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Reconciliation policies and the effects of motherhood on employment, earnings, and poverty

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Luxembourg Income Study Working Paper Series

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Reconciliation Policies and the Effects of Motherhood on
Employment, Earnings, and Poverty

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Reconciliation Policies and the Effects of Motherhood on Employment, Earnings, and Poverty

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Reconciliation Policies and the Effects of Motherhood on Employment, Earnings, and Poverty

Abstract

In this paper, we examine the consequences of different welfare state strategies. We argue that four major strategies have appeared: 1) the primary caregiver/secondary earner strategy, focused on valuing the care in which women engage; 2) the primary earner/secondary caregiver strategy, focused on encouraging women's labor market participation; 3) the choice strategy, which provides support for women's employment, but also gives women the choice of emphasizing caretaking when children are very young; and 4) the earner-carer strategy, focused on helping men and women balance care and work through support for care both inside and outside of the home. We examine differences between women who are mothers of children and other women on three outcomes—labor force participation rates, wage rates, and poverty rates, analyzing the effects of motherhood and marital status on labor force participation rates, annual earnings, and poverty rates. After analyzing these differences, our study suggests that the strategy taken by the earner-carer strategy is most effective at increasing equity for the widest array of women.

Reconciliation Policies and the Effects of Motherhood on Employment, Earnings, and Poverty

Historically, welfare states were premised on a model of a heterosexual two-parent family with a breadwinner-father and caregiver-mother. However, welfare state policies across a range of nations now are premised upon and encourage women's employment (Esping-Andersen 2002; Orloff 2002; Europa 2003; Stryker et al. 2005). The impressive development of work-family reconciliation policies over the last several decades across Europe suggests a critical shift is taking place in how women's roles – as caregivers and employed workers – are conceptualized (Fraser 1994; Lewis 1998; Jenson and Sineau 2001; Michel and Mahon 2002; Gornick and Meyers 2003). Indeed, in almost every industrialized nation, most mothers have now entered the labor market. Yet, without enough attention to the demands for care, women – particularly those with children – do not necessarily have equal access to good jobs and earnings, and may still face higher levels of poverty. Women who are mothers continue to face significant penalties in the workplace – both in terms of employment and earnings, even while they face significant challenges in ensuring adequate care for their families (Spain and Bianchi 1996, Harrington Meyer 2000, Budig and England 2001, Daly 2001, Harkness and Waldfogel 2003, Gornick and Meyers 2003). Mothers' poverty rates also vary dramatically cross-nationally, in ways at least partially related to employment and earnings (Casper et al. 1994, Christopher 2002, Huber et al. 2004, Misra and Moller 2004).

In this study, we focus on welfare state regime strategies with an emphasis on work-family reconciliation policies meant to help men and women reconcile their roles as workers and parents. Reconciliation policies include policies such as paid or unpaid parental and family leave, childcare policies supporting subsidized or state-provided care, and flexible work-time policies (Gornick and Meyers 2003; Hantrais 2000). Theoretically, work-family reconciliation policies

should give mothers (and fathers) the opportunity to advance in the workplace, while also ensuring that their families receive adequate care. Yet while all reconciliation policies may support work-family balance, these policies draw upon different assumptions about women's roles in society, and therefore may lead to diverse outcomes regarding equity.

Reconciliation policies may be assumed to have positive effects for all women. Yet, the effects of reconciliation policies must be conceptualized and analyzed carefully. For example, policies that support caretaking within the family may weaken mothers' employment continuity and earnings, while ensuring that women remain "on the hook" for caretaking because men are much less likely to do care (Bergmann 1998, 2001; Morgan and Zippel 2003). On the other hand, policies may be designed to lead to greater equity, particularly by emphasizing incentives for men to engage in care (Gornick and Meyers 2003, Gornick 2004). Placing support for caregiving within the context of other policies—for example, whether high-quality childcare exists alongside family leaves—can help make sense of how motherhood affects women's opportunities.

In this paper, we consider how variations in welfare state regime's approaches to work-family issues have led to different outcomes regarding equity in employment, earnings, and poverty for mothers as compared to women without children in the home. We develop four distinct welfare state strategies of care and employment derived from Esping-Andersen's welfare state regimes. We then discuss cross-national variations in employment, earnings, and poverty, and our expectations for how these will be related to our four strategies. Finally, we use data from Waves IV and V of the Luxembourg Income Study (LIS) to examine the associations between these regimes and our outcomes in a range of nations.

Welfare State Regimes, Employment, and Caregiving

Recent welfare state scholarship emphasizes how nations tend to cluster in certain groups in terms of policy creation and outcomes (Esping-Andersen 1990, 1999; Castles 1993; Korpi and Palme 1998). Grouping nations into certain broad categories allows scholars to identify qualitative differences between groups in both the origins of social policies and their outcomes. Esping-Andersen's (1990) very influential welfare state regime typology is the predominant approach used to place countries into regime types. In the *Liberal* regime (e.g., Australia, Canada, the United Kingdom, the United States), the state avoids policy measures that tamper with the market. In the *Conservative* regime (e.g., France, Germany, Italy), the Church-shaped state uses policy to uphold status differences and preserve the traditional family. In the *Social Democratic* regime (e.g., Denmark, Norway, Sweden), the state uses policy to redistribute wealth and support full employment.ⁱ

Feminist scholars have critiqued this model for neglecting the family and gendered modes of caregiving (Orloff 1993). These scholars have focused attention on cross-national variations in male-breadwinner ideologies (Lewis and Ostner 1991), as well as how welfare states may reinforce roles differently for single and married mothers (Millar 1996; Hobson 1994). For example, Orloff (1993) argues for a model of welfare states that attends to women's access to paid employment and women's capacity to form and maintain autonomous households. These critiques have informed Esping-Andersen's (1999, 2001) more recent work, in which he has conceptualized the ideas of de-familialization and familialism. For Esping-Andersen, de-familialization occurs where caring responsibilities for households are lessened by state or market provision of care; familialism occurs where policy encourages household responsibility for care.ⁱⁱ

With this further conceptualization, Esping-Andersen (1999) notes that his original classification of welfare regimes still remains valid. Indeed, the Liberal regime countries continue to cluster together, most Social Democratic countries remain clustered together, while clearer differences emerge between the countries originally defined as “Conservative.” He finds two major groups – continental European countries (Austria, Belgium, France, Germany, and the Netherlands) and southern European countries (Italy, Portugal, Spain) – with southern European countries scoring the lowest on de-familialization. Esping-Andersen also observes that, for measures focused on family support, France and Belgium may “break ranks” with the other continental countries since they are less familialist in orientation, but he considers this a minor aberration (Esping-Andersen 1999). A range of scholars note that women have somewhat more accepted roles as breadwinners in France and Belgium than in other continental countries (Lewis and Ostner 1991; Millar 1996; Anttonen and Sippila 1996; Gornick, Meyers, and Ross 1996; Pfau-Effinger 1999; Gornick and Meyers 2004). Leitner (2003) notes that for measures related to childcare, Belgium and France should be typed along with Social Democratic cases as promoting “optional familialism.”

In our analysis, we do not include the southern European cases. However, from Esping-Andersen (1999) and his critics, we draw four major welfare state approaches: the Liberal, Conservative, and Social-Democratic approaches, as well as a mixed model where the French and Belgian cases fall. In the following section, we show how these regime types map onto Nancy Fraser's (1994) reconceptualization of welfare state strategies regarding care.

Welfare State Regime Strategies regarding Work-Family Reconciliation

The significant restructuring of welfare states over the last two decades reflects not only a response to globalization, increased immigration, and the weakening of labor (Pierson 2001, Rothstein and Steinmo 2002, Castles 2004)—but also significant changes in the “gender order” (Fraser 1994, Lewis 1998, Jenson and Sineau 2001, Michel and Mahon 2002; Gornick and Meyers 2004). Welfare state structures rest on gendered assumptions about men’s and women’s traditional roles in the family and workplace. Historically, the dominant vision of the Western welfare state during the twentieth century was the “male breadwinner-female caregiver” or “family wage” strategy (Fraser 1994, Sainsbury 1999). According to this strategy, families were presumed to be composed of a man working outside the home, a woman providing care within the home, and their children. Men were expected to earn a wage large enough to support all of the members of this family. The welfare state intervened only to replace the male breadwinner’s wage in case of unemployment, disability, sickness, or old age, or occasionally to support women’s caretaking within the home (Fraser 1994). Yet the male breadwinner strategy is no longer tenable for even middle-class families, since few jobs pay enough to support an entire family, and because most women are now also labor market participants (Crompton 1999). As families diversify to include many more single-parent or nonheterosexual forms, welfare state strategies relying upon the two-parent heterosexual breadwinner-caregiver strategy are inadequate.

Given these changes, what does the “new” welfare state look like? How do states attempt to support families with children in societies where both parents are likely to work outside the home? These strategies vary by welfare state regime, as noted above. Drawing on Nancy Fraser’s (1994) conceptualization of welfare state support for care, we recognize four major strategies which assume certain roles for women: the Conservative primary caregiver/secondary earner

strategy (where women are treated primarily as carers, and secondarily as earners), the Liberal primary earner/secondary carer strategy (where women are treated primarily as earners, and secondarily as carers), the Conservative choice model (where women are treated as choosing whether they are primarily earners or caregivers, in part depending on presence of young children), and the Social Democratic dual earner-carer strategy (where women are treated as equally involved in both earning and caring).

The Conservative *primary caregiver/secondary earner regime* remains closest to the male breadwinner-female caregiver strategy assumed by the family wage model; Orloff refers to this strategy as the "family support" model. This regime, however, posits a society in which women are explicitly valued and rewarded for providing care. Here, the welfare state recognizes gender difference and values care (Sainsbury 1999). Rather than encouraging women to pursue employment patterns that mimic men's, a primary caregiver/secondary earner strategy tries to make the difference between men's and women's employment patterns less costly to women by supporting the time and effort women spend on care. The state provides caregiver allowances in order to support informal carework and initiates workplace reforms such as parental leaves and flextime that make it easier for women to pursue both care and paid employment. At the same time, the state encourages the development of part-time employment, as an ideal strategy for women who wish to combine employment and care. Instead of shifting care to the market and state (or to men), such a strategy emphasizes women's caregiving within the family as the primary site for the provision of care (Fraser 1994). As a consequence, women's employment and earning power is secondary to that of men. In this policy regime-type, when women are the primary earners, such as the case of single mothers, their employment opportunities may suffer in an environment that de-prioritizes women's employment.

This regime is characterized by countries that provide fairly generous transfer support for caretaking, as well as generous reconciliation policies that help women provide care in the home, such as parental leave. On the other hand, state provision of care has been more limited in these nations. Austria, Germany, the Netherlands, and Luxembourg, belong in this grouping. Many of the countries falling into this regime remain devoted to traditional gender norms. Thus, the Conservative primary caregiver/secondary earner strategy addresses changes in women's formal work roles without challenging their traditional gender roles within the family. For example, in Germany, while women have increased their labor market participation, they are more likely to be employed in part-time positions that also allow them to provide care for their families. Germany provides very generous parental leave policies, but somewhat less effective state provision of childcare, particularly for children under three (Gornick and Meyers 2003). In addition, Germany provides care allowances for caregivers, subsidizes pension contributions for caregivers for up to three years of care for young children, and subsidizes pension contributions for part-time workers for up to ten years of care for children (Seeleib-Kaiser 2004). Such programs clearly recognize the important carework done by women but do little to involve men in care provision.

The Liberal *primary earner/secondary carer* regime posits a society in which both men and women are equally invested in labor market participation (Fraser 1994); Orloff refers to this as the "market-oriented" strategy. In such a regime, state policies work to eliminate differences between men and women by engaging women in the paid labor force. Policies emphasize removing gender discrimination, although there is little state-provided support for children. For example, Orloff (2002, p. 16) notes that in Canada and the United States, "the liberal model has incorporated women's paid work, especially via employment equity policies and the tax-

encouraged market provision of services." The Liberal primary earner strategy has generally relied upon market provision of care, as well as women's continued private provision of unpaid care, therefore placing significant pressure on women to ensure that care needs are met. Without direct state intervention into care provision, meeting care needs remains a significant challenge. This strategy does provide for women's opportunities for full-time employment and higher earnings, although, the net benefit to women who are mothers is questionable because this strategy does not ameliorate the privatized and feminized costs of caring.

The primary earner/secondary carer regime includes Australia, New Zealand, the United States, the United Kingdom, and Canada. In these nations, the welfare state does not intervene with particularly generous policies to support care, instead treating men and women primarily as workers. However, there has been a good deal of variation even among these nations. The United Kingdom, while not providing particularly generous parental leave or childcare policies, has provided transfers that have allowed women to remain in the home (Orloff 2002). In the United States, on the other hand, transfers have been much lower, and women are treated more as earners than as caregivers. For example, the United States has passed legislation that equalizes women's opportunities in full-time positions in the workplace, and women are more likely to be engaged in full-time labor force participation than in many other countries. However, the state plays less of a role in providing support for care, and primarily expects families to rely on market provision of care, such as family day care or childcare centers, or private provision from neighbors, friends, or grandparents, or from parents who stagger their working shifts to cover childcare.

The Conservative *choice regime* posits a society in which women are valued and rewarded for providing care, but also encouraged to engage in employment. In this regime,

policies provide significant support for women's full-time employment, while also providing opportunities and support for women who provide care for their families. For example, the state provides generous parental leave and caregiver allowances, and may encourage more flexible forms of employment for women, including part-time work. However, at the same time, the state provides high quality childcare, which enables women to enter full-time employment. In this regime type, there is significant variation among women, with moderate levels of full-time employment, and lower levels of part-time employment. Women's employment and earning power varies, but when women are the primary earners, such as the case of single mothers, their work opportunities are better due to the increased employment support.

The countries falling into this mixed regime – France and Belgium – have ambivalent approaches to gender and women's roles. The Conservative mixed regime does not fully challenge women's traditional roles within the family, even as women, including mothers, are more likely to be conceptualized as workers. France serves as an excellent example. Indeed, French policies are promoted as giving women a free choice (*libre choix*) (Morgan 2002). Laufer (1998, p. 63) notes French "policies sought to encompass both the ideal of "free choice" for women, that is that they could choose between paid work and unpaid caring work in the family, and the principle that women should not have to choose, but should be able to have both, achieving a full career and simultaneously being a wife and mother, an achievement which involved women being economically active even when their children were small." French women have traditionally had higher levels of employment than women in most continental European countries, and they have access to expansive state-provided childcare. French women are also more likely to work full-time than in many other continental countries. However, at the same time, France provides generous parental leave, as well as home care allowances that

support parental care for two or more children (passed in 1986 for parents of three or more children; extended to two or more children in 1995). These policies have tended to encourage women's caretaking, rather than promoting men's equal role in care.

Finally, the Social Democratic *earner-carer* regime approach rejects both of these strategies to suggest a new vision, in which women balance informal carework and labor force participation; Orloff (2002) refers to this as the "dual-earner support" model. States also pursue strategies that encourage men's participation in providing care and women's participation in employment, and require social institutions to adjust to meet the needs of men and women who are involved in both formal work and informal care. Such a strategy requires all jobs to assume that workers are both earners and carers, and provide them with shorter workweeks and employment-enabling services. Unlike the Liberal dual earner strategy that privileges provision of care outside of the household, the earner-carer strategy assumes that care will take place both inside and outside of households. However, unlike the Conservative primary caregiver/secondary earner or choice strategies, the earner-carer strategy attempts to break down gendered norms of care and employment (Fraser 1994, Crompton 1999, Gornick and Meyers 2003).

The Social Democratic earner-carer regime includes Scandinavian nations such as Sweden, Denmark, Norway, and Finland. It can generally be characterized by countries that provide generous support for care both within and outside of the home, and encourage both men and women to share participation in the workforce and at home. In these countries, both men and women are encouraged to take parental leave, but high-quality childcare outside of the home is also available (Gornick and Meyers 2003). Income transfers exist to help families trying to balance home and work, particularly families with special needs. This strategy remains difficult to institute effectively. Sweden provides the closest example, encouraging women's employment

by providing significant state-provided care support. Sweden has also tried to encourage men's caregiving through paternity leaves that only men can take (Gornick and Meyers 2003). Yet despite efforts to institute a more flexible combination of employment and care, gendered strategies remain (Ellingsaeter 1999, Sainsbury 1999). However, as Sainsbury (1999: 196) notes, "The lack of far-reaching change. . . should not blind us to the merits of policy construction which integrates market work and care work in the home and simultaneously grants equal entitlement to men and women."

Welfare State Strategies and the Effects of Motherhood

We are interested in how different welfare state regime-types may be related to outcomes for mothers as compared to women without children in their homes, including employment rates, wage rates, and poverty rates.ⁱⁱⁱ For example, do countries that generally follow the primary earner/secondary caregiver strategy have more positive outcomes for mothers' employment? Do countries that generally follow the primary caregiver/secondary earner strategy have more positive outcomes regarding poverty rates for mothers? Where are wage penalties for mothers lowest?

There is significant variation regarding employment rates, earnings, and poverty rates for mothers as compared to nonmothers cross-nationally, as well as variation in these outcomes by marital status. These differences may be due, in part, to multiple factors such as cultural values about the roles of mothers, unemployment rates within nations, or even women's own preferences. However, these cross-national differences have also often been attributed to differences in the availability of work-family reconciliation policies. We examine how different welfare state strategies are related to different outcomes for mothers and non-mothers regarding

employment, earnings, and poverty. Clearly, women may have different preferences regarding employment in different contexts. For example, due to cultural differences, women in Germany may have a lower preference for full-time employment than women in Canada. To minimize the effects of contextual variation in women's overall employment preferences, we focus our analyses on differences between mothers and women without children within each country. In our approach, the employment patterns of women without children should indicate women's baseline employment preferences, and the degree to which patterns for mothers differ should capture the additional impact of institutions and policies on women's ability to balance work and family responsibilities. We also assume that policies reflect cultural and ideological differences across countries as policies represent a mechanism through which cultural values and norms are enforced. Indeed, cultural differences in employment preferences might influence labor force participation rates and wage rates. However, if patterns associated with these variables correspond with patterns associated with poverty rates, as our hypotheses suggest, then we posit that the trends are also structural because it is unlikely that women choose impoverishment.

Many researchers argue that reconciliation policies have positive effects on women's labor market participation, although fewer look specifically at mothers' outcomes (Gornick et al. 1998, Gornick and Meyers 2003, Mandel and Semyonov 2003). Pettit and Hook (2002) show that while high levels of childcare have a positive effect on women's employment, generous maternity leave (measured in terms of weeks of leave to mothers) has negative effects. This outcome may reflect the possibility that very generous maternity leave—as in lengthy paid leaves—actually reduces the labor force attachment of mothers, while shorter paid leaves more effectively help mothers maintain labor force attachment. While generous paid parental leaves

may indeed have very positive effects in supporting care, they may have more ambivalent effects regarding employment rates.

Given the variation in the kinds of approaches and policies emphasized by our welfare state strategies, we expect to see some variation in employment outcomes. For example, since the primary caregiver regime tends to emphasize part-time employment for mothers, we expect to see higher levels of part-time employment for mothers (relative to childless women), and lower levels of full-time employment. However, the primary earner, choice, and earner-carer strategies do encourage full-time employment, so in these regimes we expect to see higher levels of full-time employment for mothers. The lack of employment supports in the primary earner model may somewhat reduce these rates. Similarly, the emphasis on women's choice may reduce these rates in the choice model, particularly for mothers of very young children. We expect the earner-carer regime to be most effective at equalizing differences in full-time employment rates between mothers and non-mothers, by providing the most direct support for employed parents.

Mothers' earnings relative to nonmothers' also vary significantly crossnationally (Waldfogel 1997, 1998, Harkness and Waldfogel 2003), although much research examines differences in earnings by gender (Mandel and Semyonov 2003; Huber et al, 2004). Previous research has argued that family policies may shape mothers' earnings relative to nonmothers (Waldfogel 1997, 1998, Budig and England 2001). Gornick and Meyers (2003) show that an index of family policies (including family leave, work-time, and childcare and schooling policies) is positively correlated to mothers' share of earnings across a range of nations.^{iv}

We expect that by emphasizing women's caregiving roles and part-time employment, the primary caregiver/secondary earner strategy may be the least successful at limiting the motherhood penalty to earnings. We posit that given the generous parental leave options,

mothers may be more likely to spend more time out of the workforce, losing experience and seniority and thus incurring a higher wage penalty for motherhood. We expect the primary earner strategy to be more successful at limiting mothers' wage penalties. However, without adequately providing support for parents, mothers should continue to pay some penalties, given their responsibilities for care. We expect the choice and earner-carer strategies, with their greater support to mothers, to be most effective at equalizing differences in earnings between mothers and women without children.

Much previous research also explores cross-national gender gaps in poverty (Casper et al. 1994, Huber et al. 2004), and differences between mothers and non-mothers (Christopher 2002, Misra and Moller 2004). Not surprisingly, scholars have argued that transfers, employment, and earnings play an important role in reducing poverty, particularly for single mothers. Looking more specifically at reconciliation policies, Misra and Moller (2004) argue that poverty rates are lowest for married mothers and lone mothers in countries where policies support care both inside and outside the home.

Poverty rates for mothers relative to non-mothers are shaped not only through employment and earnings, but also through tax and transfer welfare programs meant to support families, particularly those with children (Sainsbury 1999; Christopher 2002; Gornick, Meyers, and Ross 1997). We expect poverty rates for mothers relative to non-mothers to be highest in the primary earner countries, since among these liberal countries, transfers to families with children are fairly low, while mothers are likely to find their earnings penalized due to inadequate employment support. We expect poverty rates of mothers relative to non-mothers to be high, particularly for single mothers, in the primary caregiver countries. While these countries tend to provide better transfer programs to families with children, the lower levels of employment and

earnings will have negative effects, particularly for single mothers who often lack a second income. We expect poverty to be relatively low in the choice and earner-carer countries. These nations both provide effective tax and transfer programs for families with children, and effective employment supports for mothers. However, we expect poverty rates for mothers relative to childless women to be somewhat higher in the choice regime, since mothers of young children may have lower levels of employment.

Measuring Equity

In this paper, we show the association between different groupings of countries with a variety of outcomes by motherhood status. We compare regimes, with a focus on their orientations toward work-family issues, and try to understand how these orientations shape the opportunities of mothers. We wish to understand how differences between these regimes may be related to different outcomes in employment, earnings, and poverty among women, comparing mothers to women without children. In addition, we examine how family structure is related to these outcomes, as certain regime types may be particularly supportive of married mothers or single mothers.

We use the Luxembourg Income Study (LIS) to develop a number of measures of employment, earnings, and poverty rates. We use LIS data because this database provides the best crossnational data for comparing income across OECD countries (OECD 1995). LIS harmonizes data from a number of national surveys to ensure comparability. We utilize data from Waves IV and V, which represent the mid 1990s and early 2000s. Given our interests and the data available, we confine our attention to Austria (1997), Belgium (1997), Canada (2000),

France (1994), Germany (2000), Luxembourg (2000), the Netherlands (1999), Sweden (1995),^v the United Kingdom (1999), and the United States (2000).

We constrain our sample to working-age adults between 25 and 49 to limit the number of students and pensioners in the sample.^{vi} The LIS data only allow us to identify women with minor children living in their households as mothers; thus limiting the age range to 25 to 49 years reduces the likelihood that empty-nesters are counted as non-mothers. However, to the extent mothers are counted as non-mothers, findings will give conservative estimates of the effects of motherhood on employment outcomes. We calculate employment rates separately for full-time and part-time work. We define full-time work as the respondent working more than 30 hours per week. We calculate wage rates separately for full-time and part-time workers by using annual earnings.^{vii} In all earnings analyses we top-code annual earnings at ten times the median and bottom code at 1% of mean annual earnings. Like most comparative researchers, we measure poverty rates relatively to capture the extent that families fall below 50 per cent of their countries' median income (Casper et al. 1994, Korpi and Palme 1998, Moller et al. 2003, Huber et al. 2004). We examine only post-tax and transfer poverty rates, and measure them as the percentage of mothers and nonmothers in households with disposable incomes (market income, governmental transfers, taxes) below 50 per cent of median income for all households.^{viii}

In our tables, we first present employment rates, earnings ratios, and poverty rates for mothers relative to women without children. These descriptive statistics give us a basic understanding of how different welfare state strategies may be related to variations in employment, earnings, and poverty by motherhood status. However, to examine how motherhood is associated with these outcomes, we further regress employment, earnings, and

poverty among women on marital status and the presence of children, controlling for age, education, and where appropriate, employment status.

Marital status and parenthood status should play crucial roles in explaining women's ability to take part in employment, as well as their likelihood of living in poverty. Since reconciliation policies are meant to help address the needs of families with children, it is important to understand where women with children are particularly disadvantaged. Similarly, since married and single mothers face different demands, it is important to understand how married and single mothers differ on these measures. Women's capacity to form and maintain autonomous households is an important measure of gender equity within a welfare state (Orloff 1993). We measure marital status as 1=currenty married or cohabiting, and 0 as all others (including single, divorced or never married). Similarly, we measure motherhood=1 if the respondent has any children under 18 living in the home.^{ix}

Because motherhood could be measured in a variety of ways, we conducted a sensitivity analysis for the effects of motherhood on all dependent variables using three different measures of motherhood. First, we use a dichotomous measure for motherhood indicating the presence of minor children in the household. In a second specification, we created two dummy variables to measure motherhood based on the age of the youngest child in the home. These motherhood categories were mothers of young children (less than 6) and mothers with older children (6-17). In a third specification, we measured motherhood by the number of children in the home.^x These different approaches allow us to consider how the penalties vary by age of child and the number of children in the home. Our findings are robust across these different specifications of motherhood; thus we present findings for the most parsimonious dichotomous measure of motherhood. To examine whether motherhood affects the outcomes differently for married and

single women, we include an interaction term for motherhood and marital status in separate models.

Our models control for age, marital status, educational attainment, and part-time status. Age is measured in years. Educational attainment is measured with a set of educational dummy variables based on the international standard classification of education from UNESCO. LIS has harmonized this variable across countries to create three educational categories: low (no education through lower secondary education), medium (upper secondary education through vocational post-secondary education) and high (university/college education through post-doctoral education).^{xi} We use low education as the reference category and include dummies for medium and high education in all regression models.

In the next sections, we document our findings. Our goal is to clarify the associations between welfare state strategies and the different outcomes, in order to consider which strategies might work most effectively for each outcome.

Findings

By examining three different outcome measures—employment, earnings, and poverty—we will better articulate the strengths and weaknesses of different strategies. We ask, which strategies appear to have the strongest benefits for mothers relative to women without children?

Employment Rates

If reconciliation policies are effective at equalizing the experiences of mothers and non-mothers, we would expect to find that both groups are equally likely to be employed full time or part time. Table 1 presents the numbers of observations for each country, as well as the percentages of mothers and non-mothers in each country who are employed full-time, part-time,

and non-employed. As Table 1 shows, in every nation, mothers are less likely to be employed full time than non-mothers, and mothers are more likely to be employed part time than non-mothers. Interestingly, part-time work is a central strategy for mothers attempting to balance caregiving and earning in a wide variety of countries, although less so in Sweden and France.

[Insert Table 1 about here.]

In Figure 1 and Table 2, we look more closely at the effect of motherhood on the likelihood of women's employment, controlling for age, marital status, and education. To predict the effect of motherhood on employment rates, we used multinomial logistic regression.^{xii} These models predict the likelihood of full-time employment and part-time employment with the reference category being nonemployment. Controlling for age, education, and marital status and including only women between 25-49, these models examine the likelihood of full-time employment, relative to nonemployment, and the likelihood of part-time employment, relative to nonemployment. We expect that motherhood would decrease the likelihood of full-time employment in most countries, while it should increase the likelihood of part-time employment. However, the earner-carer strategy may provide additional supports for working mothers, which might limit the employment dampening effects of motherhood.

Table 2 presents the relative risk ratios^{xiii} and robust standard errors for the multinomial logistic regressions, while Figure 1 summarizes the effects of motherhood (as percentages) on the likelihood of full-time employment. As Figure 1 indicates, controlling for age, education, and marital status, motherhood decreases the likelihood of full-time employment in every country. Motherhood reduces the likelihood of full-time employment twenty-four percent in Sweden as compared to eighty-five percent in the Netherlands – a very wide range. As we would expect, motherhood dampens full-time employment most strongly in the primary caregiver countries,

and in the United Kingdom, which is categorized as a primary earner country. As expected, the Swedish case seems to do the best toward ensuring that motherhood does not substantially lower women's rates of full-time employment, although the "choice" model also appears to limit the effect of motherhood. However, it is important to note that these effects only compare mothers to women without children; in fact, the highest full-time employment rates are among childless women in the primary earner countries and mothers in Canada and the United States (see Table 1). All women – childless women as well as mothers – in the choice and earner-carer countries are less likely to be employed full-time than women in the primary earner countries, suggesting stronger norms for full-time work for women in Canada and the United States.

[Insert Figure 1 and Table 2 about here.]

In Table 2, when we focus more specifically on single and married mothers in full-time employment, we find that in most countries, motherhood has similar effects on single and married women. However, motherhood has a stronger effect on single women than married women in the United Kingdom, perhaps due to the lack of employment supports coupled with the presence of welfare programs directed at single mothers. Motherhood has a weaker negative effect on single women than on married women in the United States – motherhood decreases the likelihood of full-time employment by 57% for married women, but only 25% for single women. Welfare programs in the United States are premised on encouraging work, making employment crucial. At the same time, married mothers in France are no less likely to work than married women without children, suggesting that the strong employment supports there help boost at least married mothers' employment. However, motherhood continues to have a negative impact on French single women's full-time employment, decreasing the likelihood of full-time employment by 49%. In results not shown we examined whether these effects of motherhood on

full-time employment varied by the age of the youngest child in the home. In every country, the negative effect of children on women's full-time employment was largest when the youngest child was a preschooler. The negative effect increased by a minimum of 8 percentage points (Austria) to a maximum of a 21 percentage point increase (US). In contrast, where the youngest child in the home was school age or older, the negative effects of motherhood decreased in every country. In fact, school-aged children had no effect on women's likelihood of full-time employment in Belgium and Sweden.

Table 2 also shows that motherhood increases the chance of part-time employment, particularly in the primary earner countries, but also in Belgium and Sweden. While motherhood's lack of effect on part-time employment in the primary caregiver countries and France may appear counterintuitive, this may reflect high levels of part-time employment among even childless women in these countries. In countries with lower overall levels of part-time work, such as Sweden or the United States, we see that motherhood is more likely to lead women to work part-time. Motherhood increases the likelihood of working part-time 51% in the United States, and 42% in Sweden. Again, in results not shown we examined whether these effects of motherhood on part-time employment varied by the age of the youngest child in the home. Preschool children negatively effect part-time employment in France, while they encourage part-time employment in Canada and the US only. In contrast, school-aged children increase the likelihood of part-time employment in the Netherlands, Canada, the UK, the US, Belgium, and Sweden.

All in all, motherhood decreases the likelihood of full-time employment for all strategies. Given that the primary caregiver strategy does not emphasize women's full-time employment, we are not surprised that motherhood strongly decreases the likelihood of women's full-time

employment in these nations. While the primary earner strategy does emphasize employment, it does not offer the services to support combining employment and caregiving. Mothers do best at full-time employment in the earner-carer and choice strategies, which encourage women's employment through significant employment supports such as high quality childcare.

Wage Rates

If reconciliation policies are effective at equalizing the experiences of mothers and non-mothers in employment, we would expect to find that annual earnings for these two groups are approximately equal. Table 3 presents the numbers of observations with valid earnings for each country, as well as a ratio of mothers' wage rates to childless women's wage rates. A value of 1 represents perfect equality, values less than 1 indicate relatively lower rates for mothers, and values greater than 1 indicate relatively higher rates for mothers.

[Insert Table 3 about here.]

As Table 3 shows, in every nation, mothers' average earnings are lower than childless women's average earnings. These ratios are smallest among the choice countries, where wage differences, without controlling for other factors, appear to be fairly small. Possibly due to selectivity issues among women who work part-time, mothers appear to earn slightly more than women without children in Belgium, Canada, and the United States.

In Table 4, we look more closely at the effect of motherhood on annual earnings among groups of women. Here, we regress the natural log of annual earnings on marital status, motherhood status, age, educational attainment, and part-time status. Using logged earnings enables us to make comparisons across countries whose currency is in different metrics. Taking the natural log of earnings also minimizes the effect of outliers and enables a straightforward interpretation of the coefficients. If we subtract 1.0 from each coefficient and multiply the result

by 100 this gives us the percent change in earnings for a 1-unit increase in an independent variable. These models predict the wage penalty for all mothers by marital status, controlling for age, educational attainment, and part-time status. We expect that the motherhood penalty should be lowest in the earner-carer and choice strategies, followed by the primary earner strategy and with the highest wage penalties in the primary caregiver strategy.

[Insert Figure 2 and Table 4 about here.]

Table 4 presents the coefficient and standard errors for the Heckman two-stage regressions, while Figure 2 summarizes the effects of motherhood (as a percentage) on annual earnings. It is possible that differences in the motherhood penalty in earnings across countries could be due to differential selection of women into employment across countries. To control for this differential section, we employ a two-stage Heckman sample selection correction estimation procedure where we include transfer income, other family income, and presence of a preschooler as selection criteria.

As Figure 2 and Table 4 indicate, controlling for age, education, and part-time employment status, motherhood decreases earnings in every country except France and Sweden. Indeed, motherhood has no direct effect on earnings in France and Sweden, but decreases annual earnings by 28% in Germany. As we would expect, motherhood decreases earnings most strongly in the primary caregiver countries, although there is substantial overlap across categories. As expected, the negative effects of motherhood on earnings are minimized in the choice and earner-carer strategies, although motherhood continues to have negative impact on married women's earnings in Belgium. In results not shown we examined whether the age of the youngest child affects the size of the motherhood pay penalty. When the youngest child is a preschooler, the wage penalty rises within Austria, Germany, Canada, the US, Belgium, and

Sweden. At the same time, the pay penalty is smaller within each of these countries when the youngest child is aged 6-17. Interestingly, it is older children who increase pay penalties in Luxembourg, the Netherlands, and the UK.

Table 4 shows that when controlling for age, education, and part-time work status, motherhood shaped earnings differently for single and married mothers in a number of countries. In the primary caregiver strategy, wage penalties to motherhood are higher for married mothers than single mothers, except in Austria where the penalties are the same. Interestingly, married mothers' earnings are not significantly different from married nonmothers' earnings in Germany and Luxembourg, controlling for age, education, and part-time work status. This may suggest that the range of reconciliation policies available to support caregiving and programs targeting single mothers have helped limit wage disparities for single women in Germany and Luxembourg. However, in the primary earner strategy, the wage penalties to motherhood are consistently higher for single mothers than married mothers. For example, married women in the United States pay an earnings penalty of 8% for having children; single women pay an earnings penalty of 25%. The lack of work-family reconciliation policy in the primary earner countries hits single women the hardest. Without a supportive policy environment or the ability to rely upon another adult for caregiving, single women in the primary earner countries are particularly disadvantaged.

Finally, in the choice and earner-carer countries, we see few differences in earnings between childless women versus mothers, or married versus single mothers, except that married mothers in Belgium do continue to pay an 18% wage penalty. Given a history of strong supports for single mothers in Belgium, this finding is not surprising. The nonsignificant effect of motherhood on earnings for single women in the choice and earner-carer countries is

encouraging. In many ways, single mothers are the most vulnerable group of women, since balancing employment and family is particularly difficult in a one-parent family. The care and employment supports provided by the earner-carer and choice strategy may truly help mediate some of the sources of the motherhood wage penalty for single mothers.

Poverty

If reconciliation policies are helpful in equalizing the experiences of mothers and childless women, we would expect to find that mothers' and childless women's post-tax-and-transfer poverty rates are approximately equal. Of course, tax and transfer programs also play a major role in limiting poverty, and are highly correlated to the regimes we present.^{xiv} As Esping-Andersen (1990, 1999) notes, welfare programs are most generous in the Social Democratic (earner-carer) countries, somewhat less generous in the Conservative (choice and primary caregiver) countries, and least generous in the Liberal (primary earner) countries. Therefore, we expect to see variation across these groups, not only due to the availability of work-family reconciliation policies, but also due to the range of means-tested and other welfare programs available for families in these nations.

We expect that the likelihood of poverty for mothers should be lowest in the earner-carer and choice strategies, where a combination of employment, support for care within the home, and tax-and-transfer policies should limit poverty for mothers. We expect that poverty may be higher for mothers in the primary caregiver/secondary earner strategy countries, where employment is a less effective way out of poverty for women, though additional supports exist for caregivers and families. Finally, we expect that poverty rates will be particularly high in the dual earner strategy, where there are less supportive policies to help families with children mediate the costs of caring for children. Table 5 presents numbers of observations, and poverty

rates for women, comparing married mothers, single mothers, married women without children, and single women without children.

[Insert Table 5 about here.]

As Table 5 shows, in most nations, mothers are more likely to fall into poverty than women without children. Indeed, married mothers in every nation are more likely to live in poverty than married non-mothers (although these differences are very small for France, Sweden, and the Netherlands), and single mothers in every nation except Sweden and Belgium are more likely to live in poverty. However, there is significant variation among these countries, particularly when we compare poverty rates for married mothers, relative to married childless women, to those for single mothers, relative to single childless women. We explore this in more depth in Table 6 and Figure 3.

In Table 6 and Figure 3, we look more closely at the effect of motherhood on the likelihood of impoverishment among groups of women. Here, we use logistic regression; these models predict the likelihood of being in poverty for mothers and non-mothers, controlling for age, education and work status (including two variables for part time and full time; not working is the excluded category). Since poverty rates are based on household income and multiple women can reside in a single household, we adjust standard errors for the interdependence of individuals within households.

[Insert Figure 3 and Table 6 about here.]

Table 6 presents the relative risk ratios and the standard errors from the logistic regression. Model 1 presents the effects of motherhood on the likelihood of impoverishment, controlling for marriage, age, education, and work status. Model 2 presents the results when an interaction term between motherhood and married is added to the previous model. Here, we

report the relative risk ratios for motherhood and the motherhood-married interaction, controlling for age, education and work status. Figure 3 summarizes these results. Figure 3 and Table 6 show that there is tremendous variation in the effects of motherhood on poverty. Motherhood has no effect on the likelihood of poverty in four countries – Germany, Luxembourg, France, and Sweden – for either married or single women. However, the actual poverty rates for single mothers are actually considerably higher in Germany and the Netherlands than they are in France and Sweden (see Table 5).

The impact of motherhood on poverty is as expected in the primary earner countries, with single mothers particularly hard hit (in the United States, for example, motherhood increases the likelihood of poverty 39% for married women and 111% for single women). Given the market-orientation of this strategy with less generous transfers and fewer employment supports for mothers, it is not surprising that motherhood increases the chance of poverty in these nations. With its lower levels of support for caring inside and outside of the home, the primary earner strategy does not effectively address poverty.

Similarly, the impact of motherhood on poverty is as expected in the choice and earner-carer countries. While motherhood does not affect the incidence of poverty, controlling for the other factors, in France or Sweden, it actually reduces the incidence of poverty in Belgium. Given the generous transfers as well as employment supports for single mothers in Belgium, this finding is consistent with our expectations. Clearly, the choice and the earner-carer strategies have helped address the family gap in poverty.

However the primary caregiver model is more varied than expected. Motherhood has no impact on poverty in Germany and Luxembourg (although poverty rates are generally higher for both mothers and childless women in Germany than in Luxembourg; see Table 5). In the

Netherlands, motherhood decreases the likelihood of poverty by 25% for married women, while motherhood increases the likelihood of poverty 301% for single women. On the other hand, in Austria, motherhood increases the likelihood of poverty for both married and single women, though significantly more so for single mothers. The policy packages in the primary caregiver countries are clearly very varied. In Austria and the Netherlands, there may be contradictory impulses toward encouraging caregiving in traditional families, but lower levels of certainty in addressing the needs of single-parent families. However, this strategy appears too varied to make clear pronouncements about its effects on poverty.

These findings are clarified when considering alternative measures of motherhood (results not shown). As previously noted, the dichotomous measure of motherhood does not significantly predict the likelihood of impoverishment in Germany and Luxembourg, yet when considering the age of children, we find that single mothers with older children are 87 percent more likely to live in poverty than single non-mothers in Germany and 358 percent more likely in Luxembourg. Indeed, we find that single mothers of older children are consistently the most disadvantaged group in the primary caregiver countries, even more so than single mothers of older children in the primary earner countries. Lower levels of attachment to the labor market may then have a continuing impact on poverty rates. Thus, when considering the age of children, the primary caregiver countries show greater homogeneity in terms of the effects of single motherhood on impoverishment. In the primary earner countries, the costs of motherhood are greatest for mothers with preschool age children. Motherhood remains non-significant in the choice and earner-carer countries, with the exception of France where mothers of older children have a 54 percent greater likelihood of impoverishment

Conclusions

What combination of welfare state policies and strategies are most likely to lead to equity among women? We began this paper considering strategies that emphasize equalizing women's opportunities in the labor force (the primary earner strategy); strategies that emphasize rewarding and supporting women's caretaking (the primary caregiver strategy); strategies that emphasize equalizing women's labor market opportunities, while also supporting women's caretaking, particularly when children are young (the choice strategy); and a model meant to equalize women's employment opportunities through supports for caring, while also equalizing men's engagement in caring (the earner-carer strategy). While our analyses in this paper merely point to associations between strategies and outcomes, they do give us some clues about the effectiveness of these different strategies.

The primary caregiver/secondary earner strategy is associated with the greatest gender inequity in employment, but this strategy does not pretend to emphasize mothers' full-time employment or earnings on a par with women without children. An approach that values women's caregiving may also emphasize part-time employment, since care may be seen as women's primary responsibility. For this reason, it is not surprising that this strategy is associated with larger employment and wage gaps by motherhood. As the results for poverty rates also show, however, this strategy has varied results; in Austria and the Netherlands, it seems to continue to primarily support "traditional" households, where motherhood had devastating effects for single parents. The high levels of poverty faced by single mothers with children in some of these nations suggests that this strategy remains problematic; however, transfer programs can clearly limit these effects on poverty, as Germany and Luxembourg show.

The primary earner strategy also has mixed results. While this strategy has made some progress in lowering the full-time employment gaps and wage penalties faced by mothers, these negative effects remain fairly serious—particularly for single mothers. Within this strategy, married mothers benefit somewhat relative to single mothers. Yet, poverty rates remain high for mothers, particularly so for single mothers. If policies are premised on women mimicking men’s labor force participation without increased supports for care, married mothers struggle to find balance, while single mothers are simply left out of the equation. The United States, with its emphasis on market-driven principles, is a telling example with its lower employment rates, high wage penalties, and high poverty rates for mothers.

The choice strategy is somewhat more successful. While motherhood decreases the likelihood of full-time employment in these countries, earnings are more effectively supported through a variety of employment supports such as high quality childcare. In France, mothers do not face wage penalties, and are no more likely to live in poverty. In Belgium married mothers continue to face some wage penalty, while single mothers are actually less likely to live in poverty than single childless women. Clearly, in these countries, programs targeted to helping working families with children, and in Belgium working single mothers, have helped equalize the situation for mothers.

Across the board, the earner-carer strategy is most consistent with the highest levels of equity for all groups, including single mothers. The earner-carer strategy may be effective in part because it boosts labor market participation and earnings for mothers—whether married or single. In this strategy, motherhood is associated with the least negative effects on employment—and single motherhood, while still carrying penalties, is associated with much lower penalties than in the other strategies. At the same time, poverty levels are quite low compared to other

countries, including for single mothers. By providing significant care support both outside the home (for example, generous, high-quality childcare), some support for care inside the home (for example, family leave), and approaches meant to encourage men's involvement in caretaking (for example, use-it-or-lose-it paternity leave) this strategy has begun to address many of the roots of gender inequality.

We believe that our analysis contributes to larger efforts to understand the effects of work-family policies. While there are many approaches to grouping countries, most scholars continue to generally group the continental countries together (Esping-Andersen 1999; Orloff 2002; Gornick and Meyers 2003, 2004). Yet, scholars have also noted that France and Belgium appear to have different norms regarding women's employment in comparison to the other continental cases (Lewis and Ostner 1991; Millar 1996; Anttonen and Sippila 1996; Gornick, Meyers, and Ross 1996; Pfau-Effinger 1999; Leitner 2003; Gornick and Meyers 2004). Our findings strongly support the idea that these two countries *are* distinct from the other continental cases regarding motherhood penalties on employment, earnings, and poverty. While our findings echo some of the findings of earlier studies (Gornick, Meyers, and Ross 1996), we make a stronger case for the importance of recognizing France and Belgium's particular strategy as different from the broader continental approach.

While our approach focuses on reconciliation policies, a range of other policies—(tax policies, unemployment insurance, family allowances, child support, single parents allowances, housing subsidies, etc.), that may be shaping the outcomes we found. Most of the variations in these policies may fit within the strategies we outline, but others would not. Future research should attend to the effects of additional policies on these outcomes. At the same time, the countries do not perfectly fit into strategies, as the heterogeneity within each strategy

(particularly, the primary caregiver) suggests. A more precise approach would more directly examine the effects of specific policies on these different outcomes and is the direction future work in this area should pursue.

However, our study suggests that certain policy strategies—in particular, the strategy taken by the earner-carer strategy—are more strongly associated with greater equity for mothers as compared to women without children in the home. Rather than looking at only one measure of equity, we focused on three measures; similarly, we looked at differences among women by parenthood and marital status. By looking at these multiple measures across diverse groups, we hoped to identify the costs and benefits associated with these strategies. While all of these strategies continue to be associated with certain inequalities due to motherhood, the earner-carer strategy appears to be most effective at increasing equity, particularly for single mothers. We interpret our findings to suggest that welfare states must be better reconceptualized to support both women’s caregiving and employment. While the earner-carer strategy we examine in this paper has long way to go before succeeding at this level, our findings suggest that it is the strategy that is most likely to lead to true equity among women.

References

- Bergmann, Barbara R., 1998, Watch out for 'family friendly' policies. *Dollars & Sense*, 215, 10-11.
- Bergmann, Barbara R., 2001, What would we gain by subsidizing childcare?, in: Mary C. King, *Squaring Up: Policy Strategies to Raise Women's Incomes in the United States* (Ann Arbor: University of Michigan Press), pp. 46-62.
- Budig, Michelle J. and England, Paula, 2001, The wage penalty for motherhood. *American Sociological Review*, 66, 204-225.
- Casper, Lynne M., McLanahan, Sara S. and Garfinkel, Irwin, 1994, The gender-poverty gap: what we can learn from other countries. *American Sociological Review*, 59, 594-605.
- Castles, Francis G. (Ed), 1993, *Families of Nations: Patterns of Public Policy in Western Democracies* (Brookfield: Ashgate Publishing Company).
- Castles, Francis G., 2004, *The Future of the Welfare State: Crisis Myths and Crisis Realities* (Oxford: Oxford University Press).
- Castles, Francis G. and Mitchell, Deborah, 1993, Worlds of welfare and families of nations, in: F. Castles (Ed), *Families of Nations: Patterns of Public Policy in Western Democracies* (Brookfield: Ashgate Publishing Company), pp. 93-128.
- Christopher, Karen, 2002, Caregiving, welfare states, and mothers' poverty, in: F. M. Cancian et al. (Eds), *Child Care and Inequality: Rethinking Carework for Children and Youth* (New York: Routledge), pp. 113-128.
- Crompton, Rosemary (Ed), 1999, *Restructuring Gender Relations and Employment: The Decline of the Male Breadwinner* (New York: Oxford University Press).

- Daly, Mary (Ed), 2001, *Carework: The Quest for Security* (Geneva: International Labour Office).
- Ellingsaeter, AnneLise, 1999, Dual breadwinners between state and market, in: R. Crompton, *Restructuring Gender Relations and Employment: The Decline of the Male Breadwinner* (New York: Oxford University Press), pp. 40-59.
- England, Paula, Budig, Michelle and Folbre, Nancy, 2002, Earnings of virtue: the relative pay of carework. *Social Problems*, 49, 455-473.
- Esping-Andersen, Gosta, 1990, *The Three Worlds of Welfare Capitalism* (Cambridge: Polity).
- Esping-Andersen, Gosta, 1999, *Social Foundations of Postindustrial Economies* (New York: Oxford).
- Fraser, Nancy, 1994, After the family wage: gender equity and the welfare state. *Political Theory*, 22, 591-618.
- Gornick, Janet C., 2004, Is parental leave good or bad for gender equality? Paper presented at the Annual Meetings of the American Sociological Association, San Francisco, California.
- Gornick, Janet C. and Meyers, Marcia K., 2003, *Families That Work: Policies for Reconciling Parenthood and Employment* (New York: Russell Sage).
- Gornick, Janet C. and Meyers, Marcia K., 2004, Welfare regimes in relation to paid work and care in: J. Giele, *Changing Life Patterns in Western Industrial Societies* (Netherlands: Oxford Elsevier Press), pp. 45-67.
- Gornick, Janet C., Meyers, Marcia K. and Ross, Katharine E., 1998, Public policies and the employment of mothers: a cross-national study. *Social Science Quarterly*, 79, 35-54.

Gornick, Janet, Marcia K. Meyers and Katherin E. Ross. 1997. "Supporting the Employment of Mothers: Policy Variation across Fourteen Welfare States." *Journal of European Social Policy* 7: 45-70.

Hantrais, Linda, 2000, From equal pay to reconciliation of employment and family life, in: Linda Hantrais (Ed), *Gendered Policies in Europe* (New York: St. Martin's Press), pp. 1-26.

Harkness, Susan and Waldfogel, Jane, 2003, The family gap in pay: evidence from seven industrialized countries. *Research in Labor Economics*, 22, 369-414.

Harrington Meyer, Madonna (Ed), 2000, *Care Work: Gender, Labor, and the Welfare State* (New York: Routledge Press).

Hobson, Barbara, 1994, Solo mothers, social policy regimes, and the logics of gender, in: D. Sainsbury (Ed), *Gendering Welfare States* (London: Sage), pp. 170-188.

Huber, Evelyne, Stephens, John D., Bradley, David, Moller, Stephanie and Nielsen, François, 2004, The welfare state and gender equality. Luxembourg Income Study Working Paper No. 279, Luxembourg.

Jenson, Jane and Sineau, Mariette (Eds), 2001, *Who Cares? Women's Work, Childcare, and Welfare State Redesign* (Toronto: University of Toronto Press).

Korpi, Walter and Palme, Joakim, 1998, The paradoxes of redistribution and strategies of equality: welfare state institutions, inequality, and poverty in the Western countries. *American Sociological Review*, 63, 661-687.

Langan, Mary and Ostner, Ilona, 1991, Gender and welfare: towards a comparative framework, in: G. Room (Ed), *Towards a European Welfare State?* (Bristol, England: SAUS Publications), pp. 126-150.

Leitner, Sigrid, 2003, Varieties of familialism: the caring function of the family in comparative perspective. *European Societies*, 5, 353-375.

Lewis, Jane (Ed), 1998, *Gender, Social Care, and Welfare State Restructuring* (Aldershot: Ashgate).

Lewis, Jane and Daly, Mary, 2000, The concept of social care and the analysis of contemporary welfare states. *British Journal of Sociology*, 51, 281-299.

Mandel, Hadas and Semyonov, Moshe, 2003, The prevalence of welfare state policies and gender socioeconomic inequality: a comparative analysis. Luxembourg Income Study Working Paper No. 346, Luxembourg.

Michel, Sonya and Mahon, Rianne (Eds), 2002, *Child Care Policy at the Crossroads: Gender and Welfare State Restructuring* (New York: Routledge).

Misra, Joya and Moller, Stephanie, 2004, Familialism and welfare regimes: poverty, employment, and family policies. SADRI and CPPA, University of Massachusetts Working Paper Series.

Moller, Stephanie, Bradley, David, Huber, Evelyne, Nielsen, François and Stephens, John D., 2003, Determinants of relative poverty in advanced capitalist democracies. *American Sociological Review*, 68, 22-51.

Morgan, Kimberly. 2002. "Does Anyone Have a Libre Choix? Child Care and the Crisis of the Welfare State in France." In Sonya Michel and Rianne Mahon, eds., *Child Care Policy at the Crossroads: Gender and Welfare State Restructuring*. New York: Routledge Press.

Organisation for Economic Co-operation and Development (OECD), 1995, Income distribution in OECD countries: evidence from the Luxembourg Income Study. *Social Policy Studies* No. 18, Paris, France.

Orloff, Ann Shola, 1993, Gender and the social rights of citizenship: the comparative analysis of gender relations and welfare states. *American Sociological Review*, 58, 303-328.

Pettit, Becky and Hook Jennifer Hook, 2002, The structure of women's employment in comparative perspective. Luxembourg Income Study Working Paper No. 330, Luxembourg.

Pierson, Paul (Ed), 2001, *The New Politics of the Welfare State* (New York: Oxford).

Rothstein, Bo and Steinmo, Sven (Eds), 2002, *Restructuring the Welfare State* (New York: Palgrave Macmillan).

Sainsbury, Diane, 1999, *Gender, Equality, and Welfare States* (New York: Cambridge).

Saraceno, Chiara, 1997, Family change, family policies and the restructuring of welfare, in: *Family, Market and Community: Equity and Efficiency in Social Policy* (Paris: OECD), pp. 81-99.

Seeleib-Kaiser, Martin, 2004, Germany: still a conservative welfare state? Paper presented at the Annual Conference of Europeanists, Chicago, Illinois. Retrieved January 12, 2005, http://www.europenet.org/conference2004/papers/J2_SeeleibKaiser.pdf

Spain, Daphne and Bianchi, Suzanne, 1996, *Balancing Act: Motherhood, Marriage, and Employment among American Women* (New York: Russell Sage Foundation).

Stier, Haya and Mandel, Hadas, 2003, Inequality in the family: the institutional aspects of wives' earning dependency. Luxembourg Income Study Working Paper No. 359, Luxembourg.

Waldfogel, Jane, 1997, The effect of children on women's earnings. *American Sociological Review*, 62, 209-217.

Waldfogel, Jane, 1998, Understanding the 'family gap' in pay for women with children. *Journal of Economic Perspectives*, 12, 137-156.

ⁱ Esping-Andersen (1990, p. 22) originally grouped countries into these clusters based on state-market relations, stratification, and social citizenship rights, including their level of de-commodification, or how state policies allow citizens to “maintain a livelihood without reliance on the market.” De-commodification was measured by the generosity and availability of old age pensions, sickness benefits, and unemployment insurance payments.

ⁱⁱ Esping-Andersen measures de-familialization by examining public spending on family services, the percentage of children under three in childcare, and the percentage of elderly receiving public home help. These measures are correlated with the intensity of family welfare provision (familialism), based on the percentage of the aged living with their children, unemployed youth living with parents, and women’s weekly unpaid hours.

ⁱⁱⁱ We might expect that differences among women might also be related to gender differences in employment, earnings, and poverty; however, we focus here on the effect of motherhood for women, since analyzing gender gaps fully would require more space than we have here.

^{iv} Mandel and Semyonov (2003) also show that a measure of welfare policies (including paid maternity leave, coverage in public childcare, and public sector employment) decrease wage gaps between men and women across countries.

^v The 2000 Swedish data does not offer variables on part-time employment or hours worked.

^{vi} Reconciliation policies focused on caring for children are less likely to shape the experiences of pensioners. While young adults may be more likely to be caring for children, if we include younger adults, we would likely include many students, whose experiences are not directly comparable to nonstudents. Motherhood most likely continues to have effects (particularly on earnings) throughout the lifecourse, and due to data limitations, there is still some possibility that some women are not treated as mothers, simply because they no longer have children (under 18) living in the home. Although not ideal, we believe that this bias is likely to lead to our *underestimating* the effect of motherhood; that is, the resulting bias should not lead us to overestimate the motherhood penalty.

^{vii} Countries differ in whether gross (before employee tax/social insurance contributions are deducted) or net (post-tax) earnings are available. Both measures are post-employer tax/social insurance contributions, however. In our analyses the following countries have gross earnings: Canada, Germany, the Netherlands, Sweden, the US, and the UK. The other countries provide net earnings: Austria, Belgium, France, and Luxembourg. If the relative difference in earnings is affected by taxation, comparing results based on net earnings to gross earnings may be problematic. Fortunately, countries with gross earnings appear in all but our “free choice” strategy. We find our results are robust even when we limit our wage analyses to these six countries providing gross earnings.

^{viii} Disposable income is adjusted for household size based on the square root of the number of persons in the household. In creating post-tax and transfer poverty rates, we excluded households with negative or no disposable income. We also dropped cases that did not report income. We lose 100 to 500 cases in Luxembourg, Austria, Belgium, and France; 500-1,000 cases in Germany, and Sweden; and 1,000 to 3,000 cases in the United Kingdom, Canada and the United States.

^{ix} Some of the respondents who are not listed as mothers may have older children. See note 11 for more information.

^x We think the dichotomous measure is also the most accurate specification of motherhood given the available data. This is because the other measures imply a false precision of motherhood. For example, the number of children motherhood specification is unable to accurately count the number of children mothers have raised if some of those children are 18 years or older at the time of the survey.

^{xi} LIS has not harmonized this educational variable for two countries in our analysis: Canada and the UK. For both countries, we hand-coded educational attainment based detailed measures available in the data.

^{xii} Another approach would be to estimate an ordered probit model. However, we cannot assume that these are ordered states for mothers making employment decisions. Ordered probit models do not allow us to examine these varying effects of children on full versus part-time employment.

^{xiii} Relative risk ratios are calculated by exponentiating the logit coefficients.

^{xiv} Another approach may have been to examine pre-tax-and-transfer poverty rates; however, we were interested in how transfers fit into the overall picture of employment, earnings, and poverty.

Table 1: Women's Full-Time, Part-Time, and Non- Employment Rates, by Presence of Children at Home

	Number of Observations	Full-Time Employment		Part-Time Employment		Not Employed	
		No Minor Children in Home	1 + Minor Children in Home	No Minor Children in Home	1 + Minor Children in Home	No Minor Children in Home	1 + Minor Children in Home
<i>Primary Caregiver / Secondary Carer Strategy</i>							
Austria	1,204	68.6%	39.0%	14.0%	28.1%	17.4%	32.9%
Germany	4,822	70.3%	30.5%	15.1%	30.7%	14.6%	38.8%
Luxembourg	1,151	71.9%	30.6%	12.6%	28.7%	15.5%	40.7%
Netherlands	2,491	63.4%	17.1%	21.1%	52.9%	15.5%	30.0%
<i>Primary Earner / Secondary Carer Strategy</i>							
Canada	12,745	62.6%	45.7%	11.0%	19.8%	26.4%	34.5%
UK	10,105	70.7%	31.2%	12.4%	33.4%	16.9%	35.4%
US	21,064	79.2%	61.5%	6.1%	14.3%	14.7%	24.2%
<i>Choice Strategy</i>							
Belgium	1,959	48.3%	38.1%	14.1%	26.7%	37.6%	35.2%
France	5,286	59.4%	46.1%	18.3%	20.8%	22.3%	33.1%
<i>Earner-Carer Strategy</i>							
Sweden	5,924	47.9%	37.5%	35.6%	46.0%	16.5%	16.5%

Table 2. Relative Risk Ratios and Robust Standard Errors from Multinomial Logistic Regression Models Predicting the Effect of Motherhood on the Likelihood of Employment, by Marital and Part-time Statuses

	Employed Full-time						Employed Part-Time	
	Model 1			Model 2			Model 1	
	Mother, no interaction			Mother	Mother & Married Interaction		Mother, no interaction	
<i>Primary Caregiver / Secondary Earner Strategy</i>								
Germany	0.199			0.268	0.668		0.841	
	(0.022)	***		(0.066)	(0.186)		(0.111)	
Netherlands	0.148			1.1774	0.604		1.171	
	(0.023)	***		(0.733)	(0.267)		(0.175)	
Luxembourg	0.273			0.383	0.616		1.048	
	(0.054)	***		(0.161)	(0.296)	**	(0.244)	
Austria	0.352			0.438	0.760		1.140	
	(0.066)	***		(0.194)	(0.372)	*	(0.270)	
<i>Primary Earner / Secondary Carer Strategy</i>								
UK	0.209			0.170	1.321		1.287	
	(0.012)	***		(0.017)	(0.166)	**	(0.095)	***
Canada	0.604			0.575	1.107		1.370	
	(0.037)	***		(0.066)	(0.154)		(0.120)	***
US	0.540			0.728	0.790		1.508	
	(0.024)	***		(0.081)	(0.072)	***	(0.110)	***
<i>Choice Strategy</i>								
Belgium	0.770			0.711	1.116		1.457	
	(0.104)	*		(0.203)	(0.363)		(0.255)	**
France	0.639			0.508	1.442		0.922	
	(0.051)	***		(0.071)	(0.249)		(0.108)	
<i>Earner-Carer Strategy</i>								
Sweden	0.757			0.875	0.766		1.419	
	(0.076)	***		(0.150)	(0.161)		(0.169)	***

Note: Model 1 tests the impact of motherhood on impoverishment; Model 2 adds an interaction term between married and motherhood status. All models control for age, education, marital status, and work status.

*** p< .001, two-tailed test, ** p< .01, two-tailed test, * p< .05, two-tailed test.

Table 3. Ratio of Mothers' Annual Earnings to Annual Earnings of Women Without a Minor Child at Home.

	# of Observations w/Valid Earnings	Employed Full-Time	Employed Part-Time
<i>Primary Caregiver / Secondary Earner Strategy</i>			
Germany	3,491	0.816	0.842
Netherlands	1,788	0.920	0.923
Luxembourg	748	0.805	0.774
Austria	648	0.841	0.782
<i>Primary Earner / Secondary Carer Strategy</i>			
UK	6,641	0.870	0.943
Canada	10,074	0.902	1.014
US	16,701	0.839	1.174
<i>Choice Strategy</i>			
Belgium	1,107	0.981	1.029
France	3,682	0.966	0.959
<i>Earner-Carer Strategy</i>			
Sweden	5,109	0.811	0.805

Table 4. Effect of Motherhood on the Natural Log of Annual Earnings

	Model 1	Model 2	
	Mother, No interaction	Mother	Mother & Married Interaction
<i>Primary Caregiver/ Secondary Earner Strategy</i>			
	-0.276	-0.044	-0.297
Germany	(0.033)***	(0.068)	(0.076)***
	-0.238	-0.106	-0.154
Netherlands	(0.047)***	(0.109)	(0.115)
	-0.188	-0.059	-0.217
Luxembourg	(0.067)***	(0.100)	(0.124)*
	-0.150	-0.043	-0.139
Austria	(0.057)***	(0.110)	(0.123)
<i>Primary Earner / Secondary Carer Strategy</i>			
	-0.146	-0.262	0.144
UK	(0.022)***	(0.043)***	(0.046)***
	-0.178	-0.272	-0.126
Canada	(0.023)***	(0.045)***	(0.051)**
	-0.112	-0.247	0.162
US	(0.015)***	(0.035)***	(0.378)***
<i>Choice Strategy</i>			
	-0.122	0.086	-0.271
Belgium	(0.060)*	(0.120)	(0.135)**
	0.019	-0.016	0.060
France	(0.031)	(0.049)	(0.063)
<i>Earner-Carer Strategy</i>			
	-0.058	0.185	-0.303
Sweden	(0.077)	(0.164)	(0.183)

Note: Model 1 tests the impact of motherhood on impoverishment; Model 2 adds an interaction term between married and motherhood status. All models control for age, education, marital status, and work status.

*** p< .001, two-tailed test, ** p< .01, two-tailed test, * p< .05, two-tailed test.

Table 5. Poverty Rates by Marital and Motherhood Status

	Number of Observations	Single Non-Mothers	Single Mothers	Married Non-Mothers	Married Mothers
<i>Primary Caregiver/ Secondary Earner Strategy</i>					
Germany	4,822	14.9%	26.2%	1.7%	4.5%
Netherlands	2,491	4.1%	22.4%	6.4%	6.7%
Luxembourg	1,042	5.4%	19.6%	2.9%	6.1%
Austria	976	5.6%	26.0%	3.9%	6.6%
<i>Primary Earner / Secondary Carer Strategy</i>					
UK	9,029	9.2%	29.4%	3.5%	8.3%
Canada	11,353	18.2%	33.3%	5.2%	9.1%
US	19,316	15.8%	35.1%	6.6%	12.0%
<i>Choice Strategy</i>					
Belgium	1,723	16.5%	11.2%	3.6%	5.1%
France	5,286	8.5%	14.0%	4.5%	4.6%
<i>Earner-Carer Strategy</i>					
Sweden	5,262	6.1%	5.9%	1.2%	1.3%

Table 6. Relative Risk Ratios and Robust Standard Errors from Logistic Regression Models Predicting the Effect of Motherhood and the Interactive Effect of Marriage with Motherhood on Poverty Status

	Model 1		Model 2			
	All Mothers		Mothers		Mothers & Married Interaction	
<i>Primary Caregiver</i>						
Germany	1.405 (0.258)		1.448 (0.292)		0.882 (0.481)	
Netherlands	2.136 (0.298)	*	4.007 (0.317)	***	0.186 (0.446)	***
Luxembourg	1.920 (0.467)		2.600 (0.561)		0.415 (0.818)	
Austria	2.792 (0.472)	*	5.629 (0.497)	**	0.222 (0.729)	*
<i>Primary Earner</i>						
UK	1.483 (0.112)	***	1.806 (0.143)	***	0.663 (0.202)	*
Canada	1.556 (0.101)	***	1.713 (0.127)	***	0.810 (0.197)	
US	1.772 (0.065)	***	2.113 (0.081)	***	0.659 (0.124)	**
<i>Choice</i>						
Belgium	0.741 (0.251)		0.426 (0.433)	*	3.033 (0.574)	
France	1.052 (0.152)		1.160 (0.190)		0.768 (0.295)	
<i>Earner-Carer</i>						
Sweden	0.900 (0.250)		0.888 (0.298)		1.062 (0.478)	

Note: Model 1 tests the impact of motherhood on impoverishment; Model 2 adds an interaction term between married and motherhood status. All models control for age, education, marital status, and work status.

*** p< .001, two-tailed test, ** p< .01, two-tailed test, * p< .05, two-tailed test

Figure One: Effect of Motherhood (in % Change) on the Likelihood of Full-time Employment Relative to Part-time and Non-employment, controlling for age, education, and marital status

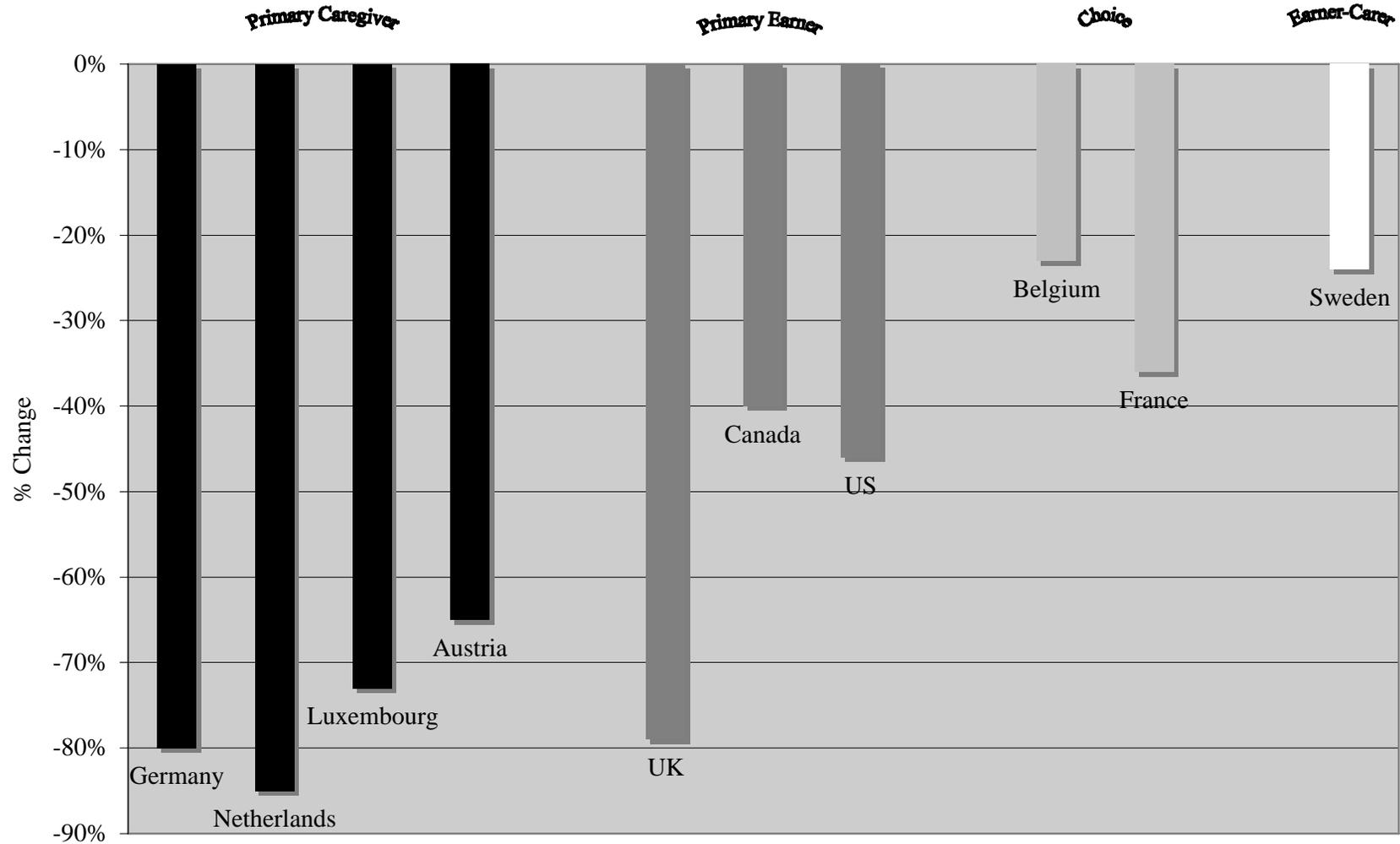


Figure Two: Effect of Motherhood (in % Change) on Earnings from Two-Stage Heckman Selection Regression Models, Controlling for Age, Marital Status, Education, and Part-time Work Status

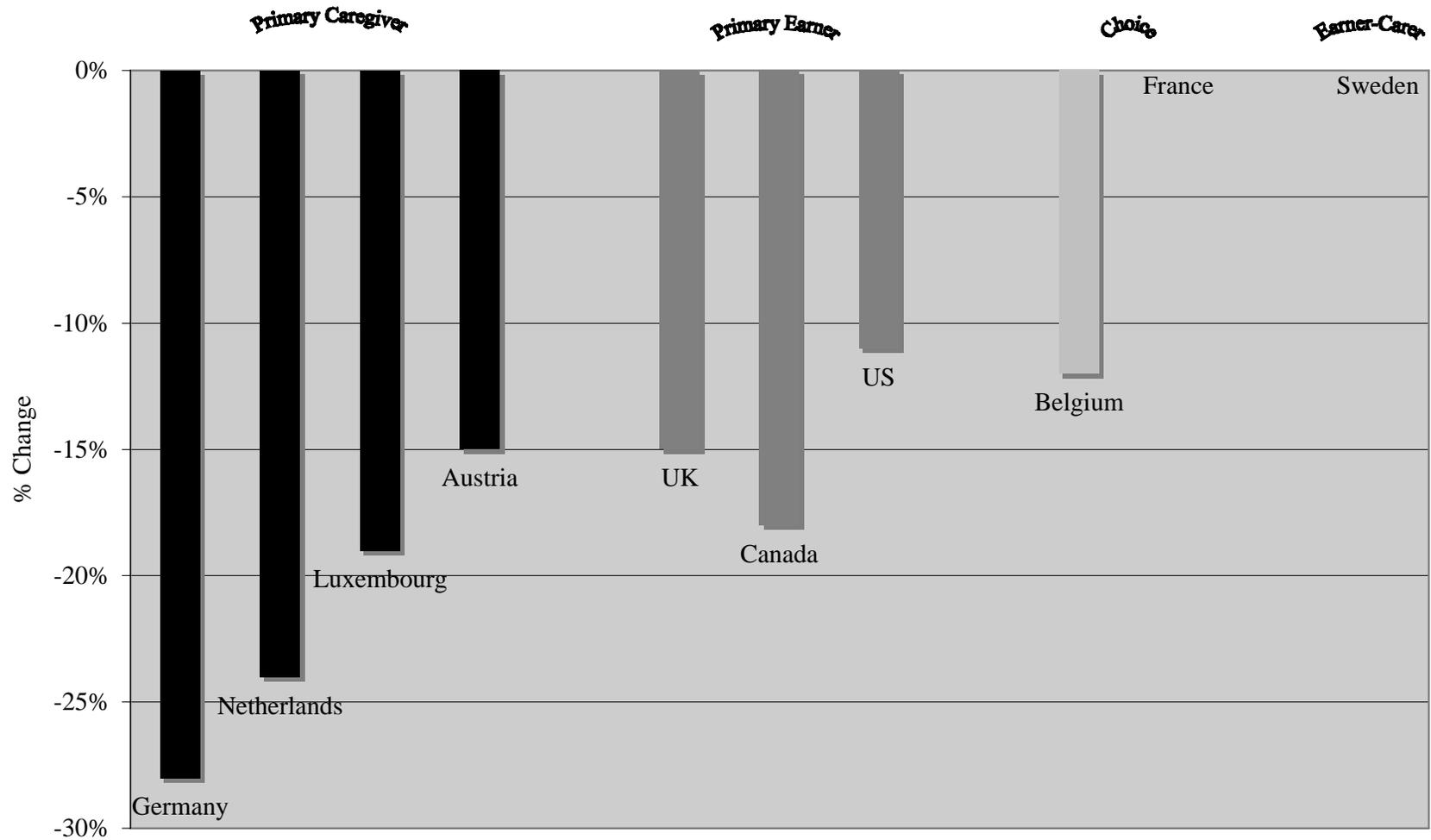


Figure Three: Effect of Motherhood (in % Change) on Likelihood of Poverty for Single (Solid Column) and Married (Checked Column) Women, Controlling for Age, Education, and Part-time Work Status

