

Sources Of Support  
and Income Inequality  
among America's  
Children

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Assessing  
the New  
Federalism

An Urban Institute  
Program to Assess  
Changing Social Policies

Discussion Papers

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## Assessing the New Federalism

*Assessing the New Federalism* is a multiyear Urban Institute project designed to analyze the devolution of responsibility for social programs from the federal government to the states. It focuses primarily on health care, income security, employment and training programs, and social services. Researchers monitor program changes and fiscal developments. Alan Weil is the project director. In collaboration with Child Trends, the project studies changes in family well-being. The project provides timely, nonpartisan information to inform public debate and to help state and local decisionmakers carry out their new responsibilities more effectively.

Key components of the project include a household survey, studies of policies in 13 states, and a database with information on all states and the District of Columbia. Publications and the database are available free of charge on the Urban Institute's Web site: <http://www.urban.org>. This paper is one in a series of discussion papers analyzing information from these and other sources.

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## Abstract

This paper examines the disparity in resources available to children across states and in different living arrangements using data from the first wave of the National Survey of America's Families. We focus on disparities in children's family incomes and supplement our findings by taking family size into account and also by using an expanded definition of family income (social family income) that deems the income of nonfamily household members to be available to children. Our major findings follow.

### **Difference in Median Income by Family Type**

Median income available to children in two-parent families is almost three times higher than the median income available to children in one-parent families (\$49,401 v. \$17,328 in 1996). When we adjust for differences in family size, we find that the median income available to children in two-parent families is two and one half times greater than the median income of children in one-parent families.

When we expand our definition of "family" to include nonrelated household members—a social family—we find that median income available to children in two-parent families is largely unaffected, but the income available to the median child living with a single parent grows by more than 10 percent.

### **Sources of Income by Family Type**

Parental earnings represent 90.9 percent of all the income available to children in two-parent families, but only about half the income available to children in one-parent families. For children in one-parent families, the balance of the income available to them comes primarily through public transfers (24 percent). Private transfers constitute less than 8 percent while earnings of nonparent family members account for 13.2 percent. When we examine social family income, the share of income available to children in one-parent families accounted for by nonparental earnings rises only modestly to 16 percent. The composition of income available to children in two-parent families is largely unaffected by the inclusion of additional household members.

### **Difference in Median Income by State**

Median income available to children varies considerably across the 13 states we examine. New Jersey has the highest median income (\$55,680 in 1996) and Mississippi the lowest (\$27,200). These differences persist even when we control for family size and consider social family income.

## **Income Inequality within States**

In addition to examining differences in average incomes between states and family types, we also examine the distribution of resources available to children within states. We find that of the 13 states we examine, New York and Mississippi consistently have the highest level of inequality across a wide variety of measures. Income available to children in Wisconsin, Washington, and Minnesota is consistently the most equally distributed. Also, social family income is generally more equally distributed than legal family income.

## **Sources of Nationwide Income Inequality**

When we examine the sources of inequality in the distribution of resources available to children nationally, we find that state differences account for about 1 percent of the total variation in family incomes. Differences across family types (one-parent, two-parent, and others) account for about one-sixth of overall inequality. This leaves five-sixths of overall inequality in the distribution of resources available to children to be explained by differences in parents' ability to generate income regardless of their marital status or the state in which they live.

## **Income Inequality and Child Poverty**

We find that states in which the resources available to children are more unequally distributed also tend to have relatively high rates of child poverty.

In sum, this paper shows that while there are important differences between states, the lion's share of the variation in the resources available to children appears within states. Even though states with high child poverty rates tend to have lower median incomes, they also have more skewed income distributions and more inequality. Thus, even "low-income" states likely have the ability to improve the material well-being of their poorest children by drawing on state resources. These resources need not be devoted to increasing cash assistance; rather, states could adopt or expand programs like the earned income tax credit that enhance the earnings and incomes of low-wage workers.

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# Sources of Support and Income Inequality among America's Children

## Introduction

While U.S. poverty rates have fallen from 15.1 percent in 1993 to 13.3 percent in 1997, poverty rates among children remain high. Nearly one out of every five children lived in poverty in 1997; indeed, children are twice as likely to be poor as adults (U.S. Bureau of the Census 1998). Many factors affect children's material well-being—for example, children living with both parents, on average, have greater financial resources available to them than children living in single-parent families. Location also matters: one-third of the children in Mississippi were poor in 1996, compared to just over one out of 10 in Wisconsin (Gallagher and Zedlewski 1999). Clearly, children's material well-being varies considerably across family types and across states.

In this paper, we take a closer look at the disparity in the familial financial resources available to children across states and family types. Using data from the National Survey of America's Families (NSAF), we document differences in average incomes available to children based on their living arrangements and states of residence. In addition, we take differences in family size into account by examining disparities in income relative to the poverty line (income-to-needs ratios).<sup>1</sup> Because conventional definitions of "family" may fail to recognize all the

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<sup>1</sup>The federal poverty line reflects the amount of income a family requires to meet its basic needs—food, clothing, shelter, and so forth. The poverty line varies by family composition, reflecting both the fact that larger families require more income to meet their needs and that individuals living together can share resources. For example, the poverty line for a single nonelderly person in 1997 was \$8,350, and the poverty line for a single parent with one child was \$11,063; while the two-person family requires more income to meet basic needs than the single individual, its needs are not double those of the single individuals. Thus, examining a family's income relative to its needs takes into account differences in family size (U.S. Bureau of the Census 1998).

resources available to a child, such as income from a nonrelated adult living in the same household, we also examine differences in “social family” income. Beyond differences in average income, we document differences in the sources of support for children living in different types of families.

The resources available to children also differ within states and within family types. That is to say that while, on average, children living with both parents are materially better off than children living with a single parent, some children in two-parent families are poor, and some in one-parent families are wealthy. Consequently, we examine how equally (or unequally) the income available to children is distributed in the U.S., as well as how income is distributed within states and family types. We also assess how much of overall inequality can be accounted for by observable differences in family structure and location.

It is important to consider inequality in the distribution of resources available to children and not just differences in average incomes and the proportion in poverty. While state poverty rates indicate the extent of need and how it varies across states, they do not allow us to infer whether or not states themselves have the resources to address the needs of low-income children. If high-poverty states also have high inequality, they may be able to improve the material well-being of children by relying on state resources. We find that, in general, high-poverty states also have high levels of inequality and that differences between states account for very little of overall inequality in the U.S.

In the following section, we discuss the NSAF data used in our analysis as well as our definitions of income, income sources, and family types. We then proceed to document

differences in the resources available to children by family type. In the next section, we examine the distribution of income across states and identify the sources of income inequality. We conclude with a summary of our findings.

## **DATA AND DEFINITIONS**

The 1997 National Survey of America's Families (NSAF) is a nationally representative survey of families with children in the United States.<sup>2</sup> Unlike many other nationally representative data sets, the NSAF contains large samples from 13 individual states, allowing for state-level analysis.<sup>3</sup> The NSAF also oversamples families with incomes below 200 percent of the poverty line. Round I of the NSAF provides information about the well-being of over 145,000 people, including 34,000 children.

While most previous research on income inequality has focused on adults and families, our analysis draws attention to differences in the resources available to children for two reasons. First, policymakers are particularly sensitive to the well-being of children. For example, Congress specifically cited child poverty as a key indicator of the impact of 1996's Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA, or welfare reform, 42 USC613, Section 413). Second, measuring inequality between adults or families cannot fully capture differences in

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<sup>2</sup>For a description of the NSAF survey and a discussion of its reliability see Kenney, Scheuren, and Wang (1999). More information about the NSAF can also be obtained through the Urban Institute's Assessing the New Federalism Web site: <http://newfederalism.urban.org/nsaf/index.htm>.

<sup>3</sup>The states are Alabama, California, Colorado, Florida, Massachusetts, Michigan, Minnesota, Mississippi, New Jersey, New York, Florida, Texas, Washington, and Wisconsin.

the resources available to children. Consider, for example, two families. The first has one child and is wealthy; the second has two children and is poor. A family-based analysis would give equal weight to each family, while a child-based analysis would find two children with limited resources and one child with ample resources. Thus, we conduct our analyses on a child-level data set. The resources available to a child are the total earnings and other cash income of all the members of his or her family.

We refer to the resources available to a child as total family income, and we divide total family income into five components: (1) parental earned income, (2) earnings of nonparents, (3) public transfers and social insurance, (4) private transfers, and (5) other cash income such as interest income. Parental earned income, or parents' earnings, counts the earnings of a child's resident biological parents, adoptive parents, or stepparents as well as any positive self-employment income. Earnings of nonparents include the earnings and positive self-employment income of any family member who is not a parent of the child (a grandparent, for example). Public transfers and social insurance include cash income from Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), Social Security, foster care payments, General Assistance, unemployment compensation, workers' compensation, and veterans' payments. Near-cash transfers such as food stamps are excluded. Private transfers count child support payments as well as money from friends and relatives living elsewhere. And residual income is composed of interest, dividends, pensions, annuities, rent, and other miscellaneous sources of income. Total family income reflects the resources available to a child during calendar year 1996, and all cash values are measured in 1996 dollars.

Because the resources available to children vary significantly by living arrangements—children with two parents generally have more resources than children in single-parent families—we examine income and income inequality by family structure: children in one-parent families, children in two-parent families, and all children. Children in one-parent families live with one, and only one, biological or adoptive parent; children living with foster parents or children living with stepparents without their biological or adoptive parents are not included in this category. Children in two-parent families live with two biological or adoptive parents or they live with a biological or adoptive parent with a spouse who has not legally adopted the child (a stepparent). This definition of two-parent families is relatively broad in that it treats stepparents like parents. The final category, all children, includes children in one- and two-parent families as well as children not elsewhere classified, such as children in foster care settings and those with unknown living arrangements.<sup>4</sup>

Measuring the resources available to a child also depends on the sources of income and the proportion of income deemed to be available to that child. We use four different measures of family income: the income of a child’s legal family, legal family income adjusted for family size, the income of a child’s social family, and social family income adjusted for family size. A legal family includes those people legally related to each other through blood, marriage, or adoption.

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<sup>4</sup>For more information about family structure in the NSAF, see Halpern, Fernandez, and Clark (1999). We find that 70.3 percent of children live in two-parent families, 26.6 percent live in one-parent families, and 3.2 percent either live with no parents or in unclassified families.

The U.S. Census Bureau uses this definition when producing official poverty measures. It assumes that all people in the family share economic resources with one another.<sup>5</sup>

Legal family income alone, however, presents an incomplete picture of a child's well-being. Two families with the same income are not necessarily equally well-off: A larger family has to stretch its income over more members than a smaller family. To adjust for differences in family size, we compare a legal family's income to its needs using the poverty threshold appropriate for a given family and we examine the distribution of income-to-needs ratios.<sup>6</sup>

The concept of a legal family, however, does not fully capture the complexity of today's households. Consequently, we also examine the resources available to children using the concept of "social" family. A social family includes all the members of a legal family as well as cohabitators and nonfamily housemates who contribute valuable resources to the family. In addition to examining the level and distribution of social family income, we also adjust for social family size using the poverty thresholds and present results for social family income-to-needs ratios.

## **INCOME LEVELS**

### **Median Family Income by Family Type**

Table 1 shows median family income available to children by their living arrangements using our four definitions of family income based on data from the NSAF. The median legal family income for children in the U.S. was \$39,000 in 1996. Median legal family income is nearly

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<sup>5</sup>We assume that all of a family's income is available to each child in the family. This is equivalent to assuming that all of a family's purchases benefit all family members simultaneously.

<sup>6</sup>We obtained poverty thresholds through the U.S. Census Bureau Web site:  
<http://www.census.gov/hhes/poverty/threshld/thresh96.html>.

three times higher for children in two-parent families than it is for those in single-parent families: For children in two-parent families median income is \$49,401, compared to \$17,328 for those in one-parent families.

Adjusting for family size, we see that the median legal family income-to-needs ratio for all children in the United States is 2.36. This indicates that, on average, families across the country have about two and one-third times the resources they need to meet their basic economic needs. The income-to-needs ratio for children in two-parent families is 2.84; for children in one-parent families it is 1.15. Note that when we adjust for family size, the gap between the resources available to children in two-parent and one-parent families narrows: Children in two-parent families have only two and one-half times as much income available to them as children in one-parent families.

When we expand our set of resources available to children to encompass social families, we find that median social family income in 1996 was \$40,000, slightly higher than legal family income. For children in two-parent families, there is little difference between median social and legal family income. But children in one-parent families have a median social family income of

Table 1: Median Family Income Available to Children, by Living Arrangements

	All Children	Children in One-Parent Families	Children in Two-Parent Families
Legal Family Income	\$39,000	\$17,328	\$49,401
Legal Family Income-to-Needs Ratio	2.36	1.15	2.84
Social Family Income	\$40,000	\$19,200	\$49,556
Social Family Income-to-Needs Ratio	2.39	1.27	2.87

Note: Urban Institute tabulations from the 1997 National Survey of American Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996. Children living in no-parent families are included in the "All Children" column, but not in subsequent columns.

\$19,200, appreciably higher than the \$17,328 median legal family income for children in one-parent families.

Adjusting for family size shows that the additional resources brought to one-parent families by including social family members largely go toward meeting the needs of those additional members: The median social family income-to-needs ratio for children in one-parent families is 1.27, just slightly higher than the 1.15 median legal family income-to-needs ratio. The median social family income-to-needs ratio is 2.39 for all children and 2.87 for children in two-parent families.

### **Sources of Support by Family Type**

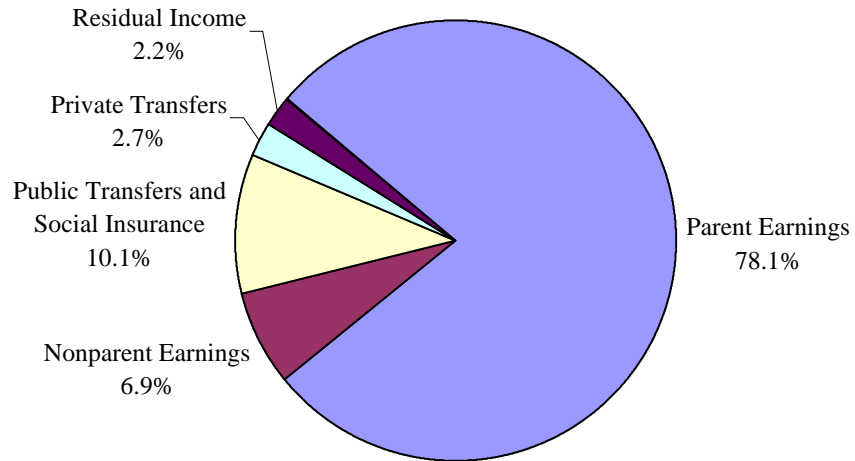
The sources of support available to children vary considerably by their living arrangements. Figure 1 shows that, on average, over three-quarters of the resources available to all children come from their parents' earnings; about 10 percent come from public transfer programs and social insurance.<sup>7</sup> The earnings of nonparents account for almost 7 percent of the resources available to children, while private transfers and other income account for about 5 percent combined.

Figure 2 compares the sources of support available to children in one- and two-parent families. Parental earnings are a far more important source of support for children in two-parent families than for children in single-parent families. Indeed, over 90 percent of the income

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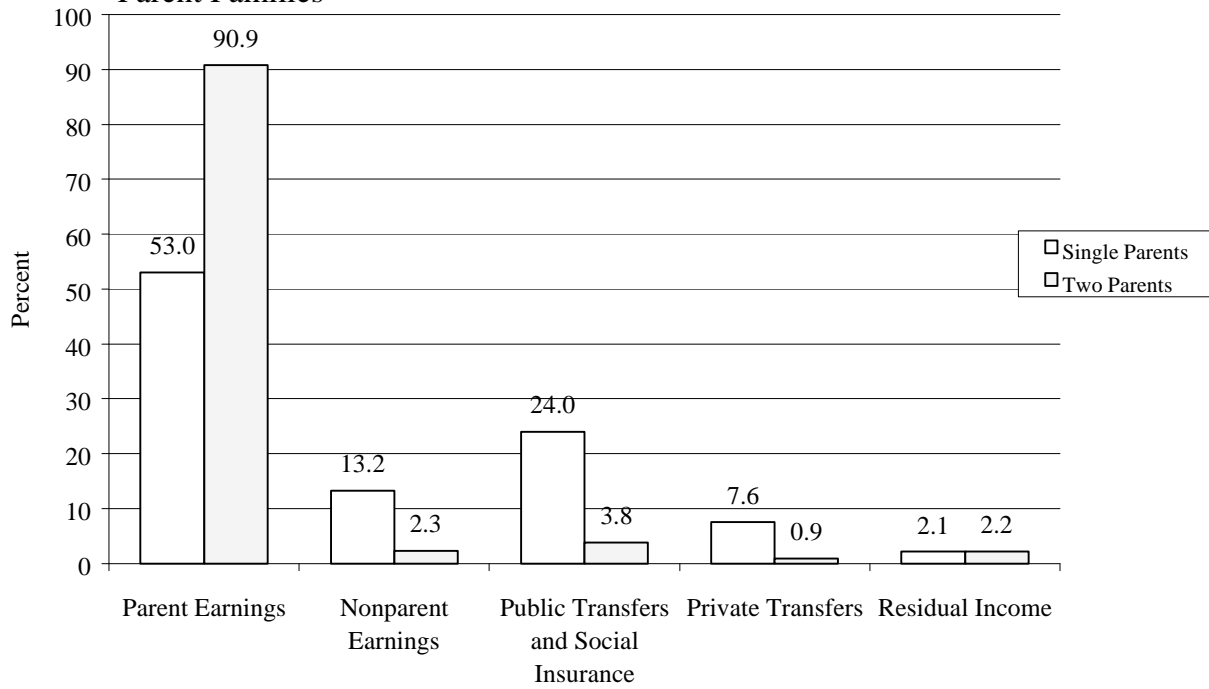
<sup>7</sup>We calculate the average proportion of income available to a child from a specific income source by computing the share of total family income each source represents for each child and then taking the average share of each source across all children.

Figure 1: Composition of Legal Family Income, All Children



Note: Urban Institute tabulations from the 1997 National Survey of America's Families.

Figure 2: Composition of Legal Family Income for Children in One- and Two-Parent Families



Note: Urban Institute tabulations from the 1997 National Survey of America's Families.

available to children in two-parent families comes from their parents' earnings, on average, compared to just 53 percent for children in one-parent families. Earned income from nonparents represents 13.2 percent of the income available to children in single-parent families, compared to 2.3 percent for those in two-parent families. Public transfers represent only 3.8 percent of the resources available to children in two-parent families but nearly one-quarter of the resources available to children in one-parent families. Children in one-parent families are also more dependent on private transfers than children in two-parent families (7.6 percent v. 0.9 percent).

When we examine the composition of family income using our expanded social family concept, we find that the sources of support for children in two-parent families are virtually the same as when we consider legal family income. This largely reflects the fact that for most children living with both their parents, there is no difference between their legal and their social families. Table 2 compares the sources of support for children in one-parent legal and social families. In one-parent social families, nonparental earnings play a somewhat more important role in supporting children (16.0 percent v. 13.2 percent in one-parent legal families). The share of support from parental earnings and the share from public transfers are lower in one-parent social families than in one-parent legal families.

## **THE DISTRIBUTION OF INCOME**

The income available to children varies widely across the 13 focal states in the NSAF. For all children, median legal family income ranges from a high of \$55,680 in New Jersey to a low of \$27,200 in Mississippi; the U.S. median is \$39,000 (table 3). Among children in two-

Table 2: Income Sources for Children in One-Parent Families, Legal v. Social

	Legal Family Income (%)	Social Family Income (%)
Parental Income	53.0	51.1
Nonparent Earnings	13.2	16.0
Public Transfers and Social Insurance	24.0	23.6
Private Transfers	7.6	7.1
Residual Income	2.1	2.1
Total	100.0	100.0

Note: Urban Institute tabulations from the 1997 National Survey of America's Families.

Table 3: Median Legal Family Income, by State and Living Arrangements

	All Children (\$)	Children in One-Parent Families (\$)	Children in Two-Parent Families (\$)
Alabama	33,400	13,000	47,000
California	34,400	17,447	45,000
Colorado	44,000	19,316	50,000
Florida	32,725	18,450	44,300
Massachusetts	51,450	19,209	61,600
Michigan	45,500	19,482	55,002
Minnesota	49,000	20,244	55,800
Mississippi	27,200	12,888	41,400
New Jersey	55,680	19,000	65,150
New York	39,000	14,000	53,000
Texas	34,100	16,224	44,000
Washington	44,280	21,000	50,000
Wisconsin	45,000	21,300	51,982
Balance of U.S.	39,000	17,440	48,500
U.S. Total	39,000	17,328	49,401

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996. Children living in no-parent families are included in the "All Children" column, but not in subsequent columns.

parent families, those in New Jersey once again have the highest median incomes (\$65,150) and those in Mississippi have the lowest (\$41,400). Among children in single-parent families, those in Mississippi have the lowest median incomes (\$12,888), while the highest median income for this group of children can be found in Wisconsin (\$21,300).

Table 4 presents social family median incomes by state and family type. Among all children, median resources are still highest in New Jersey at \$56,880 and lowest in Mississippi at \$28,240. Again, there is little difference between median social and legal family income for children in two-parent families in any of our 13 focal states. For children in one-parent families, their average social family income is appreciably higher than their legal family income in all 13 states. Interestingly, children in one-parent families in Wisconsin benefit the most from considering social family income. Median social family income for children in one-parent families in Wisconsin is \$25,000, compared to \$21,300 for legal family income.

Table 5 presents income-to-needs ratios by state and family type for both legal and social families. We find that, in general, differences in median incomes across states are largely unaffected by differences in family size. For example, New Jersey has the highest median income-to-needs ratio, almost twice as high as Mississippi, which has the lowest. This difference is similar to the gap between the two states' median incomes. In some instances, however, adjusting for family size matters. For example, among children living in two-parent families, the median income-to-needs ratio is smallest in Texas (2.46) rather than Mississippi (2.48), which has the lowest median income.

Table 4: Median Social Family Income, by State and Living Arrangements

	All Children (\$)	Children in One- Parent Families (\$)	Children in Two- Parent Families (\$)
Alabama	34,000	14,000	47,000
California	35,320	18,118	45,730
Colorado	44,296	21,240	50,050
Florida	34,048	20,000	45,000
Massachusetts	52,000	21,000	61,896
Michigan	45,800	20,660	55,002
Minnesota	49,244	22,876	56,000
Mississippi	28,240	13,375	41,400
New Jersey	56,880	20,210	65,400
New York	40,000	15,360	53,100
Texas	35,000	17,000	44,200
Washington	45,088	24,500	50,000
Wisconsin	46,000	25,000	52,000
Balance of U.S.	40,000	20,000	48,500
U.S. Total	40,000	19,200	49,556

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996. Children living in no-parent families are included in the "All Children" column, but not in subsequent columns.

Table 5 (corrected 2/00): Median Income-to-Needs Ratios for Legal and Social Families, by State and Living Arrangements

	<u>Legal Family Income-to-Needs</u>			<u>Social Family Income-to-Needs</u>		
	All Children	Children in One-Parent Families	Children in Two-Parent Families	All Children	Children in One-Parent Families	Children in Two-Parent Families
Alabama	2.07	0.88	2.80	2.08	0.88	2.80
California	2.00	1.00	2.60	2.03	1.04	2.60
Colorado	2.59	1.41	2.95	2.61	1.51	2.97
Florida	2.10	1.17	2.72	2.14	1.22	2.77
Massachusetts	2.95	1.29	3.59	3.00	1.42	3.60
Michigan	2.70	1.29	3.14	2.72	1.31	3.14
Minnesota	2.85	1.50	3.20	2.87	1.67	3.20
Mississippi	1.65	0.78	2.48	1.67	0.81	2.48
New Jersey	3.23	1.39	3.85	3.27	1.44	3.85
New York	2.36	0.96	3.16	2.39	1.05	3.17
Texas	2.01	1.11	2.46	2.02	1.13	2.46
Washington	2.63	1.48	2.93	2.65	1.65	2.93
Wisconsin	2.70	1.57	3.04	2.76	1.70	3.05
Balance of U.S.	2.38	1.25	2.79	2.40	1.36	2.83
U.S. Total	2.36	1.15	2.84	2.39	1.27	2.87

Note: Urban Institute tabulations from the 1997 National Survey of American Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996. Children living in no-parent families are included in the "All Children" column, but not in subsequent columns.

In addition to differences across states and family types, the income available to children also varies within states and family types. That is, even in a state with low (or high) median income, there are high (or low) income families of all types. Next, we consider how equally or unequally resources are distributed among children living in the same state and with the same type of family.

We measure inequality using six different measures: the ratio of income at the median to income at the 20th percentile (50/20 percentile ratio), the ratio of income at the 80th percentile to income at the 20th percentile (80/20 percentile ratio), the ratio of income at the 80th percentile to income at the median (80/50 percentile ratio), the Gini coefficient, the coefficient of variation (CV), and the variance of the natural logarithm of income (VLN).

The three percentile ratios are the most basic measures of inequality. They show how the resources available to a child at one point in the income distribution relate to income for children at another point. For example, the child at the 20th percentile is poorer than 80 percent of all children; the 50/20 percentile ratio shows how much poorer that child is than the average child while the 80/20 percentile ratio shows how much poorer that child is than a child who is richer than 80 percent of all children. The larger the percentile ratio, the greater the inequality.

The Gini coefficient, the CV, and the VLN consider the entire distribution of income, not just relative incomes at specific points in the distribution. The Gini coefficient measures the distribution of income relative to the distribution of people—how much income do the poorest 10 percent of the population control, the poorest 20 percent, and so on. The Gini coefficient ranges from 0 to 1, with larger values indicating greater inequality. Both the CV and the VLN are

measures of the dispersion of income. The CV is the standard error of income divided by mean income, while the VLN is simply the variance of the natural logarithm of income. By taking the log of income, the VLN captures income inequality in terms of percentage differences—that is, the difference between \$10,000 and \$20,000 is the same as the difference between \$20,000 and \$40,000. Higher values indicate greater inequality for both the CV and the VLN.

Before examining these inequality measures, it is important to note that these measures will not necessarily rank states in the same order. For example, consider two states, A and B, in which the 20th, median, and 80th percentile incomes are \$10,000, \$40,000, and \$60,000 and \$15,000, \$40,000, and \$90,000, respectively. The 50/20 percentile ratio would be higher in A than B (4.0 v. 2.7, respectively), indicating more inequality in A, while the 80/50 percentile ratio is higher in B than in A (2.3 v. 1.5, respectively), indicating more inequality in B. The 80/20 percentile ratio is the same in both states (6.0). Indeed, because different measures of inequality yield different rankings of inequality, it is important to consider a broad set of measures. Further, different inequality measures are more or less sensitive to disparities in different portions of the distribution. If we were interested in how much less children in the lowest portions of the income distribution have relative to other children, then we would focus on measures like the 50/20 and 80/20 percentile ratios and the VLN, which are more sensitive to inequalities in the lower portions of the distribution.

We begin by presenting national values for the six inequality measures, comparing the distribution of legal family income to social family income for all children as well as for children in one- and two-parent families. Table 6 shows that social family income is, in general, more

equally distributed than family income. For example, the VLN for all children in legal families is 1.83, compared to 1.53 for all children in social families. Interestingly, counting the extra resources available to children by using social family income improves the relative well-being of the poorest children. The ratio of income available to children at the 80th percentile relative to children at the 20th percentile is 4.41 for legal family income but only 4.18 for social family income; the ratio between the 80th percentile and the median is basically unaffected by the choice between legal and social family income (1.80 v. 1.78).

For children in one-parent families, the VLN, the Gini coefficient, and the CV—all measuring the entire distribution of income—indicate that social family income is more equally distributed than legal family income. However, the percentile ratios indicate very little difference between the two. For example, the 80/20 ratio only falls from 5.29 to 5.26 when we shift from legal to social family income. The 50/20 ratio actually rises from 2.50 to 2.52. That there is little difference in the relative incomes at the 20th, 50th, and 80th percentiles for social and legal families but that inequality measures considering the entire distribution of income indicate that social family income is more equally distributed suggests that among children in one-parent families, expanding the definition of resources available to them to include the incomes of social family members increases the incomes of the very poorest of children in these families, those well below the bottom fifth.

Table 6: Legal and Social Family Income Inequality, by Living Arrangements

	<u>All Children</u>		<u>Children in One-Parent Families</u>		<u>Children in Two-Parent Families</u>	
	Legal	Social	Legal	Social	Legal	Social
VLN	1.829	1.529	2.905	2.652	1.169	0.909
CV	1.125	0.994	1.244	1.063	1.234	0.894
Gini	0.432	0.423	0.475	0.469	0.374	0.370
80/20 Ratio	4.409	4.176	5.287	5.258	3.074	2.963
50/20 Ratio	2.453	2.353	2.503	2.524	1.898	1.835
80/50 Ratio	1.798	1.775	2.112	2.083	1.619	1.614

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996. Children living in no-parent families are included in the "All Children" column but not in subsequent columns.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

Next, we compare the levels of inequality across states by family type, first considering the distribution of legal family income and then social family income. Numerical values for the six inequality measures for all children by state appear in the appendix. In table 7, we summarize the information by grouping the states into three categories for each of the six measures. The four of the 13 states with lowest measured inequality are placed in the “low” inequality group; the four states with the highest measured inequality are placed in the “high” inequality group; and the remaining five states are placed in the “middle” inequality group. A solid block denotes high inequality, a dotted square denotes mid-level inequality, and an empty square denotes low inequality.

As table 7 shows, New York and Mississippi are consistently ranked as having high inequality in the distribution of resources available to all children. Five of the six inequality measures place California in the high-inequality group as well.<sup>8</sup> Conversely, Minnesota and Wisconsin rank as low-inequality states by five out of six measures. In general, the inequality measures rank states fairly consistently, with a state ranked in either the middle or one of the two extreme categories. Two states, however, demonstrate surprising patterns. Alabama falls in the middle category for three measures, the high-inequality category for two measures, but is a low-inequality state by the CV. Similarly, five of six measures rank Colorado in the low or middle category, but the CV ranks Colorado as a high-inequality state.

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<sup>8</sup>Langer (1999) uses Gini coefficients to measure state-level income inequality in 1989 using data from the 1990 U.S. Census. She finds that Mississippi and New York are among the five states with the highest levels of inequality, while Washington and Wisconsin are among the six states with the most equal distributions of income. Hence, her findings are largely consistent with those presented here.

Table 7: State Rankings for Legal Family Income Inequality among All Children

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	■	□	▣	▣	■	▣
California	■	▣	■	■	■	■
Colorado	□	■	▣	□	□	▣
Florida	▣	■	▣	▣	□	▣
Massachusetts	□	▣	▣	▣	▣	□
Michigan	▣	□	□	▣	▣	▣
Minnesota	▣	□	□	□	□	□
Mississippi	■	■	■	■	■	■
New Jersey	▣	□	▣	▣	▣	▣
New York	■	■	■	■	■	■
Texas	▣	▣	■	■	▣	■
Washington	□	▣	□	□	▣	□
Wisconsin	□	▣	□	□	□	□

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

□ designates the four states with the lowest inequality in that column.

▣ designates the five states in the middle of the inequality range in that column.

■ designates the four states with the highest inequality in that column.

Tables 8 and 9 show state rankings for inequality among children in one- and two-parent families, respectively. New York is consistently ranked as a high-inequality state for children in single-parent families. Alabama and New Jersey are generally ranked as high-inequality states and Minnesota, Washington, and Wisconsin are generally ranked as low-inequality states for children in single-parent families. Among children living in two-parent families, inequality appears to be the highest in California, Florida, New York, and Texas and lowest in Michigan, Minnesota, and Wisconsin.

In table 10, we combine all the inequality measures for all family types into two inequality indexes. The indexes range from 0 to 1, with higher values indicating greater inequality. Our first index is based on the inequality rankings of our states using all children. Our second, “composite” index considers the states’ inequality rankings for all children as well as state inequality rankings for children in single-parent families and children in two-parent families. We compute the indexes by assigning two points for each measure that ranks a state as a high-inequality state, 1 for mid-inequality, and 0 for low inequality. We then add up the points and divide by the maximum number of points available.<sup>9</sup> Our composite index shows that New York, with a composite score of 0.944, has the highest level of inequality; California and Texas follow close behind, both with scores of 0.806. Wisconsin and Minnesota have the least inequality, with composite scores of 0.083 and 0.111, respectively.

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<sup>9</sup>For example, in column 1 we present the index based on state inequality ranking for all children; here the maximum number of points is 12. For our composite index in column 2, we use points from all families, one-parent families, and two-parent families; with six inequality measures and three family types, the total number of points available is 36.

Table 8: State Rankings for Legal Family Income Inequality among Children in One-Parent Families

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	■	□	■	■	▣	■
California	□	■	■	▣	□	■
Colorado	▣	▣	▣	▣	□	▣
Florida	▣	▣	▣	▣	■	□
Massachusetts	▣	▣	▣	▣	▣	▣
Michigan	■	□	□	□	▣	□
Minnesota	□	□	□	□	□	▣
Mississippi	▣	□	▣	▣	▣	▣
New Jersey	■	▣	▣	■	■	■
New York	■	■	■	■	■	■
Texas	▣	■	■	■	■	▣
Washington	□	▣	□	□	▣	□
Wisconsin	□	■	□	□	□	□

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

□ designates the four states with the lowest inequality in that column.

▣ designates the five states in the middle of the inequality range in that column.

■ designates the four states with the highest inequality in that column.

Table 9: State Rankings for Legal Family Income Inequality among Children in Two-Parent Families

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	□	□	□	■	■	■
California	■	■	■	■	■	■
Colorado	□	■	■	■	■	■
Florida	■	■	■	■	■	■
Massachusetts	■	■	■	□	□	□
Michigan	■	□	□	□	□	□
Minnesota	■	□	□	□	□	□
Mississippi	■	■	■	■	■	■
New Jersey	■	■	■	■	■	■
New York	■	■	■	■	■	■
Texas	■	■	■	■	■	■
Washington	□	■	■	■	■	■
Wisconsin	□	□	□	□	□	□

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

□ designates the four states with the lowest inequality in that column.

■ designates the five states in the middle of the inequality range in that column.

■ designates the four states with the highest inequality in that column.

Table 10: Indexes of Legal Family Income Inequality

	<u>Inequality Rank Score</u>	
	All Children Index	Composite Index
Alabama	0.583	0.556
California	0.917	0.806
Colorado	0.333	0.444
Florida	0.500	0.611
Massachusetts	0.333	0.361
Michigan	0.333	0.222
Minnesota	0.083	0.111
Mississippi	1.000	0.694
New Jersey	0.417	0.611
New York	1.000	0.944
Texas	0.750	0.806
Washington	0.167	0.250
Wisconsin	0.083	0.083

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. The "All Children Index" is based on inequality measured for all children. The "Composite Index" combines inequality measures for all children with those for children in one- and two-parent families. See text for details.

Comparing the composite index to the index based solely on the rankings of all children (table 10), we see that the two indexes are similar with one notable exception: Mississippi. When all children are considered, income inequality in Mississippi is extremely high, but when we examine children in one-parent families and children in two-parent families separately, income inequality is only moderate. This suggests that a significant portion of income inequality in Mississippi is driven by the disparity in incomes between children in one- and two-parent families.

Next, we consider income inequality using our expanded “social” family concept to capture the resources available to children. Numerical measures and summary rankings by family type and state for social family income inequality appear in the appendix. In table 11, we present composite inequality scores. Texas and New York rank first and second, with composite index scores of 0.917 and 0.889, respectively. California ranks third, with a score of 0.788. The resources available to children are most equally distributed in Minnesota and Wisconsin; and Wisconsin’s composite index score is 0. Thus, we find that state inequality rankings for social and legal family income are quite similar.

To review, while we find significant differences in the resources available to children between states and family types, we also see a substantial amount of inequality within states and family types. Regardless of the populations considered or the measures of inequality used, the resources available to children are more equally distributed in states like Minnesota and Wisconsin and more unequally distributed in states like Mississippi, New York, and Texas.

Table 11: Indexes of Social Family Income Inequality

	<u>Inequality Rank Score</u>	
	All Children Index	Composite Index
Alabama	0.667	0.556
California	0.750	0.778
Colorado	0.333	0.500
Florida	0.667	0.667
Massachusetts	0.333	0.361
Michigan	0.333	0.194
Minnesota	0.083	0.083
Mississippi	1.000	0.750
New Jersey	0.500	0.611
New York	0.917	0.889
Texas	0.917	0.917
Washington	0.000	0.167
Wisconsin	0.000	0.000

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. The "All Children Index" is based on inequality measured for all children. The "Composite Index" combines inequality measures for all children with those for children in one- and two-parent families. See text for details.

Next, we consider how much inequality can be accounted for by differences in incomes between family types and states.

### **Sources of Income Inequality**

On average, children in one-parent families have fewer resources than children in two-parent families, and the average resources available to children also vary across states. In this section, we assess how much these observable differences across family types and states contribute to overall inequality. To the extent that differences across states account for a significant portion of overall inequality, then one may infer that inequality reflects differences in the cost of living between states and/or that there are significant regional differences in the distribution of resources available to children. To the extent that differences in incomes across family types account for a significant portion of overall inequality, then one may consider policies aimed at promoting two-earner families and/or those targeted at lower-income one-parent families. In addition, to the extent that overall inequality is driven by unobserved differences within states and family types, then differences in the ability of adults to earn income account for the bulk of inequality in the resources available to children, regardless of where they live or the types of families they live in.

To determine how much of overall inequality is accounted for by differences in children's living arrangements and states of residence, we decompose a single measure of inequality, the variance of the natural logarithm of income (VLN). For our decomposition, we employ a straightforward multivariate technique: we simply examine the R-squared statistic from a linear regression of the natural log of income on a set of variables describing children's living

arrangements and states of residence. The R-squared statistic measures how much of the overall variation in the log of income can be explained by the variables included in the model.<sup>10</sup>

We estimate three regressions, one accounting only for living arrangements, one accounting only for state of residence, and one taking both into account.<sup>11</sup> Regression results appear in the appendix. Table 12 shows that 15.1 percent of the total variation in the resources available to children (counting only legal family income) reflects differences in living arrangements.<sup>12</sup> When we consider social family income, differences in living arrangements account for 15.6 percent of the total variation. Interestingly, differences in state of residence account for about 1 percent of total variation regardless of whether we consider legal or social family income. When we take both living arrangements and state of residence into account, we can explain about one-sixth of the total variation in the resources available to children. These results suggest that differences in adults' earnings as generated by the labor market, and differences in unearned income, drive inequality in the resources available to children rather than

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<sup>10</sup>For a detailed description of the relationship between the R-squared statistic and the VLN, see appendix 1.

<sup>11</sup>The dependent variable in each regression is the log of income. Each explanatory variable takes on a value of 1 if a child lives in a particular type of family or state and 0 otherwise. We have four different living arrangements: one-parent family, two-parent family, no-parent family, and unclassified (the omitted category). Children can live in any one of 13 specified states or in the balance of the U.S. (the omitted category). In our final model, we interact our four living arrangement categories and our 14 state-of-residence categories (children in two-parent families in the balance of the U.S. constitute the omitted category). Because of the complex design of the sample, all regressions are run using weighted data.

<sup>12</sup>Using a different decomposition technique, Lerman (1996) finds that differences in living arrangements (between group differences) account for about one-quarter of overall family income inequality for families with children in 1989. In 1971, these differences accounted for between 16 percent and 18 percent of overall inequality.

Table 12: Proportion of Total Variation in Income Available to Children Explained by Differences in Living Arrangements and State of Residence

Percent Explained By	Legal Family Income Inequality (%)	Social Family Income Inequality (%)
Living Arrangements	15.1	15.6
State	0.9	1.0
Living Arrangements and State	16.2	17.0

Note: Urban Institute tabulations from the 1997 National Survey of America's Families.

differences in the average resources available to children across states or in different living arrangements.

### **THE LINK BETWEEN INEQUALITY AND CHILD POVERTY**

Child poverty rates vary considerably from state to state, and it is not surprising that states with lower average incomes tend to have higher poverty rates. This, however, does not necessarily imply that states with high poverty rates lack resources to help disadvantaged children. Even states with low median incomes may have a significant number of well-off residents—that is to say, the distribution of income in such states may be quite unequal and highly skewed. If high-poverty states are also high-inequality states, then these states likely have more resources that can be brought to bear on the needs of poor children than would be suggested by state median incomes.

In table 13, we present correlations between state child poverty rates and several measures of inequality, including our composite indexes. The correlation coefficient can range from -1 to +1, with values near zero indicating that poverty and inequality are unrelated and values near one (-1) indicating a strong positive (negative) correlation. With the exception of the CV of legal family income, all our inequality measures are strongly correlated with child poverty. For example, we find that when we measure the resources available to children using legal family income, the correlation between state income inequality (as measured by the Gini coefficient) and child poverty is 0.901. And the correlation between inequality in the distribution of social family income and child poverty ranges from a high of 0.900 (when inequality is measured using

Table 13: The Correlation between State-Level Inequality and Child Poverty

Inequality Index	Correlation With	
	Legal Family Income	Social Family Income
VLN	0.587	0.639
CV	0.324	0.734
Gini	0.901	0.900
All Children Index	0.899	0.874
Composite Index	0.772	0.774

Note: Urban Institute tabulations from the 1997 National Survey of America's Families.

- VLN: Variance of the natural log of income.
- CV: Coefficient of variation.
- Gini: Gini Coefficient.
- 80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.
- 50/20 Ratio: Ratio of income at the median to income at the 20th percentile.
- 80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

the Gini coefficient) to a low of 0.639 (when inequality is measured using the VLN). Thus, our results suggest that states with high child poverty rates also tend to be states in which the distribution of resources available to children is more unequally distributed.

Since overall inequality is not driven by differences between states (as we reported in the previous section) and state-level poverty and inequality are, in fact, highly correlated, states themselves may well have the wherewithal to do more to improve the well-being of poor children within their borders.<sup>13</sup> There are several actions states could take to aid poor children. Most obviously, states could increase their cash transfers to poor families. Interestingly, states with higher levels of inequality tend to have the least generous welfare benefits (Moffitt 1999). However, it is important to note that even in states with high benefit levels, welfare income leaves families well below the poverty line. Further, raising benefit levels may draw low-income working families out of jobs and onto the welfare rolls. An alternative approach would involve providing additional supports to low-income working families. For example, states without earned income tax credits could introduce them, and those with such tax credits could expand them.<sup>14</sup> Indeed, this may be a particularly effective way to reduce inequality and raise the resources available to children in low-income families without discouraging work.

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<sup>13</sup>Note that our analysis is focused on children. States with relatively high inequality in the distribution of resources available to children as well as high child poverty rates may also have childless persons with significant needs.

<sup>14</sup>About one-quarter of all states have earned income tax credits and several are considering adding them. In our sample of 13 states, Massachusetts, Minnesota, New York, and Wisconsin have earned income tax credits and Colorado is considering one.

## SUMMARY AND CONCLUSION

In 1996, the average child in the U.S. lived in a family whose income was \$39,000—about three times the poverty line. But the incomes of children’s families vary considerably both across family types and states as well as within states. We find that children living in two-parent families have almost three times as much income available to them as children in one-parent families. Adjusting for differences in family size and deeming the income of nonfamily household members available to children reduces the gap slightly: the median income of the families of children living with two parents is about two and one-half times greater than that of children in one-parent families.

Not only do children in one-parent families have fewer resources available to them than children in two-parent families, their sources of income are quite different. While 90.9 percent of the income available to children in two-parent families comes from parental earnings, only 53 percent of the income available to children in one-parent families comes from parents’ earnings. And about one-quarter of the income available to children in one-parent families comes from public transfers.

There are also significant differences in average incomes between states. For example, the median income available to children in New Jersey is twice as high as the median income in Mississippi. Within states there is also considerable variation in income. In Texas, for example, a child whose family income is greater than 80 percent of all other children’s families has 5.3 times more income than a child whose family income is lower than 80 percent of all other children’s

families. Indeed, variation within state borders contributes far more to overall inequality than differences between states.

Overall, we find that differences across states explain only about 1 percent of the variation in the resources available to children nationwide. Differences in family structure account for about one-sixth of the inequality in the resources available to children across the country. This leaves five-sixths of overall inequality in the distribution of resources available to children to be explained by differences in parents' ability to generate income regardless of their marital status or the state in which they live.

Finally, we find that while states with high child poverty rates have lower median incomes, they also have higher levels of inequality. That is, poverty and inequality are highly correlated. Thus, even "low-income" states likely have the ability to improve the material well-being of their poorest children by drawing on state resources. These resources need not be devoted to increasing cash assistance; rather, states could adopt or expand programs like the earned income tax credit that enhance the earnings and incomes of low-wage workers.

## Appendix

### **The Relationship between the R-Squared Statistic from a Regression of the Natural Log of Income to Inequality Measured by the Variance of the Log of Income (VLN)**

To see the relationship between the R-squared statistic and the VLN, note that the formula for VLN is:

$$VLN = var[\ln(Y)] = \frac{\sum_{i=1}^n (\ln(Y_i) - \bar{\ln}(Y))^2}{n-1}$$

where Y represents income. The regression we estimate is:

$$\ln(Y_i) = \beta X_i + \epsilon_i$$

where Y represents income, X denotes the set of variables measuring state and living arrangements,  $\beta$  represents the regression coefficients, and  $\epsilon$  is a random disturbance. From this regression, we can obtain predicted incomes available to each child:

$$\ln(\hat{Y}_i) = \hat{\beta} X_i$$

A regression model minimizes the total squared difference between actual income and predicted income for each person:

$$\sum_{i=1}^n \epsilon_i^2 = \sum_{i=1}^n (\ln(Y_i) - \ln(\hat{Y}_i))^2$$

The difference between the actual log of income and the predicted value is the unexplained or residual portion of the total variation and is sometimes called the residual sum of squares (RSS).

In a regression, the total sum of squared differences between actual income and mean income (the total sum of squares, TSS) equals the total sum of squared differences between actual income and predicted income (the explained sum of squares, ESS) plus the unexplained portion (RSS):

$$TSS = ESS + RSS$$

$$\sum_{i=1}^n (\ln(Y_i) - \ln(\bar{Y}))^2 = \sum_{i=1}^n (\ln(\hat{Y}_i) - \ln(\bar{Y}))^2 + \sum_{i=1}^n (\ln(Y_i) - \ln(\hat{Y}_i))^2$$

The R-squared statistic is simply the explained portion of variation (ESS) divided by the total variation (TSS):

$$R\text{-squared} = \frac{\sum_{i=1}^n (\ln(\hat{Y}_i) - \ln(\bar{Y}))^2}{\sum_{i=1}^n (\ln(Y_i) - \ln(\bar{Y}))^2}$$

Note that when TSS is divided by  $n-1$ , it equals VLN. Consequently, one can interpret the R-squared statistic as measuring the portion of inequality accounted for by the factors included in the model; in this case, differences in living arrangements and state of residence.

Appendix Table 1: Legal Family Income Inequality by State for All Children

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	2.290	0.684	0.427	5.156	2.738	1.883
California	2.181	0.733	0.453	5.594	2.646	2.114
Colorado	1.517	1.149	0.414	3.587	2.095	1.712
Florida	1.808	1.158	0.443	4.179	2.182	1.915
Massachusetts	1.644	0.920	0.403	4.067	2.442	1.666
Michigan	1.992	0.540	0.372	3.679	2.202	1.671
Minnesota	1.794	0.410	0.365	3.211	2.042	1.572
Mississippi	2.523	1.055	0.481	5.560	2.720	2.044
New Jersey	2.057	0.730	0.401	4.163	2.466	1.688
New York	3.717	1.189	0.457	6.250	3.250	1.923
Texas	1.913	0.935	0.446	5.315	2.617	2.031
Washington	1.065	0.873	0.386	3.550	2.213	1.604
Wisconsin	1.012	0.870	0.342	2.981	1.926	1.548
Balance of U.S.	1.603	1.122	0.431	4.097	2.363	1.733
U.S. Total	1.829	1.125	0.432	4.409	2.453	1.798

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

Appendix Table 2: Legal Family Income Inequality by State for Children in One-Parent Families

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	3.807	0.773	0.498	5.396	2.440	2.212
California	2.129	1.104	0.495	5.005	2.239	2.235
Colorado	2.660	1.044	0.452	4.553	2.161	2.107
Florida	2.857	0.839	0.447	5.172	2.963	1.745
Massachusetts	2.336	0.824	0.447	4.935	2.481	1.990
Michigan	3.522	0.727	0.435	4.217	2.347	1.797
Minnesota	1.849	0.807	0.411	4.332	2.244	1.930
Mississippi	3.180	0.773	0.457	4.881	2.498	1.954
New Jersey	3.492	0.831	0.469	6.651	2.714	2.450
New York	6.197	1.286	0.529	8.507	3.500	2.431
Texas	3.386	1.297	0.536	6.891	3.245	2.124
Washington	1.748	0.908	0.414	4.505	2.365	1.905
Wisconsin	1.544	1.085	0.387	3.575	1.972	1.813
Balance of U.S.	2.312	0.986	0.459	4.973	2.344	2.122
U.S. Total	2.905	1.244	0.475	5.287	2.503	2.112

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

Appendix Table 3: Legal Family Income Inequality by State for Children in Two-Parent Families

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	0.676	0.674	0.329	2.881	1.875	1.536
California	1.839	0.893	0.406	4.342	2.337	1.858
Colorado	0.797	1.229	0.372	2.788	1.667	1.673
Florida	0.823	1.143	0.383	3.091	1.846	1.674
Massachusetts	0.971	0.850	0.333	2.476	1.640	1.510
Michigan	1.027	0.450	0.302	2.445	1.618	1.511
Minnesota	1.578	0.327	0.314	2.381	1.594	1.494
Mississippi	0.945	1.157	0.396	2.972	1.832	1.622
New Jersey	1.121	0.734	0.340	2.730	1.761	1.550
New York	1.427	1.046	0.366	3.181	1.938	1.642
Texas	0.886	1.017	0.380	3.652	2.114	1.727
Washington	0.617	0.850	0.346	2.655	1.724	1.540
Wisconsin	0.553	0.685	0.288	2.235	1.537	1.454
Balance of U.S.	0.920	1.287	0.378	2.796	1.796	1.556
U.S. Total	1.169	1.234	0.374	3.074	1.898	1.619

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

Appendix Table 4: Social Family Income Inequality by State for All Children

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	2.019	0.802	0.422	4.963	2.678	1.853
California	1.717	0.872	0.441	5.196	2.463	2.109
Colorado	1.364	0.940	0.406	3.450	2.013	1.713
Florida	1.502	0.992	0.434	3.977	2.115	1.881
Massachusetts	1.303	0.820	0.392	3.739	2.261	1.654
Michigan	1.483	0.709	0.364	3.499	2.106	1.662
Minnesota	1.537	0.702	0.356	3.041	1.920	1.584
Mississippi	2.394	1.139	0.472	5.256	2.669	1.969
New Jersey	1.688	0.801	0.394	3.989	2.410	1.655
New York	3.372	0.930	0.447	5.580	2.976	1.875
Texas	1.866	0.910	0.441	5.153	2.577	2.000
Washington	0.879	0.795	0.375	3.261	2.049	1.591
Wisconsin	0.801	0.683	0.330	2.778	1.825	1.522
Balance of U.S.	1.396	1.102	0.422	3.806	2.222	1.713
U.S. Total	1.529	0.994	0.423	4.176	2.353	1.775

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

Appendix Table 5: Social Family Income Inequality by State for Children in One-Parent Families

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	3.472	1.034	0.495	5.362	2.482	2.160
California	1.950	1.041	0.484	5.036	2.139	2.355
Colorado	2.437	1.139	0.454	4.690	2.213	2.120
Florida	2.481	0.882	0.448	5.372	2.919	1.840
Massachusetts	2.371	0.979	0.463	5.484	2.581	2.125
Michigan	3.274	0.839	0.430	4.684	2.460	1.905
Minnesota	1.911	0.767	0.408	4.404	2.444	1.802
Mississippi	2.884	0.912	0.450	4.805	2.371	2.026
New Jersey	3.429	0.934	0.477	7.429	2.887	2.573
New York	5.948	1.493	0.519	8.410	3.516	2.392
Texas	3.330	1.491	0.539	6.818	3.091	2.206
Washington	1.618	0.806	0.408	4.253	2.316	1.837
Wisconsin	1.261	0.775	0.387	3.564	2.040	1.747
Balance of U.S.	2.286	0.975	0.450	5.013	2.500	2.005
U.S. Total	2.652	1.063	0.469	5.258	2.524	2.083

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

Appendix Table 6: Social Family Income Inequality by State for Children in Two-Parent Families

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	0.520	0.625	0.326	2.837	1.847	1.536
California	1.465	0.775	0.397	4.169	2.280	1.829
Colorado	0.732	0.860	0.369	2.788	1.668	1.671
Florida	0.682	0.886	0.379	2.968	1.800	1.649
Massachusetts	0.520	0.704	0.326	2.447	1.629	1.503
Michigan	0.463	0.595	0.297	2.375	1.571	1.511
Minnesota	1.239	0.623	0.310	2.356	1.582	1.489
Mississippi	0.863	0.964	0.391	2.870	1.769	1.622
New Jersey	0.626	0.697	0.334	2.658	1.721	1.544
New York	1.192	0.724	0.360	3.097	1.890	1.638
Texas	0.862	0.745	0.378	3.619	2.105	1.719
Washington	0.534	0.735	0.342	2.633	1.710	1.540
Wisconsin	0.461	0.610	0.283	2.192	1.507	1.455
Balance of U.S.	0.722	1.018	0.375	2.766	1.777	1.557
U.S. Total	0.909	0.894	0.370	2.963	1.835	1.614

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

Appendix Table 7: State Rankings for Social Family Income Inequality among All Children

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	■	▣	▣	▣	■	▣
California	▣	▣	■	■	▣	■
Colorado	□	■	▣	□	□	▣
Florida	▣	■	▣	▣	▣	■
Massachusetts	□	▣	▣	▣	▣	□
Michigan	▣	□	□	▣	▣	▣
Minnesota	▣	□	□	□	□	□
Mississippi	■	■	■	■	■	■
New Jersey	▣	▣	▣	▣	▣	▣
New York	■	■	■	■	■	▣
Texas	■	▣	■	■	■	■
Washington	□	□	□	□	□	□
Wisconsin	□	□	□	□	□	□

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

□ designates the four states with the lowest inequality in that column.

▣ designates the five states in the middle of the inequality range in that column.

■ designates the four states with the highest inequality in that column.

Appendix Table 8: State Rankings for Social Family Income Inequality among Children in One-Parent Families

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	■	▣	■	▣	▣	▣
California	□	■	■	▣	□	■
Colorado	▣	■	▣	▣	□	▣
Florida	▣	▣	▣	▣	■	□
Massachusetts	▣	▣	▣	■	▣	▣
Michigan	▣	□	□	□	▣	▣
Minnesota	□	□	□	□	▣	□
Mississippi	▣	▣	▣	▣	▣	▣
New Jersey	■	▣	▣	■	■	■
New York	■	■	■	■	■	■
Texas	■	■	■	■	■	■
Washington	□	□	□	□	□	□
Wisconsin	□	□	□	□	□	□

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for calendar year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

□ designates the four states with the lowest inequality in that column.

▣ designates the five states in the middle of the inequality range in that column.

■ designates the four states with the highest inequality in that column.

Appendix Table 9: State Rankings for Social Family Income Inequality among Children in Two-Parent Families

	VLN	CV	Gini	80/20 Percentile Ratio	50/20 Percentile Ratio	80/50 Percentile Ratio
Alabama	□	□	□	■	■	■
California	■	■	■	■	■	■
Colorado	■	■	■	■	■	■
Florida	■	■	■	■	■	■
Massachusetts	□	■	■	□	□	□
Michigan	□	□	□	□	□	□
Minnesota	■	□	□	□	□	□
Mississippi	■	■	■	■	■	■
New Jersey	■	■	■	■	■	■
New York	■	■	■	■	■	■
Texas	■	■	■	■	■	■
Washington	■	■	■	■	■	■
Wisconsin	□	□	□	□	□	□

Note: Urban Institute tabulations from the 1997 National Survey of America's Families. Data are weighted to generate national estimates of the resources available to children. Income is measured for median year 1996.

VLN: Variance of the natural log of income.

CV: Coefficient of variation.

Gini: Gini Coefficient.

80/20 Ratio: Ratio of income at the 80th percentile to income at the 20th percentile.

50/20 Ratio: Ratio of income at the median to income at the 20th percentile.

80/50 Ratio: Ratio of income at the 80th percentile to income at the median.

□ designates the four states with the lowest inequality in that column.

■ designates the five states in the middle of the inequality range in that column.

■ designates the four states with the highest inequality in that column.

Appendix Table 10: Regression of the Natural Logarithm of Family Income on Children's Living Arrangements

Parameter	<u>Legal Family Income</u>		<u>Social Family Income</u>	
	Parameter Estimate	Standard Error of Estimate	Parameter Estimate	Standard Error of Estimate
Intercept	10.45*	0.204	10.54*	0.182
No Parents	-0.74*	0.248	-0.78*	0.223
One Parent	-0.97*	0.206	-0.97*	0.181
Two Parents	0.22	0.207	0.16	0.184
Mean of Dependent Variable	10.32		10.37	
R-Squared	0.151		0.156	

Note: Urban Institute tabulations from the 1997 National Survey of America's Families.

Regressions are weighted.

\* indicates that the number is significant.

Appendix Table 11: Regression of the Natural Logarithm of Family Income on State of Residence

Parameter	<u>Legal Family Income</u>		<u>Social Family Income</u>	
	Parameter Estimate	Standard Error of Estimate	Parameter Estimate	Standard Error of Estimate
Intercept	10.36*	0.025	10.4*	0.024
Alabama	-0.28*	0.064	-0.28*	0.062
California	-0.14*	0.052	-0.11*	0.042
Colorado	0.15*	0.04	0.14*	0.039
Florida	-0.15*	0.044	-0.13*	0.039
Massachusetts	0.2*	0.045	0.23*	0.04
Michigan	0.1	0.056	0.12*	0.048
Minnesota	0.18*	0.08	0.18*	0.072
Mississippi	-0.44*	0.06	-0.43*	0.059
New Jersey	0.26*	0.048	0.27*	0.043
New York	-0.27*	0.045	-0.25*	0.043
Texas	-0.17*	0.045	-0.18*	0.044
Washington	0.15*	0.039	0.16*	0.037
Wisconsin	0.18*	0.033	0.19*	0.031
Mean of Dependent Variable	10.32		10.37	
R-Squared	0.009		0.01	

Note: Urban Institute tabulations from the 1997 National Survey of America's Families.

Regressions are weighted.

\* indicates that the number is significant.

Appendix Table 12: Regression of the Natural Logarithm of Family Income on State of Residence and Children's Living Arrangements

Parameter	<u>Legal Family Income</u>		<u>Social Family Income</u>	
	Parameter Estimate	Standard Error of Estimate	Parameter Estimate	Standard Error of Estimate
Intercept	10.68*	0.019	10.71	0.017
Alabama				
No Parents	-1.15*	0.193	-1.17*	0.192
One Parent	-1.58*	0.139	-1.53*	0.136
Two Parents	-0.06	0.035	-0.07*	0.03
Unknown Family Structure	-1.22	1.227	-0.15	0.248
California				
No Parents	-0.63*	0.133	-0.47*	0.109
One Parent	-1.09*	0.091	-1.00*	0.074
Two Parents	-0.18*	0.046	-0.15*	0.036
Unknown Family Structure	-0.96	0.778	-0.94	0.774
Colorado				
No Parents	-0.62*	0.209	-0.59*	0.206
One Parent	-1.05*	0.088	-0.96*	0.09
Two Parents	0.09*	0.03	0.08*	0.028
Unknown Family Structure	-0.01	0.203	-0.04	0.202
Florida				
No Parents	-0.75*	0.113	-0.7*	0.127
One Parent	-1.25*	0.094	-1.15*	0.088
Two Parents	-0.05	0.032	-0.05	0.031
Unknown Family Structure	-0.39*	0.069	-0.42*	0.068
Massachusetts				
No Parents	-0.65*	0.174	-0.65*	0.176
One Parent	-1.07*	0.084	-0.98*	0.086
Two Parents	0.22*	0.035	0.25*	0.026
Unknown Family Structure	0.10	0.371	0.10	0.363

(Table continues on the next page.)

Appendix Table 12: Regression of the Natural Logarithm of Family Income on State of Residence and Children's Living Arrangements (continued)

Parameter	<u>Legal Family Income</u>		<u>Social Family Income</u>	
	Parameter Estimate	Standard Error of Estimate	Parameter Estimate	Standard Error of Estimate
Michigan				
No Parents	-0.46*	0.165	-0.43*	0.155
One Parent	-1.19*	0.128	-1.13*	0.128
Two Parents	0.12*	0.044	0.15*	0.025
Unknown Family Structure	-0.13	0.216	-0.16	0.215
Minnesota				
No Parents	-0.57*	0.245	-0.58*	0.248
One Parent	-1.00*	0.095	-0.94*	0.099
Two Parents	0.08	0.073	0.09	0.067
Unknown Family Structure	0.08	0.243	0.06	0.244
Mississippi				
No Parents	-1.38*	0.348	-1.39*	0.345
One Parent	-1.56*	0.118	-1.5*	0.115
Two Parents	-0.16*	0.041	-0.17*	0.037
Unknown Family Structure	-0.13	0.437	-0.16	0.437
New Jersey				
No Parents	-0.72*	0.168	-0.72*	0.169
One Parent	-1.11*	0.109	-1.08*	0.111
Two Parents	0.27*	0.037	0.3*	0.023
Unknown Family Structure	-0.43*	0.097	-0.37	0.187
New York				
No Parents	-1.23*	0.274	-1.19*	0.264
One Parent	-1.8*	0.107	-1.73*	0.102
Two Parents	0.02	0.036	0.03	0.034
Unknown Family Structure	-0.17	0.231	-0.07	0.206

(Table continues on the next page.)

Appendix Table 12: Regression of the Natural Logarithm of Family Income on State of Residence and Children's Living Arrangements (continued)

Parameter	<u>Legal Family Income</u>		<u>Social Family Income</u>	
	Parameter Estimate	Standard Error of Estimate	Parameter Estimate	Standard Error of Estimate
Texas				
No Parents	-0.9*	0.168	-0.87*	0.165
One Parent	-1.36*	0.11	-1.3*	0.111
Two Parents	-0.12*	0.035	-0.14*	0.033
Unknown Family Structure	-1.75	1.441	-0.19	0.278
Washington				
No Parents	-0.64*	0.125	-0.55*	0.106
One Parent	-0.92*	0.064	-0.8*	0.058
Two Parents	0.05	0.032	0.05	0.027
Unknown Family Structure	0.27	0.284	0.27	0.27
Wisconsin				
No Parents	-0.74*	0.142	-0.68*	0.137
One Parent	-0.85*	0.046	-0.73*	0.047
Two Parents	0.1*	0.024	0.1*	0.023
Unknown Family Structure	-0.08	0.176	-0.11	0.182
Balance of U.S.				
No Parents	-1.13*	0.212	-1.14*	0.211
One Parent	-1.14*	0.063	-1.07*	0.06
Unknown Family Structure	0.14	0.116	0.11	0.115
Mean of Dependent Variable	10.32		10.37	
R-Squared	0.162		0.17	

Note: Urban Institute tabulations from the 1997 National Survey of America's Families.

Regressions are weighted.

\* indicates that the number is significant.

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