

Welfare Reform, Living Arrangements, and Economic Well-Being: A Synthesis of Literature

Caroline Ratcliffe
Signe-Mary McKernan
Emily Rosenberg

The Urban Institute
2100 M Street, NW
Washington, DC 20037

June 2002

This report was prepared for the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE), under Contract No. HHS-100-01-0010 Task Order No. 01. The views expressed are those of the authors and should not be attributed to the U.S. Department of Health and Human Services, The Urban Institute, its trustees, or its funders. The project benefited greatly from the oversight and input of Alana Landey, the ASPE Project Officer. The authors also thank Gregory Acs, Kelleen Kaye, Robert Lerman, and Kelly Mikelson for their suggestions and Kristen Erwin for her excellent research assistance. Contact the authors via email at paffairs@ui.urban.org.

Table of Contents

EXECUTIVE SUMMARY	I
SECTION I. INTRODUCTION.....	1
SECTION II. CONCEPTUAL FRAMEWORKS	3
THEORETICAL MODELS FOR THE EFFECT OF WELFARE REFORM ON HOUSEHOLD STRUCTURE	3
THEORETICAL MODELS FOR THE EFFECT OF HOUSEHOLD STRUCTURE ON ECONOMIC WELL-BEING AND RESOURCE SHARING	4
SECTION III. METHODS	6
QUALITATIVE METHODS.....	6
QUANTITATIVE METHODS.....	7
<i>Quantitative Nonexperimental Methods</i>	7
<i>Quantitative Experimental Methods</i>	10
SECTION IV. DATA.....	12
QUALITATIVE DATA	12
QUANTITATIVE DATA	13
<i>Quantitative Nonexperimental Data</i>	13
<i>Quantitative Experimental Data</i>	15
SECTION V. RESULTS AND MAJOR FINDINGS.....	17
Q1: EFFECT OF WELFARE REFORM ON HOUSEHOLD STRUCTURE	17
<i>Nonexperimental Studies</i>	18
<i>Experimental Studies</i>	21
Q2: EFFECT OF HOUSEHOLD STRUCTURE ON ECONOMIC WELL-BEING AND RESOURCE SHARING	23
<i>Q2a. Household Structure and Economic Well-Being</i>	24
<i>Q2b. Household Structure and Resource Sharing</i>	28
SECTION VI. SUMMARY OF FINDINGS.....	30
Q1: HAVE CHANGES IN WELFARE POLICIES IN THE 1990S AFFECTED HOUSEHOLD STRUCTURE?	30
Q2: WHAT ARE THE EFFECTS OF HOUSEHOLD STRUCTURE ON ECONOMIC WELL-BEING AND RESOURCE SHARING?	31
SECTION VII. UNANSWERED QUESTIONS AND SUGGESTED NEXT STEPS.....	32
Q1: HAVE CHANGES IN WELFARE POLICIES IN THE 1990S AFFECTED HOUSEHOLD STRUCTURE?	32
<i>Unanswered Research Questions</i>	32
<i>Suggested Next Steps</i>	33
Q2: WHAT ARE THE EFFECTS OF HOUSEHOLD STRUCTURE ON ECONOMIC WELL-BEING AND RESOURCE SHARING?	34
<i>Unanswered Research Questions</i>	34
<i>Suggested Next Steps</i>	34
VII. APPENDIX A: TABLES.....	36
VIII. REFERENCES CITED	47

Executive Summary

A primary objective of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) is reducing single mothers' dependence on the welfare system. This objective is sought not only through increased work, but also through changes in household structure—particularly encouraging healthy marriages and the formation and maintenance of two-parent families. Indeed, moving from a one-parent to a two-parent family may have positive implications for the economic well-being of families with children.

This literature review focuses on the relationships between welfare reform, household structure, economic well-being, and resource sharing. In particular, we address two questions:

1. Have changes in welfare policies in the 1990s affected household structure?
2. What are the effects of household structure on economic well-being and intra-household resource sharing?

Studies examining these research questions have used qualitative and quantitative (both nonexperimental and experimental) methods. The qualitative studies reviewed are based on in-depth interviews with relatively few respondents; the nonexperimental quantitative studies are, for the most part, carried out with large-scale nationally representative data sets; and the experimental quantitative studies use both state administrative and welfare client survey data, and are based on random assignment designs. The effects of welfare reform on living arrangements have been examined using nonexperimental quantitative and experimental quantitative methods, while studies of the effects of living arrangements on economic well-being and resource sharing have used qualitative and nonexperimental quantitative methods.

Summary of Findings

Have changes in welfare policies in the 1990s affected household structure?

The nonexperimental evidence reviewed suggests that welfare reform has not been a major force in affecting family structure. There is, however, some nonexperimental evidence that welfare reform may be having some effect on family structure, especially in subpopulations such as black central city and Hispanic children, and women without a high school education. For the experimental studies, most studies find no effect of welfare reform on household structure. Of the relatively few nonexperimental and experimental studies that find an effect of

welfare reform on family structure, these studies find that welfare reform has both increased and decreased single parenting (through marriage, cohabitation, etc.), although the majority find that welfare reform decreased single parenting. So, combined, the nonexperimental and experimental research evaluating the effect of welfare reform on household structure and living arrangements provides some suggestive evidence, but no strong compelling evidence that welfare reform is responsible for the apparent decrease in single parenting after welfare reform.

That welfare reform has had few statistically significant effects on household structure is not necessarily surprising. First, if welfare reform is to have an effect on household structure, the effect may come more slowly than for other outcomes. Changes in household structure are rare events and may occur not as a direct response to welfare policy changes, but in response to other outcomes affected by welfare reform, such as increases in employment. Second, few of the changes implemented through welfare reform were explicitly aimed at influencing household structure. Greater effects might be seen under policies that are more targeted towards household structure. Third, many studies measure welfare reform as the overall effect of waivers or TANF and because changes in different welfare policies are hypothesized to have opposite effects on household structure, they may offset one another to create no effect.

What are the effects of household structure on economic well-being and resource sharing?

Findings from the literature on household structure and economic well-being suggest that children and parents living in married-couple households have the best economic situation, followed by children and parents in cohabiting-couple households. Households headed by single mothers, who either live independently or double up, have the lowest levels of economic well-being. But this literature is generally describing a relationship between living arrangements and well-being, not identifying how living arrangements *impact* economic well-being. One of the reviewed studies is an exception and does examine whether living arrangements impact economic well-being. This analysis suggests that marriage increases the economic well-being of mothers and their children as compared to mothers who live independently.

The reviewed studies also examine intra-household resource sharing. Results of these studies suggest that resource sharing does occur between related and unrelated household members, but that it is more common among related individuals.

Unanswered Research Questions

Have changes in welfare policies in the 1990s affected household structure?

Although several studies have examined whether welfare reform in the 1990s affected household structure, these outcomes are less well studied than other outcomes (such as caseload size and employment) and we conclude that this question has not been adequately addressed in the literature. In addition to the need for further studies on the effect of welfare reform on marriage, cohabitation, and female headship, we identify three main unanswered questions:

1. What is the effect of welfare reform on various living arrangements? The types of living arrangements examined in this literature are limited. The majority of studies focus on outcomes such as marriage, cohabitation, and female headship, and very few studies have examined other types of living arrangements, such as living with a parent or “doubling up” with adults other than a parent or partner.

2. What is the effect of specific welfare policies on living arrangements? A second gap in the literature is the limited information on how specific policies affect household structure. Future studies should precisely define states’ welfare policies. For example, a state’s welfare sanction policy should be represented as a continuous measure such as dollar amount or percent of benefit lost, rather than simply as whether the state has a full family sanction. More precisely defining states’ policies will allow the policy community to better understand the relationship between welfare reform and household structure.

3. Has welfare reform differentially affected different subpopulations? The literature provides limited information on the extent to which welfare reform has affected the living arrangements of different subpopulations. Bitler et al. (2001) find differences across racial groups, suggesting that future studies should separately examine subpopulations.

What are the effects of household structure on economic well-being and resource sharing?

While numerous studies have examined the relationship between living arrangements and economic well-being, only one study looks beyond the descriptive relationship and tries to identify a causal effect. This analysis suggests that marriage increases the economic well-being of mothers and their children as compared to mothers who live independently. With only one study that has addressed this specific research question, there are numerous unanswered questions in this literature. Three central unanswered questions are:

1. Is marriage a better path to economic well-being than cohabitation?
2. To what extent does living with a parent increase the economic well-being of young mothers?
3. Does “doubling up” increase the economic well-being of mothers and their children?

Multiple measures of economic well-being, such as income, income-to-needs ratio, and poverty status, should be considered in answering each of these questions.

Section I. Introduction

A primary objective of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) is reducing single mothers' dependence on the welfare system. This objective is sought not only through increased work, but also through changes in household structure—particularly encouraging healthy marriages and the formation and maintenance of two-parent families. This interest in promoting two-parent families is tied to children's economic well-being: moving from a one-parent to a two-parent family may have positive implications for the economic well-being of families with children.

This literature review focuses on the relationships between welfare reform, household structure, economic well-being, and resource sharing. In particular, we address two questions:

1. Have changes in welfare policies in the 1990s affected household structure?
2. What are the effects of household structure on economic well-being and intra-household resource sharing?

Our review of the welfare reform and household structure literature relevant to Question 1 includes studies that examine the effect on household structure of both (1) the 1996 federal welfare reform legislation and (2) state welfare waivers that occurred prior to the 1996 legislation. In terms of the effects of household structure on economic well-being and resource sharing literature relevant to Question 2, we focus on studies that address a broad set of living arrangements, such as marriage, cohabitation, doubling up, and living with a parent.

The review is organized into five main sections to make clear the context, conclusions and implications of this complex body of research:

- Section II provides a general overview of the different models and frameworks used to explain the relationship between welfare policies and household structure, and household structure and economic well-being. These conceptual frameworks help explain why certain policies or program rules (e.g., eliminating differences in eligibility between two-parent and one-parent households) are predicted to have a particular effect (e.g., more recipient two-parent households). Importantly, these frameworks provide context for the results discussed in later sections of this report.

- We describe the methods used to answer the two primary research questions, and the advantages and disadvantages of the different methods, in Section III. The literature related to Question 1 includes studies that use quantitative experimental and quantitative nonexperimental methods. Question 2 studies include those that use both qualitative and quantitative nonexperimental methods.
- Section IV provides an overview of the data used to examine the research questions in the literature, and addresses the relative strengths and weaknesses of the different data sets in providing answers to those questions.
- Results and findings from the research are discussed for each of the research questions in Sections V and VI.
- Section VII identifies the research questions that remain unanswered by the literature, and lays out some possible next steps for filling in the gaps that remain.

Section II. Conceptual Frameworks

Theoretical and conceptual models provide insights for how observed relationships, such as the relationship between welfare reform and household structure, may come about. Understanding the mechanism is important as it identifies factors and policies that might alter the relationship. Many of the reviewed studies analyzing the effect of welfare reform on household structure provide conceptual models. Few studies analyzing the effect of household structure on economic well-being and resource sharing, however, base their analyses on a conceptual framework.

Theoretical models for the effect of welfare reform on household structure

Based on the studies reviewed, we summarize the general and specific ways welfare is hypothesized to affect family structure. The theoretical models of the effect of welfare reform on family structure are based on Becker's (1981) rational choice (utility maximization) model of demographic decision-making. In these models, a woman compares the utility (i.e., level of well-being) she attains from one living arrangement (e.g., female headship) to that of another living arrangement (e.g., non-female headship). This model predicts that more generous welfare benefits increase female headship because they are provided primarily to single mothers (Bitler et al. 2001, Fitzgerald and Ribar 2001). Similar models also predict that increases in welfare generosity decrease marriage and increase divorce, again because welfare benefits are provided primarily to single mothers (Bitler et al. 2001).

In general, the theoretical and conceptual models reviewed hypothesize that welfare, by providing income to single mothers with children, discourages marriage (Acs and Nelson 2002, Fein 1999, Maynard et al. 1998, Moffitt and Pavetti 1999), encourages female-headship (Acs and Nelson 2002, Bitler et al. 2001, Fitzgerald and Ribar 2001), and encourages cohabitation (Moffitt and Pavetti 1999). Based on these models, the studies predict that welfare reform policies that make welfare more attractive will decrease marriage, increase female-headship, and increase cohabitation, while welfare policies that make welfare less attractive will have the opposite effects.¹

¹ In a unique conceptual model that has received little attention in the literature, Brandon and Fisher (2001) suggest that more generous welfare policies help maintain a child in his family by lowering the cost of raising a child (p. 3). Winkler (2001) in her review of the paper, however, argues that the decision for a child-parent union to dissolve is very different from the decision of parents to have children, the more typical outcome assessed in the welfare literature and linked with the cost of raising a child.

Welfare policies hypothesized to make welfare more attractive include more generous benefits, more generous earned income disregards, and other financial incentives. Welfare policies hypothesized to make welfare less attractive include time limits (Grogger et al. 2001, Moffitt and Pavetti 1999), stricter work requirements (Acs and Nelson 2002, Grogger et al. 2001), stricter sanctions (Acs and Nelson 2002, Grogger et al. 2001), and family caps.

As part of welfare reform, some policies were designed to directly affect family structure (Grogger et al. 2001, Maynard et al. 1998). Requirements that single mothers under age 18 live with their parents or other responsible adults—minor residency requirements—are designed to make unwed teen childbearing less attractive. Eliminating differences in eligibility for two-parent versus one-parent families aims to diminish disincentives associated with welfare eligibility rules.² States that make it harder for two-parent families to receive welfare benefits are hypothesized to encourage single parenting (Acs and Nelson 2002).

Welfare policies also could have secondary effects on family structure, through the policies' effects on other outcomes, such as work and earnings. The direction of the effect is often unclear. For example, increased work and earnings could lead to greater independence and so decrease the likelihood of marriage (Fitzgerald and Ribar 2001, Grogger et al. 2001), but increased work and earnings could also lead to altered marriage prospects with ambiguous effects on marriage (Fitzgerald and Ribar 2001, Grogger et al. 2001).

The literature on the effect of welfare reform on family structure provides general concepts about the mechanisms through which welfare policies may affect family structure and preliminary hypotheses about the direction of these effects. While there is still room for improvement, the conceptual models in this literature are more developed than those examining the effect of family structure on economic well-being and resource sharing.

Theoretical models for the effect of household structure on economic well-being and resource sharing

A review of the literature analyzing the effect of household structure on economic well-being and resource sharing reveals few conceptual frameworks. Researchers expect that there may be a relationship between living arrangements and economic hardship and resource sharing, but few provide theoretical or conceptual models of why a relationship might exist.

Though few researchers state formal hypotheses, the expectation of many studies appears to be that children in cohabiting-couple families may be worse off than children in married-parent families, but better off than children in single-parent families (e.g., Manning and Lichter

² Different treatment of one-parent and two-parent families include the 100-hour rule and work history requirements. Under the 100-hour rule, a two-parent family is not eligible for welfare benefits if the principal wage earner is working more than 100 hours per month, regardless of income or needs. Under work history requirements, a two-parent family is not eligible for welfare benefits unless the principal wage earner has a work history. Many states have relaxed both of these requirements. (See Acs and Nelson 2002 and Rowe 2000).

1996). These expectations are likely based on descriptive empirical evidence that shows, for example, children in married-couple families on average live in higher income families than children in other types of families. But marriage and cohabitation are highly selective of different socioeconomic groups. “Stable employment, higher earnings, and the completion of school are less highly associated with cohabitation than with marriage” (Manning and Lichter 1996, p. 1000). As a result, empirically based expectations about the relationship between living arrangements and economic well-being and resource sharing may be driven not by the effect of living arrangements, but by the types of people who enter into them.

Lerman (2001) and Rosenbaum, E. (2000) provide a conceptual framework for the effect of living arrangements on economic well-being. Lerman explains that children living with a single, never-married parent often face more serious economic and social disadvantages than children in other single-parent homes. “Many have no legal father, because official paternity was never legally established. Unlike children of divorced parents, who have spent at least some years living with both biological parents, the majority of children of the never-married will never reside with both of their biological parents. Such children are much less likely to receive child support payments than children of divorced parents” (p. 5).

Rosenbaum, E. (2000) uses an economic framework to explain individuals’ decisions regarding household arrangements. “The economic model suggests that low-income households may choose to take in relatives or non-relatives to compensate for, or supplement, the low earnings of the primary earner” (p. 221). The extent to which the new members help the household’s financial circumstances depends on the characteristics of the household members. Based on this model, Rosenbaum expects that related children (children living with relatives who are not their own parents) will be worse off economically than own children (children living with their parents), irrespective of the headship structure, because related children come to live in households that are seeking to supplement their own low earnings.

Turning to the related question regarding living arrangements and resource sharing, Winkler (1997) provides a theoretical framework. Winkler uses a framework where individuals choose the outcome that maximizes their well-being (i.e., utility maximization framework) to test two hypotheses: (1) cohabiting couples do not, in general, income share and (2) there are differences in the extent to which cohabiting couples income share based on their circumstances. Winkler hypothesizes that couples in long-term cohabiting relationships and cohabiting couples who have biological children are more likely to income share than other cohabiting couples. Winkler lays out a bargaining model where household utility is based on each individual’s (cohabitor’s) utility, which is a function of her (or his) utility within the union and her (or his) utility outside the union. Winkler uses this model to look for differing labor supply responses of the female (or male) partner when there is a change in her nonlabor income or her partners’ nonlabor income.

Section III. Methods

The methods used in studies to examine our two research questions fall into two categories—qualitative and quantitative—and the quantitative category is further subdivided into nonexperimental and experimental methods. The effects of welfare reform on living arrangements have been examined using quantitative nonexperimental and quantitative experimental methods, while studies of the effect of living arrangements on economic well-being and resource sharing have used qualitative and quantitative nonexperimental methods (see Table 1). Quantitative experimental methods cannot be used to examine the effect of living arrangements on well-being, because experimental methods are based on a random assignment design, and individuals cannot be randomly assigned to different living arrangements. We discuss these research methods and the type of research questions addressed below.

Table 1: Methods Used By Research Question

Methods	<i>Question 1</i> Welfare Reform’s Effect on Household Structure	<i>Question 2</i> Household Structure’s Effect on	
		Economic Well-Being	Resource Sharing
Qualitative		X	X
Quantitative			
Nonexperimental	X	X	X
Experimental	X		

Qualitative Methods

The qualitative studies on the effect of living arrangements on economic well-being and resource sharing involve interpreting in-depth interviews (Edin 1991, Edin 2000, Edin and Lein 1997, Newman 1998, Newman 1999). These studies generally rely on not one, but a series of interviews with respondents. Edin (1991), for example, conducts three to five interviews with respondents, where each interview lasts between one and three hours. These interviews are “tape recorded, transcribed, coded and analyzed” (Edin 1991, p. 463). Newman (1998 and 1999) not only conducts intensive interviews with respondents and their families, she also obtains additional information from diaries that respondents are asked to keep. Information from these in-depth interviews are summarized, and in some cases particular respondents are quoted.

Newman (1998) highlights some strengths and weaknesses of qualitative studies. In-depth interviews, which attempt to dig deeply into respondents' daily lives, provide context for *why* we see the patterns in the survey data that we observe. Rather than stating a fact about what proportion of individuals exhibit a particular behavior, qualitative studies address the reasons behind that behavior. On the flip side, the intensiveness of these studies "almost always precludes the kind of extensive coverage and attention to representativeness that is the hallmark of survey research" (p. 2). As a result, the generalizability of findings from these studies is limited.

Quantitative Methods

Quantitative Nonexperimental Methods

There are a range of quantitative nonexperimental methods, with the most basic being descriptive. Descriptive analyses allow one to answer questions about whether individuals in one type of living arrangement have lower poverty rates than individuals in another type of living arrangement, for example. Moving from a descriptive to a multivariate analysis allows one to examine the relationship between two outcomes (e.g., marriage and poverty status) while taking other factors into account. Suppose, for example, the descriptive analysis shows that the poverty rate is higher for single mothers than for married mothers. A multivariate analysis allows one to explore whether or not the differences in poverty rates are due to living arrangements or something else, such as mothers' age, race/ethnicity, and/or educational attainment. Beyond the basic multivariate analysis, there are more sophisticated modeling techniques that control for factors that are unobserved, such as mothers' motivation or ability. These more sophisticated multivariate models are estimated when there is a concern that unobserved factors are driving the observed relationship.

The literature on welfare reform and living arrangements (Question 1) has used more sophisticated multivariate models than the literature on living arrangements and economic well-being (Question 2). The welfare reform literature has placed more emphasis on identifying a *causal* relationship. This literature focuses on the question "What is the *effect* of welfare reform on marriage?," not "Is marriage a more likely outcome after welfare reform?" Studies examining living arrangements and material well-being generally do not identify a causal relationship. Below we discuss the quantitative nonexperimental approaches used to examine Question 1, and then turn to Question 2.

Welfare reform and living arrangements: A basic regression model designed to examine the relationship between welfare reform and living arrangements would include a measure(s) of states' welfare policies (e.g., indicator of whether the state has a welfare waiver) and other variables that capture demographic characteristics and state economic conditions. A regression model that does not fully capture differences across states (or across time) may produce biased estimates (i.e., not a causal effect) because the model may incorrectly attribute differences in

unmeasured state (or time) characteristics to differences in state welfare policies. If, for example, public sentiment towards welfare recipients affects both states' welfare policies and individuals' choice of living arrangement, then omitting public sentiment from a model of welfare policy on living arrangements would produce biased estimates.

In this literature, the method most commonly used to control for unobservable *state* and *time* characteristics is a *fixed effects* model (Acs and Nelson 2002, Bitler et al. 2001, Fitzgerald and Ribar 2001, Rosenbaum, D. 2000, Schoeni and Blank 2000).³ These models incorporate *state fixed effects*, which control for unobservable differences across states that do not vary over time, and *time fixed effects*, which control for unobserved differences over time that do not vary by state.⁴ The estimated effect of welfare reform on living arrangements is measured by cross-state comparisons of changes in living arrangements that occurred within states over time as states implemented welfare reform policies. Variation in welfare reform policies across states and over time is necessary to identify the welfare reform policy effects. Fitzgerald and Ribar's (2001) fixed effects model is richer than the others as it includes detailed county-level measures of wage and employment opportunities—the other studies do not have this type of detailed economic data and generally include only unemployment rates.

A second approach used by researchers builds on the first approach by adding a comparison between a group of individuals likely affected by welfare policies and a group of individuals likely *not* affected by welfare policies.⁵ Schoeni and Blank (2000) estimate the effect of Temporary Assistance for Needy Families (TANF) on marriage by comparing marriage outcomes before and after TANF for (1) women with less than a high school degree (women likely affected by welfare policies) and (2) women with more than a high school degree (women likely unaffected by welfare policies, according to the authors, but who may be affected by the economy and other policies).⁶ Acs and Nelson (2002) estimate a similar model where they estimate the effect of specific TANF policies on marriage by comparing (1) individuals in families with incomes below 200 percent of the poverty line (individuals likely affected by

³ Rosenbaum, D. (2000) uses a more structural approach and incorporates region, not state, fixed effects. Moffitt (1999) uses a similar approach to estimate the effect of welfare reform waivers on welfare caseloads and women's labor force outcomes.

⁴ These models are sometimes referred to as difference-in-difference models (Grogger et al. 2001) and typically include a state-specific time trend that allows the model to capture a trend that is occurring over time within a state.

⁵ This approach is particularly helpful in identifying the effect of *TANF* (Temporary Assistance to Needy Families) on living arrangements. Using the fixed effects method (described above) to estimate the effect of TANF on living arrangements is difficult because there is limited variation across states and over time in when TANF was implemented. TANF was implemented over a relatively short period (17 months). Identifying the effect of state welfare *wavers* on living arrangements using this fixed effects method is not problematic because welfare waivers were implemented over a considerably longer period of time—roughly four years (Schoeni and Blank 2000).

⁶ Schoeni and Blank's (2000) model is similar to the fixed effects model discussed above, but excludes all policy variables and the state-specific time trend. The model uses 1995 and 1998 year dummy variables (1995 captures the pre-TANF period and 1998 captures the post-TANF period) to measure the effect of TANF on outcomes. It measures the effect of TANF relative to waivers in place in 1995; it does not measure TANF relative to AFDC in the pre-waiver period.

welfare policies) to (2) individuals in families with incomes between 200 and 400 percent of the poverty line (individuals likely unaffected by welfare policies).⁷

Living arrangements, material well-being, and resource sharing: A similar issue with causality arises when estimating the effect of living arrangements on economic well-being. The concern is that unmarried mothers may be systematically different from married mothers in a (unobserved) way that makes them likely to continue facing economic hardship even if they marry. To identify a causal relationship, the regression model should control for all relevant characteristics of individuals, whether these characteristics are observed (e.g., educational attainment) or unobserved (e.g., motivation and ability).

Most studies in this literature do not attempt to estimate a causal relationship. One exception is Lerman (2002a) who uses an individual-level fixed effects model.⁸ This model controls for observed and unobserved characteristics that are fixed over time. If individuals' unobserved characteristics are fixed over time, this model provides an unbiased estimate of the effect of living arrangements on economic well-being. One difficulty in implementing this approach is that it requires multiple years of data on the same individual, a feature that many of the data sets used to examine this question do not have. A related literature on living arrangements and welfare receipt tries to estimate the causal effect of living arrangements on welfare benefit receipt using an approach that does not require multiple years of data on the same individual (Acs and Ratcliffe 2001, London 2000). These studies use an approach (instrumental variables) that accounts for systematic differences in the types of people who enter into different living arrangements by identifying factors that affect single mothers' living arrangement decisions but do not affect their welfare choices.⁹

Studies that use a multivariate framework to examine living arrangements and material well-being include a host of mother and family characteristics such as age, race/ethnicity, educational attainment, number of children, and age of children (Acs and Gallagher 2000, Folk 1996, Hao 1996, Lerman 2001, Lerman 2002b, Lichter et al. 2001, Manning and Lichter 1996, Rosenbaum, E. 2000). While these studies do not identify a causal relationship, they provide information on the relationship between living arrangements and well-being once these observed characteristics are taken into account.¹⁰ Some analyses limit the study populations to individuals who are similar, such as mothers with less than a high school education. The idea behind these studies is that there are fewer unobserved differences between individuals with similar

⁷ Schoeni and Blank (2000) refer to this as a difference-in-difference estimator, whereas Acs and Nelson (2002) referred to it as a difference-in-difference-in-difference estimator.

⁸ This individual-level fixed effects model is similar to the state and time fixed effects model discussed above. The individual-level fixed effects model controls for differences across individuals, while the state and time fixed effects model controls for differences across states and over time.

⁹ See Greene (2000) for a thorough discussion of instrumental variables (pp. 284-286).

¹⁰ These estimated relationships are sometimes referred to as “conditional relationships” or “conditional correlations.”

characteristics. Lerman (2002b), for example, estimates separate models for women with less than a high school education and women who live below 150 percent of the poverty line.

A concern with quantitative nonexperimental methods is whether the model provides an estimate of the causal relationship. As discussed above, researchers have used fixed effects models that capture unobserved differences across states and over time in order to identify the effect of welfare reform on living arrangements. But, if there are unobserved characteristics that the model does not capture, then the model will not provide a causal estimate of the effect of welfare reform on living arrangements. For example, models that do not fully control for policies and political differences across states may not provide a causal estimate. Suppose states that implemented welfare reform policies directed at increasing marriage rates also implemented other non-welfare marriage promotion policies directed at increasing marriage rates. Omitting these non-welfare marriage promotion policies from the model would produce a biased estimate at the effect of welfare reform policies on marriage rates. This issue is of less concern with quantitative experimental methods, which we turn to now.

Quantitative Experimental Methods

Studies that use experimental data to study the effect of welfare reform on living arrangements are based on random assignment. Random assignment involves having a study population where each individual is randomly placed into one of two groups. Individuals are either placed into the “treatment group” where they are subject to the new welfare policies or placed into the “control group” where they are *not* exposed to the new welfare policies and operate under the baseline welfare program. If random assignment is properly implemented, the only difference between individuals in the treatment and control groups is the different welfare policies they face. With this study design, an estimate of the impact of welfare reform can be obtained by comparing outcomes (e.g., marriage rates) across the treatment and control groups.

This experimental research design has two primary advantages over the nonexperimental methods. First, if properly implemented, an experimental design has a high degree of credibility because randomization assures that the only difference between the treatment and control groups is the different policies they face. Second, an experimental design provides estimates of the impact of welfare reform without relying on complicated econometric techniques often used in the nonexperimental studies (National Research Council 2001).

There are, however, drawbacks to an experimental design. First, there could be “contamination” of the study groups. For example, if individuals in the control group (those subject to the baseline program) think that they are subject to the new policies and act accordingly, then a comparison of treatment and control group outcomes will provide an estimate (of the effect of welfare reform on living arrangements) that is biased toward zero (Grogger et al. 2001). A second drawback is that random assignment evaluations are almost always limited to a population of individuals who are welfare applicants and recipients. Women who are deterred

from applying for welfare benefits are omitted from these analyses, so the random assignment evaluations do not capture the effect of welfare reform on the total population, but rather, the effect of welfare reform on welfare applicants and recipients.¹¹ The nonexperimental studies examine a broader population than welfare recipients, and thus, do not suffer from this limitation. A third drawback of random assignment studies is that they are typically carried out in a particular state or within particular counties within a state, so the findings are often not generalizable to the broader U.S. population. Again, the nonexperimental studies typically look across the United States and do not suffer from this limitation.

The experimental studies reviewed generally use a multivariate regression framework to estimate the impact of welfare reform on living arrangements. In addition to including an indicator variable that identifies whether an individual is in the treatment or control group, these models include individual-level characteristics, such as age, race, educational attainment, and duration of welfare receipt. The benefit of using a regression framework over a simple comparison of average outcomes across the treatment and control groups, is that the regression model—by accounting for some portion of the variation in outcomes that is not due to the welfare program—provides more precise estimates of the program’s impact. The more precise estimate allows smaller program impacts to be detected.

¹¹ Grogger et al. (2001) note that limiting the study population to welfare recipients is important to consider “because recent evidence suggests that more than half the decline in the welfare caseload results from changes in entry rates rather than changes in exit rates (Haider, Klerman, and Roth, 2001)” (p. 25).

Section IV. Data

Studies examining how welfare reform affects living arrangements and how living arrangements affect economic well-being and resource sharing, our two research questions, have used both qualitative and quantitative (nonexperimental and experimental) data. The qualitative data are based on in-depth interviews with a relatively small number of respondents. The quantitative nonexperimental data used in these studies come from large-scale surveys and the quantitative experimental data come from state administrative data systems and surveys of welfare clients. We discuss these data below.

Qualitative Data

Five reviewed studies use qualitative data to examine the effects of living arrangements on economic well-being and resource sharing (Edin 2000, Edin 1991, Edin and Lein 1997, Newman 1999, Newman 1998). These studies consist of in-depth interviews with women who were often low-income single mothers. Edin's (2001) study is based on roughly 130 low-income women in the Philadelphia metropolitan area, and an earlier study by Edin (1991) is based on 50 welfare recipients in the Chicago metropolitan area (Cook County). In Edin (1991) welfare recipients were interviewed three to five times and each interview lasted between one and three hours. Edin and Lein's (1997) study is based on a larger sample of 378 low-income single mothers (214 welfare-reliant mothers and 164 wage-reliant mothers) from four U.S. cities—Boston, Charleston (SC), Chicago, and San Antonio. Interviews with these low-income single mothers occurred between 1988 and 1992. Newman's (1998 and 1999) qualitative data are obtained in conjunction with a larger survey. Three hundred individuals from New York were interviewed, 100 of these individuals provided their complete life history, and 12 were followed for almost a year (Newman 1999).

The strength of these data lie in their level of detail. By following individuals over time and conducting in-depth interviews, researchers can begin to understand what motivates individuals to make the decisions they make (Newman 1998). An analysis by Edin and Lein (1997) suggests that in-depth interviews with respondents generate more accurate data. They find that single mothers often report living alone unless their partners' name is on the lease, and interviewers only obtained the right answer after pressing respondents. With these strengths comes significant weakness. Unlike survey research, the small samples on which qualitative analyses are typically based produce findings that cannot be generalized across the nation (Newman 1998).

Quantitative Data

Quantitative Nonexperimental Data

Eight large-scale survey data sets have been used to evaluate the two research questions. Seven of the surveys are nationally based, while one focuses exclusively on individuals living in New York City. The eight surveys are:

- March Current Population Surveys (CPS),
- Decennial Census Public Use Microdata Samples (PUMS),
- Survey of Income and Program Participation (SIPP),
- National Longitudinal Survey of Youth (NLSY),
- National Survey of America’s Families (NSAF),
- National Survey of Families and Households (NSFH),
- National Survey of Family Growth (NSFG), and
- New York City Housing and Vacancy Survey (HVS).

Analyses of the effect of welfare reform on household structure have used data from the CPS, SIPP, and NSAF, while analyses of the effect of household structure on economic well-being and resource sharing have used all these data sets (see Table 2). Below we provide a brief description of these data, along with some of their strengths and weaknesses.

Table 2: Quantitative Nonexperimental Data By Research Question

Data Source	<i>Question 1</i> Welfare Reform’s Effect on Household Structure	<i>Question 2</i> Household Structure’s Effect on	
		Economic Well-Being	Resource Sharing
CPS	X		X
PUMS		X	
SIPP	X		X
NLSY		X	
NSAF	X	X	X
NSFH		X	X
NSFG		X	
HVS		X	

CPS: March CPS files were used by Bitler et al. (2001), Elwood (1999), Rosenbaum, D. (2000), and Schoeni and Blank (2000) to examine Question 1 and by Winkler (1993 and 1997) to examine Question 2. The March CPS is a cross-sectional data set with a sample of roughly 60,000 households. This large sample allows for extensive subgroup analyses. The core CPS files provide a host of demographic information, while the March supplement provides income

data for the prior calendar year. Because income data are collected for the prior calendar year, the timing of the household structure and income data do not coincide. A second drawback of CPS data is that prior to 1994 it was not possible to distinguish between cohabitators and opposite sex roommates. This resulted in some opposite sex roommates being wrongly classified as cohabitators (Winkler 1997).

PUMS: The 1990 PUMS data were used by Manning and Lichter (1996) to examine Question 2. Fitzgerald and Ribar (2001) also use the 1990 PUMS as part of their analysis for Question 1, but only for control variables measuring county-level skill-specific measures of wages and employment opportunities. The PUMS is a subsample of the 1990 decennial census. A strength of the PUMS is its very large sample, which allows examination of even relatively small sub-groups, such as Mexican-Americans and Puerto Ricans. In addition, the 1990 PUMS identifies cohabitators, unlike the pre-1994 CPS. It includes unmarried partner as an additional choice for relationship status (Manning and Lichter 1996). However, the PUMS only provides information about the relationship of the household head to other individuals in the household; it is not possible to determine whether a cohabiting partner is the biological parent of a child in the household (Manning and Lichter 1996).

SIPP: The SIPP also has been used to examine both research questions. Fitzgerald and Ribar (2001) and Rosenbaum, D. (2000) used it to address Question 1, while Bauman (1999) and Lerman (2002b) used it to address Question 2. The SIPP is a nationally representative longitudinal dataset that has panels that run from two to four years. The SIPP has a relatively large sample, with 14,000 to 37,000 households in each panel. An advantage of the SIPP is that it tracks the same families over time and asks questions every four months, rather than annually (as do the other longitudinal data sets reviewed). In addition, a SIPP topical module provides information on households' material hardship.

NLSY: The NLSY was used by Kaestner et al. (2002) to study Question 1, and by Lerman (2002a) to study Question 2. The NLSY is a longitudinal data set that began in 1979, and includes a sample of individuals who were between ages 14 and 21 in 1978. By providing multiple observations on the same person over time, the NLSY can be used to estimate an individual-level fixed effects model (Lerman 2002a). However, using the NLSY to examine the well-being of cohabiting-couple families is potentially problematic because cohabiting partners' incomes, key indicators of well-being, are missing in the majority of cases (55 percent on average across the annual interviews).¹²

NSAF: The NSAF was used by Acs and Nelson (2002) to answer Question 1, and by Acs and Gallagher (2000) and Lerman (2001) to examine Question 2. The 1997 and 1999 NSAF are cross-sectional data sets with roughly 44,000 households. Three strengths of the NSAF are that

¹² Morrison and Ritualo, 2000 (p. 565).

it (1) includes large samples from 13 individual states, unlike most other nationally representative data sets, (2) over-samples low-income families, the families most likely affected by welfare reform, and (3) provides detailed data on household structure and children's living arrangements (Acs and Nelson 2002). However, the NSAF has only a short, two-year period over which to measure changes in welfare reform's impact on living arrangements.

NSFH: The NSFH was used to examine living arrangements, economic well-being, and resource sharing (Folk 1996, Hao 1996, and Winkler 1997). The NSFH consists of 13,017 respondents—9,643 nationally representative households and 3,374 minority over-sample. The minority over-sample includes three types of households: single parent, cohabitating, and recently married households (Folk 1996). The NSFH also includes detailed information on the components of wealth. A weakness of the NSFH, however, is that it does not provide household income for single mothers who reside with their parents and excludes single parents younger than age 19.

NSFG: The NSFG was used by Lichter et al. (2001) to look at Question 2. The NSFG is a national survey based on 10,847 women 15-44 years of age in the civilian, noninstitutionalized population. The NSFG provides information on income and marriage/cohabiting status.

HVS: Rosenbaum, E. (2000) uses the HVS to explore the relationship between living arrangements and economic well-being. The HVS was conducted by the U.S. Census Bureau under a contract to New York City and includes a broad range of census-based socio-demographic information. HVS has a sample of approximately 18,000 housing units located in the five boroughs of New York City, and their unit of analysis is the children in these households. Three advantages to this data set are: its sample is racially and ethnically diverse; it provides information on immigrant status; and it includes detailed information that allows complex household structures to be identified. Because it focuses on only one city, the findings are not generalizable to the U.S. population (Rosenbaum, E. 2000).

Quantitative Experimental Data

Studies examining the effects of welfare reform on household structure using experimental data were conducted in 12 different U.S. states—Arizona, California, Connecticut, Delaware, Florida, Georgia, Michigan, Minnesota, North Dakota, Ohio, Oklahoma, and Oregon—and in Canada.¹³ These data come from state administrative records, as well as welfare client survey data. The state administrative data identify whether a client was assigned to the treatment or control group.¹⁴

¹³ The studies are: Bloom et al. 1998; Bloom et al. 2000; Fein 1999; Freedman et al. 2000; Grogger et al. 2001; Hamilton et al. 2001; Harknett and Gennettian 2001; Knox et al. 2000; London et al. 2000; and Mills et al. 1996.

¹⁴ See Section III for discussion of treatment and control groups.

The administrative data provide large samples of welfare clients, but these data do not contain information about the welfare recipients' living arrangements. As a result, studies examining the relationship between welfare reform and household structure rely, in part, on welfare client survey data. These follow-up surveys often have a considerably smaller sample size than their corresponding administrative databases. In addition, administrative data only have information on individuals who have applied for welfare, thus missing individuals who do not seek government help.

Section V. Results and Major Findings

Q1: Effect of welfare reform on household structure

To a great extent, welfare reform was motivated by trends in household structure (Grogger et al. 2001). Policymakers and researchers alike were concerned that welfare, by providing income to single mothers with children, discouraged marriage and encouraged non-marital childbearing. Indeed, prior to welfare reform, the fraction of births to unmarried mothers was increasing steadily, driven largely by increases in the fraction of young women who were unmarried (Grogger et al. 2001). Since welfare reform there appears to be a shift in household structure and fertility trends (Acs and Nelson 2002, Dupree and Primus 2001, Grogger et al. 2001). Is welfare reform responsible for this shift in trends?

A place to start is to ask, did welfare affect family formation and marriage prior to welfare reform? A substantial body of literature addresses this question. Ellwood (1999) summarizes the lack of consensus on the answer well: “it has proven remarkably difficult for social scientists to reach a definitive consensus about the influence of social policies on marriage and family formation” (p. 31). While some conclude “[welfare] promoted the growth in single parent households from the 1970s through the early 1990s” (Fein 1999, p. 1), others find “virtually no support for the welfare disincentives argument” (Edin 2000, p. 31).¹⁵ Moffitt (1998) summarizes the literature on the effect of welfare on marriage and concludes that the welfare system probably has an effect on family formation and marriage, but disparities across research findings weaken the strength of the conclusion and create considerable uncertainty about the magnitude of the effect.

Though welfare reform, including waivers and TANF, was driven by trends in household structure and fertility, these outcomes are less well studied than other outcomes (Grogger et al. 2001). The TANF Third Annual Report to Congress reports that the issue of whether and to what degree welfare programs and policies have affected the formation and maintenance of two-parent families has been a longstanding issue that has been marked by a lack of rigorous information (United States Department of Health and Human Services 2000, p. 88). Below we review the findings of nine nonexperimental studies and 19 experimental studies that examine the effect of welfare reform on household structure.

¹⁵ Edin (2000) finds very few mothers say that they have avoided marriage or remarriage to maintain eligibility for welfare, even when asked directly.

Nonexperimental Studies

Overall, most of the nonexperimental studies find mixed effects of welfare reform on household structure as measured by marriage, cohabitation, female headship, and other related outcomes (Appendix A, Table A1). The mixed effects include intuitive effects for some measures of welfare reform, counterintuitive effects for other measures, and no effect at all for many measures. We discuss the effects of welfare reform on marriage, cohabitation, female headship, and other outcomes in turn.

Effect of welfare reform on marriage: Marriage is the most studied household structure outcome. Of the seven nonexperimental studies that have examined the effect of welfare reform on marriage, only one study (Ellwood 1999) finds no relationship between marriage and welfare reform. The other six studies find mixed results—some policies increase marriage, others decrease marriage, and yet others have no effect.

Using the 1997 and 1999 NSAF to separately look at the relationship between different welfare policies and marriage, Acs and Nelson (2002) find that low-income families in states with family cap policies are more likely to be married than low-income families in states without family cap policies (Acs and Nelson 2002).¹⁶ They find no relationship between full family sanctions or two-parent rules and the probability of being a married-couple family.¹⁷ Acs and Nelson recommend that their findings be interpreted with caution because the policy variables are measured as simple 0/1 measures, each policy is examined separately without allowing for interactions, and the two-year time frame allows only a short time for welfare reform, as measured by these policies, to affect living arrangements. Few studies move beyond simple 0/1 measures of welfare policies, as we will see below.

Using the 1989-2000 March CPS, Bitler et al. (2001) define welfare reform states (in each year) as states that (1) had a major AFDC waiver implemented, (2) had TANF implemented and implemented an AFDC waiver in the past, or (3) had TANF implemented and never implemented an AFDC waiver in the past. Welfare reform states are then compared with non-welfare reform states—states that had neither an AFDC waiver nor TANF implemented. Using these definitions, they find no effect of welfare reform on whether black central city children live with married parents and mixed effects of welfare reform on whether Hispanic children live with married parents. Any major waiver and TANF in states that ever had a waiver increase the probability that Hispanic children live with married parents, while TANF in states that never had a waiver has no statistically significant effect. Bitler et al. also measure welfare reform using

¹⁶ States with family cap policies do not increase TANF benefits if a family has another child while receiving welfare.

¹⁷ Full family sanctions eliminate the entire TANF benefit for noncompliance with work requirements. Acs and Nelson (2002) count a state as having two-parent rules if the state either places limits on the number of hours a parent in a two-parent family can work regardless of income or requires the primary earner to have a work history to qualify for benefits.

measures of specific welfare reform policies but find the results “muddled, leaving little basis to attribute effects to particular policies” (p. 36).

Using the 1980-1998 March CPS, Ellwood (1999) finds that the EITC and welfare reforms have had no discernable effect on marriage or cohabitation. He finds no relevant difference in the probability of marriage or cohabitation between states with more and less aggressive welfare reforms (p. 35).

Also using the March CPS files, this time from 1977-1999, Schoeni and Blank (2000) find mixed effects of welfare reform on marriage in their preferred models. Measuring welfare reform as the existence of a major welfare waiver, Schoeni and Blank find that welfare reform increased marriage for women with less than a high school education, but decreased marriage for women with a high school education. The authors find no effect of TANF on marriage. Based on their findings, Schoeni and Blank conclude that the waivers of the early 1990s appeared to increase marriage (p. 25).

Using the 1984-1996 SIPP panels and the 1985-1999 March CPS, Rosenbaum, D. (2000) finds no significant effect of any time limit waiver or statewide waiver application on marriage, and a negative effect of work requirement waivers on marriage.¹⁸ Based on these findings, Rosenbaum concludes that AFDC waivers have little effect on marriage. In their syntheses of the literature on the effect of welfare reform on marriage, Grogger et al. (2001) and Peters et al. (2001) find mixed or weak evidence that welfare reform has affected marriage.

Effect of welfare reform on cohabitation: Only two of the nonexperimental studies reviewed examine the effect of welfare reform on cohabitation. Acs and Nelson (2002) examine the probability that low-income families cohabit, using the NSAF. They find no effect of full family sanctions or family caps, and a somewhat surprising effect of two-parent rules: two-parent rules are associated with an increased probability that low-income families cohabit. This result is surprising because the rules also apply to biological cohabiting parents (Acs and Nelson). Since, the two-parent rules make it more difficult for cohabiting couples to receive welfare, they are expected to reduce, not increase, the likelihood that families cohabit. As mentioned, Ellwood (1999) finds no discernable effect of welfare reforms on cohabitation.

Effect of welfare reform on female headship: The goals of welfare reform explicitly include reducing the incidence of out-of-wedlock pregnancies and encouraging the formation and maintenance of two-parent families (Maynard et al. 1998). Three of the studies reviewed examine the effect of welfare reform on female headship, typically measured as a woman who is unmarried and has a child(ren). Using the 1990, 1992, and 1993 SIPP panels, Fitzgerald and Ribar (2001) examine the effect of various types of welfare waivers on the level of female

¹⁸ Rosenbaum, D. (2000) measures work requirement waivers with an indicator variable that equals one for states terminating AFDC cases under an AFDC waiver, zero otherwise.

headship, entry into female headship, and exits from female headship. They find little evidence that waivers reduce the number of single-parent families. They do, however, find weak evidence that work-encouraging waivers may reduce female headship. Using the 1977-1999 March CPS, Schoeni and Blank (2000) find that both waivers and TANF decrease female headship among women with less than a high school degree and that TANF, but not waivers, decreased female headship among women with a high school degree. They conclude that welfare reform reduced female headship (p. 25).

Peters et al. (2001) synthesize the empirical evidence on how changes in welfare policies are likely to affect female headship and find mixed results. They find policy effects on female headship for declines in real cash benefits and earnings disregard policies (both reduce female headship); mixed policy effects for work requirements and sanctions; and no policy effects for family caps, time limits, expanded eligibility for two-parent families, and minor-parent provisions. However, they warn that many of these conclusions must be viewed cautiously because they are based on only one or two empirical studies.

Effect of welfare reform on other living arrangements: The papers reviewed also examined other forms of living arrangements. Here and in Appendix A, Table A1, we summarize selected results. Acs and Nelson (2002) examine the relationship between welfare reform and the probability that a single parent lives independently. They find a weak relationship with full family sanctions, a negative relationship with family caps, and no relationship with two-parent rules.

Bitler et al. (2001) examine a number of other living arrangements, including whether a child lives with an unmarried parent or a grandparent and parent. Welfare reform as measured by any major waiver decreases the probability that Hispanic children live either with an unmarried parent or a grandparent and parent (relative to all other living arrangements), but has no effect on black central city children. They also find that welfare reform as measured by TANF had an effect on black central city children if the state never had a waiver and on Hispanic children if the state ever had a waiver.

Using the 1979 and 1997 NLSY cohorts to evaluate the effect of welfare reform on teenage girls, Kaestner et al. (2002) conclude in their executive summary that since welfare reform “teenagers who have a non-marital birth are less likely to receive welfare, and those who are not on welfare are more likely to live with a parent.”

Overall effect of welfare reform on household structure: What do researchers conclude about the nonexperimental evidence on welfare reforms’ effect on household structure? Based on the multiple living arrangements outcomes they examine, Acs and Nelson (2002) conclude that family caps are correlated with living arrangements, but it is unlikely that family caps are directly responsible for any changes. Family caps, more likely, serve as a marker for a common

set of policies and practices that together reduce single parenting and promote dual parenting (p. 34). Acs and Nelson further conclude that sanctions, two-parent welfare eligibility rules, and stepparent income have no clear consistent correlation with living arrangements.

Based on the eight different outcomes and multiple child and women sample populations they examine, in their abstract Bitler et al. (2001) conclude that “welfare reform has had large effects on some important measures of living arrangements, including household size, parental co-residence among children, and marital status among women.” They warn that these changes in living arrangements would not be uncovered if more standard approaches that do not look at children, across racial groups, or at TANF effects in waiver and nonwaiver states are used.

Earlier syntheses of the literature on the effect of welfare reform on marriage (Grogger et al. 2001) and family structure (Peters et al. 2001) conclude that there is little empirical evidence from which to draw conclusions about the effect of welfare reform on living arrangements.¹⁹ In the end, Grogger et al. conclude that “the very limited econometric evidence suggests that welfare reform as a whole, at least during the waiver period, may increase marriage” (p. 220) and Peters et al. conclude that “the evidence about differential incentives for cohabitation, other shared living arrangements, and marriage has not been well sorted out” (p. 29).

The nonexperimental evidence reviewed here suggests that welfare reform as measured in the reviewed papers has not been a major force in affecting family structure and that no clear picture of the ways in which welfare reform affects family structure has yet emerged. There is, however, some evidence that welfare reform may be decreasing single parenting, especially in subpopulations such as black central city and Hispanic children, and women without a high school education.

Experimental Studies

Overall, most of the experimental studies find no effect of welfare reform on household structure (Appendix A, Table A2). Household structure outcomes reviewed in the experimental literature include marriage, separation or divorce, cohabitation, lives alone, and lives with other adults and children. We examine each outcome in turn.

Effect of welfare reform on marriage: Of the 20 experimental programs or program components that evaluate the effect of welfare reform on marriage, only two find a significant positive effect. The Delaware A Better Chance (ABC) experiment, which combines time limits with financial incentives and/or mandatory work-related activity, finds a modest positive impact on marital cohabitation among women who were under age 25 and those with less than 12 years of education (Fein 1999). Women in these two treatment subgroups were approximately four

¹⁹ Not all the more recent studies reviewed in this synthesis are included in the earlier syntheses.

percentage points more likely to live with a spouse than women in the corresponding control groups.

The Minnesota Family Investment Program (MFIP) finds that financial work incentive policies increase marriage and marital stability for recipients (though not necessarily applicants). At the three-year follow-up point, 10.6 percent of MFIP recipients who were not married at random assignment (single-parent families) were married, compared with 7.0 percent of AFDC recipients. Of recipients who were married at random assignment (two-parent families), MFIP recipients were 38 percent more likely than AFDC recipients to be married at the three-year follow-up interview (Knox et al. 2000).

Of the seven National Evaluation of Welfare-to-Work Strategies (NEWWS) program components that evaluate the effect of welfare policies on separation or divorce, only one, Grand Rapids-Labor Force Attachment (LFA), finds that the welfare policies reduce marital disruptions. Program group members in the Grand Rapids LFA program were 4.1 percentage points (or 12 percent) less likely to report being separated, divorced, or widowed than control group members (Hamilton et al. 2001).

Based on their synthesis of the experimental literature's effect of welfare reform on marriage, Grogger et al. (2001) conclude that there is no effect of work-related activities on marriage, and some evidence from MFIP that programs that provide more generous financial incentives may increase marriage or keep existing marriages intact (Grogger et al. 2001, p. 220). They add, however, that the mixed results from the Canadian Self-Sufficiency Project (SSP) suggest caution in interpreting the MFIP results. Canada's SSP program, which also increased financial incentives, finds mixed impacts on marriage (Grogger et al. 2001). Based on their summary of the NEWWS experiments, Hamilton et al. (2001) report "over the five years, the programs had no effect on marriage rates" (p. 15).

Effect of welfare reform on cohabitation: Of the eight experimental programs or program components that evaluate the effect of welfare reform on cohabitation, two find significant effects. Two of the experiments with employment-focused approaches, Riverside-Labor Force Attachment and Portland, find positive effects on cohabiting (Hamilton et al. 2001).

Effect of welfare reform on other household structure outcomes: Many of the NEWWS experiments also measure the effect of welfare reform on living alone or living with other adults and/or children. These studies find significant, though opposing, effects on two of the experiment groups. There are statistically significant decreases in the number of Atlanta Labor Force Attachment and Human Capital Development respondents who live alone, and a statistically significant increase in the number of Riverside Human Capital Development respondents who live alone (Hamilton et al. 2001).

Overall effect of welfare reform on household structure: What do researchers conclude about the limited experimental evidence on the effect of welfare reform on household structure? In reviewing the NEWWS studies, Hamilton et al. (2001) conclude “there were few program impacts on household composition, except for impacts on living alone” (Chapter 9, p. 13-14). As mentioned above, Grogger et al. (2001) conclude that there is no effect of work-related activities on marriage, and some evidence from MFIP that programs that provide more generous financial incentives may increase marriage or keep existing marriages intact (Grogger et al. 2001, p.220). Grogger et al. also point out that experimental evaluations may not be well-suited to measuring changes in marital status because the short follow-up periods and small survey samples of many experiments make it less likely that they will detect significant changes in rare events such as marriage. Experiments are also not designed to capture effects on women who never apply for or receive welfare. The experimental evidence reviewed suggests that welfare policies measured to date have had little or no effect on household structure and living arrangements.

Combined, the nonexperimental and experimental research evaluating the effect of welfare reform on household structure and living arrangements provide some suggestive evidence, but no strong compelling evidence that welfare reform is responsible for the apparent shift in household structure trends after welfare reform. The mixed results and lack of significant effects in this literature are especially striking when compared with the consistently significant effects of welfare reform found in the caseload and employment and earnings literatures (Grogger et al. 2001).

That welfare reform has had few statistically significant effects on household structure is not necessarily surprising for three reasons. First, prior to welfare reform, many studies of the relationships between welfare policies (i.e., state benefit levels) and living arrangements produced weak and mixed results. Second, if welfare reform is to have an effect on household structure, the effect may come more slowly than for other outcomes. Changes in household structure are rare events and may result in response to changes in other outcomes affected by welfare reform, such as employment. Third, studies that measure welfare reform as the overall effect of waivers or TANF may find no significant effect because changes in different welfare policies are often hypothesized to have opposite effects on household structure, thereby potentially offsetting one another to create no effect.

Q2: Effect of household structure on economic well-being and resource sharing

Policy interest in the effect of welfare reform on household structure is driven in part by household structure’s potential link to economic well-being. This section discusses the literature on household structure, economic well-being, and resource sharing. We first describe findings from the literature on the effect of household structure on economic well-being, and then turn to the literature on household structure and resource sharing. Within each question we first

describe findings from the qualitative studies and then from the quantitative nonexperimental studies.

Q2a. Household Structure and Economic Well-Being

Qualitative Findings: The studies reviewed that use in-depth interviews to examine living arrangements and well-being generally focus on low-income single mothers and welfare recipients (see Appendix A, Table A3). These studies show the difficult economic circumstances that many single mothers face. For example, Edin and Lein's (1997) analysis of roughly 375 single mothers shows that welfare recipients' welfare income and low-wage working mothers' earnings from a main job were generally not sufficient to cover their expenses.²⁰

The qualitative studies also discuss single mothers' living arrangement decisions and how those decisions may relate to their economic well-being. Edin and Lein (1997) suggest that single mothers use different approaches to meet their needs. They find that 47 (22 percent) of the 214 welfare recipients interviewed reported living with friends or relatives ("doubling up") for financial reasons (p. 40, p. 54). While doubling up may help single mothers in the short run, Edin and Lein find that these living arrangements tend to be unstable (p. 54). Single mothers in these types of living arrangements were also found to have financial difficulties. For example, Edin's (1991) analysis of 50 welfare recipients in the Chicago metropolitan area suggests that single mothers who double up still have difficulty making ends meet.

Edin and Lein's (1997) study suggests that marriage is not foremost in welfare recipients' plans to leave welfare. When asked about leaving welfare, 86 percent of the 214 welfare recipients reported that they plan to leave welfare through work, while only two percent reported that they plan to leave welfare through marriage. Although a small minority of single mothers responded that marriage was a way to exit welfare, Edin's (2000) study of more than 130 mothers in the Philadelphia metropolitan area finds that many single mothers aspire to marry (p. 28).²¹ Many women reported, however, that marriage "entails far more risks than rewards—at least marriage to the kind of men who fathered their children and live in their neighborhoods. Mothers say these risks may be diminished if they can find the "right" man—and they defined "rightness" in both economic and non-economic terms" (p. 28). These responses suggest that the unmarried status of these mothers is tied up in the availability of male partners. The literature on whether there are marriageable men who will increase the economic well-being of single mothers is mixed. Some studies suggest women, particularly minority women living in inner cities, face a shortage of marriageable men (Wilson 1987, as cited in Lichter et al. 2001, p. 4). However, a recent study by Thomas and Sawhill (2002) suggests that there is a pool of

²⁰ Edin and Lein's (1997) study is based on 378 low-income single mothers (214 welfare-reliant mothers and 164 wage-reliant mothers) from four U.S. cities—Boston, Charleston (SC), Chicago, and San Antonio. Interviews with the single mothers occurred between 1988 and 1992.

²¹ These interviews were conducted in the mid-1990s.

marriageable men who could increase the economic well-being of some single mothers and their children.

These qualitative studies provide information about how single mothers view or use different living arrangements; however they do not provide estimates of the effect of living arrangements on economic well-being. We look to the quantitative analyses to provide insight into this question.

Quantitative Findings: Numerous studies use large-scale national data sets to examine living arrangements and economic well-being, where economic well-being has been measured in terms of (1) income (e.g., log income, income per adult equivalent,²² poverty status, income-to-needs ratio, and variance of income-to-needs), (2) material hardship, and (3) wealth. In addition to presenting descriptive statistics, most studies examine living arrangements and economic well-being in a multivariate framework and control for a host of observed characteristics such as age, race/ethnicity, educational attainment, number of children, and age of children. But only one study (Lerman 2002a) attempts to identify a causal effect of living arrangements on economic well-being. Lerman uses an individual-level fixed effects model to control for individuals' unobserved characteristics (e.g., motivation and ability), which will provide an estimate of a causal effect if individuals' unobserved characteristics are fixed over time. Below we discuss the results of the various studies (see Appendix A, Table A4).

Descriptive analyses show that the economic status of mothers and their children differs substantially across living arrangements (Acs and Gallagher 2000, Acs and Ratcliffe 2001, Folk 1996, Hao 1996, Hogan and Lichter 1995, Lerman 2001, Lerman 2002b, Lerman 2002a, Manning and Lichter 1996, McLanahan and Sandefur 1994, Rosenbaum, E. 2000, Winkler 1993). Living in a married-couple family is associated with higher economic status, as compared with other living arrangements (Lerman 2001, Lerman 2002b, Lerman 2002a, Manning and Lichter 1996, Winkler 1993). Analyses that focus on single mothers have found that single mothers who live with a parent or cohabit have higher economic statuses than those single mothers who double up with a nonparent or partner or live independently (Acs and Ratcliffe 2001, Folk 1996, Winkler 1993). While these descriptions of economic status by living arrangement are informative, they do not allow for the possibility that the observed difference in economic status across the various living arrangements is due to differences in the characteristics of mothers (e.g., age, race/ethnicity, educational attainment, and number and age of children) who reside in these arrangements. For this we turn to results from multivariate analyses.

The reviewed studies have examined different populations. Some studies focus only on single mothers and their children, while others look more broadly at all mothers and consider marriage. We first discuss the finding with regard to marriage, and then turn to the findings

²² Adult-equivalent income counts adults as one person and children as 0.4 persons.

related to the living arrangement choices of single mothers, such as living independently, living with a parent, and cohabiting.

Marriage and economic well-being: The literature finds that, in general, individuals who live in married-parent families are better off economically than those who live in alternate arrangements. Using data from the 1990 PUMS, Manning and Lichter (1996) find that children who live in married-couple families have higher economic statuses, as measured by the income-to-needs ratio, than children living in cohabiting couple, single female, and single male headed households. Hao's (1996) study of children using the NSFH, which is the only reviewed study that measures economic well-being in terms of wealth, finds that longer marriages are associated with greater wealth. Rosenbaum, E. (2000) also looks at children, but in addition to looking at whether the child is living in a married-couple versus female-headed household, she considers whether the child is living with his/her parent(s) or with a relative.²³ Results from her basic regression model (that controls for demographic characteristics such as race/ethnicity, age, and educational attainment) suggest that children in couple-headed households with their parents have higher levels of economic well-being (i.e., live in higher income households) than children in female-headed households.²⁴

In a series of three papers, Robert Lerman examines the economic benefits to marriage using three data sets—NSAF, SIPP, and NLSY. Using NSAF data, Lerman (2001) shows that married-couple families are less likely to experience poverty and material hardship. Using SIPP data Lerman (2002b) focuses on material hardship and the results of his multivariate analysis, which controls for observed demographic characteristics that might affect hardship, in general suggest that married mothers experience less material hardship than mothers who live independently, cohabit, or live with another adult. He finds that this relationship holds for all women and those below 150 percent of poverty. However, among women with less than a high school education, his results suggest that there is no significant difference in the degree of material hardship married and cohabiting mothers experience.

Lerman's third paper (2002a) uses longitudinal data from the NLSY and an individual-level fixed effects model to estimate the impact of marriage on economic well-being.²⁵ From this analysis, he concludes that marriage increases the economic well-being (as measured by the income-to-needs ratio) of mothers and their children as compared to mothers who cohabit, live

²³ Rosenbaum's analysis is based on data from the 1993 New York City Housing and Vacancy Survey (HVS).

²⁴ Rosenbaum also estimates a regression model that includes indicator variables for number of employed adults in the household. Based on this model she finds that children in female-headed households (whether living with their own parent or a relative) are not worse off than children in couple-headed households. The results of this model, however, only suggest that once number of workers in the household is controlled for, the marital status of the household head may be unimportant.

²⁵ As discussed above, if individuals' unobserved characteristics are fixed over time (and all relevant time-varying characteristics are included in the specification), this individual-level fixed effects model provides an unbiased estimate of the effect of living arrangements on economic well-being.

independently, and live with other adult relatives. More specifically, he finds that "moving into a married state raises living standards by about 65 percent relative to single parents living with no other adults, over 50 percent relative to single parents living with at least another adult, and 20 percent relative to cohabitation" (p. 32). It is important to interpret these findings with limitations of the NLSY data in mind. Specifically, as mentioned in the data section above, the NLSY is missing the incomes of cohabiting partners in the majority of cases (55 percent on average across the annual interviews). In the case where the cohabiting partner has no income reported, Lerman's analysis assumes that the cohabiting partner did not contribute any income to the household nor increased the household's need for income.²⁶ This assumption may be overly restrictive and may make mothers in cohabiting households appear worse off economically than they are. With the large degree of uncertainty about cohabiting partners' incomes in the NLSY, the extent to which married mothers are better off economically than cohabiting mothers warrants additional research.

Unmarried mothers' living arrangements and economic well-being: In terms of living arrangements among unmarried mothers, results from the literature suggest that cohabiting mothers are better off than mothers who live independently. However, these studies describe a relationship between living arrangements and economic well-being; they do not identify a causal effect of living arrangements on economic well-being. Manning and Lichter's (1996) analysis suggests that children living with cohabiting parents are better off economically than those that live in single female-headed households.²⁷ This finding is consistent with Lerman (2002b) who finds that cohabiting mothers experience less material hardship than other single mothers—those who live independently and those who live with another adult. Folk (1996) finds different results for white and black single mothers. She finds that cohabiting white mothers have higher levels of economic status than single white mothers who live independently, but finds no difference in economic status among black single mothers who cohabit and live independently. Folk does, however, find that black single mothers who live with an adult other than a parent or partner (i.e., double up) have lower levels of economic well-being than those who live independently.²⁸ Folk is careful to point out that her results do not necessarily identify a causal relationship. Her finding that mothers who double up are worse off than mothers who live independently may arise because mothers who are facing difficult economic situations may be more likely to move into another person's household.

²⁶ That is, for cohabiting partners, Lerman "neither increases the unit's poverty threshold or the unit's income" (p. 11).

²⁷ Manning and Lichter (1996) also find that single male-headed households are better off economically than single female-headed households.

²⁸ Folk's analysis is the only one that distinguishes between single mothers who live with a parent and single mothers who live with some other related or unrelated adult (i.e., a nonparent or partner). Descriptive analyses suggest that these two groups of single mothers face different economic situations (Acs and Ratcliffe 2001 and London 2000).

In general, the findings of this literature suggest that married-couple households provide the best economic situation, followed by cohabiting-couple households. Households headed by single mothers, who either live independently or double up, had the lowest levels of economic well-being and are more likely to experience material hardship. Although these results are derived from a multivariate framework, only one study (Lerman 2002a) estimates a model to capture the causal effect of living arrangements on economic well-being—the other studies do not control for unobservable differences that may affect economic status independently of any effects on marriage.

Q2b. Household Structure and Resource Sharing

Qualitative Findings: Qualitative studies suggest that resource sharing occurs among adult household members who are not married, such as cohabitators and related family members (such as an aunt/uncle). The reviewed articles suggest that both monetary and in-kind resource sharing occurs among these adults (see Appendix A, Table A3). Newman (1998) provides an in-depth analysis of a young, low-wage single mother who lives with her mother in New York City. This study reveals that the young single mother relies on her mother (i.e., the grandmother) for child care, while the grandmother relies on her daughter to bring home a salary. In another study, Newman (1999) conducts in-depth interviews of an extended family household—with a grandmother, aunt, and uncle—and finds that these family members share their monetary resources.

The reviewed studies suggest that cohabiting boyfriends contribute monetarily to the household, but the extent to which they share their resources is not clear. Based on in-depth interviews with roughly 130 women in the Philadelphia metropolitan area, Edin (2000) reports that a single mother will not allow a male partner to stay in her home if he is a financial drain, but Edin does not say whether mothers require male partners to contribute more than they cost in order to remain in the household. However, Edin's (1991) analysis of 50 single mothers in the Chicago area suggests that cohabiting male partners generally contribute to household expenses. She writes: "Mothers claimed they have little difficulty convincing boyfriends to assist in supporting their children who were, in most cases, not their own" (p. 466).

Results of these qualitative studies suggest that some degree of resource sharing occurs among adults in the same household. We turn to quantitative analyses in an attempt to more precisely identify the extent to which resource sharing occurs.

Quantitative Findings: Three of the reviewed studies address the question of resource sharing using quantitative methods. Bauman (1999) and Winkler (1997) examine resource sharing among cohabitators using multivariate frameworks, while Folk (1996) describes the extent

to which single mothers who live with their parents receive financial assistance (see Appendix A, Table A5).²⁹

Bauman (1999) examines whether individuals who cohabit and live with unrelated individuals share resources to the same extent that family members do. His analysis of SIPP data suggests that they do not. He finds individuals with “spousal and family relations to the household head are the most likely, and those with less formal relationships are least likely [cohabitants and other nonfamily housemates], to contribute to the basic needs of the household” (p. 324). While Bauman concludes that income sharing occurs to a greater extent among family than nonfamily members, he does not conclude that nonfamily members do not income share. Winkler (1997) provides less evidence of income sharing among cohabitators. Based on analyses of all cohabiting couples, Winkler concludes that cohabiting couples do not income share. However, she also conducts separate analyses of long-term cohabitators and cohabitators with joint biological children, and the results do suggest that these subgroups of cohabitators may in fact share income.

Folk’s (1996) analysis of the 1987 NSFH suggests that single mothers who live with their parents receive considerable economic support (p. 280). Folk finds that over 60 percent of single mothers who live with a parent(s) receive free room and board (p. 280). Many of these single mothers received additional support from their parent(s), with 20 percent reporting that most of their personal expenses are paid by their parents. For the roughly 40 percent of single mothers who pay a percentage of their room and board, the NSFH data suggest that they often receive other assistance from their parent(s), such as help with transportation.

Results from these analyses suggest that resource sharing does occur between related and unrelated household members, but that this resource sharing is more common among related individuals.

²⁹ Rosenzweig and Wolpin (1994) look at a related, but different, question. They use data from the NLSY to examine the extent to which young adult children receive housing from their parents (i.e., live with their parents) and how the availability of public assistance affects to whom and the degree to which parents provide housing to their adult children.

Section VI. Summary of Findings

This review of the literature has examined two interrelated questions of interest to policymakers: (1) Have changes in welfare policies in the 1990s affected household structure? and (2) What are the effects of household structure on economic well-being and intra-household resource sharing? The effects of welfare reform on living arrangements have been examined using both quantitative nonexperimental and quantitative experimental methods, while studies of the effects of living arrangements on economic well-being and resource sharing have used qualitative and quantitative nonexperimental methods. Findings from these studies are summarized by research question below.

Q1: Have changes in welfare policies in the 1990s affected household structure?

The nonexperimental evidence reviewed suggests that welfare reform has not been a major force in affecting family structure and that no clear picture of the ways in which welfare reform affects family structure has yet emerged. There is, however, some evidence that welfare reform may be having some effect on family structure, especially in subpopulations such as black central city and Hispanic children, and women without a high school education. For the experimental studies, most studies find no effect of welfare reform on household structure. For example, of the 20 experimental programs or program components reviewed that evaluate the effect of welfare reform on marriage, only four find a significant effect. Of the relatively few nonexperimental and experimental studies that find an effect of welfare reform on family structure, these studies find that welfare reform has both increased and decreased single parenting (through marriage, cohabitation, etc.), although the majority find that welfare reform decreased single parenting. So, combined, the nonexperimental and experimental research evaluating the effect of welfare reform on household structure and living arrangements provides some suggestive evidence, but no strong compelling evidence that welfare reform is responsible for the apparent decrease in single parenting after welfare reform.

That welfare reform has had few statistically significant effects on household structure is not necessarily surprising. First, if welfare reform is to have an effect on household structure, the effect may come more slowly than for other outcomes. Changes in household structure are rare events and may occur not as a direct response to welfare policy changes, but in response to other outcomes affected by welfare reform. For example, increases in employment that result from welfare reform could in turn affect living arrangements. Second, few of the changes implemented through welfare reform were explicitly aimed at influencing household structure.

Greater effects might be seen under policies that are more targeted towards household structure. Third, many studies measure welfare reform as the overall effect of waivers or TANF and because changes in different welfare policies are hypothesized to have opposite effects on household structure, they may offset one another to create no effect.

Q2: What are the effects of household structure on economic well-being and resource sharing?

Findings from the literature on household structure and economic well-being suggest that children and parents living in married-couple households have the best economic situation, followed by children and parents in cohabiting-couple households. Households headed by single mothers, who either live independently or double up, have the lowest levels of economic well-being. This literature general describes a relationship between living arrangements and well-being, while controlling for observable characteristics such as age, race/ethnicity, educational attainment, and number of children. It does not necessarily identify how living arrangements *impact* economic well-being. These analyses provide information about the extent to which there is economic disparity between individuals who live in different arrangements; it does not provide information about whether those arrangements are responsible for their level of well-being. One exception in this literature is Lerman (2002a) who uses an individual-level fixed effects model to control for unobserved characteristics of individuals that are fixed over time. If individuals' unobserved characteristics are fixed over time, this model provides an unbiased estimate of the effect of living arrangements on economic well-being. He concludes that marriage increases the economic well-being of mothers and their children as compared to mothers who cohabit, live independently, and live with other adults relatives. As described above, the large degree of uncertainty about cohabiting partners' incomes in the NLSY suggests the need for additional research on the extent to which married mothers are better off economically than cohabiting mothers.

The reviewed studies also examine intra-household resource sharing. Results of these studies suggest that resource sharing does occur between related and unrelated household members, but that it is more common among related individuals.

Section VII. Unanswered Questions and Suggested Next Steps

Q1: Have changes in welfare policies in the 1990s affected household structure?

Unanswered Research Questions

Although several studies have examined whether welfare reforms in the 1990s affected household structure, these outcomes are less well studied than other outcomes (such as caseload size and employment) and we conclude that this question has not been adequately addressed in the literature. Our finding is consistent with other recent studies. Syntheses of the literature on the effect of welfare reform on marriage (Grogger et al. 2001) and family structure (Peters et al. 2001) conclude that there is little empirical evidence from which to draw conclusions about the effects of welfare reform on living arrangements. In addition, the TANF Third Annual Report to Congress reports that the issue of whether and to what degree welfare programs and policies have affected the formation and maintenance of two-parent families has been marked by a lack of rigorous information (United States Department of Health and Human Services 2000, p. 88).

In addition to the need for further studies on the effect of welfare reform on marriage, cohabitation, and female headship, we identify three unanswered questions.

1. *What is the effect of welfare reform on various living arrangements?* The types of living arrangements examined in this literature are limited. The majority of studies focus on outcomes such as marriage, cohabitation, and female headship, and very few studies have examined other types of living arrangements, such as living with a parent or “doubling up” with adults other than a parent or partner. Additional studies examining, for example, whether welfare reforms encourage young mothers to live with a parent(s) or relative would further inform policymakers about the effects of welfare reforms on a broader set of living arrangements.

2. *What is the effect of specific welfare policies on living arrangements?* A second gap in the literature is the limited information on how specific policies affect household structure. Identifying the relationship between specific welfare reform policies and household structure, rather than defining welfare reform as the implementation of any major waiver or TANF, is important because different welfare reform policies can have opposite effects on living arrangements. As noted before, these opposite effects can offset one another to create no effect. Some studies have looked at specific policies, such as full family sanctions, but these studies specify the policy variable simply as whether the state did or did not have the policy in place.

Future studies should define states' welfare policies more precisely. For example, rather than representing a state's welfare sanction policy as either having or not having a full family sanction, the severity of the sanction policy could be represented as a continuous measure (e.g., dollar amount or percent of benefit lost). More precisely defining states' policies will allow the policy community to better understand the relationship between welfare reform and household structure.

3. *Has welfare reform differentially affected different subpopulations?* The literature provides limited information on the extent to which welfare reform has affected the living arrangements of different subpopulations. Bitler et al. (2001) find differences across racial groups, suggesting that future studies should separately examine subpopulations.

These research questions should be examined using a relatively long post-reform time frame, since household structure changes may respond slowly to policy changes.

Suggested Next Steps

Should experimental or nonexperimental methods be used to address these research questions? The answer is somewhat ambiguous because each method has strengths and weaknesses. Experimental analyses, if properly implemented, bring the credibility associated with random assignment, but are limited because the study population is restricted to welfare recipients and applicants. If welfare reform deterred women from applying for welfare benefits, then the random assignment evaluations do not capture the effect of welfare reform on the total population, but rather, the effect of welfare reform on welfare recipients and applicants. Experimental studies also typically are limited to recipients in one state, making their findings less generalizable. Nonexperimental studies typically capture the full population (recipients and nonrecipients living across the U.S.), so if the samples are representative and large they produce results that are generalizable to the full population. But nonexperimental studies are sometimes considered less credible because it is difficult to control for all unobservable characteristics, and thus identify a causal effect, even with sophisticated econometric techniques. On the other hand, successfully implemented experimental studies control for unobservables and identify a causal effect without these techniques.

Since future studies should use a relatively long follow-up period, a major consideration for using experimental studies should be whether individuals in the "control group" have been exposed to the new welfare policies over time. If individuals in the control group have been exposed to new policies, the experimental design is compromised and experimental methods cannot be used to obtain estimates of the effect of welfare reform on living arrangements. Another consideration for experimental studies should be the cost of collecting the follow-up data. A benefit of nonexperimental data is the availability of large data sets, such as the SIPP and CPS. CPS data are currently available through early 2002 and the 1996 SIPP panel provides data through early 2000.

In terms of methods, the experimental and nonexperimental studies reviewed here have used appropriate methods, and these methods can be used in future studies. The most important aspect of experimental methods is ensuring that individuals in the control group are not exposed to the new welfare policies and operate under the baseline welfare programs. Nonexperimental studies of the effect of welfare reform on living arrangements would benefit from the use of generally accepted econometric techniques used in the literature. These include state and time fixed effects models, as well as comparison group techniques.

Q2: What are the effects of household structure on economic well-being and resource sharing?

Unanswered Research Questions

While numerous studies have examined the relationship between living arrangements and economic well-being, only one study (Lerman 2002a) looks beyond the descriptive relationship and tries to identify a causal effect. His analysis suggests that marriage increases the economic well-being of mothers and their children as compared to mothers who live independently. With only one study that has addressed our specific research question, there are numerous unanswered questions in this literature. We identify three key questions:

1. Is marriage a better path to economic well-being than cohabitation?
2. To what extent does living with a parent increase the economic well-being of young mothers?
3. Does “doubling up” increase the economic well-being of mothers and their children?

Multiple measures of economic well-being should be considered in answering each of these questions. The studies reviewed have measured economic well-being with: income, income per adult equivalent, income-to-needs ratio, poverty status, and measures of material hardship. Future studies should consider these measures.

Suggested Next Steps

Future analyses of the effect of living arrangements on economic well-being should focus on identifying a causal relationship, as done in the literature examining the effect of welfare reform on living arrangements. One can estimate a causal relationship using an instrumental variables approach, as used in related studies on the effect of living arrangements on welfare benefit receipt (Acs and Ratcliffe 2001 and London 2000). A second option is to estimate an individual-level fixed effects model using longitudinal data, as does Lerman (2002a). The instrumental variables model relies heavily on identifying factors that affect individuals’ choices of living arrangement but do not affect their economic well-being. The fixed effects model has the advantage that it does not require the identification of such factors, and thus, is preferable to an instrumental variables model if appropriate longitudinal data are available.

The longitudinal Panel Study of Income Dynamics (PSID) or SIPP could be used to examine the effect of living arrangements on economic well-being, using an individual-level fixed effects model.³⁰ These data sets have some advantages over the National Longitudinal Survey of Youth (NLSY) used by Lerman (2002a). As discussed above, the NLSY is missing the incomes of cohabiting partners in the majority of cases (55 percent on average across the annual interviews), making it difficult to examine whether marriage is a better pathway to economic well-being (as measured by income) than cohabitation.³¹

Overall, this synthesis finds suggestive results about (1) the effects of welfare reform on living arrangements and (2) the effect of living arrangements on economic well-being. Some important questions, however, are not yet answered and the literature would benefit from additional research on both topics.

³⁰ The PSID is a longitudinal data set with a single panel that provides annual data from 1968 through 1997. The SIPP has multiple panels (the most recent panels are 1990-93 and 1996) where each panel provides monthly data on individuals over a two- to four-year period.

³¹ In addition, the PSID and SIPP are more nationally representative than the NLSY. The NLSY includes a sample of individuals who were between the ages of 14 and 21 in 1979, whereas the PSID and SIPP have no such restriction.

VII. Appendix A: Tables

Table A1: How do welfare reform policies affect household structure?
Quantitative Nonexperimental Studies

Author	Data Source	Sample	Welfare Policy Variable	Outcome-Living Arrangement	Does Welfare Reform Matter?
Acs and Nelson (2002)	1997 & 1999 NSAF	Low-income families and children	Full family sanction	Married couple families	No
			Family cap	Married couple families	Yes (+)
			Two-parent rules	Married couple families	No
			Full family sanction	Cohabitation	No
			Family cap	Cohabitation	No
			Two-parent rules	Cohabitation	Yes (+)
			Full family sanction	Single parent living independently	Yes (+, 0)
			Family cap	Single parent living independently	Yes (-)
			Two-parent rules	Single parent living independently	No
Bitler et al. (2001)	1989-2000 March CPS	Black central city children (<16)	Any major waiver	Child lives with married parent	No
		Black central city children (<16)	TANF: Ever had a waiver	Child lives with married parent	No
		Black central city children (<16)	TANF: Never had a waiver	Child lives with married parent	No
		Hispanic children (<16)	Any major waiver	Child lives with married parent	Yes (+)
		Hispanic children (<16)	TANF: Ever had a waiver	Child lives with married parent	Yes (+)
		Hispanic children (<16)	TANF: Never had a waiver	Child lives with married parent	No
		Black central city children (<16)	Any major waiver	Child lives with unmarried parent	No
		Black central city children (<16)	TANF: Ever had a waiver	Child lives with unmarried parent	No
		Black central city children (<16)	TANF: Never had a waiver	Child lives with unmarried parent	Yes (-)
		Hispanic children (<16)	Any major waiver	Child lives with unmarried parent	Yes (-)
		Hispanic children (<16)	TANF: Ever had a waiver	Child lives with unmarried parent	Yes (-)
		Hispanic children (<16)	TANF: Never had a waiver	Child lives with unmarried parent	No
		Black central city children (<16)	Any major waiver	Child lives with grandparent and parent	No
		Black central city children (<16)	TANF: Ever had a waiver	Child lives with grandparent and parent	No
		Black central city children (<16)	TANF: Never had a waiver	Child lives with grandparent and parent	Yes (-)
		Hispanic children (<16)	Any major waiver	Child lives with grandparent and parent	Yes (-)
		Hispanic children (<16)	TANF: Ever had a waiver	Child lives with grandparent and parent	Yes (-)
		Hispanic children (<16)	TANF: Never had a waiver	Child lives with grandparent and parent	No
Ellwood 1999	1980-1998 March CPS	Women 18-44	EITC and welfare reforms	Marriage/cohabitation	No

(Continued on the next page)

Table A1: How do welfare reform policies affect household structure?
Quantitative Nonexperimental Studies-continued

Author	Data Source	Sample	Welfare Policy Variable	Outcome-Living Arrangement	Does Welfare Reform Matter?
Fitzgerald and Ribar (2001)	1990, 1992, & 1993 SIPP	Women 15-55	Time/ family waiver	Female headship (level, entry, exit)	No
			Work type waiver	Female headship (level, entry, exit)	Yes (-, 0)
			Time limit	Female headship (level, entry, exit)	No
			Work req. time limit	Female headship (level, entry, exit)	No
			Family cap	Female headship (level, entry, exit)	No
			JOBS waiver	Female headship (level, entry, exit)	Yes (+,0)
			Earnings disregard	Female headship (level, entry, exit)	Yes (-, 0)
			Teen coresidence	Female headship (level, entry, exit)	No
Grogger et al. (2001)	Synthesis of research		Welfare reform	marriage	Yes (+)
Kaestner et al. (2002)	1979 & 1997 NLSY	Teenage girls	Welfare reform	Not on welfare and live with parent	Yes (+)
Peters et al. (2001)	Synthesis of research		Decline in real cash benefit	Marriage	Yes (+)
			Family cap	Marriage	No
			Time limits	Marriage	No
			Work requirements and sanctions	Marriage	Mixed
			Expanded eligibility for two-parent families	Marriage	Yes (+)
			Minor-parent provision	Marriage	No
			Decline in real cash benefit	Shared living arrangements	Yes (-)
			Decline in real cash benefit	Female headship	Yes (-)
			Family cap	Female headship	No
			Time limits	Female headship	No
			Work requirements and sanctions	Female headship	Mixed
			Earnings disregard	Female headship	Yes (-)
			Expanded eligibility for two-parent families	Female headship	No
			Minor-parent provision	Female headship	No
Rosenbaum, D. (2000)	1984-1996 SIPP		Any time limit waiver	Marriage (level, entry, exit)	No
	1985-1999 March CPS		Any terminations waiver	Marriage (level, entry, exit)	Yes (-)
			Statewide waiver application	Marriage (level, entry, exit)	No

(Continued on the next page)

Table A1: How do welfare reform policies affect household structure?
Quantitative Nonexperimental Studies-continued

Author	Data Source	Sample	Welfare Policy Variable	Outcome-Living Arrangement	Does Welfare Reform Matter?
Schoeni and Blank (2000)	1977-1999	Women 16-54, educ<12	Any waiver	Marriage	Yes (+)
		Women 16-54, educ=12	Any waiver	Marriage	Yes (-)
	March CPS	Women 16-54, educ>12	Any waiver	Marriage	No
		Women 16-54, educ<12	TANF	Marriage	No
		Women 16-54, educ=12	TANF	Marriage	No
		Women 16-54, educ>12	TANF	Marriage	No
		Women 16-54, educ<12	Any waiver	Female headship	Yes (-)
		Women 16-54, educ=12	Any waiver	Female headship	No
		Women 16-54, educ>12	Any waiver	Female headship	No
		Women 16-54, educ<12	TANF	Female headship	Yes (-)
		Women 16-54, educ=12	TANF	Female headship	Yes (-)
		Women 16-54, educ>12	TANF	Female headship	No

Table A2: How do welfare reform policies affect household structure?
Quantitative Experimental Studies

Author	Study	State	Sample	Welfare Policy Focus	Outcome-Living Arrangement	Does Welfare Reform Matter?
Bloom et al. (2000)	FTP	FL	Recipients and applicants	Combine time limits with financial incentives and/or mandatory work-related activity	Married, living with spouse	No
Bloom et al. (1998)	Jobs-First	CT	Recipients and applicants	Combine time limits with financial incentives and/or mandatory work-related activity	Married, living with spouse	No
Fein (1999)	ABC	DE	Single-parent recipients and applicants, some subgroups	Combine time limits with financial incentives and/or mandatory work-related activity	Married, living with spouse	Yes (+)
					Cohabitation	No
Freedman et al. (2000)	LA Jobs-1st GAIN	CA	Single-parent recipients and applicants	Mandatory work-related activity	Married, living with spouse	No
					Living with partner	No
Grogger et al. (2001)	Synthesis			Work-related activity	Married	No
				Financial incentives	Married	Yes, weak
Grogger et al. (2001)	NEWWS					
	Columbus Integrated	OH	Recipients and applicants	Mandatory work-related activity	Married, living with spouse	No
	Columbus Traditional	OH	Recipients and applicants	Mandatory work-related activity	Married, living with spouse	No
	Detroit	MI	Recipients and applicants	Mandatory work-related activity	Married, living with spouse	No
	Oklahoma City	OK	Recipients and applicants	Mandatory work-related activity	Married, living with spouse	No
Hamilton et al. (2001)	NEWWS-continued					
	Atlanta LFA	GA	Recipients and applicants	Mandatory work-related activity (Labor Force Attachment)	Married	No
					Cohabiting	No
					Separated or divorced	No
					Lives alone	Yes (-)
				Lives with other adult and/or children	No	

(Continued on the next page)

Table A2: How do welfare reform policies affect household structure?
Quantitative Experimental Studies-continued

Author	Study	State	Sample	Welfare Policy Focus	Outcome-Living Arrangement	Does Welfare Reform Matter?
	Grand Rapids LFA	MI	Recipients and applicants	Mandatory work-related activity (Labor Force Attachment)	Married Cohabiting Separated or divorced Lives alone Lives with other adult and/or children	No No Yes (-) No No
	Riverside LFA	CA	Recipients and applicants	Mandatory work-related activity (Labor Force Attachment)	Married Cohabiting Separated or divorced Lives alone Lives with other adult and/or children	No Yes (+) No No No
	Portland	OR	Recipients and applicants; no cases with substantial barriers	Mandatory work-related activity	Married Cohabiting Separated or divorced Lives alone Lives with other adult and/or children	Marginal (-) Marginal (+) No No No
	Atlanta HCD	GA	Recipients and applicants	Mandatory work-related activity (Human Capital Development)	Married Cohabiting Separated or divorced Lives alone Lives with other adult and/or children	No No No Yes (-) No
	Grand Rapids HCD	MI	Recipients and applicants	Mandatory work-related activity (Human Capital Development)	Married Cohabiting Separated or divorced Lives alone Lives with other adult and/or children	No No No No No

(Continued on the next page)

Table A2: How do welfare reform policies affect household structure?
Quantitative Experimental Studies-continued

Author	Study	State	Sample	Welfare Policy Focus	Outcome-Living Arrangement	Does Welfare Reform Matter?
	Riverside HCD	CA	Recipients and applicants	Mandatory work-related activity (Human Capital Development)	Married Cohabiting Separated or divorced Lives alone Lives with other adult and/or children	No No No Yes (+) No
Harknet et al. (2001)	SSP	Canada	Single-parent recipients	Combined mandatory work-related activity and Financial work incentives outside the welfare system	Married Married or in common law relationship	No No
Knox et al. (2000)	MFIP	MN	Single-parent recipients Single-parent applicant Single-parent recipients Two-parent recipients	Financial work incentives Financial work incentives Combined mandatory work-related activity and Financial work incentives within the welfare system Financial work incentives	Married Married Married Marital stability	Yes (+) No No Yes (+)
London et al. (2000)	TEEM	ND	Recipients	Work related, financial incentives, family stability, and family caps	Married	Yes (-)
Mills et al. (1996)	EMPOWER	AZ	Recipients	Combine time limits with financial incentives and/or mandatory work-related activity	Married	No

Table A3: Household Structure, Economic Well-Being, and Resource Sharing
Qualitative Studies

Author	Data Source	Sample	Household Structure and Economic Well- Being	Household Structure and Resource Sharing
Edin (2000)	Philadelphia, PA	Welfare recipients	X	
Edin (1991)	Chicago, IL	Single mothers	X	X
Edin and Lein (1997)	Boston, MA Charleston, SC Chicago, IL San Antonio, TX	Single mothers	X	X
Newman (1999)	New York, NY	Single mothers	X	X
Newman (1998)	New York, NY	Single mothers		X

Table A4: Household Structure and Economic Well-Being
Quantitative Nonexperimental Studies

Author	Data Source	Sample	Living Arrangement	Outcome-Economic Well-being	Do Living Arrangements Matter?
<i>Economic Well-Being</i>					
Acs & Gallagher (2000)	1997 NSAF	Children	Two parents One parent No parents Unknown	Income-to-needs ratio Log of income	Yes
Folk (1996)	1987 NSFH	Single mothers	Live independently Cohabit Live with parent Live with other adult	Income per adult equivalent Receive public assistance	Yes
Hao (1996)	1987 NSFH	Children	Intact family Stepfamily Cohabit Lone mom, ever married Lone mom, never married Lone dad (no lone dad were never married)	Family wealth	Yes
Lerman (2002a)	1978-1998 NLSY	Mothers	Married Cohabiting Single parent, other adult Single parent, no other adult	Income-to-needs ratio	Yes
Lerman (2002b)	1996 SIPP	Mothers	Married Cohabiting Single parent, other adult Single parent, no other adult	Material hardship (yes/no) Index of material hardship	Yes

(Continued on the next page)

Table A4: Household Structure and Economic Well-Being
Quantitative Nonexperimental Studies-continued

Author	Data Source	Sample	Living Arrangement	Outcome-Economic Well-being	Do Living Arrangements Matter?
<i>Economic Well-Being-continued</i>					
Lerman (2001)	1997 & 1999 NSAF	Families with children	Married, two biological or adoptive parents Married, one biological or adoptive parent Married, children in foster or kinship care Cohabit, two biological or adoptive parents Cohabit, one biological or adoptive parent Cohabit, children in foster or kinship care Single biological, adoptive or step parent with no other adult Single biological, adoptive or step parent with other adult Single, children in foster or kinship care	Poverty status Material hardship	Yes
Lichter et al. (2001)	1995 NSFG	Women, age 25-44	Married	Poverty status	Yes
Manning and Lichter (1996)	1990 PUMS	Children	Child living with: Married couple Cohabiting couple Single male Single female	Income-to-poverty (needs) ratio	Yes
Rosenbaum, E. (2000) ^a	1993 HVS	Children	Own child/couple-headed Own child/female-headed Related child/couple-headed Related child/female-headed	Log of income per adult equivalent	Yes
Winkler (1993) ^b	1986 CPS	Single mothers	Live independently Live with related single mother (child<18) Live with non-related single female (no child<18) Cohabit, household head Cohabit, not household head Married-couple household	Income Poverty status	Yes

a) Rosenbaum, E. (2000) finds a weak relationship between living arrangements and income after controlling for number of persons employed in the household.

b) Winkler (1993) presents a descriptive analysis only.

Table A5: Household Structure and Resource Sharing

Author	Data Source	Sample	Living Arrangement	Outcome	Do Non-Family Members Income Share?
<i>Resource Sharing</i>					
Bauman (1999)	1990, 1991, and 1992 SIPP	Household heads	Spouse in household Cohabitant in household Other family in household Housemate in household	Income sharing	Some
Folk (1996)	1987 NSFH	Single mothers	Single mothers living with their parents	Income sharing	Yes
Winkler (1997)	1987 NSFH and 1993 CPS	Cohabiting couples	Cohabit	Income sharing	Some

VIII. References Cited

- Acs, Gregory, and Megan Gallagher. 2000. Sources of Support and Income Inequality among America's Children <<http://newfederalism.urban.org/html/discussion99-15.html>>. Washington, D.C>.
- Acs, Gregory, and Sandi Nelson. 2002. *Assessing the Relationship between Welfare Policies and Changes in Living Arrangements of Low-Income Families and Children in the Late 1990s*, Accessing the New Federalism Discussion Paper no. 02-05. Washington DC: The Urban Institute.
- Acs, Gregory, and Caroline Ratcliffe. 2001. Living Arrangements, Work, and Welfare Decisions Among Single Mothers, Washington, DC, January.
- Bauman, Kurt. J. 1999. Shifting Family Definitions: The Effect of Cohabitation and Other Nonfamily Household Relationships on the Measures of Poverty. *Demography*, 36: 315-25.
- Bitler, Marianne, Jonah Gelbach, and Hilary Hoynes. 2001. The Impact of Welfare Reform on Living Arrangements, December 10.
- Bloom, Dan, Mary Andes, and Claudia Nicholson. 1998. *Jobs First: Early Implementation of Connecticut's Welfare Reform Initiative*. New York: Manpower Demonstration Research Corporation.
- Bloom, Dan, James Kemple, Pamela Morris, Susan Scrivener, Nandita Verma, and Richard Hendra. 2000. *The Family Transition Program: Final Report on Florida's Initial Time-Limited Welfare Program*. New York: Manpower Demonstration Research Corporation.
- Brandon, Peter D, and Gene A Fisher. 2001. The Dissolution of Joint Living Arrangements Among Single Parents and Children: Does Welfare Make a Difference? *Social Science Quarterly*, 82, no. 1, March: 1-19.
- Dupree, Allen, and Wendell Primus. 2001. *Declining Share of Children Lived with Single Mothers in the Late 1990s: Substantial Differences by Race and Income*. Washington DC: Center on Budget and Policy Priorities.
- Edin, K. 1991. Surviving the Welfare System: How AFDC Recipients Make Ends Meet in Chicago. *Social Problems*, 38, no. 4, November.
- Edin, Kathryn. 2000. Few Good Men: Why Low-Income Single Mothers Don't Get Married. *The American Prospect*, 11, no. 4, January: 26-31.
- Edin, Kathryn, and Laura Lein. 1997. *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work*. New York, NY: Russell Sage Foundation.
- Ellwood, David T. 1999. *The Impact of the Earned Income Tax Credit and Social Policy Reforms on Work, Marriage, and Living Arrangements*. Tech. Rept. no. 124. Chicago IL: Joint Center for Poverty Research (Working Paper Series).

- Fein, David J. 1999. *Will Welfare Reform Influence Marriage and Fertility? Early Evidence from the ABC Demonstration*. Bethesda, MD: Abt Associates Inc.
- Fitzgerald, John, and David Ribar. 2001. The Impact Welfare Reform on Female Headship Decisions, U.S. Census Bureau working paper, November 9.
- Folk, Karen Fox. 1996. Single Mothers in Various Living Arrangements: Differences in Economic and Time Resources. *American Journal of Economics and Sociology*, 55, no. 3, July: 277-92.
- Freedman, Stephen, Jean Tansey Knab, Lisa A. Gennetian, and David Navarro. 2000. *The Los Angeles Jobs-First GAIN Evaluation: Final Report on a Work First Program in a Major Urban Center*. New York, NY: Manpower Demonstration Research Corporation.
- Greene, William H. 2000. "Econometric Analysis." New Jersey: Prentice-Hall, Inc.
- Grogger, Jeffrey, Lynn Karoly, and Jacob Alex Klerman. 2001. *Consequences of Welfare Reform: A Research Synthesis*. Draft Tech. Rept. no. DREU-2676-DHHS. Santa Monica, CA: RAND.
- Hamilton, Gayle, Stephen Freedman, Lisa Gennetian, Charles Michalopoulos, Johanna Walter, Diana Adams-Ciardullo, Anna Gassman-Pines, Sharon McGroder, Martha Zaslow, Surjeet Ahluwalia, and Jennifer Brooks. 2001. *National Evaluation of Welfare-to-Work Strategies: How Effective Are Different Welfare-to-Work Approaches? Five Year Adult and Child Impacts for Eleven Programs*. New York: Manpower Demonstration Research Corporation.
- Hao, L. 1996. Family Structure, Private Transfers, and the Economic Well-Being of Families with Children. *Social Forces*, 75: 269-92.
- Harknett, Kristen, and Lisa Gennetian. 2001. *How Earnings Supplement Can Affect the Marital Behavior of Welfare Recipients: Evidence From the Self-Sufficiency Project*. Social Research and Demonstration Corporation.
- Hogan, Dennis P., and Daniel T. Lichter. 1995. Children and Youth: Living Arrangements and Welfare. In *State of the Union: America in the 1990s. Volume 2: Social Trends*, edited by Reynolds Farley, 93-139. New York: Russell Sage Foundation.
- Kaestner, Robert, Sanders Korenman, and June O'Neill. 2002. *The Effect of Welfare Reform on Welfare Use, Fertility, and Marriage of Disadvantaged Teenage Girls*, The Assistant Secretary for Planning and Evaluation, United States Department of Health and Human Services.
- Knox, Virginia, Cynthia Miller, and Lisa Gennetian. 2000. *Reforming Welfare and Rewarding Work: A Summary of the Final Report on the Minnesota Family Investment Program*. New York: Manpower Demonstration Research Corporation.
- Lerman, Robert I. 2001. *Marriage as a Protective Force Against Economic Hardship: An Initial Report*. Washington, DC: The Urban Institute.

- . 2002a. Married and Unmarried Parenthood and the Economic Well-Being of Families: A Dynamic Analysis of a Recent Cohort, The Urban Institute, Washington DC, February.
- . 2002b. The Relationship between Marriage and Other Family Structures and the Material Hardship Experience by Household with Children: Evidence from the Survey of Income and Program Participation, The Urban Institute, Washington DC, February.
- Lichter, Daniel T., Deborah R. Graefe, and J. Brian Brown. 2001. Is Marriage a Panacea? Union Formation Among Economically-Disadvantaged Unwed Mothers. Paper presented at the 2001 annual meetings of the Population Association of America, Washington, DC.
- London, Rebecca A. 2000. The Interaction Between Single Mothers' Living Arrangements and Welfare Participation. *Journal of Policy Analysis and Management*, 19, no. 1: 93-117.
- London, Rebecca, Courtney Smith, Kristin Porter, and Kendra Lodewick. 2000. *Evaluation of North Dakota's Training, Education, Employment, and Management (TEEM) Program*. Oakland, California: Berkeley Planning Associates.
- Manning, W., and D. Lichter. 1996. Parental Cohabitation and Children's Economic Well-Being. *Journal of Marriage and the Family*, 58: 998-1010.
- Maynard, Rebecca, Elisabeth Boehnen, Tom Corbett, and Gary Sandefur. 1998. Changing Family Formation Behavior Through Welfare Reform. In *Welfare, the Family, and Reproductive Behavior: Research Perspectives*, edited by Robert Moffitt, 134-76. Washington, DC: National Academy Press.
- McLanahan, Sara, and Gary D. Sandefur. 1994. *Growing Up With a Single Parent: What Hurts, What Helps*. Cambridge: Harvard University Press.
- Mills, Gregory, Donna DeMarco, and Sara Maranowicz. 1996. *Evaluation of the Arizona EMPOWER Welfare Reform Demonstration*. Cambridge, MA: Abt Associates, Inc.
- Moffitt, Robert. 1998. The Effect of Welfare on Marriage and Fertility. In *Welfare, the Family, and Reproductive Behavior*. ed. R. Moffitt. Washington: National Academy Press.
- Moffitt, Robert A. 1999. The Effect of Pre-PRWORA Waivers on AFDC Caseloads and Female Earnings, Income, and Labor Force Behavior. In *Economic Conditions and Welfare Reform*, edited by Sheldon H. Danziger, 91-117. Kalamazoo, Michigan: W.E Upjohn Institute for Employment Research.
- Moffitt, Robert A., and LaDonna Pavetti. 1999. *Time Limits*, JCPR: Working Paper Series no. 91. Washington, DC: Joint Center for Poverty Research.
- Morrison, Donna, and Amy Ritualo. 2000. Routes To Children's Economic Recovery After Divorce: Are Cohabitation and Remarriage Equivalent? *American Sociological Review*, 65: 560-80.
- National Research Council. 2001. *Evaluating Welfare Reform in an Era of Transition*. Panel on Data and Methods for Measuring the Effects of Changes in Social Welfare Programs, Robert A. Moffitt and Michele Ver Ploeg, Editors. Committee on National Statistics,

- Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- Newman, Katherine S. 1998. Tyasha's Dilemmas: Anthropological Ruminations on Welfare Reform. Joint Center of Poverty Research, Northwestern University and University of Chicago. Welfare Reform and Child Development.
- . 1999. *No Shame in My Game: The Working Poor in the Inner City*. New York, NY: Knopf and The Russell Sage Foundation.
- Peters, H. Elizabeth, Robert D. Plotnick, and Se-Ook Jeong. 2001. *How will Welfare Reform Affect Childbearing and Family Structure Decisions?* Institute for Research on Poverty no. 1239-01. University Wisconsin, Madison: IRP Publications.
- Rowe, Gretchen. November 2000. State TANF Policies as of July 1999. In *Welfare Rules Databook*. Assessing the New Federalism. Washington, DC: The Urban Institute.
- Rosenbaum, Dan T. 2000. Taxes, the Earned Income Tax Credit, and Marital Status. Paper presented at the 1999-2000 ASPE/Census Bureau Small Grants Sponsored Research Conference, Washington, DC.
- Rosenbaum, Emily. 2000. Urban Children's Living Arrangements and their Economic Status: New York City 1993. *American Journal of Economics and Sociology*, 59, no. 2, April: 217-52.
- Schoeni, Robert F.; Blank, Rebecca M. 2000. What Has Welfare Reform Accomplished? Impacts on Welfare Participation, Employment, Income, Poverty, and Family Structure. National Bureau of Economic Research Working Paper No. 7627.
- Thomas, Adam, and Isabel Sawhill. 2002. For Richer or for Poorer: Marriage as an Antipoverty Strategy.
- United States Department of Health and Human Services. 2000. *Temporary Assistance for Needy Families Program Third Annual Report to Congress*. Washington, DC.
- Wilson, William J. 1987. *The Truly Disadvantaged*. Chicago: University of Chicago Press.
- Winkler, Anne E. 1993. The Living Arrangements of Single Mothers with Dependent Children: An Added Perspective. *American Journal of Economics and Sociology*, 52, no. 1, January: 1-18.
- . 1997. Economic Decision Making by Cohabitators: Findings Regarding Income Pooling. *Applied Economics*, 29, no. 8: 1079-90.
- . 2001. Welfare and the Dissolution of Child-Parent Living Arrangements. *Social Science Quarterly*, 82, no. 1, March: 20-23.