.1	−2.7	+4.4	+2.5	+0.5	+3.4	−2.2	−1.0	0	+5.6

Region and State		1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Oregon	income	−14.5	−16.8	−24.8	−1.5	+18.4	+12.0	+20.6	+2.4	−8.2	+7.3	+7.2	+31.9
	prices	−2.8	−9.9	−9.7	−3.9	+4.8	+3.1	+1.4	+4.0	−1.7	−1.0	0	+6.2
Washington	income	−12.2	−19.6	−25.6	−1.3	+17.1	+8.8	+23.2	+3.1	−6.5	+5.4	+7.5	+32.8
	prices	−2.4	−9.4	−9.7	−3.6	+3.7	+2.3	+0.9	+4.2	−1.7	−0.5	+0.3	+6.1

TABLE A-5 (continued)

Region and State		1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
United States	income	+26.3	+20.8	+9.6	-2.8	+1.7	+6.7	+7.0	-4.3	+8.8	+9.8	+4.0	+4.0
	prices	+11.0	+6.6	+2.0	+2.6	+8.3	+14.1	+7.4	-1.3	+1.4	+7.9	+2.2	+0.5
New England:	income	+21.5	+16.5	+5.9	+1.4	+2.1	+4.8	+4.4	-3.1	+10.0	+8.7	+4.1	+3.5
	prices	+11.6	+6.2	+1.0	+2.1	+8.0	+12.5	+7.0	-1.7	+0.9	+7.0	+2.7	-0.4
Connecticut	income	+23.8	+13.1	+3.1	-2.8	-0.1	+7.9	+2.8	-3.5	+12.9	+12.5	+3.3	+5.9
	prices	+12.1	+6.2	+1.4	+1.4	+7.4	+14.0	+6.8	-2.9	+0.6	+7.4	+3.4	0
Maine	income	+35.0	+32.3	+2.2	+0.2	+4.2	+4.7	+5.4	-6.3	+2.7	+9.2	+8.0	+0.8
	prices	+12.4	+6.9	+1.7	+2.2	+7.1	+15.9	+6.5	-1.3	+0.8	+6.9	+2.5	+0.3
Massachusetts	income	+18.0	+16.6	+7.0	+3.3	+2.6	+2.9	+5.2	-1.8	+10.1	+6.2	+4.1	+2.3
	prices	+11.6	+5.9	+0.6	+2.1	+8.4	+11.1	+7.0	-1.2	+0.7	+7.2	+2.6	-0.8
New Hampshire	income	+21.2	+17.5	+9.9	+4.1	+4.0	+6.0	+3.4	-3.9	+9.3	+12.8	+5.2	+4.4
	prices	+12.5	+7.1	+1.2	+2.4	+7.7	+15.8	+7.6	-2.4	+0.8	+7.2	+2.1	+0.4
Rhode Island	income	+23.3	+10.5	+8.2	-0.9	+1.0	+6.2	+4.0	-4.3	+10.9	+8.4	-0.7	+5.3
	prices	+9.4	+6.6	+3.0	+3.3	+6.5	+13.7	+8.1	-2.0	+2.8	+4.3	+1.4	-1.1
Vermont	income	+17.8	+19.7	+8.8	+9.2	+2.9	+4.9	+5.0	-7.4	+4.8	+11.0	+5.9	+2.9
	prices	+12.3	+7.0	+1.9	+2.2	+7.2	+15.8	+6.5	-1.3	+0.8	+7.0	+2.4	+0.3
Middle East:	income	+19.6	+18.7	+10.3	+4.4	+2.0	+4.0	+5.5	-3.3	+9.7	+8.3	+3.4	+4.9
	prices	+10.7	+6.3	+2.4	+2.6	+9.1	+13.2	+6.9	-1.3	+1.1	+7.8	+1.8	+0.4
Delaware	income	+16.3	+15.8	+3.8	-1.3	+3.2	+6.8	+6.3	+3.7	+15.3	+12.1	+0.7	+4.4
	prices	+11.3	+7.4	+1.1	+2.3	+8.9	+14.7	+7.5	-1.4	+0.6	+8.7	+1.3	+0.1
District of Columbia	income	+7.9	+8.3	+4.4	+4.3	+4.6	+5.5	+9.8	+7.2	+10.8	+7.3	0	-1.2
	prices	+10.8	+6.2	+1.5	+3.0	+8.7	+13.0	+6.0	-0.1	+1.3	+6.8	+2.7	+0.5

Region and State		1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
Maryland	income	+27.9	+15.2	+2.8	−0.2	+0.9	+5.2	+6.4	−1.9	+10.3	+10.5	+1.9	+5.9
	prices	+11.6	+6.9	+1.8	+3.4	+7.7	+15.5	+7.1	−0.4	+0.7	+7.5	+2.6	+0.9
New Jersey	income	+21.4	+20.0	+9.5	+0.5	+0.1	+4.3	+3.7	−2.4	+11.3	+10.5	+4.5	+6.1
	prices	+10.8	+5.8	+2.5	+3.3	+8.6	+10.8	+8.9	−2.3	+0.3	+8.5	+2.5	+0.6
New York	income	+17.4	+17.6	+11.8	+7.0	+2.5	+2.1	+4.4	−4.0	+8.8	+6.8	+2.9	+4.7
	prices	+10.0	+7.0	+2.4	+2.2	+9.3	+12.4	+6.9	−1.3	+0.8	+7.5	+1.6	+0.5
Pennsylvania	income	+21.7	+20.9	+10.6	+3.0	+1.8	+5.5	+6.5	−3.4	+11.2	+8.2	+4.3	+5.1
	prices	+11.6	+5.7	+2.6	+2.7	+9.3	+15.6	+6.2	−1.3	+1.9	+8.3	+1.7	−0.4
West Virginia	income	+24.4	+20.6	+12.4	+8.4	+2.3	+11.9	+9.9	−8.7	+4.6	+12.5	+4.1	+1.9
	prices	+11.5	+6.4	+2.4	+4.6	+7.4	+14.9	+4.2	−3.6	+2.9	+5.4	+1.9	+0.8
Southeast:	income	+32.4	+25.0	+14.8	+4.3	−0.2	+6.5	+8.3	−3.9	+8.2	+11.7	+5.2	+2.8
	prices	+11.8	+7.8	+2.2	+2.9	+8.0	+15.3	+6.4	−1.7	+1.4	+7.9	+1.9	+0.2
Alabama	income	+37.0	+27.6	+13.6	+4.7	−3.8	+9.5	+6.8	−7.9	+9.8	+11.6	+6.1	+4.4
	prices	+11.7	+6.9	+2.7	+2.7	+7.8	+16.1	+6.3	−1.9	+0.8	+9.1	+2.0	+0.9
Arkansas	income	+37.4	+18.7	+20.2	+8.4	+4.8	+0.5	+16.0	−9.0	+4.2	+12.3	+4.7	−2.9
	prices	+11.7	+6.7	+2.7	+2.9	+7.8	+15.7	+6.3	−1.7	+1.7	+8.0	+1.8	+0.1
Florida	income	+29.6	+28.3	+13.6	+3.8	+0.1	+1.4	+4.3	+1.5	+9.2	+7.2	+2.8	+2.5
	prices	+12.4	+8.1	+2.4	+2.9	+7.6	+14.0	+6.2	−1.8	+3.7	+7.1	+2.1	−0.9
Georgia	income	+31.8	+30.5	+14.6	+4.7	−1.7	+8.8	+6.6	−3.8	+9.7	+13.6	+3.5	+4.0
	prices	+11.7	+8.0	+2.3	+3.3	+7.5	+15.5	+6.3	−0.8	+1.3	+9.4	+2.1	+0.8
Kentucky	income	+29.5	+31.6	+12.1	+7.1	+1.6	+6.9	+1.5	−4.8	+4.5	+18.2	+4.7	+3.7
	prices	+10.2	+6.8	+2.2	+3.5	+8.3	+16.3	+6.5	−2.7	+1.4	+6.9	+1.9	+0.3

Region and State		1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
Louisiana	income	+29.8	+32.9	+12.0	+1.1	−5.3	+8.9	+12.5	+3.5	+4.5	+7.5	+8.8	+1.5
	prices	+11.8	+8.7	+1.2	+2.3	+9.0	+15.9	+6.1	−1.9	+0.4	+7.9	+1.4	+1.2
Mississippi	income	+39.2	+20.9	+19.4	+1.7	−2.5	+13.6	+13.0	−13.4	+10.0	+10.4	+6.6	+1.0
	prices	+11.8	+7.7	+2.3	+3.4	+7.8	+15.1	+6.1	−2.1	+1.6	+7.7	+1.8	+0.7
North Carolina	income	+31.2	+18.3	+14.5	+6.0	+5.8	+7.1	+5.0	−4.3	+10.2	+10.1	+1.4	+3.7
	prices	+11.1	+7.8	+2.5	+3.2	+8.5	+15.0	+6.0	−1.9	+1.9	+7.9	+1.6	+0.1
South Carolina	income	+33.0	+23.1	+14.5	+3.1	+5.2	+4.0	+11.2	−7.1	+6.5	+18.0	+10.7	+0.6
	prices	+12.6	+7.4	+2.3	+3.0	+8.0	+14.9	+6.3	−1.9	+0.3	+8.3	+2.3	+0.6
Tennessee	income	+26.8	+29.4	+20.6	+6.8	−5.0	+5.0	+5.1	−3.5	+10.4	+10.3	+5.4	+5.2
	prices	+12.1	+8.5	+2.6	+2.7	+7.8	+16.0	+6.3	−1.0	+1.0	+7.8	+1.4	+0.1
Virginia	income	+33.9	+11.9	+10.3	+1.4	−1.0	+7.1	+8.6	−2.8	+9.3	+11.3	+5.1	+1.7
	prices	+12.1	+6.9	+1.3	+2.5	+7.5	+15.8	+6.8	−0.9	+1.2	+7.8	+2.0	+0.4
Southwest:	income	+38.0	+26.1	+13.4	+1.3	−1.0	+12.7	+5.5	+3.8	+4.2	+10.1	+5.6	+1.5
	prices	+10.7	+6.7	+2.3	+2.9	+7.0	+15.1	+7.4	−0.7	+2.8	+7.7	+1.6	+1.0
Arizona	income	+46.2	+1.3	+12.0	+5.1	+1.0	+7.6	+8.6	−2.9	+5.5	+6.4	+4.5	−2.0
	prices	+10.9	+6.1	+1.7	+3.7	+7.8	+12.3	+8.7	−1.3	+0.8	+8.5	+2.2	+0.6
New Mexico	income	+36.2	+19.1	+13.2	+6.7	−0.2	+11.8	+6.9	+2.8	+7.5	+13.7	+3.0	+1.5
	prices	+11.4	+7.5	+2.5	+3.2	+7.2	+15.4	+7.0	−1.0	+0.4	+7.8	+2.3	+0.3
Oklahoma	income	+42.6	+23.2	+21.7	+0.4	−1.0	+11.1	+10.2	−1.4	−0.9	+11.2	+8.1	+2.6
	prices	+9.0	+7.4	+3.0	+3.1	+7.2	+15.2	+7.1	−0.8	+3.0	+7.8	+1.3	+0.9
Texas	income	+35.9	+29.5	+11.3	+0.7	−1.3	+13.7	+3.9	+5.9	+5.3	+9.0	+5.1	+1.6
	prices	+11.0	+6.6	+2.0	+2.8	+6.8	+15.2	+7.4	−0.6	+3.2	+7.7	+1.5	+1.0

Region and State		1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
Central:	income	+25.0	+21.7	+7.2	+3.2	+2.4	+7.0	+10.1	−6.7	+10.1	+10.8	+3.7	+5.7
	prices	+10.9	+6.2	+1.8	+2.5	+8.2	+15.3	+7.6	−1.3	+1.5	+8.2	+2.2	+0.8
Illinois	income	+19.0	+19.0	+9.3	+6.7	+3.9	+7.8	+9.8	−7.4	+8.5	+9.6	+3.1	+5.0
	prices	+10.6	+6.0	+2.1	+2.4	+8.6	+16.1	+8.1	−0.4	+1.1	+7.9	+2.2	+0.7
Indiana	income	+26.7	+23.1	+5.7	+4.2	−3.3	+9.0	+10.0	−7.0	+12.6	+12.3	+1.9	+10.0
	prices	+11.0	+6.0	+1.8	+2.7	+7.0	+16.1	+7.7	−1.8	+1.2	+7.5	+1.5	+2.0
Iowa	income	+34.7	+24.0	−1.3	+5.3	+13.4	−4.6	+29.6	−14.3	+10.3	+7.3	+3.8	−3.5
	prices	+11.3	+7.1	+1.5	+2.7	+7.8	+15.2	+7.6	−1.1	+2.3	+8.1	+1.9	+0.1
Michigan	income	+27.5	+28.6	+3.9	−5.2	+1.0	+10.3	+4.6	−3.9	+12.7	+9.7	+4.7	+9.5
	prices	+11.4	+5.9	+1.2	+2.8	+8.6	+14.0	+6.6	−1.6	+2.4	+8.8	+2.4	+1.5
Minnesota	income	+29.4	+16.1	+8.3	+9.3	+8.1	+6.3	+10.4	−8.4	+7.7	+10.2	+2.2	+3.0
	prices	+10.2	+5.5	+1.7	+2.6	+8.7	+15.5	+8.2	−1.3	+1.2	+7.8	+2.8	+0.7
Missouri	income	+23.9	+19.1	+12.8	+5.7	+6.1	+3.0	+13.5	−4.0	+8.2	+9.0	+5.0	+2.6
	prices	+11.3	+6.4	+1.9	+2.5	+8.1	+15.2	+7.4	−1.4	+1.3	+8.1	+2.8	+0.6
Ohio	income	+24.3	+21.6	+5.5	+1.9	−2.1	+8.1	+9.3	−6.6	+10.9	+13.6	+4.2	+7.5
	prices	+11.1	+6.6	+2.0	+2.1	+7.9	+14.6	+7.6	−1.9	+1.0	+7.7	+2.3	+0.9
Wisconsin	income	+29.8	+19.0	+11.9	+4.9	+2.3	+8.1	+7.0	−5.5	+9.3	+13.0	+3.0	+2.1
	prices	+11.1	+6.3	+2.2	+2.8	+7.9	+16.3	+7.5	−1.5	+2.7	+9.3	+2.7	+0.3
Northwest:	income	+50.9	+15.9	+9.4	+3.7	+1.6	+14.8	+5.5	−10.3	+10.3	+9.3	+2.9	−0.4
	prices	+11.4	+7.2	+2.5	+2.8	+7.8	+15.3	+7.6	−1.7	+1.4	+8.0	+2.0	+0.2
Colorado	income	+43.9	+11.6	+4.1	+10.8	−1.1	+16.1	+4.3	−4.4	+5.3	+12.9	+4.6	+2.8
	prices	+11.6	+6.6	+2.3	+2.7	+8.0	+15.7	+8.1	−1.2	+1.3	+8.4	+2.0	+0.4

Region and State		1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
Idaho	income	+59.5	+10.1	+7.5	+5.3	+8.2	+7.8	+2.1	−5.7	+1.9	+9.0	+8.0	−4.9
	prices	+13.6	+7.3	+2.0	+3.6	+7.4	+14.2	+7.7	−1.5	+1.6	+8.1	+2.0	+0.4
Kansas	income	+54.3	+19.2	+11.1	−0.6	−2.0	+17.8	−2.9	−6.2	+13.6	+8.4	+12.2	−4.8
	prices	+11.7	+7.7	+2.9	+2.8	+7.1	+16.5	+7.6	−2.8	+1.7	+8.2	+2.0	+0.5
Montana	income	+33.0	+20.2	+8.4	+2.3	+7.0	+15.6	+7.9	−17.1	+16.8	+10.8	−2.8	−0.1
	prices	+11.6	+7.2	+2.2	+3.1	+7.6	+14.9	+7.7	−1.5	+0.7	+7.2	+1.7	+0.3
Nebraska	income	+64.1	+16.3	+12.3	+2.5	+3.6	+4.7	+7.2	−2.0	+1.6	+7.7	+2.0	+0.4
	prices	+10.1	+6.6	+1.6	+2.1	+8.5	+14.7	+18.8	−12.6	+15.9	+2.0	+5.0	−3.2
North Dakota	income	+38.7	+25.2	+12.7	+1.0	+2.1	+39.4	−3.1	−21.0	+9.5	+7.6	−8.9	+4.1
	prices	+11.7	+7.8	+2.5	+3.6	+8.3	+15.8	+6.9	−1.7	+1.2	+8.1	+2.0	+0.4
South Dakota	income	+66.0	+0.1	+25.1	+7.0	+5.6	+11.3	+19.6	−24.8	+10.8	+15.5	−16.5	+10.8
	prices	+10.4	+7.8	+2.9	+3.4	+8.5	+15.8	+7.0	−1.7	+1.2	+8.1	+2.0	+0.3
Utah	income	+52.6	+20.5	−4.0	+4.7	−3.2	+11.6	+3.4	−1.9	+5.3	+13.0	+1.4	+3.5
	prices	+11.8	+6.3	+2.7	+2.6	+6.5	+12.9	+9.3	−0.8	+1.0	+7.9	+2.5	+0.5
Wyoming	income	+22.3	+16.6	+12.8	+6.3	+7.1	+12.5	+4.8	−3.1	+2.4	+14.6	−4.2	−0.4
	prices	+11.9	+7.3	+2.6	+3.0	+8.0	+15.7	+7.6	−1.4	+1.3	+8.4	+2.0	+0.4
Far West:	income	+28.6	+21.1	+6.2	−4.0	+2.4	+5.8	+3.5	+3.5	+7.3	+9.3	+3.1	+3.0
	prices	+12.4	+6.1	+2.1	+3.0	+7.7	+13.5	+7.2	−0.5	+0.9	+8.3	+2.8	+1.0
California	income	+24.3	+21.0	+6.4	−3.1	+4.1	+4.0	+3.1	−3.3	+7.8	+9.5	+2.9	+3.1
	prices	+12.4	+6.1	+2.1	+3.0	+7.8	+13.5	+7.0	−0.4	+0.6	+8.4	+2.9	+1.0
Nevada	income	+68.6	−5.3	−4.1	+7.9	+11.1	+4.5	+0.4	−1.4	+11.8	+11.6	+5.3	−2.3
	prices	+12.3	+7.1	+2.6	+3.3	+7.9	+11.1	+9.5	−0.9	+0.7	+8.3	+2.7	+0.8

Region and State		1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
Oregon	income	+41.1	+20.7	+3.3	−1.9	−0.2	+11.0	+4.2	−5.2	+4.4	+10.3	+2.5	+0.7
	prices	+13.7	+6.7	+1.6	+3.3	+7.2	+13.6	+8.4	−1.3	+1.7	+8.2	+2.0	+0.5
Washington	income	+39.1	+23.6	+7.4	−9.3	−4.7	+11.7	+5.0	−3.0	+7.0	+6.9	+3.9	+4.0
	prices	+12.3	+6.1	+1.7	+2.6	+7.8	+13.2	+8.0	−0.5	+1.9	+7.6	+2.4	+1.0

Percentage Change over Cyclical Periods in per Capita Income in Current and in Constant Dollars, and in Prices, by State and Region, 1929–1953

REGION AND STATE	1929–1933 INCOME			1933–1940 INCOME			1940–1945 INCOME		
	Current Dollars	1947–1949 Dollars	PRICES	Current Dollars	1947–1949 Dollars	PRICES	Current Dollars	1947–1949 Dollars	PRICES
United States	−46	−28	−25	+56	+44	+8	+107	+58	+31
New England:	−39	−20	−23	+41	+27	+11	+81	+40	+29
Connecticut	−41	−23	−23	+54	+34	+14	+78	+37	+30
Maine	−36	−18	−22	+37	+31	+5	+109	+59	+31
Massachusetts	−38	−20	−23	+39	+25	+11	+74	+36	+28
New Hampshire	−36	−16	−24	+34	+20	+12	+94	+48	+31
Rhode Island	−37	−19	−23	+33	+17	+14	+83	+42	+28
Vermont	−42	−25	−22	+47	+39	+5	+105	+56	+32
Middle East:	−43	−26	−23	+43	+34	+7	+89	+46	+30
Delaware	−44	−28	−23	+73	+60	+8	+57	+21	+30
District of Columbia	−32	−18	−18	+33	+26	+6	+29	0	+29
Maryland	−37	−19	−22	+61	+49	+8	+80	+35	+34
New Jersey	−44	−27	−23	+50	+39	+8	+82	+42	+28
New York	−43	−26	−23	+34	+26	+6	+90	+48	+28
Pennsylvania	−46	−28	−25	+52	+42	+7	+99	+52	+31
West Virginia	−43	−25	−24	+51	+40	+7	+120	+63	+35
Southeast:	−43	−24	−25	+65	+53	+8	+149	+85	+35
Alabama	−50	−31	−27	+74	+60	+9	+177	+106	+34
Arkansas	−50	−34	−25	+66	+54	+8	+182	+109	+34
Florida	−44	−24	−26	+73	+60	+8	+120	+61	+37
Georgia	−39	−19	−25	+58	+47	+8	+155	+89	+35
Kentucky	−46	−29	−25	+55	+43	+8	+145	+83	+34
Louisiana	−47	−30	−24	+61	+48	+9	+135	+78	+33
Mississippi	−55	−39	−26	+66	+53	+9	+189	+112	+36
North Carolina	−34	−12	−25	+54	+43	+8	+139	+76	+35
South Carolina	−34	−12	−25	+72	+59	+8	+141	+80	+34
Tennessee	−46	−27	−25	+66	+53	+8	+175	+102	+36
Virginia	−37	−18	−23	+67	+56	+7	+110	+58	+33
Southwest:	−47	−29	−25	+62	+49	+9	+140	+84	+30
Arizona	−54	−40	−24	+81	+68	+8	+115	+63	+32
New Mexico	−49	−32	−24	+82	+68	+8	+140	+80	+33
Oklahoma	−50	−34	−25	+58	+45	+9	+154	+94	+31
Texas	−45	−27	−25	+61	+47	+9	+137	+82	+30
Central:	−51	−33	−26	+70	+55	+10	+107	+59	+30
Illinois	−54	−37	−27	+68	+55	+9	+96	+52	+29
Indiana	−49	−32	−25	+83	+67	+9	+122	+70	+31
Iowa	−53	−38	−24	+88	+76	+7	+119	+66	+32
Michigan	−53	−33	−30	+85	+61	+15	+96	+50	+30
Minnesota	−46	−29	−23	+66	+51	+10	+109	+64	+28
Missouri	−45	−27	−24	+50	+39	+8	+116	+66	+30
Ohio	−48	−32	−24	+66	+52	+10	+105	+57	+31
Wisconsin	−51	−32	−27	+65	+54	+7	+128	+74	+31

REGION AND STATE	1929–1933 INCOME			1933–1940 INCOME			1940–1945 INCOME		
	Current Dollars	1947– 1949 Dollars	PRICES	Current Dollars	1947– 1949 Dollars	PRICES	Current Dollars	1947– 1949 Dollars	PRICES
Northwest:	−50	−35	−23	+72	+58	+9	+147	+88	+32
Colorado	−45	−29	−23	+55	+43	+9	+120	+68	+31
Idaho	−53	−39	−24	+83	+67	+10	+148	+82	+37
Kansas	−52	−37	−23	+64	+50	+9	+165	+100	+33
Montana	−52	−37	−23	+98	+82	+9	+111	+60	+32
Nebraska	−51	−35	−24	+57	+45	+8	+162	+109	+26
North Dakota	−51	−36	−24	+95	+80	+8	+188	+113	+35
South Dakota	−59	−46	−24	+120	+102	+9	+188	+114	+35
Utah	−49	−33	−23	+76	+60	+9	+130	+75	+32
Wyoming	−46	−30	−23	+64	+51	+8	+99	+50	+33
Far West:	−46	−30	−24	+62	+49	+9	+96	+48	+32
California	−46	−29	−24	+57	+46	+8	+87	+41	+32
Nevada	−45	−28	−24	+82	+69	+8	+81	+35	+35
Oregon	−47	−31	−24	+73	+56	+11	+128	+68	+35
Washington	−48	−33	−23	+71	+60	+9	+122	+68	+32

	1945–1950			1950–1953		
	INCOME			INCOME		
	Current Dollars	*1947–1949 Dollars*	PRICES	*Current Dollars*	*1947–1949 Dollars*	PRICES
United States	+21	−9	+33	+19	+7	+11
New England:	+19	−8	+29	+17	+7	+9
Connecticut	+21	−6	+28	+23	+11	+11
Maine	+11	−16	+32	+19	+8	+10
Massachusetts	+20	−6	+28	+13	+4	+9
New Hampshire	+20	−9	+32	+24	+13	+10
Rhode Island	+18	−10	+32	+13	+8	+5
Vermont	+10	−16	+32	+21	+10	+10
Middle East:	+19	−10	+32	+17	+7	+10
Delaware	+40	+5	+33	+18	+7	+10
District of Columbia	+44	+9	+32	+6	−4	+10
Maryland	+22	−9	+34	+19	+7	+11
New Jersey	+18	−8	+28	+22	+10	+12
New York	+14	−13	+31	+15	+5	+10
Pennsylvania	+23	−9	+35	+18	+8	+10
West Virginia	+20	−6	+28	+19	+10	+8
Southeast:	+20	−9	+32	+21	+10	+10
Alabama	+14	−14	+32	+24	+10	+12
Arkansas	+16	−12	+33	+14	+4	+10
Florida	+17	−12	+33	+13	+4	+8
Georgia	+20	−9	+33	+22	+8	+13
Kentucky	+20	−9	+32	+28	+17	+9
Louisiana	+26	−5	+32	+19	+7	+11
Mississippi	+19	−9	+31	+19	+7	+10
North Carolina	+26	−5	+32	+16	+6	+10
South Carolina	+20	−7	+30	+32	+18	+12
Tennessee	+12	−16	+33	+22	+12	+10
Virginia	+22	−8	+33	+19	+9	+10
Southwest:	+27	−6	+35	+18	+7	+10
Arizona	+21	−8	+31	+19	+7	+12
New Mexico	+32	0	+32	+19	+8	+11
Oklahoma	+18	−12	+35	+23	+12	+10
Texas	+30	−4	+36	+16	+6	+10
Central:	+24	−8	+35	+21	+9	+12
Illinois	+24	−10	+37	+19	+7	+11
Indiana	+21	−9	+33	+26	+13	+11
Iowa	+33	−2	+35	+7	−2	+10
Michigan	+26	−5	+33	+26	+11	+13
Minnesota	+25	−8	+36	+16	+4	+12
Missouri	+29	−4	+34	+18	+5	+12
Ohio	+20	−9	+32	+27	+14	+11
Wisconsin	+22	−10	+36	+19	+6	+13
Northwest:	+22	−9	+33	+12	+2	+10
Colorado	+21	−11	+35	+21	+9	+11

	1945–1950			1950–1953		
	INCOME			INCOME		
	Current Dollars	*1947–1949 Dollars*	PRICES	*Current Dollars*	*1947–1949 Dollars*	PRICES
Idaho	+14	−14	+32	+12	+1	+11
Kansas	+19	−10	+33	+16	+5	+10
Montana	+29	−2	+32	+8	−2	+9
Nebraska	+31	−2	+33	+4	−6	+10
North Dakota	+19	−11	+33	+2	−8	+11
South Dakota	+17	−12	+34	+7	−3	+11
Utah	+15	−12	+32	+18	+7	+11
Wyoming	+25	−7	+34	+9	−2	+11
Far West:	+16	−12	+32	+16	+3	+12
California	+16	−11	+31	+16	+3	+13
Nevada	+14	−14	+33	+14	+3	+11
Oregon	+29	−2	+31	+15	+2	+12
Washington	+16	−13	+34	+16	+4	+11

TABLE A-7

Per Capita Income in 1947–1949 Dollars, by State and Region, 1929–1953

Region and State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
United States	938	849	787	669	673	733	782	895	915	851	914	970	1,109
New England:	1,166	1,107	1,082	953	929	948	979	1,102	1,105	1,029	1,106	1,179	1,331
Connecticut	1,323	1,241	1,194	1,022	1,015	1,061	1,113	1,268	1,305	1,164	1,286	1,365	1,634
Maine	787	775	741	636	645	666	715	799	797	755	806	843	918
Massachusetts	1,224	1,167	1,146	1,024	982	988	1,008	1,137	1,134	1,064	1,141	1,230	1,335
New Hampshire	952	906	920	786	802	851	860	935	934	912	943	959	1,088
Rhode Island	1,216	1,135	1,128	1,013	991	993	1,040	1,135	1,130	1,036	1,115	1,156	1,399
Vermont	836	779	750	645	627	673	734	834	803	763	823	874	1,016
Middle East:	1,263	1,185	1,105	942	936	1,003	1,052	1,189	1,203	1,121	1,192	1,253	1,387
Delaware	1,304	1,106	1,096	929	940	1,017	1,076	1,265	1,310	1,152	1,311	1,508	1,631
District of Columbia	1,709	1,721	1,692	1,562	1,404	1,475	1,581	1,852	1,777	1,714	1,707	1,769	1,711
Maryland	1,023	969	940	833	826	877	913	1,031	1,073	1,026	1,105	1,229	1,378
New Jersey	1,280	1,207	1,134	972	935	995	1,050	1,171	1,189	1,133	1,223	1,300	1,426
New York	1,522	1,423	1,316	1,113	1,126	1,193	1,240	1,390	1,395	1,307	1,373	1,421	1,569
Pennsylvania	1,051	983	916	770	761	832	881	1,008	1,040	940	1,017	1,081	1,217
West Virginia	643	561	532	462	481	562	572	668	678	618	641	675	764
Southeast:	486	407	384	350	367	424	450	517	519	496	529	560	661
Alabama	422	333	311	287	292	352	371	438	427	401	422	467	582
Arkansas	431	308	289	282	285	317	352	421	414	407	428	438	544
Florida	676	627	586	523	512	580	628	733	753	724	775	817	857
Georgia	461	399	369	346	375	435	458	514	506	486	508	551	641
Kentucky	524	440	417	363	374	413	448	526	542	486	517	536	598
Louisiana	601	515	502	425	421	486	501	578	589	595	621	621	706
Mississippi	382	278	234	232	233	288	307	377	346	320	351	356	471
North Carolina	437	372	350	324	385	447	466	504	520	497	537	551	653
South Carolina	350	302	287	267	309	365	379	431	432	408	448	492	586
Tennessee	500	417	387	344	363	433	455	526	526	488	521	557	684
Virginia	597	534	526	497	492	584	607	667	673	650	696	769	901

(continued on next page)

Region and State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Southwest:	641	536	479	422	452	483	522	600	647	618	650	672	771
Arizona	787	677	606	481	476	554	597	712	782	727	776	798	929
New Mexico	539	468	429	350	365	422	466	562	584	548	587	615	717
Oklahoma	630	504	439	380	415	426	475	536	584	547	575	603	678
Texas	643	545	492	440	470	505	538	619	665	643	674	692	794
Central:	992	868	793	658	662	733	810	932	969	877	966	1,027	1,193
Illinois	1,270	1,086	977	809	803	875	939	1,082	1,146	1,046	1,155	1,243	1,404
Indiana	810	702	648	532	549	620	674	796	836	756	848	916	1,118
Iowa	762	722	617	442	474	423	608	660	713	715	801	832	990
Michigan	1,005	854	801	702	671	830	916	1,029	1,059	878	995	1,079	1,232
Minnesota	806	754	693	569	569	610	692	803	818	793	838	859	957
Missouri	845	773	724	612	613	648	698	792	795	761	822	855	997
Ohio	1,055	918	851	693	716	806	873	1,020	1,066	931	1,026	1,086	1,291
Wisconsin	848	741	655	564	575	636	710	819	833	786	836	855	1,057
Northwest:	761	714	622	475	493	536	606	694	720	680	716	778	928
Colorado	889	828	742	620	628	675	714	844	876	806	868	895	1,013
Idaho	758	687	566	452	466	556	600	714	754	705	721	779	917
Kansas	770	742	661	487	486	529	578	671	708	649	659	729	912
Montana	859	721	640	527	539	686	782	876	894	829	885	983	1,116
Nebraska	742	745	642	429	483	465	573	647	649	622	649	702	812
North Dakota	565	495	393	339	362	368	472	523	563	526	572	650	897
South Dakota	608	575	482	320	329	418	480	513	520	559	618	665	813
Utah	756	681	605	490	504	548	613	705	746	726	748	805	952
Wyoming	993	924	851	686	696	780	830	945	933	924	988	1,052	1,167
Far West:	1,213	1,120	1,026	850	853	932	991	1,179	1,182	1,114	1,175	1,273	1,488
California	1,314	1,225	1,127	935	931	1,007	1,066	1,261	1,269	1.198	1,254	1,363	1,559
Nevada	1,143	1,101	1,063	858	823	944	1,057	1,197	1,214	1,091	1,311	1,391	1,443
Oregon	936	823	760	632	648	732	795	946	931	870	943	1,010	1,254
Washington	1,019	917	813	669	685	773	821	1,003	993	944	1,000	1,071	1,340

Region and State	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
United States	1,261	1,428	1,532	1,537	1,443	1,350	1,345	1,304	1,399	1,424	1,450	1,499
New England:	1,449	1,589	1,666	1,655	1,564	1,457	1,421	1,401	1,527	1,553	1,574	1,636
Connecticut	1,803	1,920	1,951	1,871	1,741	1,647	1,585	1,576	1,768	1,851	1,849	1,959
Maine	1,102	1,364	1,369	1,342	1,306	1,180	1,167	1,108	1,128	1,153	1,216	1,222
Massachusetts	1,413	1,556	1,655	1,676	1,586	1,469	1,444	1,436	1,570	1,555	1,577	1,625
New Hampshire	1,171	1,285	1,396	1,419	1,372	1,255	1,206	1,188	1,287	1,355	1,395	1,452
Rhode Island	1,577	1,634	1,716	1,647	1,562	1,460	1,406	1,374	1,483	1,541	1,510	1,608
Vermont	1,066	1,192	1,273	1,360	1,306	1,183	1,166	1,093	1,136	1,179	1,219	1,251
Middle East:	1,499	1,674	1,802	1,833	1,712	1,573	1,553	1,520	1,649	1,657	1,683	1,759
Delaware	1,704	1,838	1,888	1,821	1,727	1,607	1,589	1,671	1,916	1,975	1,964	2,048
District of Columbia	1,665	1,697	1,746	1,768	1,700	1,586	1,643	1,763	1,929	1,938	1,886	1,853
Maryland	1,580	1,703	1,720	1,661	1,556	1,417	1,408	1,386	1,518	1,560	1,548	1,625
New Jersey	1,562	1,771	1,892	1,841	1,696	1,595	1,518	1,518	1,685	1,717	1,751	1,846
New York	1,676	1,842	2,010	2,105	1,973	1,792	1,750	1,702	1,836	1,824	1,848	1,923
Pennsylvania	1,327	1,518	1,635	1,641	1,528	1,394	1,397	1,367	1,492	1,491	1,529	1,612
West Virginia	853	966	1,060	1,099	1,040	1,019	1,075	1,018	1,034	1,104	1,128	1,141
Southeast:	783	909	1,021	1,035	956	883	899	878	937	970	1,002	1,027
Alabama	714	852	943	961	858	810	813	763	831	850	884	915
Arkansas	669	745	871	917	892	775	846	783	802	834	857	833
Florida	988	1,173	1,301	1,313	1,221	1,085	1,065	1,100	1,159	1,160	1,169	1,208
Georgia	757	915	1,025	1,039	950	895	897	870	943	979	991	1,038
Kentucky	703	866	950	983	922	848	887	868	895	989	1,016	1,051
Louisiana	819	1,001	1,105	1,108	952	895	948	1,000	1,041	1,037	1,112	1,116
Mississippi	586	658	768	755	683	674	718	635	688	705	738	739
North Carolina	771	846	945	972	948	883	875	853	923	942	940	974
South Carolina	692	793	888	888	866	784	820	777	825	899	972	972
Tennessee	773	922	1,084	1,127	994	899	889	866	946	982	1,006	1,058
Virginia	1,076	1,127	1,226	1,213	1,117	1,033	1,051	1,031	1,113	1,149	1,184	1,209

Region and State	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
Southwest:	961	1,136	1,259	1,238	1,146	1,123	1,102	1,152	1,167	1,193	1,240	1,246
Arizona	1,224	1,168	1,286	1,304	1,221	1,170	1,169	1,149	1,203	1,291	1,320	1,285
New Mexico	877	971	1,073	1,110	1,032	1,000	999	1,037	1,111	1,171	1,180	1,194
Oklahoma	887	1,018	1,202	1,172	1,082	1,044	1,074	1,068	1,027	1,058	1,129	1,149
Texas	971	1,180	1,287	1,262	1,165	1,150	1,112	1,184	1,208	1,222	1,266	1,274
Central:	1,344	1,541	1,622	1,633	1,545	1,434	1,467	1,387	1,504	1,539	1,562	1,638
Illinois	1,511	1,696	1,816	1,892	1,809	1,679	1,705	1,586	1,702	1,728	1,744	1,819
Indiana	1,276	1,482	1,539	1,561	1,410	1,323	1,351	1,280	1,424	1,487	1,493	1,610
Iowa	1,199	1,388	1,350	1,385	1,457	1,207	1,453	1,260	1,359	1,349	1,374	1,327
Michigan	1,411	1,713	1,758	1,622	1,508	1,461	1,433	1,399	1,540	1,552	1,587	1,712
Minnesota	1,123	1,237	1,318	1,405	1,397	1,288	1,286	1,217	1,295	1,325	1,318	1,348
Missouri	1,110	1,243	1,376	1,419	1,394	1,247	1,317	1,282	1,369	1,381	1,411	1,439
Ohio	1,444	1,648	1,705	1,702	1,544	1,457	1,480	1,410	1,548	1,633	1,664	1,773
Wisconsin	1,236	1,383	1,513	1,544	1,465	1,362	1,355	1,300	1,383	1,430	1,434	1,461
Northwest:	1,257	1,358	1,450	1,462	1,378	1,372	1,345	1,227	1,335	1,352	1,364	1,356
Colorado	1,305	1,366	1,390	1,501	1,374	1,379	1,331	1,288	1,339	1,394	1,430	1,463
Idaho	1,288	1,322	1,392	1,415	1,424	1,344	1,274	1,222	1,232	1,305	1,237
Kansas	1,260	1,396	1,507	1,457	1,332	1,348	1,217	1,174	1,311	1,313	1,444	1,381
Montana	1,330	1,492	1,583	1,571	1,561	1,570	1,573	1,325	1,534	1,586	1,516	1,511
Nebraska	1,211	1,321	1,460	1,466	1,400	1,278	1,417	1,264	1,442	1,366	1,407	1,357
North Dakota	1,113	1,294	1,423	1,387	1,307	1,574	1,427	1,146	1,240	1,234	1,103	1,144
South Dakota	1,222	1,132	1,376	1,424	1,386	1,332	1,489	1,138	1,246	1,331	1,090	1,204
Utah	1,300	1,474	1,378	1,406	1,279	1,264	1,196	1,182	1,232	1,289	1,275	1,313
Wyoming	1,276	1,387	1,525	1,574	1,561	1,517	1,477	1,451	1,468	1,552	1,459	1,446
Far West:	1,700	1,940	2,018	1,881	1,789	1,667	1,610	1,564	1,664	1,680	1,687	1,718
California	1,725	1,969	2,047	1,927	1,861	1,705	1,644	1,598	1,712	1,730	1,731	1,764
Nevada	2,167	1,917	1,791	1,872	1,928	1,814	1,663	1,654	1,837	1,893	1,942	1,881
Oregon	1,557	1,761	1,790	1,699	1,582	1,545	1,484	1,425	1,464	1,492	1,499	1,502
Washington	1,660	1,933	2,041	1,804	1,594	1,573	1,530	1,491	1,566	1,555	1,578	1,624

Per Capita Real Income (1947–1949 Dollars), by State and Region, 1929–1953

(*1929 = 100*)

Region and State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
United States	100	91	84	71	72	78	83	95	98	91	97	103	118
New England:	100	95	93	82	80	81	84	95	95	88	95	101	114
Connecticut	100	94	90	77	77	80	84	96	99	88	97	103	124
Maine	100	98	94	81	82	85	91	102	101	96	102	107	117
Massachusetts	100	95	94	84	80	81	82	93	93	87	93	100	109
New Hampshire	100	95	97	83	84	89	90	98	98	96	99	101	114
Rhode Island	100	93	93	83	81	82	86	93	93	85	92	95	115
Vermont	100	93	90	77	75	81	88	100	96	91	98	105	122
Middle East:	100	94	87	75	74	79	83	94	95	88	94	99	110
Delaware	100	85	84	71	72	78	83	97	100	88	101	116	125
District of Co-													
lumbia	100	101	99	91	82	86	93	108	104	100	100	104	100
Maryland	100	95	92	81	81	86	89	101	105	100	108	120	135
New Jersey	100	94	89	76	73	78	82	91	93	89	96	102	111
New York	100	93	86	73	74	78	81	91	92	86	90	93	103
Pennsylvania	100	94	87	73	72	79	84	96	99	89	97	103	116
West Virginia	100	87	83	72	75	87	89	104	105	96	100	105	119
Southeast:	100	84	79	72	76	87	93	106	107	102	109	115	136
Alabama	100	79	74	68	69	83	88	104	101	95	100	111	138
Arkansas	100	71	67	65	66	74	82	98	96	94	99	102	126
Florida	100	93	87	77	76	86	93	108	111	107	115	121	127
Georgia	100	87	80	75	81	94	99	111	110	105	110	120	139
Kentucky	100	84	80	69	71	79	85	100	103	93	99	102	114
Louisiana	100	86	84	71	70	81	83	96	98	99	103	103	117
Mississippi	100	73	61	61	61	75	80	99	91	84	92	93	123
North Carolina	100	85	80	74	88	102	107	115	119	114	123	126	149
South Carolina	100	86	82	76	88	104	108	123	123	117	128	141	167
Tennessee	100	83	77	69	73	87	91	105	105	98	104	111	137
Virginia	100	89	88	83	82	98	102	112	113	109	117	129	151
Southwest:	100	84	75	66	71	75	81	94	101	96	101	105	120
Arizona	100	86	77	61	60	70	76	90	99	92	99	101	118
New Mexico	100	87	80	65	68	78	86	104	108	102	109	114	133
Oklahoma	100	80	70	60	66	68	75	85	93	87	91	96	108
Texas	100	85	77	68	73	79	84	96	103	100	105	108	123
Central:	100	87	80	66	67	74	82	94	98	88	97	104	120
Illinois	100	86	77	64	63	69	74	85	90	82	91	98	111
Indiana	100	87	80	66	68	77	83	98	103	93	105	113	138
Iowa	100	95	81	58	62	56	80	87	94	94	105	109	130
Michigan	100	85	80	70	67	83	91	102	105	87	99	107	123
Minnesota	100	94	86	71	71	76	86	100	101	98	104	107	119
Missouri	100	91	86	72	73	77	83	94	94	90	97	101	118
Ohio	100	87	81	66	68	76	83	97	101	88	97	103	122
Wisconsin	100	87	77	67	68	75	84	97	98	93	99	104	125
Northwest:	100	94	82	62	65	70	80	91	95	89	94	102	122
Colorado	100	93	83	70	71	76	80	95	99	91	98	101	114
Idaho	100	91	75	60	61	73	79	94	99	93	95	103	121

(continued on next page)

TABLE A-8 (continued)

(1929 = 100)

Region and State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Kansas	100	96	86	63	63	69	75	87	92	84	86	95	118
Montana	100	84	75	61	63	80	91	102	104	97	103	114	130
Nebraska	100	100	87	58	65	63	77	87	87	84	87	95	109
North Dakota	100	88	70	60	64	65	84	93	100	93	101	115	159
South Dakota	100	95	79	53	54	69	79	84	86	92	102	109	134
Utah	100	90	80	65	67	72	81	93	99	96	99	106	126
Wyoming	100	93	86	69	70	79	84	95	94	93	94	106	118
Far West:	100	92	85	70	70	77	82	97	97	92	97	105	123
California	100	93	86	71	71	77	81	96	97	91	96	104	119
Nevada	100	96	93	75	72	83	92	105	106	95	115	122	126
Oregon	100	88	81	68	69	78	85	101	99	93	101	108	134
Washington	100	90	80	66	67	76	81	98	97	93	98	105	132

$(1929 = 100)$

Region and State	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
United States	134	152	163	164	154	144	143	139	149	152	155	160
New England:	124	136	143	142	134	125	122	120	131	133	135	140
Connecticut	136	145	147	141	132	124	120	119	134	140	140	148
Maine	140	173	174	171	166	150	148	141	143	147	154	155
Massachusetts	115	127	135	137	130	120	118	117	128	127	129	133
New Hampshire	123	135	147	149	144	132	127	125	135	142	147	153
Rhode Island	130	134	141	135	128	120	116	113	122	127	124	132
Vermont	128	143	152	163	156	142	139	131	136	141	146	150
Middle East:	119	133	143	145	136	125	123	120	131	131	133	139
Delaware	131	141	145	140	132	123	122	128	147	151	151	157
District of Columbia	97	99	102	103	99	93	96	103	113	113	110	108
Maryland	154	166	168	162	152	139	138	135	148	152	151	159
New Jersey	122	138	148	144	132	125	119	119	132	134	137	144
New York	110	121	132	138	130	118	115	112	121	120	121	126
Pennsylvania	126	144	156	156	145	133	133	130	142	142	145	153
West Virginia	133	150	165	171	162	158	167	158	161	172	175	177
Southeast:	161	187	210	213	197	182	185	181	193	200	206	211
Alabama	169	202	223	228	203	192	193	181	197	201	209	217
Arkansas	155	173	202	213	207	180	196	182	186	194	199	193
Florida	146	174	192	194	181	161	158	163	171	172	173	179
Georgia	164	198	222	225	206	194	195	189	205	212	215	225
Kentucky	134	165	181	188	176	162	169	166	171	189	194	201
Louisiana	136	167	184	184	158	149	158	166	173	173	185	186
Mississippi	153	172	201	198	179	176	188	166	180	185	193	193
North Carolina	176	194	216	222	217	202	200	195	211	216	215	223
South Carolina	198	227	254	254	247	224	234	222	236	257	278	278
Tennessee	155	184	217	225	199	180	178	173	189	196	201	212
Virginia	180	189	205	203	187	173	176	173	186	192	198	203
Southwest:	150	177	196	193	179	175	172	180	182	186	193	194
Arizona	156	148	163	166	155	149	149	146	153	164	168	163
New Mexico	163	180	199	206	191	186	185	192	206	217	219	222
Oklahoma	141	162	191	186	172	166	170	170	163	168	179	182
Texas	151	184	200	196	181	179	173	184	188	190	197	198
Central:	135	155	164	165	156	145	148	139	152	155	157	165
Illinois	119	134	143	149	142	132	134	125	134	136	137	143
Indiana	158	183	190	193	174	163	167	158	176	184	184	199
Iowa	157	182	177	182	191	158	191	165	178	177	180	174
Michigan	141	170	175	161	150	145	143	139	153	154	158	170
Minnesota	139	153	164	174	173	160	160	151	161	164	164	167
Missouri	131	147	163	168	165	148	156	152	162	163	167	170
Ohio	137	156	162	161	146	138	140	134	147	155	158	168
Wisconsin	146	163	178	182	173	161	160	153	163	169	169	172
Northwest:	165	178	191	192	181	180	177	161	175	178	179	178
Colorado	147	154	156	169	155	155	150	145	151	157	161	165
Idaho	170	174	184	187	188	177	168	161	161	163	172	163
Kansas	164	181	196	189	173	175	158	152	170	171	188	179
Montana	155	174	184	183	182	183	183	154	179	185	176	176

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Region and State	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
Nebraska	163	178	197	198	189	172	191	170	194	184	190	183
North Dakota	197	229	252	245	231	279	253	203	219	218	195	202
South Dakota	201	186	226	234	228	219	245	187	205	219	179	198
Utah	172	195	182	186	169	167	158	156	163	171	169	174
Wyoming	128	140	154	159	157	153	149	146	148	156	147	146
Far West:	140	160	166	155	147	137	133	129	137	138	139	141
California	131	150	156	147	142	130	125	122	130	132	132	134
Nevada	190	168	157	164	169	159	145	145	161	166	170	165
Oregon	166	188	191	182	169	165	159	152	156	159	160	160
Washington	163	190	200	177	156	154	150	146	154	153	155	159

State and Regional per Capita Real Income (1947–1949 Dollars) as Percentage of National Average, 1929–1953

(*United States* = *100*)

Region and State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
United States	100	100	100	100	100	100	100	100	100	100	100	100	100
New England:	124	130	137	142	138	129	125	123	121	121	121	122	120
Connecticut	141	146	152	153	151	145	142	142	143	137	141	141	147
Maine	84	91	94	95	96	91	91	89	87	89	88	87	83
Massachusetts	130	137	146	153	146	135	129	127	124	125	125	127	120
New Hampshire	101	107	117	117	119	116	110	104	102	107	103	99	98
Rhode Island	130	134	143	151	147	135	133	127	123	122	122	119	126
Vermont	89	92	95	96	93	92	94	93	88	90	90	90	92
Middle East:	135	140	140	141	139	137	135	133	131	132	130	129	125
Delaware	139	130	139	139	140	139	138	141	143	135	143	155	147
District of Co-lumbia	182	203	215	233	209	201	202	207	194	201	187	182	154
Maryland	109	114	119	125	123	120	117	115	117	121	121	127	124
New Jersey	136	142	144	145	139	136	134	131	130	133	134	134	129
New York	162	168	167	166	167	163	159	155	152	154	150	146	141
Pennsylvania	112	116	116	115	113	114	113	113	114	110	111	111	110
West Virginia	69	66	68	69	71	77	73	75	74	73	70	70	69
Southeast:	52	48	49	52	55	58	58	58	57	58	58	58	60
Alabama	45	39	40	43	43	48	47	49	47	47	46	48	52
Arkansas	46	36	37	42	42	43	45	47	45	48	47	45	49
Florida	72	74	74	78	76	79	80	82	82	85	85	84	77
Georgia	49	47	47	52	56	59	59	57	55	57	56	57	58
Kentucky	56	52	53	54	56	56	57	59	59	57	57	55	54
Louisiana	64	61	64	64	63	66	64	65	64	70	68	64	64
Mississippi	41	33	30	35	35	39	39	42	38	38	38	37	42
North Carolina	47	44	44	48	57	61	60	56	57	58	59	57	59
South Carolina	37	36	36	40	46	50	48	48	47	48	49	51	53
Tennessee	53	49	49	51	54	59	58	59	57	57	57	57	62
Virginia	64	63	67	74	73	80	78	75	74	76	76	79	81
Southwest:	68	63	61	63	67	66	67	67	71	73	71	69	70
Arizona	84	80	77	72	71	76	76	80	85	85	85	82	84
New Mexico	57	55	55	52	54	58	60	63	64	64	64	63	65
Oklahoma	67	59	56	57	62	58	61	60	64	64	63	62	61
Texas	69	64	63	66	70	69	69	69	73	76	74	71	72
Central:	106	102	101	98	98	100	104	104	106	103	106	106	108
Illinois	135	128	124	121	119	119	120	121	125	123	126	128	127
Indiana	86	83	82	80	82	85	86	89	91	89	93	94	101
Iowa	81	85	78	66	70	58	78	74	78	84	88	86	89
Michigan	107	101	102	105	100	113	117	115	116	103	109	111	111
Minnesota	86	89	88	85	85	83	88	90	89	93	92	89	86
Missouri	90	91	92	91	91	88	89	88	87	89	90	88	90
Ohio	112	108	108	104	106	110	112	114	117	109	112	112	116
Wisconsin	90	87	83	84	85	87	91	92	91	92	91	91	95

(*United States = 100*)

Region and State	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Northwest:	81	84	79	71	73	73	77	78	79	80	78	80	84
Colorado	95	98	94	93	93	92	91	94	96	95	95	92	91
Idaho	92	81	72	68	69	76	77	80	82	83	79	80	83
Kansas	82	87	84	73	72	72	74	75	77	76	72	75	82
Montana	81	85	81	79	80	94	100	98	98	97	97	101	101
Nebraska	79	88	82	64	72	63	73	72	71	73	71	72	73
North Dakota	60	58	50	51	54	50	60	58	62	62	63	67	81
South Dakota	65	68	61	48	49	57	61	57	57	66	68	69	73
Utah	81	80	77	73	75	75	78	79	82	85	82	83	86
Wyoming	106	109	108	103	103	106	106	106	102	109	108	108	105
Far West:	129	132	130	127	127	127	127	132	129	131	129	131	134
California	140	144	143	140	138	137	136	141	139	141	137	141	141
Nevada	122	130	135	128	122	129	135	134	133	128	143	143	130
Oregon	100	97	97	94	96	100	102	106	102	102	103	104	113
Washington	109	108	103	100	102	105	105	112	109	111	109	110	121

(United States = 100)

Region and State	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
United States	100	100	100	100	100	100	100	100	100	100	100	100
New England:	115	111	109	108	108	108	106	107	109	109	109	109
Connecticut	143	134	127	122	121	122	118	121	126	130	128	131
Maine	87	96	89	87	91	87	87	85	81	81	84	82
Massachusetts	112	109	108	109	110	109	107	110	112	109	109	108
New Hampshire	93	90	91	92	95	93	90	91	92	95	96	97
Rhode Island	125	114	112	107	108	108	105	105	106	108	104	107
Vermont	85	83	83	88	91	88	87	84	81	83	84	83
Middle East:	119	117	118	119	119	117	115	117	118	116	116	117
Delaware	135	129	123	118	120	119	118	128	137	139	135	137
District of Columbia	132	119	114	115	118	117	122	135	138	136	130	124
Maryland	125	119	112	108	108	105	105	106	109	110	107	108
New Jersey	124	124	123	120	118	118	113	116	120	121	121	123
New York	133	129	131	137	137	133	130	131	131	128	127	128
Pennsylvania	105	106	107	107	106	103	104	105	107	105	105	108
West Virginia	68	68	69	72	72	75	80	78	74	78	78	76
Southeast:	62	64	67	67	66	65	67	67	67	68	69	69
Alabama	57	60	62	63	59	60	60	59	59	60	61	61
Arkansas	53	52	57	60	62	57	63	60	57	59	59	56
Florida	78	80	85	85	85	80	79	84	83	81	81	81
Georgia	60	64	67	68	66	66	67	67	67	69	68	69
Kentucky	56	61	62	64	64	63	66	67	64	69	70	70
Louisiana	65	70	72	72	66	66	70	77	74	73	77	74
Mississippi	46	46	50	49	47	50	53	49	49	50	51	49
North Carolina	61	59	62	63	66	65	65	65	66	66	65	65
South Carolina	55	56	58	58	60	54	61	60	59	63	67	65
Tennessee	61	65	71	73	69	67	66	66	68	69	69	71
Virginia	85	79	80	79	77	77	78	79	80	81	82	81
Southwest:	76	80	82	81	79	83	82	88	83	84	86	83
Arizona	97	82	84	85	85	87	87	88	86	91	91	86
New Mexico	70	68	70	72	72	74	74	80	79	82	81	80
Oklahoma	70	71	78	76	75	77	80	82	73	74	78	77
Texas	77	83	84	82	81	85	83	91	86	86	87	85
Central:	107	108	106	106	107	106	109	106	108	108	108	109
Illinois	120	119	119	123	125	124	127	122	122	121	120	121
Indiana	101	104	100	102	98	98	100	98	102	104	103	107
Iowa	95	97	88	90	101	89	108	97	97	95	95	89
Michigan	112	120	115	106	105	108	107	107	110	109	109	114
Minnesota	89	87	86	91	97	95	96	93	93	93	91	90
Missouri	88	87	90	92	97	92	98	98	98	97	97	96
Ohio	115	115	111	111	107	108	110	108	111	115	115	118
Wisconsin	98	97	99	100	102	101	101	100	99	100	99	97
Northwest:	100	95	95	95	95	102	100	94	95	95	94	90
Colorado	103	96	91	98	95	102	99	99	96	98	99	98
Idaho	102	93	91	92	99	100	95	93	87	87	90	83
Kansas	100	98	98	95	92	100	90	90	94	92	100	92

(*United States = 100*)

Region and State	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
Montana	105	104	103	102	108	116	117	101	110	111	105	101
Nebraska	96	93	95	95	97	95	105	97	103	96	97	91
North Dakota	88	91	93	90	91	117	106	88	89	87	76	76
South Dakota	97	79	90	93	96	99	111	87	89	93	75	80
Utah	103	103	90	91	89	94	89	91	88	91	88	88
Wyoming	101	97	100	102	108	112	110	111	105	109	101	96
Far West:	135	136	132	122	124	123	120	120	119	118	116	115
California	137	138	134	125	129	126	122	123	122	121	119	118
Nevada	172	134	117	122	134	134	124	127	131	133	134	125
Oregon	123	123	117	111	110	114	110	109	105	105	103	100
Washington	132	135	133	117	110	117	114	114	112	109	109	108

Percentage Change in per Capita Income and in Relative Position of States and Regions to the National Average, 1929–1953

Region and State	CHANGE IN PER CAPITA INCOME		CHANGE IN RELATIVE POSITION	
	Current Dollars	1947–1949 Dollars	Current Dollars	1947–1949 Dollars
United States	151	60	—	—
New England:	118	40	−13	−12
Connecticut	139	48	−5	−8
Maine	142	55	−4	−3
Massachusetts	102	33	−20	−17
New Hampshire	148	53	−1	−4
Rhode Island	106	32	−18	−18
Vermont	133	50	−7	−6
Middle East:	114	39	−15	−13
Delaware	151	57	0	−2
District of Columbia	77	8	−29	−32
Maryland	164	59	5	−1
New Jersey	121	44	−12	−10
New York	92	26	−24	−21
Pennsylvania	138	53	−5	−4
West Virginia	171	75	8	9
Southeast:	237	111	34	32
Alabama	242	117	36	36
Arkansas	208	93	23	21
Florida	183	79	13	12
Georgia	260	125	43	41
Kentucky	215	101	25	26
Louisiana	201	86	20	16
Mississippi	205	93	22	21
North Carolina	255	138	41	49
South Carolina	335	178	73	74
Tennessee	240	124	35	40
Virginia	223	103	29	27
Southwest:	211	94	24	21
Arizona	157	63	2	2
New Mexico	252	122	40	39
Oklahoma	192	82	16	14
Texas	218	98	27	24
Central:	162	65	4	3
Illinois	124	43	−11	−11
Indiana	215	99	25	24
Iowa	178	74	11	9
Michigan	169	70	7	6
Minnesota	173	67	9	4
Missouri	170	70	8	6
Ohio	169	68	7	5
Wisconsin	170	72	8	8

| Region and State | CHANGE IN PER CAPITA INCOME | | CHANGE IN RELATIVE POSITION | |
	Current Dollars	1947–1949 Dollars	Current Dollars	1947–1949 Dollars
Northwest:	187	78	14	11
Colorado	172	65	8	3
Idaho	172	63	8	2
Kansas	191	79	16	12
Montana	181	76	12	10
Nebraska	175	83	10	14
North Dakota	233	102	33	26
South Dakota	227	98	30	24
Utah	181	74	12	9
Wyoming	140	46	—4	—9
Far West:	130	41	—8	—12
California	116	34	—14	—16
Nevada	166	65	6	3
Oregon	169	60	7	0
Washington	164	59	5	—1

COMMENT

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Abner Hurwitz and Carlyle P. Stallings have my respect for undertaking the considerable job of assembling all the information available to them on consumer price trends, of developing price indexes for each state and region for the period since 1929, of presenting tabulations of per capita real income trends for the twenty-five-year period every which way, of inventorying the major gaps in price data; and, as a final tribute to thoroughness and persistence, of preparing an evaluation of the quality of their price indexes. Furthermore, they have anticipated most of the possible criticisms of their work.

They have my sympathy for the somewhat negative results of their research. As they indicate on page 217, they have found little variation in price trends among the states and regions. This does not imply that they have been wasting their time. If it can be assumed that consumer price trends are much the same over time throughout the nation, the task of analyzing income trends is simplified. Is such an assumption justified?

If 1953 is compared with 1929, the regional consumer price indexes developed by Hurwitz and Stallings show a spread in regional

price trends of from 2 per cent below to 2.5 per cent above the United States average. This variation is small, if not insignificant, compared with the rise of almost 60 per cent in average consumer prices during the twenty-four years.

Do the price indexes adequately reflect regional variations in price trends? I am not questioning what the authors have done to the urban indexes; they had a considerable body of price data and experience to work with. But they admit that the weakest part of their calculations is their treatment of the rural price index.

Hurwitz and Stallings have developed a rural price index for the United States (covering the rural nonfarm people as well as farm people) by combining the food, clothing, and house-furnishings components of the United States prices paid by farmers index published by the Department of Agriculture with the housing, fuels, and miscellaneous services groups of the Bureau of Labor Statistics consumer price index. This is a compromise to allow for the omission of service rates from the PPF series and to give weight to the combined living expenditure pattern of rural farm and nonfarm people. In general, the authors were explicit in explaining what they did. In this crucial step also they should have shown in detail how they obtained the combined rural expenditure weights, especially those assigned to housing and food. Based on what I think they did, I question applying urban housing trends to farm families or even to rural nonfarm families. I might also have tried to make allowance for the fact that a substantial part of the farm income is from farm-produced food.

The second critical choice was to use the United States rural price index for each state in the absence of sufficient price data to construct individual state indexes. This is not a reasonable way of determining regional and state variations in price trends. Would relying entirely on urban price trends have made much difference? Urban regional price trends are very much like the total regional trends. This is not unexpected, because urban price trends for the United States for some components were used in the rural index, and the trends in urban regional indexes were all much the same. Perhaps it would have been better to apply United States weights to the regional and state prices paid by farmers for food and clothing for the available periods to determine what variation existed in these components.

Would rural indexes that adequately reflect price trends in each of the several regions give significant differences in interregional variation? An index of prices paid by farmers for living items published recently by Montana for the period 1935–1953 shows that,

compared with 1929, Montana prices rose some 11 per cent less than United States prices. But in Montana, the postwar pattern of purchases was priced in the index, while the index for the United States represents prewar patterns. The difference between the two indexes may reflect largely the diverging biases of the Laspeyre and Paasche index methods over time.

Although urban price trends are weak for the early years, they have a much better base for acceptance than rural trends. Yet they show little interregional difference. Even where the rise in real incomes per capita has been greatest—in the Southeast, Southwest, and Northwest—price trends have not differed significantly from those in regions where income growth has been much slower. Should we expect that regional rural indexes, if they were available, would show something else? This is a question that is not likely to be answered from materials presently available. But if differences do exist in regional price trends, they appear more likely to rise out of population shifts from the country to the city than from different regional movements of either urban or rural consumer prices.

I believe that effort would better be directed, once again, toward developing a basis for comparing regional and state real incomes and toward determining the differences in purchasing power between, for example, the $1,000 per capita income in the Southeast and the $1,800 income in the middle eastern states. Such differences are also pertinent to comparisons of incomes of farm people with others. Some of the missing data listed by the authors may become available in the next year or so. The Department of Agriculture has made a survey of farm family expenditure patterns. When published, it will provide the first nationwide information on farm family expenditures in the postwar period and the survey was planned so that it would obtain enough information to indicate major regional differences in living patterns.

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Abner Hurwitz and Carlyle P. Stallings had a difficult task. I agree with Nathan M. Koffsky that they have carried it out with great skill and ingenuity and have done an admirable job in describing their procedures. Apart from the price indexes of various cities included in the Bureau of Labor Statistics consumer price index, only fragmentary price information and scanty supplementary facts for the development of suitable weights were available. The list of various price series in Table A-1 will be useful to other workers in this field.

The authors devoted considerable space to the appraisal of the series, their coverage of populations in various states and of items in consumer budgets, and the adequacy of weight diagrams to represent current consumption. Perhaps more should have been said about differences among the indexes in the methods of price collection, especially as these bear on correlations between income and price change. Some comparisons were made between the clothing index of the CPI and the prices paid by farmers index. I wonder whether sufficient attention was given to the likelihood that the method of price collection used more by the Department of Agriculture than by the BLS reflects the varying quality of clothing purchased with higher and lower incomes to a greater extent than the CPI. The controversy in the early 1940's over the accuracy of the CPI index involved comparisons between the prices of the two indexes. At that time, Dorothy S. Brady and O. V. Wells made a detailed comparison of them to which it would seem worthwhile to refer.

Many people are going to be grateful for the state price indexes. Some will be glad for the reassurance that the CPI is a reasonably good index for various parts of the United States. This has long been the assumption, partly because of the lack of local indexes. Others will be glad to have a local index because those who turn to them for information on price trends, whether university administrators or local editors, are skeptical of the applicability of the general index.

The main findings of this paper, that differential price trends among the states for 1929 to 1953 were too small to affect trends in relative real income, lead me to question the authors' recommendations that increased effort should go to securing more local price indexes. I agree that more and better price series might demonstrate more differences than this paper shows. They might also demonstrate less. But the likelihood of any difference being found that will influence the conclusions as to trends in relative real incomes of states seems very small indeed. Of course, local price series may have other justifications.

This paper, like many others that explore a set of empirical relations, may have important by-products. In scanning the data in Table A-5 on percentage change in income compared to percentage change in price, I wondered about their contribution to our knowledge of their interrelation. It would be helpful to have price indexes of various components, e.g. food, rent, and clothing. There may well have been important differences among these. There are several reasons for such expectations, for example, (1) the pricing speci-

fications are such that the index for food more nearly than that for other products describes price changes of a given quality, whereas the specifications for clothing are broader, and in periods of income decline responses of retailers to lower local demand may well result in a reduction in the quality of clothing and (2) products differ in the extent to which they are part of a national market. Food and clothing of various local areas are mainly segments of a national market. Price changes of local areas will be unique only if the quality priced varies with income or if local wholesaler and retailer margins are affected. Rent, on the other hand, is largely determined by local demand, but it has contractual aspects that make it sticky.

In the piecemeal accumulation of knowledge, one addition leaves little room for complacency. Attention shifts to the unanswered questions. To return to the title of the paper, "Interregional Differentials in Per Capita Real Income Change," important price trends affecting these differentials have been occurring that were not taken into account by price indexes of the type described in this paper. The indexes relate to price change in various types of communities. They take no account of differences in prices paid because of the shift of population among communities. Population movement has reduced the percentage on farms, and the reduction has been greater in low income states than in high income ones. This shift has tended to increase the prices paid for a given bundle of commodities. The per capita dollar incomes of states show a greater relative increase during the 1940's in states in the South than in the United States as a whole. My guess is that this difference would be reduced if the effect of population shifts by type of community were taken into account. A paper by Koffsky on the relative cost of living of farm and nonfarm population provides some basis for estimating such effects.[1]

Scholars investigating interregional differentials in income have two quite different problems: (1) the estimation of differences at a point in time and changes that have occurred, and (2) the determination of the character of forces effecting change. For the latter, economic theory provides the basic hypothesis. It postulates that resources tend to move to the location where returns tend to be maximized. It is my hunch that 1950 census of population and supplementary material from earlier censuses hold great potential for the study of population movements in search of the highest real

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[1] Nathan M. Koffsky, "Farm and Urban Purchasing Power," *Studies in Income and Wealth, Volume Eleven,* National Bureau of Economic Research, 1949, pp. 156–178.

income. Cooperation is needed between population analysts and economists with a special interest in migration and income distribution. Even a superficial examination of the data in the 1950 census indicates that net migration is away from the low income states.