The Welfare State and Relative Poverty in Rich Western Democracies, 1967-1997*

DAVID BRADY, *Duke University*

Abstract

This study investigates the relationship between the welfare state and poverty with multiple measures of the welfare state and poverty in an unbalanced panel of 18 Western nations from 1967 to 1997. While addressing the limitations of past research, the analysis shows that social security transfers and public health spending significantly reduce poverty. Less robust evidence exists that social wages reduce poverty, while public employment and military spending do not significantly affect poverty. The welfare state's effects are far larger than economic and demographic sources of poverty. The significant features of the welfare state entirely account for any differences in poverty between welfare state regimes, and these features have similar effects across welfare state regimes. The welfare state's effects on poverty did not change in the 1990s. Sensitivity analyses show the results hold regardless of the U.S. cases. The welfare state emerges as the primary causal influence on national levels of poverty.

Perennially a contentious issue, the welfare state has recently come under a storm of criticism. For the first time since inception, the generous West European welfare states appear unsustainable and possibly even counterproductive. Regarded for decades as egalitarian havens, many social democracies appeared to struggle with rigid, unproductive labor markets in the 1990s. The social democratic Sweden suffered a crisis of three straight years of negative economic growth, massive budget deficits, and high unemployment (Freeman et al. 1997). By contrast, the

* *This paper benefited from comments from Art Alderson, Jason Beckfield, Judith Blau, Mike Ezell, Lane Kenworthy, Kevin Leicht, Stephanie Moller, Phil Morgan, David Reingold, Rob Robinson, and especially Clem Brooks and Mike Wallace. I greatly appreciate data shared by David Bradley, Evelyne Huber, Lane Kenworthy, Charles Ragin and John Stephens.* *Direct correspondence to David Brady, Department of Sociology, Duke University, Box 90088, Durham, NC, 27708. E-mail: brady@soc.duke.edu.*

liberal, flexible and efficient U.S. seemed to experience an unprecedented decade of robust economic expansion.

More specifically, the relationship between the welfare state and poverty has received tremendous scrutiny. Critics variously claim that even the most generous welfare states fail to eradicate poverty (Cantillion 1997) and that the welfare state provides disincentives (Murray 1984), carries a middle class bias (Burtless 1994; Reingold et al. 2001), is inadequate (Freeman 1999), and inefficient (Mayer 1997). In his history of poverty, Katz (1989:113) lamented that poverty, hunger, and a lack of health insurance and housing remain unacceptably prominent and further noted that, "Neither public policy nor private enterprise has moderated the great forces that generate poverty in America." In his widely read text on the declining standing of working Americans, Krugman (1994:28) analyzed historical trends in poverty and concluded, "Neither generosity nor niggardliness seems to make much difference to the spread of the underclass." Ultimately, the mounting criticism culminated with the 1996 U.S. Personal Responsibility and Work Opportunities Act, which both scientific studies and political rhetoric claim overwhelmingly vindicated social policy retrenchment (Bernstein 1999; Hernandez 1999; Pear 1999).

At the same time, recent scholarly advances promise new opportunities to study the welfare state and poverty. While the welfare state appears increasingly unsustainable, the potential for research on the welfare state and poverty has never been more secure. The building of comparative historical data sets on welfare states has reached a zenith. Further, measurement innovations and pioneering high-quality income data have greatly advanced the study of poverty. Finally, theoretical developments in the sociology of the welfare state give an increased sophistication to empirical analyses of the relationship between the welfare state and poverty.

In such a context, this study provides an unbalanced panel analysis of 18 rich Western democracies from 1967 to 1997, multiple measures of the welfare state and poverty, and controls for economic performance and demographics. Building on its contributions, the paper explicitly addresses five limitations of past research. First, I incorporate the liberal economic critique by controlling for economic performance and demographics. Second, this paper compares various specific features of the welfare state to explore their precise effects on poverty. Third, I examine the impact of welfare state regimes and the effects of the key welfare state features across regimes. Fourth, I expand the comparative historical scope of inquiry. Fifth, I utilize more valid and reliable measures of poverty.

Contributions and Limitations of Past Research

An accumulating body of research has begun to investigate the relationship between the welfare state and poverty (Cantillion 1997; McFate et al. 1995; Nolan

et al. 2000; Smeeding et al. 2001). In general, the literature falls into in two modes. First, a community of analysts using the Luxembourg Income Study (LIS) has found a difference between poverty before and after taxes and transfers. Typically, these researchers utilize individual-level microdata and consider poverty among particular demographic groups. Based on significantly different means between poverty before and after taxes and transfers, scholars infer that the welfare state effectively reduces poverty among women, children, the elderly, and the rest of the population (Casper et al. 1994; Christopher et al. 2002; Jantti and Danziger 2000).

Second, a smaller but growing cluster of macrolevel cross-national or historical studies demonstrates a negative association between welfare state generosity and poverty. Most studies focus on the U.S. history of social policy and poverty trends (Blank 1997; Burtless 1994; Burtless and Smeeding 2001; Danziger and Weinberg 1994; DeFina and Thanawala 2001; Page and Simmons 2000; Tomaskovic-Devey 1991). Some show that welfare state generosity is associated with less poverty in a cross-section of rich Western democracies (Cantillion 1997; Korpi and Palme 1998; Smeeding et al. 2001). For example, Kenworthy (1999) found a negative association between the welfare state and poverty across 15 affluent democracies. Very few studies examine both comparative and historical variation (Hanratty and Blank 1992; Hicks and Kenworthy 2003). Recently, Moller and her colleagues (2003) found that welfare generosity reduces adult poverty in 14 affluent countries from 1970 to 1997.

On balance, this research substantially contributes to understanding how welfare states affect poverty. Yet, we are only beginning to untangle this complicated relationship. As mentioned above, this study addresses five limitations of past research: the liberal economic critique; diverse features of the welfare state; varieties of types of welfare states; historical and cross-national scope; and the measurement of poverty. To my knowledge, no study has addressed all five limitations.

THE LIBERAL ECONOMIC CRITIQUE

Arguably, the most powerful critique of the welfare state emerges from liberal economics (Gordon 1972; O'Connor 2001). I recently explained that liberal economics distills to four claims about poverty: (i) a nation's poverty depends on levels of economic growth; (ii) free market capitalism is, at least in the long term, a more successful route to poverty reduction; (iii) raising worker productivity through the acquisition of human capital reduces poverty; and (iv) the supply and demand of jobs, as represented by unemployment, predicts levels of poverty (Brady 2003b). Liberal economics does not represent all economic or economists' explanations of poverty, but is a set of implicit core assumptions anchored in classical economic theory and underlying policy, conventional wisdom, and social science. Two issues are relevant to this analysis.

Liberal economics contends primarily that economic performance is the most important determinant of poverty (Cain 1998; Freeman 2001). Ellwood and Summers (1986:79) argue, "Economic performance is the dominant determinant of the poverty rate." Blank (2000:6, 10) asserts, "A strong macroeconomy matters more than anything else," and "the first and most important lesson for anti-poverty warriors from the 1990s is that sustained economic growth is a wonderful thing."[1] After the 1996 U.S. welfare reform, several analysts concluded that the strong economy was mostly responsible for the decline in welfare recipiency (Ziliak et al. 2000). With economic growth, the greatest priority is to reduce unemployment and to foster employment among the poor (O'Connor 2001; Tobin 1994). Haveman and Schwabish (1999:18) conclude, "Strong economic growth and high employment may again be the nation's most effective antipoverty policy instrument." Unemployment is routinely identified as the most important poverty issue in Western Europe (Gallie and Paugam 2000; Hauser et al. 2000). If the government has any role, the state should focus on raising the productivity of workers through increased education for skills and human capital (Karoly 2001; Murnane 1994; O'Connor 2001). In liberal economics, increasing economic growth and productivity, and reducing unemployment are much more important to reducing poverty than the welfare state.

A second claim of liberal economics is that the welfare state is counterproductive (Gilbert 2002). The welfare state purportedly has direct and indirect effects that actually increase poverty (Banfield 1970; Gilder 1981; Glazer 1988; Lindbeck 1995; Mead 1986; Murray 1984). Directly, welfare generosity encourages dependency and longer poverty spells (Bane and Ellwood 1994; Darity and Myers 1987; Leisering and Leibfried 1999). Thus, some features of the welfare state may have positive effects on poverty. Indirectly, welfare generosity provides an incentive for single parenthood, unemployment, and labor force nonparticipation (e.g., early retirement or single-earner couples) (Danziger, Haveman, and Plotnik 1981; Lichter et al. 1997; Moffitt 2000). Relatedly, many scholars contend that generous West European welfare states contribute to labor market rigidity and inefficiency and hence limit economic performance (Alesina and Perotti 1997; Freeman et al. 1997; Lindbeck 1998). If welfare generosity encourages unemployment, labor force nonparticipation, and single parenthood, and reduces economic growth and productivity, any poverty-reducing effects of the welfare state would be counterbalanced. If these economic and demographic variables have large effects on poverty, the welfare state could indirectly increase poverty.[2]

Recent research on the welfare state and poverty has not fully considered the liberal economic critique. For example, Kenworthy (1999) and Moller and her colleagues (2003) control for the level of economic development with GDP per capita. However, those authors did not include economic growth in their models. Also, Kenworthy did not control for the main mechanisms of the welfare state's potential counterproductivity: single parenthood, unemployment, and labor force nonparticipation.

DIVERSE FEATURES OF THE WELFARE STATE

The sociology of the welfare state sharply contrasts liberal economics. A wealth of research presumes the welfare state is beneficial and concentrates instead on the sources of the welfare state. If the welfare state definitively reduces poverty, the only questions that remain are why some welfare states are more generous or developed more quickly than others. One of the contributions of this literature is that the welfare state has a diversity of specific features. To better understand its effects on poverty, researchers need to examine the specific features of the welfare state.

Traditionally, analysts relied on measures of social spending or social security transfers (Burtless 1994; Huber and Stephens 2001). Such measures gauge the general extent of redistribution or welfare effort. By contrast, Esping-Andersen (1990) argued that the quality of welfare programs was actually a more crucial and valid measure of the welfare state than the quantity of welfare effort.[3] Generalist, encompassing welfare states that sustain equal social citizenship – as opposed to those that guarantee basic economic security – are considered more successful at reducing poverty (Korpi and Palme 1998). In turn, scholars have emphasized the qualitative nature of the welfare state and followed Esping-Andersen's concept of decommodification with measures like social wages. Social wages are the amount of income workers would receive if they were to stop working and rely solely on the state. Kenworthy (1999) finds that social wages reduce poverty. Freeman (1999:24) endorses social wages over other social policies arguing that "Recentering the welfare state in this way is a way to institutionalize commitments to greater equality."

Beyond general measures, scholars suggest the value of at least three specific features (Huber and Stephens 2001). While prior studies have not analyzed whether these features alleviate poverty, it is equally valuable to assess their relative importance. First, public health spending is particularly salient (Bergman 1996; Conley and Springer 2001; Currie and Yelowitz 2000; Huber and Stephens 2001; Mullahy and Wolfe 2001; Wolfe 1994). The absence of health insurance is often the main obstacle to labor market entry for low-income families (Blank 1997). Further, the public provision of healthcare distinguishes the more encompassing social democratic welfare states from the most liberal variants. Second, public employment is essential in terms of the civil servants who provide social services and as a program to alleviate unemployment (Blank 1997; Huber and Stephens 2001). Referring to public employment, Huber and Stephens (2000:323) argue that the "public delivery of a wide range of welfare state services is the most distinctive feature of the social democratic welfare state" (also Huber and Stephens 2001). Public employment provides work experience and income for the poor (Blank 1994; Ellwood and Welty 2000; Gans 1995; Newman 1999); enhances the social mobility of the disadvantaged (Hout 1984); and reduces gender inequality and women's poverty (Gornick and Jacobs 1998). Third, military spending has recently

been neglected in the study of the welfare state. While it seems unorthodox to view the military as part of the welfare state, we should recall that the military functions as a Keynesian economic development institution (Hooks 1991). The state often boosts military spending to counteract economic stagnation and unemployment (Griffin et al 1982; Mintz and Hicks 1984). Further, the military can serve as a turning point in the life course of disadvantaged young men by enabling upward social mobility (Mare and Winship 1984; Sampson and Laub 1996).

Recent sociological research has begun to explore diverse features of the welfare state (Kenworthy 1999; Moller et al. 2003). However, no study specifically examines the effects of public health spending, public employment, or military spending. Moreover, past research has not compared these five features in one model. Doing so provides evidence about their relative effectiveness, and their specific influence after controlling for welfare generosity generally.[4]

VARIETIES OF TYPES OF WELFARE STATES

The second main contribution from the sociology of the welfare state emphasizes the variety of welfare state types. The present generation of scholarship broadly contends that welfare states cluster into different types that are not necessarily directly comparable. These institutional clusters, regimes, or systems reflect the genetic historical legacies of social policy development and the state's particular institutionalized tradition of intervention into the market (Freeman 1995; Hall and Soskice 2001; Hicks and Kenworthy 2003;).[5] Most influentially, Esping-Andersen's (1990, 1999) typology of socialist, liberal, and conservative regimes reoriented scholarship away from universal explanations of social policy expansion and effects. In turn, Esping-Andersen's work has generated two claims that are relevant to this analysis.

First, social policies are expected to have different effects across the three regimes (Esping-Andersen 1990, 1999).[6] Because of different historically institutionalized traditions of social policy development and execution, the consequences for stratification should vary across regimes (Hall and Soskice 2001). By extension, social policies should have different effects on poverty across regimes. For example, Korpi and Palme (1998) argue that universal social policies reduce poverty more effectively than targeted social policies. Second, these regimes reflect deeper differences in the institutionalization of equality than can be captured by simply analyzing the levels of different welfare programs.[7] Accordingly, examining different welfare programs will neglect the more crucial institutional sources of variation in societal inequality. Thus, analyzing welfare state regimes will ultimately yield a greater understanding of poverty.

Despite tremendous influence in the social science of the welfare state, no study has examined whether welfare state regimes influence levels of poverty or if welfare state programs have differing effects across regimes. Esping-Andersen's work has certainly guided the conceptualization and selection of welfare state

measures (Kenworthy 1999; Moller et al. 2003). Nevertheless, only descriptive evidence exists on the patterns in poverty across welfare state regimes (Esping-Andersen 1999; Korpi and Palme 1998;).

HISTORICAL AND CROSS-NATIONAL SCOPE

It is imperative that scholars broaden the cross-national and historical scope of research on the welfare state and poverty. When studies examine many countries, the historical scope is typically limited. Overwhelmingly, past cross-national analyses of the welfare state are limited to a cross-section of OECD nations at one point in time (Kenworthy 1999; Korpi and Palme 1998; Smeeding et al. 2001). Microanalyses commonly examine individuals within a smaller number of welfare states at one or two points in time (Casper et al 1994). When a longer time period is examined, the cross-national scope is severely constrained. For example, much research has focused on only the U.S – despite its unique and potentially anomalous position in the global economy (Burtless 1994; Danziger and Weinberg 1994).[8] Hence, the generalizability of past findings remains uncertain. Moller and her colleagues (2003) provide a rare exception by analyzing 14 countries from 1970 to 1997. Nevertheless, the present study has a sample that is more than 30% larger, including 18 countries from 1967 to 1997.

In addition, it is crucial that studies scrutinize the 1990s. The 1990s were a particularly challenging period of welfare state contraction and retrenchment (Clayton and Pontusson 1998; Esping-Anderson 1999; Gilbert 2002; Huber and Stephens 2001; Kenworthy 2002; Western and Healy 1999). Surveying welfare states, Stephens et al. remark, "Overall, then, by the late 1980s and early 1990s a picture of widespread cuts emerges, in some cases at least of considerable magnitude" (1999:191). While the social democracies faced a series of economic crises that threatened their sustainability, the minimalist liberal welfare state of the U.S. has seemingly produced both dynamic economic expansion and less poverty and welfare recipiency. As a result, the classic trade-off between social protection and economic efficiency (Okun 1975) has seemed more immediate and acute (Esping-Andersen 1996, 1999). For example, after its economic crisis in the 1990s, Freeman and his colleagues characterized the encompassing Swedish welfare state as, "nearly impossible for the country to afford" (1997:11), "unsustainable" (1997:25), and "dysfunctional" (1997:27). While past studies suggested the welfare state influenced poverty prior to the 1990s, it remains highly debatable whether that relationship still held in the 1990s. To my knowledge, no study has tested the temporal stability of the welfare state's effects.

THE MEASUREMENT OF POVERTY

Research on the U.S. overwhelmingly relies on the official measure of poverty. This measure has many well-documented reliability and validity weaknesses that raise questions about this research (Betson and Warlick 1998; Brady 2003a; Citro and Michael 1995; DeFina and Thanawala 2001; Foster 1998; O'Connor 2001). International poverty researchers have made great advances in poverty measurement (Atkinson 1987; Hagenaars 1991; Sen 1992; Smeeding et al. 2001). Recently, I synthesized these advances into five criteria for more valid and reliable measures of poverty: (a) measure comparative historical variation effectively; (b) be relative rather than absolute; (c) conceptualize poverty as social exclusion; (d) integrate the depth of poverty and the inequality among the poor; and (e) assess the impact of taxes, transfers, and noncash benefits (Brady 2003a). Building on my recent article leads to three departures from recent research.

First, this study incorporates the depth of poverty. Much poverty research utilizes simple headcount measures, for example, 50% of the median income (Casper et al. 1994; Kenworthy 1999; Moller et al. 2003; Smeeding et al. 2001). These measures justifiably operationalize poverty relatively, usually incorporate comprehensive definitions of household income, and effectively describe the percentage of the population that is poor. However, these measures fail to consider the depth of poverty, treating all poor people as equal regardless of their distance from the threshold. This neglects the intensity of poverty and problematically homogenizes the poor. In turn, this study incorporates the depth of poverty of the average poor household.[9]

Second, I focus on poverty after taxes and transfers – what I call state-mediated (SM) poverty. SM poverty is based on the most comprehensive definition of household income, so it is the central, most valid and reliable measure of economic resources.[10] By contrast, some scholars examine poverty before taxes and transfers – what I call market-generated (MG) poverty (Brady 2003b, 2003c; Christopher et al. 2002; Moller et al. 2003). MG poverty is a simulated counterfactual, which is useful when examining individual adults. Unfortunately, there are serious limitations to MG poverty. First, MG poverty makes little sense when including the elderly in your sample, since the elderly often have little income before taxes and transfers in many countries. Second, it may be unrealistic to reify MG poverty on a macrolevel since states and markets inherently constitute each other (Esping-Andersen 1990, 2003; Fligstein 2001). Taxes and transfers always shape the income distribution, and it may be impossible to truly simulate a pretax and pretransfer income distribution.[11] Finally, I explain below why MG poverty is less relevant than SM poverty. There is much more variation in SM than MG poverty, and it is this crucial variation that needs explanation. Further, MG and SM poverty are simply not empirically associated in a way that suggests the relevance of MG poverty.

Third, as a supplement to my focus on SM poverty, I follow recent research

and examine poverty reduction (Hicks and Kenworthy 2003; Moller et al. 2003). Poverty reduction is calculated as the rate of change between poverty before taxes and transfers and poverty after taxes and transfers. While there are limitations to examining MG poverty, poverty reduction provides a dependent variable that incorporates the information contained in measures of MG poverty. Thus, poverty reduction provides a supplementary perspective on the relationship between the welfare state and poverty (Hicks and Kenworthy 2003; Moller et al 2003).[12]

Methods

To investigate the welfare state and poverty, I follow recent studies of the macro-level variation in poverty and inequality (Alderson and Nielsen 1999, 2002; Brady 2003b, 2003c; Gustafsson and Johansson 1999; Moller et al. 2003;). I utilize an unbalanced panel research design where the unit of analysis is a country-year. Because of limited observations for my dependent variable (see below), cases are unevenly distributed across 18 countries (Ns) and 31 years (Ts). Due to unmeasured time-invariant cross-national heterogeneity, ordinary least squares (OLS) regression is inappropriate (Hsiao 2003). Using Stata, I analyzed models with several techniques.

For theoretical and methodological reasons, I present random-effects (RE) models. First, *both* cross-national and historical variations are crucial. The RE model better facilitates estimation of the effects of the independent variables on the dependent variables when *both* cross-national and historical variation are essential (Beck 2001; Beck and Katz 1996; Greene 1990).[13] It is valuable to understand why some nations have more or less poverty and why poverty increases or decreases over time. In fact, the standard deviations between nations are much larger than within nations for most of the key variables. Further, the number of countries (18 Ns) far exceeds the average number of time points (4.5 Ts). Hence, the cross-national (between) variation is arguably more important than the historical (within) variation. Second, statistical tests accept RE models.[14] Third, in small and unbalanced samples with more Ns than Ts, RE models may perform better than the alternatives (Beck 2001; Bhargava and Sargan 1983; Greene 1990; Hsiao 2003). By contrast, the alternatives are often problematic in small and unbalanced samples, especially when the N far exceeds the Ts.[15] Fourth, including dummy variables for welfare state regimes (see below) prevents the use of FE models (Beck 2001; Beck and Katz 2001). Fifth, the conclusions are not sensitive to these technical choices. In analyses available upon request, I estimated a host of alternative techniques. Though these alternatives may be less appropriate, the conclusions are consistent.

In addition to statistical significance and basic fit statistics, the Bayesian Information Criterion Prime (BIC′) assists model selection. Raftery (1995) shows that BIC′ selects the more parsimonious model unless model fit is significantly

enhanced. Specifically, the greater negative (i.e., lower) value of BIC′ is preferred, with positive values of BIC′ indicating that a model is less preferred than a model with no independent variables.[16]

DEPENDENT VARIABLES

The source of poverty data is the Luxembourg Income Study (LIS). The LIS provides cross-nationally and historically comparable individual-level, nationally representative datasets. Cumulatively, LIS provides almost standardized data on household income – what LIS calls "Lissified," with similar variables across data sets, similar samples, and equal weights, which allows for population estimates. I utilize an updated version of my estimates of relative income poverty (Brady 2003a). The analysis includes observations from 18 nations with an average of 4.5 time points each, generating an unbalanced sample of 79-81 cases.[17] Unlike Moller and her colleagues, who focus on 25 to 59 year olds, I examine poverty in the entire population. Doing so includes children and the elderly, two groups that are much more vulnerable to being in poverty (Brady 2004; Smeeding et al. 2001).

This study focuses on what I call the Interval (HI) measure of poverty, which is the product of H and I (Brady 2003a). H is the headcount, the percent of the sample that is below 50 percent of the median income. I is the average depth of poverty, the difference between the median income in the sample and the mean income of the poor subsample. Hence, HI is not a rate but synthesizes the poverty rate and average depth of poverty into one index.[18] For comparison purposes, I also present the main models for H. As mentioned above, I analyze both state mediated (SM) poverty (after taxes and transfers) and poverty reduction (the rate of change between MG and SM poverty).[19]

WELFARE STATE VARIABLES

This study analyzes five features of the welfare state and three welfare state regimes.[20] All measures are in the present year, as lagged values and moving averages produce identical results. *Social Security Transfers as a % of GDP* includes state-sponsored cash transfers for sickness, old age pensions, family allowances, unemployment and workers' compensation, and other assistance (OECD 2000a). *Social Wage* is Kenworthy's (1999) measure of the percent of former income that an average worker would receive if work halted. This calculates the average income received over a period of several years through maternity leave, unemployment, disability assistance and other transfers for nonworking adults, as a proportion of the average production wage. Since it is calculated bi-annually on odd years, I used the preceding year for even years.[21] Neither of these two general measures incorporates state spending for services or in-kind benefits. *Public Health Spending as a % of Total Health Spending* summarizes all public spending on healthcare,

medicine, and public health and includes transfers and in-kind benefits and services (OECD 1998; see Huber and Stephens 2001). *Public Employment as a % of Civilian Employment* measures all civilian nonmilitary government employment as a percent of the working-age population (Cusack 2004).[22] *Military Spending as a % of GDP* includes all spending on military personnel, technology, equipment, weapons, and research (SIPRI 1999).

Beyond these specific welfare state features, I analyze the interaction of the most important features with two relevant contexts. First, I examine Esping-Anderson's (1990) schema of socialist, liberal, and conservative welfare state regimes. In addition, I code Luxembourg as socialist owing to its very encompassing programs, and code Spain as conservative due to its traditional family relations and authoritarian legacy. Hence, I include dichotomous variables for *conservative* and *socialist regimes*, while *liberal* is the reference. I also include the interaction of conservative and socialist regimes with the main welfare state features. Second, I investigate the welfare state's impact in the 1990s. I created a dummy variable for the *1990s period* and include interactions of that period with the main welfare-state features.

CONTROL VARIABLES

Following my earlier research, I control for the liberal economic model: economic growth, productivity, and unemployment (Brady 2003b). First, I measure *economic growth* as the current annual rate of change in gross domestic product (GDP) of purchasing power parity (PPP) dollars (OECD 1998). Second, I measure *productivity* as GDP in PPP per civilian employee utilizing comparable data on labor force participation (OECD 2000b). This productivity measure, which is lagged one year, proxies the level of economic development and human capital.[23] Third, I measure the supply and demand of workers as *unemployment* in the current year with standardized unemployment rates that permit cross-national and historical comparison of the percent of the labor force unemployed (OECD 2000c).

In addition, I control for two demographic variables. According to liberal economics, the welfare state may be indirectly counterproductive by increasing these, which are expected to increase poverty. First, each model controls for the *percentage of the population not in the labor force* (OECD 1998). This variable sums the percentage of the population that is retired or too young to participate in the labor force as well as adults who are not participating in the labor force.[24] Second, I included the *percentage of children in single mother families*.[25]

Results

DESCRIPTIVE STATISTICS

Table 1 presents the means and standard deviations for all variables. Unfortunately, data on both MG and SM poverty is not available for two cases (see fn. 17), so the poverty reduction analyses contain two fewer cases. Since the sample changes slightly, I present descriptive statistics for the independent variables for each dependent variable.

Additionally, one crucial finding deserves mention. The coefficient of variation is considerably larger for SM poverty than for MG poverty (Brady 2003a).[26] Thus, there is much more variation in poverty after taxes and transfers than before. While all countries generate poverty in the market, only some of those reduce the poverty. Thus, a crucial comparative-historical pattern emerges. With little variation, all nations produce poverty. Much greater variation exists in poverty after states use taxes and transfers. This pattern so fundamentally shapes the distribution of poverty that SM and MG poverty are not empirically associated. In fact, MG and SM poverty are not significantly, and surprisingly negatively, correlated ($r = -.20$ for HI, and $r = -.18$ for H). In RE models with MG poverty as the only independent variable, it is only weakly associated with SM poverty. As a result, an independent variable is not likely to have an indirect effect on SM poverty through MG poverty. Since MG poverty is weakly associated with SM poverty, any influence on MG poverty is less relevant to the more valid and reliable SM poverty. Coupling these facts with the greater validity of SM poverty, the essential variation occurs after taxes and transfers. To better understand how the welfare state affects poverty, scholars should focus on SM poverty.

Table 2 displays the models of state-mediated poverty interval (HI) and headcount (H) poverty on the five measures of the welfare state, and the economic and demographic controls. In the first full model for each dependent variable, I include all five features of the welfare state.[27] In the second preferred model, I include only the two most important features of the welfare state.

In the first SM poverty models, social security transfers, social wage, and public health spending significantly reduce poverty, while public employment and military spending are insignificant. Social security transfers and public health spending have the most robust significant effects. Social wage is significant and appears to have a larger standardized coefficient than social security transfers in the first SM HI model. However, in models without public employment and military spending (not shown), social wage has a smaller coefficient and t-score than social security transfers. As I explain below, social wage does not significantly affect poverty reduction. Though Table 2 provides some evidence that social wage reduces poverty, social wage's effects are less robust than the effects of social security transfers and public health spending. BIC′ very strongly prefers the second models for SM H and HI poverty.

Table 1. Descriptive Statistics (Means and Standard Deviations in Parentheses) Models of State-Mediated Poverty

	SM Poverty (*N*=81)	Poverty Reduction (*N*=79)
Interval (HI)	6.511	76.153
	(2.375)	(2.683)
Headcount (H)	9.710	68.915
	(3.426)	(12.854)
Social Security Transfers	15.201	15.099
	(4.519)	(4.529)
Social Wages	.277	.277
	(.129)	(.131)
Public Health Spending	76.661	76.713
	(11.869)	(12.014)
Public Employment	11.850	11.832
	(4.437)	(4.490)
Military Spending	2.641	2.683
	(1.250)	(1.237)
Economic Growth	2.149	2.138
	(3.612)	(3.644)
Productivity	45236.270	45338.950
	(7429.575)	(7476.835)
Unemployment	7.067	7.147
	(3.584)	(3.593)
% of Population Not in Labor Market	54.487	54.475
	(5.236)	(5.391)
% of Children Single Mother Families	10.384	10.346
	(4.596)	(4.645)
Conservative Regime	.309	.316
	(.465)	(10.835)
Socialist Regime	.346	.329
	(.479)	(.473)
Conservative × Social Security Transfers	4.966	5.092
	(7.579)	(7.633)
Socialist × Social Security Transfers	6.371	6.046
	(9.193)	(9.074)
Conservative × Public Health Spending	23.593	24.190
	(35.576)	(35.825)
Socialist × Public Health Spending	29.092	27.940
	(40.485)	(40.330)
1990s Period	.457	.456
	(.501)	(.501)
Social Security Transfers × 1990s	7.440	7.381
	(8.591)	(8.550)
Public Health Spending × 1990s	34.769	34.721
	(38.963)	(39.020)

Table 2. Random-Effects Models of Poverty on Welfare State and Control Variables in Rich Western Democracies, 1969–1997

	State Mediated				Poverty Reduction			
	Interval (HI)		Headcount (H)		Interval (HI)		Headcount (H)	
Welfare State								
Social Security	-.113*	-.151***	-.227***	-.286***	.689***	.784***	.982***	1.127***
Transfers	**-.194**	**-.258**	**-.299**	**-.377**	**.288**	**.328**	**.346**	**.397**
	(-1.88)	(-3.00)	(-3.17)	(-4.79)	(2.77)	(3.67)	(3.76)	(5.15)
Social Wage	-4.070*		-5.762**		7.590		11.522	
	-.199		**-.217**		**.092**		**.117**	
	(-1.94)		(-2.30)		(.88)		(1.27)	
Public Health	-.130***	-.124***	-.180***	-.169***	.527***	.531***	.624***	.628***
Spending	**-.583**	**-.559**	**-.622**	**-.587**	**.585**	**.588**	**.584**	**.587**
	(-4.54)	(-5.31)	(-5.28)	(-6.13)	(4.46)	(3.51)	(5.03)	(6.12)
Public	.059		.080		-.122		-.151	
Employment	**.100**		**.103**		**-.050**		**-.053**	
	(.93)		(1.04)		(-.46)		(-.55)	
Military	-.104		-.194		-.214		.0001	
Spending	**-.049**		**-.071**		**-.024**		**.000**	
	(-.51)		(-.80)		(-.25)		(.00)	
Economic								
Economic	-.077*	-.091**	-.143***	-.164***	.528***	.562***	.677***	.724***
Growth	**-.105**	**-.124**	**-.150**	**-.173**	**.178**	**.189**	**.192**	**.205**
	(-1.87)	(-2.26)	(-2.81)	(-3.25)	(3.16)	(3.51)	(3.89)	(4.29)

Productivity	-.00003	-.00003	-.00003	-.00003	.0001	.0001	.0001	.0001
	-.096	**-.088**	**-.067**	**-.055**	**.085**	**.088**	**.050**	**.049**
	(-1.45)	(-1.35)	(-1.06)	(-.89)	(1.26)	(1.35)	(.84)	(.86)
Unemployment	.036	.034	.061	.067	.235	.250	.211	.203
	.049	**.046**	**.064**	**.070**	**.078**	**.083**	**.070**	**.057**
	(.62)	(.63)	(.89)	(1.03)	(1.00)	(1.09)	(.85)	(.86)
Demographic								
Percent of Pop.	-.015	-.010	.019	.027	.144	.127	.029	.008
Not in Labor	**-.030**	**-.021**	**.029**	**.042**	**.071**	**.063**	**.012**	**.003**
Market	(-.32)	(-.25)	(.33)	(.52)	(.77)	(.74)	(.15)	(.04)
Percent of	.030	.056	.068	.107	.046	.012	..071	.013
Children with	**.053**	**.097**	**.091**	**.144**	**.020**	**.005**	**.026**	**.005**
Single Mothers	(.53)	(1.04)	(.99)	(1.63)	(.20)	(.05)	(.29)	(.06)
Constant	20.792***	19.636***	27.544***	25.387***	8.641	7.981	-4.120	-3.312
	(5.07)	(5.21)	(5.56)	(5.52)	(.51)	(.51)	(-.23)	(-.21)
BIC′	-58.819	-70.405	-87.768	-96.895	-62.542	-77.305	-82.236	-98.075
R^2 Within	.170	.114	.236	.171	.247	.240	.372	.354
R^2 Between	.783	.800	.865	.875	.819	.825	.860	.871
R^2 Overall	.719	.713	.803	.793	.739	.745	.800	.804
N	81	81	8181	79	79	79	79	

Note: For each independent variable, the unstandardized coefficient, **standardized coefficient,** and t-score in parentheses are displayed.

*** $p<.01$ ** $p<.05$ * $p<.10$

Hence, social security transfers and public health spending most effectively reduce SM poverty. These two welfare state features produce large reductions in SM poverty. A standard deviation increase in social security transfers reduces SM HI poverty by between .2 and .26 standard deviations, holding all other variables constant at their means. A standard deviation increase in social security transfers reduces SM H poverty by between .3 and .38 standard deviations. For a standard deviation increase in public health spending, SM HI poverty is expected to decline by between .56 and .58 standard deviations. For a standard deviation increase in public health spending, SM H poverty is expected to decline by between .59 and .62 standard deviations. The standardized coefficients for the significant welfare state features dwarf the standardized coefficients for the economic and demographic control variables. Notably, public health spending has the largest effect. Table 2 suggests that the welfare state has similar effects for H and HI poverty.

The nonsignificant effects of the other two features are noteworthy. Though insignificant, public employment has surprisingly positive t-scores near 1.0. Military spending never approaches statistical significance. Importantly, the nonfindings for public employment and military spending demonstrate that the effects of social security transfers and public health spending (and social wages) are not simply true by definition. If those significant effects occurred solely due to the relative definition of poverty, one would observe that all welfare programs reduce SM poverty. In fact, two measures do not affect poverty. Considering the control variables included, it is unlikely that the welfare state's effects are simply due to the relative poverty measure.

The SM poverty results do not support liberal economic claims. The welfare state, not economic performance, is the most important influence on poverty. While economic growth significantly reduces SM poverty, its standardized coefficient is less than a sixth as large as the combined effect of social security transfers and public health spending. Productivity and unemployment do not have significant effects, and their standardized coefficients would be small. Moreover, none of the welfare state measures directly increases poverty with significant positive effects. As well, the results suggest that the welfare state does not have indirect positive effects on poverty. The two demographic variables – the percent of the population not in the labor market and the percent of children in single mother families – are insignificant and their small standardized coefficients suggest they are much less important than the welfare state. Even if the welfare state increased unemployment, labor force nonparticipation, and single parenthood and undermined economic growth and productivity, the welfare state does not indirectly increase poverty. Since those economic and demographic variables do not significantly affect poverty, the welfare state cannot indirectly increase poverty.

MODELS OF POVERTY REDUCTION

The next four columns in Table 2 display models of poverty reduction. These analyses supplement the analyses of SM poverty and further scrutinize if the welfare state has nonspurious effects on poverty. Broadly, the results are consistent with the analyses of SM poverty. The welfare state is the largest determinant of poverty reduction, despite controlling for economic and demographic variables. Two welfare state features significantly increase poverty reduction: social security transfers and health spending. Again, health spending is most powerful. A standard deviation increase in social security transfers raises HI poverty reduction by between .29 and .33 standard deviations and H poverty reduction by between .35 and .4 standard deviations. A standard deviation increase in public health spending augments HI poverty reduction by about .59 standard deviations and H poverty reduction by about .58 standard deviations. These welfare state effects are similar across H and HI poverty reduction.

Importantly, social wages do not significantly affect poverty reduction. Thus, social wages have a less robust relationship with poverty. As with SM poverty, public employment and military spending do not affect poverty reduction. Given the results for both dependent variables, it is unlikely that these two features effectively reduce poverty. Welfare states most successfully reduce poverty by emphasizing social security transfers and public health spending. As with SM poverty, BIC′ very strongly prefers the second poverty reduction models.

The economic and demographic variables are far less relevant to poverty reduction. Economic growth significantly increases poverty reduction, but its standardized coefficient is much smaller than the significant aspects of the welfare state. While economic growth contributes to poverty reduction, the welfare state is far more important. Productivity, unemployment, and the two demographic variables do not significant affect poverty reduction.

INTERACTIONS WITH WELFARE STATE REGIMES AND THE 1990S PERIOD

Esping-Andersen (1990) and others contend that welfare states are of different types, where social policies function differently across regimes. Also, many scholars mark the 1990s as a period when the welfare state began to lose its effectiveness and became counterproductive. Tables 3 and 4 examine these issues. As in Table 2, all analyses control for the economic and demographic controls. From this point, I confine my presentation to HI poverty. Similar analyses of H poverty are available on request. Testing Esping-Andersen's claims, I first test if the socialist-conservative-liberal typology explains poverty; second, I examine if any inter-regime differences can be explained by the two main features of the welfare state; and third, I examine if the effects of these two features differ across regimes. Evaluating the 1990s, I first analyze if the 1990s had different poverty levels after

controlling for the main features of the welfare state; and second, I test whether the effects of these features differed in the 1990s. At the bottom of each table, I display the BIC′ statistics for the baseline models in Table 2. Comparing BIC′ provides more evidence of whether these analyses are preferred to the baseline models in Table 2.

Table 3 displays these analyses for SM poverty. The first model demonstrates that both conservative and socialist regimes have significantly less SM poverty than liberal regimes.

However, the next model shows that after including social security transfers and health spending, the effects of conservative and socialist regimes attenuate to non-significance. Thus, differences in these two welfare state features entirely account for any inter-regime differences in SM poverty. Model 3 shows that the effects of these welfare state features do not differ across regimes. None of the interaction terms is significant, and the main effects for social security transfers and health spending remain significantly negative. BIC′ strongly prefers Table 2's baseline model, with only social security transfers and health spending, over these three models. Thus, the results in Table 3 contradict Esping-Andersen's arguments. Levels of these welfare state features explain any differences between welfare state regimes in SM poverty, and these features do not have significantly different effects across regimes. SM poverty is best explained by simply examining social security transfers and health spending and neglecting welfare state regimes.

Table 3 shows that the 1990s did not experience significantly different SM poverty. The coefficient for the 1990s period is not significant. Further, the effects of social security transfers and health spending did not change in the 1990s. The coefficients for the interaction of 1990s period and the two features of the welfare state are not significant and are in opposite directions. Moreover, BIC′ prefers the baseline model in Table 2 – with the two welfare-state features and without the 1990s period effect and interaction terms. Thus, arguments that the 1990s ushered in a changed relationship between the welfare state and poverty are not supported.

Table 4 shows the results for poverty reduction are consistent with the results for SM poverty. Both conservative and socialist regimes have significantly more poverty reduction than liberal regimes. However, variation in social security transfers and health spending account for these inter-regime differences. The main effects for social security transfers and public health spending are significant while the regime effects are not. In model 3, the main effects for the two welfare state features continue to be significantly positive, and the regime effects continue to be insignificant. But, the interaction of social security transfers and socialist regime is significantly negative at the .10 level. Thus, some evidence exists that after controlling for the main effect of social security transfers, social security transfers are slightly less effective in socialist regimes. This surprising finding is not consistent with Esping-Andersen and should be taken with caution. Also, BIC′ very strongly prefers the baseline model in Table 2 over models 1–3.

Table 3. Random-Effects Models of State-Mediated Interval Poverty on Interaction Effects of Welfare State Regimes and 1990s Period with Social Security Transfers and Public Health Spending in Rich Western Democracies, 1969–1997 (*N*=81)

	Model 1	Model 2	Model 3	Model 4	Model 5
Socialist	-3.103***	.048	-4.438		
	(-3.02)	(.05)	(-.75)		
Conservative	-1.797*	-.282	3.927		
	(-1.66)	(-.35)	(.51)		
Social Security Transfers		-.151**	-.230*	-.152***	-.173***
		(-2.15)	(-1.78)	(-3.16)	(-3.17)
Public Health Spending		-.127***	-.122***	-.128***	-.112***
		(-4.87)	(-3.42)	(-5.89)	(-4.56)
Social Security Transfers × Socialist			.133		
			(1.00)		
Social Security Transfers × Conservative			-.084		
			(-.50)		
Public Health Spending × Socialist			.032		
			(.49)		
Public Health Spending × Conservative			-.032		
			(-.34)		
1990s Period				.157	1.858
				(.46)	(1.04)
Social Security Transfers × 1990s Period					.052
					(.74)
Public Health Spending × 1990s Period					-.034
					(-1.38)
BIC′	-9.556	-62.583	-50.503	-65.645	-60.214
R^2 Within	.046	.114	.128	.125	.132
R^2 Between	.457	.806	.832	.794	.807
R^2 Overall	.392	.717	.735	.712	.724

Baseline Model BIC′ = -70.405

Notes: For each independent variable, the unstandardized coefficient and t-score in parentheses are displayed. All models also include Economic Growth, Productivity, Unemployment, Percent of Population Not in Labor Market, Percent of Children in Single Mother Families, and a Constant. The Baseline Model includes the control variables, Social Security Transfers and Public Health Spending.

*** $p < .01$ ** $p < .05$ * $p < .10$

Table 4. Random-Effects Models of Interval Poverty Reduction on Interaction Effects of Welfare State Regimes and 1990s Period with Social Security Transfers and Public Health Spending in Rich Western Democracies, 1969–1997 (*N*=79)

	Model 1	Model 2	Model 3	Model 4	Model 5
Socialist	16.546***	4.703	32.14		
	(4.02)	(1.07)	(1.36)		
Conservative	7.125*	1.259	30.130		
	(1.65)	(.34)	(.98)		
Social Security Transfers		.602**	1.233**	.753***	.837***
		(2.08)	(2.45)	(3.58)	(3.46)
Public Health Spending		.459***	.512***	.545***	.500***
		(3.99)	(3.42)	(5.67)	(4.59)
Social Security Transfers × Socialist			-.937*		
			(-1.84)		
Social Security Transfers × Conservative			.200		
			(.30)		
Public Health Spending × Socialist			-.197		
			(-.74)		
Public Health Spending × Conservative			-.472		
			(-1.26)		
1990s Period				.765	-2.353
				(.56)	(-.34)
Social Security Transfers × 1990s					-.182
					(-.64)
Public Health Spending × 1990s					.079
					(.82)
BIC′-16.071	-65.948	-59.027	-75.579	-67.774	
R^2 Within	.228	.250	.310	.230	.236
R^2 Between	.531	.817	.853	.837	.836
R^2 Overall	.446	.736	.769	.753	.756
Baseline Model BIC′ = -77.305					

Notes: For each independent variable, the unstandardized coefficient and t-score in parentheses are displayed. All models also include Economic Growth, Productivity, Unemployment, Percent of Population Not in Labor Market, Percent of Children in Single Mother Families, and a Constant. The Baseline Model includes the control variables and Social Security Transfers and Public Health Spending.

*** $p < .01$ ** $p < .05$ * $p < .10$

The 1990s did not experience significantly different poverty reduction than earlier years, as the coefficient for 1990s period is not significant in model 4. Further, the effects of the welfare state did not change in the 1990s as interaction terms are not significant in model 5. In both models 4 and 5, the main effects of social security transfers and public health spending are the only significant effects. Finally, BIC′ prefers the baseline model in Table 2 over both models.

Sensitivity Analyses

Table 5 scrutinizes the unique dynamics created with the inclusion of the U.S. in the sample. The U.S. has the least generous welfare state and the most poverty, and it is possible that the finding of a negative relationship depended on these anomalous cases. Though the random-effects models control for cross-national differences, readers may be concerned that the U.S. cases bias the results. In this table, I first include a dummy variable for the U.S. cases and second replicate the analyses after dropping the U.S. cases.

The results of Table 5 are broadly consistent with the earlier tables. The most important causes of SM poverty and poverty reduction remain the two features of the welfare state. The effects of social security transfers are similar and public health spending are slightly smaller, but both remain significant. While economic growth has slightly larger and more significant effects after dropping the U.S. cases, it is still less important than the welfare state. Also, productivity has statistically significant effects after dropping the U.S. cases. But, its coefficient is similar to those in Table 2 – much smaller than the effects of the welfare state variables. Finally, the U.S. dummy variable only nearly significantly affects poverty reduction. Overall, these results suggest that the analyses in the prior tables are not biased by the U.S. cases. The conclusions are robust even after controlling for the idiosyncrasies of the U.S.

Discussion

This study investigates the welfare state's relationship with poverty in 18 rich Western democracies with multiple measures of the welfare state and poverty, and economic and demographic controls. Consistent with others, I provide evidence that the welfare state effectively reduces poverty (Kenworthy 1999; Moller et al. 2003). However, this study advances our understanding by addressing five limitations of past research. First, this paper incorporates the liberal economic critique by controlling for economic performance and demographics. Second, this paper evaluates five specific features of the welfare state to compare their precise effects on poverty. Third, I examine the impact of welfare state regimes and effects of the key welfare state features across regimes. Fourth, this study expands the

Table 5. Random-Effects Models of Interval Poverty on Social Security Transfers, Public Health Spending and Control Variables in Rich Western Democracies With and Without the U.S., 1969-1997

	State Mediated		Poverty Reduction	
	With U.S. Dummy	Dropping U.S.	With U.S. Dummy	Dropping U.S.
Welfare State				
Social Security Transfers	-.151***	-.163***	.779***	.819***
	(-2.93)	(-3.14)	(3.61)	(3.76)
Public Health Spending	-.103***	-.107***	.376***	.399***
	(-3.12)	(-3.24)	(2.76)	(2.90)
Economic				
Economic Growth	-.090**	-.115***	.567***	.662***
	(-2.25)	(-2.71)	(3.59)	(3.92)
Productivity	-.00003	-.00004*	.0002	.0002*
	(-1.54)	(-1.67)	(1.65)	(1.74)
Unemployment	.051	.059	.128	.094
	(.87)	(.99)	(.53)	(.38)
Demographic				
Percent of Population Not in Labor Market	-.013	.000001	.139	.101
	(-.31)	(-.00)(	.82)	(.58)
Percent of Children in Single Mother Families	.039	.038	.114	.131
	(.69)	(.65)	(.50)	(.55)
U.S. Dummy	1.601		-11.649	
	(.91)		(-1.59)	
Constant	18.317***	18.289***	18.446	17.494
	(4.52)	(4.47)	(1.11)	(1.04)
BIC′	-65.588	-22.427	-70.828	-30.498
R^2 Within	.119	.164	.263	.292
R^2 Between	.800	.638	.819	.710
R^2 Overall	.712	.504	.738	.564
N	81	75	79	73

Note: For each independent variable, the unstandardized coefficient and t-score in parentheses are displayed.

*** $p < .01$ ** $p < .05$ * $p < .10$

comparative historical scope of inquiry. Fifth, the analysis uses more valid and reliable measures of poverty. I now review the study's evidence on each.

First, this study does not support liberal economics. Economic performance, measured by economic growth, unemployment, and productivity, does not have larger effects than the welfare state. In fact, only economic growth significantly influences poverty. However, its standardized coefficient is far smaller than the significant features of the welfare state. Productivity and unemployment do not have significant effects. Even if these variables were significant, their standardized coefficients would be far smaller than the key features of the welfare state. Simply put, this study challenges liberal economic claims that economic performance is more important than the welfare state to reducing poverty.

This study provides no evidence that welfare state generosity counterproductively increases poverty. None of the welfare state measures significant increases SM poverty or significantly undermines poverty reduction. So, the welfare state does not directly increase poverty through dependency, deeper poverty, or longer poverty spells (Sanders 1990). The results also challenge claims of any indirect poverty-increasing effects of the welfare state. Even if welfare generosity increases unemployment, single parenthood, and labor force nonparticipation, none of these three has a significant effect on SM poverty or poverty reduction. Again, if these three were significant, their standardized coefficients would be far smaller than the key features of the welfare state. Since research on welfare disincentives has found them to have very small effects, it would be necessary for these three to have large effects for the welfare state to counterproductively increase poverty.

It is important to recognize that the evidence for welfare disincentives remains highly debatable. Most studies have been done solely on the U.S. Studies of other industrialized democracies conclude that welfare generosity does not impede economic performance (Blank 1995). In my data, there is little prima facie evidence that welfare generosity undermines economic performance or increases labor force nonparticipation and single parenthood.[28] These findings, along with the growing body of literature that is skeptical of the liberal economics of poverty (Brady 2003b), raise questions about its prominent position in debates about poverty.

Second, two features of the welfare state are most influential in explaining poverty. As a general measure, social security transfers are more salient than social wages. While the effects of social wages are significant for SM poverty and insignificant for poverty reduction, the traditional social security transfers have consistently significant effects and the second largest effects in the model. Social wages focus only on the working population, while transfers are essential to the elderly, children, and those not in the labor force. Since these groups are much more vulnerable to poverty, generous transfers are essential for integrating them into society (Brady 2004). Though social wages reduce inequality by stabilizing workers' incomes through maternity leave and unemployment compensation, transfers integrate those that otherwise would be socially excluded. This study

suggests that social security transfers have greater predictive validity for poverty. This is surprising since so much has been written about the purported theoretical superiority of social wages and decommodification compared to traditional measures like social security transfers (Esping-Andersen 1990; Korpi and Palme 1998).

Public health spending has the largest effect of the welfare state features, and in fact, of any variable. Though more research is needed to examine why it has such large effects, I can offer three explanations. First, health spending may have the largest effects because its denominator (total health spending) is far more precise than the denominator for social security transfers and military spending (GDP). In turn, health spending is measured with much less measurement error than these two. Still, though, health spending is comparatively more effective than social wages and public employment, since their denominators are equally precise (total employment and average wages).

Second, health spending captures the redistributiveness of the welfare state, a concept for which there are few good measures. Because state-sponsored health care is expensive, it requires larger government budgets and higher taxes on households above the median. The higher taxes and large government budgets needed to finance these services redistribute income and lower poverty after taxes and transfers (Blank 1997; Huber and Stephens 2001; Korpi and Palme 1998).[29] By providing services to low-income households, public health care effectively redistributes resources across the entire income distribution and in turn reduces poverty. While transfers are contingent on previous employment income, health services are granted universally as a citizenship right in most welfare states. As Huber and Stephens (2000:324) argue, "The redistributive effect of the free or subsidized provision of public services and goods should differ from, and be greater than, the redistributive effect of transfer payments."

Third, this measure quantitatively tracks fundamental differences between encompassing and minimalist welfare states. Almost all welfare states publicly cover over 75% of total health costs. But, the minimalist, high poverty U.S. provides less than 50%. This measure may capture the substantive difference between liberal, conservative and socialist regimes. Health spending might be a quantitative means to understand the qualitative differences between encompassing and minimalist welfare states (Esping-Andersen 1990; Korpi and Palme 1998). Importantly, however, the effect of health spending does not merely mask differences between welfare state regimes or between the US and other nations. If that was the case, health spending would not have significant effects in Tables 3, 4, and 5. This variable measures unique variation in welfare state generosity and does not simply proxy qualitative differences between countries. While these three explanations are plausible, more research is obviously needed to explore the specific causal processes.

In contrast to the two key features, public employment and military spending do not significantly affect poverty. After controlling for welfare state generosity

generally (with the other features), the analysis provides no evidence that countries could expect less poverty to result from increased public employment or military spending. The non-significance of public employment challenges arguments that it is the most important feature of the welfare state (Huber and Stephens 2001). Though not significant, public employment has positive t-scores near 1.0 for SM poverty. Interestingly, Tomaskovic-Devey (1991) found that public employment was positively associated with official poverty in U.S. counties. Tomaskovic-Devey's and this study's findings are inconsistent with the view that public employment is an effective antipoverty strategy. In turn, more research is needed to scrutinize how public employment affects poverty.

Third, there is no evidence that welfare state regimes have independent effects on poverty or that social policies have different effects across regimes. While regime differences in poverty initially appear, all of the regime differences can be explained by social security transfers and public health spending.[30] Since the regime differences attenuate to non-significance after including the welfare state features, the welfare state features explain variation in poverty, not historically institutionalized differences across welfare state regimes (contrast with fn. 3). Also, since the interactions of the welfare state features and regimes are mostly insignificant, there is little evidence that social policies operate differently across regimes (contrast with fn. 6 and 7). Only one of the interaction effects is significant, and that was the unexpected finding that social security transfers may be less effective in socialist regimes. Moreover, the simpler models in Table 2 are consistently preferred over the more complicated models in Tables 3 and 4. Ultimately, this study is skeptical of the value of Esping-Anderson's typology for understanding poverty. Given the influence of Esping-Anderson and the tradition of typologies, these non-findings are quite surprising.

Fourth, this study expands the comparative and historical scope of inquiry. On one level, this study expands beyond the samples of other recent sociological analyses. Given the robustness of earlier findings to this larger sample, this study provides even stronger evidence that welfare state generosity has negative effects on poverty. On a second level, this study provides the first scrutiny of the 1990s period. For both SM poverty and poverty reduction, the 1990s period did not have significantly different patterns. Also, the two key features of the welfare state did not have different effects in the 1990s. Again, the models with the 1990s period and related interactions are less preferred than the simpler models in Table 2. These non-findings challenge the view that the 1990s ushered in a different period for welfare states, and particularly social democracies. In the 1990s, generous welfare states continued to reduce poverty effectively.

Fifth, this study extends beyond recent research by using more valid and reliable measures of poverty. I use a relative measure of poverty, which is an advance beyond the problematic official U.S. measure. Also, this study contributes to recent research in three ways. First, I incorporate the depth of poverty. The significance and size of the effects of the welfare state and other independent

variables were similar across HI and H poverty. Second, I concentrate on poverty after taxes and transfers (SM). Third, I supplement the analysis by also examining poverty reduction. Unlike similar recent research, this study includes the entire population. Since the elderly and children are much more vulnerable to being poor than working-age adults, it is essential to incorporate the entire population to fully observe the welfare state's effects on poverty (Brady 2004). By advancing poverty measurement in these ways, this study provides novel evidence on the relationship between the welfare state and poverty.

In sum, the welfare state is a generalizable, stable, and essential poverty-reduction mechanism. The many vocal critics of the welfare state are premature, and probably mistaken, in claiming that the welfare state is no longer effective at reducing poverty. Regardless of the era or welfare state regime, social security transfers and health spending are robust as the main predictors of poverty. Sociological research on poverty should recognize the central role of the welfare state in explaining poverty in rich Western democracies. The welfare state should feature prominently in theories of poverty.

Notes

1. As one of the most visible welfare state advocates (and occasionally one of the more persuasive critics of liberal economics), Blank's ambiguities should be noted. Three years prior, she argued, "Economic growth is not likely to be effective in the near future in reducing poverty" (1997:221); "Poverty is harder to address through broad-based economic growth policies now than thirty years ago" (222); and, "Changes in the jobs available to less-skilled workers have made those jobs less effective in helping people escape poverty" (222). Moreover, she documents welfare's clear success (Chapter 4): "All of this evidence supports the view that cash transfers generally improve the economic well-being of their recipients" (1997:138); and "Many of our antipoverty efforts have accomplished exactly what they set out to accomplish" (1997:291). At the same time, Blank is skeptical that the U.S. will ever have a more generous welfare state. As a result, she proposes a three-tiered system of narrow, means-tested, targeted programs that almost exclusively rely on the market. Blank (1997:291) "propose[s] a reconfigured system of public assistance that moves us away from large-scale cash support and toward a more work-focused system." While in 1994, she (204) noted, "At best, employment programs can serve as one piece of a larger overall strategy to fight poverty," her policy recommendations then (1994:199) and in what was labeled "A New Agenda For Fighting Poverty" in 1997, concentrate on a strong macroeconomy, improving the human capital of children, job training, work incentives for welfare beneficiaries, tax relief, employment services, and targeting youth in high-unemployment neighborhoods. In this research (except Hanratty and Blank 1992), Blank used the absolute official U.S. measure of poverty. However, Blank also was a member of the NRC Panel that proposed abandoning the official measure and replacing it with a relative measure (Citro and Michael 1995).

2. Welfare generosity has only been linked to very small effects on single parenthood, unemployment, and labor force nonparticipation (Lichter et al. 1997). Hence, it will take large effects of these variables to result in large indirect positive effects on poverty. For example, since welfare generosity has very small effects on single parenthood, single parenthood needs to have large effects on poverty for welfare generosity to be counterproductive.

3. Esping-Andersen writes specifically, "The existence of a social program and the amount of money spent on it may be less important than what it does" (1990:2), "Expenditures are epiphenomenal to the theoretical substance of welfare states" (1990:19), and, "Welfare states may be equally large or comprehensive, but with entirely different effects on social structure" (1990:58).

4. For example, Kenworthy (1999) does not have enough information to compare different features in one model with only a cross-section of 15 countries at one time. Instead, he analyzes social spending, social wages, and decommodification in separate models. We do not know if each of these reduces poverty since they are correlated. When he finds a significant effect of social wages, this could be because it proxies general levels of welfare generosity. By including all five in the same model, one can assess the effect of social wages while controlling for the other features and, in turn, general levels of welfare generosity.

5. The literature has experienced a proliferation of institutional typologies, including Korpi and Palme's (1998) targeting versus universalism; Huber and Stephens's (2001) social democratic, Christian democratic, and liberal; and classic distinctions between residual and institutionalized welfare states and civil, political, and social rights. Across typologies, there is actually a great deal in common with Esping-Andersen's schema.

6. Esping-Andersen (1990: 76–77) argues, "In other words, if we are willing to accept that welfare states play an important role in the patterning of social stratification . . .we find that it is misleading to compare welfare states as merely 'more' or 'less' egalitarian. We discover, instead, entirely different logics of social stratification embedded in welfare-state construction." Later, he (1999:16–17) argues, "When also the welfare state is residual and social protection highly privatized . . . market inequalities are unlikely to be affected much by social redistribution… .Clearly, where also the welfare state is strongly universalistic, the distribution of resources and life chances should be additionally egalitarian, creating homogeneity not only within the working class, but also between the social classes." Finally, he (1999:32) argues "The Scandinavian social democrats have now for decades defined their target as the equalization of social resources, a multidimensional across-the-board programmatic effort to level social capital; in contrast, the liberal Anglo-Saxon approach is selective, singling out disadvantaged groups for 'sponsored mobility'.. . . Egalitarianism is a derivative consequence of what is and always was the foremost objective behind social policy, namely, insuring the population against social risks. How, to what degree, and which kinds of risks are pooled collectively will certainly have immediate – but none the less derivative – consequences for poverty, income distribution, economic opportunities and, more generally, for social solidarities and stratification outcomes."

7. Esping-Andersen (1990:2) explains, "the concept of the welfare state is too narrowly associated with the conventional social-amelioration policies . . .contemporary advanced nations cluster not only in terms of how their traditional social-welfare policies are constructed, but also in terms of how these influence employment and general social structure. To talk of 'a regime' is to denote the fact that in the relation between state and economy a complex of legal and organizational features are systematically interwoven." See also the quotes in fn. 3.

8. Smeeding et al. (2001:162) explain, "The United States has a long tradition of measuring income poverty and weighing the effectiveness of government policies aimed at poverty reduction. Although this analysis has been valuable to policymakers, it rests on an inherently parochial foundation, for it is based on the experiences of only one nation."

9. Blank (1997:139) explains, "Understanding that cash assistance programs may make families less poor without necessarily removing them from poverty highlights a problem with

how we evaluate these programs. Expansions in cash assistance over time could make many poor families substantially better off, but as long as this does not actually move them above the poverty line, this improvement will not be reflected in reduced poverty rates. Similarly, reductions in cash assistance will have no effect on poverty if they make already-poor families even poorer. Thus, changes in poverty rates may seriously understate the impact of changes in cash transfers on the well-being of poor families."

10. Smeeding et al. (2001:165) write, "The best current definition is disposable cash and noncash income (that is, money income minus direct income and payroll taxes, and including all cash and near-cash transfers, such as food stamps and cash housing allowances, and refundable tax credits, such as the Earned Income Tax Credit)."

11. Wright (2003:3-4) explains, "The state plays a pivotal role in establishing the very possibility of markets through the coercive enforcement of property rights that directly impact on the nature of market-generated distributions . . . In all sorts of ways the state is involved in regulating aspects of market exchanges and production – from health and safety rules, to credentialing requirements in many labor markets, to labor laws – that impact on the income distribution process. It is therefore misleading to talk about a clear distinction between pure 'distribution' of income and a process of politically shaped 'redistribution." Since the state is *always* involved in the market, it may be problematic to claim to measure income *before* state mediation (i.e., pretax and pretransfers).

12. Potentially, poverty reduction might examine if the welfare state is efficient as well as effective. Imagine two nations A and B. Imagine that the headcount rate of SM poverty is 20% in A and 15% in B, and that social security transfers are 5% of GDP in A and 15% of GDP in B. This would result in a negative association between social security transfers and SM poverty, and we could infer that transfers are effective. However, do transfers efficiently reduce SM poverty? B spends three times as much as A on transfers, yet has only 25% less poverty. Further, imagine the MG headcount is 30% in A and 17% in B, so poverty reduction would be 66.6% in A and only 13.3% in B. In this scenario, transfers would not be positively associated with poverty reduction. Thus, social security transfers would not be an efficient poverty reduction mechanism and the results for SM poverty alone would not reveal this valuable information.

13. Fixed effects (FE) models allow the independent variables to explain the historical variation *within* nations while removing the variation between nations. FE models perform OLS after including nation-specific constant terms and subtracting all variables from their nation-specific means (Alderson and Nielsen 1999; Hsiao 2003). Between-effects (BE) models allow the independent variables to explain the between nation variation while removing the variation within nations. The RE model is the matrix weighted average of the within-nations (FE) and between-nations (BE) estimators (Greene 1990:488; Hsiao 2003). RE models include a country-specific error term in addition to the general error term and subtract a smaller portion of the nation-specific means (Alderson and Nielsen 1999). Last, cross-national differences in poverty and the welfare state are not constant over time, but relative stability exists in the cross-national ranking of nations for these variables – hence, FE models effectively mask this crucial variation (see Beck and Katz 2001:492). As Beck and Katz (2001:487) explain, "Fixed effects are problematic in the presence of [the] temporally stable regressors." Further, understanding historical trends in poverty is essential as well, and unfortunately, BE models would mask this essential within-nation variation.

14. Recently, methodologists have demonstrated that the Bayesian Information Criterion (BIC′) can be used to select between techniques (Beck and Katz 2001; Teachman et al. 2001).

BIC′ very strongly prefers RE over FE models. Hausman's (1978) chi-square test accepts RE and does not require FE models.

15. FE models consume a degree of freedom for every N. In this analysis, with 78 cases and 18 N's (average of 4.33 T's), FE models produce inefficient estimates (Beck and Katz 2001; Greene 1990; Hsiao 2003;). Nickell (1981) also shows that FE models may produce biased estimates when N far exceeds T. Population average (PA) models are problematic in small samples since they are a maximum likelihood estimator (MLE), which is designed for much larger samples. Another alternative is to use techniques with heteroskedasticity-consistent standard errors, for example, OLS or RE with robust clustered errors (Moller et al. 2003). Importantly, however, Long and Ervin (2000) show that the popular Huber-White-Sandwich (HC0) estimator produces incorrect inferences in samples with less than 250 cases. The alternative HC3, which works well even in samples as small as 25, does not allow for the clustering of errors within countries – the principal reason for using HC0. Finally, Beck (2001; and Beck and Katz 1995) emphasizes that OLS with panel-corrected standard errors should not be used when there are less than 10 or 15 Ts. Importantly, Beck (2001) draws a sharp distinction between time-series-cross-section data with more Ts than Ns and panel data with more Ns than Ts. Beck (274) explains, "Panel methods [e.g., RE] are designed for and work well with very small Ts (three, or perhaps even two)."

16. Raftery (1995) shows that a BIC′ difference of 0–2 offers weak evidence for model selection, 2-6 offers positive evidence, 6-10 offers strong evidence, and greater than 10 offers very strong evidence. Of course, I do not solely rely on BIC′ but consider it along with the significance and size of coefficients (e.g., Manza and Brooks 1999).

17. My updated data include observations for Australia (4), Austria (2), Belgium (4), Canada (7), Denmark (4), Finland (3), France (5), Germany (7), Ireland (4), Italy (3), Luxembourg (3), Netherlands (4), Norway (4), Spain (2), Sweden (6), Switzerland (2), U.K. (7), U.S. (7). For the Austria cases, data on income before taxes and transfers (MG) was unavailable. For the U.S. in 1969, data on income after taxes and transfers (SM) was unavailable. Therefore, my sample is 81 for SM poverty and 79 for poverty reduction. This list represents all cases of rich Western democracies available in the LIS (up to 1997) available as of August 2004. Unfortunately, some variables are not available after 1997.

18. Though HI has theoretical and methodological advantages over the traditional H, the two are highly correlated (regardless of whether one uses my or the official LIS estimates of H) (Brady 2003a).

19. SM poverty is calculated from the LIS variable DPI. Market generated (MG) poverty (before taxes and transfers) is calculated from all sources of income before government taxes and transfers (Brady 2003a). Poverty reduction is calculated as PR = (MG-SM/MG)*100. Poverty reduction as a dependent variable produces similar results to having SM poverty as the dependent variable with MG poverty included as a control. Models of poverty reduction, however, are more parsimonious.

20. Data for many of the independent variables were proximately from Huber et al. (2004). Also, I added Luxembourg and Spain to the dataset. Solely because sufficient data are unavailable, I do not analyze tax progressivity as a feature of the welfare state. In another piece, I examined current government receipts as a % of GDP as a measure of state revenue and found results consistent with this study (Brady 2003b).

21. For Luxembourg, the social wage measures were unavailable, so I constructed estimates

on my own. Dropping those cases does not change the results.

22. For Spain and Luxembourg, Cusack's measure was unavailable. So I substituted data on general government services as percent of civilian employment from the OECD (2000a). The two measures are highly correlated. Dropping those cases does not change the results.

23. In previous work, I justify the use of productivity (Brady 2003b). I acknowledge productivity is not a perfect proxy for human capital. Unfortunately, valid and reliable pooled time series data on educational attainment are simply not available. Still, however, productivity effectively controls for the level of economic development. This is typically done with GDP per capita, while my measure of productivity is GDP per employee. The two are highly correlated, and productivity is slightly more correlated with poverty. I have shown that the results are robust while only including productivity or economic growth in the model (Brady 2003b). Also, I substituted GDP per capita for productivity, and the conclusions are identical (with or without economic growth in the model, available on request).

24. In analyses available upon request, I decomposed this variable and analyzed the percentage of the population over 65, the percentage of the population children, and total and female labor participation. Including these variables instead of this summary measure does not alter any of the conclusions. Solely to preserve degrees of freedom, I rely on this more parsimonious summary measure.

25. This variable is based on the LIS data and is calculated by the LIS administrators (see www.lisproject.org).

26. The coefficients of variation are MG H = .134, MG HI = .169, SM H = .353, and SM HI = .365.

27. Tests for collinearity among the welfare state features reveal that it is not a serious problem. The correlations with social security transfers are .45 with social wages, .28 with public health spending, .06 public employment, and -.24 with military spending. Social wages correlates with health spending .32, with public employment .21, and with military spending -.29. Health spending correlates with public employment .37 and with military spending -.34. Public employment and military spending correlate -.04. In analyses available upon request, I estimated these models with one feature of the welfare state at a time, and the conclusions are consistent.

28. Economic growth correlates with social security transfers (.07), social wages (.24), health spending (.01), public employment (-.17), and military spending (-.26). Productivity correlates with social security transfers (-.28), social wages (-.29), health spending (-.26), public employment (-.10), and military spending (.10). Unemployment correlates with social security transfers (.11), social wages (.10), health spending (-.15), public employment (-.21) and military spending (-.14). The percent of the population not in the labor market correlates with social security transfers (.08), social wages (-.09), health spending (.001), public employment (-.59), and military spending (-.02). The percent of children in single mother families correlates with social security transfers (-.09), social wages (-.08), health spending (-.42), public employment (.31), and military spending (.27).

29. Some evidence of this can be shown by including government receipts as a % of GDP in the models of Table 2. Receipts is significant if health spending is not in the model. However, if health spending is in the model, receipts attenuates to non-significance, while health spending is significant. Thus, health spending may reflect the larger government budgets and higher taxation needed to finance expensive welfare state services. Unlike

simply measuring the size of the government budget however, health spending more closely measures redistributiveness.

30. Unlike the public health spending measure, the poverty measures do not incorporate in-kind benefits. Hence, it is possible that the public health spending * welfare regime interactions may be less appropriate for testing Esping-Andersen. However, this concern does not apply to social security transfers.

References

Alderson, Arthur S,. and Francois Nielsen. 2002. "Globalization and the Great U-Turn." *American Journal of Sociology* 107:1244–99.

———. 1999. "Income Inequality, Development and Dualism: A Reconsideration." *American Sociological Review* 64:606–31.

Alesina, Alberto, and Robert Perotti. 1997. "The Welfare State and Competitiveness." *American Economic Review* 87:921–39.

Atkinson, Anthony B. 1987. "On the Measurement of Poverty." *Econometrica* 55:749–64.

Bane, Mary Jo, and David T. Ellwood. 1994. *Welfare Realities*. Harvard University Press.

Banfield, Edward C. 1970. *The Unheavenly City*. Little, Brown and Company.

Beck, Nathaniel. 2001. "Time Series-Cross Section Data: What Have We Learned in the Past Few Years." *Annual Review of Political Science* 4:271–93.

Beck, Nathaniel, and Jonathan N. Katz. 2001. "Throwing Out the Baby with the Bath Water." *International Organization* 55:487–95.

———. 1996. "Nuisance Over Substance." *Political Analysis* 6:1–36.

Bergmann, Barbara R. 1997. *Saving Our Children From Poverty*. Russell Sage Foundation.

Bernstein, Nina. 1999. "Giuliani Proclaims Success on Pledge to Curb Welfare." *The New York Times* (12 December):A1, A22.

Betson, David M., and Jennifer L. Warlick. 1998. "Alternative Historical Trends in Poverty." *American Economic Review* 88:348–51.

Bhargava, Alok, and J.D. Sargan. 1983. "Estimating Dynamic Random Effects Models from Panel Data Covering Short Time Periods." *Econometrica* 51:1635–60.

Blank, Rebecca M. 2000. "Fighting Poverty: Lessons From Recent U.S. History." *Journal of Economic Perspectives* 14:3–19.

———. 1997. *It Takes a Nation*. Princeton University Press.

———. (ed.). 1995. *Social Protection Versus Economic Flexibility: Is There a Tradeoff?* University of Chicago Press.

———. 1994. "The Employment Strategy: Public Policies to Increase Work and Earnings." Pp. 168–204 in *Confronting Poverty*, edited by Sheldon H. Danziger, Gary D. Sandefur and Daniel H. Weinberg. Harvard University Press.

Brady, David. 2004. "Reconsidering the Divergence Between Elderly, Child, and Overall Poverty." *Research on Aging* 26(5):487–510.

———. 2003a. "Rethinking the Sociological Measurement of Poverty." *Social Forces* 81:715–52.

———. 2003b. "The Poverty of Liberal Economics." *Socio-Economic Review* 1(3):369–409.

———. 2003c. "The Politics of Poverty: Left Political Institutions, the Welfare State and Poverty." *Social Forces* 82:557–88.

Burtless, Gary. 1994. "Public Spending on the Poor: Historical Trends and Economic Limits." Pp. 51–84 in *Confronting Poverty*, edited by Sheldon H. Danziger, Gary D. Sandefur, and Daniel H. Weinberg. Russell Sage Foundation.

Burtless, Gary, and Timothy M. Smeeding. 2001. "The Level, Trend, and Composition of Poverty." Pp. 27–68 in *Understanding Poverty*, edited by Sheldon Danziger and Robert Haveman. Russell Sage Foundation and Harvard University Press.

Cantillion, Bea. 1997. "The Challenge of Poverty and Exclusion." Pp. 115–166 in *Social Policy Studies* No. 21: "Family, Market, and Community: Equity and Efficiency in Social Policy." OECD.

Casper, Lynne M., Sara S. McLanahan and Irwin Garfinkel. 1994. "The Gender-Poverty Gap: What We Can Learn From Other Countries." *American Sociological Review* 59:594–605.

Christopher, Karen, Paula England, Timothy M. Smeeding, and Katherine Ross. 2002. "The Gender Gap in Poverty in Modern Nations: Single Motherhood, the Market, and the State." *Sociological Perspectives* 45:219–242.

Citro, Constance, and Robert T. Michael. 1995. *Measuring Poverty: A New Approach*. National Academy Press.

Clayton, Richard, and Jonus Pontusson. 1998. "Welfare State Retrenchment Revisited: Entitlement Cuts, Public Sector Restructuring, and Inegalitarian Trends in Advanced Capitalist Societies." *World Politics* 51:67–98.

Conley, Dalton, and Kristen W. Springer. 2001. "Welfare State and Infant Mortality." *American Journal of Sociology* 107:768–807.

Currie, Janet, and Aaron Yelowitz. 2000. "Health Insurance and Less Skilled Workers." Pp. 233–61 in *Finding Jobs*, edited by David E. Card and Rebecca M. Blank. Russell Sage Foundation.

Cusack, Thomas R. 2004. Data on public employment and wages for 21 OECD countries, Science Center Berlin, May.

Danziger, Sheldon D., Robert H. Haveman, and Robert Plotnik. 1981. "How Income Transfers Affect Work, Savings and Income Distribution." *Journal of Economic Literature* 19:975–1028.

Danziger, Sheldon H,. and Daniel H. Weinberg. 1994. "The Historical Record: Trends in Family Income, Inequality, and Poverty." Pp. 18–50 in *Confronting Poverty*, edited by Sheldon H. Danziger, Gary D. Sandefur, and Daniel H. Weinberg. Russell Sage Foundation.

Darity, William A. Jr, and Samuel L. Myers, Jr. 1987. "Do Transfer Payments Keep the Poor in Poverty?" *American Economic Review* 77:216–22.

DeFina, Robert H., and Kishor Thanawala. 2001. "The Impact of Taxes and Transfers on Alternative Poverty Indexes." *Review of Social Economy* 59:395–416.

Ellwood, David T., and Lawrence Summers. 1986. "Poverty in America: Is Welfare the Answer or the Problem." Pp. 78–105 in *Fighting Poverty*, edited by Sheldon Danziger and Daniel Weinberg. Harvard University Press.

Ellwood, David T., and Elisabeth D. Welty. 2000. "Public Service Employment and Mandatory Work: A Policy Whose Time Has Come and Gone and Come Again?" Pp. 299–372 in *Finding Jobs*, edited by David E. Card and Rebecca M. Blank. Russell Sage Foundation.

Esping-Andersen, Gosta. 2003. "Why No Socialism Anywhere? A Reply to Alex Hicks and Lane Kenworthy." *Socio-Economic Review* 1:63–70.

———. 1999. *Social Foundations of Postindustrial Economies*. Oxford University Press.

———. 1996. *Welfare States in Transition*. Sage.

———. 1990. *The Three Worlds of Welfare Capitalism*. Princeton University Press.

Foster, James E. 1998. "What is Poverty and Who are the Poor? Redefinition for the United States in the 1990s: Absolute Versus Relative Poverty." *American Economic Review* 88:335–41.

Freeman, Richard B. 2001. "The Rising Tide Lifts…" Pp. 97–126 in *Understanding Poverty*, edited by Sheldon Danziger and Robert Haveman. Russell Sage Foundation and Harvard University Press.

———. 1999. *The New Inequality*. Beacon Press.

———. 1995. "The Large Welfare State as a System." *American Economic Review* 85:16–21.

Freeman, Richard B., Robert Topel, and Birgitta Swedenborg. 1997. *The Welfare State in Transition: Reforming the Swedish Model*. University of Chicago Press.

Gans, Herbert. 1995. *The War Against the Poor*. Basic Books.

Gilbert, Neil. 2002. *Transformation of the Welfare State.* Oxford University Press.

Gilder, George. 1981. *Wealth and Poverty*. Basic Books.

Glazer, Nathan. 1988. *The Limits of Social Policy*. Harvard University Press.

Gordon, David M. 1972. *Theories of Poverty and Underemployment*. Lexington Books.

Gornick, Janet C., and Jerry A. Jacobs. 1998. "Gender, the Welfare State, and Public Employment: A Comparative Study of Seven Industrialized Countries." *American Sociological Review* 63:688–710.

Greene, William H. 1990. *Econometric Analysis*. Macmillan.

Griffin, Larry J., Joel A. Devine, and Michael Wallace. 1982. "Monopoly Capital, Organized Labor, and Military Expenditures in the United States, 1949–1976." *American Journal of Sociology* 88 (Supplement):S113–S153.

Griffin, Larry J., Michael Wallace, and Joel Devine. 1982. "The Political Economy of Military Spending: Evidence from the United States." *Cambridge Journal of Economics* 6: 1–14.

Gustafsson, Bjorn, and Mats Johansson. 1999. "In Search of Smoking Guns: What Makes Income Inequality Vary Over Time in Different Countries?" *American Sociological Review* 64: 585–605.

Hagenaars, Aldi J.M. 1991. "The Definition and Measurement of Poverty." Pp. 134–156 in *Economic Inequality and Poverty: International Perspectives*. M.E. Sharpe.

Hall, Peter A., and David Soskice. 2001. *Varieties of Capitalism.* Oxford University Press.

Hanratty, Maria J., and Rebecca M. Blank. 1992. "Down and Out in North America: Recent Trends in Poverty Rates in the United States and Canada." *The Quarterly Journal of Economics* 107:233–54.

Hausman, J.A. 1978. "Specification Tests in Econometrics." *Econometrica* 46:1251–71.

Haveman, Robert, and Jonathan Schwabish. 1999. "Economic Growth and Poverty: A Return to Normalcy?" *Focus* 20:1–7.

Hernandez, Raymond. 1999. "More Who Leave Welfare Rolls in New York Are Found to Get Jobs." *New York Times* (5 August):A19.

Hicks, Alexander, and Lane Kenworthy. 2003. "Varieties of Welfare Capitalism." *Socio-Economic Review* 1:27–61.

Hooks, Gregory. 1991. *Forging the Military Industrial Complex.* University of Illinois Press.

Hout, Michael. 1984. "Occupational Mobility of Black Men: 1962 to 1973." *American Sociological Review* 49:308–22.

Hsiao, Cheng. 2003. *Analysis of Panel Data,* 2nd Ed. Cambridge University Press.

Huber, Evelyne, John D. Stephens, Charles Ragin, David Brady, and Jason Beckfield. 2004. *Comparative Welfare States Data Set*, University of North Carolina, Northwestern University, Duke University, and Indiana University.

Huber, Evelyne, and John D. Stephens. 2001. *Development and Crisis of the Welfare State.* University of Chicago Press.

———. 2000. "Partisan Governance, Women's Employment, and the Social Democratic Service State." *American Sociological Review* 65:323–42.

Jantti, Marcus, and Sheldon Danziger. 2000. "Income Poverty in Advanced Countries." Pp. 309–78 in *Handbook of Income Distribution*, edited by Anthony B.Atkinson and Francois Bourguignon. Elsevier.

Katz, Michael B. 1989. *The Undeserving Poor*. Pantheon.

Kenworthy, Lane. 2002. "Corporatism and Unemployment in the 1980s and 1990s." *American Sociological Review* 67:367–88.

———. 1999. "Do Social Welfare Policies Reduce Poverty? A Cross-National Assessment." *Social Forces* 77:1119–40.

Korpi, Walter, and Joakim Palme. 1998. "The Paradox of Redistribution and Strategies of Equality: Welfare State Institutions, Inequality, and Poverty in the Western Countries." *American Sociological Review* 63:661–87.

Krugman, Paul. 1994. *The Age of Diminished Expectations.* The MIT Press.

Leisering, Lutz, and Stephan Leibfried. 1999. *Time and Poverty in Western Welfare States*. Cambridge University Press.

Lichter, Daniel T. 1997. "Poverty and Inequality Among Children." *Annual Review of Sociology* 23:121–45.

Lichter, Daniel T., Diane K. McLaughlin, and David C. Ribar. 1997. Welfare and the Rise of Female-Headed Families." *American Journal of Sociology* 103:112–43.

Lindbeck, Assar. 1998. "The Welfare State and the Employment Problem." *American Economic Review* 84:71–75.

———. 1995. "Hazardous Welfare-State Dynamics." *American Economic Review* 85:9–15.

Long, J. Scott, and Laurie H. Ervin. 2000. "Using Heteroscedastic Consistent Standard Errors in the Linear Regression Model." *The American Statistician* 54:217–24.

Manza, Jeff, and Clem Brooks. 1999. *Social Cleavages and Political Change*. Oxford University Press.

Mare, Robert, and Christopher Winship. 1984. "The Paradox of Lessening Racial Inequality and Joblessness Among Black Youth: Enrollment, Enlistment, and Employment, 1964–1981." *American Sociological Review* 49:39–55.

Mayer, Susan E. 1997. *What Money Can't Buy* Cambridge, MA.: Harvard University Press.

McFate, Katherine, Roger Lawson, and William Julius Wilson. 1995. *Poverty, Inequality and the Future of Social Policy*. Russell Sage Foundation.

Mead, Lawrence M. 1986. *Beyond Entitlement*. Free Press.

Mintz, Alex, and Alexander Hicks. 1984. "Military Keynesianism in the United States, 1949–1976: Disaggregating Military Expenditures and Their Determination." *American Journal of Sociology* 90:411–17.

Moller, Stephanie, David Bradley, Evelyne Huber, Francois Nielsen, and John D. Stephens. 2003. "Determinants of Relative Poverty in Advanced Capitalist Democracies." *American Sociological Review* 68:22–51.

Moffitt, Robert. 2000. "Welfare Benefits and Female Headship in U.S. Time Series." *American Economic Review* 90:373–77.

Mullahy, John, and Barbara L. Wolfe. 2001. "Health Policies for the Non-Elderly Poor." Pp. 278–313 in *Understanding Poverty*, edited by Sheldon Danziger and Robert Haveman. Russell Sage Foundation and Harvard University Press.

Murray, Charles. 1984. *Losing Ground*. Basic Books.

Newman, Katherine S. 1999. *No Shame in My Game*. Russell Sage Foundation and Knopf.

Nickell, Stephen. 1981. "Biases in Dynamic Models with Fixed Effects." *Econometrica* 49:1417–26.

Nolan, Brian, Richard Hauser, and Jean-Paul Zoyem. 2000. "The Changing Effects of Social Protection on Poverty." Pp. 87–106 in *Welfare Regimes and the Experience of Unemployment in Europe*, edited by Duncan Gallie and Serge Paugam. Oxford University Press.

O'Connor, Alice. 2001. *Poverty Knowledge*. Princeton University Press.

OECD. 2000a. *OECD Labor Force Statistics*. OECD.

———. 2000b. *OECD Laborforce Statistics*. OECD.

———. 2000c. *OECD Main Economic Indicators*. OECD.

———. 1998. *OECD Health Data CD-Rom*. OECD.

Okun, Arthur M. 1975. *Equality and Efficiency, The Big Tradeoff* . The Brookings Institution.

Osberg, Lars, and Kuan Xu. 2000. "International Comparisons of Poverty Intensity: Index Decomposition and Bootstrap Inference." *The Journal of Human Resources* 35:51–81.

Page, Benjamin I., and James R. Simmons. 2000. *What Government Can Do*. University of Chicago Press.

Pear, Robert. 1999. "Clinton Hears Success Stories of Ex-Welfare Recipients." *New York Times* (4 August :A10.

Raftery, Adrian. 1995. "Bayesian Model Selection in Social Research." *Sociological Methodology* 25:111–63.

Reingold, David A., Gregg G. Van Ryzin and Michelle Ronda. 2001. "Does Urban Public Housing Diminish the Social Capital and Labor Force Activity of Its Tenants?" *Journal of Policy Analysis and Management* 20:485–504.

Sampson, Robert J., and John H. Laub. 1996. "Socioeconomic Achievement in the Life Course of Disadvantaged Men: Military Service as a Turning Point, Circa 1940–1965." *American Sociological Review* 61:347–67.

Sanders, Jimy M. 1990. "Public Transfers: Safety Net or Inducement into Poverty?" *Social Forces* 68:813–34.

Sen, Amartya. 1992. *Inequality Reexamined*. Harvard University Press.

SIPRI. 1999. *Armaments, Disarmament and International Security: Stockholm International Peace Research Institute Yearbook*. Oxford University Press.

Smeeding, Timothy M., Lee Rainwater, and Gary Burtless. 2001. "U.S. Poverty in Cross-National Context." Pp. 162–89 in *Understanding Poverty*, edited by Sheldon Danziger and Robert Haveman. Russell Sage Foundation and Harvard University Press.

Stephens, John D., Evelyne Huber, and Leonard Ray. 1999. "The Welfare State in Hard Times." Pp. 164–93 in *Continuity and Change in Contemporary Capitalism*, edited by Herbert Kitschelt, Peter Lange, Gary Marks and John D. Stephens. Cambridge University Press.

Teachman, Jay, Greg J. Duncan, W. Jean Yeung, and Dan Levy. 2001. "Covariance Structure Models for Fixed and Random Effects." *Sociological Methods and Research* 30:271–88.

Tomaskovic-Devey, Donald. 1991. "A Structural Model of Poverty Creation and Change: Political Economy, Local Opportunity, and U.S. Poverty, 1959–1979." *Research in Social Stratification and Mobility* 10:289–322.

Western, Bruce, and Kieran Healy. 1999. "Explaining the OECD Wage Slowdown: Recession or Labour Decline?" *European Sociological Review* 15:233–49.

Wright, Erik Olin. 2004. "Introduction." *Politics and Society* 32:3–6.

Wolfe, Barbara. 1994. "Reform of Health Care for the Nonelderly Poor." Pp. 253–88 in *Confronting Poverty*, edited by Sheldon H. Danziger, Gary D. Sandefur and Daniel H. Weinberg. Russell Sage Foundation.

Ziliak, James P., David N. Figlio, Elizabeth E. Davis, and Laura S. Connolly. 2000. "Accounting for the Decline in AFDC Caseloads." *Journal of Human Resources* 35:570–86.