
PULLING APART

A State-by-State Analysis of Income Trends

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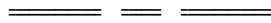
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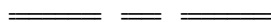


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Executive Summary

Despite the strong economic growth and tight labor markets of recent years, income disparities in most states are significantly greater in the late 1990s than they were during the 1980s. The average income of the lowest-income families grew by less than one percent from the late 1980s to the late 1990s — a statistically insignificant amount. The average real income of middle income families grew by less than two percent, while the average real income of high-income families grew by 15 percent.

The small growth in the incomes of low-income families over the last decade was not enough to make up for the decline in incomes during the previous decade. Nationwide, from the late 1970s to the late 1990s, the average income of the lowest-income families fell by over six percent after adjustment for inflation, and the average real income of the middle fifth of families grew by about five percent. By contrast, the average real income of the highest-income fifth of families increased by over 30 percent.

The trend has been widespread. Income disparities between the top fifth of families and families at the bottom and the middle of the income distribution grew substantially in almost every state over the past two decades.

While the national trend toward increasing inequality has received widespread coverage, less attention has been focused on how this trend has varied by state. This analysis examines trends in income inequality in each of the 50 states over the past two business cycles.

Income Inequality Increased In All States But Four Over the Last Two Decades

In 46 states, the gap between the incomes of the richest 20 percent of families and the incomes of the poorest 20 percent of families is wider than it was two decades ago.

Data Used in This Report

This report is based on before-tax income data for families — two or more related individuals residing together — from the Census Bureau’s March Current Population Survey public use files. All figures are expressed in 1997 dollars and have been adjusted for inflation. The report compares “pooled” data from the three most recent years for which data were available — 1996, 1997, and 1998 — to pooled data from the late 1970s and the late 1980s. The purpose of pooling these data was to increase the sample size of the data and hence their precision. Comparisons between the three time periods chosen are appropriate because they are similar points in the business cycle. (The late 1970s and late 1980s were the peaks of the previous two economic expansions and the late 1990s are the highest point of the current expansion for which state data are available.)

- In 18 states high-income families got richer while the poor got poorer. In 31 states the incomes of high-income families grew faster than the incomes of low-income families.¹
- In all but two states in the nation, the average income of families in the top 20 percent of the income distribution grew, after adjustment for inflation, between the late 1970s and late 1990s. In 31 states, the incomes of the upper fifth of families jumped by over 30 percent over the past two decades.
- Incomes of the poorest fifth of families, however, declined in 18 states between the late 1970s and the late 1990s. In some states, the decline was very steep. In 11 states, the incomes of families in the bottom quintile of the income distribution dropped by more than 10 percent. In four states — Arizona, New Mexico, New York, and Wyoming — the poorest fifth of families experienced a decline in income of *more than 20 percent*.

The differences in income growth since the late 1970s between high- and low- income families are seen to be even more pronounced when families in the top five percent of the income distribution are compared to the bottom fifth.

- In the eleven large states analyzed, the incomes of the top five percent of families increased by 35 percent or more between the late 1970s and the late 1990s. By contrast, in ten of these eleven states the incomes of the bottom fifth of families either declined or grew very little between the late 1970s and late 1990s.²

¹ In the remaining state — Alaska — the income of low-income families grew at a faster rate than the income of high-income families.

² An analysis of the average income of the top five percent of families was conducted for eleven large states that have sufficient observations in the Current Population Survey to allow the calculation of reliable estimates of the
(continued...)

- In the eleven large states analyzed, the increases in the average income of families in the top five percent of the income distribution ranged from \$58,000 to over \$111,000. In three states — New Jersey, New York, and Pennsylvania — the increase was larger than \$100,000. By contrast, the largest increase in average income for the bottom fifth of families in these states was only \$1,300. In New York, for example, the average income of the top five percent of families grew by \$107,880 while the average income of the bottom 20 percent dropped by \$2,900.

Middle-income families also lost ground. In 45 states, the gap between the average income of middle-income families and the average income of the richest 20 percent of families widened.

- The average income of families in the middle fifth of the income distribution fell in 11 states between the late 1970s and the late 1990s. In all but three of these states, the average income of the top fifth of families increased. In the other 39 states, the average income of the middle fifth of families increased modestly, but did not keep pace with the income growth of the top fifth of families.

Gap Between High-Income Families and the Poor and Middle-Class is Wide

The resulting disparities between the incomes of high- and low-income families are substantial.

- In the United States as a whole, the poorest 20 percent of families had an average income of \$12,990 in the late 1990s, while the average income of families in the top 20 percent of the income distribution was \$137,490, or more than 10 times as large. There were nine states — New York, Arizona, New Mexico, Louisiana, California, Rhode Island, Texas, Oregon, and Kentucky — where the average income of the richest fifth of families was more than eleven times as great as the average income of the bottom fifth of families.
- In the late 1970s, there was no state where high income families had average income that was as much as 9.5 times larger than the average income of low-income families. By the late 1990s, 24 states had "top-to-bottom" ratios of 9.5 or greater. The increase in income disparities between the top and bottom fifths of families was greatest in New York, Arizona, Rhode Island, Oregon, California, New Mexico, West Virginia, Kentucky, Connecticut, and Kansas.

² (...continued)

average income of the top five percent of families. These states are California, Florida, Illinois, Massachusetts, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, and Texas.

The gaps between the incomes of high-income families and middle-income families also were not always as large as they are in the 1990s.

- In the late 1970s, there was not a single state where the average income of families in the top quintile of the distribution was as much as 2.7 times as great as the average income of families in the middle quintile. By the late 1990s, there were 39 states where the gap was this wide.
- In the late 1990s, the gap between high-income and middle class families was the widest in 12 states — Arizona, New Mexico, New York, Oregon, Texas, California, South Dakota, Rhode Island, Florida, Kansas, Mississippi, and Louisiana — where the average income of the richest fifth of families was at least three times as large as the average income of the middle fifth of families.

The Economic Prosperity of the 1990s Has Not Been Shared Equally

The long-term trend toward increasing inequality has continued over the past decade despite the economic growth of recent years. In only a handful of states was progress made toward reducing income inequality between the late 1980s and the late 1990s.

- Since the late 1980s, income inequality has increased in most states. In two-thirds of the states, the gap in incomes between the top 20 percent of families and the bottom 20 percent of families grew between the late 1980s and the late 1990s. In 15 states, the average income of families in the bottom fifth of the distribution fell while the incomes of those in the top fifth grew.
- By contrast, the gap in income between the top 20 percent of families and the bottom 20 percent narrowed significantly in only three states — Alaska, Louisiana, and Tennessee.

Since the late 1980s, the incomes of very high income families — the richest five percent of families — grew dramatically while the incomes of the poorest families declined or stagnated.

- In nine of the 11 large states analyzed, the average income of the poorest fifth of families declined or grew very little since the late 1980s, while the incomes of the top five percent of families grew by more than 15 percent. In five of these states — Michigan, New York, Ohio, Pennsylvania, and Texas — the incomes of the top five percent grew by more than 30 percent.
- The greatest increase in average income for the poorest families in the 11 large states was \$1,490 in Michigan. The increases in the average income of the top

five percent of families ranged from \$32,690 in Illinois to \$67,680 in Pennsylvania.

Families in the middle of the income distribution have fallen farther behind upper-income families in most states over the past decade.

- In close to three-fourths of the states, the ratio of the incomes of the top fifth of families compared to the middle fifth of families increased between the late 1980s and the late 1990s. Income disparities between the top and middle fifths of families increased most in Arizona, followed by Oregon, South Dakota, Rhode Island, Kansas, New York, Connecticut, New Hampshire, Nevada, and Maryland. By contrast, the top to middle ratio did not decline significantly in any state.
- On average in the United States, the share of income held by the middle fifth of families fell from 17.2 percent to 16.2 percent of total income, while the share held by the richest fifth of families increased from 42.1 percent to 45.4 percent of total income. Since the late 1980s, the share of income held by the middle fifth of families has fallen in 44 states. Over the same period, the share of income held by the fifth of families with the highest incomes grew in all but four states.

Causes of Rising Inequality

Researchers have identified several factors that have contributed to the large and growing income gaps in most states. The growth of income inequality is primarily due to the growth in wage inequality. Wages at the bottom and middle of the wage scale have been stagnant or have declined over the last two decades. The wages of the very highest paid employees, however, have grown significantly. Several factors have contributed to increasing wage inequality including globalization, the decline of manufacturing jobs and the expansion of low-wage service jobs, immigration, and the weakening of labor market institutions — the lower real value of the minimum wage and fewer and weaker unions. These factors have led to an erosion of wages for workers with less than a college education — approximately the lowest-earning four-fifths of the workforce.

In the last few years, persistent low unemployment, an increase in the minimum wage and fast productivity growth have fueled real wage gains at the bottom. As a result, there has been a lessening of wage inequality at the bottom while the gap between middle- and high-wage workers continues to grow. However, even the recent wage growth for low-wage workers has not been sufficient to counteract the two-decade long pattern of stagnant or declining wages.

Besides wages, the other major source of income is investment income such as dividends, rent, interest and capital gains. Since investment income primarily accrues to those at the top of the income structure, recent expansions of investment income have led to greater income

inequality. (This report captures only some of the effects of these investment income trends because the income measure used in this report includes only a portion of investment earnings. It does not include income from capital gains.)

Another factor that explains some of the increased income inequality is the increase in the number of families headed by a single person. These families generally have lower income than two-earner families.

Government policies — both what governments have done and what they have not done — have contributed to the increase in wage and income inequality over the past two decades in most states. For instance, deregulation and trade liberalization, the weakening of the social safety net, the failure to have effective labor laws regulating the right to collective bargaining, and a minimum wage that has declined in real terms have all contributed to growing wage inequality. In addition, changes in federal, state and local tax structures and benefit programs have, in many cases, accelerated rather than moderated the trend toward growing inequality emerging from the labor market.

States Can Choose a Different Course

One consequence of the nation's prolonged economic recovery is that tax revenue has been growing at a faster rate than originally projected in most states, leaving states with surplus revenues. The strong economy also has played a part in reducing public assistance caseloads in many states. As a result, the current economic expansions provide state budget-makers with the resources to mitigate some of the growing inequality through state policies.

States have long played a major role in the establishment of labor market policies such as rules governing the formation of unions, the design of the unemployment insurance system, and the establishment of state minimum wages, all of which affect income inequality.

The minimum wage, for example, has a direct bearing on individual earnings. The value of the federal minimum wage has fallen considerably since the late 1970s. One way that policymakers could help reverse or moderate the decline in wages for workers at the bottom of the pay scale would be to enact a higher minimum wage. Ten states have compensated for the decline in the value of the federal minimum wage by establishing higher state-level minimum wage standards.

Since the 1970s, unemployment insurance protection has eroded as a result of both federal and state-level cutbacks. The proportion of jobless workers receiving unemployment insurance benefits has declined in recent years. These cutbacks have affected both middle- and low-income families. Efforts to strengthen the unemployment insurance system both at the national level and in many states are warranted in order to broaden the receipt of unemployment insurance among unemployed workers.

Changes in programs that provide assistance to low-income families have contributed to the increase in income inequality and will likely continue to exacerbate the trend towards increasing inequality in the coming years. In the typical state, cash assistance benefits for a family of three with no other income fell 40 percent between 1975 and 1996, after adjusting for inflation. In addition, in every state, receipt of cash assistance has declined dramatically. Studies indicate that between one-half and three-quarters of former welfare recipients are employed shortly after they leave the rolls. However, significant barriers to obtaining and keeping steady work remain for many families, and these barriers are likely to retard income gains for the lowest income fifth of families.

There are a host of options state policymakers can consider to strengthen their social safety nets including the provision of supportive services such as transportation, child care, and health insurance coverage to low-wage workers. States can also provide intensive case management and a range of services to help current and former welfare recipients to maintain their present employment, move into better jobs, or obtain the education and training needed for career advancement.

The analysis presented here uses pre-tax income. It does not reflect the effects of tax policies that influence the distribution of post-tax income. Nevertheless, federal and state tax policies influence how much income families have to spend and how disposable income is distributed. The overall effect of the federal income tax system is to narrow income inequalities. In recent years, expansions in the earned income tax credit have helped to increase the after-tax income of low-income families with children. However, the tax system more generally has become less progressive over the past two decades; changes to the federal tax code made in 1997 exacerbated this trend.

While the federal tax system as a whole remains progressive, nearly all state tax systems are regressive. States rely more on regressive sales taxes and user fees than on progressive income taxes and, therefore, take a larger percentage of income from low- and middle-income families than from the wealthy. In the past few years, when many states have sought to cut taxes, nearly all have chosen to make the vast majority of the cuts in their progressive income taxes, rendering their tax systems even more regressive.

In order to narrow the gap between high- and low-income families, states can institute tax reforms that are progressive in nature and improve the after-tax distribution of income. For example, states can increase their reliance on income taxes rather than sales taxes by cutting sales tax rates rather than income tax rates. States can also make their income tax systems more progressive by enacting tax credits targeted to low-income taxpayers or by raising personal exemptions or standard deductions. Another way to lessen the negative impact of state tax systems on the poor while cutting taxes is to exempt food from the sales tax base. One direct way that states can use tax policies to raise income from work for their poorest residents is to enact state earned income tax credits.

State policies constitute only one of a range of factors that have contributed to the increasing disparities in incomes over the past decade. If low- and middle-income families are to stop receiving steadily smaller shares of the income pie, state as well as federal policies will have to play an important role.

Table A

<p><u>Ten States where Income Inequality Between the Top and the Bottom Was Greatest, 1996-98</u></p>	<p><u>Ten States where Income Inequality Between the Top and the Middle was Greatest, 1996-98</u></p>
<p>New York Arizona New Mexico Louisiana California Rhode Island Texas Oregon Kentucky Virginia</p>	<p>Arizona New Mexico New York Oregon Texas California South Dakota Rhode Island Florida Kansas</p>
<p><u>Ten States where Income Inequality Between the Top and the Bottom Grew Most, 1970s - 1990s</u></p>	<p><u>Ten States where Income Inequality Between the Top and the Middle Grew Most, 1970s - 1990s</u></p>
<p>New York Arizona Rhode Island Oregon California New Mexico West Virginia Kentucky Connecticut Kansas</p>	<p>Arizona Oregon Rhode Island Kansas New York West Virginia California South Dakota New Mexico Kentucky</p>
<p><u>Ten States where Income Inequality Between the Top and the Bottom Grew Most, 1980s - 1990s</u></p>	<p><u>Ten States where Income Inequality Between the Top and the Middle Grew Most, 1980s - 1990s</u></p>
<p>Rhode Island Oregon Arizona New York Connecticut Kansas New Mexico Washington California Montana</p>	<p>Arizona Oregon South Dakota Rhode Island Kansas New York Connecticut New Hampshire Nevada Maryland</p>

I. Introduction

The U.S. economy continues to experience a prolonged period of economic growth. By November of 1999, the unemployment rate had dropped to 4.1 percent, the lowest rate since the early 1970s. Despite the current economic expansion, the long-term trend in the distribution of growth raises some troubling and ongoing issues. The incomes of the country's wealthiest families have increased substantially over the past two decades, but middle- and lower-income families have seen their incomes stagnate or fall. This trend of rising inequality in the United States as a whole has been well documented by Census Bureau and Congressional Budget Office data and by a large number of analysts. Few analyses, however, have focused on how income inequality has changed within the different states and regions of the country.

This report examines trends in the distribution of income from the late 1970s to the late 1990s in each of the 50 states. The analysis finds that in the vast majority of states, the gap between the incomes of the highest-income families and the incomes of middle-class and poor families has grown substantially over the period.³

The report also finds that even the economic expansion of the past several years has not altered the long-term trend. Rather, an analysis of the changes in income inequality since the late 1980s (a period comparable in the economic cycle to the current period) shows that in two-thirds of states, the gap between high-income and low-income families continued to grow over the past decade. Moreover, the gap between high-income and middle class families increased since the late 1980s in close to three-fourths of states.

³ Families with incomes that fall in the bottom 20 percent of the income distribution are referred to as "poor" in this report. The vast majority of these families have incomes below the official poverty line.

One consequence of the nation's prolonged economic recovery is that tax revenue has been growing at a faster rate than originally projected in most states, leaving states with surplus revenues. The strong economy also has played a part in reducing public assistance caseloads in many states. As a result, the current economic expansions provide state budget-makers with the resources to mitigate some of the growing inequality through state policies.

Why Growing Income Inequality is a Problem

As this report demonstrates, inequality has grown in virtually every state in the United States since the 1970s. This growing divide between the rich and the poor and the middle class deserves the attention of policymakers and the public.

The strong economic growth of recent years results from the contributions of people in all walks of life, from laborers to corporate executives. It is a problem when everyone does not share in the resulting prosperity.

The United States was built on the ideal that hard work should pay off, that individuals who contribute to the nation's economic growth should reap some of the benefits of that growth. And for many years, they did. Over the past two decades, however, the benefits of economic growth have been skewed in favor of the wealthiest members of society. If everyone's income grew along with the economy but the incomes of some grew a little faster than others, that would be far less of a problem. But since the late 1970s, the incomes of the poor have actually fallen or stagnated in most states and the incomes of the middle class have increased only slightly, while the incomes of the wealthiest grew rapidly. It is not that the poor and middle class are simply getting a slightly smaller share of the growth; it is that virtually all of the growth is going to the top end.

Continuing growth in income inequality could also undercut the basis of the much-heralded changes made to the welfare system in recent years. Current policy is based on the assumption that a job is the first step to self-sufficiency and to moving out of poverty. When former welfare recipients can only find jobs that do not pay enough to lift a family out of poverty and the real incomes of the poorest families decline over time, the underpinnings and future success of policies that encourage work are called into question.

The decline in the incomes of the poorest families is particularly disturbing. Research has shown that poverty can have a substantial effect on child and adolescent well-being. Children who grow up in families with incomes below the poverty line have poorer health, higher rates of learning disabilities and developmental delays, and poorer school achievement. They are far more likely to be unemployed as adults than children who were not poor.⁴

⁴ See, for example, Greg Duncan, Jeanne Brooks-Gunn, eds. *The Consequences of Growing Up Poor*. New
(continued...)

Moreover, there is evidence that income inequality in and of itself — not simply the decline of the incomes of the poor — results in problems for society. For example, there is a considerable body of research linking income inequality to poor health outcomes. A number of papers at a recent conference on income inequality sponsored by the Federal Reserve Bank of New York discussed the association between higher levels of inequality and poor schools, substandard housing, and higher levels of crime victimization.⁵

- The impact of inequality on public health in particular has received considerable attention from researchers. A recent article on income inequality summarized this research as follows: “Demographers and public health researchers have found mounting though controversial evidence that greater inequality can boost mortality rates and contribute to poor health. Countries and communities with above-average inequality have higher mortality rates than countries or communities with comparable incomes and poverty rates but lower inequality.”⁶

While numerous studies have documented this link between income inequality and poor health, the causes of this link are not entirely clear.⁷ A leading explanation is that individuals who feel their income and social status are below what they expect based on their observation of the status of others experience high levels of stress. There is a well-documented link between stress and poor health.

- Income inequality can have a direct effect on adequacy of housing. Economic growth can lead to more demand for housing and consequently to higher housing prices. When the incomes of the poorest families are falling even as the economy grows, they are less likely to be able to afford adequate housing leading to increased homelessness.
- In the United States, increased disparities in income have led to geographic disparities as wealthier families move to the suburbs. Because school systems depend heavily on local funding, this has led to increased disparities in the quality

⁴ (...continued)
York: Russell Sage Foundation, 1997.

⁵ Timothy Smeeding, “General Commentary,” *Federal Reserve Bank of New York Economic Policy Review*, September, 1999.

⁶ Gary Burtless, “Growing Income Inequality: Sources and Remedies” in Henry J. Aaron and Robert D. Reischauer, eds. *Setting National Priorities, The 2000 Election and Beyond*. Washington, DC: Brookings Institution Press, 1999.

⁷ See, for example, Ichiro Kawachi, Sol Levine, S. Michael Miller, Kathryn Lasch, and Benjamin Amick, *Income Inequality and Life Expectancy - Theory, Research and Policy*, Society and Health Working Paper Series No 94-2, 1994.

of schools. Poor schools make it harder for poor children to acquire the skills they need to succeed.

A widening gulf between the rich and the poor and the middle class can reduce social cohesion, trust in institutions including government, and participation in the democratic process. Growing income inequality in the United States has widened discrepancies in political influence — a particular problem given the heavy dependence of candidates for office on private contributions. This may have contributed to the growth in the number of Americans who feel that their elected officials do not care much about the views of ordinary citizens.

In addition, as the divide grows among families at differing income levels, there is less contact and familiarity with the problems faced by families in different economic circumstances. For example, it can be difficult for an upper middle-income family living in a suburban neighborhood to understand the lack of decent housing available to poor families. Similarly, wealthy families with the resources that allow access to private schools for their children can lose sight of the need to support public schools. As a result, support for the taxes necessary to finance government programs declines.

The failure to invest in programs that meet the health and housing needs of families at all income levels, that provide education and training for children and that provide supports for low-wage workers can have long-term impacts on the future economic growth of the country.

Government at all levels has an important role to play in pushing back against the growth of income inequality. Improvements to state government policies can affect the trend towards growing income inequality. State and local tax policies also can serve to mitigate the effects of increased inequality. Through policies such as raising the minimum wage, strengthening unemployment insurance, implementing a wide range of supports for low-income working families, and reforming regressive state tax systems, state and federal lawmakers can help moderate the growing income divide.

II. The Long-Term Trend: The Late 1970s to the Late 1990s

Nationwide, income inequality increased significantly during the 1980s and 1990s, a stark reversal of the trend towards lessening inequality that prevailed between World War II and the 1970s. Gaps in income between high-income families and poor families and between high-income families and middle-income families have widened across the United States, in every region and in virtually every state. As a group, low-income families have seen their incomes decline while the incomes of middle-income families have risen only slightly. The incomes of the wealthiest families, by contrast, have grown dramatically. These developments occurred both in the 1980s and the 1990s. This chapter examines this long-term — post 1979 — trend in the growth in income inequality, while the next chapter examines the trends in the 1990s.

To assess how families at different income levels have fared over the past two decades, this report measures income inequality at three points in time: the late 1970s, the late 1980s, and the late 1990s. These periods reflect comparable points in the economic cycle. For each time period, all families are ranked by income and divided into five groups (or "quintiles"), each made up of the same number of persons. The average income of families in each quintile is then calculated for each of the three time periods. The change in the income held by each quintile is one way in which researchers commonly illustrate changes in the distribution of income over time by, for instance, showing that income growth was higher among higher income groups.

Income Trends: Differences Between High- and Low-Income Families

In comparing the varying income trends of families at different points in the income distribution, there is a dramatic contrast between how the richest fifth of families and the poorest fifth of families fared over the last two decades. Table 1 shows how families in the top and bottom fifths of the distribution have fared since the late 1970s in each of the 50 states. The table presents both the percentage change in average incomes and the dollar change in average

incomes. (The directions of most of the changes in average incomes are statistically significant at the 95 percent level of confidence. In Tables 1, 5, 9, and 12 states are only counted as a state where the poor grew poorer or the middle class lost income if the decline in average income is statistically significant. See the footnote to Table 1 for details.)

In 18 states, the poorest fifth of families grew poorer between the late 1970s and the late 1990s. In 11 of those states, the incomes of families in the bottom quintile of the income distribution dropped by more than 10 percent. In four states — Arizona, New Mexico, New York, and Wyoming — the poorest fifth of families experienced a decline in income of *more than 20 percent*.

In every state but three, by contrast, families in the top 20 percent of the income distribution saw their incomes swell between the late 1970s and the late 1990s. In 31 states, the incomes of the upper fifth of families jumped by over 30 percent. In New York, for example, the average income of the bottom fifth of families fell by \$2,900 from the late 1970s to the late 1990s, a drop of over 20 percent. Over the same period, New York's richest 20 percent of families saw their incomes rise by \$45,480, or over 40 percent. (All figures are presented in 1997 inflation-adjusted dollars.)

The high-income families were growing richer in 16 of the 18 states in which the poor grew poorer. In the remaining two states — Montana and Wyoming — the average income of the poorest families declined by 15 percent or more, while the average income of the richest families remained essentially the same.

In 31 of the 32 states where incomes of the bottom fifth of families either rose or did not change between the late 1970s and late 1990s, the incomes of the top fifth of families grew faster than the incomes of the bottom fifth.⁸ In 20 of these states, incomes of the bottom fifth were essentially stagnant, growing by a statistically insignificant amount over two decades, while the incomes of the top fifth grew by more than 20 percent.

In Florida, for example, the average income of families in the bottom fifth of the distribution increased by only 1.2 percent, or \$140 between the late 1970s and the late 1990s (a change that was not statistically significant). Families in the top fifth of the distribution, on the other hand, saw their incomes rise by over 36 percent, or by \$33,240.

The trend toward widening inequality is even more pronounced when families in the top five percent of the income distribution are compared to the bottom fifth. Table 1A shows this

⁸ In the remaining state, Alaska, the incomes of both the poorest families and the richest families increased, and the percentage increase in the incomes of the bottom fifth of families exceeded the percentage increase for the top fifth of families. Specifically, the average income of the poorest 20 percent of families increased from \$15,620 to \$18,260 between the late 1970s and the late 1990s, an increase of nearly 17 percent. The average income of the richest 20 percent of families rose from \$144,810 to \$147,430 over the same period, an increase of two percent.

comparison for the eleven large states where such a calculation can be made.⁹ In ten of the eleven states, the incomes of the bottom fifth of families either declined or grew very little between the late 70s and late 90s. In all eleven states, however, the incomes of the top five percent of families increased by 35 percent or more.

Changes in Income Gaps

The gap in income between high- and low-income families at any point in time may be measured by dividing the average income of the top quintile by the average income of the bottom quintile. This calculation provides a "top-to-bottom" income ratio. Table 2 shows the top-to-bottom ratios in all fifty states in the 1990s, and the ranking of each state. New York, ranked first, has a larger income gap between the top fifth of families and the bottom fifth than any other state.

There are nine states — New York, Arizona, New Mexico, Louisiana, California, Rhode Island, Texas, Oregon, and Kentucky — where the average income of the richest fifth of families was more than eleven times as great as the average income of the bottom fifth of families. In most of these states, the average income of the bottom fifth of families was well below the national average.

At the other end of the spectrum, there are only four states — North Dakota, Iowa, Indiana, and Utah — where the richest fifth of families had less than eight times the average income of the bottom fifth. These are the states where income was distributed least unevenly, although the gap between high-income and poor families was still quite large. In these four states, the average income of the bottom fifth of families was well above the national average.

Table 1A
Dollar and Percent Change in Average Income of Bottom Fifth and Top 5% of Families, '78-'80 to '96-'98

State	Bottom Fifth		Top 5%	
5 Large States Where the Bottom Fifth Grew Poorer and Top 5% Grew Richer				
California	(2,884) *	-19.1%	81,715 *	48.5%
Michigan	(1,297) *	-8.1%	74,040 *	49.5%
New York	(2,897) *	-21.2%	107,875 *	66.9%
Ohio	(1,791) *	-11.4%	84,420 *	57.2%
Texas	(1,149) *	-9.3%	58,480 *	35.0%
6 Large States Where Incomes of the Top 5% Grew Faster than Incomes of the Bottom Fifth				
Florida	139	1.2%	78,444 *	57.4%
Illinois	(146)	-1.0%	69,187 *	42.2%
Massachusetts	(370)	-2.4%	96,328 *	59.8%
New Jersey	1,293 *	8.0%	111,304 *	68.6%
North Carolina	18	0.1%	72,862 *	51.9%
Pennsylvania	(416)	-2.7%	104,447 *	74.8%
Total U.S.	(897) *	-6.5%	84,762 *	55.5%
* Dollar changes marked with an asterisk are statistically significant. The direction of the change is known with 95 percent certainty. See the footnote in Table 1 for details.				
Source: Economic Policy Institute/Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.				

⁹ An analysis of the average income of the top five percent of families was conducted for eleven large states that have sufficient observations in the Current Population Survey to allow the calculation of reliable estimates of the average income of the top five percent of families.

Table 1
Dollar and Percent Change in Average Income of Bottom and Top Fifths
of Families, '78-'80 to '96-'98

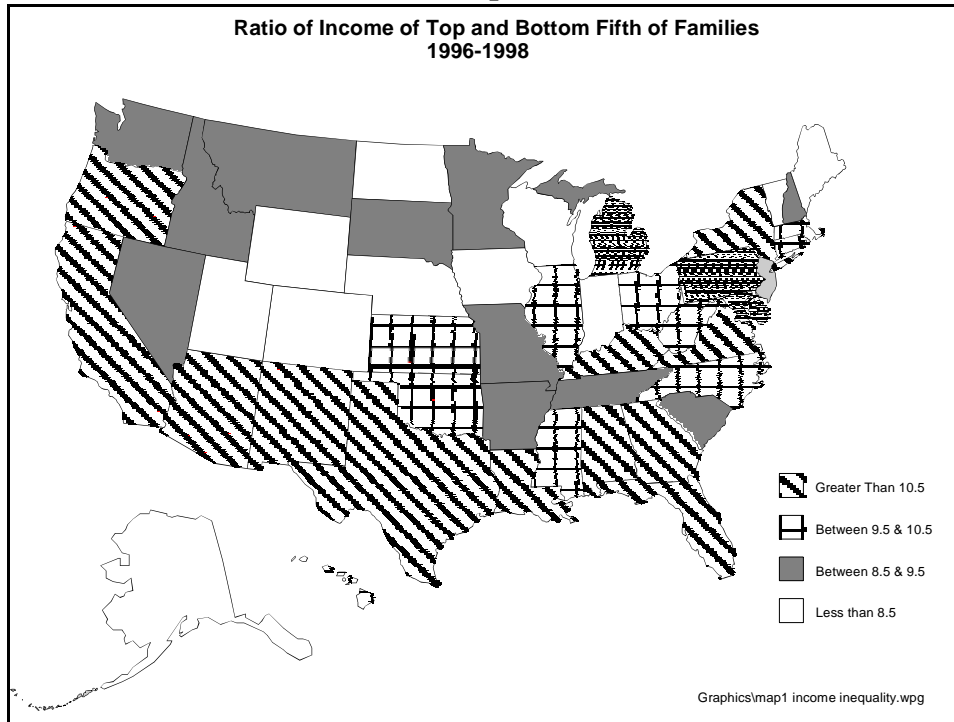
State	Bottom Fifth		Top Fifth	
18 States Where the Bottom Fifth Grew Poorer and Top Fifth Grew Richer				
Wyoming	(5,613) *	-29.8%	2,759	2.6%
Arizona	(3,884) *	-26.5%	33,712 *	31.4%
New York	(2,897) *	-21.2%	45,481 *	42.6%
California	(2,884) *	-19.1%	31,814 *	27.8%
New Mexico	(2,392) *	-21.5%	16,400 *	17.3%
West Virginia	(2,154) *	-18.0%	24,713 *	31.9%
Oregon	(1,933) *	-13.0%	49,518 *	52.2%
Montana	(1,912) *	-15.1%	2,467	2.5%
Ohio	(1,791) *	-11.4%	34,742 *	34.2%
Oklahoma	(1,656) *	-12.5%	13,114 *	12.8%
Louisiana	(1,468) *	-13.6%	13,364 *	13.6%
Rhode Island	(1,340) *	-9.0%	66,447 *	70.9%
Michigan	(1,297) *	-8.1%	29,258 *	27.7%
Iowa	(1,173) *	-7.2%	18,354 *	19.6%
Texas	(1,149) *	-9.3%	24,435 *	23.1%
Kansas	(1,057) *	-6.8%	48,285 *	51.6%
Idaho	(1,005) *	-7.0%	22,568 *	25.0%
Georgia	(700) *	-5.7%	23,720 *	24.1%
31 States Where Incomes of the Top Fifth Grew Faster Than Incomes of the Bottom Fifth				
Hawaii	(1,072)	-6.6%	34,733 *	30.5%
Connecticut	(924)	-5.0%	61,180 *	54.2%
Nevada	(801)	-4.9%	26,008 *	24.5%
New Hampshire	(707)	-4.0%	49,490 *	50.1%
Wisconsin	(439)	-2.6%	31,678 *	30.2%
Kentucky	(436)	-3.7%	41,491 *	49.2%
Pennsylvania	(416)	-2.7%	42,499 *	43.3%
Massachusetts	(370)	-2.4%	45,888 *	41.4%
Minnesota	(317)	-1.9%	43,281 *	42.6%
Virginia	(194)	-1.4%	45,195 *	42.7%
Illinois	(146)	-1.0%	29,444 *	26.4%
North Carolina	18	0.1%	35,831 *	39.5%
Florida	139	1.2%	33,243 *	36.1%
Delaware	211	1.4%	33,604 *	32.9%
Maine	233	1.8%	22,105 *	25.3%
Vermont	243	1.7%	29,940 *	32.9%
Missouri	275	2.0%	31,002 *	32.0%
Washington	281	1.9%	32,191 *	30.2%
Maryland	355	2.0%	42,779 *	35.1%
North Dakota	503	3.9%	12,078 *	12.8%
Mississippi	877 *	9.3%	22,016 *	26.3%
Nebraska	899	6.5%	31,926 *	35.0%
Tennessee	1,175 *	11.1%	22,788 *	26.5%
Indiana	1,288 *	8.4%	33,105 *	37.3%
New Jersey	1,293 *	8.0%	52,835 *	46.7%
Arkansas	1,363 *	14.5%	18,981 *	23.6%
Colorado	1,571 *	9.3%	34,788 *	30.5%
Alabama	1,613 *	16.8%	32,997 *	38.2%
Utah	2,040 *	12.6%	29,435 *	30.5%
South Carolina	2,297 *	20.7%	28,632 *	32.7%
South Dakota	2,441 *	19.9%	43,413 *	48.6%
1 State Where Incomes of the Bottom Fifth Grew Faster Than Incomes of the Top Fifth				
Alaska	2,640 *	16.9%	2,627	1.8%
District of Columbia	(2,107) *	-21.9%	86,794 *	74.6%
Total U.S.	(897) *	-6.5%	34,365 *	33.3%
<p>* Dollar changes marked with an asterisk are "statically significant." That is, according to a commonly-used statistical test, we are 95 percent certain that the direction of the change noted (i.e., whether income rose or fell) is correct. For example, in Wisconsin, we cannot say with 95 percent certainty that the \$439 drop in average income of the bottom fifth reflects a true income drop, but we can say with 95 percent certainty that the \$31,678 gain in the income of the top fifth reflects a true gain. The test is important since these income data are based on samples of the population in each state. No statistical tests were performed on the percentage changes.</p>				
<p>Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.</p>				

Table 2
Ratio of Incomes of Top and Bottom Fifths of Families,
'96-'98

State	Rank	Average income of bottom fifth of families	Average income of top fifth of families	Top-to-bottom ratio
New York	1	10,769	152,349	14.1
Arizona	2	10,801	141,190	13.1
New Mexico	3	8,720	111,295	12.8
Louisiana	4	9,289	111,441	12.0
California	5	12,239	146,066	11.9
Rhode Island	6	13,527	160,176	11.8
Texas	7	11,200	130,302	11.6
Oregon	8	12,902	144,300	11.2
Kentucky	9	11,365	125,797	11.1
Virginia	10	14,141	151,117	10.7
Alabama	11	11,225	119,470	10.6
Georgia	12	11,491	122,128	10.6
Florida	13	11,847	125,204	10.6
West Virginia	14	9,805	102,174	10.4
Mississippi	15	10,279	105,612	10.3
Massachusetts	16	15,342	156,606	10.2
North Carolina	17	12,617	126,580	10.0
Oklahoma	18	11,558	115,272	10.0
Connecticut	19	17,615	174,149	9.9
Hawaii	20	15,119	148,458	9.8
Kansas	21	14,470	141,903	9.8
Ohio	22	13,986	136,259	9.7
Illinois	23	14,666	141,104	9.6
New Jersey	24	17,447	165,958	9.5
Pennsylvania	25	14,900	140,627	9.4
Montana	26	10,762	99,904	9.3
Tennessee	27	11,749	108,686	9.3
Arkansas	28	10,771	99,519	9.2
Michigan	29	14,622	134,707	9.2
Maryland	30	17,941	164,816	9.2
Washington	31	15,123	138,787	9.2
South Dakota	32	14,730	132,773	9.0
Missouri	33	14,196	127,738	9.0
New Hampshire	34	16,832	148,315	8.8
Minnesota	35	16,464	144,919	8.8
South Carolina	36	13,390	116,223	8.7
Delaware	37	15,660	135,732	8.7
Nevada	38	15,635	132,301	8.5
Idaho	39	13,336	112,732	8.5
Vermont	40	14,400	120,826	8.4
Nebraska	41	14,714	123,018	8.4
Wyoming	42	13,238	108,450	8.2
Wisconsin	43	16,690	136,404	8.2
Maine	44	13,539	109,619	8.1
Alaska	45	18,264	147,432	8.1
Colorado	46	18,450	148,812	8.1
North Dakota	47	13,423	106,304	7.9
Iowa	48	15,143	111,852	7.4
Indiana	49	16,660	121,955	7.3
Utah	50	18,174	125,926	6.9
District of Columbia		7,498	203,110	27.1
Total U.S.		12,986	137,485	10.6

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Map 1



Map 1 shows the most unequal and least unequal states as measured by the top-to-bottom ratio in the late 1990s. Inequality is greatest in the Southeastern and the Southwestern states. The Midwest Plains region and northern New England are the least unequal.

Changes in inequality over time can be assessed by comparing the top-to-bottom ratios for each of the 50 states in the late 1970s to the same ratios in the late 1990s. As shown in Table 3, inequality has grown substantially over the period. In 46 states, the ratio increased by a statistically significant amount. In three states, the ratio increased, but not by a statistically significant amount. The last column of Table 3 shows the extent to which the top-to-bottom ratios grew over the two-decade period. The rank of each state shows how the growth in inequality in that state compared to the growth in inequality in other states.

In the late 1970s, there was no state where high-income families had average income that was 9.5 times larger than the average incomes of low-income families. By the late 1990s, 24 states had "top-to-bottom" ratios of 9.5 or greater.

The greatest increase in income inequality occurred in New York. In the late 1970s, the richest fifth of families in New York had about eight times the income of the poorest fifth of families. By the late 1990s, the richest fifth of families had over 14 times the income of families in the bottom fifth of the distribution. The increased inequality resulted in part from a drop in the income of families in the bottom quintile of the distribution from \$13,670 to \$10,780, a decline of \$2,900. Meanwhile, the average income of families at the top of the distribution in New York increased from \$106,870 to \$152,350, an increase of \$45,480.

Table 3
Change in Ratio of Incomes of Top and Bottom Fifths of Families,
'78-'80 - '96-'98

State	Rank	Top-to-bottom ratio '78-'80	Top-to-bottom ratio '96-'98	Change in top/bottom ratio
New York	1	7.8	14.1	6.3 *
Arizona	2	7.3	13.1	5.8 *
Rhode Island	3	6.3	11.8	5.5 *
Oregon	4	6.4	11.2	4.8 *
California	5	7.6	11.9	4.4 *
New Mexico	6	8.5	12.8	4.2 *
West Virginia	7	6.5	10.4	3.9 *
Kentucky	8	7.1	11.1	3.9 *
Connecticut	9	6.1	9.9	3.8 *
Kansas	10	6.0	9.8	3.8 *
Ohio	11	6.4	9.7	3.3 *
Virginia	12	7.4	10.7	3.3 *
New Hampshire	13	5.6	8.8	3.2 *
Massachusetts	14	7.0	10.2	3.2 *
Texas	15	8.6	11.6	3.1 *
Pennsylvania	16	6.4	9.4	3.0 *
Louisiana	17	9.1	12.0	2.9 *
North Carolina	18	7.2	10.0	2.8 *
Hawaii	19	7.0	9.8	2.8 *
Minnesota	20	6.1	8.8	2.7 *
Florida	21	7.9	10.6	2.7 *
Michigan	22	6.6	9.2	2.6 *
Wyoming	23	5.6	8.2	2.6 *
Georgia	24	8.1	10.6	2.6 *
New Jersey	25	7.0	9.5	2.5 *
Maryland	26	6.9	9.2	2.2 *
Oklahoma	27	7.7	10.0	2.2 *
Idaho	28	6.3	8.5	2.2 *
Illinois	29	7.5	9.6	2.1 *
Wisconsin	30	6.1	8.2	2.1 *
Delaware	31	6.6	8.7	2.1 *
Missouri	32	6.9	9.0	2.0 *
Washington	33	7.2	9.2	2.0 *
Nevada	34	6.5	8.5	2.0 *
Vermont	35	6.4	8.4	2.0 *
Nebraska	36	6.6	8.4	1.8 *
South Dakota	37	7.3	9.0	1.7 *
Iowa	38	5.7	7.4	1.7 *
Alabama	39	9.0	10.6	1.6 *
Montana	40	7.7	9.3	1.6 *
Indiana	41	5.8	7.3	1.5 *
Maine	42	6.6	8.1	1.5 *
Mississippi	43	8.9	10.3	1.4 *
Colorado	44	6.8	8.1	1.3 *
Tennessee	45	8.1	9.3	1.1 *
Utah	46	6.0	6.9	0.9 *
South Carolina	47	7.9	8.7	0.8
Arkansas	48	8.6	9.2	0.7
North Dakota	49	7.3	7.9	0.6
Alaska	50	9.3	8.1	-1.2 *
District of Columbia		12.1	27.1	15.0 *
Total U.S.		7.4	10.6	3.2 *

* The direction of the changes in the top/bottom ratio marked with an asterisk are statistically significant at the 95 percent level of confidence. That is, one can say with 95 percent certainty that the increases or decreases shown in the table are true increases or decreases in income inequality.

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

The dimensions of the increase in inequality become even clearer when the income of the poorest 20 percent of families is compared to the richest five percent of families. Table 3A shows that, once again, the greatest increase in income inequality occurred in New York. In the late 1970s, the richest five percent of families in New York had about 12 times the income of the poorest fifth of families on average. By the late 1990s, the richest five percent of families had 25 times the income of families in the bottom fifth of the

Table 3A
Change in Ratio of Incomes of Top 5% and Bottom Fifths of Families, '78-'80 - '96-'98

State	Top-to-bottom ratio '78-'80	Top-to-bottom ratio '96-'98	Change in Top/Bottom ratio
California	11.2	20.5	9.3 *
Florida	11.7	18.2	6.5 *
Illinois	11.1	15.9	4.8 *
Massachusetts	10.2	16.8	6.5 *
Michigan	9.4	15.3	5.9 *
New Jersey	10.0	15.7	5.6 *
New York	11.8	25.0	13.2 *
North Carolina	11.1	16.9	5.8 *
Ohio	9.4	16.6	7.2 *
Pennsylvania	9.1	16.4	7.3 *
Texas	13.5	20.1	6.6 *
Total U.S.	11.0	18.3	7.3 *

* The direction of the changes in the top/bottom ratio marked with an asterisk are statistically significant at the 95 percent level of confidence. That is, one can say with 95 percent certainty that the increases shown in the table are true increases in income inequality.

Source: Economic Policy Institute/Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

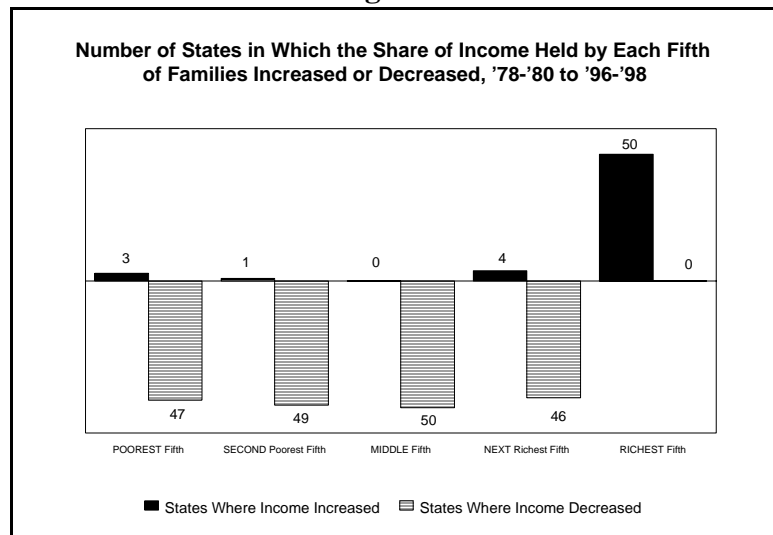
distribution — a more than doubling of the income gap. As indicated above, the increased inequality resulted in part from a drop in the income of families in the bottom quintile of the distribution from \$13,670 to \$10,770 over the two decade period. Over the same period, the average income of the richest five percent of families in New York increased from \$161,180 to \$269,050, an increase of \$107,880. Inequality increased dramatically in California as well. By the late 1990s, the average income of the top five percent of families in California was more than 20 times the average income of the poorest 20 percent of families — almost double the gap in the late 1970s.

Changes in Income Shares

Another way to measure changes in income inequality over time is to look at changes in the share of total family income held by each fifth of families in the income distribution.

Figure 1 shows the number of states where the share of income held by each quintile rose or fell between the late 1970s and the late 1990s. In virtually all states, the share of income held by the bottom 80 percent of families fell over the period. By contrast

Figure 1



in every state the percentage of total family income held by the richest families increased since the 1970s.

Table 4 shows the share of income held by the top and bottom fifths of families in each of the states in the late 1970s and in the late 1990s. Alaska, South Dakota and Tennessee were the only states in which the share of income held by the bottom fifth of families did not decline between the 1970s and the 1990s. In each of the remaining 47 states, the share of income held by the poorest fifth of families decreased. The share held by the top fifth of families increased in every state.

Income Trends: Differences between High- and Middle-Income Families

It was not only the poor as a group that failed to share in the income growth that has occurred since the late 1970s. Families in the middle of the distribution were also left behind compared to families at the top of the income distribution.

Table 5 shows the dollar and percentage change in the average incomes of families in the middle and top fifths of the income distribution between the late 1970s and the late 1990s.

In 11 states, the average income of families in the middle fifth fell while the average income of those in the top fifth rose.¹⁰ In Arizona, for example, families in the middle fifth of the income distribution saw their incomes fall by \$4,520 from the late 1970s to the late 1990s, a drop of 11 percent. Incomes of the richest 20 percent of families in Arizona increased by \$33,710 over the same period, or by 31 percent.

In 39 states, the average income of families in the middle of the distribution either remained about the same or rose, but did not keep pace with the increases in the average income of families in the top 20 percent of the distribution. In eight of these states the middle fifth grew five percent or less while the top fifth grew by more than 20 percent. In Michigan, for example, the average income of the middle fifth of families increased four percent, or by \$2,140. The richest 20 percent of families in Michigan, however, saw their incomes increase by \$29,260 on average, an increase of 28 percent. In all but two of the states where the incomes of the middle fifth grew, that growth was less than half the growth in the incomes of the richest fifth of families. The exceptions are Alabama and South Carolina.

Changes in Income Gaps

The ratio of the average income of the top fifth of families to the average income of the middle fifth of families is shown in Table 6 for all fifty states. In the late 1990s, the gap between

¹⁰ In three states — Alaska, Montana, and Wyoming — the increases in the incomes of the top fifth of families were not statistically significant.

Table 4
Share of Income Held by Bottom and Top Fifths of Families,
'78-'80 through '96-'98

State	Share of Income held by bottom fifth		Share of Income held by top fifth	
	'78-'80	'96-'98	'78-'80	'96-'98
Alabama	5.3%	4.8%	40.7%	45.2%
Alaska	5.3%	6.3%	41.4%	42.4%
Arizona	7.0%	3.9%	40.1%	50.8%
Arkansas	5.7%	5.6%	42.7%	44.6%
California	6.3%	4.2%	39.9%	48.6%
Colorado	7.0%	6.0%	37.2%	43.6%
Connecticut	8.0%	5.2%	36.6%	44.4%
Delaware	7.0%	5.6%	38.1%	44.4%
Florida	5.9%	4.9%	40.1%	45.0%
Georgia	5.8%	4.4%	39.8%	44.3%
Hawaii	7.1%	6.0%	35.5%	39.1%
Idaho	7.9%	5.8%	38.0%	42.4%
Illinois	6.1%	5.3%	37.1%	43.4%
Indiana	7.8%	7.0%	35.6%	42.0%
Iowa	8.2%	6.8%	35.1%	41.0%
Kansas	7.4%	5.9%	37.1%	46.4%
Kentucky	6.3%	4.7%	36.7%	44.5%
Louisiana	5.5%	4.2%	40.3%	46.1%
Maine	7.2%	6.4%	37.5%	42.1%
Maryland	7.1%	5.3%	37.1%	45.0%
Massachusetts	7.1%	5.3%	36.8%	43.4%
Michigan	7.3%	5.5%	35.7%	42.2%
Minnesota	8.4%	5.7%	35.7%	41.3%
Mississippi	5.5%	5.1%	41.1%	47.3%
Missouri	7.1%	5.8%	38.5%	42.7%
Montana	6.3%	5.2%	38.6%	42.2%
Nebraska	7.2%	6.2%	35.9%	42.7%
Nevada	7.1%	5.8%	37.6%	44.7%
New Hampshire	8.0%	6.2%	36.7%	45.0%
New Jersey	6.8%	5.5%	36.1%	43.4%
New Mexico	5.6%	3.8%	41.7%	50.3%
New York	6.4%	3.8%	38.9%	48.7%
North Carolina	6.2%	5.1%	39.0%	44.6%
North Dakota	7.3%	6.5%	37.5%	40.8%
Ohio	7.4%	5.4%	36.6%	43.1%
Oklahoma	6.6%	5.1%	40.7%	45.8%
Oregon	7.5%	5.0%	37.6%	48.1%
Pennsylvania	7.5%	5.6%	35.3%	44.0%
Rhode Island	7.9%	4.7%	34.9%	47.6%
South Carolina	6.0%	5.7%	39.2%	43.5%
South Dakota	6.7%	6.8%	38.6%	44.8%
Tennessee	5.6%	5.6%	40.0%	43.7%
Texas	5.4%	4.3%	41.4%	48.7%
Utah	8.4%	7.4%	36.7%	41.2%
Vermont	7.3%	5.9%	35.9%	42.2%
Virginia	6.2%	5.1%	38.6%	44.5%
Washington	6.8%	5.6%	38.1%	41.9%
West Virginia	6.8%	5.0%	37.4%	43.7%
Wisconsin	8.4%	6.3%	34.9%	41.9%
Wyoming	8.3%	6.3%	36.7%	41.9%
District of Columbia	4.3%	2.1%	47.7%	61.6%
Total U.S.	6.5%	4.9%	38.4%	45.4%

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Table 5
Dollar and Percent Change in Average Income of Middle and Top Fifths
of Families, '78-'80 to '96-'98

State	Middle Fifth		Top Fifth	
11 States Where the Middle Fifth Grew Poorer and the Top Fifth Grew Richer				
Wyoming	(7,731) *	-15.7%	2,759	2.6%
Arizona	(4,518) *	-10.5%	33,712 *	31.4%
Montana	(4,088) *	-9.9%	2,467	2.5%
New Mexico	(3,364) *	-9.0%	16,400 *	17.3%
Iowa	(1,877) *	-4.1%	18,354 *	19.6%
Texas	(1,611) *	-3.8%	24,435 *	23.1%
Louisiana	(1,540) *	-3.9%	13,364 *	13.6%
California	(1,538) *	-3.2%	31,814 *	27.8%
Alaska	(1,457) *	-2.5%	2,627	1.8%
Nevada	(1,204) *	-2.6%	26,008 *	24.5%
West Virginia	(1,182) *	-3.3%	24,713 *	31.9%
39 States Where Incomes of the Top Fifth Grew Faster than the Incomes of the Middle Fifth				
Oklahoma	(417)	-1.0%	13,114 *	12.8%
Oregon	194	0.4%	49,518 *	52.2%
Hawaii	477	0.9%	34,733 *	30.5%
Idaho	781 *	1.9%	22,568 *	25.0%
Mississippi	1,536 *	4.6%	22,016 *	26.3%
Arkansas	1,617 *	5.0%	18,981 *	23.6%
North Dakota	1,635 *	4.0%	12,078 *	12.8%
New York	1,728 *	3.8%	45,481 *	42.6%
Michigan	2,142 *	4.3%	29,258 *	27.7%
Illinois	2,258 *	4.6%	29,444 *	26.4%
Ohio	2,506 *	5.4%	34,742 *	34.2%
Nebraska	2,655 *	6.1%	31,926 *	35.0%
Kansas	2,924 *	6.7%	48,285 *	51.6%
Georgia	2,933 *	7.1%	23,720 *	24.1%
Tennessee	3,497 *	9.7%	22,788 *	26.5%
Wisconsin	3,681 *	7.7%	31,678 *	30.2%
Pennsylvania	3,791 *	8.4%	42,499 *	43.3%
Maine	4,441 *	11.9%	22,105 *	25.3%
Indiana	4,485 *	10.3%	33,105 *	37.3%
Delaware	4,488 *	9.7%	33,604 *	32.9%
Florida	4,496 *	12.3%	33,243 *	36.1%
Kentucky	4,511 *	11.5%	41,491 *	49.2%
Colorado	4,547 *	9.2%	34,788 *	30.5%
North Carolina	4,683 *	12.0%	35,831 *	39.5%
South Dakota	4,802 *	12.9%	43,413 *	48.6%
Washington	4,927 *	10.6%	32,191 *	30.2%
Missouri	4,965 *	11.7%	31,002 *	32.0%
Utah	5,293 *	12.1%	29,435 *	30.5%
Vermont	5,350 *	13.3%	29,940 *	32.9%
Virginia	5,629 *	12.3%	45,195 *	42.7%
Maryland	5,798 *	10.7%	42,779 *	35.1%
New Hampshire	6,308 *	13.7%	49,490 *	50.1%
Rhode Island	6,448 *	14.4%	66,447 *	70.9%
South Carolina	7,187 *	19.6%	28,632 *	32.7%
Minnesota	7,791 *	16.6%	43,281 *	42.6%
Alabama	7,868 *	22.6%	32,997 *	38.2%
Massachusetts	8,518 *	17.4%	45,888 *	41.4%
New Jersey	10,335 *	20.5%	52,835 *	46.7%
Connecticut	10,604 *	20.9%	61,180 *	54.2%
District of Columbia	(1,411) *	-3.7%	86,794 *	74.6%
Total U.S.	2,246 *	5.1%	34,365 *	33.3%
* Dollar changes marked with an asterisk are statistically significant. The direction of the change is known with 95 percent certainty. See the footnote in Table 1 for details.				
Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.				

Table 6
Ratio of Incomes of Top and Middle Fifths of Families,
'96-'98

State	Rank	Average income of middle fifth of families	Average income of top fifth of families	Top-to-middle ratio
Arizona	1	38,624	141,190	3.7
New Mexico	2	33,981	111,295	3.3
New York	3	46,756	152,349	3.3
Oregon	4	44,984	144,300	3.2
Texas	5	41,099	130,302	3.2
California	6	46,076	146,066	3.2
South Dakota	7	41,920	132,773	3.2
Rhode Island	8	51,071	160,176	3.1
Florida	9	41,094	125,204	3.0
Kansas	10	46,747	141,903	3.0
Mississippi	11	34,991	105,612	3.0
Louisiana	12	37,764	111,441	3.0
West Virginia	13	34,686	102,174	2.9
Virginia	14	51,444	151,117	2.9
Arkansas	15	33,954	99,519	2.9
Oklahoma	16	39,441	115,272	2.9
North Carolina	17	43,748	126,580	2.9
Nevada	18	45,834	132,301	2.9
Pennsylvania	19	48,797	140,627	2.9
Kentucky	20	43,722	125,797	2.9
New Hampshire	21	52,294	148,315	2.8
Connecticut	22	61,461	174,149	2.8
Hawaii	23	52,422	148,458	2.8
Alabama	24	42,756	119,470	2.8
Georgia	25	43,990	122,128	2.8
Ohio	26	49,135	136,259	2.8
Maryland	27	59,879	164,816	2.8
Illinois	28	51,337	141,104	2.7
Colorado	29	54,202	148,812	2.7
Tennessee	30	39,607	108,686	2.7
New Jersey	31	60,801	165,958	2.7
Massachusetts	32	57,417	156,606	2.7
Idaho	33	41,498	112,732	2.7
Missouri	34	47,240	127,738	2.7
Washington	35	51,541	138,787	2.7
Montana	36	37,165	99,904	2.7
Nebraska	37	45,906	123,018	2.7
Delaware	38	50,920	135,732	2.7
Minnesota	39	54,634	144,919	2.7
South Carolina	40	43,885	116,223	2.6
Vermont	41	45,643	120,826	2.6
Wisconsin	42	51,647	136,404	2.6
Maine	43	41,750	109,619	2.6
Alaska	44	56,196	147,432	2.6
Michigan	45	51,513	134,707	2.6
Wyoming	46	41,666	108,450	2.6
Utah	47	49,010	125,926	2.6
Iowa	48	43,780	111,852	2.6
Indiana	49	47,876	121,955	2.5
North Dakota	50	42,294	106,304	2.5
District of Columbia		36,918	203,110	5.5
Total U.S.		46,530	137,485	3.0

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

high-income and middle class families was the widest in 12 states — Arizona, New Mexico, New York, Oregon, Texas, California, South Dakota, Rhode Island, Florida, Kansas, Mississippi, and Louisiana — where the average income of the richest fifth of families was at least three times as large as the average income of the middle fifth of families. In California, for example, the middle fifth of families had average income of \$46,080 while the richest fifth of families had average income of \$146,070.

At the other end of the spectrum, five of the eleven states with the smallest top-to-middle ratios in the late 1990s were in the Midwest region. The states with the smallest top-to-middle ratios were — South Carolina, Vermont, Wisconsin, Maine, Alaska, Michigan, Wyoming, Utah, Iowa, Indiana, and North Dakota.

The income gaps shown in Table 6 were not always so great. Between the late 1970s and the late 1990s, the gap between the average income of middle-income families and the average income of high-income families grew significantly in 45 states. As shown in Table 7, which ranks states by the degree to which its gap increased over the period, the greatest increase in inequality between middle class and high-income families was in Arizona, followed by Oregon, Rhode Island, Kansas, and New York.

In the late 1970s, there was not a single state where the average income of families in the top quintile of the distribution was as much as 2.7 times as great as the average income of families in the middle quintile. By the late 1990s, there were 39 states where the gap was this wide.

Table 7A compares the top-to-middle ratio using the top five percent and middle 20 percent of the income distribution. Over the two-decade period this table shows an increase in inequality nationally of 1.7 points.

Table 7A
Change in Ratio of Incomes of Top 5% and Middle Fifths of Families,
'78-'80 - '96-'98

State	Top-to-middle ratio '78-'80	Top-to-middle ratio '96-'98	Change in top/middle ratio
California	3.5	5.4	1.9 *
Florida	3.7	5.2	1.5 *
Illinois	3.3	4.5	1.2 *
Massachusetts	3.3	4.5	1.2 *
Michigan	3.0	4.3	1.3 *
New Jersey	3.2	4.5	1.3 *
New York	3.6	5.8	2.2 *
North Carolina	3.6	4.9	1.3 *
Ohio	3.2	4.7	1.6 *
Pennsylvania	3.1	5.0	1.9 *
Texas	3.9	5.5	1.6 *
Total U.S.	3.5	5.1	1.7 *

* The direction of the changes in the top/middle ratio marked with an asterisk are statistically significant at the 95 percent level of confidence. That is, one can say with 95 percent certainty that the increases shown in the table are true increases in income inequality.

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Table 7
 Change in Ratio of Incomes of Top and Middle Fifths of Families,
 '78-'80 - '96-'98

State	Rank	Top-to-middle ratio '78-'80	Top-to-middle ratio '96-'98	Change in top/middle ratio
Arizona	1	2.5	3.7	1.2 *
Oregon	2	2.1	3.2	1.1 *
Rhode Island	3	2.1	3.1	1.0 *
Kansas	4	2.1	3.0	0.9 *
New York	5	2.4	3.3	0.9 *
West Virginia	6	2.2	2.9	0.8 *
California	7	2.4	3.2	0.8 *
South Dakota	8	2.4	3.2	0.8 *
New Mexico	9	2.5	3.3	0.7 *
Kentucky	10	2.2	2.9	0.7 *
Pennsylvania	11	2.2	2.9	0.7 *
Texas	12	2.5	3.2	0.7 *
New Hampshire	13	2.1	2.8	0.7 *
Hawaii	14	2.2	2.8	0.6 *
Nevada	15	2.3	2.9	0.6 *
Virginia	16	2.3	2.9	0.6 *
Connecticut	17	2.2	2.8	0.6 *
Ohio	18	2.2	2.8	0.6 *
Nebraska	19	2.1	2.7	0.6 *
North Carolina	20	2.3	2.9	0.6 *
Florida	21	2.5	3.0	0.5 *
Mississippi	22	2.5	3.0	0.5 *
Iowa	23	2.0	2.6	0.5 *
Idaho	24	2.2	2.7	0.5 *
Indiana	25	2.0	2.5	0.5 *
Maryland	26	2.3	2.8	0.5 *
New Jersey	27	2.2	2.7	0.5 *
Minnesota	28	2.2	2.7	0.5 *
Michigan	29	2.1	2.6	0.5 *
Illinois	30	2.3	2.7	0.5 *
Delaware	31	2.2	2.7	0.5 *
Massachusetts	32	2.3	2.7	0.5 *
Wyoming	33	2.1	2.6	0.5 *
Wisconsin	34	2.2	2.6	0.5 *
Louisiana	35	2.5	3.0	0.5 *
Colorado	36	2.3	2.7	0.4 *
Arkansas	37	2.5	2.9	0.4
Missouri	38	2.3	2.7	0.4 *
Washington	39	2.3	2.7	0.4 *
Vermont	40	2.3	2.6	0.4 *
Georgia	41	2.4	2.8	0.4 *
Tennessee	42	2.4	2.7	0.4 *
Utah	43	2.2	2.6	0.4 *
Oklahoma	44	2.6	2.9	0.4 *
Montana	45	2.4	2.7	0.3 *
Alabama	46	2.5	2.8	0.3
Maine	47	2.3	2.6	0.3 *
South Carolina	48	2.4	2.6	0.3
North Dakota	49	2.3	2.5	0.2
Alaska	50	2.5	2.6	0.1
District of Columbia		3.0	5.5	2.5 *
Total U.S.		2.3	3.0	0.6 *

* The direction of the changes in the top/middle ratio marked with an asterisk are statistically significant at the 95 percent level of confidence. That is, one can say with 95 percent certainty that the increases shown in the table are true increases in income inequality.

Source: Economic Policy Institute/Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau Current Population Survey.

New York had the largest increase from 3.6 to 5.8 points, followed by California and Pennsylvania.

Changes in Income Shares

Trends in the share of income held by families in the middle quintile of the income distribution also show that middle-income families are falling behind the richest fifth of families in the vast majority of states.

Table 8 shows the share of income held by families in the middle and top fifths of the income distribution in the late 1970s and the late 1990s. In the United States as a whole, the share of income held by the middle fifth of families fell from 18.1 percent to 16.2 percent. In every state the share of income held by the middle fifth of families followed the national trend.

As noted earlier, the top fifth of families saw its share increase over the period in every state. In the United States as a whole, the share of total family income held by the richest 20 percent of families increased from 38.4 percent to 45.4 percent over the past two decades.

Table 8
Share of Income Held by Middle and Top Fifths of Families,
'78-'80 through '96-'98.

State	Share of Income held by middle fifth		Share of Income held by top fifth	
	'78-'80	'96-'98	'78-'80	'96-'98
Alabama	18.0%	16.2%	40.7%	45.2%
Alaska	17.8%	15.9%	41.4%	42.4%
Arizona	17.4%	14.4%	40.1%	50.8%
Arkansas	16.6%	15.6%	42.7%	44.6%
California	17.7%	15.1%	39.9%	48.6%
Colorado	18.4%	16.4%	37.2%	43.6%
Connecticut	17.4%	16.7%	36.6%	44.4%
Delaware	17.5%	16.0%	38.1%	44.4%
Florida	17.5%	16.1%	40.1%	45.0%
Georgia	17.9%	17.0%	39.8%	44.3%
Hawaii	20.0%	18.3%	35.5%	39.1%
Idaho	17.7%	16.6%	38.0%	42.4%
Illinois	19.2%	17.0%	37.1%	43.4%
Indiana	17.8%	16.5%	35.6%	42.0%
Iowa	18.8%	17.0%	35.1%	41.0%
Kansas	17.4%	15.4%	37.1%	46.4%
Kentucky	18.3%	16.6%	36.7%	44.5%
Louisiana	17.9%	16.2%	40.3%	46.1%
Maine	18.1%	17.0%	37.5%	42.1%
Maryland	18.0%	16.9%	37.1%	45.0%
Massachusetts	18.4%	17.4%	36.8%	43.4%
Michigan	18.9%	17.0%	35.7%	42.2%
Minnesota	18.3%	17.6%	35.7%	41.3%
Mississippi	17.4%	15.1%	41.1%	47.3%
Missouri	17.6%	17.1%	38.5%	42.7%
Montana	18.3%	17.2%	38.6%	42.2%
Nebraska	17.9%	17.0%	35.9%	42.7%
Nevada	18.5%	15.8%	37.6%	44.7%
New Hampshire	18.6%	16.0%	36.7%	45.0%
New Jersey	18.9%	16.9%	36.1%	43.4%
New Mexico	16.7%	14.0%	41.7%	50.3%
New York	18.2%	15.4%	38.9%	48.7%
North Carolina	18.3%	16.2%	39.0%	44.6%
North Dakota	17.7%	17.6%	37.5%	40.8%
Ohio	18.5%	17.1%	36.6%	43.1%
Oklahoma	17.5%	15.4%	40.7%	45.8%
Oregon	17.5%	15.2%	37.6%	48.1%
Pennsylvania	18.5%	16.5%	35.3%	44.0%
Rhode Island	19.2%	15.4%	34.9%	47.6%
South Carolina	18.0%	16.5%	39.2%	43.5%
South Dakota	17.9%	15.6%	38.6%	44.8%
Tennessee	17.8%	17.2%	40.0%	43.7%
Texas	17.4%	14.7%	41.4%	48.7%
Utah	17.6%	17.0%	36.7%	41.2%
Vermont	18.3%	17.1%	35.9%	42.2%
Virginia	18.0%	17.4%	38.6%	44.5%
Washington	18.3%	16.8%	38.1%	41.9%
West Virginia	18.2%	16.4%	37.4%	43.7%
Wisconsin	19.1%	16.8%	34.9%	41.9%
Wyoming	18.0%	16.8%	36.7%	41.9%
Dist. of Col.	15.3%	11.1%	47.7%	61.6%
Total U.S.	18.1%	16.2%	38.4%	45.4%

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

III. The Recent Trend: The Late 1980s to the Late 1990s

The economic recovery of the 1990s has been referred to as one of the most robust periods of economic growth in the postwar period in the United States. A close look at income growth over the past decade, however, reveals a sobering trend; the benefits of the strong economy of the last decade have done little to turn around the longer-term trend toward increasing income inequality. In fact, income inequality grew in most states in the 1990s. Moreover, income growth over the period covered in this report — the late 1980s to the late 1990s — was not especially favorable. For instance, the incomes of the bottom fifth grew by an insignificant amount — \$100 or 0.8 percent nationwide — and fell in 15 states. Incomes in the middle fifth grew by 1.7 percent or \$780 nationwide and fell in 12 states including California and New York.

It is only in the last two years that real wages have grown significantly for workers at all levels and this growth has not been sufficient to counteract the two-decade long patterns of stagnant or declining wages. The gains that low- and middle-income families have made during the most recent recovery have not made up for the losses suffered by these families during the last recession; in most states income inequality grew during the 1990s.

Income Trends: Differences Between High- and Low-Income Families

Table 9 shows how the average incomes of the top and bottom fifths of families changed between the late 1980s and the late 1990s in every state. In 15 states, high-income families grew richer while poor families became poorer over the past decade.¹¹ In Kansas, for example, the average income of families in the bottom fifth of the distribution fell by \$1,140, a decline of

¹¹ In four states — New Hampshire, New Mexico, Vermont, and Wyoming — the increases in the average income of the top fifth of families were not statistically significant.

Table 9

Dollar and Percent Change in Average Income of Bottom and Top Fifths of Families, '88-'90 to '96-'98

State	Bottom Fifth		Top Fifth	
15 States Where Bottom Fifth Grew Poorer and the Top Fifth Grew Richer				
Connecticut	(\$6,160)*	-25.9%	26,138 *	17.7%
Rhode Island	(\$3,781)*	-21.8%	35,146 *	28.1%
New Hampshire	(\$2,767)*	-14.1%	12,497	9.2%
Oregon	(\$2,067)*	-13.8%	39,798 *	38.1%
New York	(\$1,969)*	-15.5%	19,675 *	14.8%
Arizona	(\$1,914)*	-15.1%	24,511 *	21.0%
Vermont	(\$1,857)*	-11.4%	846	0.7%
Wyoming	(\$1,764)*	-11.8%	4,998	4.8%
Washington	(\$1,485)*	-8.9%	22,645 *	19.5%
Massachusetts	(\$1,412)*	-8.4%	12,101 *	8.4%
California	(\$1,408)*	-10.3%	12,017 *	9.0%
New Jersey	(\$1,339)*	-7.1%	13,639 *	9.0%
Montana	(\$1,266)*	-10.5%	13,078 *	15.1%
Kansas	(\$1,142)*	-7.3%	32,850 *	30.1%
New Mexico	(\$1,134)*	-11.5%	7,447	7.2%
22 States Where Incomes of the Top Fifth Grew Faster Than Incomes of the Bottom Fifth				
Delaware	(\$742)	-4.5%	25,228 *	22.8%
North Dakota	(\$444)	-3.2%	11,335 *	11.9%
Virginia	(\$424)	-2.9%	17,948 *	13.5%
Florida	(\$349)	-2.9%	14,275 *	12.9%
Nevada	(\$256)	-1.6%	21,986 *	19.9%
Wisconsin	(\$170)	-1.0%	28,261 *	26.1%
North Carolina	(\$57)	-0.5%	20,540 *	19.4%
West Virginia	\$150	1.6%	16,802 *	19.7%
Idaho	\$157	1.2%	18,571 *	19.7%
Nebraska	\$244	1.7%	21,284 *	20.9%
Pennsylvania	\$258	1.8%	25,165 *	21.8%
Texas	\$339	3.1%	18,547 *	16.6%
Ohio	\$362	2.7%	23,080 *	20.4%
Iowa	\$559	3.8%	16,599 *	17.4%
Maryland	\$753	4.4%	30,930 *	23.1%
Kentucky	\$1,212 *	11.9%	33,714 *	36.6%
Utah	\$1,355 *	8.1%	24,871 *	24.6%
Illinois	\$1,446 *	10.9%	14,204 *	11.2%
Michigan	\$1,493 *	11.4%	18,100 *	15.5%
Minnesota	\$1,544 *	10.4%	29,684 *	25.8%
Alabama	\$1,744 *	18.4%	26,613 *	28.7%
South Dakota	\$1,943 *	15.2%	39,472 *	42.3%
4 States Where the Incomes of the Bottom Fifth and Top Fifth Remained About the Same				
Hawaii	(\$784)	-4.9%	2,982	2.0%
Maine	(\$266)	-1.9%	5,102	4.9%
Georgia	\$121	1.1%	5,157	4.4%
Oklahoma	\$221	2.0%	8,436	7.9%
9 States Where Incomes of the Bottom Fifth Grew Faster Than Incomes of the Top Fifth				
Missouri	\$1,433 *	11.2%	14,673	13.0%
Arkansas	\$1,704 *	18.8%	15,183	18.0%
South Carolina	\$1,827 *	15.8%	8,168	7.6%
Louisiana	\$1,930 *	26.2%	(3,469)	-3.0%
Mississippi	\$2,116 *	25.9%	16,262 *	18.2%
Tennessee	\$2,224 *	23.4%	10,259 *	10.4%
Alaska	\$4,001 *	28.1%	10,201 *	7.4%
Indiana	\$4,029 *	31.9%	22,696 *	22.9%
Colorado	\$5,660 *	44.3%	39,726 *	36.4%
District of Columbia	(\$1,509)*	-16.8%	54,968 *	37.1%
Total U.S.	\$103	0.8%	17,867 *	14.9%
* Dollar changes marked with an asterisk are statistically significant. The direction of the change is known with 95 percent certainty. See the footnote in Table 1 for details.				
Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.				

seven percent. Over the same period, the richest fifth of families saw their incomes rise by \$32,850, an increase of 30 percent.

The average income of the bottom fifth of families rose or remained the same over the decade in 35 states. In 22 of these 35 states, however, the incomes of the richest families grew faster than the incomes of the poor. In Minnesota, for example, the average income of the poorest fifth of families increased from \$14,920 to \$16,460, which is a gain of \$1,540 or 10 percent. The average income of the richest fifth of families, in contrast, increased from \$115,240 to \$144,920 — a gain of \$29,680 or 26 percent.

In four states, the average incomes of both the bottom fifth and middle fifth of families remained about the same over the past decade. Neither increased by a statistically significant amount.

In the remaining nine states the average income of the poorest families increased significantly while the incomes of the richest families remained the same or grew more slowly than those of the poorest families. These states are Alaska, Arkansas, Colorado, Indiana, Mississippi, Missouri, South Carolina, Tennessee, and Louisiana. Higher growth in the incomes of the poorest families than in that of the richest families would tend to reduce income inequality.

For example, in Colorado, the average income of the poorest fifth of families increased from \$12,790 in the late 1980s to \$18,450 by the late 1990s, a 44 percent increase. By contrast, incomes of the richest 20 percent of Colorado's families increased from \$109,090 in the late 1980s to \$148,810 in the late 1990s, an increase of about 36 percent. Since the rate of growth in the incomes of the poorest fifth of families was more rapid than the income growth for the highest income families in the state, income inequality could have lessened between the late 1980s and the late 1990s. (Note, however, that while the percentage gain is greater for the lower income families, the \$5,660 average income gain for the bottom fifth was much smaller than the \$39,730 gain for the top fifth. In addition, the change in the top-to-bottom ratio was not statistically significant. It also should be pointed out that the gains over the past decade did not reverse the longer-term trend. By the 1990s, the poorest fifth of families in Colorado had incomes only nine percent above their late 1970s level, while the incomes of the richest fifth of families had increased by 31 percent in income since the 1970s — more than three times as much.) As Table 10 below will show, a significant decline in income inequality occurred in only a handful of states.

The average income of the richest five percent of families grew dramatically from the late 1980s to the late 1990s. These changes are shown in Table 9A for 11 large states. In each of these 11 large states, income inequality widened as the incomes of the richest five percent of families grew dramatically. The increases in the average income of the top five percent of families ranged from \$32,690, or 16.3 percent, in Illinois to \$67,680, or 38.4 percent, in Pennsylvania. While the incomes of the richest families were growing rapidly, the amount of income available to the poorest fifth of families either declined or grew very little; the largest

Table 9A
Dollar and Percent Change in Average Income of Bottom Fifth and Top 5% of Families,
'88-'90 to '96-'98

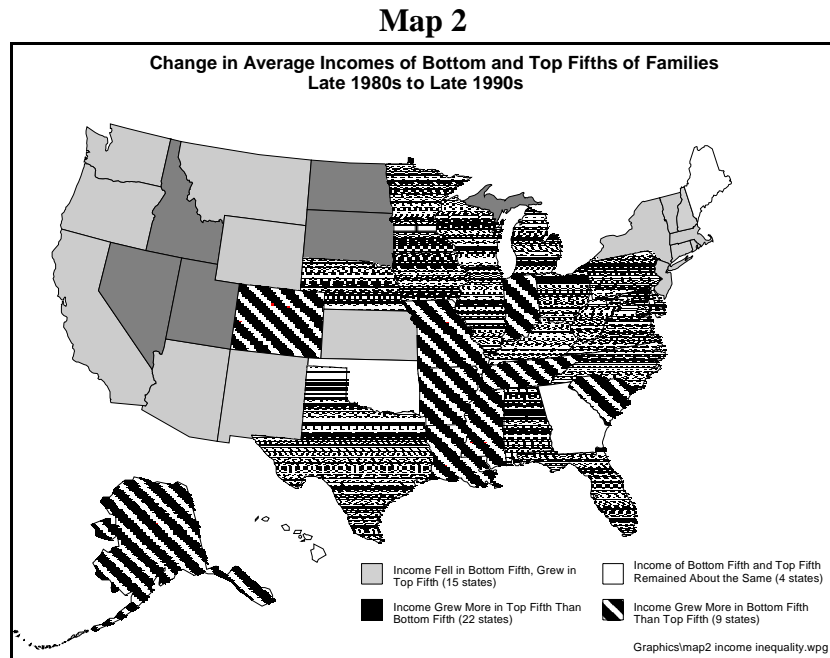
State	Bottom Fifth		Top 5%	
4 Large States Where Bottom Fifth Grew Poorer and the Top 5% Grew Richer				
California	(\$1,408) *	-10.3%	\$38,190 *	18.0%
Massachusetts	(\$1,412) *	-8.4%	\$38,672 *	17.7%
New Jersey	(\$1,339) *	-7.1%	\$40,381 *	17.3%
New York	(\$1,969) *	-15.5%	\$63,583 *	30.9%
7 Large States Where Incomes of the Top 5% Grew Faster Than Incomes of the Bottom Fifth				
Florida	(\$349)	-2.9%	\$37,529 *	21.1%
Illinois	\$1,446 *	10.9%	\$32,692 *	16.3%
Michigan	\$1,493 *	11.4%	\$53,139 *	31.2%
North Carolina	(\$57)	-0.5%	\$42,261 *	24.7%
Ohio	\$362	2.7%	\$57,371 *	32.8%
Pennsylvania	\$258	1.8%	\$67,676 *	38.4%
Texas	\$339	3.1%	\$55,987 *	33.0%
Total U.S.	\$103	0.8%	\$50,759 *	27.2%

* Dollar changes marked with an asterisk are statistically significant. The direction of the change is known with 95 percent certainty. See the footnote in Table 1 for details.

Source: Economic Policy Institute/Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

increase in average income for the poorest families was just under \$1,500, or 11 percent, in Michigan. In four of the 11 large states, income declined significantly for the lowest income fifth of families.

Map 2 shows how the average incomes of the top and bottom fifths of families changed between the late 1980s and the late 1990s in every state. The states where high-income families grew richer and poor families became poorer are concentrated in the West and the Northeast. The states where the incomes of the bottom fifth of families grew faster than the incomes of the top fifth of families are primarily in the South.



Changes in Income Gaps

As discussed above, one way to assess income gaps is to compare the average income of the top fifth of families to the average income of the bottom fifth of families. Table 10 presents the top-to-bottom ratio for each state in the late 1980s compared to the ratio in the late 1990s and shows that the gap in income between the poorest fifth of families and the richest fifth of families increased by a statistically significant amount in 33 states. In many states, the increase in inequality was substantial.

The table ranks the states by size of change in the income gap over the past decade. As shown, the gap between the richest 20 percent of families and the poorest 20 percent grew most in Rhode Island, followed by Oregon, Arizona, New York, and Connecticut. In Rhode Island, the top fifth of families in the late 1980s had incomes seven times as large as the bottom fifth. By the late 1990s, the richest fifth of Rhode Island families had incomes almost 12 times as large as the poorest fifth of families.

The growth in the gap between the families at the very top of the income scale and the bottom fifth was even more dramatic. Table 10A shows the change in the ratio of the average income of the top five percent of families to the bottom 20 percent for eleven large states. The increase was most dramatic in New York where the ratio of the average income of the top five percent of families to the bottom fifth of families increased by more than 50 percent between the late 1980s and the late

1990s, from 16.1 to 25.0. In the late 1980s, New York was the only state among these eleven states in which the ratio of the average income of the top five percent of families to the bottom fifth of families was 16 or higher. By the late 1990s, the average income of the richest five percent of families was more than 16 times the average income of the poorest 20 percent in eight of these eleven states.

Changes in Income Shares

Trends over the past decade in the share of total family income held by families in each quintile also illustrate the

Table 10A
Change in Ratio of Incomes of Top 5% and Bottom Fifth of Families,
'88-'90 to '96-'98

State	Top-to-Bottom ratio '88-'90	Top-to-Bottom ratio '96-'98	Change in Top/Bottom ratio
California	15.5	20.5	4.9 *
Florida	14.6	18.2	3.6 *
Illinois	15.2	15.9	0.7
Massachusetts	13.0	16.8	3.7 *
Michigan	13.0	15.3	2.3 *
New Jersey	12.4	15.7	3.3 *
New York	16.1	25.0	8.9 *
North Carolina	13.5	16.9	3.4 *
Ohio	12.8	16.6	3.8 *
Pennsylvania	12.0	16.4	4.3 *
Texas	15.6	20.1	4.5 *
Total U.S.	14.5	18.3	3.8 *

* The direction of the changes in the top/bottom ratio marked with an asterisk are statistically significant at the 95 percent level of confidence. That is, one can say with 95 percent certainty that the increases shown in the table are true increases in income inequality.

Source: Economic Policy Institute/Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Table 10
Change in Ratio of Incomes of Top and Bottom Fifths of Families,
'88-'90 to '96-'98

State	Rank	Top-to-bottom ratio '88-'90	Top-to-bottom ratio '96-'98	Change in top/bottom ratio
Rhode Island	1	7.2	11.8	4.6 *
Oregon	2	7.0	11.2	4.2 *
Arizona	3	9.2	13.1	3.9 *
New York	4	10.4	14.1	3.7 *
Connecticut	5	6.2	9.9	3.7 *
Kansas	6	7.0	9.8	2.8 *
New Mexico	7	10.5	12.8	2.2 *
Washington	8	7.0	9.2	2.2 *
California	9	9.8	11.9	2.1 *
Montana	10	7.2	9.3	2.1 *
Kentucky	11	9.1	11.1	2.0 *
Delaware	12	6.7	8.7	1.9 *
New Hampshire	13	6.9	8.8	1.9 *
Wisconsin	14	6.4	8.2	1.8 *
South Dakota	15	7.3	9.0	1.7 *
North Carolina	16	8.4	10.0	1.7 *
Massachusetts	17	8.6	10.2	1.6 *
West Virginia	18	8.8	10.4	1.6 *
Pennsylvania	19	7.9	9.4	1.6 *
Virginia	20	9.1	10.7	1.5 *
Nevada	21	6.9	8.5	1.5 *
Florida	22	9.1	10.6	1.5 *
Ohio	23	8.3	9.7	1.4 *
New Jersey	24	8.1	9.5	1.4 *
Maryland	25	7.8	9.2	1.4 *
Texas	26	10.3	11.6	1.3 *
Nebraska	27	7.0	8.4	1.3 *
Idaho	28	7.1	8.5	1.3 *
Wyoming	29	6.9	8.2	1.3 *
Minnesota	30	7.7	8.8	1.1 *
North Dakota	31	6.8	7.9	1.1 *
Vermont	32	7.4	8.4	1.0
Utah	33	6.0	6.9	0.9 *
Iowa	34	6.5	7.4	0.9 *
Alabama	35	9.8	10.6	0.8
Hawaii	36	9.1	9.8	0.7
Oklahoma	37	9.4	10.0	0.5
Maine	38	7.6	8.1	0.5
Georgia	39	10.3	10.6	0.3
Michigan	40	8.9	9.2	0.3
Missouri	41	8.9	9.0	0.1
Illinois	42	9.6	9.6	0.0
Arkansas	43	9.3	9.2	-0.1
Colorado	44	8.5	8.1	-0.5
Indiana	45	7.9	7.3	-0.5
South Carolina	46	9.3	8.7	-0.7
Mississippi	47	10.9	10.3	-0.7
Tennessee	48	10.3	9.3	-1.1 *
Alaska	49	9.6	8.1	-1.5 *
Louisiana	50	15.6	12.0	-3.6 *
District of Columbia		16.4	27.1	10.6 *
Total U.S.		9.3	10.6	1.3 *

* The direction of the changes in the top/bottom ratio marked with an asterisk are statistically significant at the 95 percent level of confidence. That is, one can say with 95 percent certainty that increases shown in the table are true increases in income inequality.

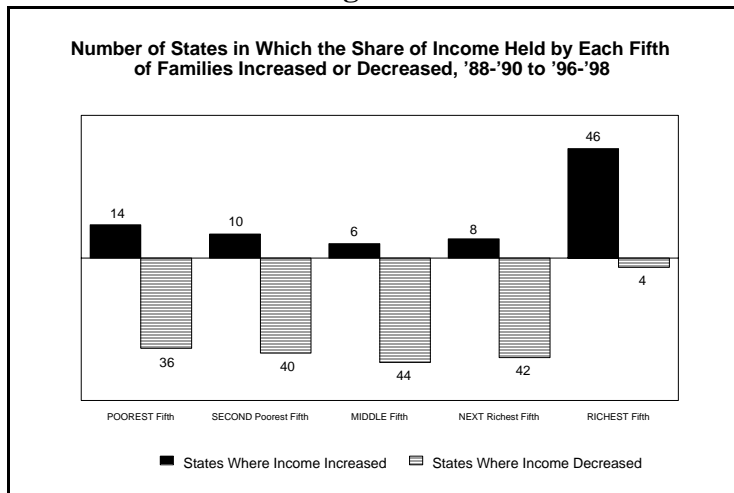
Source: Economic Policy Institute/Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

degree to which the recent economic expansion has benefitted the richest fifth of the population more than low- or middle-income families.

Table 11 shows the share of income held by the bottom and top quintiles of the income distribution in both the late 1980s and the late 1990s. Over the past decade, the proportion of total family income held by the bottom 20 percent of families has continued to fall overall, from 5.3 percent to 4.9 percent in the United States as a whole, whereas the share held by the richest fifth of families has increased from 42.1 percent to 45.4 percent over the same period.

The trend is widespread across states. For each quintile, Figure 2 shows the number of states where the share of income held by families in that quintile either decreased or increased. Although there were 14 states in which the share of income held by the poorest fifth of families rose, the share of income held by the poorest fifth of families fell in 36 states, or close to three quarters of all the states. Families in the second, third and fourth quintiles also lost ground in the vast majority of states. By contrast, the share of income held by the top fifth of the distribution increased in 46 states.

Figure 2



Income Trends: Differences Between High- and Middle-Income Families

The recent trend toward increasing income inequality, like the longer-term trend, is not limited to the increasing gap between low- and high-income families. Income disparities between middle class and high-income families also have been on the rise over the past decade. Table 12 shows the amount by which the incomes of families in the middle and top fifths of the income distribution rose or fell over the past decade in each state.

In 12 states the middle class became poorer while high-income families became richer or maintained the same income. In Massachusetts, for example, the average income of the middle 20 percent of families fell from \$59,970 to \$57,420 between the late 1980s and the late 1990s, a decline of over four percent.

The average income of the richest 20 percent of families rose from \$144,510 to \$156,610 over the same period, an increase of over eight percent.

Table 11
Share of Income Held by Bottom and Top Fifths of Families,
'88-'90 through '96-'98

State	Share of Income held by bottom fifth		Share of Income held by top fifth	
	'88-'90	'96-'98	'88-'90	'96-'98
Alabama	5.2%	4.8%	43.1%	45.2%
Alaska	4.9%	6.3%	41.5%	42.4%
Arizona	4.8%	3.9%	45.2%	50.8%
Arkansas	4.8%	5.6%	42.3%	44.6%
California	4.9%	4.2%	44.5%	48.6%
Colorado	5.2%	6.0%	41.4%	43.6%
Connecticut	8.1%	5.2%	38.0%	44.4%
Delaware	6.7%	5.6%	37.8%	44.4%
Florida	5.3%	4.9%	43.3%	45.0%
Georgia	5.0%	4.4%	43.1%	44.3%
Hawaii	5.1%	6.0%	40.7%	39.1%
Idaho	6.6%	5.8%	40.4%	42.4%
Illinois	5.0%	5.3%	42.2%	43.4%
Indiana	6.1%	7.0%	37.5%	42.0%
Iowa	7.3%	6.8%	37.6%	41.0%
Kansas	6.8%	5.9%	39.4%	46.4%
Kentucky	5.2%	4.7%	41.2%	44.5%
Louisiana	3.2%	4.2%	48.4%	46.1%
Maine	6.2%	6.4%	38.7%	42.1%
Maryland	5.7%	5.3%	39.5%	45.0%
Massachusetts	5.9%	5.3%	38.8%	43.4%
Michigan	5.4%	5.5%	39.9%	42.2%
Minnesota	5.9%	5.7%	39.8%	41.3%
Mississippi	4.4%	5.1%	44.1%	47.3%
Missouri	5.5%	5.8%	41.9%	42.7%
Montana	6.2%	5.2%	39.7%	42.2%
Nebraska	6.6%	6.2%	38.8%	42.7%
Nevada	6.6%	5.8%	39.0%	44.7%
New Hampshire	7.0%	6.2%	39.0%	45.0%
New Jersey	6.4%	5.5%	39.5%	43.4%
New Mexico	4.6%	3.8%	47.0%	50.3%
New York	4.8%	3.8%	42.4%	48.7%
North Carolina	5.9%	5.1%	41.0%	44.6%
North Dakota	6.9%	6.5%	38.7%	40.8%
Ohio	5.7%	5.4%	39.9%	43.1%
Oklahoma	5.3%	5.1%	43.4%	45.8%
Oregon	7.0%	5.0%	39.0%	48.1%
Pennsylvania	6.1%	5.6%	40.4%	44.0%
Rhode Island	7.4%	4.7%	37.7%	47.6%
South Carolina	5.2%	5.7%	44.0%	43.5%
South Dakota	6.8%	6.8%	40.8%	44.8%
Tennessee	4.7%	5.6%	44.0%	43.7%
Texas	4.6%	4.3%	44.1%	48.7%
Utah	8.2%	7.4%	36.5%	41.2%
Vermont	6.8%	5.9%	38.8%	42.2%
Virginia	5.4%	5.1%	41.2%	44.5%
Washington	6.7%	5.6%	39.2%	41.9%
West Virginia	5.5%	5.0%	40.7%	43.7%
Wisconsin	7.5%	6.3%	37.5%	41.9%
Wyoming	7.0%	6.3%	39.3%	41.9%
Dist. of Col.	3.5%	2.1%	49.7%	61.6%
Total U.S.	5.3%	4.9%	42.1%	45.4%

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Table 12
Dollar and Percent Change in Average Income of Middle and Top Fifths of Families, '88-'90 to '96-'98

State	Middle Fifth		Top Fifth	
12 States Where the Middle Fifth Grew Poorer and the Top Fifth Grew Richer				
New Hampshire	(5,821)*	-10.0%	12,497	9.2%
Wyoming	(4,769)*	-10.3%	4,998	4.8%
Hawaii	(4,619)*	-8.1%	2,982	2.0%
Arizona	(3,708)*	-8.8%	24,511 *	21.0%
Vermont	(3,607)*	-7.3%	846	0.7%
New York	(3,472)*	-6.9%	19,675 *	14.8%
Connecticut	(2,992)*	-4.6%	26,138 *	17.7%
Maine	(2,691)*	-6.1%	5,102	4.9%
Massachusetts	(2,550)*	-4.3%	12,101 *	8.4%
California	(2,252)*	-4.7%	12,017 *	9.0%
New Jersey	(1,833)*	-2.9%	13,639 *	9.0%
Montana	(663)*	-1.8%	13,078 *	15.1%
31 States Where Incomes of the Top Fifth Grew Faster Than Incomes of the Middle Fifth				
Virginia	(775)	-1.5%	17,948 *	13.5%
Rhode Island	(752)	-1.5%	35,146 *	28.1%
Nevada	155	0.3%	21,986 *	19.9%
Oregon	276	0.6%	39,798 *	38.1%
West Virginia	447	1.3%	16,802 *	19.7%
Kansas	558	1.2%	32,850 *	30.1%
Iowa	598	1.4%	16,599 *	17.4%
Florida	814 *	2.0%	14,275 *	12.9%
Texas	949 *	2.4%	18,547 *	16.6%
North Dakota	1,089 *	2.6%	11,335 *	11.9%
Alaska	1,104 *	2.0%	10,201 *	7.4%
Delaware	1,221 *	2.5%	25,228 *	22.8%
Maryland	1,542 *	2.6%	30,930 *	23.1%
North Carolina	1,715 *	4.1%	20,540 *	19.4%
Ohio	1,782 *	3.8%	23,080 *	20.4%
Illinois	1,785 *	3.6%	14,204 *	11.2%
Idaho	1,968 *	5.0%	18,571 *	19.7%
Washington	1,976 *	4.0%	22,645 *	19.5%
Wisconsin	2,199 *	4.4%	28,261 *	26.1%
Nebraska	2,414 *	5.6%	21,284 *	20.9%
South Dakota	2,797 *	7.1%	39,472 *	42.3%
Pennsylvania	2,837 *	6.2%	25,165 *	21.8%
Michigan	3,203 *	6.6%	18,100 *	15.5%
Mississippi	3,493 *	11.1%	16,262 *	18.2%
Tennessee	3,530 *	9.8%	10,259 *	10.4%
Utah	4,274 *	9.6%	24,871 *	24.6%
Indiana	4,791 *	11.1%	22,696 *	22.9%
Kentucky	6,264 *	16.7%	33,714 *	36.6%
Minnesota	6,273 *	13.0%	29,684 *	25.8%
Alabama	8,026 *	23.1%	26,613 *	28.7%
Colorado	9,013 *	19.9%	39,726 *	36.4%
2 States Where Incomes of the Bottom Fifth and the Top Fifth Remained About the Same				
New Mexico	(278)	-0.8%	7,447	7.2%
Georgia	518	1.2%	5,157	4.4%
5 States Where Incomes of the Middle Fifth Grew Faster Than Incomes of the Top Fifth				
Louisiana	987 *	2.7%	(3,469)	-3.0%
Arkansas	1,298 *	4.0%	15,183	18.0%
Oklahoma	1,364 *	3.6%	8,436	7.9%
South Carolina	3,351 *	8.3%	8,168	7.6%
Missouri	4,366 *	10.2%	14,673	13.0%
District of Columbia	(5,952)*	-13.9%	54,968 *	37.1%
Total U.S.	779 *	1.7%	17,867 *	14.9%
* Dollar changes marked with an asterisk are statistically significant. The direction of the change is known with 95 percent certainty. See the footnote in Table 1 for details.				
Source: Economic Policy Institute/Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.				

In 31 of the remaining states, the average income of families in the middle of the income distribution either remained the same or increased while the incomes of the top fifth of families increased by a larger percentage. In Ohio, for example, the average income of the middle fifth of families increased from \$47,350 to \$49,140. This less than four percent increase, however, is modest when compared to the increase in the average income of the richest fifth of families. The top 20 percent of families saw their average income rise from \$113,180 to \$136,260, an increase of more than 20 percent.

In two states — New Mexico and Georgia — the incomes of both the middle fifth of families and the top fifth remained about the same.

In the five remaining states, families in the middle fifth of the distribution did marginally better than families in the top fifth.

Changes in Income Gaps

The increase in the income gaps between middle class and high-income families in the majority of states can be seen in Table 13, which shows how the ratio of the average income of the top fifth of families to the average income of the middle fifth of families has changed over the past decade. As shown, the gap in income between middle class and high-income families increased by a statistically significant amount in 36 states. In 12 additional states, the ratio increased but not by a statistically significant amount. The gap between the middle fifth and top fifth did not decline by a statistically significant amount in any state.¹²

Changes in Income Shares

The share of total income held by middle class families has fallen in virtually every state over the past decade. Since the late 1980s, the share of income held by the middle fifth of families has fallen in 44 states. There were only four states — Hawaii, Louisiana, Minnesota, and Virginia — where the share of income held by the middle quintile increased modestly over the decade and two states — Illinois and Tennessee — where the share did not change. By contrast, the share of income held by the top fifth of families increased in all but four states, Hawaii, Louisiana, South Carolina, and Tennessee.

Table 14 shows the share of income held by families in the middle and top quintiles in the late 1980s and the late 1990s. In the United States as a whole, the share of income held by the middle fifth of families fell from 17.2 percent to 16.2 percent. The share of total family income held by the top fifth of families increased from 42.1 percent to 45.4 percent over the same period.

¹² In Table 13, a small increase in the top-to-middle ratio in Tennessee and a small decrease in the ratio in South Carolina are shown as zero as the result of rounding.

Table 13
 Change in Ratio of Incomes of Top and Middle Fifths of Families,
 '88-'90 to '96-'98

State	Rank	Top-to-middle ratio '88-'90	Top-to-middle ratio '96-'98	Change in top/middle ratio
Arizona	1	2.8	3.7	0.9 *
Oregon	2	2.3	3.2	0.9 *
South Dakota	3	2.4	3.2	0.8 *
Rhode Island	4	2.4	3.1	0.7 *
Kansas	5	2.4	3.0	0.7 *
New York	6	2.6	3.3	0.6 *
Connecticut	7	2.3	2.8	0.5 *
New Hampshire	8	2.3	2.8	0.5 *
Nevada	9	2.4	2.9	0.5 *
Maryland	10	2.3	2.8	0.5 *
Wisconsin	11	2.2	2.6	0.5 *
West Virginia	12	2.5	2.9	0.5 *
Delaware	13	2.2	2.7	0.4 *
Kentucky	14	2.5	2.9	0.4 *
California	15	2.8	3.2	0.4 *
Montana	16	2.3	2.7	0.4 *
Virginia	17	2.6	2.9	0.4 *
Texas	18	2.8	3.2	0.4 *
Ohio	19	2.4	2.8	0.4 *
Wyoming	20	2.2	2.6	0.4 *
North Carolina	21	2.5	2.9	0.4 *
Pennsylvania	22	2.5	2.9	0.4 *
Washington	23	2.3	2.7	0.3 *
Iowa	24	2.2	2.6	0.3 *
Arkansas	25	2.6	2.9	0.3
Nebraska	26	2.3	2.7	0.3 *
Idaho	27	2.4	2.7	0.3 *
Colorado	28	2.4	2.7	0.3 *
Massachusetts	29	2.4	2.7	0.3 *
Utah	30	2.3	2.6	0.3 *
New Jersey	31	2.4	2.7	0.3 *
Florida	32	2.8	3.0	0.3 *
Hawaii	33	2.6	2.8	0.3
Maine	34	2.4	2.6	0.3 *
Minnesota	35	2.4	2.7	0.3 *
New Mexico	36	3.0	3.3	0.2
Indiana	37	2.3	2.5	0.2 *
Vermont	38	2.4	2.6	0.2
North Dakota	39	2.3	2.5	0.2
Michigan	40	2.4	2.6	0.2 *
Illinois	41	2.6	2.7	0.2 *
Mississippi	42	2.8	3.0	0.2
Alaska	43	2.5	2.6	0.1
Alabama	44	2.7	2.8	0.1
Oklahoma	45	2.8	2.9	0.1
Georgia	46	2.7	2.8	0.1
Missouri	47	2.6	2.7	0.1
Tennessee	48	2.7	2.7	0.0
South Carolina	49	2.7	2.6	-0.0
Louisiana	50	3.1	3.0	-0.2
District of Columbia		3.5	5.5	2.0 *
Total U.S.		2.6	3.0	0.3 *

* The direction of the changes in the top/middle ratio marked with an asterisk are statistically significant at the 95 percent level of confidence. That is, one can say with 95 percent certainty that the increases shown in the table are true increases in income inequality.

Source: Economic Policy Institute/Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Table 14
Share of Income Held by Middle and Top Fifths of Families,
'88-'90 through '96-'98

State	Share of Income held by middle fifth		Share of Income held by top fifth	
	'88-'90	'96-'98	'88-'90	'96-'98
Alabama	17.2%	16.2%	43.1%	45.2%
Alaska	17.8%	15.9%	41.5%	42.4%
Arizona	16.6%	14.4%	45.2%	50.8%
Arkansas	16.6%	15.6%	42.3%	44.6%
California	16.5%	15.1%	44.5%	48.6%
Colorado	17.2%	16.4%	41.4%	43.6%
Connecticut	17.7%	16.7%	38.0%	44.4%
Delaware	17.9%	16.0%	37.8%	44.4%
Florida	16.7%	16.1%	43.3%	45.0%
Georgia	17.2%	17.0%	43.1%	44.3%
Hawaii	17.6%	18.3%	40.7%	39.1%
Idaho	17.4%	16.6%	40.4%	42.4%
Illinois	17.0%	17.0%	42.2%	43.4%
Indiana	19.0%	16.5%	37.5%	42.0%
Iowa	17.9%	17.0%	37.6%	41.0%
Kansas	18.0%	15.4%	39.4%	46.4%
Kentucky	17.6%	16.6%	41.2%	44.5%
Louisiana	16.1%	16.2%	48.4%	46.1%
Maine	18.1%	17.0%	38.7%	42.1%
Maryland	18.5%	16.9%	39.5%	45.0%
Massachusetts	18.0%	17.4%	38.8%	43.4%
Michigan	17.9%	17.0%	39.9%	42.2%
Minnesota	17.3%	17.6%	39.8%	41.3%
Mississippi	16.7%	15.1%	44.1%	47.3%
Missouri	18.3%	17.1%	41.9%	42.7%
Montana	17.8%	17.2%	39.7%	42.2%
Nebraska	18.1%	17.0%	38.8%	42.7%
Nevada	17.3%	15.8%	39.0%	44.7%
New Hampshire	17.1%	16.0%	39.0%	45.0%
New Jersey	17.8%	16.9%	39.5%	43.4%
New Mexico	15.8%	14.0%	47.0%	50.3%
New York	17.3%	15.4%	42.4%	48.7%
North Carolina	17.6%	16.2%	41.0%	44.6%
North Dakota	17.8%	17.6%	38.7%	40.8%
Ohio	18.0%	17.1%	39.9%	43.1%
Oklahoma	16.3%	15.4%	43.4%	45.8%
Oregon	18.5%	15.2%	39.0%	48.1%
Pennsylvania	17.3%	16.5%	40.4%	44.0%
Rhode Island	18.1%	15.4%	37.7%	47.6%
South Carolina	17.1%	16.5%	44.0%	43.5%
South Dakota	16.8%	15.6%	40.8%	44.8%
Tennessee	17.2%	17.2%	44.0%	43.7%
Texas	16.5%	14.7%	44.1%	48.7%
Utah	17.6%	17.0%	36.5%	41.2%
Vermont	17.4%	17.1%	38.8%	42.2%
Virginia	16.8%	17.4%	41.2%	44.5%
Washington	17.9%	16.8%	39.2%	41.9%
West Virginia	17.6%	16.4%	40.7%	43.7%
Wisconsin	18.0%	16.8%	37.5%	41.9%
Wyoming	17.8%	16.8%	39.3%	41.9%
Dist. of Col.	15.1%	11.1%	49.7%	61.6%
Total U.S.	17.2%	16.2%	42.1%	45.4%

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

IV. Causes and Cures: State Policy Options

Income inequality has grown over the last 20 years and over the past decade mainly as a result of economic trends and government policies. In particular, the growth of income inequality is primarily due to the growth in wage inequality. A variety of factors explain the growth of wage inequality including globalization, the shrinkage of manufacturing jobs and the expansion of low wage service jobs, immigration, and the weakening of labor market institutions — the lower real value of the minimum wage and fewer and weaker unions. These factors have led to an erosion of wages for workers with less than a college education — approximately the lowest-earning four-fifths of the workforce. Only in the last few years has there been a modest improvement in this picture. Persistent low unemployment, an increase in the minimum wage and rapid productivity growth have fueled real wage gains at the bottom, resulting in a lessening of wage inequality for the lowest income families. The gap between middle- and high-wage workers, however, continues to grow. Moreover, even the recent wage growth for low-wage workers has not been sufficient to counteract the two-decade long pattern of stagnant or declining wages; inequality is greater today between low- and high-income families and between middle- and high-income families than it was 20 years ago or ten years ago.

Government policies — both what governments have done and what they have not done — have contributed to the increase in income inequality over the past two decades in most states. For instance, deregulation and trade liberalization, the weakening of the social safety net, the failure to have effective labor laws regulating the right to collective bargaining, and a minimum wage that has declined in real terms have all contributed to growing wage inequality. In addition, changes in federal, state and local tax structures and benefit programs have, in many cases, accelerated rather than moderated the trend toward growing inequality emerging from the labor market.

Recent state policy decisions have played a role in widening the already growing gaps in the distribution of income. If they so choose, however, states can chart a different course. States can enact policies such as raising their minimum wage and reforming their unemployment

insurance system that improve the distribution of income. In addition, states can pursue tax policies that can, in part, offset the growing inequality of pre-tax incomes.

This chapter gives a brief overview of the factors that have been identified by researchers as underlying the growing income disparities and examines state policies that could mitigate this trend.

Economic Trends

Increasing income inequality results initially from changes in the wages paid by private employers and from the growth of investment and capital income. Government policies also affect income inequality directly by redistributing income through the tax system and through benefit programs such as welfare. Federal and state government policies also affect the distribution of income less directly through the rules and regulations they set for the operation of private markets such as minimum wages, tariffs and the rules governing the formation of unions. Demographic factors, such as the growth in the number of families headed by a single person, have also played a role.

The growing wage gap is the major factor explaining the growth in income inequality. Wages are a key factor because they constitute about three-fourths of total family income. Wages at the bottom and middle of the wage scale have been stagnant or declined over the last two decades. The wages of the very highest paid employees, however, have grown significantly. It is only in the last three years that real wages have grown significantly for workers at all levels, including those at the lower end of the income distribution, and this growth has not been sufficient to counteract the two-decade long pattern of stagnant or declining wages.

Several fundamental changes in the United States economy have contributed to the increasing disparities in the wages paid to low- and middle-income workers relative to highly-skilled, highly-paid workers. The expansion of service sector jobs, the result of globalization as well as increased manufacturing productivity, has led to an increase in the number of low-paying jobs and a decline in higher paying jobs for workers with less than a college education. Between 1979 and 1997, employment in manufacturing fell 11 percent, while employment in services rose 111 percent and employment in retail trade rose 47 percent. The increase in the number of jobs in the services and retail trade industries accounted for 79 percent of net job growth between 1979 and 1997. These service sector jobs tend to be lower paid than comparable manufacturing jobs. For example, in 1997, average weekly pay in the retail trade industry was just 44 percent of that of the manufacturing industry.

Increasing international trade also plays an important role in rising wage inequality. As more goods are produced overseas and imported, the number of higher-wage manufacturing jobs available to non-college educated workers has declined in the United States. In addition, workers in the United States may agree to wage concessions based on threats of moving production

facilities to other countries.¹³ Research on the influence of trade on wage inequality has generally found that the growth in international trade has played an important role in the decline in relative earnings of non-college educated workers and can explain about 10 percent to 15 percent of rising wage inequality.¹⁴

Labor market policies have had a major impact on wage inequality. The real value of the minimum wage has declined considerably since its high point in the late 1960s. In fact, the value of the minimum wage dropped 31 percent after accounting for inflation between 1979 and 1989. Despite the legislated increases in the minimum wage in 1990 and 1991, and again in 1996 and 1997, the value of the minimum wage in 1997 was still 18 percent less than in 1979. The impact of this reduction in the minimum wage on wage inequality has been, by many accounts, very substantial, especially for low wage women workers.¹⁵

In addition, the continued decline in the percentage of workers who are union members has contributed to increased wage inequality. Unions have historically been successful in raising wages and benefits by standardizing compensation across competing employers. Non-unionized workers typically are paid lower wages, have less job security, fewer benefits, and are more likely to work part time. In 1979, some 24 percent of the labor force was unionized. By 1997, the percentage of workers belonging to unions had dropped to 14 percent. Economic analysis confirms that the decrease in the unionization rate contributed to the 1980s increase in U.S. earnings inequality.¹⁶

It is also contended that increasing technology has fed the growth of wage inequality. Manufacturing has become more automated than in the past, so demand for high-skilled jobs has increased while the demand for low-skilled manufacturing jobs has declined. New technology, such as personal computers and improved communications, have increased the demand for skilled workers in all industries. In theory, these changes lead to wage inequality by placing a premium on highly skilled, high wage workers over unskilled workers. However, there is little direct evidence of the impact of technological change on wage inequality — in part due to the

¹³ Lawrence Mishel, Jared Bernstein and John Schmitt, *The State of Working America*. Cornell University Press, 1999.

¹⁴ J. David Richardson, "Income Inequality and Trade: How to Think, What to Conclude," *Journal of Economic Perspectives*, Vol. 9, No. 3 (Summer 1995), 33-55.

¹⁵ Mishel, Bernstein and Schmitt, *The State of Working America*, 1999.

¹⁶ See, for example, Richard Freeman, "Is Declining Unionization of the U.S. Good, Bad or Irrelevant?" in *Unions and Economic Competitiveness*. Armonk, NY: Economic Policy Institute Series, 1992; Richard Freeman, "How Much Has De-Unionization Contributed to the Rise in Male Earnings Inequality" in Sheldon Danziger and Peter Gottschalk, *Uneven Tides*. New York, NY: Russell Sage Foundation, 1993.

Income Mobility

Do Low-Income Families Move Quickly Up the Economic Ladder

As shown in this analysis, income inequality has increased substantially in the vast majority of states over the past two business cycles. In many states, the average income of the poorest fifth of families is lower now than in the late 1970s.

Some families, however, have low incomes for only a few years, quickly moving into the middle class. For example, the parents of a young child may be working part-time while finishing college. The family's income might be very low for a few years, but after both parents graduate from college and obtain well-paying jobs, the family's income could increase substantially.

While some families do see their incomes increase over time, studies of income mobility have shown that the majority of low-income families have low incomes for many years. A recent study of earnings mobility showed that in the short term workers in the bottom fifth of the income distribution experienced very little income mobility. In the early 1990s, 75 percent of individuals who started in the lowest fifth of family income ended up in the lowest fifth one year later. Income mobility improves when a longer period of time is analyzed; even after more than 20 years, however, almost half of the poorest workers remain at the bottom of the income distribution. Between 1968 and 1991, 47 percent of those in the lowest fifth were still there 23 years later and another 25 percent had only moved to the second fifth of the income distribution.^a

Another question is whether income mobility has increased over time, because increases in income mobility can offset increased income inequality. If income mobility has increased substantially, then increases in income inequality might reflect changes in lifecycle patterns and not be particularly important. On the other hand, if income mobility has remained about the same or declined since the 1970s, then the increases seen in income inequality over that time reflect true growth in inequality and not merely a reshuffling of the income distribution. In fact, research has shown that income mobility actually declined between the late 1960s and the early 1990s. In 1968-69 the percent of people remaining in the same quintile was 62.7 percent. In 1990-91 the percentage increased to 65.9 percent. Thus, the probability of staying in the same fifth of the income distribution has increased, a circumstance that exacerbates rather than ameliorates the growth in income inequality.^b

^a Peter Gottschalk and Sheldon Danziger, "Family Income Mobility - How Much Is There, and Has It Changed?" in James A. Auerback, and Richard S. Belous, eds. *The Inequality Paradox: Growth of Income Disparity*. Washington, DC: National Policy Association, 1998.

^b *Ibid.*

difficulty in measuring changes in technology.¹⁷ Moreover, technological change that has favored the use of “skilled” over “unskilled” labor has been ongoing for many decades. Meanwhile, there has been a continuous growth in the education and skill levels of the workforce. The issue then is whether the pace of technological change has accelerated in recent decades so that the “demand for skill” outpaced the supply. A recent analysis found that the overall impact of technology on the wage and employment structure was no greater in the 1980s and 1990s than in earlier periods when inequality was not growing, suggesting that the role of technological change in increasing wage inequality has been small.¹⁸

Finally, immigration has been identified as a potential cause of rising wage inequality. Immigration plays a role in increasing wage inequality if the growing number of immigrants increases the supply of workers — particularly low-wage workers — thus lowering wages.

The role of immigration in the wage inequality story is a source of much research and debate. The general findings are that there is “a weak negative correlation between the presence of immigrants in a local labor market and the earnings of the natives in the labor market.”¹⁹ That is, there is some evidence of a slight reduction in wages among the native-born population due to immigrants moving into an area. A recent study of state wage inequality found that immigration had only a small impact on increasing wage inequality.²⁰ However, the impact of immigration will differ depending on the region of the country. For example, a recent study of income inequality in California — a state with a large number of immigrants — found that immigration explains between 17 percent and 40 percent of the rise in male wage inequality in the state since the late 1960s.²¹ Any impact that the immigration of lower-skilled workers has on rising income inequality underscores the importance of training and educational programs that build the skills of all low-wage workers.

Besides wages, the other major source of income is investment income such as dividends, rent, interest and capital gains. Since investment income primarily accrues to those at the top of the income structure, any expansions of investment income — as has occurred recently — will lead to greater income inequality. This was particularly true in the period of recession of the

¹⁷ Gary Burtless, “Technological Change and International Trade: How Well Do They Explain the Rise in U.S. Income Inequality?” in James A. Auerback, and Richard S. Belous, eds. *The Inequality Paradox: Growth of Income Disparity*. Washington, DC: National Policy Association, 1998.

¹⁸ Mishel, Bernstein and Schmitt, *The State of Working America*, 1999.

¹⁹ George J. Borjas, “The Economics of Immigration,” *Journal of Economic Literature*, Vol. XXXII (December 1994), 1667-1717.

²⁰ Andrew B. Bernard and S. Bradford Jensen, *Understanding Increasing and Decreasing Wage Inequality*, April, 1998.

²¹ Deborah Reed, *California’s Rising Income Inequality: Causes and Concerns*. San Francisco, CA: Public Policy Institute of California, 1999.

early 1990s. This report captures only some of the effects of these investment income trends because the income measure used in this report includes only a portion of investment earnings. It does not include income from capital gains — the income that people make when they sell assets, such as stock, that has appreciated in value.

In aggregate between 1979 and 1997, income derived from capital — such as rent, dividends, interest payments and capital gains — increased as a share of personal income from 16 percent to 20 percent. Over the same period, total labor income — wages, salaries and fringe benefits — fell from 74 percent to 71 percent. Higher income families benefitted disproportionately from this increase in the importance of investment income as this type of income makes up a larger share of their total income. Some 75 percent of all capital gains income is realized by families in the top five percent of the income distribution.²² The growth of the stock market and other returns to capital benefit families at the upper end of the income scale most.²³

Another possible explanation for the growing income gap is that changes in the demographic composition of the population have led to increased income inequality. The past two decades have been marked by significant changes; the population has grown steadily older, the education level of family heads has increased, and the share of minorities in the population has expanded. Despite these significant changes, a number of analysts have found that these factors played a minimal role in increasing income inequality. For example, Lynn Karoly of the RAND Corporation finds that changes in the age and educational make-up of the population have served to reduce the rise in inequality rather than increase it.²⁴ In addition, she finds that the growing share of the population consisting of minorities has had only a small effect on the rise of family income inequality.²⁵

²² Congressional Budget Office, *Perspectives on the Ownership of Capital Assets and the Realization of Capital Gains*, May 1997.

²³ In 1995, the wealthiest 10 percent of the U.S. population held 88 percent to 92 percent of stocks and mutual funds, financial securities, trusts and business equity, while the remaining 90 percent of the population held less than 12 percent. Edward Wolff, *Recent Trends in Wealth Ownership*, April 20, 1999.

²⁴ Karoly examined changes in income inequality for subsets of the population with different education levels and different ages. If the composition of the population had shifted towards groups with higher levels of inequality this would have accelerated the growth in income inequality. Karoly found that the net result of movements among age or education groups was a reduction in inequality. That is, if the age or education composition of the population had been held constant at the 1975 level, inequality would have been higher in 1993 than the level actually observed.

²⁵ Lynn A. Karoly, “Growing Economic Disparity in the U.S.: Assessing the Problem and the Policy Options” in *The Inequality Paradox: Growth of Income Disparity*.

One demographic trend has had some impact on the rise in family income inequality.²⁶ Over the last two decades, the percentage of families composed of single individuals increased from six percent to 11 percent. At the same time, the percentage of families headed by a woman increased from eight percent to 11 percent. These trends have served to reduce incomes at the low end of the income scale because both single individual families and female-headed households are generally lower income households. This report analyzes the income of families — two or more related individuals. As a result, the changes in inequality reflected here are not the result of the increase in families composed of single individuals, but do to some degree reflect the increase in families headed by a single woman.

Another significant trend, the increase in husband-wife families with a working wife, has served to lessen family income inequality. During the 1970s and 1980s, families often made up for the decline in the wages of the husband by increasing the number of hours family members were employed. Increasing numbers of women entered the workforce, helping to stem the decline in family incomes that resulted from the fall in average male earnings. In addition, family members increased their hours of work. However, there is a limit to how long increased work effort can serve to offset declining wages. There is some evidence that the United States is approaching that limit. In the 1990s, wives' hours of work grew much more slowly than in the 1980s.²⁷

Policies to Reduce Inequality

A significant amount of increasing income inequality results from the economic forces described above that are largely outside the control of state policymakers. However, state government policies can serve to mitigate the effects of increasing inequality and push back against rather than worsen the trend towards increasing inequality. By improving the economic well-being of the working poor and assisting in the transition from welfare to work, states can provide economic opportunity for everyone struggling to make ends meet including workers on the lowest rung of the wage ladder, recently arrived immigrants and workers who face temporary unemployment. In addition, state tax structures can be modified to reduce their tendency to accelerate rather than moderate the growth in the income gap between rich families and poor and middle-income families.

Minimum Wage

One way that policymakers could help reverse or moderate the decline in wages for workers at the bottom of the pay scale would be to enact a higher minimum wage. The federal minimum wage is now \$5.15 an hour. At this level, the value of the minimum wage is still lower than it was any year between 1961 and 1984, after adjusting for inflation. The purchasing power

²⁶ Ibid.

²⁷ Mishel, Bernstein and Schmitt, *The State of Working America*, 1999.

of the minimum wage is about 18 percent below its average value during the late 1970s. This year Congress considered several bills that would have phased in an increase in the minimum wage but ultimately did not enact an increase.

Because prospects for passage of an increase in the federal minimum wage are uncertain, increases in state minimum wages should be considered. Since 1981, a number of states have raised their minimum wages to offset the decline in the value of the federal minimum wage. As of July 1, 1999 ten states and the District of Columbia had minimum wages that were higher than the federal level.²⁸

A higher minimum wage could serve to reduce income inequality significantly. Each 25 cent increase in the minimum wage would boost the earnings of a full-time minimum wage worker by \$520 per year.²⁹ Contrary to the popular stereotype, the majority of minimum wage workers are not teenagers, but rather are adults. Minimum wage earners contribute an average of 54 percent of their families' weekly earnings.³⁰

One of the principal arguments against raising the minimum wage is that it would price many workers out of the job market. At the state level, some argue that an increase in the state minimum wage would result in a loss of jobs to neighboring states with lower minimum wages. These concerns are not borne out by the research on minimum wage increases. Several recent analyses of increases in state minimum wages have come to the similar conclusion that the increases did not have a negative impact on employment, even relative to neighboring states with lower minimum wages.³¹

²⁸ The ten states include Alaska at \$5.65, California at \$5.75, Connecticut at \$5.65, Delaware at \$5.65, Hawaii at \$5.25, Massachusetts at \$5.25, Oregon at \$6.50, Rhode Island at \$5.65, Vermont at \$5.75, and Washington at \$5.70. In some of these states, further increases are scheduled to take place. For example as of January 1, 2000 Connecticut increases to \$6.15, Massachusetts increases to \$6.00, and Washington increases to \$6.50.

²⁹ For someone working 40 hours per week and 52 weeks per year at the minimum wage, a 25 cent increase would yield a *gross* annual wage increase of \$0.25 times 2,080, or \$520. After payroll taxes of 7.65 percent are deducted, the net gain is \$480.

³⁰ These figures reflect workers affected by the 1996 increase in the minimum wage from \$4.25 an hour to \$5.15 an hour. They include workers with hourly wages in this range and salaried workers whose hourly wage equivalent (weekly earnings divided by number of hours worked) falls within this range. From Lawrence Mishel, Jared Bernstein, and John Schmitt, *The State of Working America*, 1999.

³¹ Jared Bernstein and John Schmitt, *Making Work Pay: The Impact of the 1996-97 Minimum Wage Increase*, Economic Policy Institute, 1998; David Card, "Using Regional Variation in Wages to Measure the Effects of the Federal Minimum Wage," *Industrial and Labor Relations Review*, October 1992; Lawrence Katz and Alan Krueger, "The Effect of the Minimum Wage on the Fast Food Industry," *Industrial and Labor Relations Review*, October 1992; David Card, "Do Minimum Wages Reduce Employment? A Case Study of California, 1987-89," *Industrial and Labor Relations Review*, October 1992; and David Card and Alan Krueger, "Minimum Wages and Employment: A Case Study of the Fast Food Industry in New Jersey and Pennsylvania," *American Economic Review*, Volume 84, Number 4, September 1994.

A related recent policy development designed to assist low wage workers is the enactment of living wage ordinances. These laws typically require private contractors performing services for a city or other local government to pay their workers a minimum hourly wage higher than the minimum wage. These ordinances affect fewer workers than a state minimum wage.

Unemployment Insurance

The incomes of many workers over the course of a year are often reduced because they experience a spell of unemployment. Intermittent unemployment is also likely to be a significant cause of workers falling into poverty in states that have a high level of seasonal unemployment, such as in agriculture or tourism.

The unemployment insurance system, administered jointly by the federal and state governments, is an important part of the safety net designed to prevent such poverty and reduction in income. Unemployment insurance helps workers who lose their jobs by replacing a portion of their former earnings while they are looking for new jobs or waiting to be called back to their old jobs, frequently preventing the unemployed from falling into poverty or from needing to rely on welfare.

Unemployment insurance has become less effective in maintaining income than in the past, however, because a smaller share of unemployed workers now receive unemployment insurance. In 1998, a little more than one in three unemployed workers — 36 percent — received unemployment insurance nationwide. By contrast, the share of unemployed workers receiving unemployment compensation exceeded 40 percent throughout the 1970s. The percentage of unemployed workers that receive unemployment insurance varies significantly by state — in 1999 it ranged from 19 percent in Oklahoma to 58 percent in Rhode Island and Massachusetts and 65 percent in Alaska. In 26 states, the share of unemployed workers receiving benefits was below 36 percent.

The decline in unemployment insurance receipt reflects both economic trends, such as the increase in low-paid, intermittent jobs, primarily in the growing service sector, and changes in federal and state policies.³² The federal government and a number of state governments have enacted changes that have made the unemployment insurance program more difficult to access. When benefit costs rose due to a lengthy period of high unemployment in the early 1980s, a number of states reacted by making eligibility rules more restrictive.

³² Compared with manufacturing, service jobs are lower-paid and much more likely to be part-time or intermittent, making it more difficult for workers to build up sufficient earnings to qualify for unemployment benefits if they lose a job. Service workers also are less likely to receive unemployment insurance because they are less likely to be in a union than are manufacturing workers. Unions typically help their members apply for unemployment compensation.

Efforts to strengthen the unemployment insurance system both at the national level and in many states are warranted in order to broaden the receipt of unemployment insurance among unemployed workers. There are a number of options for modifying state rules that govern unemployment insurance that would expand coverage among low-wage workers.

- **“Moveable Base Period” for Eligibility:** Unemployment insurance benefits are determined in part by a person’s earning history. Under current rules in most states the most recent earnings used in benefit determination are from jobs held from three to six months prior to the time a person applies for benefits. States could alter their unemployment insurance eligibility rules to allow a person’s most recent earnings to be considered in the determination of unemployment insurance benefits. Eleven states currently have such provisions.³³
- **Good Cause for Voluntarily Leaving Work:** Workers who leave a job voluntarily generally are not eligible for unemployment benefits. Nevertheless, all states have rules that allow some workers who leave a job voluntarily with “good cause” to be eligible for benefits.³⁴ As welfare reform efforts lead to an increase in the number of working single parents, states should consider broadening the list of reasons that qualify as “good cause” for leaving a job voluntarily to include such reasons as lack of child care or transportation problems.
- **Workers Available Only for Part-Time Work:** One fundamental requirement for eligibility for unemployment compensation is that a person be available for work. In recognition of the need to balance work and child rearing, states can modify their eligibility provisions so that a person who looks only for part-time work or work on certain shifts is considered “available” for work.
- **Extended Benefits During Periods of High Unemployment:** In most states, unemployed workers are eligible for basic unemployment benefits for a maximum of 26 weeks. When a state’s unemployment rises substantially, such as during a recession, it may qualify to pay “extended benefits” beyond 26 weeks to unemployed workers.

In 1993, Congress established a new optional formula, or “trigger mechanism,” under which states could qualify for the extended benefits program under which the federal government pays 50 percent of benefit costs. Adopting this alternate

³³ These are Massachusetts, Maine, Michigan, New Hampshire, New Jersey, New York, North Carolina, Ohio, Rhode Island, Vermont, and Washington.

³⁴ See, for example, Gary L. Siegel and L. Anthony Loman, *Child Care and AFDC Recipients in Illinois: Patterns, Problems, and Needs*, Institute of Applied Research, St. Louis, Missouri, September 1991, or Stephanie Seguino, *Living on the Edge: Women Working and Providing for Families in the Maine Economy, 1979-1993*, Margaret Chase Smith Center for Public Policy, 1995.

trigger would allow many more states to qualify for extended benefits during an economic downturn than under the standard trigger.³⁵

- **Seasonal Workers:** Some states treat seasonal workers differently — and more harshly — than other workers in determining eligibility for unemployment insurance. Some 15 states either exclude the earnings a worker accrues in seasonal labor when determining eligibility or benefit levels for unemployment insurance benefits in the off-season, or otherwise restrict eligibility for unemployment insurance for seasonal workers.³⁶ These states could join the majority of states and eliminate these exclusions.
- **Dependent Allowances:** Some 12 states and the District of Columbia have acknowledged the special needs of working parents by providing additional unemployment insurance payments to workers with children. These payments are called dependent or dependency allowances. States that offer these allowances are Alaska, Connecticut, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, New Jersey, Ohio, Pennsylvania, and Rhode Island.

Income Support Programs

Changes in programs that provide assistance to low-income families also have contributed to the increase in income inequality and will likely continue to exacerbate the trend toward increasing inequality in the coming years.

Among these changes are those in the cash assistance programs serving needy families with children. Over the period between the late 1970s and the mid-1990s, cash assistance benefits fell in the majority of states. In the typical state, benefits for a family of three with no other income fell 40 percent between 1975 and 1996, after adjusting for inflation.

The Personal Responsibility and Work Opportunities Act of 1996, better known as the welfare reform law, has had a significant effect on the incomes of low-income single parent families with children. The law allows states to eliminate benefits to families that do not conform to strict training and work requirements and sets a time limit on benefits.

In every state, reliance on cash assistance has declined dramatically. Nationally, the number of welfare cases has dropped by half from their peak in 1994. Studies indicate that between one-quarter and one-half of former welfare recipients are not employed after they leave the rolls.

³⁵ For more information, see Center on Budget and Policy Priorities, *Unemployment Insurance Protection in 1994*, May 1995.

³⁶ These states are Arkansas, Colorado, Delaware, Indiana, Maine, Massachusetts, Michigan, Minnesota, Mississippi, North Carolina, Ohio, Pennsylvania, South Dakota, West Virginia, and Wisconsin.

Although information about former welfare recipients who are not employed is relatively scant, the available evidence suggests that at least some of them have experienced declines in income. An Urban Institute study found that over half of former recipients who are not working had poor health, faced barriers to work such as lack of child care or transportation or could not find work. The study also found that fewer than half of the non-working former recipients received other types of government cash assistance (Social Security or SSI) or child support.³⁷

In addition, for many former recipients who have found jobs, the move from reliance on public assistance to reliance on a paycheck has not meant an escape from poverty. Recent studies of families that have left welfare and evaluations of state welfare-to-work programs demonstrate that former welfare recipients who find jobs typically work a substantial amount of hours but are paid low wages.³⁸ Recipients who find jobs typically earn between \$2,000 and \$2,700 per quarter (or between \$8,000 and \$10,800 annually), a total well below the poverty line for a family of three. In addition, the jobs they find often fail to provide basic benefits such as paid sick days, vacation leave and health benefits. Lack of such benefits can further reduce annual earnings because of time away from the job. Many former welfare recipients are joining the growing number of parents struggling to support their families with low-wage jobs.

It is also likely that when the economy goes into another recession, the consequences for these families could be dire. Families that have relied on public assistance are often headed by adults with few job skills who are likely to be among the first to lose their jobs if there is a recession.

The welfare reform bill also replaced the eligibility criteria for the Supplemental Security Income program, the program that provides cash assistance to elderly and disabled poor, with stricter disability standards for children. These new standards have resulted in thousands of low-income disabled children being disqualified from the program. This is further reducing the incomes of low-income families with children.

Some states operate a general assistance program for individuals and families that do not qualify for federal assistance under SSI or TANF. However, in the early 1990s, many states either eliminated or substantially cut funding from general assistance programs. This also contributed to the income inequality in those states. (As noted, this report looks only at families of two or more people so the effect of general assistance cuts on families is reflected but the effect on individuals is not.)

³⁷ Pamela Loprest, *Families Who Left Welfare: Who Are They and How Have They Done?*, Assessing the New Federalism Discussion Papers 99-02, Urban Institute, 1999. This study found that 25 percent of all former recipients were not working and either do not have a spouse or their spouse is not employed.

³⁸ These studies are summarized in Sharon Parrott, *Welfare Recipients Who Find Jobs: What Do We Know About Their Employment and Earnings?*, Center on Budget and Policy Priorities, 1998. The Urban Institute study cited above shows slightly higher combined earnings of recipients and their spouses/partners of \$1,149 a month.

There are a host of options state policymakers can consider to strengthen their social safety nets to assist both families who leave welfare for work and low-wage workers who have never received cash assistance.³⁹ States can boost the incomes of the families of low-wage workers and of those receiving public assistance. States can establish state earned income tax credits based on the federal Earned Income Tax Credit (EITC) to supplement the earnings of low-income, working parents. (This option is described further in the section on taxes below.) Worker stipends — payments to parents who work but earn too little to meet their families' basic needs — and policies that allow workers to retain some assistance until their income rises to specified levels can enhance the well-being of working poor families.

States can also assist low-wage workers by providing key work supports. States can help low-income families get to their jobs by providing income-based transportation subsidies, establishing subsidy programs for low-income families to assist in purchasing a car, or developing coordinated networks of local transportation services for individuals with special needs. States can help to create an improved child care system by providing child care subsidies with affordable co-payments, improving resource and referral services and providing enhanced reimbursement rates to centers that provide care during non-standard hours.

Intensive case management and a range of supportive services can be provided to help current and former welfare recipients maintain their present employment, move into better jobs, or obtain the education and training needed for career advancement. States can assist low income families in accessing existing work supports such as food stamps, medical coverage, and child care by explaining what they are eligible for and helping them to apply. In addition, they can help to ensure that families already receiving Medicaid and food stamps do not inappropriately lose these benefits when they start to work.

States can also expand the availability of health insurance for low-wage workers. The federal welfare law enacted in August of 1996 gives states a little-recognized opportunity to use Medicaid to provide health care coverage to low-income working parents. Taking advantage of this opportunity allows states to use federal matching funds to expand health insurance for low-income working parents.

State Tax Policies

Virtually all state tax systems collect a larger share of the incomes of poor families than of high-income families. State taxes also generally absorb a larger share of the incomes of middle-class families than of high-income families. This serves to widen the after-tax income gap, exacerbating the trends in pre-tax income detailed in this report. Further, many states have been making their tax systems less progressive throughout the 1990s. When states raised taxes over the past decade to meet recession-induced shortfalls, they predominantly raised those taxes

³⁹ For additional information on the policy options summarized below, see *Windows of Opportunity: Strategies to Support Families Receiving Welfare and Other Low-Income Families in the Next Stage of Welfare Reform*, Center on Budget and Policy Priorities, forthcoming, January 2000.

that fall most heavily on low- and moderate- income households. When a stronger economy has allowed taxes to be reduced, however, much of the benefit has been targeted on higher-income families. As a result, state taxes appear to have become relatively more burdensome to low- and moderate-income families than they were in the late 1980s.⁴⁰

State Tax Reform

As long as current economic trends continue, states are likely to maintain healthy fiscal conditions. State revenue collections are growing because of a combination of low unemployment and strong returns on financial investments; the increased personal income and associated consumption translate into rising revenue for many states. Moreover, strong economies temporarily reduce the demand and the need for some social safety net programs.

These additional revenues and reduced expenditures are likely to spur continued discussion of tax cuts in many states. The specific taxes that states choose to cut and the form those cuts take will determine whether tax changes increase or decrease after-tax income inequality in the states. If states choose to cut taxes, they can fashion tax reductions that are progressive in nature and improve the after-tax distribution of income.

There are many ways to accomplish this. For example, sales taxes place a disproportionate burden on low-income families, largely because lower-income families must spend most or all of their income while higher-income families do not pay sales taxes on portions of their incomes that are saved and invested. If a state increases its reliance on income taxes relative to sales taxes, the relative burden generally is lessened for lower-income families. Thus, if a state cuts sales tax rates rather than income tax rates, after-tax income disparities generally would be reduced.

Another way to lessen the negative impact of state tax systems on the poor is to exempt food from the sales tax base. Georgia and North Carolina have eliminated their sales tax on food and Missouri and Virginia have both reduced the rate at which food is taxed under their sales taxes. States can also make their income tax systems more progressive by enacting tax credits targeted to low-income taxpayers or by raising personal exemptions or standard deductions.

Establishing a State Earned Income Tax Credit

One direct way that states can use tax policies to boost income from work for their poorest residents is to enact a state earned income tax credit. In recent years, several states have created earned income tax credits to build on the strengths of the federal Earned Income Tax

⁴⁰ Between 1994 and 1997, states lowered personal income taxes, which are the major taxes paid by upper-income families, by \$9.9 billion. This is approximately equivalent to the \$8.2 billion income taxes were raised in the early 1990s if inflation is taken into account. But states have not reversed the increases in sales and excise taxes that took place in the earlier years. While sales and excise taxes, the most burdensome taxes for lower-income families, were increased \$12.0 billion in the early 1990s, there was a net reduction of only \$0.1 billion in sales and excise taxes in the 1994-97 period.

Credit. The federal EITC is a tax credit for low- and moderate-income working people that is designed to offset the sizable burden of the Social Security payroll tax on low-wage workers, supplement the earnings of low- and moderate-income families, and complement efforts to help families make the transition from welfare to work.

There is an important role for state EITCs. Many families with working parents remain poor even when their federal EITC benefits are considered. In addition, low-income families pay a substantial share of their incomes in state and local taxes, particularly regressive sales and excise taxes. Partly as a result of these factors, eleven states have established their own EITCs — Colorado, Iowa, Kansas, Maryland, Massachusetts, Minnesota, New York, Oregon, Rhode Island, Vermont, and Wisconsin. State EITCs can boost the incomes of a state's poorest working families and reduce the gap between the state's poorest and state's richest residents.

Better Information on the Impact of State Tax Changes

In most states, tax reductions or increases are considered without much information or debate over the extent to which various income groups would benefit or be harmed by the proposed tax changes. Only a few states have the capacity in either their executive budget offices or legislative fiscal offices to analyze routinely and disseminate in a timely way during the legislative process information on the distribution of the benefits that would result from a tax proposal. Even states that have such a capacity do not necessarily produce and disseminate analyses throughout the session, when negotiations become intense, compromises are hammered out, and legislation can undergo substantial change. Nor is it common for states to prepare analyses of the distribution of tax changes that have been enacted over a period of years. Policymakers in most states do not have access to analytic information describing the impact on families at different income levels of decisions they have made or might make.

In order for state policymakers to fashion tax reforms which reduce after-tax inequality, they must have access to consistent, timely information about the distributional impact of their taxes. Minnesota has routinely produced such information. Texas is moving in the direction of providing comprehensive information on the impact of its tax system and proposed tax changes. The availability of this type of information can help the public participate in debates over the type of tax changes that are desirable for the state and can help policymakers make informed decisions.

V. Conclusion

Over the course of the two decades since the late 1970s, few states have experienced broadly-shared growth. While overall the economy of the United States has grown over the period, most of the benefits of that growth have accrued to families at the top of the income distribution. Lower-income families have seen their incomes fall in real terms or stagnate in the majority of states. The incomes of families in the middle of the income distribution have grown only slowly. At the same time, incomes at the top of the distribution have increased substantially, thereby widening the gap in income between the high-income families and poor and middle-class families.

Even the robust growth of the early to mid-1990s has not reversed this long-term trend. In three-fourths of states, families at the bottom and the middle of the income distribution have failed to keep pace with the gains made by the richest fifth of families over the past decade, and consequently, in those states, the gap between high-income families and the middle class and the poor has widened.

The increase in income inequality has resulted from a number of factors, including both economic trends and government policy. Both federal and state policies have contributed to the increasing gap in income, and both federal and state policies can be used to help mitigate or even reverse this trend in the future.

Methodological Appendix

The data source for this analysis is the Bureau of the Census' March Current Population Survey (CPS) — a survey of a nationally representative sample of households conducted every year. Each March, approximately 50,000 households are asked questions about their prior year's incomes from a wide variety of sources (the income data in the 1999 March CPS refer to 1998).⁴¹ The survey provides information on family income, which includes not only wages and salaries, but also other sources of cash income such as interest income and cash benefits, including veterans assistance, welfare payments, and child support income.

In order to have enough cases to make statistically reliable estimates of the state-level incomes by quintile, we “pool” three years of data for each time period of interest. Thus, the first time period, centered on 1979, includes the income data from 1978 to 1980. The second period centered on 1989, includes the income data from 1988 to 1990. The most recent period includes the income data from 1996 to 1998.

For each time period, all families are ranked by income and divided into five groups (or “quintiles”), each made up of the same number of persons. The average income of families in each quintile is then calculated for each of the three time periods.

The income data presented in this report are adjusted for inflation to reflect 1997 dollars. The adjustment was made using the Consumer Price Index for Urban Consumers (CPI-U-1X).

⁴¹ In earlier years, sample sizes reached 65,000 (1980-81).

The Income of Some Families is Understated

The data on family income used for this analysis understates the incomes of the top 20 percent of families as the Census Bureau definition of family income does not include income from capital gains.

Capital gains are the profits made from the sale of stocks, real estate, and other assets. Congressional Budget Office calculations based on data from the Internal Revenue Service show that the top five percent of families received 75 percent of all capital gains in 1997. In recent years, as the value of stocks has surged, capital gains have increased, especially for the highest-income investors. Since capital gains are heavily concentrated among high-income families, the effect of excluding these gains from family income is to understate income much more for high-income families than for the middle class or the poor.

To a lesser degree, the incomes of families in the bottom fifth of the income distribution are also understated. Non-cash government benefits such as food stamps, school lunches, and housing subsidies are not included as income in this analysis.

Other Considerations

Some of the families report having negative incomes during a given year. Most of these families own small businesses and their business losses during a year exceeded their incomes. Following the methodology used by the Congressional Budget Office in its income distribution analyses, negative incomes are not included in the calculations of average incomes of families in the bottom fifth of the income distribution.

The data on family income ignore another important factor contributing to a family's disposable income — the effect of federal and state tax systems. The data presented in this analysis are for pre-tax, rather than post-tax income. Income taxes paid and earned income tax credits received are therefore not taken into consideration in the analysis.

An analysis of the average income of the top five percent of families was conducted for eleven large states that have sufficient observations in the Current Population Survey to allow the calculation of reliable estimates of the average income of the top five percent of families. These states are California, Florida, Illinois, Massachusetts, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, and Texas.

Treatment of Top-Coded Variables

The Current Population Survey income data also understate the income of very high-wage workers because, in order to preserve the confidentiality of respondents, the income variables on the public use files of the CPS are top-coded. That is, values above a certain level are suppressed — that is, not included in the public use file. For example, in 1978, the top-code for earnings from primary job was \$50,000 (in 1978 dollars.) An individual with a salary of \$90,000 was

therefore counted as having earnings of \$50,000 — \$40,000 less than his or her true income from that job.

Since income inequality measures are very sensitive to changes in the upper reaches of the income scale, this suppression poses a challenge to analysts interested in both the extent of inequality in a given time period and the change in inequality over time. In order to take into account this top-coding and still be able to make accurate comparisons over time, we use an imputation technique, described below, that is commonly used in such cases to estimate the value of top-coded cases. In the last year of data used for this study, 1998, Census top-coding procedures underwent a significant change, which also must be dealt with to preserve consistency. These methods are discussed below.

For most of the years of data in our study, a relatively small share of the distribution of any one variable is top-coded. For example, in our middle time period, centered on 1989, 0.67 percent (i.e., two-thirds of the top one percent) of weighted cases are top-coded on the variable earnings from longest job, meaning actual reported values are given for over 99 percent of the those with positive earnings. Nevertheless, the disproportionate influence of the small group of top-coded cases means their earnings levels cannot be ignored.

Our approach has been to impute the average value above the top-code for the key components of income using the assumption that the tails of these distributions follow a Pareto distribution.⁴² We apply this technique to four key variables: earnings from longest job, interest, dividend, and rental income. Since the upper tails of empirical income distributions closely follow the general shape of the Pareto, this imputation method is commonly used for dealing with top-coded data (West, undated). The estimate uses the shape of the upper part of the distribution (in our case, the top 20 percent) to extrapolate to the part that is unobservable due to the top-codes. Intuitively, if the shape of the observable part of the distribution suggests that the tail above the top-code is particularly long, implying a few cases with very high income values, the imputation will return a high mean relative to the case where it appears that the tail above the top-code is rather short.

Polivka (1998), using an uncensored data set (i.e., without top-codes), shows that the Pareto procedure effectively replicates the mean above the top-code. For example, her analysis of the use of the technique to estimate usual weekly earnings from the earnings files of the CPS yield estimates that are generally within less than one percent of the true mean.

The imputed mean is then assigned to every case above the top-code. Ideally, we would like to make these imputations at the state level so as to capture regional variations in the values above the top codes. For example, dividend income in the years 1996-97 is top-coded at \$99,999. It is reasonable to suspect that an individual with dividend income above this amount

⁴² The Pareto distribution is defined as $c/(x^{a+1})$ where c and a are positive constants which we estimate using the top 20 percent of the empirical distribution (more precisely, c is a scale parameter assumed known; a is the key parameter for estimation).

in NY has higher dividend income than a top-coded case in a state where dividend income is less common. However, even with the three years of pooled data there were not enough cases to reliably estimate Pareto means by state. In fact, for unearned income, we were unable to go below the national level. For earnings from longest job (the primary income source for most families) we were able to generate four different Pareto estimates for four groups of states (three groups of 13 states and one of 12), sorted by the share of top-coded cases. Thus, we calculated one Pareto mean for the 13 states with the largest share of top-coded cases, another for the states with the next largest share, etc. We would expect these values to fall monotonically and this is generally the case. For example, in period three (centered on 1997), the four Pareto means for annual earnings from longest job were: \$220,454; \$213,366; \$207,622; \$203,349.

As noted, Census has lifted the top-codes over time in order to accommodate the fact that nominal and real wage growth eventually renders the old top-codes too low. For example, the top-coded value for “earnings from longest job” was increased from \$50,000 in 1979 to \$99,999 in 1989. Given the growth of earnings over this period, we did not judge this change (or any others in the income-component variables) to create inconsistencies in the trend comparisons between these two time periods.

However, a change made in the data for the last period did require consistency adjustments. For these years, Census both adjusted the top-codes (some were raised, some were lowered),⁴³ and used “plug-in” averages above the top-codes for certain variables. These are group-specific average values taken above the top-code, with the groups defined on the basis of gender, race, and worker status. Since these averages are essentially what we trying to estimate with the Pareto (since Census still has an internal top-code, they are not exactly the same), the question arises as to why we did not simply use these averages. However, since these averages are not available for our first two time periods, their use would create another trend inconsistency.

For the first two years of the third period, 1996-97, we were able to successfully apply our Pareto approach. For the final year, however, top-codes were lowered significantly for the three unearned income variables for which we impute: interest income, income from dividends, and rental income. While these were all top-coded at \$99,999 in 1996 and 1997, in 1998, the top-codes were \$35,000, \$15,000, and \$25,000, respectively, with plug-ins above these values. While we could have calculated Pareto means above these values, to do so would have created a significant inconsistency, since a much larger share of cases would have been assigned this mean value (e.g., in 1996-97, 0.2 percent of weighted cases were top-coded on interest income, while in 1998, 3.8 percent of cases were top-coded on this variable).

Instead we used the following procedure. Using the pooled data for 1996-97, we estimated the average values between the new 1998 top-codes and \$99,999 (call these values x'). Next, we calculated the difference between the shares above the top-codes in 1998 and that

⁴³ The new top-codes were determined by using whichever value is higher: the top three percent of all reported amounts for the variable, or the top 0.5 percent of all persons.

above \$99,999 in 1996-97. We assumed this to be the implicit share between the new and old top-code between 1996-97 and 1998. Using these shares as weights, we calculated the Pareto average for 1998 as a weighted average of x' for each of the three unearned income variables and the 1996-97 Pareto values above \$99,999. The weights in this calculation were the implied shares of cases between the new 1998 top-code and \$99,999, and one minus that value (the implied share above \$99,999). Note that this procedure assumes that the upper tail of the distribution had the same shape in 1998 as in 1996-97.

For example, x' for interest income was \$59,886. The Pareto imputation for this variable, 1996-97, was \$821,046. The implied weights were 0.788 between \$35,000 and \$99,999 and 0.212 above \$99,999. Thus, the our plug-in for interest income for 1998 was 220,998.

In order to test the reliability of these estimates, we compared the national averages for the top quintile and top five percent to published Census data (these published data derive from Census internal files which are not subject to the top-codes that are on the public use files).⁴⁴ In order to ensure comparability, we average the Census data over the three-year period used in our study. These values, shown below, verify that our imputations do a good job of replicating the values generated by Census' internal files.⁴⁵

The third panel of Appendix Table A is the percent difference in our numbers relative to Census. The higher levels in the bottom fifth are likely driven by our exclusion of negative incomes. Most other differences are trivial, with the exception of our estimate being 1.5 percent higher in the top fifth in 1979 (driven mostly by the top five percent), suggesting our top-code imputations generate higher incomes than in the Census data for that year.

Note, however, that this difference means that our estimates of the growth in inequality will be lower than those made with Census data because we are starting from a higher base. This is confirmed in Appendix Table B, which features the same type of ratio comparisons made in the report. The bottom panel shows the difference in the growth rates of these ratios between us and Census. In each time period, inequality grows slightly faster in the Census data. Thus, we conclude that our top-code adjustments do a good job of replicating Census internal data. To the extent that we differ from their estimates, we underestimate the growth of inequality.

Appendix Bibliography

Polivka, Anne E. (1998). "Using Earnings Data for the Current Population Survey After the Redesign." Working Paper #306, U.S. Bureau of Labor Statistics, Washington, DC.

West, Sandra A. (Undated). "Measures of Central Tendency for Censored Earnings Data from the Current Population Survey." Unpublished Bureau of Labor Statistics report.

⁴⁴ These files do, however, have internal top-codes that are generally well above the public use cutoffs.

⁴⁵ Note that these values differ from those in the report because, in order to be comparable with Census published data, they include 20 percent of families in each quintile instead of 20 percent of persons.

Appendix Table A
Average Incomes By Income Fifth, Census and EPI/CBPP

	Lowest fifth*	Second fifth	Third fifth	Fourth fifth	Highest fifth	80th to 95th Percentile	Top 5 Percent
Census							
1979	12,805	27,774	41,849	57,775	98,144	83,221	142,912
1989	12,131	28,255	43,794	62,962	117,036	94,482	184,696
1997	12,013	28,248	44,654	65,406	133,827	100,647	233,367
EPI/CBPP							
1979	12,940	27,828	41,905	58,039	99,632	83,715	147,387
1989	12,247	28,185	43,761	62,972	116,678	94,673	182,689
1997	12,378	28,217	44,539	65,311	134,149	101,271	233,193
Percent Difference, EPI/Census							
1979	1.1	0.2	0.1	0.5	1.5	0.6	3.1
1989	1.0	-0.2	-0.1	0.0	-0.3	0.2	-1.1
1997	3.0	-0.1	-0.3	-0.1	0.2	0.6	-0.1

* EPI/CBPP data do not include negative incomes. Note also that these tables include 20 percent of families, not persons, in each quintile to be comparable with Census data.

Source: US Bureau of the Census and Economic Policy Institute/Center on Budget and Policy Priorities

Appendix Table B
Changes in Inequality Ratios,
Census and EPI/CBPP

	Inequality Ratios	
	Top 20/ Bottom 20	Top 5/ Bottom 20
Census		
1979	7.7	11.2
1989	9.6	15.2
1997	11.1	19.4
1979-89	2.0	4.1
1989-97	1.5	4.2
EPI/CBPP		
1979	7.7	11.4
1989	9.5	14.9
1997	10.8	18.8
1979-89	1.8	3.5
1989-97	1.3	3.9
Difference in growth rates, Census-EPI/CBPP		
1979-89	0.2	0.5
1989-97	0.2	0.3

Source: US Bureau of the Census and Economic Policy Institute/Center on Budget and Policy Priorities

Appendix Table 1: Income Ranges for Each Fifth of Families, by State, '78-'80

State	Bottom fifth begins at:	Next-to-bottom fifth begins at:	Middle fifth begins at:	Next-to-top fifth begins at:	Top fifth begins at:
Alabama	\$0	\$16,356	\$28,200	\$42,004	\$59,074
Alaska	0	26,030	44,933	70,408	102,087
Arizona	0	22,957	36,655	51,130	72,846
Arkansas	0	15,614	26,831	38,319	54,466
California	0	23,861	39,783	55,909	78,026
Colorado	0	26,764	42,430	58,482	80,685
Connecticut	0	29,566	44,265	57,484	77,931
Delaware	0	25,790	39,826	53,354	74,145
Florida	0	18,764	30,371	43,805	62,668
Georgia	0	20,217	33,768	48,829	68,980
Hawaii	0	25,774	44,247	61,184	83,735
Idaho	0	22,252	34,978	46,354	61,362
Illinois	0	24,946	41,434	56,855	78,241
Indiana	0	24,117	37,052	49,892	65,863
Iowa	0	25,924	39,479	52,495	69,887
Kansas	0	24,184	37,852	50,449	67,570
Kentucky	0	19,080	32,527	46,106	62,690
Louisiana	0	17,961	31,416	46,679	67,082
Maine	0	20,521	31,870	43,020	60,846
Maryland	0	30,228	45,662	63,124	89,859
Massachusetts	0	26,030	42,054	56,562	77,885
Michigan	0	26,265	42,219	56,551	77,258
Minnesota	0	26,286	40,386	54,230	72,469
Mississippi	0	14,790	27,354	39,341	56,694
Missouri	0	21,876	36,189	48,807	67,911
Montana	0	20,499	34,562	48,217	65,423
Nebraska	0	22,234	37,102	49,525	68,380
Nevada	0	25,338	39,675	54,918	73,796
New Hampshire	0	27,115	40,082	52,191	68,076
New Jersey	0	25,777	42,881	58,573	80,694
New Mexico	0	18,403	30,482	44,898	67,610
New York	0	21,909	37,549	52,560	73,249
North Carolina	0	20,286	32,640	45,781	62,907
North Dakota	0	21,692	34,707	47,289	65,163
Ohio	0	25,597	40,141	53,388	72,382
Oklahoma	0	21,011	32,993	46,610	65,510
Oregon	0	24,783	38,505	51,844	69,675
Pennsylvania	0	24,570	38,785	51,518	70,848
Rhode Island	0	25,236	38,458	51,931	69,731
South Carolina	0	18,004	30,273	43,202	60,306
South Dakota	0	18,818	30,694	43,774	60,521
Tennessee	0	17,991	29,805	42,898	59,215
Texas	0	20,666	35,217	50,325	69,935
Utah	0	25,586	38,178	50,293	69,414
Vermont	0	21,952	34,056	46,746	66,796
Virginia	0	23,514	39,059	53,362	75,341
Washington	0	24,108	40,130	53,933	73,850
West Virginia	0	19,171	30,423	41,241	56,725
Wisconsin	0	27,531	41,484	54,824	74,310
Wyoming	0	29,740	43,384	55,059	72,410
Dist. of Col.	0	17,354	29,547	47,722	70,254
Total U.S.	0	22,560	37,154	51,783	71,670

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Appendix Table 2: Income Ranges for Each Fifth of Families, by State, '88-'90

State	Bottom fifth begins at:	Next-to-bottom fifth begins at:	Middle fifth begins at:	Next-to-top fifth begins at:	Top fifth begins at:
Alabama	\$0	\$16,446	\$28,461	\$41,915	\$60,996
Alaska	0	24,414	44,582	66,942	95,643
Arizona	0	20,815	34,567	51,083	72,448
Arkansas	0	15,527	26,908	38,860	58,085
California	0	22,281	39,468	57,397	86,028
Colorado	0	21,604	37,568	53,169	76,132
Connecticut	0	36,481	54,981	75,630	101,745
Delaware	0	26,043	42,123	58,344	80,595
Florida	0	19,792	32,876	48,419	70,893
Georgia	0	19,545	35,576	52,458	78,186
Hawaii	0	27,884	46,484	66,752	94,276
Idaho	0	20,395	33,374	45,558	63,996
Illinois	0	23,917	41,576	58,215	81,626
Indiana	0	20,596	36,223	50,722	71,863
Iowa	0	23,292	37,621	49,288	67,529
Kansas	0	25,264	38,962	54,204	74,929
Kentucky	0	17,464	29,867	45,586	65,198
Louisiana	0	13,320	28,823	44,153	65,977
Maine	0	23,257	37,076	51,938	74,646
Maryland	0	28,847	49,030	68,675	93,977
Massachusetts	0	29,092	50,541	70,116	98,194
Michigan	0	23,157	40,171	57,125	80,567
Minnesota	0	24,937	41,034	55,757	77,038
Mississippi	0	13,662	24,838	38,825	56,592
Missouri	0	20,825	34,215	51,082	71,657
Montana	0	19,252	31,643	43,855	60,198
Nebraska	0	23,397	37,180	50,453	68,693
Nevada	0	24,644	38,810	54,000	77,125
New Hampshire	0	32,859	50,453	65,589	87,245
New Jersey	0	32,489	52,473	73,674	102,295
New Mexico	0	16,559	27,555	41,360	63,604
New York	0	22,768	40,925	59,940	86,677
North Carolina	0	20,693	34,748	50,106	69,664
North Dakota	0	22,585	34,799	46,831	64,001
Ohio	0	22,944	39,715	55,467	76,417
Oklahoma	0	18,512	31,132	46,572	69,470
Oregon	0	24,626	38,680	50,712	72,109
Pennsylvania	0	23,803	38,810	53,459	77,232
Rhode Island	0	28,097	43,263	61,876	86,626
South Carolina	0	19,586	33,635	47,942	67,885
South Dakota	0	20,699	33,260	45,201	62,680
Tennessee	0	16,005	29,107	43,651	64,627
Texas	0	18,499	32,467	48,706	73,376
Utah	0	25,710	38,392	51,009	71,410
Vermont	0	26,282	42,230	57,087	78,060
Virginia	0	25,239	43,723	62,154	90,815
Washington	0	26,701	42,691	57,326	78,784
West Virginia	0	17,428	28,075	41,295	60,366
Wisconsin	0	26,829	42,840	56,098	75,188
Wyoming	0	24,191	38,842	53,960	71,724
Dist. of Col.	0	16,818	34,023	52,031	83,287
Total U.S.	0	21,798	37,674	54,353	78,396

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Appendix Table 3: Income Ranges for Each Fifth of Families, by State, '96-'98

State	Bottom fifth begins at:	Next-to-bottom fifth begins at:	Middle fifth begins at:	Next-to-top fifth begins at:	Top fifth begins at:
Alabama	\$0	\$19,800	\$35,000	\$50,700	\$72,326
Alaska	0	29,136	48,000	64,548	95,646
Arizona	0	18,000	30,032	47,668	75,000
Arkansas	0	17,440	28,651	39,262	58,800
California	0	20,200	36,560	56,290	86,016
Colorado	0	29,000	46,053	63,234	89,255
Connecticut	0	28,485	48,919	74,000	103,662
Delaware	0	25,468	42,000	60,600	85,926
Florida	0	19,669	33,233	50,001	74,077
Georgia	0	19,800	34,935	53,500	77,853
Hawaii	0	25,300	42,224	64,024	92,250
Idaho	0	20,822	35,012	49,028	70,750
Illinois	0	24,705	42,132	61,320	88,400
Indiana	0	27,150	41,108	54,900	75,910
Iowa	0	23,900	36,560	51,930	74,500
Kansas	0	23,494	39,352	55,243	80,832
Kentucky	0	19,468	35,200	51,332	76,801
Louisiana	0	16,114	30,000	46,775	71,068
Maine	0	22,320	35,370	49,277	69,602
Maryland	0	30,000	49,920	70,000	99,301
Massachusetts	0	26,400	47,040	67,527	97,913
Michigan	0	24,828	42,446	61,000	85,936
Minnesota	0	27,250	45,500	64,962	89,700
Mississippi	0	17,000	28,845	42,110	62,782
Missouri	0	23,498	39,115	54,330	77,272
Montana	0	18,000	30,102	45,000	64,162
Nebraska	0	24,000	38,514	54,872	75,020
Nevada	0	24,000	39,040	53,566	76,664
New Hampshire	0	26,913	42,955	62,130	86,400
New Jersey	0	28,964	50,500	71,162	103,938
New Mexico	0	15,050	27,280	41,808	64,524
New York	0	19,693	37,000	57,502	86,525
North Carolina	0	21,000	36,000	52,420	78,030
North Dakota	0	21,585	35,347	50,047	66,312
Ohio	0	23,864	40,226	58,707	83,112
Oklahoma	0	19,200	32,610	46,402	68,620
Oregon	0	21,834	37,066	53,600	80,000
Pennsylvania	0	24,159	40,724	58,200	83,800
Rhode Island	0	23,500	42,274	61,602	87,084
South Carolina	0	21,473	36,000	52,083	74,061
South Dakota	0	23,642	35,452	50,000	72,338
Tennessee	0	18,600	32,076	47,224	66,200
Texas	0	19,036	33,100	50,000	76,200
Utah	0	28,271	41,530	56,500	76,430
Vermont	0	24,000	38,940	52,825	73,936
Virginia	0	24,065	41,976	63,076	89,800
Washington	0	26,604	42,631	60,030	88,245
West Virginia	0	16,800	28,000	42,081	65,131
Wisconsin	0	27,140	44,265	60,100	81,000
Wyoming	0	22,202	35,149	49,576	69,324
Dist. of Col.	0	13,518	27,600	49,575	89,606
Total U.S.	0	21,813	38,000	55,797	82,128

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Appendix Table 4: Income Cutoff for Top 5%

State	Top 5% Begins at:		
	'78-'80	'88-'90	96-'98
California	\$121,642	\$144,631	153,604
Florida	102,386	115,585	128,616
Illinois	122,573	135,599	151,183
Massachusetts	115,184	155,393	170,522
Michigan	118,306	127,752	139,200
New Jersey	126,065	170,340	188,477
New York	118,221	144,501	160,386
North Carolina	98,048	111,391	130,675
Ohio	111,735	122,974	143,925
Pennsylvania	107,273	124,859	143,715
Texas	112,798	120,724	134,297
Total U.S.	112,150	129,884	142,100

Source: Economic Policy Institute/ Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Appendix Table 5: Average Incomes of Fifth of Families in '78-'80 through '96-'98, by State

State	Bottom fifth			Next-to-bottom fifth			Middle fifth			Next-to-top fifth			Top fifth		
	'78-'80	'88-'90	'96-'98	'78-'80	'88-'90	'96-'98	'78-'80	'88-'90	'96-'98	'78-'80	'88-'90	'96-'98	'78-'80	'88-'90	'96-'98
Alabama	\$9,611	\$9,481	\$11,225	\$22,112	\$22,263	\$26,764	\$34,888	\$34,729	\$42,756	\$49,781	\$50,327	\$60,138	\$86,474	\$92,858	\$119,470
Alaska	15,624	14,263	18,264	35,177	34,445	38,433	57,653	55,092	56,196	84,434	80,308	77,334	144,805	137,231	147,432
Arizona	14,685	12,714	10,801	29,614	27,905	23,975	43,142	42,331	38,624	60,453	61,138	58,597	107,477	116,679	141,190
Arkansas	9,408	9,066	10,771	21,336	21,260	23,084	32,337	32,656	33,954	45,569	47,652	48,157	80,538	84,336	99,519
California	15,123	13,646	12,239	31,707	30,910	28,213	47,614	48,328	46,076	65,877	70,205	69,807	114,252	134,048	146,066
Colorado	16,879	12,789	18,450	34,891	29,398	37,752	49,655	45,189	54,202	68,226	64,315	75,287	114,024	109,086	148,812
Connecticut	18,539	23,775	17,615	36,863	45,458	37,953	50,857	64,453	61,461	66,715	86,486	87,309	112,969	148,011	174,149
Delaware	15,449	16,402	15,660	33,067	33,998	33,461	46,432	49,699	50,920	62,828	68,135	71,907	102,128	110,504	135,732
Florida	11,708	12,196	11,847	24,323	26,339	26,153	36,598	40,280	41,094	52,569	58,298	60,363	91,961	110,929	125,204
Georgia	12,191	11,369	11,491	26,788	27,860	27,235	41,057	43,472	43,990	58,051	63,790	64,340	98,408	116,970	122,128
Hawaii	16,191	15,903	15,119	35,426	36,933	33,889	51,945	57,041	52,422	71,503	79,341	76,195	113,725	145,476	148,458
Idaho	14,341	13,179	13,336	28,879	27,213	27,573	40,717	39,530	41,498	53,044	54,253	58,492	90,164	94,161	112,732
Illinois	14,812	13,220	14,666	33,284	33,053	33,144	49,078	49,551	51,337	66,595	68,689	72,880	111,660	126,900	141,104
Indiana	15,372	12,631	16,660	31,017	28,325	34,214	43,392	43,085	47,876	57,208	60,328	63,221	88,850	99,259	121,955
Iowa	16,316	14,584	15,143	32,900	30,397	30,020	45,657	43,182	43,780	60,043	57,596	61,416	93,498	95,254	111,852
Kansas	15,527	15,612	14,470	31,388	31,954	31,089	43,823	46,189	46,747	58,285	64,046	66,462	93,618	109,052	141,903
Kentucky	11,801	10,153	11,365	25,914	23,421	27,366	39,211	37,458	43,722	54,080	54,108	61,826	84,306	92,083	125,797
Louisiana	10,757	7,360	9,289	24,387	20,277	22,967	39,304	36,777	37,764	55,709	53,956	57,053	98,077	114,910	111,441
Maine	13,306	13,806	13,539	25,963	29,900	29,064	37,308	44,440	41,750	50,897	61,717	58,098	87,514	104,517	109,619
Maryland	17,586	17,188	17,941	38,327	39,644	39,773	54,081	58,337	59,879	74,752	80,339	82,954	122,037	133,885	164,816
Massachusetts	15,712	16,755	15,342	34,206	39,768	36,279	48,899	59,967	57,417	66,216	83,244	80,891	110,718	144,505	156,606
Michigan	15,919	13,129	14,622	34,488	31,823	33,637	49,371	48,310	51,513	65,887	67,650	72,085	105,449	116,607	134,707
Minnesota	16,781	14,919	16,464	33,167	33,271	36,772	46,843	48,360	54,634	62,307	65,509	75,541	101,638	115,236	144,919
Mississippi	9,402	8,163	10,279	21,246	19,048	22,295	33,455	31,498	34,991	47,436	47,249	51,338	83,595	89,350	105,612
Missouri	13,921	12,763	14,196	29,153	27,319	31,000	42,275	42,874	47,240	57,175	60,950	64,748	96,736	113,065	127,738
Montana	12,674	12,027	10,762	27,159	25,054	23,447	41,252	37,828	37,165	56,422	51,749	53,122	97,437	86,826	99,904
Nebraska	13,816	14,471	14,714	30,228	30,391	30,996	43,251	43,492	45,906	58,245	58,350	64,321	91,092	101,734	123,018
Nevada	16,436	15,890	15,635	32,528	31,762	31,999	47,038	45,680	45,834	63,495	64,216	64,518	106,294	110,315	132,301
New Hampshire	17,539	19,599	16,832	33,683	41,747	35,444	45,985	58,115	52,294	59,608	75,164	72,502	98,824	135,817	148,315
New Jersey	16,154	18,786	17,447	34,271	42,677	39,587	50,466	62,634	60,801	68,360	86,400	85,999	113,123	152,319	165,958
New Mexico	11,112	9,854	8,720	24,136	21,993	21,565	37,346	34,259	33,981	55,451	50,474	52,316	94,895	103,848	111,295
New York	13,666	12,738	10,769	29,493	31,856	28,180	45,028	50,228	46,756	61,586	71,802	69,989	106,869	132,674	152,349
North Carolina	12,599	12,675	12,617	26,742	27,629	28,227	39,065	42,033	43,748	53,519	59,224	63,261	90,750	106,041	126,580
North Dakota	12,920	13,868	13,423	27,515	28,874	28,509	40,660	41,205	42,294	55,371	55,175	57,634	94,226	94,969	106,304
Ohio	15,777	13,624	13,986	32,888	31,610	31,289	46,629	47,352	49,135	62,004	65,331	69,335	101,516	113,179	136,259
Oklahoma	13,214	11,337	11,558	27,071	25,107	26,175	39,858	38,077	39,441	55,219	57,465	56,132	102,158	106,837	115,272
Oregon	14,835	14,969	12,902	31,706	31,499	29,111	44,790	44,708	44,984	59,215	59,423	64,973	94,782	104,502	144,300
Pennsylvania	15,316	14,642	14,900	31,804	31,066	32,341	45,006	45,960	48,797	60,175	63,963	69,446	98,129	115,463	140,627
Rhode Island	14,867	17,307	13,527	31,906	35,537	33,133	44,624	51,823	51,071	60,206	72,117	72,131	93,730	125,030	160,176
South Carolina	11,093	11,563	13,390	24,318	26,317	28,633	36,698	40,534	43,885	50,946	57,222	62,694	87,592	108,055	116,223
South Dakota	12,288	12,786	14,730	24,620	27,000	29,479	37,118	39,124	41,920	51,361	52,771	60,025	89,360	93,301	132,773
Tennessee	10,574	9,525	11,749	24,251	22,114	25,035	36,110	36,078	39,607	50,601	53,291	55,519	85,897	98,427	108,686
Texas	12,350	10,862	11,200	27,820	25,356	26,007	42,709	40,149	41,099	59,388	59,953	61,394	105,867	111,755	130,302
Utah	16,134	16,819	18,174	32,092	31,723	34,511	43,716	44,736	49,010	58,827	59,584	65,830	96,491	101,055	125,926
Vermont	14,157	16,257	14,400	27,620	34,422	30,840	40,293	49,249	45,643	55,823	66,425	62,173	90,886	119,980	120,826
Virginia	14,334	14,564	14,141	31,123	33,931	32,584	45,816	52,219	51,444	63,307	74,712	74,596	105,922	133,169	151,117
Washington	14,842	16,608	15,123	32,204	33,975	34,891	46,614	49,565	51,541	62,159	66,596	72,475	106,596	116,142	138,787
West Virginia	11,959	9,655	9,805	24,691	22,624	22,363	35,868	34,239	34,686	47,932	49,569	51,816	77,462	85,372	102,174
Wisconsin	17,129	16,861	16,690	34,414	34,929	35,477	47,966	49,448	51,647	63,755	64,457	69,899	104,726	108,143	136,404
Wyoming	18,851	15,002	13,238	36,759	31,662	28,465	49,397	46,435	41,666	63,208	61,733	57,979	105,691	103,452	108,450
District of Columbia	9,604	9,007	7,498	22,984	25,078	20,134	38,329	42,871	36,918	57,043	66,682	66,279	116,315	148,142	203,110
Total U.S.	13,883	12,883	12,986	29,848	29,712	29,684	44,284	45,751	46,530	60,627	65,227	67,527	103,120	119,618	137,485

Source: Economic Policy Institute/Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.

Appendix Table 6: Average Incomes of the Top 5% of Families

State	'78-'80	'88-'90	'96-'98
California	\$168,617	\$212,142	\$250,332
Florida	136,746	177,661	215,190
Illinois	163,889	200,384	233,075
Massachusetts	160,962	218,619	257,291
Michigan	149,507	170,409	223,547
New Jersey	162,312	233,234	273,616
New York	161,175	205,467	269,051
North Carolina	140,466	171,067	213,327
Ohio	147,651	174,699	232,071
Pennsylvania	139,562	176,333	244,009
Texas	166,980	169,472	225,459
Total U.S.	152,807	186,810	237,568

Source: Economic Policy Institute/Center on Budget and Policy Priorities' analysis of data from the U.S. Census Bureau's Current Population Survey.