# Socioeconomic Changes in Distressed Cities During the 1980s

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The economic revival of many of the Nation's older cities during the 1980s caused some observers to wonder whether the urban crisis was over.<sup>1</sup> Indeed, after predictions of their economic and fiscal demise, Boston, New York, Philadelphia, and other large cities made dramatic recoveries during the last decade and provided a sense of optimism about the ability of older, declining cities to adapt to economic and fiscal hardships. Many older cities diversified their economies and rebuilt the downtown areas by attracting advanced service and knowledge-intensive industries (Stanback, 1991). In most instances the recovery came after substantial losses of manufacturing jobs during the 1970s.<sup>2</sup> A study by The Urban Institute found that city officials became better financial managers during the 1980s, made tough decisions to balance their budgets in the face of Federal aid cutbacks (that is, they increased taxes and cut spending), and tried to finance their underfunded pension systems.<sup>3</sup>

This article examines the extent to which the turnaround affected the social and economic conditions of distressed urban areas. It updates an earlier study by the authors which showed that conditions in the Nation's distressed cities deteriorated rapidly during the 1970s (Bunce and Neal, 1983). Many cities first suffered extreme hardship during the 1970s. Shifts of higher income persons and better paying manufacturing jobs to suburban and rural areas and to the Sunbelt led to sharp increases in poverty, particularly in older industrial areas. In fact the tendency of the more distressed cities to become worse off during the 1970s was most apparent for older central cities at the very top of the distress list. These cities, which began that decade with the greatest concentration of problems such as poverty and unemployment, became increasingly worse off relative to less distressed cities. By 1980 the increased severity of their social and economic problems had set this group apart from the remaining cities. Concern about the conditions in these cities was heightened by the fact that they included many of the Nation's largest urban areas, such as Cleveland, St. Louis, Philadelphia, and Detroit.

This article also seeks to determine whether the socioeconomic gap between more distressed and less distressed cities continued to widen during the 1980s. Did the severe social and economic problems that afflicted many of the central cities at the end of the 1970s become even more severe during the decade of the 1980s? Or did the problems of distressed cities lessen during the 1980s as the cities restructured their economies and benefitted from the national economic expansion? To answer these questions, data from the 1970, 1980, and 1990 censuses are analyzed for 425 central cities and 168 suburban cities with populations greater than 50,000. The census data are supplemented with recent employment and unemployment data from the Bureau of Labor Statistics to gauge the effects of the recent recession and slow expansion on conditions in distressed cities. It should be noted that this study is descriptive rather than explanatory. Explaining the changes described here will require another effort.

In contrast to the article by Roy Bahl in this volume (starting on page 293), which examines fiscal disparities among city governments, this article focusses on aspects of the social and economic structure of cities. However, similar conclusions are drawn in both articles. Not surprisingly, the cities with the greatest social problems in terms of poverty, unemployment, crime, and female-headed households are also those that have the greatest difficulty raising sufficient revenue to meet the higher need level of their residents' greater needs. The definition of distressed city used in this article is consistent with the weak social structure that inhibits economic development, identified by Laurence E. Lynn, Jr., in his article, which starts on page 245.

Analysts that attempt to study such a large number of cities must deal with the extreme diversity in city conditions. Cities have been undergoing massive economic transformations since 1970, and some have been more successful in adapting to the new economic realities than others (Noyelle and Stanback, 1983). It is also well known that the existence of social problems and urban underclass conditions vary widely across cities (Kasarda, 1993). Frequently these variations can be captured by analysis that disaggregates according to regional location and city size; in other instances, patterns and underlying trends may be difficult to discern.

The diversity of city conditions has two implications for this study. First, the more aggregate analysis that we begin with must be followed by more detailed regional, subregional, and correlational analyses, as well as frequent examinations of individual city results.<sup>4</sup> This is particularly important because, as will be seen, the shifts in distressful conditions were much more ambiguous during the 1980s than they were during the 1970s. A second implication is that the overall findings are often subject to qualification. Even in our earlier study, there were several distressed cities, primarily in the South, that began the 1970s with extremely high poverty rates but experienced economic growth and substantial improvement during the decade. Exceptions such as these will be identified throughout the discussion. The remainder of the article is organized as follows: The next section explains the study's methodology and the concept of city distress, while the third and fourth sections describe the primary trends for cities during the 1970s and 1980s.

#### Methodology

#### Measuring City Distress

The concept of city distress recognizes the fact that some cities suffer much more severe economic, social, and fiscal problems than other cities. Newark, Cleveland, and Detroit are examples of distressed cities; San Francisco, Minneapolis, and San Jose are examples of nondistressed cities.<sup>5</sup> Interest in measuring variations in city distress heightened during

the 1970s, when major cities such as New York and Cleveland began to experience fiscal problems and several Federal categorical aid programs were replaced by block grant programs with automatic distribution formulas based on objective measures of city need. During the late 1970s and early 1980s, academic and government researchers produced numerous reports that analyzed the responsiveness of the new Federal block grant allocations to differences in city distress (Bunce, 1976; Nathan et al., 1977; Cuciti, 1978; Bunce and Goldberg, 1979).

The first step in these studies was to develop a measure that could be used as a standard for evaluating the actual allocation of program funds among cities. In most cases, this involved combining several indicators of stressful conditions—such as low income, job loss, unemployment, and crime—into a single, composite index that ranked cities according to their relative levels of distress (or "need" for the program funds). Data from the decennial censuses were typically used to construct the distress indexes, because they were readily available and consistently defined for all cities. A variable was selected as a distress (or needs) indicator if it was a good proxy for problems that the specific aid program was attempting to solve. The indicators were usually expressed in per capita or rate form, such as per capita income (an inverse indicator of distress) or rate of poverty (a direct indicator of distress). A city's composite index score was interpreted as characterizing the level of stressful conditions for the "average" person of that city. The analysis then determined the extent to which per capita dollar allocations under a particular formula system were targeted to cities with the highest distress scores.

#### A Specific Distress Index

In addition to serving as a standard for evaluating the fairness of allocation formulas, city distress indexes can also serve as an analytical tool for monitoring trends in city conditions (Bunce and Neal, 1983; Bradbury, 1984; James, 1990). This approach is taken in this article, which is concerned with whether distressed cities became worse or better off during the 1980s. The analysis involves two steps: first, ranking cities according to their relative levels of distress at the beginning of the decade and second, comparing the performances of more distressed and less distressed cities during the decade.

Differences among cities in their 1980 levels of distress were measured with an index of community development need that the Department of Housing and Urban Development (HUD) used in 1983 to evaluate the targeting of the Community Development Block Grant (CDBG) formula. This index was based on 18 indicators of socioeconomic problems and was constructed for a sample of 593 CDBG entitlement cities, consisting of 425 central cities and 168 large (more than 50,000 in population) suburban cities. The appendix to this article lists the distress indicators and describes how they were combined to produce a composite index of distress (or community development need) for each city in the sample. In addition the appendix discusses some of the more controversial issues that arose when developing this distress index—for example, how to weigh the relative importance of different types of city problems such as population loss, low income, unemployment, and crime—as well as the obvious need for caution when interpreting composite indexes of this kind.

The HUD index has been subject to extensive review by both HUD and non-HUD researchers, and there is much evidence that it identified cities with the most severe and concentrated problems in 1980.<sup>6</sup> Thus it provides a reliable basis on which to examine trends in city conditions during the 1980s. Table 1 lists some of the most distressed and some of the least distressed cities as defined by the index. Cities with high levels of distress include Newark, Detroit, St. Louis, and New Orleans; those with low levels of distress include Houston, Phoenix, Sacramento, and San Jose. As noted by Burchell et al. (1980), most distress indexes yield rankings of large cities similar to those given in Table 1.

#### Analytical Approach

The 593 sample cities were first ranked according to their 1980 levels of distress and then divided into quintiles (five equal groupings) with the first quintile being the most distressed, and so on. Changes in selected socioeconomic variables—real per capita income, poverty rate, unemployment rate, percentage of minorities, percentage of female-headed households—were then computed for each distress quintile to determine which quintiles became worse between 1980 and 1990. To provide a historical context for the analysis, changes between 1970 and 1980 were also included in the tables. (The analytical approach is illustrated in Table 2.) The tables present data for quintiles, except that the most distressed quintile is divided into its two component deciles. This approach was used to capture the extreme differences among the most distressed deciles, while simplifying comparisons among the less distressed cities, in which differences were not as extreme.

The sample includes cities that ranged in size from 14,000 to 7.1 million persons in 1980. It is questionable whether the census-type distress variables "proxy" the same conditions in smaller and larger cities. In fact, as the appendix explains, the distress methodology is probably more reliable for the larger cities. Therefore, the data on trends will be presented separately for the larger (population over 200,000) and smaller (population under 200,000) cities.<sup>7</sup>

The discussion focusses on trends for the larger cities. The smaller cities are discussed primarily in the context of their similarity to, or difference from, large city patterns.

The data for 1979 or 1980 in Tables 3 and 4 provide the baseline against which the changes in socioeconomic conditions are measured.<sup>8</sup> They clearly show that the more distressed cities began the 1980s with substantially higher incidences of social and economic problems than did the less distressed cities.

## Findings

#### Economic Turnaround During the 1980s

Two points are immediately apparent in the aggregate data on changes in socioeconomic conditions presented in Tables 2 and 5. First, conditions in distressed cities did not deteriorate as much during the 1980s as they did during the 1970s; and second, the less distressed cities performed less robustly in the 1980s than in the 1970s. As a result, the socioeconomic gap between the most distressed and least distressed cities did not widen to the extent that it did during the 1970s and on some dimensions even diminished.

**Large Cities.** This pattern is most evident from the figures on real per capita income<sup>9</sup> for large distressed cities presented in Table 2. Large cities in the first decile of distress experienced a 14.6-percent increase in real per capita income during the 1980s, compared with a 5.3-percent increase for the 1970s. Their percentage income gain for the 1980s was larger than the other groups except for the least distressed quintile, which experienced a 16.3-percent gain in real per capita income.

A flavor of the varying experiences of a number of cities can be seen in Table 1. During the 1980s Northeastern cities such as Newark, Paterson, Trenton, and Wilmington experienced substantial increases in real per capita income, as well as decreases in poverty. The

improvements in New Jersey occurred at the same time that the minority population (primarily Hispanic) was increasing. New York, Philadelphia, Atlanta, and Boston also experienced large increases in real per capita income, although poverty rates remained fairly stable. The Northeastern cities in this group made much headway in restructuring their economies. Manufacturing losses, which were heavy in the 1970s, tapered off in the 1980s and were offset (at least partially) by rising employment in service, financial, and technical areas.

The less distressed quintiles, on the other hand, experienced a slower growth in real per capita income during the 1980s than they did in the 1970s. This slowdown reflected both dramatic reductions in income among oil industry cities such as Houston, Tulsa, Oklahoma City, and Baton Rouge and more modest reductions in other cities throughout the country. Nevertheless a number of less distressed cities had greater increases in real per capita income in the 1980s than in the 1970s. Such cities tended to be smaller, better off Northeastern cities (for example, Danbury, Norwalk, Bristol, and Greenwich, Connecticut).

Similar comments can be made about the other indicators. Distressed cities experienced much lower increases in their incidences of poor, female-headed, and black households during the 1980s, as compared with the 1970s. For instance, the poverty rate for the most distressed decile increased by 1.6 percent during the 1980s, much lower than the 5.2-percent increase during the 1970s (see Table 2). Note that, in contrast to the 1970s, nondistressed cities suffered about the same increases in the poverty rate as did distressed cities. In addition the rate of population loss fell from 14.4 percent to 7.2 percent for the most distressed group. The growth in black and minority concentrations also slowed, from 6.7 to 2.8 percentage points for the percentage of blacks, and from 10.2 to 5.2 percentage points for the percentage of blacks, and from 10.2 to 5.4 percentage of blacks was greater in more distressed cities than in less distressed cities, the increase in the percentage of minorities was about the same across distress levels. This occurred because the less distressed cities had higher rates of increase in their Hispanic concentrations.

**Small Cities.** In many respects the experience of the small cities was similar to that of the large cities (see Table 5). Compared with the 1970s, the rate of real per capita income growth increased in the 1980s among distressed cities and decreased for less distressed cities. However, unlike large cities, small distressed cities still had an income growth rate less than that of less distressed cities. The poverty rate and the percentages of blacks and minorities increased at a lesser rate in the 1980s than in the 1970s for more distressed cities and at a greater rate for less distressed cities. While the rates still increased more in distressed cities than in less distressed cities, the margin of difference was smaller during the 1980s. All but the least distressed quintile of cities showed improvement in population change, either in terms of diminished loss or increased growth. Distressed cities such as Asbury Park, Passaic, Bridgeton, and East Orange, New Jersey, experienced substantial turnaround in the 1980s.

**Correlation Analysis.** The relationship of distress to socioeconomic changes during the 1970s and 1980s can be summarized with correlation analysis. Consider the correlation coefficients<sup>11</sup> in Table 6 for large cities. The relationship between the distress index and each change in socioeconomic condition was much closer during the 1970s than during the 1980s.<sup>12</sup> For example, a change in the poverty rate had a 0.70 correlation with the distress index in the 1970s, meaning that the increase in the poverty rate was greatest among the most distressed cities. In the 1980s, on the other hand, the correlation was only -0.02, which means that there was essentially no pattern between the poverty rate increase and the distress level. The correlation with a change in the percentage of blacks dropped

from 0.63 to 0.31, while the correlation with a change in per capita income dropped from -0.73 to -0.07. Thus in the 1970s there was a strong relationship between a high distress level and both a high increase in the percentage of blacks and a slow rate of growth in per capita income. In the 1980s, by contrast, the tendency of distressed cities to have larger increases in the percentage of blacks than less distressed cities was much weaker, and distress no longer had any relationship to increase in real per capita income.

Table 6 also shows correlations for small and medium-sized cities. The patterns are similar; that is, relationships between socioeconomic change and distress were much stronger in the 1970s than in the 1980s. However, on the whole the size of the correlations declines with city size. The strength of the relationships for medium-sized cities is almost as strong as those for large cities, but the coefficients tend to be substantially smaller for small cities. These weaker relationships are explained by the greater diversity of the small cities and their experiences.<sup>13</sup> The one exception to this pattern is that the coefficients for poverty and per capita income decline less for small cities than for medium-sized and large cities between the 1970s and the 1980s. As a result, the small cities show a stronger relationship than larger cities between distress and both changes in the poverty rate and changes in per capita income in the 1980s.

#### **Continuing Weaknesses**

While the above discussion has presented a rather favorable picture for distressed cities during the 1980s, this section discusses three important caveats to the optimistic picture. First, there was much variation within the distressed city category; some distressed cities suffered extreme hardship during the 1980s. Second, at the end of the 1980s, the distressed cities remained substantially worse off than nondistressed cities. Third, distressed cities fared worse in the most recent recession and slow recovery than did less distressed cities.

**Variations in Individual City Performance.** Although distressed cities on average experienced a slowed increase in poverty and strong growth in real per capita income in the 1980s, a number of cities in the distressed category have failed to turn around. Among the large distressed cities, Detroit, Cleveland, and New Orleans had significant increases, and Chicago and St. Louis had moderate increases in their poverty rates in the 1980s. For instance, the poverty rate in Detroit increased 7.2 percentage points in the 1970s and 10.5 percentage points in the 1980s. The poverty rate in Cleveland increased 5.1 and 6.6 percentage points in the 1970s and 1980s, respectively. Small distressed cities having a similar pattern include Flint, Muskegon, Saginaw, and Pontiac, Michigan, as well as Dayton and Youngstown, Ohio, and Monroe, Louisiana. Most such cities are in the Midwest, which suffered more severely than any other region from the 1982 recession and the continued restructuring of the manufacturing economy.

**Persistent Gap in Socioeconomic Conditions.** The relatively better experience of distressed cities during the 1980s compared with their 1970s experience should not lead one to conclude that they are on the same socioeconomic level as nondistressed cities. Comparing 1980 and 1990 levels of various indicators in Tables 3 and 4 to their changes shows that the sharp distinctions between distressed and nondistressed cities which existed at the end of the 1970s continued to exist in 1990. For example, comparing ratios between the most distressed decile and the least distressed quintile indicates that the disparity in real per capita income remained relatively constant (the most distressed decile's income was 81 percent of the least distressed quintile in 1980 and 80 percent in 1990) and that the disparity in poverty rates also remained constant (at a ratio of 2.2 in both 1980 and 1990 of the most distressed decile to the least distressed quintile) but narrowed

somewhat for the percentage of blacks (from a ratio of 7.4 between the most distressed decile and the least distressed quintile to a ratio of 7.0). In 1990 the crime rate of the most distressed decile was 5.2 times that of the least distressed quintile.

The continuing problems of the distressed cities are particularly evident from data on the concentration of poverty. In 1990 cities in the most distressed decile had an average of 47 percent of their population living in tracts with poverty rates of at least 20 percent, compared with 17 percent in the least distressed quintile, for a ratio of 2.8. The ratio was even greater (3.9) for the percentage of the population living in tracts with poverty rates of at least 40 percent. Some individual distressed cities have concentrations vastly in excess of the average. For example, 75 percent of the population in Detroit and 86 percent of the population in Gary lived in tracts with poverty rates of 20 percent or higher in 1990, a dramatic increase from the 1980 levels of concentration. Even distressed cities that experienced economic growth during the 1980s were left with highly concentrated poverty populations. By 1990, 37 percent of the population in New York, 42 percent in Philadelphia, 44 percent in Boston, and 61 percent in Newark lived in tracts with poverty rates of at least 20 percent.

**Recession and Slow Recovery.** The distressed cities have fared worse in the most recent recession and slow recovery than the nondistressed cities. Table 7 shows changes in unemployment, private employment, and manufacturing employment by quintiles of distress for large and small central cities.<sup>14</sup> Large cities in the most distressed decile experienced a larger increase in the unemployment rate from 1989 to 1992 than did those in less distressed quintiles, though there was no consistent pattern among the second through fifth quintiles. In addition, the two deciles in the most distressed quintile lost private employment between 1989 and 1992, while the less distressed quintiles continued to have employment increases.<sup>15</sup> While all quintiles lost manufacturing employment during this period, the rate of loss was higher for the more distressed quintiles. Similar patterns were evident in the smaller cities.

Table 7 also presents employment changes from 1984 to 1989, which provide an interesting contrast to the patterns in the recession. The growth rate in total private employment between 1984 and 1989 was only somewhat slower in the most distressed decile than was the average for large cities during this period. However, the restructuring occurring in the distressed cities is apparent from a comparison with the change in manufacturing employment over the period. Cities in the most distressed quintile lost manufacturing jobs between 1984 and 1989, while less distressed cities gained them.

Distressed cities that showed the strongest turnaround in the 1980s, such as New York, Newark, Jersey City, and Boston, experienced the highest rates of employment loss (9 percent or greater) and unemployment increase (4 percentage points or greater) from 1989 to 1992. Distressed cities that failed to turn around in the 1980s, such as Detroit, Cleveland, and Gary, suffered to a smaller degree in the most recent recession.

Although the smaller cities had similar average changes by distress quintile, there was much more variation among individual cities in a given quintile, leading to somewhat different correlation patterns. For changes in both the unemployment rate and the employment rate, the correlations were similar in magnitude: 0.32 between distress and change in unemployment rate from 1989 to 1992 and -0.33 between distress and change in private employment.

#### **Regional Analysis**

The distress ranking has regional tendencies, with cities in the Northeast and Midwest dominating the more highly distressed quintiles and those in the South and West dominating the least distressed quintiles (see Tables 8 to 11). Since most of the exceptions to the performance of cities by distress level cited above follow regional lines, it is useful to switch the focus of the discussion briefly to regions in this section. Both methods are important monitoring tools. Distressed cities share similarities in concentrations of socio-economic problems, while cities within a region are often subject to similar economic forces.

As discussed earlier, the utility of the distress ranking for classifying urban trends weakened in the 1980s. Regional trends, however, remained very strong, though patterns shifted from the 1970s to the 1980s. As shown in Table 8, among large cities the 1970s were a period of decline in the Northeast (New England and the Middle Atlantic region) and in the East North Central region.<sup>16</sup> These areas of the country, which make up the Frostbelt, experienced slow growth in real per capita income, population loss, and rising rates of poverty and minority populations. The Sunbelt, on the other hand, had rapid growth in real per capita income, population growth, and a generally slower growth in minority concentrations. Two of the southern regions (East and West South Central) and the Mountain region had reductions in their poverty rates during the 1970s. Growth in prosperity was most pronounced in the West South Central region, as measured by growth in real per capita income and reduction in poverty rate.

The trends in the 1980s can best be characterized as a boom in the coastal regions with decline in the interior of the country. Relative to the patterns in the 1970s, only the Pacific and South Atlantic regions showed a continuity of prosperity. Income growth slowed in the two South Central regions, and poverty rates grew again. The reversal was most pronounced in the West South Central region, because of the collapse of the oil industry. Cities such as Houston, Tulsa, and Shreveport, which prospered in the 1970s, experienced either falling or slow-growing real per capita income and increases in poverty in the 1980s.

The Northeast, on the other hand, experienced a dramatic revival. Real per capita income increased 41.7 percent in New England and 26.4 percent in the Middle Atlantic region. Poverty rates fell in these regions, and population loss slowed. New England cities even had population increases. This increased prosperity did not accompany above-average employment growth. As seen in Table 12, large cities overall had a 16.6-percent increase in private employment between 1984 and 1989, while New England cities had only an 8.2-percent increase, and cities in the Middle Atlantic region had a 13.1-percent increase. Many of the new jobs were in highly paid industries, such as financial services and technology.

Only cities in the East North Central region continued to decline in the 1980s, and in fact declined at an even faster pace than before in some dimensions. As shown in Table 8, real per capita income increased only 3.8 percent, compared with a 13.2-percent average for all large cities. The poverty rate increased more than it had in the 1970s: by 4.9 percentage points compared with 3.9 in the earlier decade. These problems reflect the painful restructuring the region has been undergoing as it has lost manufacturing jobs. As mentioned earlier, the decline was worst in industrial cities such as Detroit, Flint, Cleveland, and Gary.

Unfortunately, the gains of the coastal areas during the 1980s have been threatened by the recession and slow recovery of 1989–92. While the East North Central region continued its decline during this period, it was not hurt as severely as areas that were more prosperous in the 1980s. As shown in Table 12, employment loss among large cities was highest in New England (-12.2 percent) and the Middle Atlantic (-5.9 percent). Only two other regions showed a loss in this period: the East North Central, with a 1.4-percent loss, and the South Atlantic, with a 0.6-percent loss. Employment gains remained virtually the same for large cities as a whole (0.2 percent) and for the Pacific (0.2 percent) and West North Central (0.6 percent) regions. While the West South Central cities lagged in employment gains from 1984 to 1989 (4.7 percent compared with a 16.6-percent increase for all large cities in the Mountain region (5.4 percent), reflecting the continued moderate recovery from the oil industry losses of the 1980s. Southwestern cities such as Beaumont, Brownsville, Bryan, and Laredo, Texas, had employment increases in excess of 10 percent from 1989 to 1992.<sup>17</sup>

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#### Notes

- 1. The June 1985 *Urban Affairs Quarterly* included a symposium titled "Whatever Happened to the Urban Crisis?" See the articles by Gottdiener (1985) and Ganz (1985).
- 2. The loss of manufacturing and blue-collar jobs hurt entry-level and less skilled workers housed in central cities. While these workers certainly benefitted from growth in the service and central business district sectors, they often were not qualified for the new knowledge-intensive, white-collar jobs that were growing in the downtown areas. The central cities increasingly depended on commuting suburbanites for their experienced and educated labor force.
- 3. See Dearborn, Peterson, and Kirk, 1992. A downside of cities putting their fiscal house in order was that the spending cuts needed to obtain financial balance were often made at the expense of solutions to long-running social problems. Dearborn, Peterson, and Kirk also note that city budgets have been hurt by the recent recession and slow recovery.
- 4. The States by census region and subregion in this study are as follows: For the North-east region, the New England States consist of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut, and the Middle Atlantic States are New York, New Jersey, Pennsylvania, Delaware, Maryland, and the District of Columbia. The Midwest region is divided into East North Central and West North Central. The East North Central States are Ohio, Indiana, Illinois, Michigan, and Wisconsin, and the West North Central Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. The South consists of the South Atlantic, East South Central, and West South Central. The East South Central States are Virginia, North Carolina, South Carolina, and Georgia. The East South Central States are Kentucky, Tennessee, Alabama, and Mississippi. The West South Central is composed of Arkansas, Louisiana, Oklahoma, and Texas. The West is made up of the Mountain and the Pacific States. The Mountain States are Montana, Idaho, Wyoming, Colorado, New Mexico, Utah, Arizona, and Nevada. The Pacific States are Washington, Oregon, Alaska, California, and Hawaii.
- 5. Poverty data illustrate the extreme differences that can exist between distressed and nondistressed cities. For instance, approximately 37 percent of Detroit's 1990 population resided in census tracts where at least 40 percent of the residents lived in poverty. There were no such census tracts in San Jose.
- 6. See Appendix J of Bunce and Goldberg (1979) and U.S. Census (1978) for tests of the index.
- 7. While the quintile tables are presented separately for large (over 200,000) and small (under 200,000) cities, the quintiles are defined for all cities together. Large cities, as a group, are more distressed than small cities. As a result, large cities are not evenly distributed across the five quintiles. In fact 35 percent of the large cities are in the

most distressed quintile, and 61 percent in the bottom two quintiles. Only 10 percent of the large cities are in the least distressed quintile.

- 8. All tables in this article present simple averages of the cities in each quintile or decile and are interpreted as the experience or condition of the average city in the group. Alternatively, weighted averages would have presented the condition experienced by the average person in each category, and the averages would have been dominated by the very large cities.
- 9. Real per capita income is expressed in 1979 dollars by adjusting per capita income for 1969 and 1989 by the national consumer price index. Adjustments are not made for local differences in living costs.
- 10. This slowing may be due in part to the fact that cities that have reached very high levels of black or minority concentration have peaked out and that continued increases become less likely.
- 11. Spearman rank-order correlations, used in this article, focus on the extent to which rankings of cities on two variables are related. If cities are ranked on two particular indicators in the same way (or in the reverse order), the correlation coefficient will equal plus (or minus) one. If the two rankings are completely independent, the correlation coefficient will equal zero.
- 12. To some extent this is due to the fact that the 1980 distress index includes measures of change during the 1970s. Changes in the 1970s are more highly correlated with resulting distress level (1980 index) than with beginning distress level (1970 index). Therefore one would expect the 1980 distress index to be less correlated with changes in the 1980s than with changes in the 1970s. Nevertheless the basic conclusion of Table 6 that relationships between distress and socioeconomic change became weaker in the 1980s is supported by a comparison of the correlations between (1) the 1980 distress index and changes in the 1980s and (2) the 1970 distress index and changes in the 1970s. With the exception of change in population, the correlations were higher for the 1970s than for the 1980s for large and medium-sized cities. For example, for large cities, the change in the poverty rate in the 1980s had a -0.02 correlation with 1980 distress, compared with a 0.50 correlation of change in the poverty rate in the 1970s with 1970 distress. Small cities showed little difference between the 1970s and the 1980s correlations.
- 13. Correlation analysis also provides a hint as to why city changes occurred as they did. Increases in the poverty rate and smaller increases in real per capita income were correlated with change in employment. For large cities, the relationship is a moderate one, with a -0.37 correlation between change in the poverty rate and a change in employment, and a 0.38 correlation between change in real per capita income and a change in employment. The relationships were stronger for the small cities, with correlations of -0.59 and 0.58 between a change in employment and changes in poverty and real per capita income, respectively.
- 14. These data are only suggestive, because they are based on the entire metropolitan area around the central cities.
- 15. The correlation (0.30) between distress and unemployment rate change, 1989–92, was somewhat lower than that (-0.44) between distress and employment rate change, 1989–92, for large cities.

- 16. Trends for small cities are presented in Table 9 and are largely similar to those for large cities.
- 17. Employment trends among small cities are also presented in Table 12 and are similar to those for large cities.

Selected cities by level of distress

	Percent in rea capita i	l per	Net change in poverty rate		Net cł in pei bla	rcent		nange rcent prity <sup>a</sup>	Percent change in private employment	
	1969–79	1979–89	1970–80	1980–90	1970–80	1980–90	1970–80	1980–90	1984–89	1989–92
More distressed										
Newark, NJ	-8.8%	24.2%	10.5	-6.3	2.9	-1.2	14.4	6.1	-3.5%	1.0%
Paterson, NJ	-10.3	24.0	8.7	-6.6	6.5	-0.4	27.0	11.9	NA	NA
Detroit, MI	-2.4	-9.4	6.9	10.9	19.1	12.4	19.6	13.0	16.6	-5.1
Gary, IN	10.3	-13.1	5.5	9.2	17.5	9.7	16.6	8.5	11.6	5.5
Trenton, NJ	-0.4	21.7	4.3	-2.7	7.0	2.1	12.2	8.1	14.5	14.7
St. Louis, MO	8.7	9.5	1.6	3.3	4.3	1.8	4.5	1.6	13.3	-2.3
Cleveland, OH	2.8	-4.3	4.7	6.9	5.1	2.6	6.4	4.5	10.6	-3.6
Atlanta, GA	4.4	39.1	6.6	0.8	14.5	1.0	14.9	1.6	21.9	0.5
Wilmington, DE	6.4	34.9	3.1	-6.2	7.2	1.2	9.7	3.5	22.0	-3.8
Pontiac, MI	10.5	-6.1	4.2	9.7	10.0	5.3	11.5	6.8	NA	NA
Flint, MI	11.3	-12.4	4.5	13.9	13.0	6.9	13.8	7.4	-4.0	0.0
Chicago, IL	2.7	10.9	5.8	1.7	6.8	-0.5	13.5	5.4	13.1	-2.6
New Orleans, LA	22.0	3.6	-0.5	5.8	9.7	6.4	8.7	5.9	-3.5	1.0
Philadelphia, PA	1.1	19.1	5.1	0.1	4.0	1.5	6.4	3.7	11.5	-5.3
New York, NY	-1.9	33.5	5.2	-0.5	2.9	1.0	12.5	5.2	4.6	-10.8
Boston, MA	6.7	41.7	3.7	-0.3	5.4	2.3	9.1	6.8	8.2	-12.2
Birmingham, AL	16.8	2.0	-1.2	3.2	15.0	7.8	15.4	7.1	15.7	1.7
Brownsville, TX	39.7	-9.3	-13.6	10.8	-0.1	-0.1	-2.2	6.1	12.8	11.2
Less distressed										
Minneapolis, MN	14.8	11.4	2.0	5.0	3.2	5.4	3.5	6.2	15.4	2.0
Sacramento, CA	12.5	11.1	1.0	2.2	2.5	1.9	3.6	3.8	33.3	6.3
Seattle, WA	15.5	17.6	0.7	1.7	2.2	0.7	2.8	2.1	32.0	3.4
Bethlehem, PA	12.1	8.0	2.4	1.8	0.2	0.9	4.5	5.5	NA	NA
Indianapolis, IN	7.1	13.1	1.7	1.3	3.4	1.6	3.5	1.7	23.7	4.5
Houston, TX	34.8	-3.3	-1.2	8.3	1.6	-0.4	7.1	10.1	0.3	8.4
Austin, TX	21.8	17.6	0.0	2.1	0.2	0.0	3.4	4.2	7.6	10.0
Phoenix, AZ	15.8	11.3	-0.4	3.1	-0.1	0.3	0.7	5.5	25.3	0.2
San Jose, CA	24.3	20.3	-0.3	1.1	2.1	-0.5	2.5	4.2	6.4	-3.6

#### Note:

<sup>a</sup>Black and Hispanic population.

Trends in socioeconomic conditions, 1970–90, cities over 200,000

	Percent change in real per capita income		Net cha pover	•	Percent change in population		
Quintile of distress	1970–80 1980–90		1970–80	1980–90	1970–80	1980–90	
Most distressed							
First decile	5.3%	14.6%	5.2	1.6	-14.4%	-7.2%	
Second decile	11.1	11.0	2.4	2.0	-10.9	-4.0	
2	16.1	9.4	0.5	2.8	0.7	6.9	
3	18.3	10.9	-0.1	1.4	8.2	12.3	
4	22.7	9.5	-0.6	3.7	16.7	10.6	
Least distressed	19.7	16.3	0.1	1.1	35.1	26.1	
Mean for all 71 cities	14.4	13.2	1.6	2.1	2.4	5.2	

	Net change in unem- ployment rate	Net change in percent black		Net cha pero mino	Net change in percent female- headed household	
	1980–90	1970–80	1980–90	1970–80	1980–90	1980–90
Most distressed						
First decile	0.7	6.7	2.8	10.2	5.2	3.6
Second decile	-0.0	7.3	2.8	7.6	3.9	2.6
2	1.3	2.9	2.0	4.6	4.7	2.7
3	1.0	2.2	0.9	5.4	4.9	1.7
4	1.5	0.2	0.7	1.3	3.6	2.0
Least distressed	0.4	0.8	0.7	3.4	4.6	1.4
Mean for all 71 cities	0.8	2.4	1.8	6.0	4.7	2.5

Note:

<sup>a</sup>Black and Hispanic population.

	Real per capita income (1979 dollars)			Poverty rate			Poverty <sup>a</sup> concentration, 1990, in		Unemployment rate	
Quintile of distress	1969	1979	1989	1970	1980	1990	20% poverty tracts	40% poverty tracts	1980	1990
Most distressed										
First decile	\$6,033	\$6,349	\$7,299	17.4%	22.7%	24.2%	47.2%	15.7%	10.0%	10.7%
Second decile	6,179	6,849	7,611	16.3	18.7	20.6	32.3	11.1	8.6	8.6
2	6,342	7,307	8,014	15.2	15.8	19.1	31.2	10.2	6.7	8.0
3	6,434	7,585	8,440	13.9	13.8	16.0	31.6	7.6	5.5	6.5
4	6,393	7,856	8,580	12.9	12.3	15.4	23.1	5.6	4.9	6.4
Least distressed	6,551	7,824	9,096	10.1	10.2	10.9	16.6	4.0	5.3	5.7
Mean for all 71 cities	6,312	7,211	8,182	14.5	16.1	18.2	33.3	10.2	7.1	8.0

Levels of socioeconomic problems, 1970–90, cities over 200,000

	Percent female- headed families		Pei	Percent black			Percent minority <sup>b</sup>		
	1980	1990	1970	1980	1990	1970	1980	1990	1990
Most distressed									
First decile	20.5%	24.1%	35.1%	41.9%	44.6%	40.3%	50.4%	55.6%	186.2
Second decile	17.4	20.0	30.2	37.5	40.3	32.4	40.0	43.8	105.3
2	13.6	16.3	16.0	19.0	20.9	27.2	31.8	36.5	109.2
3	12.5	14.2	15.4	17.6	18.5	25.3	30.7	35.7	87.8
4	11.2	13.2	12.5	12.7	13.3	22.6	23.8	27.4	74.6
Least distressed	10.0	11.4	4.9	5.7	6.4	15.2	18.7	23.3	35.5
Mean for all 71 cities	14.6	17.5	20.1	23.6	26.1	28.1	34.1	39.6	113.1

Notes:

<sup>a</sup>Percent of population in the city residing in census tracts that are at least 20 percent <sup>b</sup>Black and Hispanic population.
<sup>c</sup>Robbery and aggravated assault per 10,000 population.

	ies over 200,000, ranked	a by uis	511033		
		Ν	lost distressed		
1	Newark	25	Memphis	49	Indianapolis
2	Detroit	26	Milwaukee	50	Dallas
3	St. Louis	27	Tampa	51	Corpus Christi
4	Cleveland	28	San Francisco	52	Charlotte
5	Atlanta	29	Toledo	53	Santa Ana
6	Baltimore	30	Los Angeles	54	Jacksonville
7	Jersey City	31	Kansas City	55	Baton Rouge
8	Buffalo	32	Minneapolis	56	Nashville-Davidson
9	Chicago	33	San Antonio	57	Wichita
10	New Orleans	34	Long Beach	58	Oklahoma City
11	Philadelphia	35	Mobile	59	Tucson
12	New York	36	Shreveport	60	San Diego
13	Washington, DC	37	Fort Worth	61	Tulsa
14	Rochester	38	El Paso	62	Lexington-Fayette
15	Boston	39	Sacramento	63	Albuquerque
16	Birmingham	40	Columbus	64	Houston
17	Miami	41	Portland	65	Austin
18	Cincinnati	42	St. Paul	66	Honolulu
19	Louisville	43	Jackson	67	Phoenix
20	Oakland	44	Denver	68	San Jose
21	Norfolk	45	Seattle	69	Anaheim
22	Pittsburgh	46	Omaha	70	Colorado Springs
23	Richmond	47	St. Petersburg	71	Virginia Beach
24	Akron	48	Fresno		

#### Table 3 (continued) Cities over 200,000, ranked by distress

Quintile of distress	Real per capita income (1979 dollars)			Poverty rate			Unemployment rate		
	1969	1979	1989	1970 1980 1990		1980	1990		
Most distressed									
First decile	\$5,454	\$5,540	\$6,074	19.3%	23.8%	26.3%	11.5%	12.4%	
Second decile	5,689	6,098	6,703	17.0	19.0	21.4	8.5	9.4	
2	5,980	6,724	7,467	14.2	15.4	18.0	7.6	7.8	
3	6,533	7,381	8,303	11.0	12.2	13.9	6.6	6.4	
4	6,796	8,060	9,333	9.1	9.2	10.7	5.8	5.6	
Least distressed	7,403	9,078	10,720	6.7	6.9	8.1	4.8	4.8	
Mean for all 522 cities	6,465	7,468	8,522	11.5	12.6	14.4	6.8	6.9	

Levels of socioeconomic problems, 1970–90, cities under 200,000

	Percent female- headed families		Percent black			Percent minority <sup>a</sup>			Crime rate⁵
	1980	1990	1970	1980	1990	1970	1980	1990	1990
Most distressed									
First decile	22.3%	25.8%	30.7%	37.9%	39.4%	36.6%	52.7%	60.1%	116.1
Second decile	15.3	18.5	17.0	21.1	22.6	21.3	33.2	38.6	65.4
2	12.0	14.6	11.8	14.1	15.7	16.2	20.5	24.4	43.9
3	10.3	12.0	7.9	9.9	11.2	12.0	15.7	19.2	34.3
4	8.5	9.9	4.4	4.9	5.8	9.6	11.2	15.5	25.6
Least distressed	7.6	8.8	2.7	3.3	4.6	7.1	8.9	13.2	21.7
Mean for all 522 cities	11.1	13.1	9.7	11.4	12.8	14.3	18.9	23.2	41.2

Notes:

<sup>a</sup>Black and Hispanic population. <sup>b</sup>Robbery and aggravated assault per 10,000 population.

Trends in socioeconomic conditions, 1970–90, cities under 200,000

Quintile of distress	Percent change in real per capita income			ange in ty rate	Percent change in population		
	1970–80	1980–90	1970–80	1980–90	1970–80	1980–90	
Most distressed							
First decile	2.8%	9.8%	4.5	2.4	-9.6%	-2.3%	
Second decile	9.0	9.5	1.9	2.4	-3.1	2.1	
2	13.3	11.3	1.1	2.6	-2.2	-0.1	
3	14.0	11.8	1.2	1.8	3.2	5.8	
4	19.3	14.9	0.2	1.7	7.9	9.0	
Least distressed	23.4	16.6	0.2	1.2	27.9	14.5	
Mean for all 522 cities	16.0	13.0	1.0	1.9	11.5	7.3	

	Net change in unem- ployment rate	Net change in percent black		Net cha pero mino	Net change in percent female- headed household	
	1980–90	1970–80	1980–90	1970–80	1980–90	1980–90
Most distressed						
First decile	0.9	7.2	2.2	16.0	7.8	3.7
Second decile	0.9	4.4	1.8	11.5	5.7	3.2
2	0.3	2.5	1.5	4.5	3.9	2.6
3	-0.1	2.4	1.2	3.8	3.2	1.6
4	-0.2	0.9	0.8	2.4	3.7	1.1
Least distressed	0.1	0.9	1.2	2.1	4.0	1.0
Mean for all 522 cities	0.1	2.4	1.3	5.2	4.2	1.9

Note:

<sup>a</sup>Black and Hispanic population.

Correlation of distress with socioeconomic trends

Cities over 200,000	1970–80	1980–90
Percent change in population	86ª	76
Change in poverty rate	.70	02
Change in percent black	.63	.31
Change in percent minority	.56	.14
Change in per capita income	73	07

Cities under 200,000	Small cities⁵	Medium cities°	Small cities	Medium cities
Percent change in population	51	79	35	61
Change in poverty rate	.32	.45	.19	.03
Change in percent black	.33	.50	.18	.31
Change in percent minority	.46	.55	.15	.19
Change in per capita income	63	79	31	11

Notes:

<sup>a</sup>Interpreted as follows: percent change in population has a negative correlation (0.86) with the distress scores. See note 11 in text for definition of Spearman rank order correlation.

<sup>b</sup>Small cities are those with populations under 100,000. <sup>c</sup>Medium cities are those with populations between 100,000 and 200,000.

	Net change in unem- ployment rate	Unemploy- ment rate	in p	t change rivate syment	in manu	t change facturing syment
	1989–92	1992	1984–89	1989–92	1984–89	1989–92
	Cities	over 200,0	00—Quintil	e of distres	S	
Most distressed						
First decile	2.3%	7.4%	13.7%	-4.1%	-5.4%	-9.7%
Second decile	1.8	6.4	17.4	-0.1	-0.1	-5.5
2	1.2	6.8	15.3	1.6	2.3	-3.9
3	1.5	7.0	15.2	2.7	4.0	-1.2
4	0.8	5.5	14.5	2.8	4.9	-2.3
Least distressed	1.4	5.9	16.8	2.0	2.9	-3.3
Mean for all 65 cities	1.6	6.7	14.9	0.2	0.6	-5.0
	Cities	under 200,0	)00—Quinti	le of distres	S	
Most distressed						
First decile	2.3	8.1	14.4	-0.6	-3.9	-8.0
Second decile	2.1	7.9	11.9	-0.7	-3.1	-6.5
2	2.2	7.8	14.5	-1.3	-2.7	-7.5
3	1.1	6.6	16.6	3.3	4.0	-4.0
4	1.2	6.5	13.1	5.0	7.6	-0.7
Least distressed	1.3	6.3	15.5	4.5	5.9	2.6
Mean for all 181 cities	1.8	7.3	14.5	1.4	1.3	-4.7

Note:

<sup>a</sup>These data cover the whole metropolitan area for central cities in each distress quintile.

Population

## Percent change in real per Net change in

Table 8

Regional trends in socioeconomic conditions, cities over 200,000

	capita i	ncome	pover	tyrate	change	
	1969–79	1979–89	1970–80	1980–90	1970–80	1980–90
New England <sup>a</sup>	6.7%	41.7%	4.9	-1.5	-12.2	1.9
Middle Atlantic	5.8	26.4	4.4	0.1	-11.0	-4.9
East North Central	6.6	3.8	3.9	4.9	-11.3	-4.1
West North Central	5.4	9.0	1.1	3.3	-12.9	-1.7
South Atlantic	15.0	19.1	2.7	-1.3	4.4	7.0
East South Central	20.6	11.0	-0.8	2.4	1.9	-1.6
West South Central	24.4	5.2	-1.1	4.4	13.6	8.1
Mountain	18.7	10.0	-0.3	2.8	24.5	16.3
Pacific	13.1	13.1	1.4	1.9	12.4	19.7
Mean for all 71 cities	14.4	13.2	1.6	2.1	2.4	5.2

	Net change in unem- ployment rate	Net change in percent black		Net cha percent r	Net change in percent female- headed households	
	1980–90	1970–80	1980–90	1970–80	1980–90	1980–90
New England	2.2	1.1	2.3	9.1	6.8	1.2
Middle Atlantic	-0.4	3.4	1.5	8.6	4.6	2.4
East North Central	0.0	3.3	3.6	8.0	4.9	3.4
West North Central	0.8	0.7	2.1	3.3	2.9	3.4
South Atlantic	0.7	3.3	2.1	5.8	3.5	1.2
East South Central	0.5	2.7	4.6	4.7	4.5	3.6
West South Central	3.7	1.7	1.7	5.4	5.5	3.8
Mountain	0.9	0.6	0.7	1.0	3.5	1.8
Pacific	0.1	2.1	-0.6	6.4	5.8	1.2
Mean for all 71 cities	0.8	2.4	1.8	6.0	4.7	2.5

Notes:

<sup>a</sup>For a list of the States in each census division, see p. 166. <sup>b</sup>Black and Hispanic population.

Regional trends in	socioeconomic	conditions.	cities under 200,000

	in rea	change al per income	Net change in poverty rate		Populati	on change
	1969–79	1979–89	1970–80	1980–90	1970–80	1980–90
New England	7.5%	32.3%	2.0	-0.4	-2.9%	2.4%
Middle Atlantic	6.6	19.5	2.9	0.4	-5.5	-1.1
East North Central	13.0	4.1	2.3	3.7	-1.2	-0.9
West North Central	23.3	5.0	0.7	3.4	3.1	5.3
South Atlantic	16.5	15.6	0.2	0.2	12.3	10.1
East South Central	23.1	8.8	-1.2	2.9	0.0	-3.8
West South Central	28.2	4.3	-2.7	4.5	27.0	11.2
Mountain	25.3	7.0	0.4	2.3	63.8	24.0
Pacific	18.4	14.2	1.1	1.3	31.1	21.6
Mean for all 522 cities	16.0	13.0	1.0	1.9	11.5	7.3

	Net change in unem- ployment rate		ange in t black		ange in minorityª	Net change in percent female- headed house- holds
	1980–90	1970–80	1980–90	1970–80	1980–90	1980–90
New England	1.5	1.1	1.3	3.5	5.1	1.6
Middle Atlantic	-0.6	3.4	1.8	8.1	6.1	2.2
East North Central	-1.3	3.3	1.7	4.5	3.1	2.4
West North Central	-0.2	0.7	0.6	1.2	1.2	1.9
South Atlantic	0.3	3.3	1.6	4.7	3.2	2.2
East South Central	0.0	2.7	1.5	3.4	1.3	2.1
West South Central	3.0	1.7	2.1	8.4	4.8	3.0
Mountain	0.1	0.6	0.4	0.4	2.4	1.7
Pacific	-0.1	2.1	0.2	5.8	6.2	0.5
Mean for all 522 cities	0.1	2.4	1.3	5.2	4.2	1.9

Note:

<sup>a</sup>Black and Hispanic population.

Levels of socioeconomic	problems.	1970-90.	cities over 200.000

	Real per capita income (1979 dollars)			Ро	overty ra	te	Unemployment rate		
	1969	1979	1989	1970	1980	1990	1980	1990	
New England	\$6,141	\$6,555	\$9,291	15.4%	20.2%	18.7%	6.2%	8.3%	
Middle Atlantic	6,384	6,798	8,685	13.0	17.4	17.3	9.1	8.7	
East North Central	6,374	6,794	7,076	13.3	17.1	22.1	10.2	10.3	
West North Central	6,445	7,447	8,112	12.4	13.5	16.7	6.1	6.9	
South Atlantic	5,982	6,882	8,217	16.5	19.2	17.9	6.2	6.9	
East South Central	5,607	6,742	7,515	18.8	18.0	20.4	7.2	7.7	
West South Central	5,907	7,353	7,721	17.4	16.4	20.8	4.9	8.6	
Mountain	6,298	7,485	8,244	12.7	12.4	15.3	6.2	7.1	
Pacific	7,140	8,063	9,170	11.7	13.1	14.9	6.6	6.7	
Mean for all 71 cities	6,311	7,210	8,183	14.5	16.1	18.2	7.1	8.0	

	Perc fema head fami	ale- ded	Percent black Percent minority <sup>a</sup>		Crime rate⁵				
	1980	1990	1970	1980	1990	1970	1980	1990	1990
New England	19.0%	20.2%	16.3%	21.7%	24.0%	19.1%	28.2%	35.0%	152.9
Middle Atlantic	17.4	23.2	26.8	30.6	39.9	29.4	38.0	51.1	150.6
East North Central	17.1	20.5	24.9	31.6	35.2	26.9	35.0	39.9	122.8
West North Central	13.4	16.8	15.1	17.9	20.0	16.9	20.3	23.2	79.8
South Atlantic	15.8	17.0	26.9	31.2	33.3	34.3	40.1	43.7	174.3
East South Central	15.2	18.8	31.0	35.4	40.0	31.5	36.2	40.7	97.9
West South Central	13.1	16.9	19.1	22.0	23.7	36.3	41.6	47.1	99.7
Mountain	10.7	12.6	4.9	5.5	6.2	24.6	25.7	29.2	54.0
Pacific	12.3	13.5	9.2	11.3	10.7	21.2	27.5	33.3	87.9
Mean for all 71 cities	14.6	17.5	20.1	23.6	26.1	28.1	34.1	39.6	113.1

Notes:

<sup>a</sup>Black and Hispanic population. <sup>b</sup>Robbery and aggravated assault per 10,000 population.

		Real per capita income (1979 dollars)			Poverty rate			Unemployment rate	
	1969	1979	1989	1970	1980	1990	1980	1990	
New England	\$6,915	\$7,432	\$9,973	8.9%	10.9%	10.5%	5.5%	6.9%	
Middle Atlantic	6,618	7,069	8,583	10.5	13.3	13.7	7.8	7.2	
East North Central	6,869	7,779	8,171	8.8	11.0	14.7	8.8	7.5	
West North Central	6,082	7,501	7,898	9.8	10.5	13.8	5.4	5.2	
South Atlantic	6,085	7,071	8,186	16.3	16.4	16.6	6.0	6.3	
East South Central	5,434	6,678	7,250	17.1	15.9	18.8	8.1	8.1	
West South Central	5,347	6,829	7,131	18.5	15.8	20.3	5.0	8.1	
Mountain	6,068	7,618	8,163	10.4	10.8	13.1	5.5	5.7	
Pacific	6,986	8,250	9,596	9.4	10.4	11.7	6.5	6.4	
Mean for all 522 cities	6,465	7,468	8,522	11.5	12.6	14.4	6.8	6.9	

	Perc fema heac famil	ale- led	Percent black		Percent minority <sup>a</sup>			Crime rate⁵	
	1980	1990	1970	1980	1990	1970	1980	1990	1990
New England	10.6%	12.5%	3.9%	4.6%	8.2%	5.2%	6.2%	13.6%	28.0%
Middle Atlantic	12.1	16.3	11.0	13.1	18.7	12.4	18.0	29.3	49.4
East North Central	10.9	12.8	8.3	11.2	14.0	9.9	11.8	15.9	33.4
West North Central	8.8	10.7	2.8	3.2	4.6	3.7	3.9	5.8	17.5
South Atlantic	13.5	15.7	24.6	26.4	29.6	26.5	28.0	32.7	67.6
East South Central	11.4	13.5	15.1	17.8	18.9	15.5	19.3	20.2	36.4
West South Central	10.4	13.4	13.2	14.4	30.8	24.2	16.5	35.6	40.0
Mountain	8.7	10.5	1.5	1.8	11.2	11.5	2.1	12.9	19.6
Pacific	10.8	11.3	4.4	5.7	21.8	17.0	5.9	28.0	48.3
Mean for all 522 cities	11.1	13.1	9.7	11.4	18.6	14.3	12.8	23.2	41.2

Notes:

<sup>a</sup>Black and Hispanic population. <sup>b</sup>Robbery and aggravated assault per 10,000 population.

	Net change in unem- ployment rate 1989–1992	Unem- ploy- ment rate 1992	Net change in private employment 1984–89 1989–92		manufa	ange in acturing yment 1989–92
		Cities ov	er 200,000			
New England	4.1%	7.5%	8.2%	-12.2%	- 20.2%	-18.6%
Middle Atlantic	3.2	7.8	13.1	- 5.9	- 9.3	-13.5
East North Central	1.4	6.5	16.9	- 1.4	- 1.9	- 5.8
West North Central	0.3	4.7	15.5	0.6	1.5	- 4.5
South Atlantic	2.1	7.0	23.0	- 0.6	3.6	- 5.6
East South Central	0.7	5.8	21.3	2.0	7.8	- 2.1
West South Central	0.4	7.0	4.7	5.2	- 1.7	3.0
Mountain	0.8	5.8	20.7	5.4	9.6	- 5.0
Pacific	3.2	7.5	23.3	0.2	13.9	- 5.3
Mean for 65 large cities	1.8	6.9	16.6	0.2	2.3	- 5.0
	11	Cities Und	der 200,000			
New England	4.3	8.3	11.3	-13.2	-13.6	-17.1
Middle Atlantic	2.9	7.8	13.6	- 1.6	- 3.1	-8.9
East North Central	1.5	7.0	16.0	2.5	3.4	-2.9
West North Central	0.2	4.3	15.3	7.0	7.9	2.6
South Atlantic	1.8	6.6	21.5	1.1	3.3	-6.4
East South Central	0.7	7.3	14.5	3.1	2.4	-1.9
West South Central	0.4	7.7	2.0	6.1	-2.7	-0.5
Mountain	0.3	5.8	22.8	8.2	12.9	3.2
Pacific	2.6	10.0	22.9	3.5	12.7	-6.3
Mean for small cities	1.7	7.2	13.9	1.4	0.7	-4.7

#### Regional changes in employment and unemployment<sup>a</sup>

Note:

<sup>a</sup>These data cover the whole metropolitan area for central cities in each region.

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### Appendix: City Distress Methodology

In this study, differences among cities in their 1980 levels of distress were measured by a composite index that was used in a HUD study to evaluate the CDBG formula (Bunce, Neal, and Gardner, 1983). In that study, the index was called a "community development needs index."

The first step in developing the needs index was to select indicators of community development need. A need indicator, such as the rate of poverty or job loss, is a variable whose greater degree in a city, other things being equal, implies greater need for assistance. (Need indicators are also frequently called "distress indicators.") Table A1 lists the 18 indicators that were used to measure differences in need among cities. The need indicators were chosen to conform to the types of need written into the community development legislation. They include slums, blight, and detrimental living conditions; neighborhood instability; the level of public services for low-income persons; and the rate of economic and population decline. Except for population decline, reliable intercity data on these conditions are not readily available. Hence, much of the effort in our earlier work involved searching for reliable "proxy" variables; that is, identifying those census variables that were readily available for all cities and highly correlated with neighborhood blight, detrimental living conditions, substandard housing, and so on.

The search for proxy variables was aided by HUD's *American Housing Survey* (AHS), which provides a wealth of information on the way urban residents rate the quality of their houses, neighborhoods, and public services. AHS data show a higher-than-average incidence of housing and neighborhood problems for female-headed, black, and low-income households. For instance, almost half of black households rated their neighborhoods as only a fair or poor place to live, compared with 29 percent for all central-city residents. This type of information supports the inclusion of a variable as a needs, or distress indicator.

Several of the other need indicators in Table A1 reflect problems associated with city decline and poor economic performance (for instance, slow growth in retail sales). Others reflect the demands for public services placed on cities by particular population subgroups (for example, persons over age 65). Inevitably the question arises as to how many indicators are needed to measure city problems adequately: why not 5 instead of 18? There is no completely satisfactory answer to this question. However, the diversity of city conditions and the fact that there are technical and measurement problems associated with each indicator (for example, cities losing population are not always very distressed, minorities are undercounted, the income and poverty data are not adjusted for intercity differences in the cost of living) argued for including a broad range of variables, particularly during the initial stage of the analysis.

After several indicators of city problems had been identified, the next question concerned the way the indicators were distributed across cities. If poverty, job loss, crime, and deteriorated housing consistently occurred in the same places, there would not be much disagreement as to which cities were the most distressed. However, not all variables are highly correlated, suggesting that community development problems are multidimensional.

To clarify the relationships among the need variables, factor analysis—a technique frequently used by statisticians to simplify analysis involving correlated variables—was used to reduce the indicators to a smaller set of factors. Factor analysis is appropriate in this context if one assumes that urban problems in different cities have common bases and that these bases can be isolated for analysis. Factor analysis reduced the 18 need indicators to 3 factors, each defined by a different group of variables that were highly correlated and which together were composed of indicators of particular dimensions of city needs. The names chosen for the factors and for the variables highly associated with each factor (dimension) are:

- Age and Decline: Decline or slow growth in households and population, pre-1940 housing stock, slow growth in retail sales, and decline or slow growth in employment.
- Poverty: Poor persons, low-income persons, uneducated persons, female-headed households, low employment rate, and a high proportion of minorities.
- Crime: Rental housing problems, violent crime, high population density, a high proportion of minorities, and poverty.

For each of these dimensions of need, the factor analysis provided an index score for each city that can be used to measure the *relative* variation in per capita need among cities. For instance, factor analysis transforms a city's percentages on several poverty-related variables into a single composite score that indicates the city's position relative to other cities on the poverty dimension. In general, a city will have a high score on a particular factor if it has a high percentage (rate) for each of the variables important in defining the factor. A city characterized by high percentages of pre-1940 housing, population loss, and job loss received a high index score on the age and decline factor. Similarly, a city characterized by high population density, crime, and renter problems received a high score on the density dimension. Pittsburgh, for example, had a high score on the age and decline dimension (1.53), Atlanta on the poverty dimension (1.14), and Newark on the density dimension (2.23). (Some cities had high scores on all three dimensions; these, of course, are the more distressed cities.)

Urban problems associated with age and decline were concentrated in the older Northern cities. Poverty scores were particularly high in large, declining central cities, such as Detroit, Atlanta, New Orleans, and Newark, and in small central cities in the South. High scores on the density dimension were found in larger cities located in the Northeast and the West. This dimension reflected problems of overcrowding in cities with large Hispanic populations.

A single index that ranked cities in terms of overall 1980 need was derived by weighting the three factors as follows:

Needs Index = 0.40 (Poverty) + 0.35 (Age and Decline) + 0.25 (Crime)

The rationale for the different weights and the properties of the composite distress index have been discussed extensively elsewhere and will only be summarized here (see Bunce, Neal, and Gardner, 1983; Bunce and Goldberg, 1979; Burchell et al., 1980). The highest weight (0.40) was given to the poverty factor because of the emphasis in the CDBG program on assisting low-income persons. The next-highest weight (0.35) was given to the age and decline factor because it reflects the economic and physical problems in areas with population and job losses. The density dimension—which served as a proxy for neighborhood externalities in slums and blighted areas of larger cities and as an indicator of crowding—received the remaining 0.25 weight.

In spite of the need for caution in reading too much into a composite index of city need, one should recall its *main advantage*: recognition of combinations of problems. The most distressed cities are those where problems such as job loss, unemployment, poverty, and crime occur together. See Table 3 in the text for a listing of the more distressed cities.

#### TABLE A1

Need (distress) indicators

- 1. Percentage of the population with income below the poverty level, 1980
- 2. Per capita income, 1979<sup>a</sup>
- 3. Percentage of families headed by a female, with children under 18, 1980
- 4. Employment rate, i.e., percent of population between ages 16 and 64 that is employed, 1980<sup>a</sup>
- 5. Unemployment rate, 1981
- 6. Percentage of the population between ages 25 and 65 with less than a high school education, 1980
- 7. Percentage of the population that is black or of Hispanic origin, 1980
- 8. Number of violent crimes per 10,000 persons, 1980
- 9. Population per square mile (using 1980 population and 1975 land areas)
- Percentage of 1980 renter-occupied housing units characterized by at least one of the following conditions: (1) overcrowding; (2) without complete plumbing; (3) without complete kitchen facilities; and (4) occupants pay more than 30 percent of their income as rent
- 11. Percentage of the population over age 65, 1980
- 12. Percentage of 1980 housing units built before 1940
- 13. Percent change in population, 1960-80<sup>a</sup>
- 14. Percent change in population, 1970-80<sup>a</sup>
- 15. Percent change in retail sales, 1967-77<sup>a</sup>
- 16. Percent change in retail, wholesale, and service employment, 1967-77ª
- 17. Percent change in households, 1970-80, using 1980 boundaries<sup>a</sup>
- 18. Change in percentage black, 1970-80

Note:

<sup>a</sup>These variables are *inverse* indicators of need; i.e., lower values indicate higher needs.