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Family Policies and Single Parent Poverty in 18 OECD Countries, 1978-2008

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Revised Version

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Abstract

In this study, we examined to what extent family policies differently affect poverty among single-parent households and two-parent households. We distinguished between reconciliation policies (tested with parental leave and the proportion of unpaid leave) and financial support policies (tested with family allowances). We used data from the Luxembourg Income Study Database, covering 514,019 households in 18 OECD countries from 1978 to 2008, combined with data from the Comparative Family Policy Database. Our findings suggest that single- and two-parent households are less likely to be poor in countries that have longer parental leave, a smaller proportion of unpaid leave, and higher amounts of family allowances. Most notably, family policies reduced poverty to a greater extent among single-parent households. Paid leave more effectively facilitated the employment of single parents, thereby reducing their poverty more than among two-parent households. Family allowances decreased the risk of poverty of single-parent households relative to two-parent households in the Nordic countries, the Netherlands and Belgium, while increasing this relative risk in for instance Luxembourg, France, Germany and Ireland. Nevertheless, in absolute terms, in most countries family allowances were found to reduce a larger share of the poverty among single-parent households than among two-parent households.

Key words: single-parent households, poverty, family policy, cross-national, parental leave, family allowance

Política familiar y pobreza en hogares monoparentales en 18 países de la OCDE, 1978-2008

Resumen

Este estudio examina en qué medida las políticas familiares impactan en forma diferencial la pobreza en hogares monoparentales y biparentales, considerando políticas de conciliación (medidos en términos de licencia de maternidad con y sin goce de sueldo) y políticas de apoyo financiero (asignaciones familiares). Para este estudio se utilizaron datos del Luxembourg Income Study Database, que cubre 514.019 hogares en 18 países de la OCDE desde 1978 a 2008, y de la base de datos Comparative Family Policy. Los resultados sugieren que los hogares mono y biparentales son menos propensos a ser pobres en países que ofrecen licencia de maternidad/paternidad más prolongadas, una menor proporción de licencias sin goce de sueldo y una mayor cantidad de asignaciones familiares. En particular, estas políticas son más efectivas en reducir la pobreza en los núcleos monoparentales. Las licencias con goce de sueldo son más efectivas en facilitar el empleo del único progenitor, lo cual reduce su pobreza más que en los hogares biparentales. Las asignaciones familiares reducen el riesgo de pobreza en hogares monoparentales en relación a los biparentales en los países nórdicos, Holanda y Bélgica, mientras que este riesgo relativo aumenta en Luxemburgo, Francia, Alemania e Irlanda. Sin embargo, en términos absolutos, en la mayoría de los países estudiados las asignaciones familiares reducen una mayor parte de la pobreza entre hogares monoparentales comparado con hogares biparentales.

Palabras clave: hogares monoparentales, pobreza, política familiar, licencia familiar, asignación familiar

Background and Research Questions

Single-parent households are an increasingly common household structure across OECD countries. Many children will spend at least part of their childhood growing up in a single-parent household (Heuveline, Timberlake, & Furstenberg, 2003; OECD, 2011A). Single-parent households have exceptionally high poverty rates across countries (Gornick & Jäntti 2009; Brady & Burroway 2012) and there is clear evidence that poverty is harmful to the future wellbeing of children (Duncan & Magnuson, 2011). Scholars have extensively studied the impact of social policy on reducing poverty of single-parent households. Previous studies have mainly focused on the outcomes of income taxes and transfers, finding that redistribution policies are an effective anti-poverty measure across countries (McLanahan, Casper, & Sorensen, 1995; Cornia & Danziger, 1997; Bradbury & Jäntti, 1999; Gornick & Meyers, 2003; Rainwater & Smeeding, 2004; Heuveline & Weinshenker, 2008; Gornick & Jäntti, 2009; Brady & Burroway, 2012). Fewer studies, however, have addressed whether family policies can reduce poverty among single-parent households. This study seeks to address this gap in the literature. In doing so, we will make an important distinction between two types of family policy: reconciliation policies that provide opportunities to reconcile work and family; and financial support policies that provide financial assistance to families with children (Gauthier, 1996; Thévenon, 2011, Nieuwenhuis, 2012).

Reconciliation policies, such as maternity and parental leave, continued pay during leave, public childcare, and early childhood education, have been an important factor in providing parents with opportunities to combine parenthood and employment. Reconciliation policies are directly linked to poverty reduction, as employment is an important protection against poverty (Gornick, Meyers, & Ross, 1998; Gornick, 2004; Misra, Budig, & Moller, 2007). Many scholars have found that reconciliation policies are particularly effective in shaping women's employment outcomes (Gornick, Meyers, & Ross, 1998; Van der Lippe & Van Dijk, 2002; Jaumotte, 2003; Del Boca, Pasqua, & Pronzato, 2009; Hook, 2010; OECD, 2011A, 2011B; Nieuwenhuis, Need & Van der Kolk, 2012). However, it remains to be seen, to what extent reconciliation policies can facilitate the employment of single parents and reduce their poverty risk.

Financial support policies, such as family allowances and tax benefits to families with children, transfer income to households with children to reduce the cost of raising children. As a result, income transfers have been found to be effective in reducing childhood poverty (Ritakallio & Bradshaw, 2006). Financial support policies, however, were also found to be a disincentive for maternal employment

(Schwarz, 2012). Nieuwenhuis, Need and Van der Kolk (2012) found that mothers' employment was lower in countries with generous family allowances. Dingeldey (2001) and Schwarz (2012) both found the same 'disincentive' for mothers' labor market participation of tax benefits for households with children. In this study, we examine reconciliation policies (paid and unpaid leave) and financial support policies (family allowances) and how they differently affect poverty among single-and two-parent households. Other policies and regulations, such as child support and alimony, are consequential in reducing single parent poverty as well (Garfinkel & McLanahan, 1986; Garfinkel, 1992; Kunz, Villeneuve, & Garfinkel, 2001; Skinner, Bradshaw, & Davidson, 2008). Since these polices are targeted towards single-parent households and not for two-parent households they are not the focus of this study; however we account for the potential poverty reducing effects of child support and alimony in our analyses.

This study is relevant for three key reasons. First, most studies on family policy outcomes did not specifically address the economic position of single-parent households. Single parents, mostly mothers who are the sole providers and caregivers for their families, are uniquely situated in how they reconcile work and family. Single–parent households have high poverty rates but also have high employment rates (Casey & Maldonado, 2012). Therefore, the combination of reconciliation and financial support policies can be effective to ensure the economic security of single-parent households (Gornick & Meyers, 2003). Secondly, and related to the previous point, the literature on family policy outcomes has increasingly focused on women's socio-economic background which has typically only examined education level (e.g. Korpi, Ferrarini & Englund, 2013; Pettit & Hook, 2009; Ghysels & Van Lancker, 2011); however, it lacks attention to the differences among various household structures (Cantillon, Ghysels, Mussche & Van Dam, 2001). We contribute an explicit focus on household *structure* and examine the differences in poverty risk between single- and two-parent household. Thirdly, the specific focus on single-parent households provides an opportunity to further develop our understanding of the different outcomes of reconciliation and financial support policies. As previously stated, reconciliation and financial support policies have different effects on mother's employment, and employment is a key factor to reduce poverty. However, the direct financial transfers (family allowances) are also likely to reduce poverty. Therefore, with respect to poverty and in contrast with employment, it could be the case that both types of family policy have the same effect. Therefore, this study answers two questions:

1. To what extent does the poverty risk of single-parent households (compared to two-parent households) vary across 18 OECD countries from 1978 to 2008?

2. To what extent can cross-national variation in the poverty risk of single-parent households (compared to two-parent households) be explained by variation in countries' (a.) reconciliation policies (leave), and (b.) financial support policies (family allowance)?

Theory and Hypotheses

In this section, we formulate our hypotheses on single parent poverty. These hypotheses are based loosely on Sen's capability approach (1992; also see Hobson 2011, 2013). The capability approach has often been used to examine gender (and class) differences in relation to the welfare state (Korpi, 2000). The approach pays attention not only to the inequality of outcomes such as poverty (in capability approach referred to as "functionings"), but also to individuals' agency: the extent to which they are capable to choose alternative outcomes. The capability approach is inherently contextual, in that it includes social policies (family policies) in the analysis of individuals' options for doing. In that, it "*asks us to consider not only what individuals do but also what their opportunities to be and do are*" (Hobson, 2011, p. 148).

Here, the capability to do what is necessary to live outside of poverty is affected by determinants at the household- and country- level (cf. Fahlén, 2013). Single- and two-parent households differ in the amount of available resources, the capability to use these resources to avoid poverty, and the opportunities provided by family policies. Thus, whereas the capability approach urges to emphasize inequality of capabilities, rather than of resources, we argue that resources are still crucial in understanding differences in poverty between single-and two-parent households. A key difference between single- and two-parent households is that the former have fewer resources to obtain sufficient income to prevent poverty. These resources include time, human capital, number of adults who can seek employment, and – very importantly – the ability for partners to distribute tasks (cf. Becker, 1991).

Two-parent households have two potential adult earners in the household. There is greater opportunity for at least one of the two parents to be employed versus both parents being unemployed. Consequently, these households have some income protection from falling into poverty. Two parents that combine resources could have "double" the amount of time and money available. Perhaps even more consequential than doubling their resources, is that two parents have greater flexibility to share in the distribution of childcare and household tasks. To further illustrate this point, if a child is sick in a two-

parent family the parents have flexibility to decide which parent is best positioned to stay at home and care for the child.

Single-parent households, on the other hand, have fewer resources than their two-parent counterparts. Single parents are often the sole providers and caregivers for their families, without income protection from a second potential earner. Single parents have a deficit in both time and money and have fewer hours during the day to work and care for their children (Cohen, 2014). They do not have options to share childcare and household responsibilities with a partner. Therefore, single-parent households are more likely than their two-parent counterparts to experience job insecurity and poverty. Furthermore, the complications add up when, for instance, a single mother is working in a low-wage job without entitlements to parental leave. If her child is sick, she must choose between work and caring for her child. If she chooses the latter, she will miss work and risk loosing her job.

Our explanatory research question pertains to poverty among single- and two-parent households, and particularly to the extent to which family policies affect the *difference* in poverty between these two types of households. We cannot a-priori hypothesize unambiguously whether family policies will increase or decrease the poverty of single-parent households relative to two-parent households, as competing positions prevail in the literature on whether households benefit more from (the opportunities provided by) family policies when they have limited resources, or when they have extensive resources. We derive testable hypotheses from both these positions.

The first position from which we derive a hypothesis pertains to the *intended* outcomes of family policies. We expect leave to be more consequential to households with limited resources, as these households will have fewer means to compensate for the absence of the opportunities provided by leave. Therefore, we expect leave to be more effective in reducing poverty among single-parent households and in decreasing the poverty of single- relative to two-parent households. As continued pay during leave will most effectively benefit those with the fewest resources, we expect that if a large proportion of the parental leave duration is unpaid, this will negatively affect single-parent households in particular. We expect that the additional income from family allowances will more strongly improve the economic position of single-parent households since they are more susceptible to poverty. Thus, we formulate:

Intended Outcomes Hypothesis: Single-parent households are more likely to be poor than two-parent households, and this difference between single- and two- parent households is smaller in countries

that have (a.) longer parental leave, (b.) a smaller proportion of leave that is unpaid, and (c.) higher family allowances.

The second position from which we derive a hypothesis pertains to *unintended* consequences. This corresponds to the 'Matthew effect' (Merton, 1968), which is described as those who have many resources, benefit the most from social policies. The rationale is that those with more resources will be better able to access the opportunities provided by social policies and that the accumulation of various resources multiplies their effectiveness, in the context of our argument, to avoid poverty. Studies have shown that family policy arrangements are, indeed, most effective among households who already have a strong connection to the labor market (Pettit and Hook 2009; Ghysels & Van Lancker 2011, Nieuwenhuis, 2014; Van Lancker, 2014).

According to the unintended consequences hypothesis, leave is more effective for two-parent households (as compared to single-parent households) that have more resources to access and benefit from leave policies. Leave intends to enable parents' capability to combine caring responsibilities and employment (Fahlén, 2013); however, if a large part of the duration of leave is unpaid, this has the opposite effect because fewer households will be able to take up unpaid leave (Gerstel & McGonagle, 1999). Single-parent households don't necessarily have the resources to benefit from leave, especially if leave is partially paid or unpaid; single parents are more likely to require their full earnings from employment in order to 'make ends meet' for their families. Therefore, according to our alternative hypothesis, we would expect paid and unpaid leave to be more effective in reducing poverty among two-parent households. We would expect that leave would create more inequality between households and increase the poverty of single- relative to two-parent households.

Similarly, there might be unintended consequences for family allowances. Two-parent households that have the most resources may benefit the most from family allowances. One rationale is that two-parent households are closer to the poverty line and family allowances might be sufficient enough to raise them above the poverty threshold. Thus, we formulate:

Unintended Outcomes Hypothesis: Single-parent households are more likely to be poor than two-parent households, and this difference between single- and two- parent households is *larger* in countries

that have (a.) longer parental leave, (b.) a larger proportion of leave that is unpaid, and (c.) higher family allowances.

Data & Method

Data

Our hypotheses were tested against data from the Luxembourg Income Study Database (LIS, 2014). The LIS Database provides income data on individuals and households; the data are harmonized to a common template to ensure comparability across countries (for a note on the comparability, see: Nieuwenhuis, Munzi & Gornick, 2013). The LIS Database also includes variables on household composition (to allow for the identification of single-parent households) and other socio-economic background characteristics.

We used 99 datasets from the LIS Database, covering 18 OECD countries from the time period 1978 to 2008 (LIS Waves I to VII). The datasets were selected based on including relatively homogeneous OECD countries, and the availability of country-level data. Our sample includes all households where at least one parent lives with one or more children, and where at least one of the parents was between the age of 20 and 55. The countries included in our study are presented in Table 1, combined with the number of valid household-level observations (after list-wise deletion of missing values), the number of datasets per country, and the earliest and latest year in which each country was observed.

<< Table 1 About Here >>

Measurements

A key challenge in comparing single- and two-parent households is to control for the socio-economic background of the individuals that comprise households. In our analyses, we have used information on the individuals in the household to aggregate socio-demographic variables to the household level. This resulted in the following household-level measurements:

Poverty: Our dependent variable was a binary indicator of poverty. Following common conventions, a household was defined as poor if the disposable cash income of the household was below 50% of the median household income in that country. Disposable household income means that our results account for a variety of country-differences in the redistributive effects of countries' tax-benefit

systems, child support and alimony regulations, among others. The median household income was determined based on the entire sample of households available in the data, before our subsample was defined. The disposable cash income of each household was equivalized following LIS conventions, by dividing the total household income by the square root of the number of household members.

Single parenthood: Single parenthood is a binary independent variable, indicating those households where the head of the household is the parent of one or more of the children that live in the same household, while this person is not partnered to any other adult living in the household. As our sample is limited to households with children, the reference category represents two-parent households. Our definition of single-parent households includes both single mothers and (a limited number of) single fathers. Of all single parents, 14% were fathers. As this represents only 2% of our entire sample, we do not differentiate between single fathers and single mothers in our analyses.

Employment: Binary variable indicating whether the head of the household or his/her partner (if present) is currently employed. In the case of single-parent households this refers to the employment of the single parent, whereas in two-parent households this variable represents whether at least one of the partners is employed.

Working Hours: Interval level variable defined as the sum of regular hours worked at all jobs currently held by the household head and his/her partner (if present).

Education: Highest level of education of the head of household or his/her partner (if present), recoded for country-comparability to 1=low, 2=medium, and 3=high. This interval-level variable was used as a control variable.

Age: Age of the oldest partner (head of the household or - if present - his/her partner).

Family allowances: Interval level variable representing the amount of family allowances (in national currency) the household received as part of the disposable cash household income. Note that in addition to this household-level measurement of family allowances, we also used a country-level measure that is described below.

The household-level data were combined with country-level data on family policy that were obtained from the Comparative Family Policy Database (Gauthier, 2010). We used three indicators of family policy (parental leave, unpaid leave, and family allowances) that were measured per year, over several years.

Parental leave: is an index of three leave policies: maternity leave, parental leave, and childcare leave, that includes the total number of weeks a mother or father is entitled to leave. For instance, the countries' paid leave, on average included 16 weeks of maternity leave (at 63% earnings), 58 weeks of parental leave (at 31% earnings), and 28 weeks of childcare leave (at 5% earnings)[1]. The United States is the exception and is the only country without a federal paid leave policy. [2]

Unpaid leave: Measured as the percentage of the total leave duration that is unpaid.

Family allowances: Measured as the monthly amount of family allowances, averaged for first, second and third child. To ensure cross-national comparability the amounts of family allowances were expressed as a percentage of the average gross annual earnings of a production worker in a country.

Descriptive statistics of both household- and country-level variables are presented in Table 2.

<< Table 2 About Here >>

Method of Analysis

We employed two distinct, but complementary approaches, to assess the effects of family policies on the poverty of single- and two-parent households. The first approach uses regression analyses to examine the parental leave and family allowance policies at the *country level* while controlling for household-level characteristics. The second approach is a pre/post comparison providing a more detailed test of how family allowances at the *household level* affect poverty among single- and two-parent households. All analyses were performed with STATA and were weighted by household-level sampling weights.

For the first approach, we analyze our data using logistic regression analyses, modeling the risk of poverty as a function of single parenthood, family policies, and various socio-economic controls. We account for the fact that households are nested within countries and within country-years by using cluster corrected standard errors.

The advantage of these regression analyses is that they allow for simultaneously modeling the influence of various determinants of poverty. It is, however, not possible to regress poverty on household-

[1] Authors' calculations of maternal, parental, childcare leave in 18 countries in 2010, based on Comparative Family Policy Database (Gauthier, 2010).
[2] The United States does not have federal paid leave policy. The U.S. provides federal entitlements to unpaid leave, however it is limited. The Family and Medical Leave Act (FMLA) covers employees who have worked for at least one year, and for at least 1,250 hours, for an employer with at least 50 employees.

level family allowances because our measure of poverty was directly derived from household income, and regression analysis is not suited to regress a dependent variable on one or more of its components. Therefore, in the regression analyses we include the country-level indicator of family allowances. While this is informative on the effects of country-level entitlements to family allowances, it cannot account for differences across households in the actual amounts of family allowances received.

The second approach compares poverty rates based on the disposable household income before and after family allowances are accounted for. We refer to this as the pre/post transfer analysis of family allowances (see: Morissens & Sainsbury, 2005; Sainsbury & Morissens, 2012). While this type of analysis cannot account for socio-demographic characteristics, it provides insight into the degree to which poverty is affected by family allowances.

The pre/post transfer analysis of family allowances on poverty among single- and two-parent households is performed on a subset of the datasets for which household-level measurements on family allowances transfers are available. Pre-transfer poverty is calculated by subtracting (if any) family allowances from disposable household income; post-transfer analysis is calculated by including (if any) family allowances received from disposable household income. Then, we subtract the difference between the pre and post to determine how family allowances affect poverty rates among all households with children and whether single- and two-parent households benefit to a different degree from family allowances.

Analyses

To answer our first, descriptive research question, we present trends in poverty in 18 OECD countries of single- and two-parent households in Figure 1. The countries and years presented in Figure 1 are the same as used in the regression analyses that will follow. In all countries, and at all times, single-parent households were more likely to be poor than two-parent households. In for instance Canada, the United Kingdom and the United States, approximately 30 to 40 percent of all single-parent households were poor, compared to approximately 10 percent of two-parent households. In Denmark, Finland, Norway, and Sweden, the poverty rates of both single- and two-parent households were substantially lower. The poverty of single- relative to two-parent households increased in Finland and France, while it decreased in Austria and Ireland.

<< Figure 1 About Here >>

The first part of our analyses pertaining to our explanatory question is based on regression analyses, the results of which are presented in Table 3. In Model I, the likelihood of a household being poor is regressed on whether the household is headed by a single parent. The results indicate that single-parent households have a higher poverty risk than their two-parent counterparts. In Model II, household-level control variables are introduced. The estimates for these controls indicate that households are less likely to be poor when the head of the household is employed, works more hours per week, has a higher level of education, and is older. Furthermore, after introducing these controls, the estimate for single parenthood is substantially smaller (.71 in Model II compared to 1.38 in Model I), which indicates that part of the increased poverty risk of single-parent households is associated with the demographic composition of these households. Single-parent households have fewer resources: they are more likely to not be employed, to work fewer hours, to have a lower level of education and/or to be of younger age.

We introduce our first family policy variable, leave, in model III. We first estimate the total effect of leave (a combination of maternity, parental, and childcare leave) without controls. Our rationale is that the employment-related controls are to be considered (in causal terms) a post-treatment variable to the effect of leave on poverty, and including these controls would conceal the effect of leave. The effect of leave is differentiated between single- and two-parent households. The results indicate that longer

durations of leave were associated with a lower poverty risk among two-parent households (the reference category in the interaction). Moreover, the interaction term indicates that the poverty-reducing outcome of leave is stronger among single-parent households than among two-parent households. After we re-introduce the household-level control variables in Model IV, the interaction between leave and single-parenthood is no longer statistically significant. Further analyses (not presented here) suggested that this is due to the introduction of the employment-related controls, which means that differences in employment patterns explain why the effect of leave is stronger among single-parent households. In other words, leave has a stronger association with reducing poverty among single-parent households than among two-parent households, because leave facilitates the employment of single-parent households to a larger extent than among two-parent households.

Finally, in Model V, we introduce two more family policy variables: the percentage of the total leave duration that is unpaid, and family allowances. The results show that a larger share of unpaid leave is associated with a higher risk of poverty, but that this outcome does not vary between single- and two-parent households. Family allowances were found to be negatively associated with poverty, and this association did not differently affect single- and two-parent households.

All in all, our findings are in line with the part *A* of the intended outcomes hypothesis, that longer parental leave more strongly decreased the poverty of single-parent relative to two-parent households. Regarding unpaid leave and family allowances, the results so far provide evidence for neither the intended, nor the unintended, outcomes hypotheses with respect to the difference in poverty between single- and two-parent households.

Our first approach, using the country-level indicator of family allowances is not the optimal test of how this transfer affects the differences in poverty risk among single- and two-parent households. Therefore, our second approach further examines the effects of family allowances with a pre/post transfer analysis presented in Table 4. This analysis uses the household-level information on the received amount of family allowances to compare poverty rates before and after receiving family allowances. We calculated this separately for each of the datasets available for our analyses, and present the averages per country in Table 4.

The first two columns of Table 4 present poverty rates for single- and two-parent households *excluding* family allowances. These poverty rates vary substantially across countries, and are typically high in Southern European countries and in Ireland. In addition, the results indicate that in all countries

poverty is more prevalent among single-parent households than among two-parent households. There are no pre-transfer family allowances poverty rates for Spain and the United States. In Spain the data are unavailable at the household level; however, in the United States this reflects the actual absence of the family allowances[3].

The next two columns of Table 4, labeled 'post family allowances' present poverty rates based on the household income *including* family allowances. The degree to which family allowances decrease poverty rates – separately for two-parent and single-parent households - are presented in the two columns labeled 'Change in Poverty %, due to Family Allowances'. In line with our regression analyses (Model V, Table 3), the results indicate that family allowances reduce the risk of poverty among both single- and two-parent households. Moreover, the percentage of poverty was reduced to a greater extent among single- as compared to two-parent households. In Italy, the poverty percentage among two-parent households is reduced by 1.19 percentage points, and only with .41 percentage points among single-parent households. In Greece, poverty is reduced slightly among two-parent households, while poverty among single-parent households is unaffected. Nevertheless, the overall pattern is that the poverty among two-parent households is reduced by up to 3.3 percentage points (Luxembourg), while poverty among single-parent households is reduced by up to 10 percentage points (Belgium). This is in line with part *C* of our intended outcomes hypothesis.

The results from our pre/post transfer analysis suggest that family allowances tend to reduce the poverty rate to a larger extent (in terms of absolute number of percentage points) among single- compared to two-parent households. This finding is seemingly at odds with the result of our regression analyses that suggested that family allowances did not differently affect poverty between these two households. The reason for this is that the regression models analyzed the poverty risk of single-parent households as a ratio of the poverty risk of two-parent households (and the role of family allowances therein), whereas the pre/post transfer analyzed the affect of poverty in terms of absolute percentage points (and the changes therein). To illustrate this, we calculated the effect of family allowances on the poverty risk of single-parent households as a ratio of the effect among two-parent households. The results are presented in the final column of Table 4, labeled as "relative (dis) advantage of single parents". The

[3] The United States does not have a national family allowance program, however, the U.S. does provide federal and state income tax credits to many working low-income families (the Earned Income Tax Credit (EITC) and the Additional Child Tax Credit (ACTC)). These tax credits are accounted for in our analyses.

degree to which family allowances affect the poverty risk of single- relative to two-parent households is indicated as follows: a value of 1 represents that the (relative) difference in poverty between households is unaffected, a value larger than 1 shows that the difference in poverty between households decreased (single-parent households benefitting more), and a value smaller than 1 means that the difference in poverty between households increased (two-parent households benefitting more). The results suggest that family allowances decreased the poverty of single- relative to two-parent households in Denmark, Norway, Belgium, Sweden, and the Netherlands; whereas family allowances increased the relative poverty between households in Luxembourg, France, Ireland, Germany, Austria, Italy and Canada. Here, the results vary across countries, explaining the absence of an (statistically significant) interaction between family allowances and single parenthood (Model V, in Table 3).

Discussion

This study was based on (pooled) cross-sectional data, and should be interpreted as such. We, therefore, cannot infer causality from the associations at the level of the household, nor can we determine whether poor households are more likely to become single-parent households, or that single- parent households are more likely to become poor (or both). The main focus of our analyses, however, was on the country level. At this level we did observe each country repeatedly over time.

A second limitation of our study was that although we could distinguish between single- and two-parent households and we could determine whether these households were poor, for single-parent households we could not observe the relationship (if any) with the other parent. Thus, we could not observe whether the child(ren) received resources (financial or otherwise) from the other parent, which means that it could be the case that while the single-parent household was poor, the child(ren) living in it were not. This means that our findings pertain to household poverty, and not to rates of child poverty. Nevertheless, the hypotheses we set out to test were based on arguments on how family policies affected the parents across countries, and these hypotheses could be tested with the data at hand.

Thirdly, inherent to the broad country-comparative nature of our study, our data did not allow us to model every relevant detail of single parent poverty and family policies. We mention four. Our first data limitation was that we could not model the effects of *irregular* working hours, whereas it becomes increasingly clear in the literature that irregularity of working hours puts a burden on work-life balance (Frase & Gornick, 2013). Such irregularity of working hours would likely further increase the differences between single- and two-parent households: single-parent households have more difficulty to cope with irregular working hours, while two-parent households have the resources to be more flexible in negotiating the irregularity of their hours. Future research could test this hypothesis. Our second data limitation was that we could not address the differences between single mothers and single fathers, at least not in this country-comparative study. Even though this is only to some extent a data-limitation (most single parents are mothers) it would be relevant to study – with datasets tailored to that purpose – whether single fathers are better or worse off than single mothers, and whether they respond differently to family policies. Our third data limitation was that, although we account for possible effects of child support and alimony on single parent poverty in our findings, we did not specifically address country differences in child support legislation. Future research that focuses solely on single-parent households

can address that. Our fourth data limitation was that, although we used several indicators of leave, pay during leave, and determined the impact of family allowances using two different measurements and associated techniques, we could not capture all the detailed institutional differences of the countries included in our study. For instance, we did not address daddy quotas in parental leave (although in the period studied, uptake of leave among fathers was typically very low), nor specific qualifying conditions. Similarly, with respect to family allowances, we could observe the actual amount of transfers, but did not model the exact rules and conditions for households to qualify for such allowances. Future studies could examine the consequences for single parents of such qualifying conditions, such as means testing, using detailed tax-benefit micro-simulations offered by EUROMOD (Sutherland & Figari, 2013).

Finally, it was beyond the scope of this study's statistical analyses to further examine why, in some countries, the family allowances either increased or decreased the difference in poverty of single- relative to two parent households. These findings were reported in Table 4. However, we do provide two plausible explanations. First, comparing the results in Table 4 to the trends in the poverty rates across countries, it is clear that the countries in which family allowances benefitted the single-parent households more were those countries with low overall poverty rates. This applied to Denmark, Norway, Sweden, Belgium, and to a lesser extent the Netherlands. While in the other countries with high overall poverty rates, family allowances seemed to increase the difference in poverty single- relative to two- parent households. The second explanation points to the institutional designs of family allowances, which are targeted towards single- and two-parent household differently across countries. This is supported by Bradshaw & Finch (2002), who found that countries indeed vary in terms of whether family allowances are universal to all households or whether they are targeted or favor a particular household type. In line with our findings, Bradshaw & Finch (2002) report that Norway, Finland, Sweden and the Netherlands have generous family allowances favorable to single-parent households; while Luxembourg, France, Germany, and Ireland are more generous to two-parent households.

Our findings are in line with key assumptions of the capability approach, in the sense that our findings highlight how the national context of households matters in shaping opportunities to be and do. Particularly relevant in this respect is our finding that parental leave is associated with lower poverty especially among single-parent households by facilitating their employment, as it highlights the importance of facilitating individuals' agency to, in this case, avoid poverty. The capability approach further suggests that family networks are important in determining what people can and cannot do.

Larger and more extensive networks allow for more flexibility in negotiating work-family balance, and the presence of such family networks could particularly benefit single-parent households. Although our data did not allow us to study the impact of such networks, future studies could address the extent to which there are cross-national or cross-temporal differences in the nature and impact of family networks.

Conclusion

Our findings on the interrelationship between the reconciliation and financial support policies and the difference in poverty between single-parent households and two-parent households, are relevant to the current debates in the literature on family policy outcomes.

First, we relate our findings to the literature on unintended outcomes of family policies, particularly with respect to the issue that family policies may benefit those who already have a strong connection with the labor market. This includes – but is not limited to - the dual earner household. Regarding this so-called Matthew effect (Merton, 1968; Ghysels & Van Lancker, 2011; Van Lancker, 2014), our findings suggest that family policies either have similar effects in reducing poverty among single- and two-parent households; and such policies can also decrease the poverty of single- relative to two-parent households thereby reducing the inequality between household types.

Secondly, our findings are relevant to the debate whether social policies should be targeted to specific social groups, or be universal to all (Korpi & Palme, 1998). Brady and Burroway (2012) found that universal social transfers were more effective in reducing single parent poverty than social transfers specifically targeted at single parents. Even though we did not specifically study the degree to which family policies were targeted towards single-parent households, our findings contribute to those of Brady and Burroway in that we measured specific family policies that not only include the financial transfers of family allowances, but also the rules set by family leave arrangements. In line with their findings, our results suggest that even non-targeted family policy arrangements, such as leave, can help reduce poverty among single-parent households. With respect to the pre/post transfer analyses of family allowances it might be that the relative benefit varied along with the degree to which family allowances were targeted towards single-parent households or the degree to which these allowances were means-tested. Nevertheless, across countries family allowances were found to reduce poverty more (in absolute terms) among single- compared to two-parent households.

Finally, our findings have important implications for recent policy developments that are often described, in Europe, as the development of a 'Social Investment State'. This notion of the social investment state describes changing policy paradigms shifting away from financial transfers to the provision of rights and services. One explicit goal of the social investment state is to stimulate women's employment with policies aimed to combine motherhood with employment (Morel, Palier & Palme, 2012). Family allowances, on the other hand, were regarded a 'disincentive' for women's employment (Apps & Rees, 2004; Schwarz, 2012; Thévenon, 2011; Thévenon & Luci, 2012) and indeed found to suppress the labor force participation of mothers (Jaumotte, 2003; Nieuwenhuis, 2012, 2014). Thus, reconciliation policies are in line with this goal of the social investment state, whereas family support policies are not. However, another aspect of social investment is early childhood development (Morel et al., 2012) and the prevention of childhood poverty. Our findings clearly indicate that with regard to this latter goal of social investment, both leave and family allowances are required to reduce poverty among households with children.

To conclude, we derived hypotheses on both intended and unintended outcomes of family policies, from two contrasting positions prevailing in the literature. The key distinction between these two positions is whether family policies most benefit those who have many resources, or those with fewer resources. Parental leave was found to decrease the poverty between single- relative to two-parent households, and family allowances were found to decrease poverty to a larger extent among single-parent households than among two-parent households (that were less likely to be poor to begin with). These findings thus generally contradict the notion of the 'Matthew effect' that family policies benefit resource-rich households most in avoiding poverty. Instead, these findings show how family policies benefit all households with children, especially those with the least resources, and in this case these are single-parent households.[4]

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Figure 1: Trends in Poverty Among Single-Parent Households and Two-Parent Households, 18 OECD countries 1978-2008

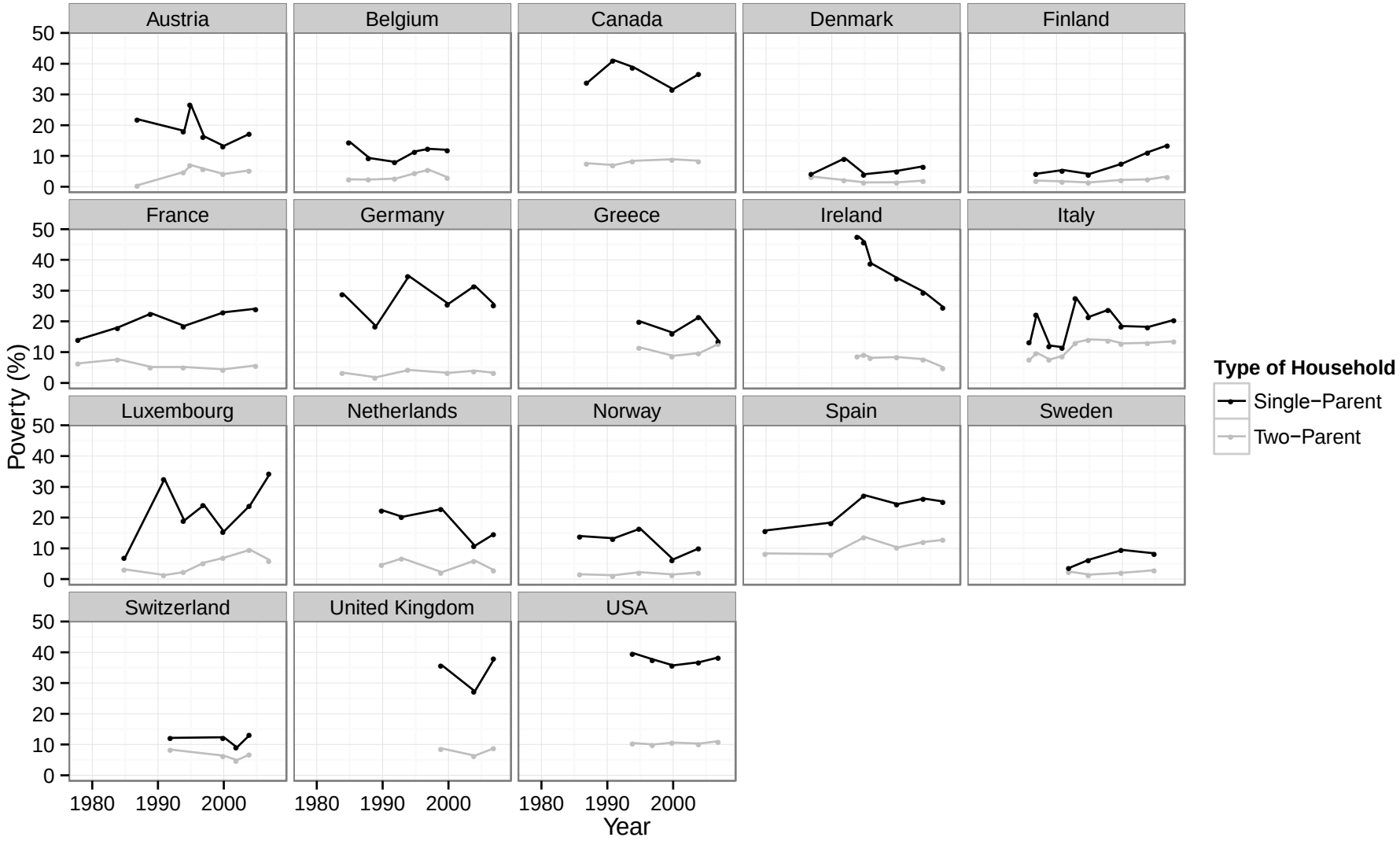

Table 1. Number of observations, per country

Country	Number of Datasets	First Year	Last Year	Number of Household-Level Observations	% of Observations
Austria	6	1987	2004	16,874	3.28
Belgium	6	1985	2000	10,168	1.98
Canada	5	1987	2004	43,507	8.46
Denmark	5	1987	2004	74,880	14.57
Finland	6	1987	2007	26,723	5.20
France	6	1978	2005	26,690	5.19
Germany	6	1984	2007	18,296	3.56
Greece	4	1995	2007	7,299	1.42
Ireland	6	1994	2007	8,672	1.69
Italy	10	1986	2008	32,569	6.34
Luxembourg	7	1985	2007	7,278	1.42
Netherlands	5	1990	2007	12,916	2.51
Norway	5	1986	2004	21,100	4.10
Spain	6	1980	2007	33,971	6.61
Sweden	4	1992	2005	17,794	3.46
Switzerland	4	1992	2004	5,821	1.13
United Kingdom	3	1999	2007	25,561	4.97
United States	5	1994	2007	123,900	21.10
Total	99	1978	2008	514,019	100.00

Source: Luxembourg Income Study (LIS) Database, Waves I to VII, authors' calculations.

Table 2. Descriptive Statistics for household-level and country-level variables (N-household = 514,019)

Variable	Min	Max	Mean / Proportion	SD
Household-Level				
Poverty	0	1	.10	-
Single Parent	0	1	.17	-
Employment	0	1	.91	-
Working Hours	0	198	36.33	34.35
Education	1	3	2.14	.74
Age	20	55	40.97	7.87
Country-Level				
Leave	10	213.4	73.65	63.07
%Unpaid Leave	0	100	71.46	23.34
Family Allowances	0	2.61	.73	.61

Source: Luxembourg Income Study (LIS) Database, Waves I to VII, and the Comparative Family Policy Database (Gauthier, 2010). Authors' calculations.

Table 3. Poverty risk of single-parent and two-parent households, regressed on demographic and institutional variables (N-household = 514019, N-country-99)

	I. Baseline		II. Micro-controls		III. Leave		IV. Leave + Controls		V. Full model	
	B	SE	B	SE	B	SE	B	SE	B	SE
Intercept	-2.66***	.062	1.58***	.271	-2.43***	.091	1.85***	.289	1.72***	.25
Single parent (ref: two-parent)	1.38***	.072	.71***	.094	1.55***	.108	.77***	.134	.56**	.275
Employment			-1.23***	.221			-1.17***	.223	-1.21***	.189
Working Hours (/10)			-.05**	.024			-.07***	.025	-.07***	.023
Education			-68***	.057			-.67***	.053	-.70***	.058
Age			-.04***	.003			-.04***	.003	-.04***	.003
Leave (/10)					-.03**	.012	-.03**	.012	-.03**	.012
Leave * Single					-.02**	.011	-.01	.012	.00	.011
% Unpaid Leave									.01***	.002
% Unpaid Leave * Single									.00	.003
Family Allowances									-24.51*	14.287
Family Allowances * Single									-4.24	11.587

* P < .05; ** P < .01; *** P < .001; All hypotheses tested one-tailed

Source: Luxembourg Income Study (LIS) Database, Waves I to VII, and the Comparative Family Policy Database (Gauthier, 2010). Authors' calculations.

Table 4. Poverty reducing contribution of family allowances, per country average of multiple years (N-household = 514019, N-country-99)

	Pre-Family Allowances		Post Family Allowances		Change in Poverty %, due to Family Allowances		Relative (dis)advantage
Country	Coupled	Single	Coupled	Single	Coupled	Single	single parents
Austria	8.06	23.71	4.92	15.92	-3.14	-7.79	0.91
Belgium	6.00	21.27	3.38	11.30	-2.62	-9.97	1.06
Canada	7.94	38.52	7.33	37.54	-0.61	-0.98	0.95
Denmark	2.75	13.95	2.04	5.88	-0.71	-8.08	1.80
Finland	5.20	17.10	2.18	7.70	-3.02	-9.40	0.97
France	8.79	25.89	5.75	20.08	-3.04	-5.81	0.83
Germany	4.77	35.29	3.32	27.48	-1.46	-7.81	0.89
Greece	11.23	16.59	11.04	16.59	-0.19	0.00	0.98
Ireland	10.15	41.76	7.84	36.76	-2.30	-5.00	0.89
Italy	14.14	18.77	12.95	18.36	-1.19	-0.41	0.94
Luxembourg	8.29	25.27	4.97	22.35	-3.33	-2.92	0.67
Netherlands	5.64	24.04	4.53	18.19	-1.11	-5.85	1.05
Norway	2.55	20.32	1.75	12.03	-0.80	-8.30	1.19
Spain			10.89	22.88			
Sweden	3.26	10.54	2.21	6.97	-1.05	-3.57	1.06
Switzerland	7.06	13.16	6.05	11.57	-1.01	-1.59	0.97
United Kingdom	9.92	40.03	7.98	33.73	-1.93	-6.31	0.96
USA			10.52	37.67			

Note: Each row presents the average per country, based on observations in multiple years. Table with full results (per year, by country) available upon request.
Note: Household-level data on family allowances unavailable for Spain and the USA.
Relative (dis)advantage single parents calculated as: (Pre-transfer single / post-transfer single) / (pre-transfer coupled / post-transfer coupled).
Source: Luxembourg Income Study (LIS) Database, Waves I to VII, authors' calculations.