Destro, Lane; Brady, David

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Does European-Style Welfare Generosity Discourage Single Mother Employment?

Lane Destro and David Brady

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DOES EUROPEAN-STYLE WELFARE GENEROSITY DISCOURAGE SINGLE MOTHER EMPLOYMENT?* 

Lane Destro    David Brady
Duke University

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Please direct correspondence to Lane Destro, Department of Sociology, Box 90088, Duke University, Durham, NC, 27708, email: lmd11@soc.duke.edu. Special thanks to Christina Gibson-Davis, Sara Pilzer and Ryan Finnigan for their helpful and thoughtful comments. We also thank Andy Fullerton for assistance with the analyses.
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ABSTRACT

Purpose: Although many have expressed concern over whether generous welfare policies discourage the employment of single mothers, scholars have rarely exploited cross-national variability in the generosity of social policies to assess this question. This is the case even though much previous scholarship has examined the effects of social policy on women’s and mothers’ labor force engagement. This paper evaluates whether generous social policies have a disincentive effect on single mother employment.

Methodology/Approach: Using the Luxembourg Income Study (LIS), we conduct a cross-national, multi-level analysis of the effects of social policy generosity on single mother employment in 17 affluent democracies.

Findings: We find high rates of single mother employment – above 60 percent in 15 of the 17 countries and above 70 percent in 5 countries. We find little effect of social policy for employment, as our two measures of social policy are insignificant in almost all models. If there are welfare disincentives, they only appear significant for young single mothers, and this evidence is limited as well. We find contradictory evidence for the employment incentive for low educated single mothers.

We determine that single mother employment is largely driven by the same individual characteristics – educational attainment, age and household composition – that drive employment in the general population, and among women and mothers.

Originality/Value of Paper: To the best of our knowledge, this is one of the few cross-national, multi-level tests of the welfare disincentive thesis for single mother employment. We provide evidence that welfare generosity does not discourage single mother employment.

Keywords: research paper, disincentive, single mothers, employment, cross-national, social policy
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Women’s presence in the labor force has grown over the last 50 years (Pettit and Hook, 2005). Changing labor force dynamics, a shift in traditional family roles, and creation of policies which enable female employment have been noted as responsible for much of this shift (Myles, 2009; Cunningham, 2008). Moreover, the growth in female labor force participation has not been limited to married or childless women. The employment rates of single mothers have also risen, especially since the 1980s (Myles, 2009). For example, in the U.S. and Canada, single mother employment rates have increased 13 and 12 percent, respectively, since the early 1980s (Myles, 2009). Even considering these recently increasing rates of single mother employment, high rates of single mother employment are relatively unique, considering the historical context. In contrast to exceptional countries like Sweden, which has exhibited a consistently high rate of single mother employment (Wong et al., 1993), single mother employment rates continue to vary substantially across and within countries.

Despite gains in rates of employment, single mothers find themselves the target of continued scrutiny in terms of their behavior, economic status and well-being. It is well known that single motherhood is strongly associated with poverty (Ananat and Michaels, 2008; Lieb and Thistle, 2006; Rank, 2005; Thomas and Sawhill, 2002; Seccombe, 2000; Bianchi, 1994, 1999). Single mother families are also criticized for disproportionately receiving social welfare as compared to other types of households (Wong et al.1993). Partly as a result of these observations, critics have speculated that single mothers actively opt out of the labor force to accept generous cash transfer payments in lieu of earning income from employment (Murray, 1984). Purportedly, single mothers also prefer to stay on welfare rather than become employed (Bryan, 2005).
The relationship between welfare and single mother employment has continued to attract attention in part because, in the past dozen or so years, there has been a great deal of research on the consequences of U.S. welfare reform. This literature has concluded that the introduction of time limits for cash welfare has successfully spurred single mothers into employment (Blank, 2003). Despite the purported success of welfare reform, scholars continue to speculate that welfare benefit levels may have some disincentive effect on the work efforts of single mothers. Moreover, work disincentives have been evaluated for the effects of pre-reform Aid to Families with Dependent Children (AFDC) rather than for post-reform Temporary Assistance to Needy Families (TANF) (Moffitt, 2003; Mead, 1992; Moffitt, 1992; Murray, 1984).

Notably, single mothers face unique concerns and challenges in the workforce. In addition to the wage penalties all mothers face (Gangl and Ziefle, 2009), single mothers often can experience employment constraints due to lack of education or training (Pandey and Kim, 2008). Single mothers also bear the brunt of caregiving support and are subject to dependency on a single income. In order for single mothers to become employed, childcare duties must be deferred elsewhere, often to a grandparent, friend or relative (Lein et al., 2005). The addition of a second household income may also influence single mother employment, as the expense of private childcare often costs more than mothers can earn (Edin and Lein, 1997). Research finds some single mothers assess the decision to work from a moral standpoint and evaluate whether employment is worth seemingly de-prioritizing their children’s care and safety (Dodson, 2007). Finally, because single motherhood is not randomly assigned, human capital and other characteristics that select women into single motherhood might be what really constrains their employment (Danziger et al., 2000; Harris, 1993).
Given the complexities facing single mothers in the workforce, it is still an open question as to whether and how social policies influence single mother employment. There are reasons to suspect that welfare generosity might encourage employment in some contexts, such as providing resources – like childcare – which then enable single mothers to work. Recent cross-national analyses suggest generous welfare policies support single mother employment rather than discourage it (e.g. Brady and Burroway n.d.). For example, Stier and colleagues (2001) find that employment continuity for women is highest in countries with state-provided support for working mothers. There is also evidence that generous welfare states might not facilitate women’s entry into prestigious positions. Thus, nations characterized by progressive welfare policies and large public sectors have high levels of female labor force participation, but this may come with substantial sex segregation and few women in managerial positions (Mandel and Semyonov, 2006).

Although there has been longstanding concern with how welfare states drive employment dis/incentives generally (Heckman, 2008), to the best of our knowledge, there has been little cross-national research specifically on social policy and single mother employment. Single mothers are a strategically important group for scrutinizing social policy effects on employment. They are more likely to utilize social welfare than many other demographic groups. As well, they may receive fewer returns for employment because of the compounded disadvantages of being female and bearing principal or sole caregiving responsibility. The presence of children has a direct, negative effect on mothers’ wages, even when controlling for their part-time work status (Waldfogel, 1997). Thus, single mothers might face unique and potentially stronger disincentives to employment from generous social policies.
Beyond these specific questions, this study can inform broader debates about European workers. While comparative labor market studies have typically and historically focused more attention on male workers, single mothers are likely to be increasingly prominent in European labor markets. Many welfare state scholars have noted that welfare states were not built to manage “new risks” like single motherhood (Esping-Andersen, 1999). This research can also help examine the effects of shifting social welfare policies and subsequent reform. In an effort to emphasize employment rather than social support, the typical country’s social welfare programs have shifted tremendously over the past 20 years (Rodgers, 2005). Political pressure has encouraged the reduction of welfare rolls through increased employment, although these achievements may come at the expense of certain segments of the population, namely single women (Moffitt, 2008).

Understanding social policy’s relationship with single mother employment can provide unique purchase on enduring questions about the efficiency and challenges of European-style welfare generosity. If welfare disincentive arguments are correct, it should be European welfare states that most acutely discourage single mother employment. Thus, European labor markets, especially in cross-national comparison, provide unique leverage for investigating the effects of social policy on single mother employment.

**The Welfare Disincentive**

Concerns with welfare disincentives likely began with the English poor laws and Malthusian population debates (Sommers and Block, 2005). Since their inception in the United States, social welfare programs have been heavily scrutinized. Federal and state-level social assistance programs have been criticized for not providing sufficient support to people in need,
yet are also accused of offering resources to “unworthy” candidates (Katz, 1996). Katz (1996) notes the difference in political support between public assistance such as AFDC (now TANF), and social insurance programs such as social security. Social insurance programs are viewed as facilitating public good, such as reducing poverty among the elderly (Katz, 1996). In contrast, the recipients of public assistance face shame and stigma. AFDC recipients were forced to undergo a series of invasive questions in order to qualify for public assistance (Piven and Cloward, 1971).

Often referred to as the key catalyst for contemporary welfare debates in the U.S., Murray (1984) argued that giving poor Americans cash-equivalent social welfare payments provided the recipients with a disincentive to work for pay. According to Murray, the disincentive would be particularly strong for minimum-wage workers without a cultural or personal history of prioritizing employment. Due to his emphasis on the importance of maintaining work ethic in the face of employment adversity, and the desire for impoverished families to “do things right” (Murray, 1984, p. 229), Murray’s work resounded with long standing debate about deserving and undeserving poor.

Spurred on by this debate, the concept of work disincentives quickly received attention in public and academic welfare state debates. Subsequently, policy officials and social science scholars considered the various ways a disincentive might arise. The predominant explanation postulates that welfare recipients assess the tradeoffs of being on welfare versus being employed and then choose the more beneficial option. Following this logic, welfare recipients would be hard-pressed to make the transition to employment until they were able to secure a post-tax wage paying more than the value of benefits they already receive (Groot, 1997; Suyderhoud et al., 1994). The value of welfare benefits also includes benefits beyond cash assistance. If employed
recipients begin earning more than means-tested social welfare programs allow, they immediately lose cash assistance and potentially other benefits such as childcare and healthcare (Edin and Lein, 1997). A loss of these various resources, cash assistance notwithstanding, would make employment unattractive to recipients in need of these other types of benefits.

Tradeoffs between welfare and work are also influenced by dynamics beyond a simple assessment of which option objectively pays more. Labor market constraints, including the pay and stability of available jobs, influence individuals’ decision to seek employment. Thus, if the available labor market options for single mothers fail to provide consistent work, mothers may opt out of employment in favor of welfare assistance. Returns to employment can be marginal when welfare recipients become employed, leading to a “poverty trap”, where full-time workers do not experience a monetary return to work large enough for them to rise out of poverty (Lambert, 1999; Lichter and Eggebeen, 1994; Kazis and Miller, 1991). As it stands, the earnings potential for welfare recipients is quite low. For example, the working poor, ¹ who make up one quarter of the U.S. population, attain a median hourly wage of only $7.29 and have a median family income just under $15,000 (Blank et al., 2006). Within the U.S., a study of Wisconsin welfare recipients finds they have not received higher earnings from 1993 to 2006, although Wisconsin respondents are faring better compared to others in the nation (Moore and Arora, 2009).

Nor are jobs - well-paying or not - readily and consistently available. The working poor face spells of unemployment more routinely than the general population (Blank et al., 2006; Duncan et al., 1984). Although social policies could increase employment marginally during economic slowdowns, social assistance most efficiently moves welfare recipients into work

¹ In this context, the “working poor” are defined as the proportion of individuals who live in households with income below 200 percent of the national poverty line for all people aged 18-54 during the years 1979-2003 (Blank et al., 2006).
during favorable labor market conditions (Herbst, 2008). The national unemployment rate affects single mothers as much if not more than the population at large, making it particularly difficult to find jobs when unemployment is high (Harris, 1993). Conversely, some research suggests low-income mothers have ample access to low-wage employment opportunities because these types of jobs are not desirable to more highly-educated workers (Hays 2004; Newman, 1999). However, low-wage work is often unreliable, thereby affecting the permanency of employment for mothers who do find work. Scholarship supports this idea, as single mothers experience recurring cycles of welfare-receipt and employment, resulting in short “spells” of poverty due to employment instability (Harris, 1996; Stevens, 1994; Bane and Ellwood, 1986).

In addition to the disincentives provided by weak employment options and the level of welfare generosity, the structure of social welfare programs may discourage employment. Across eight countries, Wong and colleagues (1993) find that means-testing produces a negative effect on labor force participation. Welfare programs may discourage employment specifically because they fail to provide single mothers with the safety net of in-kind benefits and services they need to enter or consistently remain in the labor market. A comparison of 14 affluent democracies’ policies finds high variability in how the absence of supplemental programs such as child and health care discourages mothers’ engagement with the labor force (Gornick et al., 1997). Even when welfare programs offer mothers more comprehensive support, such as cash assistance plus childcare, the effects on single mother employment appear to be minimal.

Regardless of whether welfare actually provides a material disincentive to work, mothers may experience detrimental corollary experiences of welfare that ultimately undermine one’s capacity or desire to engage in employment. For example, Australian single mothers participating in welfare-to-work programs reported a lower quality of life than the general
population (Cook et al., 2009). In the U.S., single-mothers with part-time or low-wage employment report poorer home environments (Lleras, 2008). African-American female welfare recipients experienced a reduction in feelings of self-efficacy once an employment readiness program was completed (Bruster, 2009). A host of potentially mitigating circumstances such as mental illness, abuse, drug use and the like may limit single mothers’ employment independent of a disincentive (Blank, 2007). As scholars have observed of welfare reform in Great Britian, reform is not a success for low-income lone mothers if their lives are examined holistically (Christopher, 2007). Rather than welfare serving as an active disincentive to work, the generalized experience of welfare often might cultivate circumstances that are not conducive to single mother employment.

Despite these arguments, there is a fair amount of evidence that suggests there is no welfare disincentive. Although the work disincentive is often used to frame and justify welfare reform (Mead, 1997; Novak, 1997; King, 1996; Sanger, 1990), in most cases, the test of the employment disincentive is limited to a general discussion about how the disincentive might be internalized and acted upon in a hypothetical set of scenarios (Lindbeck, 1995). One manner of testing for the disincentive includes calculating the value of the average welfare benefit received and comparing it to the average salary of the target poor population to determine whether employment would be comparatively desirable (Caniglia, 1996). This benefit/income comparison technique is often used to explain why welfare recipients display lower-than-expected rates of employment (Ashby and Gillis, 2007). However, other research in the U.S. has noted that recipients in more generous welfare states were as likely to work as those living in less-generous states (Vartanian and McNamara, 2000), and there is no association between the level of benefits and the number of recipients on welfare rolls (Shah and Smith, 1995).
More rigorous tests of the welfare disincentive thesis have modeled the effect of welfare benefit levels and ADFC tax rates on hours worked per week (Hausman, 1981; Moffitt, 1980). Although these studies have found disincentive effects for benefit levels, there is less consensus about the effect of the ADFC tax rate on hours worked (Danziger et al., 1981). Furthermore, when these studies do produce evidence of disincentives, the effects exhibit high variability due to state-to-state differences in benefit levels (Moffitt, 1992).

Generous social policy does not have to trigger tradeoffs between welfare and work, as mothers often utilize a combination of work and social support benefits (Edin and Lein, 1997). For example, a study of the effect of French welfare reform showed an increase in single mothers’ employment rates with the introduction of a policy allowing mothers to collect welfare benefits while employed. Married mothers’ employment did not increase during this time, so the combination of welfare and work might function as an incentive for single mother employment (Gonzalez, 2008). Other countries have seen increased rates of single mother employment through the introduction of special tax programs that allow low-income, employed persons with children to keep more of their earnings. For instance, single mother employment increased with the addition of the Working Families’ Tax credit in the United Kingdom (Francesconi and van der Klaauw, 2007). In the U.S., the Earned Income Tax Credit (EITC) was the most important factor in employment growth for single mothers, accounting for approximately 25% of the increase for both black and white mothers (Noonan et al., 2007). Thus, generous welfare policies may encourage single mother employment by “making work pay” through supplemental support to employment.

Our study seeks to cultivate a better understanding of welfare disincentives, as well as determine what factors influence single mother employment. Although there are some reasons to
believe the welfare disincentive thesis is correct, there is also much evidence showing single mothers defy the logic of the welfare disincentive and choose to work even when it is not advantageous. For example, even when employment does not offer a chance for mothers to earn more than they would receive from welfare benefits, there is evidence that they still choose to work outside the home. Research shows that the patterns of expenditure for low-income single mothers have changed to incorporate more expenses related to employment outside the home (Kaushal et al., 2007). Mothers often express a desire to work (Monroe and Tiller, 2001), despite returns to work being lower than what they receive in cash assistance and social welfare. Furthermore, studies continually find high rates of concurrent work and welfare receipt among single-mother families (Shirk et al., 1999; Harris, 1993).

Finally, there is great variation in welfare generosity cross-nationally, and if the disincentive thesis is correct, generous (e.g. European) welfare states should be particularly discouraging for single mother employment. As well, the labor market contexts of different countries can provide insight into whether cross-national differences are actually due to social policy or to the opportunities for well-paid employment. However, there remains very little cross-national research comparing welfare disincentives to work, although policies and their impact on single-mother employment have been compared cross-nationally (Wong et al., 1993; Gornick et al., 1997).

**WHY WOMEN, MOTHERS AND SINGLE MOTHERS WORK**

The complications single mothers face when entering the workplace are compounded by the considerations of mothers generally. Mothers have lower levels of employment than comparable childless women, childless men and fathers, and are also more likely to be employed
part-time (Misra et al., 2011; Pettit and Hook, 2009). Data show that the presence of children in
the home reduces mothers’ support for even the idea that women should be working (Treas and
Widmer, 2000). Single mothers’ work circumstances in particular are sensitive to the presence of
children in the household, as they are often dictated by the immediate childrearing demands of
the youngest child (Dudova, 2009). A study using five waves of the U.S. Census estimated that
four out of ten single mothers with no other younger children entered the work force after the
school enrollment of a five-year-old child. However, no significant labor supply response was
detected among other mothers (Cascio, 2009).

Just as women in general are concerned with achieving work-life balance, single mothers
recognize that work demands have an impact on family life. Single mothers recognize that higher
income coupled mothers can assuage the work-life conflict by opting out of work altogether
(Hennessey, 2009). Also, employed single mothers may utilize their adolescent children as
resources for household management tasks (Romich, 2007) and establish a “family work project”
in order to sustain employment (Millar and Ridge, 2009). However, single mothers have to
discern whether such an approach is best for their family, as failed work experiences often have
impacts on children, who recognize their mother’s sporadic or inconsistent employment (Ridge,
2009). Furthermore, work demands can negatively affect family routines in single mother
families by increasing work-family conflict (McLoyd, Toyokawa and Kaplan, 2008).

Finally, mothers and single mothers alike are often forced to consider their own health
status as another obstacle to employment. Poor maternal health and poor child health impacts
mothers’ employment or preferred work hours (Spiess and Dunkleberg, 2009). Likewise,
mothers’ mental well-being has been suggested as an obstacle to employment, particularly for
low-income mothers not actively seeking mental health services (Iversen and Armstrong, 2007).
These challenges are likely even more complicating of single mother employment across national contexts. Affluent democracies vary in terms of culture, opportunities, and intergenerational and other forms of support as they pertain to single mother employment. So, just as scholars have demonstrated that there is important cross-national variation in the expectations for women and mothers to work, there may be important contextual differences for single mothers to work.

**METHODS**

*Individual-Level Data*

The individual-level data come from the Luxembourg Income Study (LIS). The LIS harmonizes various national, individual-level datasets to create cross-nationally comparative datasets with standardized measures. We analyze a dataset near the year 2000 for 17 affluent Western democracies. We first confine our sample to women aged 18 to 54 years old. Then, we select only those in households headed by a female, where the head is neither married nor cohabiting, and children are present. This sample excludes children, elders and men who live in these households. To be clear, however, we do include control variables regarding other people in the household (see below).

The analyses merge the 17 countries into one file containing 15,005 individuals. Table 1 contains descriptive statistics and sources. In additional analyses, we estimate the models for a variety of sub-samples, including lone mother households (i.e. a single mother household

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2 We code couples using the variable “married,” which includes married and non-married cohabiting couples (including same sex). Unfortunately, the LIS does not provide sufficient information to identify the mother of the children. So, our sample includes other 18-54 year old women residing in the household. We address this problem by controlling for the number of other adults and multiple earners in the household. While Rainwater and Smeeding (2004: 109-110) define single mother households simply as female-headed households where children are present, we employ an even more stringent definition by only including those not married or cohabiting.
containing no other adults), single mothers with low educational attainment, and young single mothers. We also estimate the models while excluding Australia and the United Kingdom and all non-European countries.3

[ TABLE 1 ABOUT HERE ]

The dependent variable is employment = 1 (non-employed = 0). As Table 1 displays, 65.93 percent of single mothers are employed across the 17 countries. The United Kingdom and Australia have the lowest rates of single mother employment at 45.36 and 50.19 percent, respectively. Ideally, we could differentiate between full- and part-time employment and incorporate information on hours worked. However, the LIS does not provide consistent information in this regard and we would be forced to omit several countries.

The analyses incorporate several demographic variables about the respondent. Using the LIS standardized measures of education, we include binary measures of Low Education and High Education (reference = medium).4 Next, we control for age with Age and Age-squared in years. Finally, we control for the structure of the household with # of Children under 18 years old, a binary measure of Child Under 5, and # of Other Adults.

Country-Level Data

A variety of archival sources was used, though the proximate source for many was Huber and colleagues (2004). Table 2 displays the values of these country-level variables and details on the LIS samples, including the single mother employment rate and rate of single motherhood.

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3 As we explain below, Australia and the United Kingdom displayed unusually low rates of employment for single mothers. Likewise, we exclude European countries to scrutinize the European welfare states.

4 This standardized measure is an innovative solution for comparing education across countries (www.lisproject.org/dataaccess/educlevel.htm). The LIS staff codes all cases as: a) less than secondary education (low), b) secondary education or some tertiary education (medium), and c) completed tertiary or more education (high). The LIS created a routine to generate these codes, and we copied the code and extended it to all 17 countries. Unfortunately, the LIS does not provide sufficient detail on vocational/technical secondary education. Using the variable d10, necessary information is available for only six of the 17 countries. There is also no information on specialization, so we would be unable to differentiate between, e.g., secretaries and electricians.
With the exception of economic growth, the country-level variables are measured in the same year as the LIS survey.

To control for the labor market context within a country, we examine three variables. Economic Growth is the three-year average (t, t-1, t-2) of the annual rate of change in gross domestic product (GDP), measured in purchasing power parity (PPP) dollars. Unemployment is the percent of the labor force without employment. Female Labor Force Participation is the percent of women aged 15-64 in the labor force.

To assess the influence of social policy on single mother employment, we created two measures. The first is the Unemployed Single Mother Benefit Rate. This measures the mean amount of cash and near-cash benefits actually received by non-working single mothers as a proportion of the median income. This calculates how much a single mother would receive in welfare benefits if she is not working. In this sense, it is a measure of single mother’s reservation wage, and when higher, single mothers should feel less pressure to work. Our measure realistically gauges the potential disincentive mothers face because it reflects the real amount of benefits received, rather than the benefits mothers qualify for. As take-up rates for certain social welfare programs are low (Currie, 2004), a measure based purely on eligibility would overestimate mothers’ actual received benefit levels. To construct our measure, we equivalize both the value of benefits received and the median income by the square root of the number of household members (Rainwater and Smeeding, 2004). We estimate the benefit level by summing the LIS standardized variables for social insurance, social assistance and alimony/child support. In turn, this measure includes all income from cash transfers, child care subsidies, social security benefits and/or pensions, child support income and near cash benefits like food stamps.
The second measure is the *Employment Incentive*. To construct this measure, we calculated a ratio of the mean equivalized welfare benefits received by employed single mothers over the mean equivalized welfare benefits received by unemployed single mothers. Thus, we totaled all cash and near cash benefits as in the unemployed single mother benefit rate above, and calculated the mean value for both employed and unemployed single mothers. As the measure approaches zero, unemployed single mothers are receiving greater benefits. If the measure equals one, employed single mothers receive the same mean benefit levels as unemployed single mothers.

**Multi-Level Modeling Technique**

The logistic regression model is typically utilized in order to examine binary dependent variables. However, due to the clustering of individuals within countries and the inclusion of country-level variables, the standard logistic regression model violates the assumption of independent errors. Therefore, we utilize multi-level mixed effects logistic regression models. Mixed logit models predict the likelihood that an individual is employed based on a set of individual-level and country-level variables. We estimate a random intercept model that can be expressed as two sets of equations. First, the log odds of being employed (log \((p_{ij}/1-p_{ij})\)) for the \(i\)th individual in the \(j\)th country is represented by eta \((\eta_{ij})\) and is a function of country intercepts \((\beta_{o})\), a set of fixed individual-level characteristics \((\beta X_{ij})\) and an error term \((r_{ij})\):

\[
\log \left( \frac{p_{ij}}{1-p_{ij}} \right) = \eta_{ij} = \beta_{o} + \beta X_{ij} + r_{ij}
\]

Second, each country intercept \((\beta_{o})\) is estimated as a function of an intercept \((\gamma_{0}C_{j})\), a set of country-level variables \((\gamma C_{j})\) and an error term \((u_{0j})\):

\[
\beta_{o} = \gamma_{0}C_{j} + \gamma C_{j} + u_{0j}
\]
Partly because we only have 17 countries, we only estimate random intercept models and treat the individual-level coefficients as fixed effects.\textsuperscript{5}

RESULTS

Descriptive Patterns

Table 2 displays the cross-national patterns in single mother employment alongside the values of the country-level variables.\textsuperscript{6} Across these 17 countries, the average single mother employment rate is 65.1 percent. A rate of 65 percent is notable relative to historic levels of female employment. Even though there has long been concern with the non-employment of single mothers, the reality is that nearly two-thirds of single mothers are employed. By comparison, in Table 2, we show that the mean female labor force participation rate across these 17 countries is 63 percent (among women 18-65 years old).

\[ \text{TABLE 2 ABOUT HERE} \]

There is also substantial cross-national variation in single mother employment. Luxembourg and Sweden are more than one standard deviation (8.03) above the mean, whereas Australia and the United Kingdom report rates of single mother employment more than a standard deviation below the mean (50.2 and 45.4, respectively).

The cross-national mean for the rate of single motherhood is 6.9. Again, several countries should be noted because they have unusually high or low rates of single motherhood. Finland (4.3), Luxembourg (4.7), Spain (4.1) and Italy (3.0) have very low rates of single motherhood.

\textsuperscript{5} The analyses are estimated in Stata. Obviously, there are several multi-level modeling approaches. Unfortunately, given the remote access of LIS (only using SPSS, Stata or SAS), one cannot use multilevel software like HLM. Still, xtmelogit in Stata should be equivalent to the binary HGLM model in HLM. One could also estimate the individual-level models in LIS, and then export those estimates into a two-step “variance-known” procedure in HLM. Also, one could estimate a random effects model or use robust-clustered standard errors. Our strategy has comparable strengths to these alternatives.

\textsuperscript{6} We also include the N’s for each country. The shaded cells indicate countries where our sample includes less than 200 cases. For those countries, one should be cautious with the country means for single mother employment.
although this may be attributed in part to small sample sizes for several of these countries. Australia (11.7), the United Kingdom (13.1) and the United States (12.0) have significantly higher rates of single motherhood. Although the United Kingdom and Australia have two of the highest reported rates of single motherhood, they have the lowest rates of single mother employment. By comparison, the United States maintains high rates of both single motherhood and single mother employment.

The unemployed single mother benefit rate, which measures the actual amount of benefits received by unemployed single mothers as a proportion of each country’s median income, has a cross-national mean of 46.07. On average, unemployed single mothers receive benefits amounting to almost half of the median income. An unemployed single mother benefit rate above 50.00 implies a non-working single mother could live a non-poor existence by the conventional relative measure of poverty (Brady, 2009). Unemployed single mother benefit rates are highest in Denmark, where mothers receive almost 66 percent of median income, and lowest in Spain, Ireland and Canada, where mothers only receive a third of the median income.

The employment incentive, which assesses the economic advantage of employment for single mothers relative to unemployed single mothers, has a cross-national mean of .58. As the ratio approaches 1.0, there is a stronger incentive for employment. Several countries – Germany, Luxembourg, Italy and Belgium – have employment incentive ratios under .50, although not lower than .45.

Female labor force participation has a mean of 63 percent across the 17 countries, with Italy (46.3) and Spain (51.8) having the lowest rates. Female labor force participation is highest in Norway (73.8) and Sweden (72.7). Several countries display significantly high values of unemployment – Italy (10.5) and Spain (13.9) have two of the highest – though the mean value is
6 percent. Economic growth (mean 4.1) is highest in Luxembourg (8.8) and lowest in Denmark (1.6).

The last row of Table 2 displays the bivariate associations with the country-level rates of single mother employment (N=17). Single mother employment rates are not at all correlated with the unemployed single mother benefit rate, but are surprisingly negatively moderately correlated with the employment incentive. In addition, single mother employment rates are weakly positively correlated with female labor force participation and moderately correlated with economic growth (+) and unemployment (-).

Figure 1 plots the association between the unemployed single mother benefit rate and the single mother employment rate (r=.03). The most important pattern is the lack of any association. Even if we omit Australia and the U.K., the correlation is only .15. Figure 2 plots the association of the employment incentive to the single mother employment rate. (r=-.32). There appears to be a negative association, implying that a greater employment incentive is associated with less single mother employment. However, we note that this association disappears if we omit Australia and the U.K. (r=.01). Thus, the low single mother employment rates of Australia and the United Kingdom should be noted in both figures, something we return to later.

Before proceeding to the models, it is helpful to describe the unemployed single mother benefit rate and the employment incentive of select countries. The unemployed single mother benefit rate is lowest for the United States, meaning that an unemployed mother receives just 23 percent of the median equivalized income for the U.S. By contrast, unemployed single mothers in Denmark receive 66 percent of median equivalized income. The employment incentive
describes the ratio of employed over unemployed single mothers’ benefit levels. Ireland (.85) has the most similar benefit receipt levels, while employed single mothers in Germany (.45) experience the least amount of support relative to the amount received by unemployed single mothers.

**Multi-Level Analyses**

Table 3 displays the odds ratios and z-scores for the models of single mother employment. Throughout Models 1-8, the individual-level predictors are significant and stable. High educational attainment, age, and the presence of other adults in the household increase the likelihood of single mother employment. Having high educational attainment increases the odds of employment by a factor of 2.1, while each additional adult in the household increases employment odds by 1.1. For a ten year increase in single mother age, employment odds increase by a factor of about 7.3. Thus, single mothers are more likely to be employed if they have higher levels of education, are older and if there are additional adults in the household. Conversely, low educational attainment, the # of children in the household and the presence of a child under age 5 reduce the likelihood of employment among single mothers. Mothers with low educational attainment experience a decrease in the odds of employment by a factor of 2.4. The presence of a child under age 5 decreases the odds of employment by a factor of 1.5, and each additional child in the household reduces the odds by about 1.2.

[ TABLE 3 ABOUT HERE ]

Model 2 introduces controls for the economic context of the country. We find that female labor force participation and economic growth are not significant. In analyses available upon request, we experimented with including these variables in the following models and the results
were robust. Unemployment is not significant in model 2, but has a larger z-score and emerges as significant in some models. Thus, we retain unemployment in some of the subsequent models.

Models 3 and 4 include only the unemployed single mother benefit rate or the employment incentive, respectively (along with the individual-level variables). In each model, the measure of social policy is insignificant and the z-scores never even exceed |1.0|.

Models 5 and 6 add unemployment as another control to Models 3 and 4. Again, the social policy variables are insignificant. Unemployment is nearly significant and negative.

Model 7 includes unemployment and both the unemployed single mother benefit rate and the employment incentive in the same model. Model 8 includes both the unemployed single mother benefit rate and the employment incentive sans unemployment. In these models as well, the two social policy variables remain insignificant though in model 7, they are closer to statistical significance. In model 7, unemployment has a significant negative effect. For a one percent increase in the unemployment rate, the odds of single mother employment are expected to decline by a factor of 1.06. In sum, Table 3 provides no evidence that social policy predicts single mother employment. The evidence demonstrates that single mother employment is largely driven by individual characteristics.

**Supplementary Analyses**

Although we find the country-level variables in Table 3 are largely inconsequential (with the one exception of unemployment in Model 7), we test another series of models to investigate whether social policy affects single mother employment for various specific sub-samples. In particular, we investigate if social policy has differential effects on more marginalized groups of single mothers and among select countries.

[ TABLE 4 ABOUT HERE ]
The first two models of Table 4 include only lone mother households – any single mother households containing other adults are omitted from these two models. The effects of all individual-level variables remain robust across these models, and all three country-level variables are non-significant. High educational attainment and age have a positive effect on the odds of employment, with educational attainment increasing the odds by a factor of 2.2. Low educational attainment, the presence of a child under age 5, and the # of children reduce the odds of single mother employment. Education level continues to have a large impact, as low educational attainment reduces employment odds by a factor of 2.5. For lone mother households, only individual-level factors continue to have a significant impact on the odds of employment. The social policy variables approach, but do not actually reach, statistical significance. Interestingly, the employment incentive is negatively signed, which is contrary to expectations.

The next two models test the models for single mother households with low educational attainment. Yet again, all individual-level variables remain highly significant. In terms of country-level variables, the employment incentive is also a significant contributor to reduced odds of employment. For a standard deviation increase in the employment incentive, the odds of single mother employment are expected to decline by a factor of about 1.2. As before, the negative effect is surprising given that this variable is a ratio of the benefits collected by employed single mothers over unemployed single mothers. One would expect that a greater value of this ratio would be associated with more single mother employment. Beyond this effect, the unemployed single mother benefit rate and the unemployment rate are insignificant in these models.

The next two models include households with single mothers under age 25. Again, all individual-level factors remain significant. The employment incentive remains negatively signed
but is insignificant in these models. By contrast, unemployment and the unemployed single mother benefit rate are significantly negative. For a one percent increase in the unemployment rate, the odds of single mother employment are expected to decline by a factor of about 1.2. For a standard deviation increase in the unemployed single mother benefit rate, the odds of single mother employment are expected to decline by a factor of about 1.5. Notably, this is the only evidence that generous social policy discourages single mother employment. Thus, if welfare generosity discourages single mother employment, it is only among young single mothers.

The last two sets of models include and exclude various sets of countries. In the two models excluding the outlier countries – Australia and the United Kingdom – all individual-level factors are significant. Unemployment is also significant. In the models only with European countries, only the individual-level variables are significant. In most of these models, the number of other adults becomes insignificant. More importantly, the two social policy variables are not significant in any of these four models. This bolsters our conclusions above because the results do not appear to be sensitive to these outlier countries and the conclusions are consistent if one only focuses on Europe.

**CONCLUSION**

Our study assesses the effects of welfare generosity on single mother employment with data on over 15,000 individuals across 17 affluent democracies. We examine the effects of individual characteristics and social policy on the odds of single mother employment. Broadly, we find little support for the argument that generous social policy discourages single mother employment. Both of our employment disincentive measures fail to achieve significance in our primary models. Rather, individual level factors appear to be most consequential. Single mothers
who are older, have higher levels of education, and live with other adults in the same household are more likely to be employed. Younger single mothers with less education and with children under 5 years old living in the household are less likely to be employed. To the best of our knowledge, these analyses provide one of the few cross-national tests of the proposed disincentive effect of social policy on single mother employment. Employing a comparative perspective is particularly valuable for evaluating the welfare disincentive, as the inclusion of European welfare states broadens the scope of comparison of welfare generosity.

As we discuss above, disincentives to employment can be realized in many ways, and we recognize the reality that single mothers face unique challenges to becoming or remaining employed. Single mothers face the same employment constraints that women and mothers endure generally, but single mothers also face distinctive disincentives to work driven by their greater likelihood of having less human capital and the challenge of balancing work and childrearing. Generous social policies allow women the option to disengage from the labor force in order to mediate these other concerns. In some cases, social welfare policies may present single mothers with advantages over employment. In our supplementary analyses, we find evidence for the disincentive thesis in one model of single mothers under age 25. These findings suggest that young single mothers may experience a disincentive effect, reflecting what we know about difficult choices young mothers face to be employed when work does not pay. Nevertheless, we also find contradictory evidence in that our measure of employment incentive is significantly negative in one model of low educated single mothers. Thus, although there is the potential that welfare disincentives occur in some contexts and for particular groups of single mothers, the vast majority of our results contradict the welfare disincentive thesis.
Importantly, our analyses show higher rates of single mother employment than might have been anticipated by historical rates of female labor force participation or a simplistic welfare disincentive account. We find occasional significance for the effect of the unemployment rate on single mother employment, which suggests single mother employment, just like all workers’ employment, reflects labor market conditions. Thus, social policy generosity is not the dominant contextual factor predicting single mother employment. Rather, what drives employment for this population are the same individual- and contextual- level factors that affect employment for women, mothers, and even all workers generally.

There are a number of policy implications of this research. Policymakers should not be only concerned with welfare disincentives, but should encourage policies that facilitate the employment of women with children and to address the unique needs of employed mothers relative to men. Where generous programs exist for single mothers, policymakers should continue to provide support for those single mothers seeking employment. The benefits of marriage aside, our results for the beneficial effects of other adults in the household suggest there should be greater recognition for the importance of alternative strategies such as combining households and enlisting intergenerational support.

Future research can address the limitations of the present analysis in a few ways. Our measure of employment cannot distinguish between full-time and part-time employment. We are also left with small sample sizes for some countries. Future analyses should address these constraints by potentially using alternative datasets as the LIS is not perfect for these issues. It would also be valuable to explore these relationships with longitudinal data on individuals and/or countries. Although the LIS is cross-sectional, it offers at least five datasets for each of these countries. So, it would be feasible to investigate the relationship between single mother
employment and welfare benefit receipt over time to determine whether generous social policies have influenced single mother’s employment at various periods in the recent history of these countries.

With a few exceptions, most of the literature debating the employment disincentive has not been empirical. As a result, it would be productive to apply this research design to other demographically vulnerable groups to assess the impact of social policies on the employment of other marginalized groups. Further cross-national research could enhance our knowledge about how mothers employ resource packaging across various levels of welfare state generosity.

Moreover, we should seek to qualitatively understand the causal mechanisms and processes by which welfare states influence single mother employment and what best enables mothers to achieve self-sustainable and consistent employment. Although quantitative research allows us to understand how different levels of welfare generosity are associated with poverty and employment, qualitative work can explain the processes by which single mothers obtain employment, choose from a range of employment options, and evaluate the advantages of work over welfare in a variety of national contexts. Qualitative and mixed methods have enhanced our understanding of the way single mothers balance work and family concerns as well as package employment, kin support, and social welfare to make ends meet (Edin and Lein, 1997; Stack, 1974).

European labor markets have long been known for their egalitarianism, labor unions, corporatism, and purported limited efficiency. Our study broadens debates about European labor markets by concentrating on a less well-studied group of potential workers. Moreover, single mother workers are interesting because they have not traditionally been viewed as the beneficiary of the labor market institutions and worker-friendly policies of Europe. Further, as
Europe has been a leader in expanding work-family policies, single mothers provide a key testing ground for the effects of these policies. As with many comparative studies, we demonstrate that while social policy is relevant to employment, it is not always as consequential as would be expected by studies concentrating solely on the U.S. Because European-style welfare generosity does not appear to undermine single mother employment, our study provides at least a modicum of evidence suggesting that European labor markets might remain sustainable in the face of the new social risks brought by increasingly diverse labor forces.
REFERENCES


Table 1. Descriptive Statistics for Variables in Analyses (N=15,005).

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| Cross-National Mean (N=17) | 882.65 | 65.13 | 6.88 | 46.07 | .58 | 63.03 | 4.09 | 6.57 |

| Cross-National Correlation with Single Mother Employment (N=17) | -.42 | .03 | -.32 | .15 | .40 | -.28 |

Note: Shaded cells indicate less than 200 cases are available for the country. The population for the rate of single motherhood is all women aged 18-54.

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*** p< .001  ** p< .01  * p< .05
Note: Constants not shown.
### Table 4. Generalized Linear Mixed Logit Models on Individual- and Country-Level Variables in 17 Affluent Western Democracies: Odds Ratios and (Z-scores).

<table>
<thead>
<tr>
<th></th>
<th>Lone Mothers</th>
<th>Lone Mothers</th>
<th>Low Education</th>
<th>Low Education</th>
<th>Under 25</th>
<th>Under 25</th>
<th>Drop Australia &amp; U.K.</th>
<th>Drop Australia &amp; U.K.</th>
<th>Europeans</th>
<th>Europeans</th>
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<tbody>
<tr>
<td>**Individual-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Level **Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Education</td>
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<td>.401***</td>
<td>.455***</td>
<td>.447***</td>
<td>.428***</td>
<td>.427***</td>
<td>.431***</td>
<td>.432***</td>
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<tr>
<td></td>
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<td>(-17.19)</td>
<td>(-7.49)</td>
<td>(-7.68)</td>
<td>(-17.45)</td>
<td>(-17.50)</td>
<td>(-15.19)</td>
<td>(-15.16)</td>
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<td></td>
</tr>
<tr>
<td><strong>High Education</strong></td>
<td>2.232***</td>
<td>2.232***</td>
<td>1.762*</td>
<td>1.757*</td>
<td>2.023***</td>
<td>2.02***</td>
<td>2.398***</td>
<td>2.400***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(10.98)</td>
<td>(10.98)</td>
<td>(2.43)</td>
<td>(2.41)</td>
<td>(11.00)</td>
<td>(11.00)</td>
<td>(9.73)</td>
<td>(9.71)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>1.290***</td>
<td>1.290***</td>
<td>1.170***</td>
<td>1.169***</td>
<td>1.234***</td>
<td>1.234***</td>
<td>1.230***</td>
<td>1.230***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(10.02)</td>
<td>(10.01)</td>
<td>(6.17)</td>
<td>(6.16)</td>
<td>(12.07)</td>
<td>(12.07)</td>
<td>(9.41)</td>
<td>(9.41)</td>
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</tr>
<tr>
<td><strong>Age-Squared</strong></td>
<td>.997***</td>
<td>.997***</td>
<td>.998***</td>
<td>.998***</td>
<td>.997***</td>
<td>.997***</td>
<td>.998***</td>
<td>.998***</td>
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<tr>
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<td>(-8.74)</td>
<td>(-5.28)</td>
<td>(-5.27)</td>
<td>(-10.24)</td>
<td>(-10.23)</td>
<td>(-7.45)</td>
<td>(-7.45)</td>
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<tr>
<td><strong># Children</strong></td>
<td>.762***</td>
<td>.762***</td>
<td>.814***</td>
<td>.814***</td>
<td>.828***</td>
<td>.828***</td>
<td>.799***</td>
<td>.799***</td>
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</tr>
<tr>
<td></td>
<td>(-9.86)</td>
<td>(-9.85)</td>
<td>(-5.97)</td>
<td>(-5.96)</td>
<td>(-8.31)</td>
<td>(-8.29)</td>
<td>(-7.63)</td>
<td>(-7.64)</td>
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<tr>
<td>**Child Under 5</td>
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<td>.689***</td>
<td>.595***</td>
<td>.595***</td>
<td>.723***</td>
<td>.724***</td>
<td>.654***</td>
<td>.655***</td>
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<tr>
<td>in HH</td>
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<td>(-6.84)</td>
<td>(-7.36)</td>
<td>(-7.34)</td>
<td>(-6.96)</td>
<td>(-6.94)</td>
<td>(-7.56)</td>
<td>(-7.54)</td>
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<td></td>
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<tr>
<td>**# of Other</td>
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<td>1.13***</td>
<td>1.124**</td>
<td>1.123**</td>
<td>1.049*</td>
<td>1.048*</td>
<td>1.059</td>
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</tr>
<tr>
<td>Adults</td>
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<td>(3.38)</td>
<td>(2.66)</td>
<td>(2.64)</td>
<td>(2.14)</td>
<td>(2.09)</td>
<td>(1.74)</td>
<td>(1.71)</td>
<td></td>
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</tr>
<tr>
<td>**Country-Level</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Unemployment</td>
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<td>.954</td>
<td>.835***</td>
<td>.954*</td>
<td>.942</td>
<td>(-.70)</td>
<td>(-1.38)</td>
<td>(-3.43)</td>
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<td>(-1.84)</td>
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<tr>
<td></td>
<td>(.974)</td>
<td>(.954)</td>
<td>(.835***)</td>
<td>(.954*)</td>
<td>(.942)</td>
<td>(.70)</td>
<td>(.138)</td>
<td>(.343)</td>
<td>(.201)</td>
<td>(.184)</td>
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<td>.985</td>
<td>.985</td>
<td>.988</td>
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<td>.992</td>
<td>.987</td>
<td>.985</td>
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<td>(-1.56)</td>
<td>(-1.59)</td>
<td>(-1.28)</td>
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<td>(-1.15)</td>
<td>(-1.22)</td>
<td>(-.76)</td>
<td>(-1.19)</td>
<td>(-.43)</td>
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<tr>
<td>Benefit Rate</td>
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<td>(-1.70)</td>
<td>(-2.13)</td>
<td>(-1.71)</td>
<td>(-1.02)</td>
<td>(.19)</td>
<td>(-.44)</td>
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<td>4549</td>
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<td>12539</td>
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<td>8737</td>
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</tbody>
</table>

**Note:** Constants not shown.

*** p< .001  ** p< .01  * p< .05
Figure 1. The Association between Unemployed Single Mother Benefit Rate and Single Mother Employment Rate across 17 Affluent Democracies Circa 2000 ($r=.03$).
Figure 2. The Association between Employment Incentive and Single Mother Employment Rate across 17 Affluent Democracies Circa 2000 ($r= -.32$).