Title
Doing Better for Single-Parent Families: Poverty and Policy across 45 Countries

Permalink
https://escholarship.org/uc/item/49w2b8gg

Author
Maldonado, Laurie Chisholm

Publication Date
2017

Peer reviewed|Thesis/dissertation
UNIVERSITY OF CALIFORNIA
Los Angeles

Doing Better for Single-Parent Families
Poverty and Policy across 45 Countries

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Social Welfare

by

Laurie Chisholm Maldonado

2017
Single parents disproportionately face a triple bind of inadequacies in resources, employment, and policy which combined together further complicate the lives of single parents and their families (Nieuwenhuis & Maldonado, forthcoming). Single parents’ resources, their socio-economic background - as well as having only one earner and carer in the household - make it difficult to provide for their families. The majority of single parents are mothers and work in full-time employment, yet for many their employment is inadequate. Single parents are often in jobs with low wages, without employment protections, and with little flexibility to balance work and family responsibilities. Policy such as an inadequate cash transfers, unaffordable child care, unpaid parental leave, or lacking safety net can fail to protect families from poverty. The focus of these analyses is on policy and how it can address the triple bind and reduce poverty for single-parent families. In particular, how child support and advance maintenance, taxes and transfers,
Family transfers, maternity leave, leave shared between parents, leave to care for a sick child, rest days, annual leave, and sick leave reduce poverty for single-parent and coupled-parent families. The study examined 373,032 households with children in 45 countries, using household-level data from the Luxembourg Income Study database and country-level policy indicators from The WORLD Policy Analysis Center. The findings show that the US has the highest rate of single-parent families in poverty of all countries. Decomposition analyses show that child support, especially in countries that pay an advance maintenance if the other parent does not pay, reduces poverty for single-parent families; however, the effectiveness varies across countries and over time. Decomposition analyses show that redistribution, particularly family transfers, have reduced poverty for all families. Most countries cut their poverty by half or more, but some countries are more effective than others. Ireland and UK reduce poverty substantially with family transfers. The Nordic countries have lower poverty to begin with but still cut their poverty by more than half. Multilevel policy analyses found the strongest policy effect to be maternity leave. Paid maternity leave significantly reduced poverty for single-parent families only, by effectively facilitating the employment of single mothers. This is an important finding as it expands earlier work (Maldonado & Nieuwenhuis, 2015) that found paid leave to reduce poverty for single-parent families in 18 countries to 45 countries. This model did not find evidence to support the findings of the previous study that maternity leave was significant for all families. Results that leave shared between parents increased the poverty risk of single parents over coupled parents were not substantiated, unless there was a bonus for fathers to share leave. Paid leave to care for a sick child for both parents increases the poverty risk of single-parent families over coupled-parent families. Working regulations, rest leave, modestly reduced poverty for families. Family benefit schemes may increase the risk of single-parent families in poverty.
over couple-parent families, however the decomposition analyses show that family benefit actually received decreases poverty for all, especially single-parent families.
The dissertation of Laurie Chisholm Maldonado is approved.

Sally Jody Heymann

Aurora Jackson

Ailee Moon

Todd M. Franke, Committee Chair

University of California, Los Angeles

2017
Dedicated

To my parents, who are such lovely people, and who have given so much love to their children and grandchildren.

To my son, Darius, who is pure joy and light in my life.

I’m grateful to have been born into such a beautiful family, and to have created an amazing one around me.
Table of Contents

Introduction .................................................................................................................. 1
Structure ....................................................................................................................... 3
This study’s contribution ............................................................................................ 4
Research questions ..................................................................................................... 5
Theory ......................................................................................................................... 6
Theoretical framework ............................................................................................... 13
Hypotheses .................................................................................................................. 14

Literature ..................................................................................................................... 15
Micro-level factors ....................................................................................................... 15
Macro-level factors
Policies that directly affect income ........................................................................... 18
Policies that affect income through employment ..................................................... 21
Summary ....................................................................................................................... 26

Data and methods ...................................................................................................... 27
Variables ....................................................................................................................... 27
Dependent variable at household level ...................................................................... 28
Independent variables at household level ................................................................. 28
Independent variables at the country level ............................................................... 30

Analyses ....................................................................................................................... 31
Descriptives .................................................................................................................. 32
Prevalence of single-parent families ......................................................................... 32
Single parent employment rates ................................................................................ 32
Single-parent family poverty rates .......................................................................... 33
Single-and coupled-parent family poverty rates ....................................................... 34

Policies directly affecting income .............................................................................. 36
Redistribution: all taxes and transfers ......................................................................... 36
Family transfers .......................................................................................................... 37
Spotlight on child support and single-parent families ............................................... 39
Polices directly affect income through employment ................................................... 44
Family Benefit ............................................................................................................ 45
Leave for mothers ....................................................................................................... 45
Leave for both parents ................................................................................................. 45
Leave to care for health needs of child ...................................................................... 46
Working time regulations (rest leave, annual leave, and sick leave) ......................... 46

Multilevel Regression on Single and Coupled-Parent Family Poverty and Policies
Leave for mothers, leave for both parents, working time regulations ....................... 48

Multilevel Regression on Single and Coupled-Parent Family Poverty and Policies
Family benefits, leave for mothers, and working time regulations ............................ 50

Multilevel Regression on Single and Coupled-Parent Family Poverty and Policies
Leave to care for sick child, sick leave, family benefit ............................................. 51
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion and Conclusion</td>
<td>52</td>
</tr>
<tr>
<td>Limitations</td>
<td>61</td>
</tr>
<tr>
<td>Policy Implications</td>
<td>64</td>
</tr>
<tr>
<td>Tables &amp; Figures</td>
<td>69</td>
</tr>
<tr>
<td>References</td>
<td>104</td>
</tr>
</tbody>
</table>
List of Tables and Figures

Table 1 Number of Observations Per Country (N-household 373,032 from 45 countries)
Table 2: Median Equivalized Income
Figure 1A & B Trends in Single Parenthood
Figures 2A & B Trends in Single Parent Employment
Figure 3A & B Single-Parent Family Poverty Rates
Figure 4A & B Single- and Coupled-Parent Family Poverty Rates
Figure 5A Transfers Reducing Poverty for Single-Parent Families
Figure 5B Transfers Reducing Poverty for Coupled-Parent Families
Figure 6A Family Transfers Reducing Poverty for Single-Parent Families
Figure 6B Family Transfers Reducing Poverty for Coupled-Parent Families
Figure 7 Child Support Reducing Poverty for Single-Parent Families
Figure 8A & B Percent of Single Parents that Receive Child Support
Figure 9A & B Share of Child Support Received as a % of Disposable Household Income
Figure 10A & B Share of Child Support Paid as a % of Disposable Household Income
Figure 11A & B Trends in Child Support Reducing Single Parent Poverty
Figure 12 Association: Family Benefit and Poverty
Figure 13 Association: Leave for Mothers and Poverty
Figure 14 Association: Leave for Both Parents and Poverty
Figure 15 Association: Leave to Care for Sick Child and Poverty
Figure 16 Association: Rest Leave and Poverty
Figure 17 Association: Annual Leave and Poverty
Figure 18 Association: Sick Leave and Poverty
Table 3A & B Multilevel Regression on Family Poverty and Policies (A)
Table 4A & B Multilevel Regression on Family Poverty and Policies (B)
Table 5A & B Multilevel Regression on Family Poverty and Policies (C)
Acknowledgement

This dissertation was supported by AFR Ph.D. Grant 4039120, Fonds National de la Recherche, Luxembourg (FNR).

I am thankful for my dissertation committee. I came in with my own approach focused on the US and Europe— and my committee challenged me to “go global”, to include a diverse set of countries from around the world. I’m so grateful for this decision as it has made all the difference. By “going global”, it makes the argument that certain policies ‘everywhere’ – at least in 45 countries – can effectively reduce poverty for single-parent families.

I am grateful for research guidance and support by Janet Gornick, Caroline Batzdorf, LIS senior scholars, and my dear colleagues Sarah Kostecki, Berglind Hólm Ragnarsdóttir, Natascia Boeri, Amalia Leguizamón, Nathaniel Johnson, at The Stone Center on Socio-Economic Inequality at the Graduate Center, City University of New York; and to Eva Sierminska, Thierry Kruten, Jörg Neugschwender and the staff at the LIS- Luxembourg Income Study. I was so fortunate to have The Stone Center and LIS as my research home.

Rense Nieuwenhuis and Emmy Dijkstra, my “paranymphs”, who have been an enormous source of inspiration and intellectual support.

Ive Marx, my partner, who believes in me and challenges me to be a better scholar and person.
Laurie C. Maldonado’s work is centered on single-parent families in the US and across countries. She hopes to contribute to research that informs policies and programs that will improve the lives of single parents and their families. She is the recipient of the four-year PhD grant awarded by Luxembourg National Research Fund (FNR), a generous grant that supported her dissertation titled *Doing Better for Single-Parent Families*, a cross-national study that examines the effectiveness of child support, family transfers, paid leave, and working time regulation polices to reduce poverty for all families.

Laurie’s first piece, co-authored with Tim Casey from Legal Momentum, was a report titled *Worst Off: Single-Parent Families in the United States: A Cross-National Comparison of Single-Parenthood in the US and Sixteen Other High-Income Countries*. The study described the difficult plight of single parents in the US as mostly due to the lack of social policies and protections that are otherwise offered in other high-income countries. The study received media attention in The Nation, by Bill Moyers, in the New York Times, in Forbes, and by the UCLA Luskin School of Public Affairs. Laurie was interviewed on the radio station WBAI, and on the television, Al Jazeera International English.

Since then, Laurie has published two articles in peer-reviewed journals, with Rense Nieuwenhuis from Swedish Institute for Social Research (SOFI), featured in *Community, Work, and Family (CWF) Journal* and *Belgian Social Security Review*. The CWF article examined to what extent family policies differently affect poverty among single- and coupled-parent families across countries. The findings suggest that family policies - paid leave and family allowances - reduce poverty for all families, especially for single-parent families. The article was nominated
for the Rosabeth Moss Kanter Award for Excellence in Work-Family Research 2016. These findings have been featured in reports by the European Union and as part of the UN Millennium Development Goals to eradicate poverty. In addition, a forthcoming book chapter in *The Handbook of In-Work Poverty* on single parents who are working, yet despite their earnings from employment their families remain below the poverty threshold. The study examines which particular polices are effective in reducing poverty for working single parents and their families.

Ms. Maldonado and Dr. Nieuwenhuis are co-editing a book with Policy Press, titled *The Triple Bind of Single-Parent Families*, expected publication is March 2018. Single parents face a triple bind of inadequate resources, employment, and policies, which in combination further complicate their lives. This book shows evidence from over 40 countries along with country case studies. Leading international scholars challenge our current understanding of what works and draw policy lessons on how to improve the well-being of single parents and their children.

For the next decade, Laurie hopes to bridge the connection between policies and services, in order to facilitate direct support to single-parent families. This is an important part of social work field and practice.

Laurie has over five years of experience as a social worker in community-based organizations serving women and children in poverty. She has had the opportunity to be a field supervisor for social work interns. She teaches both social welfare policy and practice to MSW students at Columbia University School of Social Work and Silberman School of Social Work at Hunter College. This knowledge from the practice has helped her to connect with social work students in using research and knowledge to transform their practice.
Introduction

In 1965, Senator Daniel Patrick Moynihan released a controversial report in the United States. The report, titled the Moynihan Report, emphasized that one of the main causes for society’s problems was the breakdown of African-American families, specifically the rise of single-parent families.

The Moynihan Report received much criticism when it was first released. Many regarded the report as a racist document that further reinforced the notion of social dysfunction within the black community. Therefore, many dismissed the report and even some well-known politicians distanced themselves away from Moynihan as to not be associated with racial controversy. Yet, today the Moynihan Report is seen as a widely influential document. William Julius Wilson, a prominent scholar, heralded the report as a “prophetic document” and claimed that there is now evidence that supports that family structure is indeed an important factor for children. The breakdown of families, irrespective of race, is associated with poverty.

Fifty years after the release of the Moynihan Report, the rise of single-parent families remains a genuine concern. There has been a dramatic increase in the number of single-parent families. In the US about half of all children were living in a single-parent household at any given time (Andersson, 2002; Heuveline, Timberlake, & Furstenberg, 2003; OECD, 2011). The most startling statistic is that single-parent families have exceptionally high poverty rates. The US census data reports that 28.2 percent of single-mother households (4.4 million) are poor in the United States in 2015 (Census Bureau, 2016).
The rise of single-parent families is a concern not exclusively for black families, but also for white families. In *Coming Apart*, Charles Murray (2013), a self-proclaimed conservative and influential intellect, argued that the decline of white America was due to marriage instability and the rise of single-parent families. Murray’s argument, along the same vein as the Moynihan Report, sparked further controversy over the association between family structure and poverty.

The debate as to whether single-parent families are the cause or consequence of poverty and inequality is widespread in public discussions. Jason DeParle (2012) wrote in the New York Times an article titled “Two Classes in America, Divided by ‘I Do’” suggesting that above else, the cause of poverty is the result of women’s poor choices of selecting a partner. DeParle argued that inequality between single-and coupled-parent families has much to do with the individual choices of single parents.

Others have argued that the problem is less about family structure and more about structural poverty (Rank, Yoon, & Hirschl, 2003). In response to DeParle’s article, Bryce Covert (2013) wrote in Forbes magazine an article titled “Bad Relationships Don’t Stand in Poor Women’s Way. Bad Policies Do”. Covert argued, “The problem isn’t who single mothers decide to date. It’s the way the US government fails to support them”. Covert posits that the government should do more to improve the economic wellbeing of single-parent families. She argued that the lesson from other countries is that social policy makes an enormous difference in improving single parents’ lives.

While family structure is indeed associated with poverty, it is debated as to whether the relationship is causal. Some attribute the rise of single-parent families to increases in poverty and inequality (Thomas & Sawhill, 2005; Cherlin, 2009; Murray, 2013). Others find a much weaker
association between poverty and single-parent families, and attribute a greater importance to employment (Christopher, 2002). Still others suggest that cross-national differences in family structure demographics have little to do with explaining poverty and inequality (Rainwater & Smeeding, 2004; Härkönen & Dronkers, 2006; Heuveline & Weinshenker, 2008; OECD, 2011c; Gornick & Jäntti, 2012; Brady & Burroway, 2012; Harkness, 2012; Harkness, 2015; OECD, 2015; Härkönen, forthcoming). Many argue that the difference between countries is partly due to the wide range of social policy provided for single-parent families. Single-parent families in countries that have more robust social protections and policies have much better economic outcomes (Casey & Maldonado, 2012).

Cross-national research is important to understanding policy variation, in this case, countries can learn from one another in how best to shape policy to improve the economic circumstances of single-parent families. This study is cross-national in design and seeks to extend this research. It will focus on the role of socio-demographic characteristics and policies (both policies that directly affect income and policies that affect income through employment) that reduce poverty for families.

Structure

The dissertation accounts for micro-level factors, the effects of socio-demographic characteristics such as parents’ employment, education level, age, and number of children on poverty and macro-level factors, the effects of institutions and policies on household poverty across countries. In particular, the study examines the policies that affect income by stimulating
parents’ employment thereby reducing poverty; and how they differently affect single- and
coupled-parent families. These policies include family transfers, paid leave for mothers, leave for
both parents, and working time regulations.

In addition, a part of the study will solely focus on single-parent families and policies that
directly affect their income – redistribution, family transfers, and child support. It assesses the
contributions of child support, which is a financial payment made by the non-resident parent to
the resident parent, and advance maintenance. Many countries have advance maintenance, which
is a payment provided by the government to the resident parent if the non-resident parent is
unable to pay. It will also assess the contributions of family transfers, which includes child
benefit and family tax credits. This will analyze the precise impact of these income policies on
reducing single parent poverty across countries and over time.

The core methodological approach of this overall study will use person- and household-
level data in Luxembourg Income Study (LIS), combined with country-level data from The
WORLD Policy Analysis Center.

Study’s Contributions

This study contributes to the literature in four important ways. First of all, the study
assesses the consequences of both micro-and macro-level factors to explain single parent
poverty. The study’s main contribution is on macro-level factors, and that it will not only focus
on the policies that directly affect income, but also on policies that affect income by stimulating
parents’ employment. In doing so, it extends previous work, by analyzing the effects of the leave
and the regulation of working time on reducing poverty. Secondly, the study examines the extent
to which policies differently affect poverty among single-parent households and coupled-parent
households. Thus, assessing the unintended consequences of policies as to whether those that benefit from such policies are those with the most resources. Thirdly, the study includes 45 high and middle income countries. In most studies, including my own, the single parent literature is solely focused on OECD countries. These analyses expand to include a very diverse set of countries. Finally, single-parent families and their high poverty rates remain a genuine concern for social work practice and policy. This study contributes to the knowledge of effective anti-poverty policies that will improve the lives of single parents and their families.

Research Questions

Therefore, this study aims to answer:

1. How has the share of single-parent families changed over time across countries?
2. To what extent does the single parent employment vary across countries over time?
3. To what extent does relative poverty (near-poor, poor, very-poor thresholds) of single-parent households vary across countries over time?
4. To what extent does the relative poverty of single-and coupled-parent households vary across countries over time?
5. To what extent can cross-national variation in single-parent household poverty be explained by variation in policies that affect income directly (redistribution, family transfers, child support and advance maintenance)?
6. Child support across countries and over time: What percentage of single-parent households receive child support? What is the share of child support received by single-
parent households as part of their disposable household income? What is the share of child support paid to single-parent families as part of the payee’s disposable household income?

7. To what extent can cross-national variation in single- and coupled-parent household poverty be explained by variation in policies that affect income via employment (maternity leave, leave for both parents, leave to care for a sick child, sick leave, rest days and annual leave) accounting for socio-demographic characteristics?

8. To what extent can cross-national variation in single- and coupled-parent household poverty be explained by variation in policies that both affect income directly and via employment (family benefit, maternity leave, and rest days) accounting for socio-demographic characteristics?

9. To what extent can cross-national variation in single- and coupled-parent household poverty be explained by variation in policies that both affect income via employment (leave to care for sick child, family benefit, and sick leave) accounting for socio-demographic characteristics?

Theory

The study is very much grounded in the comparative welfare state theory, ongoing debates on the welfare state, as well as it draws upon insights from economics theory. As a result, I then create a theoretical framework for this study, shown in Framework 1 (p18).

As previously mentioned, the study is grounded in the comparative welfare state theory, which describes the role of the state in the protection and promotion of citizens’ wellbeing. Many scholars have made theoretical contributions to the social rights of citizenship and the welfare
state (Marshall, 1950; Titmuss, 1974; Korpi, 1989; Esping-Andersen, 1990; Palme, 1990; Kangas, 1991; Kolberg, 1992). Esping-Andersen’s (1990) seminal work, *The three worlds of welfare capitalism*, classified countries into regimes, according to the principles of decommodification, meaning the degree to which social policies relax workers’ dependence on the labor market. Since then, there has been an explosion of research on the comparative welfare state. Scholars have extended Esping-Andersen’s original framework, both theoretically and empirically, and many have contributed to gender and “woman friendly policies” (Hernes, 1987; Lewis & Ostner, 1991; Leira, 1992; Orloff, 1993; O’Connor, 1996; Sainsbury, 1999; Gornick & Meyers, 2003; Gornick & Jäntti 2009. (see Hegewisch & Gornick (2011) for a review of the literature on gender contributions to the welfare state).

Single parents, who are primarily single mothers, are important for considering gender (and race and class) differences in the welfare state. Orloff (1993) questioned the degree to which the welfare state recognizes a single-parent household as a legitimate family type and does not discriminate against it as compared to a two-parent household. Hobson (1990) describes, “The conditions of single mothers are shaped by citizenship rights– affect married mothers as well, for they reflect something of what the ‘exit options’ would be. The better the situation for single mothers, the more power partnered women have. Single mothers have served as a ‘test case’ of the extent to which welfare states address women’s economic vulnerabilities; their poverty alleviated” (Orloff, 1993, p. 9).

Scholars have applied this framework to further understand the cross-national variation in poverty and policies for single-parent families (Hobson, 1994; Orloff, 1993; Lewis, 1997; Kilkey & Bradshaw, 1999; Christopher, 2002). Some have gone further to examine the comparison between family types as a way to demonstrate the generosity of the welfare state towards single-
parent households (Kilkey & Bradshaw, 1999; Christopher, 2002). Comparative welfare state scholars have significantly contributed to our understanding in how/why policies and their outcomes vary across countries.

There have been important and ongoing debates in the comparative welfare literature on how to effectively reduce poverty among single-parent families. One important question is: whether single-parent families can benefit from universal welfare state policies (e.g. leave and working time regulations), or whether policies should be targeted to address the specific needs of such families (e.g. social assistance and advance maintenance)?

In their influential contribution, Korpi and Palme (1998) presented “the paradox of redistribution” that argued that universal transfers were more effective to reduce poverty than transfers that were targeted specifically at the poor. The argument is that policies that target the poor, tend to be both minimal and stigmatizing. Universal policies, on the other hand, are more generous and designed for the middle class (supported by the middle-class vote) but also intended to benefit those at the lower end of the income distribution. Even today, this paradox has stirred debate among scholars on how to effectively reduce poverty.

There are many studies that support the Korpi & Palme claim. Brady and Burroway (2012) also found that universal transfers have been more effective in reducing poverty, more so than transfers specifically targeted at single-parent families. They found that countries with policies targeted at single-parent families, such families were more likely to have additional children and not be employed. Therefore, arguing that targeted social policies may in fact induce risk factors for poverty among single-parent families.

On the other hand, some have found the opposite; that targeted policies are effective to reduce poverty among single-parent families. Morissens (forthcoming) found that targeting
benefits and universal benefits are both significant in reducing poverty among single-parent families.

Still, others show that the “paradox of redistribution” is less of a concern. Marx, Salanauskaite, & Verbist (2016) found that the current minimum income protection schemes, such as the Earned Income Tax Credit (EITC) in the US, alone are insufficient to reduce poverty. Instead, poverty reduction requires a combination of both universal and targeted benefits. More specifically, designing strongly targeting benefits within universalism. These authors propose a new way of targeting: to strengthen targeting measures within universal benefits. This means, for example, providing all families a child benefit and providing single-parent families a supplemental child benefit.

Another important question is ‘social investment”: whether single-parent families benefit most from income ‘transfers’, or ‘in-kind’ policies and services, or a combination of the two? Social investment is the transition from income “transfers” to policies and services that are “in-kind” (Giddens, 1998; Vandenbroucke and Vleminckx, 2011). In terms of reducing poverty for single-parent families, this means a shift away from taxes and transfers (e.g. social assistance, child benefit, advance maintenance) to in-kind services (e.g. family leave, job training and education, child care, regulation of working time).

Social investment is an emerging paradigm in the European welfare states, much less is known about this strategy in the United States. In 2013, The European Commission adopted social investment as a strategy to more effectively reduce poverty during a time of budget constraint. In addition, the social investment strategy aimed to address the increase in single-parent families and the need for families to combine work and family responsibilities (Morel, Palier & Palme, 2012). The main goal being to ‘prepare” single-parent families to become
economically independent through employment as opposed to “repairing” poor single-parent families through transfers (Morel et al., 2012).

One major critique is that despite efforts to improve employment and skills, poverty is still persistent (Vandenbroucke and Vleminckx, 2011). In addition, Cantillon (2011) argued that social investment benefits those households with the most resources, rather than those households at the bottom of the income distribution. Thus beckons the question: Is the transition to social investment policies sufficient to improve employment to protect single-parent families against poverty?

Nieuwenhuis & Maldonado (2015) argued that social investment is indeed a beneficial strategy to reduce poverty; however, that this strategy alone is not enough. They found that both paid family leave and child benefits are effective at poverty reduction. Therefore, both strategies that ‘prepare’ and ‘repair’ are required to invest in single-parent families. (For a detailed review see Nieuwenhuis & Maldonado (2015) Prepare versus Repair? Combining parental leave and family allowances for social investment against single-parent poverty).

As previously mentioned, this study draws upon insights from economics theory. Gary Becker’s (1991) new home economics theory has been useful in understanding women’s decisions in employment and the differences in the parenting resources available to single-and coupled-parent household. Household resources include human capital, time, money, and the ability for partners to distribute household and child care tasks (cf. Becker, 1991). The latter, the ability to share in responsibilities between partners, is perhaps the most important to understand the difference in resources between households.

Coupled-parent households have more resources than single-parent households because they have two potential earners, greater opportunity for at least one of the parents to be
employed, the ability to combine resources, and greater flexibility to share in tasks. Single parents, on the other hand, have a “deficit in both time and money and have fewer hours during the day to work and care for their children” (cf. Cohen, 2014). Single parents do not have options to share responsibilities with a partner. Furthermore, this becomes increasingly difficult if a single parent is working in a low-wage job without entitlements to leave, without child care, and without flexible working hours.

Therefore, we would expect that policies might compensate for some of the differences in resources between households. Perhaps policies might benefit single-parent families more than coupled-parent families in reducing their poverty? However, this is not necessarily straightforward, certain policies might be biased towards the traditional two-parent family. Cantillon (2011) found that policies very often benefit those with more resources. This is the “Matthew Effect” that those that have the most resources, benefit the most from social policies (Merton, 1968).

Furthermore, this study is based on Amartya Sen’s (1992; also see Hobson 2011, 2013) capability approach. According to Sen’s capability approach, the most important thing to consider is what people are actually able to be and do. The core concepts are that an individual has both ‘functionings’ to be able to be and do and ‘capabilities’ to be able to access opportunities to make alternative choices. “For Sen, the core issue is not only what individuals choose, but the choices that they would make if they had the capabilities to lead the kind of lives that they want to lead” (Hobson, 2011, p. 148). Therefore, it “asks us to consider not only what individuals do but also what their opportunities to be and do are” (Hobson, 2011, p. 148).

In this case, poverty denies the capability for single-parent families to achieve an adequate standard of living. A poor single parent does not have an alternative choice to live
differently. Instead, she/he is without the ability to choose how to work and care in order to avoid poverty. Sen describes the difference between ‘starving’ and ‘fasting’, while the latter is a choice, the former is not. This position argues that there really is no choice in poverty. In this study, I will argue that in order for a single parent to have alternative choice, she/he much have the similar level of resources and equality of opportunities as a coupled-parent household. In this case, single parents will indeed need extra support since they have varying needs and require different levels of resources. Perhaps single parents will need to work fewer hours, receive more flexibility in working hours, take a longer amount of paid leave after the birth of a child, receive higher amounts of child benefits, and/or receive more substitute child care. The capabilities approach is helpful in that the national context matters, policies matter, in shaping households’ opportunities to be and do.

Informed by the aforementioned theory, this study aims to better understand large-scale poverty and policy associations for single-parent families. I will address the theory and ongoing debates throughout the research questions, hypotheses, and discussion of the findings. For the targeting within universalism debate, the study will explore whether to provide both single- and coupled-parent families family policies and regulation of working time, and then provide single-parent families’ additional support within these benefits (e.g. allow single parents to have additional time for leave, provide additional time off from working time for single parents). Additionally, I will study whether social investment (policies that affect income via employment) is a more effective strategy than social protection (policies that directly affect income), and/or the ideal combination for reducing poverty for single-parent families. I will examine the unintended consequences of such policies, to see if the Matthew Effect of benefiting households with the most resources is indeed in effect.
This study, based on the capabilities approach, will explore both the policies (opportunities) and take up rate of these services (capabilities) and their effects on lowering poverty. I will consider: what are the ideal circumstances to maximize the economic wellbeing of single-parent families? What if single-parent families had access to the same opportunities and resources as coupled-parent households? How to improve both the capability and agency of single-parent families? Are the take up of such services valuable options for single parents?

Thus, this guides the following theoretical framework of the study:

**Theoretical framework**

Framework 1. Mechanisms that affect employment and poverty, adapted by Nieuwenhuis and Maldonado (2015)
This framework highlights the relationship between how socio-demographics and policies are associated with employment and poverty. From the bottom of the framework, it is well established that employment decreases poverty. On the left, socio-demographics (single parenthood, not employed, working fewer hours, low education, younger age, and additional children) decrease parental employment and increase poverty risk. On the far right, policies that affect income directly (taxes and transfers such as child benefit, social assistance, child support and advance maintenance) have been found to decrease parental employment for coupled households, but the opposite effect, a positive correlation for single-parent households. Policies that affect income directly facilitate the single parent employment. Now, the middle column shows the policies that affect income through employment (family leave, child care, flexible working time, job training and education) increase employment and decrease poverty. This focus on stimulating employment to reduce poverty, the shift away from transfers in favor of in-kind policies and services, is the core argument of the social investment strategy. This study will examine these three mechanisms and how they affect employment and poverty.

**Hypotheses**

For this study, I expect to find intended hypotheses, these positive and negative associations depicted in this theoretical framework. However, I also expect to find unintended consequences; those with the most resources (coupled-parent families) benefit the most from social policies. I hypothesize that single-parent households are more likely to be poor than coupled-parent households; however that this difference between single- and two- parent households is either smaller (intended) or larger (unintended) due to variation in: (a.) policies that directly affect
income (b.) policies that affect income through employment. I expect that the difference between households is smaller when demographics are accounted for between countries. I also expect this difference to be significantly smaller in countries with family policy and working time regulations. Second, the unintended consequences will explore if the difference is larger between single- and coupled-parent households – creating more inequality between households.

**Literature Review**

There is an enormous amount of literature on single-parent families and poverty. For the most part, the research is divided into two main bodies of literature. The first include studies on micro-level factors such as family structure; the second include studies on institutional factors, which very often make comparison of the US to other countries.

**Micro-level factors**

There is a substantial body of literature in the US that examines the effects of family structure on the wellbeing of households and children (Duncan, 1969; Hoffman, 1977; Hampton, 1979; Smith, 1980; Datcher, 1982; Greenberg & Wolf, 1982; Moffitt, 1983; Hoffferth, 1984; McLaanahan, 1985; Duncan, Brooks-Gunn, & Klebanov, 1994; McLaanahan & Sandefur, 1994; Amato, 2005; Jackson, Scheines, 2005; Jackson, Bentler, Franke, 2006; McLaanahan & Percheski, 2008; Jackson, Choi, & Franke, 2009).

According to McLaanahan and Percheski (2008), being raised in a single-parent family can reduce family resources available for children, such as income and mother’s mental health; those reduced resources can ultimately compromise children’s overall wellbeing. McLaanahan
and Sandefur (1994) found that children living in single-parent families, compared to their two-parent counterparts, have significantly worse educational outcomes, including school attendance, test scores, grades, high school graduation rates, college enrollment and graduation rates. Children in single-parent families also experience a higher prevalence of behavioral and psychological problems, and are more likely to live in poverty when they reach adulthood. Others have studied the impact of family structure on racial inequality (Duncan & Duncan, 1969; Featherman & Hauser, 1976).

While other countries have similar findings to the US, the negative effect of single parenthood and child wellbeing outcomes is much smaller. Chapple (2009) meta-analysis of studies on child wellbeing and family structure across the OECD countries, suggests that the effect sizes were small; and that the average effect for the OECD countries is smaller than for the United States.

Across countries, the risk of poverty is greater when single parents are of younger age, low education attainment, not employed, and work fewer hours. The poverty risk is higher for single-parent families with each additional child, and with children of younger age in the household.

**Macro-level factors**

households as compared to 10 percent of coupled-parent households were poor. Canada and the
United Kingdom show similar trends of high single-parent household poverty. Whereas, in
Denmark, Finland, Norway, and Sweden, the poverty rates of both single- and coupled-parent
households were substantially lower with less than 10 percent of single-parent households in
poverty. Most notable is Denmark with only 5 percent of single-parent households in poverty for
some years.

Thus, beckons the question: Why such variation in poverty rates of single-parent
households across countries? Why such cross-national variation in the difference in poverty rates
between single-and coupled-parent households? Why do these countries have much lower single
parent poverty as compared to, for instance, the US?

There are some answers to these questions. Researchers have found that demographics
contribute little to explain the poverty gap between US and these countries (Heuveline &
Weinshenker, 2008; Brady & Burroway, 2012). In addition, in the US, there has been debate as
to whether redistributive policies – taxes and transfers - will reduce the adverse effects of
poverty of single-parent families. Some argue that transferring income to single-parent families
will not necessarily improve child outcomes (Mayer, 1997). However, many scholars have found
that redistributive policies have been a very effective strategy in reducing poverty for single-
parent families across countries (McLanahan, Casper, & Sørensen, 1995; Cornia & Danziger,
1997; Bradbury & Jäntti, 1999; Gornick & Meyers, 2003; Rainwater & Smeeding, 2004;
Heuveline & Weinshenker, 2008; Gornick & Jäntti, 2009; Gornick & Jäntti, 2012; Brady &
Burroway, 2012; Maldonado & Nieuwenhuis, 2015).
Policies that directly affect income

Policies that directly affect income to reduce single parent poverty across countries have been widely studied (Sørensen, 1994; Rainwater, & Smeeding, 2004; Gornick & Meyers, 2003; Heuveline & Weinshenker, 2008; Gornick & Jäntti, 2012; Brady & Burroway, 2012).

Wong, Garfinkel, and McLanahan (1993) were the first to examine the role of social assistance on the economic wellbeing of single-parent families; finding that the economic status of single-parent families is lower than coupled-parent families, and especially low in the US. Since then, others have reported similar income policy moderating effects. Rainwater and Smeeding (2004) use LIS microdata to calculate cross-national child poverty rates; they conclude that household structure is less consequential and that social assistance is a considerable factor in explaining variation in child poverty across countries. Heuveline and Weinshenker (2008) further tease out the relationship between the social assistance and single-parent families using demographic decomposition to assess the demographic factors that place children in single-parent families at risk of poverty relative to labor market opportunities and governmental assistance. They found that demographics contributed little to the US child poverty gap among the high-income countries and that labor market and social policy best explain US child poverty. Gornick and Jäntti (2009) found that single parents remain extremely economically vulnerable in many countries, especially in Canada and in the United States. Brady and Burroway (2012) examine the influence of demographic characteristics on single mother poverty in a multi-level analysis across high-income countries. The authors find that particular policy features, universalism over targeting, are influential in reducing the likelihood of single-parent families being poor.
Gornick & Jäntti (2012) calculated the child poverty rates for single-mother households pre- and post tax and transfer income, and then compared the difference between pre and post income. Maldonado and Nieuwenhuis (2015) analyze the redistributive effects, relative poverty rates 50 percent median income, for children in single-mother families. Pre-transfer, on average excluding the US, reports that 60 percent of children living in single-mother families were poor. There are remarkably high rates reported in Ireland (81 percent), the UK (78 percent), Australia (69 percent), Germany and the Netherlands (68 percent), Canada (67 percent), and the US (63 percent). Denmark reports the lowest rate of the other countries (47 percent). Post-transfer, on average, OECD countries excluding the US reduce single mother poverty by 34 percentage points. In the Netherlands, pre-transfer is 68 percent and post-transfer is 21 percent, reducing the poverty by 47 percent. In Denmark, the poverty rate decreases from 47 to 8 percent. In the US poverty rates are reduced from 63 to 51 percent (total of 12 percentage points). The point is that poverty is high across all countries, however; countries that effectively redistribute income greatly reduce single parent poverty.

Child benefit

Scholars have also found that a specific redistributive policy, such as child benefit, has also been found to be effective in reducing childhood poverty among low-income families and single-parent families (Bradshaw & Finch, 2002; Morissens & Sainsbury, 2005; Ritakallio & Bradshaw, 2006; Maldonado & Nieuwenhuis, 2015). According to Maldonado & Nieuwenhuis (2015) for the most part, percentage of poverty was reduced for all households and to a greater extent for single-parent families. The overall pattern was that the poverty among coupled-parent
households is reduced by up to 3.3 percentage points (Luxembourg), while poverty among single-parent families is reduced by up to 10 percentage points (Belgium). Child benefit is very effective in reducing poverty.

**Child support and advance maintenance**

Besides child benefit, other policies that directly affect income such as child support and advance maintenance are also significant in reducing single parent poverty (Garfinkel & McLanahan, 1986; Garfinkel, 1992; Kunz, Villeneuve, & Garfinkel, 2001; Skinner, Bradshaw, & Davidson, 2008; Skinner & Davidson, 2009; Garfinkel & Nepomnyaschy, 2009; OECD, 2011).

As previously mentioned, child support is a financial payment made by the non-resident parent to the resident parent. In all OECD countries, there is a formal system that enforces child support payments. Many OECD countries go even further to provide single parents an advance maintenance payment if the non-resident parent does not pay child support (e.g. Austria, Belgium, Denmark, Finland, France, Germany, Norway, Poland, Spain, Sweden, Switzerland have advance maintenance schemes).

OECD (2011a) completed an analysis of the child support schemes and child support receipt rates using 2004 LIS data. The report showed that there was tremendous cross-national variation in the percent of single-parent families receiving child support and/or advance maintenance payments, meaning there was a great deal of difference between countries in the effectiveness of the child support and advance maintenance schemes. The report found that the contribution of child support payments on reducing single parent poverty was considerable for Denmark, Germany, Switzerland and Sweden (reduced poverty by 2.5 percentage points) In
contrast, the US child support system was much less effective (reduced poverty by 1 percentage point) (OECD, 2011, p. 233).

Overall, this body of literature suggests that policies that directly affect income, including taxes and transfers, child benefit, child support have all been very effective in reducing poverty for single-parent families across countries.

Policies that affect income through employment

However, up to this point, the research has been focused on redistributive policies that directly affect income. Anthony Atkinson (2015) brought this issue to the forefront in his recent book, which argues that cross-national variation in poverty is not only based on the effectiveness of redistribution but also on market inequalities. Here, questions still remain on such labor market strategies.

There is an emerging body of literature that examines this question. Such policies, such as parental leave, are intended to improve employment of parents; employment is an effective strategy to reduce poverty (Gornick, Meyers, & Ross, 1998; Budig & England, 2001; Gornick, 2004; Misra, Budig, & Moller, 2007; Heymann, Rho, Schmitt, & Earle, 2009).

Family policy – leave, child care, working time regulation

Family policies aim to increase women’s labor force participation by providing opportunities to reconcile work and family life responsibilities. Reconciliation policies facilitate
opportunities for parents to leave work to provide care in the home, with the ability to return to employment (Gornick & Meyers, 2003; Heymann et al., 2009). Reconciliation policies are particularly effective in shaping women’s employment outcomes (Gornick, Meyers, & Ross, 1998; Boushey & Glynn, 2012; Boushey, 2016; Jaumotte, 2003; Del Boca, Pasqua, & Pronzato, 2009; Hook, 2010; OECD, 2011; Van der Lippe & Van Dijk, 2011; Nieuwenhuis, Need, & Van der Kolk, 2012).

Reconciliation policies have been widely studied among coupled-parent families; they have found to increase women’s labor market participation and reduce the motherhood penalty (OECD, 2001; Gornick & Meyers, 2003). While reconciliation policies are found to increase mother’s employment, financial support policies are found to decrease them (Gauthier, 1996; Thévenon, 2011; Thévenon, 2012). Some scholars argue that such policies reinforce the distribution of household tasks of the traditional male-breadwinner model. Gauthier (1996) found a negative association, that child benefit reduced the employment of mothers. Nieuwenhuis, Need & Van der Kolk (2012) reported similar findings, and found that mothers’ employment was lower in countries with generous child benefit policies. Dingeldey (2001) and Schwarz (2012) both found adverse effects of tax benefits for families with children; that tax benefits negatively influence mother’s labor market participation. Scholars generally agree that child benefit policies reduce, rather than increase, mothers’ employment.

A growing literature examines family policy effects on socio-demographic background; however, the role of women’s education and family policy is unclear. Korpi, Ferrarini & Englund (2013) found that family policy improves opportunities for women without university education, and found no policy effects for tertiary-educated women. Others have shown, in contrast, that reconciliation policies are more effective for higher-educated women than for
lower-educated women (Nieuwenhuis, 2014). Pettit and Hook (2009) reported that public child care improved the employment of higher-educated women as compared to lower educated women. Ghysels & Van Lancker (2011) showed that in Flaunder, Belgium reconciliation policies are more likely to benefit high-income as compared to low-income families, thereby producing greater inequities between households.

Scholars have studied the association between family policy and attitudes on women’s employment outcomes. Fuwa (2004) showed that women’s individual assets were more important in egalitarian countries. Boeckmann, Budig, & Misra (2012) reported that both leave and child care are associated with higher earnings for mothers in countries with cultural attitudes that support maternal employment.

Likewise, there have been many studies on family policy; however, these have not focused on single-parent families. Some (Nieuwenhuis et al., 2012) have found child benefit, monetary benefits designed to help offset some of the costs associated with child rearing, as a disincentive to women’s employment. However, most of these studies only capture women in coupled-parent households, much less is known about single mothers and how these policies differently affect the outcomes of single- and coupled-parent families.

Maldonado & Nieuwenhuis’ (2014) is the first to study how family policies affect single parent poverty. The study was based on data from the Luxembourg Income Study Database (LIS), combined with family policy indicators of the Comparative Family Policy Database (Gauthier, 2010). The data were analysed using logistic regression with cluster corrected standard errors to account for the nesting structure in the data of households within countries. The study observed family policies at the country-level, while at the same time accounting for household-level characteristics such as single parenthood and employment.
The findings suggest that, not surprisingly, single-parent families have a substantially higher risk of poverty than coupled-parent families. Moreover, although part of the difference in poverty between single- and coupled-parent families could be explained based on differences in their age, level of education, employment status and employment hours, after accounting for these household-level characteristics single parents were still estimated to face a higher risk of poverty.

Secondly, the paid parental leave was found to be associated with a lower poverty risk among all families with children, and more so among single-parent families. Paid leave more strongly facilitated single parent employment. Unpaid leave did not protect households against poverty.

Thirdly, the child benefits, as previously mentioned, were found to be associated with a lower poverty risk among all families with children, especially for single-parent families.

This research is limited to leave and child benefits, whereas future studies can expand on evaluating other policies that affect income through employment, such as working time.

Research has clearly shown the importance of early childhood education and care on child outcomes (Moss & Pence, 1994; Moss, 2000; Kammerman & Kahn, 1981; Kammerman, 2000; OECD, 2001; Brooks-Gunn, Weh-Jui, & Waldfogel, 2002; Meyers, Rosenbaum, Ruhm, & Waldfogel, 2004; OECD, 2006; Waldfogel, 2010). In the US, James Heckman and others have made a compelling case to invest in early childhood development. ECEC can prevent the achievement gap, improve health outcomes, improve earnings, and improves the economy and reduces government spending in the long run (Heckman, 2012).

In the US child care is often informal, leaving single parents with few options for child care. While there are child care vouchers and early childhood head start programs, these services are inadequate and have been found to have low quality. Whereas, formal universal ECEC is provided for all children age 3 and above in other OECD countries (Moss, 2000; OECD, 2001).
The research suggests that when the quality of child education is high, it benefits all households with children, especially low-income families.

We would also expect single-parent families to benefit from working time regulations since single parents are mostly working and working long hours (Casey & Maldonado, 2012; Jacobs & Gerson, 2004). As previously mentioned, working time regulations limit annual/weekly working hours, allow for scheduling of nonstandard hours (the right to refuse evening, night, or weekend shifts), right for annual paid leave (vacation), and availability and quality of part-time work. Labor laws and collective agreements typically govern working time. The literature suggests that the irregularity of working hours puts a burden on work-life balance (Frase & Gornick, 2013). Furthermore, such irregularity of working hours would likely increase the inequality between single- and coupled-parent households. Single-parent households will have more difficulty to cope with irregular working hours, while coupled-parent households have the resources to be more flexible in negotiating the irregularity of their hours. Regulations to limit annual and/or weekly working hours across the board have been proposed as a key step to facilitating work/family reconciliation (Bielenski, Bosch, & Wagner, 2002; Bosch, Dawkins, & Michon, 2002; Gornick & Meyers, 2003; Fagan, 2004; Gornick & Heron, 2006; Heymann, 2006; Heymann & Earle; 2010).

Working time policies help provide families time for caregiving. Part-time work regulations improve the quality of part-time work (Bardasi & Gornick, 2008). There is agreement that working time regulations are effective for all families and especially for low-income families.
Summary

Overall, this body of literature suggests that both micro- and macro-level factors explain poverty. We know that policies that directly affect income are very effective in poverty reduction – all taxes and transfers, child benefit, child support and advance maintenance are consequential in reducing single parent poverty. Although, these analyses on child support and advance maintenance across countries are outdated (most recently completed for OECD 2011a, using LIS 2004 data) and only covering a single time period. Furthermore, there is a growing body of literature on policies that affect income through employment, although few of these studies focus on single-parent families and how policies differently affect single- and coupled-parent families. The literature is mostly focused on US and Europe, and less is known about other countries.

This study intends to fill these gaps in the literature. The study will go further in describing the extent to which the effect of single parenthood and other demographic characteristics on poverty vary across countries. It will update and improve the analyses on child support and advance maintenance to cover multiple time periods. It will also contribute to the research on policies that affect income through employment. In particular, it will extend the work of Maldonado & Nieuwenhuis (2014), both empirically and theoretically, it will improve these analyses (from logistic regression to multi-level model). Most importantly, and entirely new, this study will expand this work and include working time regulation and the extent such policies increase or decrease the poverty risk between single-and coupled-parent households.

Most importantly, the study will go beyond the US and Europe to include 45 countries from around the world.
Data and methods

The study used the micro data from Luxembourg Income Study (LIS) database. The LIS Database provides income data from a large number of countries which are harmonized into a common template for cross-national research. These data include socio-economic background characteristics, which allows for the identification of single- and coupled-parent households. The person-level data was merged with the household-level data. The unit of analysis is the household, as poverty is typically considered a household concept. Along with the household-level data from LIS, I used country-level data from The WORLD Policy Analysis Center. The WORLD Policy Analysis Center has globally comparative data available on laws and policies.

The analysis included 45 countries (Austria, Australia, Belgium, Brazil, Canada, Switzerland, China, Colombia, Czech Republic, Germany, Denmark, Dominican Republic, Estonia, Egypt, Spain, Finland, France, Georgia, Greece, Guatemala, Hungary, Ireland, Israel, India, Israel, Italy, Japan, South Korea, Luxembourg, Mexico, Netherlands, Norway, Panama, Peru, Poland, Paraguay, Serbia, Russia, Sweden, Slovenia, Slovak Republic, United Kingdom, United States, Uruguay, South Africa). These countries were selected based on diverse set of countries that include both high and middle income, both OECD and non-OECD countries, and the availability of country-level data. This analysis includes the latest data available for each country.

For the multi-level analyses, the population is households with children. This includes all households where at least one parent lives with one or more child(ren), and where at least one of the parents will be of working age between 20 and 55 years (for the multilevel model).
Dependent variable (household-level)

The dependent variable Poverty is coded as binary variable: 0 refers to individuals living in households that are not poor, 1 refers to individuals living in households that are poor. The conventional approach in cross-national studies is to define poverty relatively as households that earn below 50 percent of the median equivalized disposable household income. Equivalized means that household income is adjusted for family size by using equivalence scale in which adjusted income equals unadjusted income divided by the square root of household size. The median household income is determined based on the entire sample of households available in the data, before the subsample is defined. Disposable household income is total monetary and non-monetary current income net of income taxes and social security contributions. It accounts for a variety of country-differences in the redistributive effects of countries’ tax-benefit systems (EITC), child support legislation, among others. I calculated two other poverty thresholds to show the near-poor (<60% of median equivalized disposable household income) and very-poor (<40% of median equivalized disposable household income).

Independent variables (household-level)

Single parenthood: a binary independent variable, indicating single parenthood (coded 1), the reference category represents coupled-parent households (coded 0). This definition of single-parent households includes a head of the household that has at least one child under the age of 18 that lives in the household. Other adults can be present in the household, except that there are no
partners that live in the household. This definition includes both single mothers and a limited number of single fathers.

*Employment*: a binary variable indicating whether the head of the household is currently employed (coded 1).

*Education*: highest level of education of the head of household, recoded for country-comparability to 1=low, 2=medium, and 3=high. This interval-level variable is used as a control variable.

*Age*: age of head of the household

*Number of children in household under age of 5*: Interval variable representing number of children under age of 5 (coded 1 = 1 child, coded 2 = 2 children, coded 3=3 children, etc.).

*Transfer income* are monetary and non-monetary transfers from the state, private, and other households. This includes all social security transfers such as work-related insurance transfers, universal benefits, assistance benefits, and private transfers.

*Family transfers* are monetary and non-monetary transfers specifically for families and children from the state and private including inter-household transfers. This includes both universal and means-tested programs such as payments for maternity, paternity, or parental leave, child benefit. This includes transfers between households such as child support and alimony payments. This also includes child tax credits, such as the Earned Income Tax Credit (EITC) in the United States.

*Child support/alimony*: an interval-level variable representing the amount of child support/alimony (in national currency) the household received as part of disposable cash household income.
Advance maintenance: an interval-level variable representing the amount of payment from advance maintenance schemes (in national currency) the household received as part of disposable cash income. Advance maintenance is paid by social security to compensate for unpaid alimony payments. The child support/alimony and advance maintenance are part of disposable household income. These variables will not be used in regression analyses and will be used in the pre/post analysis on disposable household income.

Independent variables (country-level)

Family Benefit: a categorical variable coded as 0-no known cash benefits; 1-provided only in certain circumstances, 2- provided subject only to a means test, 3-provided without a means test/universal to all.

Paid Maternity Leave: paid leave available to mothers of infants. A categorical variable coded as 0- no paid leave; 1- < 14 weeks, 2- 14-25.9 weeks, 3-26 -51.9 weeks, 4- 52 weeks or more.

Leave for both parents: Is paid leave structure to incentivize working fathers to share infant caregiving responsibilities? A categorical variable coded as 0- no paid parental leave; 1-parental leave but no incentives; 2- 2 weeks or fewer reserved for fathers; 3-more than 2 weeks reserved for fathers; 4-leave length or payment bonus for fathers sharing leave.

Leave to care for a sick child: Are parents given guaranteed paid leave for the health needs of their children? A categorical variable coded as 0- no leave; 1- unpaid leave for both parents; 2-only paid available to mothers; 3- yes paid leave for both parents.

Rest Day: Are workers guaranteed a weekly day of rest? A continuous variable that is the number of hours a week of rest.
Annual Leave: A continuous variable that is the maximum days of paid annual leave available to workers.

Sick Leave: A categorical variable that is the maximum weeks available for paid sick in a year. Coded as 0- no paid sick leave; 1- 1-3.9 weeks; 2- 4-25.9 weeks; 3- 26 weeks or more.

Descriptive statistics are shown in Table 1.

<<< Insert Table 1 >>>

Analyses

There are five types of analyses. (1) Descriptives with the household-level data. I calculated the prevalence of single-parent families, single parent employment rates, and poverty rates at different poverty thresholds. (2) Decomposition on all taxes and transfers, as well as a specific family transfers for single and coupled-parent families. This decomposition analysis was done with the LIS microdata. I first calculated poverty before the benefit and then after the benefit was added. The impact of the benefit on reducing poverty is the difference between the two- the before and after benefit. There are some limitations to this process. For example, one benefit such as family transfers combined with another transfer might be enough to move a family above the poverty line, but in isolation the family transfer might be inadequate to reduce poverty (Nelson, 2013). This analysis does not account for other factors as a regression model, and should not be interpreted as causation. However, this method does show the precise impact of family transfers on reducing poverty, without holding constant other factors. (3) Child support descriptive and decomposition analyses for single-parent families. This is a similar analysis as above, instead I calculated poverty before child support and then after child support to see the
difference in single parent poverty rates. (4) Policy and poverty associations. Here, I chart the value of the policy and the association with single-and coupled-parent poverty rates at the 50% poor threshold. (5) Multilevel policy analyses. Finally, I estimate logistic multilevel models, estimating the risk of being poor, as a function of employment, policy, controlled for sociodemographic background variables. These models then include random effects that allow the effect of being a single parent on the risk of poverty to vary across countries (Gelman & Hill, 2006).

Prevalence of single-parent families

Figures 1 shows single-parent households as a percentage of all households with children. Data are reported for 38 countries with the most recent wave of data from around 2010 to 2014. On average, in countries about (19%) of all families were headed by a single parent. These rates of course vary by country. South Africa stands out with the highest percentage of single-parent families (51%). The US is close to the average (22%). Greece with the lowest percentage (10%).

Figures 1 show the trends of single-parent households across all countries. The overall pattern is that single-parent families have been increasing over time for the majority of countries.

<<< Insert Figure 1>>>

Single parent employment rates

Figures 2 shows single parent employment rates over time. On average for the 45 countries the employment rates for single parents is 66%; and for the majority of countries the employment
rates for single parents are well above 70%. Switzerland, Japan, China, Peru, and Russia have highest rates above 80%. South Africa, Ireland, France, Greece have lower rates below 50%. There have been some declines in single parent employment Finland, Sweden, Iceland, Ireland, and in France in recent years. Although, for the most part, single parents are working and their employment is increasing over time.

<<< Insert Figure 2 >>>

**Single parent relative poverty rates 40-50-60 thresholds**

Poverty rates are calculated by 50 percent below the median equivalized disposable household income. Median equivalized disposable household income for an adult are reported in Table 2. There are high median incomes in Norway ($36,385), Luxembourg ($36,323), and the US ($31,955). To translate this into a relative poverty rate, a household would be poor if the income was below 50% of the median equivalized disposable household income in that country. For the US that would mean that the poverty threshold for an adult is about $15, 976, which is a higher threshold than the official US poverty line which reports figures for the same year as $12,119 (US Census Bureau 2013). For a single parent with two children the relative poverty threshold would be $27,671, and the official US poverty for same family is $18,769. Whereas the relative poverty threshold would be slightly higher in Norway and Luxembourg than in the US. The same is true for countries with lower median incomes such as South Africa and India. Relative poverty is higher in South Africa and India than in the US, but these are relative rates in that country.
Figures 3 show the trends in poverty rates of single-parent families at different poverty thresholds. The thresholds are poor (below 50 percent median equivalized disposable household income), near-poor (60 percent) and very poor (40 percent).

The US stands out with the highest poverty. At the 50 percent threshold, the US along with South Africa, Japan, Canada, Germany, Israel, Luxembourg, Spain, China, Panama, and Brazil– have poverty rates above 25 percent. The US and South Africa have the highest poverty rates at the 40 percent threshold, with more that 23 percent of single-parent families experiencing deep poverty.

The trends show that poverty is increasing in some countries while decreasing in others. For example, poverty is increasing in Finland and Iceland which are Nordic countries with typically have lower poverty rates but here the rates for single parent poverty have been increasing in recent years. Finland, especially at the near-poor threshold is increasing over time.

Ireland and the UK have drastically reduced their poverty rates over time. The Netherlands also shows a notable trend in decreasing poverty over time, especially declines at the 60 percent threshold, near-poverty.

<<< Insert Table 2 & Figure 3 >>>

Single parent and coupled parent relative poverty rates

Figures 4 show the comparison in poverty trends of single-parent and coupled-parent households in 45 countries from 1978-2013. Here, shows the inequality between the family types. Across countries, single-parent households have higher poverty rates than coupled-parent families. On one extreme, the US has much wider gap between single and coupled parent poverty. The US has
the highest single parent poverty rates of about 35 percent and much lower coupled parent poverty rates of 11 percent. Similarly, more inequality between family types in Luxembourg, Canada, Germany, Czech Republic, France, Iceland, Ireland, Japan, South Africa, and South Korea.

Denmark, on the other hand, has low poverty rates in general and a small poverty gap between families. Denmark has 7 percent of single-parent families and 2 percent of coupled-parent families in poverty. Sweden, Switzerland, and Finland have similar low poverty gaps. Interesting are some of the other countries with perhaps medium to high poverty, but with lower gap between single and coupled parent poverty: Mexico, Colombia, India, Egypt, China, Guatemala, Georgia, Panama, Peru, Paraguay, Slovak Republic, and Serbia. Surprisingly in Guatemala and India the single parent poverty rates are slightly lower than the coupled parent poverty rates.

In the UK, there is a major decline in both single parent poverty and the single and coupled parent poverty gap.

There is much variation in poverty rates between countries, and this difference is in large part due to policies that redistribute income, through taxes and transfers, to families. The next section will examine redistribution, family transfers, child support and policies that partly explain these differences across countries.

<<< Insert Figure 4 >>>
Policies directly affecting income

Redistribution of taxes and transfers

Figures 5 shows the redistributive impact of taxes and transfers reducing poverty for families. The medium blue bars are the poverty rate before the taxes and transfers are included. The taxes and transfers are accounted for in the orange bars which are lower poverty rates. The difference between the medium blue and orange bars—light gray bars—shows the effectiveness of taxes and transfers reducing poverty for families.

Figure 5A shows all taxes and transfers reducing poverty for single-parent families. Here, the poverty rates before redistribution are all high, above 30 percent. The US single parent poverty rate before taxes and transfers (58%) is quite similar to countries like Denmark and Sweden. However, there is much difference between countries poverty rates after taxes and transfers are accounted for. Whereas the United States only reduced poverty from 58% to 36%, for a total of 22 percentage points, it remains the highest single parent poverty rates. Denmark reduced poverty from 50% to 7%, a total of 43 percentage points. UK and Ireland have significantly reduced poverty by 57 and 52 percentage points, respectively.

Figure 5B shows all taxes and transfers reducing poverty for coupled-parent families. Here, taxes and transfers reduce poverty as well for coupled parents. Some countries have lower amounts of redistribution: China, Peru, India, Dominican Republic, Colombia, Egypt, Japan, South Korea, Panama, Belgium. Others have higher amounts Ireland, Sweden, Luxembourg. Luxembourg is more effective in reducing coupled parent poverty than single parent poverty. In Luxembourg, redistribution reduces single parent poverty from 56% to 25% for a total of 31 percentage points; and reduces coupled parent poverty from 28% to 21% for a total of 7
percentage points. The US is less of an outlier, as it cuts coupled parent poverty by half from 21% to 11% for a total 10 percentage points.

South Korea is generally known for less redistribution, however here the country effectively redistributes income to single-parent families and cuts their poverty rate by half.

The main difference between countries with high poverty and low poverty: countries with low poverty effectively use redistribution.

<<< Insert Figure 5 >>>

**Family transfers**

Figures 6 take a closer look at the taxes and transfers. It focuses on one specific type of redistribution: family transfers. Family transfers are particularly important to reducing family poverty. Family and children transfers are monetary transfers from the state, private, and other households. This includes maternity, paternity, parental leave, family benefit (also referred to as child benefit), means-tested social assistance for families, child support and advance maintenance, and inter-household transfers. There are some countries that have family transfer policies, however, there was no specific information on the monetary amounts available in the microdata and therefore some countries were excluded from the analyses.

Figure 6A shows the redistributive impact of family transfers reducing poverty for single-parent families. The medium blue bars are the poverty rate before the family transfers are added. Very high poverty rates above 45% from Ireland, South Africa, the US Australia, Germany, South Korea, before accounting for the family transfer. The transfer is accounted for in the orange bars which are lower poverty rates. The difference between the bars, the light gray bars
shows the effectiveness of family transfers reducing poverty for single-parent families. In Ireland, the family transfers reduce poverty from 54% to 21% for a total of 33 percentage points, in the UK the reduction is 31 percentage points, and in Iceland and Denmark 25 and 24 percentage points, respectively. The United States through the TANF, EITC, child support, and child tax credits does reduce poverty by a total of 9 percentage points. South Africa reduced poverty from 50% to 34% for a total of 16 percentage points, 9 of these percentage points were due to a family benefit. Many countries have family benefit policy at the national level, the US does not. The UK and Ireland have similar poverty rates as the US before accounting for family benefit, but greatly reduced their poverty by more than half through family benefit, so much so that UK has low poverty rates akin to the Nordic countries. Some of these countries have very slight effects– reducing poverty by less than 5 percentage points– but not adequate to make substantial reductions to poverty (especially if had high poverty to begin with).

Figure 6B shows that family transfers also effectively reduce poverty for coupled-parent households –to a much lesser degree as compared with single-parent families. Luxembourg reduced poverty from 18% to 7%, by a total of 11 percentage points. This is consistent with the literature as Luxembourg has more generous allowances for coupled-parent families than for single-parent families (Chzhen & Bradshaw, 2012). The UK, South Africa, France, Australia, Finland, and Israel reduce poverty by 7 or more percentage points. Many of the Nordic countries cut their poverty down by half. The US is more in the middle of the pack in terms of poverty rates and poverty reduction by family benefit for coupled-parent families.

<<< Insert Figure 6 >>>
Child support

Child support is an important source of income for single-parent families. Child support is a monetary payment made by the non-resident parent to the parent that resides with the child(ren). Most countries have a formal child support system that enforces the child support payment. Some countries have advance maintenance which is a state transfer per year for each dependent child if a non-resident parent does not financially contribute to the family. In this case, the state advances the money and then demands the non-resident parent to pay it back in full or part. The advance maintenance schemes are in about half of OECD countries, these countries Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Italy, Luxembourg, The Netherlands, Norway, Poland, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom (OECD, 2011). However, the schemes vary between countries. For example, the Nordic countries (Denmark, Finland, Sweden, Iceland) are more generous while France and Germany are less generous (OECD, 2011). This section will include an in-depth review of child support and single-parent families: child support reducing poverty, percent of single parents that receive child support, share of child support received, the share of child support paid, and trends in child support reducing single parent poverty.

Child support reducing poverty for single-parent families

Figure 7 shows the redistributive impact of child support on reducing poverty for single-parent families. The medium gray bars are the poverty rate before the child support is added. The child support is accounted for in the dark gray bars which are lower poverty rates. The difference between the medium gray and dark gray bars, shown by the light gray bars shows the
effectiveness of child support reducing poverty for single-parent families. In Switzerland, the child support reduces poverty from 35% to 16% for a total of 19 percentage points, in Iceland the reduction is 10 percentage points. Poverty reduction in Sweden and Denmark (8%-points); Austria (7%-points); Belgium, Poland, and Germany (6%-points); Finland, Uruguay, Dominican Republican (5%-points); Australia and Spain (4%-points), Norway, Peru, Panama, Canada, Panama, and Israel (3%-points); Luxembourg, France, Greece, Russia, Serbia, Slovak Republic, and the US (2%-points); and Italy, Estonia, Paraguay, Ireland, Hungary, and UK (1%-points). The Nordic countries, Slovak Republic and UK have lower poverty to begin with, yet still child support reduces poverty.

What percentage of single-parent household receive child support? How has this changed over time?

Figures 8 show single-parent families across countries receive and depend on child support. On average, of the 33 countries that have data available for the recent year, 25% of single-parent households received child support. 86% of Swedish single-parent households received child support. Denmark (74%), Iceland (60%), and Switzerland (53%) also have high rates of single parents receiving child support. For the most part, countries with generous advance maintenance policy have higher percentages of single-parent households receiving child support. Luxembourg is one of a few exceptions to this rule, only 15% of single-parent households receive the child support and advance maintenance. A similar case can be made for France. In the US, 21% of
single-parent households receive child support. Whereas, only 6% single-parent households receive child support in Serbia and Colombia, and 2% in Egypt.

The trends suggest that the amount of child support received is either stable or increasing over time. For example, there are increases in Denmark, Switzerland; and declines in Australia, Iceland.

In the US, 18% of single parents received child support in 1980 and 21% in 2013, not much change in the child support system over the last 30 years. Denmark, on the other hand, had a major policy shift that enhanced the percentage of single parents receiving child support from 11% in 1987 to 71% in 1995 – reflecting a big policy change in mid-1990s. Then a peak of 92% in 2007 to now 74% in 2013 – a vast difference over the years and reflects the advance guarantee reaching most single parents.

However, unfortunately there are no child support data available in recent years for some countries (Switzerland and Norway).

How much do single parents rely on child support/advance maintenance? How has this changed over time?

Figures 9 show single-parent households receive a sizable portion of their income from child support.

On average, for 34 countries that have data available for recent year, child support and advance maintenance comprise 19% of the disposable household income of single-parent households. Single parents rely heavily on child support – more than a third of their income- in
Greece, Italy, Egypt, Serbia, and Switzerland. Single parents rely the most in Greece (47%) and the least in Denmark (7%). In fact, single parents rely to a much lesser degree in the Nordic countries which have generous advance maintenance policies. In Switzerland, single parents also rely on child support and a generous advance maintenance, but as a higher portion of their income (28%). In the US, single parents rely on 13% of their income on child support.

Single parents’ reliance on child support has declined over time in most countries. For the exception of a few countries, including Greece and Serbia. In Ireland, in 1995, single parents relied on 50% of their income, more recently in 2010 single parents relied on 14% of their income. Similarly, this is the case in Luxembourg, Netherlands, Spain, France, Australia, Colombia, Estonia, and Uruguay. There were more modest declines in UK from 15% in 1979 to 9% in 2013. The US has not experienced much change in single parents’ reliance on child support from 1979 (14%) to 2013 (13%).

Can parents afford to pay child support?

Figures 10 show the amount of the child support payment as a portion of paying parents’ disposable household income.

On average, for the 23 countries that have data available for recent years, parents pay 11% of their income to child support. Parents pay highest portion of income in United States (19%), Poland (18%), Iceland (17%), Italy (16%) and much lower, less than 10%, in Sweden, Denmark, Australia, Finland, Hungary, Slovak Republic, Luxembourg, UK, Belgium and Israel.
The amount of child support payment as the portion of disposable household income has declined in most countries over time. There are declines in Australia, Canada, Estonia, Italy, and Russia. There are also some increases, parents paying more in recent years in Iceland, Poland, France, Peru, and the US. In the US in 2010 parents paid 13% of their income and in 2013 parents paid 19% of their income. In the US, parents pay a much higher portion their income to child support, more so than in most other countries.

<<< Insert Figure 10 >>>

Is child support effective in reducing poverty? How has this changed over time?

Figures 11 shows the trends in child support reducing single parent poverty across countries. The dark gray bars show the poverty rate before child support is accounted for, the lighter gray accounts for child support. Here we see many countries have consistently relied on child support to reduce poverty over time including Switzerland, Austria, Finland, Denmark, Sweden, Belgium, Poland, Israel, Uruguay – and to a lesser extent Canada, Brazil, France, Israel, Czech Rep., Luxembourg, South Africa, and Peru. Germany’s child support has reduced poverty more after 2000 than in earlier years. Ireland’s child support was more effective in 1996 (reducing poverty by 7 percentage points) to little reduction in recent years. UK and The Netherland follows the same trend as Ireland. Child support has little to no effects over time in Spain, Greece, Georgia, Hungary, Italy, Russia, Serbia, Slovenia, Slovak Rep. The US child support system has consistently reduced poverty by 2 percent from 1979 to 2013.

<<< Insert Figure 11 >>>

43
Policies affecting income through employment

Policy descriptions: Policy and Poverty

The next part of the analyses, is the association between policies and poverty rates. These are simple associations and should not be interpreted as causal relationships. The important part of this section is that it describes and narrates the various policies—family benefit, maternity leave, leave for both parents, leave to care for the health needs of children, leave for rest, and annual leave, sick leave—across countries. Here, I graph each country’s value of the policy on the x-axis with the poverty rates for single-parent families (left) and poverty rates for coupled-parent families (right) on the y-axis.

Family Benefit

Figure 12 shows the association with family benefit and poverty. Family benefit includes whether and to what extent families receive income support. The value is from 0-3, 0- no known cash benefits; 1- provided in certain circumstances; 2 -provided only to a means tested; 3- provided without a means test/universal. The average for all countries is that families receive income support provided with a means test. For example, the US provides support in certain circumstances, while the Nordics provide income without a means test, but to all families. Here, the more the family benefit (the policy design from target to universal), shows a decline in poverty. The slope appears to be more steep for coupled-parent families than for single-parent families, suggesting that the benefit might be more consequential in reducing coupled parent poverty, of course without any controls. This will later be tested in the multilevel model.
Leave for mothers

Figure 13 shows that higher amounts of leave for mothers to care for their infant is associated with lower poverty rates for single- and coupled-parent households, and perhaps more so for coupled parents. The Nordic countries have higher amounts of paid maternity leave and low poverty rates. Many countries have generous maternity leave – 52 weeks or more – including Japan, South Korea, Germany, Serbia, Estonia, Slovak Republic, Russia, Poland, Czech Republic, and Hungary. There is a strong evidence in the literature that finds that there are some unintended consequences with leave that is too long on lowering mothers’ employment (Pettit & Hook, 2009; Keck & Saraceno, 2013). There are many countries, among them UK and Ireland, that have leave from 26 to 51.9 weeks. There are also countries that have leave from 14 to 25.9 weeks, among them are Colombia and South Africa. There are even some countries with leave less than 14 weeks including Egypt and India.

The US is the only country out of the 45 that does not have a paid maternity leave policy at the national level. The US is the exception with no paid leave and high single parent poverty rates.

Leave for both parents

Figure 14 show leave policies that incentivize both fathers and mothers to share in the caregiving of infants. Higher amount of leave for both parents is associated with lower poverty among coupled-parent households, while less so for single parents. Sweden and Finland have the
lowest poverty rates and also offer fathers a bonus for sharing the infant care with mothers. Austria, Italy, Germany Japan also provide a bonus or longer leave for fathers. Some countries provide more than 2 weeks reserved for fathers, including Slovenia and Iceland. Many others provide 2 weeks or fewer reserved for fathers including Denmark, UK and South Africa. Some countries provide parental leave but no incentives.

The US is among the 8 countries that offers no paid parental leave for both mothers and fathers.

<< Insert Figure 14 >>

Leave to care for sick child

Figure 15 shows that paid leave to care for a sick child is associated with lower poverty, especially for coupled-parent families. The majority of countries provide paid leave to both parents. Some provide unpaid leave for both parents, the US, Switzerland, and Georgia. As well as some provide no leave: China, Guatemala, Panama, Mexico, Paraguay, Dominican Republic, Colombia, Brazil, India, Uruguay and Korea.

<< Insert Figure 15 >>

Working time regulation: Rest leave

Figure 16 shows the association between rest leave and lower poverty for single and coupled-parent families. Here the countries with the highest hours of paid rest leave are not the
Nordics but Hungary, Slovak Republic, Luxembourg and Russia with more than 42 hours. The majority of the countries have either 24 or 35 hours. United States, Australia, Georgia, and India are among the 4 countries that do not have leave for rest.

Working time regulation: Annual Leave

Figure 17 shows the association between paid annual leave and poverty. More days of paid annual leave is associated with lower poverty rates among single and coupled-parent households. The majority of countries have more than 12 days of paid annual leave, and the Nordic countries, Austria, Luxembourg, France, Germany, Spain, Peru, Brazil, Panama all have more than 21 days of paid annual leave. United States and India are without a national paid annual leave policy.

Working time regulation: Sick Leave

Figure 18 shows the association between sick leave and lower poverty for single-parent families and more so for coupled-parent families. The majority of countries have more than 26 weeks of sick leave. China, Brazil, Uruguay, and Mexico have no paid sick leave.

The US does have paid sick leave in some states and cities, however does not have a national paid sick leave policy.
Multilevel model: Maternity leave, leave for both parents, and working regulations

Table 3A shows the results for the multilevel regression analyses that examines leave for mothers, leave for both parents, rest and annual leave at the country-level with how it effects employment and poverty while controlling for socio-demographic characteristics at the person and household level. The multilevel model accounts for the fact that households are nested within countries, as well as weighs the sample sizes appropriately.

The multi-level policy results are presented in Table 3. In Model 1, the likelihood of being poor is regressed on whether the household is headed by a single parent, and socio-demographic characteristics. Single parents have a much higher poverty risk as compared to coupled parents. Heads of the household who are older and have higher level of education have resources that protect their families from poverty risk. Families that have one or more children under the age of 5 have greater poverty risk, and even greater risk if the number of young children is increased. Model 2 shows that paid maternity leave is associated with lower poverty rates for single parents, but not significant for coupled parents. Here, shorter periods of leave –as oppose to longer leave –has a stronger effect on reducing poverty for single-parent families. Model 3 adds employment and shows that maternity leave is still significant in reducing poverty for single parents, after employment is considered. Model 4 shows the results for leave for both parents. With greater than 2 weeks for fathers and dad bonus as compared to no leave for both parents, this is associated with lower poverty for coupled-parent households. Leave for both parents is associated with significant results for single-parent households, however possibly
slightly increasing their poverty risk as compared to coupled parents, especially if there is bonus or long leave for fathers. Model 5 shows that longer hours for rest is associated with reducing poverty among all households with children, however the effect is less than maternity leave. The result for leave for both parents for greater than two weeks for dad as compared to no leave becomes insignificant when adding working regulations to the model. Model 6 shows that annual leave is only statistically significant for single parents, however effects are ever so slight.

Finally, Model 7 shows the strength of the multilevel logistic regression model. It adds the variables of interests as random slopes, allowing the effect of being a single parent on the risk of poverty to vary across countries. In other words, it tests whether the association between single parenthood and poverty is different and different in countries. It shows that the effect of single parenthood is significant and that the extent of the effect differs significantly across countries. Here, we see the results are slightly different than from the previous models. The interaction effects for single parents and leave for both parents are no longer significant, except when there is longer dad leave or dad bonus. In other words, when adding the random effect this enables us to find that leave for both parents is not “increasing” the risk of poverty for single parents except when dad leave is too long or dad bonus. In addition, annual leave, which had a much smaller effect to start with, is no longer significant for single parents. Table 3B adds the single-parent family variance for the entire model.

<<< Insert Table 3A & 3B >>>
Multilevel model: Family benefit, mom leave, and working regulations

Table 4A shows the results for the multilevel regression analyses that examines family benefit, leave for mothers, and rest leave at the country-level with how it effects employment and poverty while controlling for socio-demographic characteristics. Model 1 includes the socio-demographic characteristics as controls. Model 2 adds family benefit to the model and finds that family benefit is statistically significant for single-parent families, however increasing their poverty risk over coupled parents. If family benefit is provided in certain cases, mean-tested, or universal as oppose to no cash benefits –this increases the poverty risk for single-parent families. This requires careful interpretation to be discussed. Model 3 adds employment to the model and finds that family benefits that are universal in design reduce poverty for all families. This finding is also the same with the random effect of single-parent families (see coefficients in Table 4B). However, this is no longer significant when additional variables are added to the model. Model 4 adds leave for mothers to the model and finds that leave for single-parent families reduces their poverty risk. Model 5 adds rest leave to the model, finding rest leave slightly reduces poverty for single-parent families.

Finally, Model 6 includes the random effect. Again, this adds the variables of interests as random slopes, which allows the effect of being a single parent on the risk of poverty to vary across countries. This changes the results. All demographic variables and controls remain the same (for the exception of single parenthood as it is included in the random effect). However, family benefit is no longer statistically significant if it is means-tested or universal as compared to no cash benefits in increasing the poverty risk of single parents. Family benefit is only significant in increasing the poverty risk of single parents over coupled parents if it is ONLY provided in certain cases as oppose to no cash benefits. Rest leave is no longer statistically
significant for reducing poverty for all families, only for single-parent families however these are very slight effects. Table 4B reports the coefficients for the same model, with the single-parent family variance.

<<< Insert Table 4A & 4B >>>

**Multilevel model: Leave to care for a sick child, sick leave, family benefit**

Table 5A shows the multilevel model results for leave to care for the health needs of a child (also referred to as “leave to care for sick child”), sick leave, and family benefit at the country-level with how it effects employment and poverty while controlling for socio-demographic characteristics. Model 1 includes socio-demographic variables as controls. Model 2 adds leave to care for a sick child in the model and finds that it is not statistically significant for all families but is significant for single-parent families. However, when leave to care for a sick child is either unpaid or paid for both parents, this increases single-parent families’ poverty risk over coupled-parent families. Model 3 adds employment and finds that leave to care for a sick child that is paid and available to both parents reduces poverty for all families. Model 4 adds sick leave and finds that when it is 4 or more weeks it reduces poverty for single-parent families. Model 5 adds family benefit to the model. Family benefit significantly increase the poverty risk of single over coupled-parent families.

Finally, Model 6 adds the random effects of single parenthood. The demographics remain significant, for the exception of single parent which is no longer significant as this variable is allowed to vary. Leave to care for a sick child is no longer statistically significant in reducing
poverty for all families. However, if paid leave to care for a sick child is provided to both parents than it significantly increases the poverty risk of single-parent families over coupled-parent families. In addition, family benefit increases the poverty risk of single-parent families (over coupled-parent families) if provided in certain cases or universal as oppose to no known cash benefits. The latter need careful interpretation. Table 5B adds the random effect of single-parent families for each model and reports the coefficients.

<< Insert Table 5A & B >>>

Discussion and Conclusion

This study of 45 diverse countries–brings new and important insights to the research on single-parent families.

In 45 countries, about 1 in 5 families are single-parent families. More than half of families in South Africa are headed by single parents. Single-parent families are prevalent and increasing over time for the majority of countries.

The majority of single parents are mothers and are working. Even in countries with lower overall employment rates, the average employment rate for single parents is still high at 66 percent. Even though the majority of single parents are employed–because they have no other choice but to work–their families remain at great risk for poverty.
The United States has the highest percentage of single-parent families in poverty of all countries. More than 1 in 3 single-parent families is poor in the US. Not only does the US stand out as the “Worst-Off” for single parents in high-income countries (Casey & Maldonado, 2012), but it deserves this same deployable title among many middle-income countries as well; including South Africa, China, Panama, and Brazil.

Approximately 1 in 4 single parents and their children experience deep poverty in both US and South Africa. The American story is told in Edin and Shaefer’s “$2.00 a Day Living on Almost Nothing in America”. The rise of deep poverty and material deprivation have put families in dire consequences without adequate support from a social safety net. South Africa has high single parent poverty for different reasons; in part, due to the legacy of AIDS that orphaned children and the apartheid (Scott, Wilcox, Ryberg, DeRose, 2015).

Across most countries, single-parent families are more likely to be poor than coupled-parent families. The US has high inequality between single and coupled-parent families. Coupled parents have low poverty rates (11%) and single parents have very high poverty rates (36%). In the other countries, the gap is much less pronounced.

Single-parent families have lower poverty rates (less than 14%) in the Denmark, Sweden, Slovak Republic, Finland, Switzerland, UK, and the Netherlands.

The main difference between countries with high poverty and low poverty: countries with low poverty effectively use redistribution. Before all taxes and transfers are accounted for, the US
poverty rate is quite similar to countries like Denmark and Sweden. But –after all taxes and transfers are accounted for, these countries effectively redistribute income and the US is left behind with persistently high poverty rates. Whereas the United States only reduced poverty from 58% to 36%, for a total of 22 percentage points, it remains the highest percentage of single parent in poverty of all countries. Denmark reduced poverty from 50% to 7%, a total of 43 percentage points. UK and Ireland have significantly reduced poverty by 57 and 52 percentage points, respectively.

An important insight: all 45 countries redistribute income to reduce poverty. Most countries redistribute income to cut their poverty rates by half or more. Even countries that are traditionally known for less redistribution in general, for instance South Korea, still redistribute income to single-parent families. Redistribution through taxes and transfers is very effective in reducing poverty for both single- and coupled-parent families for all countries.

Not only is redistribution effective, family transfers are particularly important for single-parent families. Ireland and the UK are effective in redistributing income to single-parent families, they do so by way of family transfers. Ireland and UK reduce poverty substantially with family transfers, by 33 and 31 percentage points respectively. Some of these countries have lower poverty rates to begin with, but still effectively use family transfers to reduce poverty by more than half.

The United States through the Temporary Assistance for Needy Families (TANF), and Earned Income Tax Credit (EITC), child support, and child tax credits does reduce poverty by a total of
9 percentage points. However, the US has high poverty to begin with and the amount of (redistribution) family transfers are inadequate to substantially reduce poverty.

South Africa is an interesting case as it has reduced poverty from family transfers for a total of 16 percentage points, 9 of these percentage points were due to a family benefit, also known as the child benefit. Many countries have child benefit policy at the national level, providing a monthly amount to families to offset the cost of raising a child. The US is among the few countries that does not have a child benefit. Although the US does provide child tax credits, many of these countries provide child tax credits in addition to the child benefit.

Child support is an important source of income for many single-parent families – one quarter of single-parent families receive child support and it comprises about 19% of single parents’ disposable household income.

Many countries have some type of child support system in place. Child support is effective in reducing poverty and even more so when combined with an advance maintenance, which the state advances the child support when the payee does not pay.

There are very high child support receipts in countries with advance maintenance: in Nordics and Switzerland; however, less so in Luxembourough with low rates of child support receipt perhaps pointing to an issue of accessibility. There are much lower rates of child support in Serbia, Colombia, and Egypt.
On average, non-resident parents pay 11% of their disposable household income to child support. Parents pay the highest portion of income in the United States. One area of concern is if the payment is too high the non-resident parent can’t afford child support payments. In the US, without an advance maintenance, if the non-resident parent fails to pay the child support the single-parent family suffers income loss.

Some countries more effectively use child support to reduce poverty than others. Switzerland stands out as the leader in child support substantially reducing poverty by 19 percentage points. Many countries reduce poverty by 5 or more percentage points.

Some countries have undergone substantial policy changes in their child support system over time. Denmark had a major policy change in the 1990s that had an enormous positive effect: a dramatic increase in the number of single parents that received child support. The US child support system, on the other hand, has not changed much over the past 30 years. The child support receipt and effectiveness have remained the same. The effectiveness of the US child support system is minimal by comparison: without an advance maintenance, child support reduces poverty by only 2 percentage points.

Child support has been consistently used as an anti-poverty mechanism, however it does not necessarily respond to the changing needs of single-parent families (Garfinkel, McLanahan, Meyer, & Seltzer, 1998; Meyer, Skinner, & Davidson, 2011). The US system is outdated and is not adequately responding to the changing needs of families. An American family that receives public assistance, does not directly receive child support that the non-resident parent pays –but
instead the child support goes to the state to recoup the funds for the family being on public assistance. This does not support the family and often pushes both the single-parent family and the non-resident parent further into poverty. While other countries allow families to receive both social assistance and child support – and the few exemplars even provide advance maintenance to ensure that the single-parent family will receive child support irrespective if the other parent pays child support.

There are also challenges for the exemplary countries, such as the Nordics. Child support can reinforce gender norms by demanding the “father” to pay child support or, as is the case of advance maintenance the “state” fulfills the fathers’ obligation to financially provide for the family. Child support in Iceland does not account for the mothers’ income when calculating child support and only bases this on the fathers’ income. A more balanced approach is to support the needs of the child(ren) by calculating child support based on the joint income of both parents (Eydal, forthcoming).

Countries implement policies – to varying degrees – which are associated with lower poverty. Most all countries provide some type of income support to families. On average, families receive income support that is at the very least means-tested. The US only provides support in certain circumstances to families, for example TANF, whereas the Nordic countries provide income universal to all families, child benefit to all families irrespective of income.

Of 45 countries, only the United States lacks paid maternity leave. The US is one of the wealthiest countries in the world and that it does not have a national paid leave policy for
mothers to care for their newborns is a concern of global proportions. There are many countries that have long leave (UK and Ireland), others have medium length (Colombia and South Africa) and a few with less than 14 weeks of leave (Egypt and India).

Most countries provide leave for mothers and fathers to share in the caregiving of their infants. Some even provide “dad” bonuses to incentivize fathers to be involved in the caregiving of their children. For the most part, countries either provide more than 2 weeks reserved for fathers (such as South Africa, Colombia, UK) or fewer than 2 weeks. The US is among the countries (including China, Peru, India, Switzerland) that offers no paid leave for fathers.

Many countries provide paid leave to both parents to care for a sick child. Some provide leave that is unpaid for both parents (the US), while other provide no leave to care for the health needs of children (China, Guatemala, Panama, Mexico, Paraguay, Dominican Republic, Colombia, Brazil, India, Uruguay and South Korea).

The majority of the countries have either 24 or 35 hours of rest leave. United States, Australia, Georgia, and India are among the only countries in the sample that do not have leave for rest. Most countries have more than 12 days of paid annual leave. United States and India are without a national paid annual leave policy. Most countries have more than 26 weeks of sick leave. United States, South Korea, India have no paid sick leave.

The study’s main contribution are the results of the multilevel policy analyses which account for demographics, employment, and policy.
Socio-demographic characteristics contribute to poverty risk. Single parents have a much higher poverty risk as compared to coupled parents. Heads of the household who are older and have higher level of education have resources that protect their families from poverty risk. Families that have one or more children under the age of 5 have greater poverty risk, and even greater risk if the number of young children is increased. However, when demographic factors are controlled for in the model, the country institutional effects are more consequential determinants of poverty.

Employment significantly reduces poverty and in some cases family policies facilitate parents’ employment.

Paid maternity leave significantly reduced poverty for single-parent families only. This is an important finding as it expands earlier work (Maldonado & Nieuwenhuis, 2015) that found paid leave to reduce poverty for single-parent families in 18 countries to 45 countries. This model did not find evidence to support the findings of the previous study that maternity leave was significant for all families. Perhaps maternity leave is beneficial but inadequate at the current level to reduce poverty for coupled-parent households. Another potential explanation is that leave that is too long has disincentives for maternal employment. Leave that is too long has unintended consequences for all mothers in coupled households further excluding them from the labor market (Pettit & Hook, 2009; Keck & Saraceno, 2013; Van Lancker, 2014) and the same applies for single mothers (Van Lancker, forthcoming). There are also unintended consequences when leave is only provided for mothers and not for fathers, reinforcing gender inequality in the labor market.
Leave for both parents to care for their infant is not significant. However, this may still mean that leave for both parents is helpful in reducing poverty, but not sufficient at the current level to bring families above the poverty threshold. Leave that is “too long” or “dad bonuses” do benefit coupled parents over single parents. However, there is evidence to support that leave for fathers and leave for both parents is important for father involvement and gender equality. The Nordic countries are the leaders in policies that father’s involvement in the care of their families and have high uptakes of paternal leave (Haas et al 2011; Eydal et al. 2015). In this analyses it is not only the Nordic countries that have paid paternal leave, most other countries – including South Africa, Colombia, Serbia, Germany, UK – have such schemes that involve fathers in the caring for their infant.

Family benefit do not stimulate, but may decrease, employment. Family benefit appear to increase the poverty risk of single parents over coupled parents. However, this requires careful interpretation. Single-parent families are more likely to rely on means-tested family benefit because they are poor, not that family benefit actually increase their poverty risk. Therefore, the decomposition analyses of family transfers more precisely capture that these transfers do in fact reduce poverty for all families, especially for single-parent families.

Leave to care for a sick child that is paid for both parents increases the poverty risk of single-parent families over coupled parent families. Perhaps a similar interpretation as with leave for both parents, such as dad bonuses, that single parents with a missing parent have only access to
part of the benefit. Therefore, the Matthew effect, benefiting families with more resources than fewer resources might be at play.

Working time regulations, rest leave, are helpful but not the main factors contributing to poverty reduction.

Many of these findings have implications on policy for the US and around the globe. However, before doing so, there are certain limitations to the data and study that will be addressed.

**Limitations**

First of all, the study used the common definition of single-parent families which limits the findings to only this sample. The definition of single parenthood is difficult to assess in household survey data. There has been misidentification of single-parent families in the Current Population Survey (CPS) in earlier years (London, 1998). As commonly defined in cross-national and cross-sectional data, a single-parent family includes a parent as head of household with at least one child living in the same household. There is no partner but other adults can be present in the household. This definition is complicated when countries such as Mexico, Guatemala, and Peru are added to the analyses because they don’t necessarily define single parent as the head of household. In some of these countries, many single parents are living in multi-generational households and are “hidden” and underrepresented in the data. This may also be the case in Slovak Republic (Bradshaw, Keung, & Chzhen, forthcoming). In addition, the definition does not capture the dynamic and changing nature of single-parent families. Single parenthood changes over the life course: some re-partner and form blended families while others
remain single, with many life changes in between. Zagel & Hübgen (forthcoming) develop a life-course perspective for studying single parents and social policy. For example, they argue to consider the age of the mother, age of the child, and time of separation and incorporate these important factors into the analyses. Certain policies are more consequential to single mothers given their life course, for example maternity leave is very important for mothers with newborns, early childhood education for parents with young children, and social security/pensions for older mothers facing retirement. Furthermore, the definition of single-parent families generally ignores the presence of the non-resident parent, often the father, and their contributions to the household. In many cases the other parent is involved in the providing and caring of the children after the separation. In reality, there may be more co-parenting arrangements, where both parents bring resources to the children. This is both a limitation of data but also in the literature. Fathers are missing in our analyses yet in many cases they are clearly in the picture and remain involved with their children’s lives after separation (Harkness & Salgado, forthcoming).

The second limitation is about the data. The child support and alimony data in the LIS database can’t be disentangled. One could argue this is income paid to the family. However, child support is a financial support to the children whereas alimony is paid to the separated spouse. The intention behind child support and alimony are quite different, and yet these two types of benefits are lumped together. In addition, child support/alimony data does not distinguish between public or private child support. The LIS data on child support are lacking for many countries, and unfortunately there are countries that previously collected data on child support but are no longer doing so (Switzerland).

In addition, the LIS data available at the micro-level was limited in terms of the most recent years. Countries in 2000 (Belgium) were compared to countries with the most recent data
in 2013. However, in the analyses I ran tests with and without the older datasets and ended with the same results.

The data from the World Policy Analysis Center also have limitations. The indicators are mostly categorical, therefore only a few policy indicators can be in a single regression model. However, these indicators may be crude but allow for extensive coverage of 45 countries.

The third limitation is due to this particular study. This study does not address single-parent families and the institutional context of employment. It does account for whether or not parents work and carefully models employment in the policy analyses, however simply accounting for employment is not enough. Many single parents are the working poor, which points to a larger issue of ‘lousy jobs’ and inadequacies in the labor market. These questions are largely left out of these analyses: what types of jobs are single parents in? Are jobs available and if so, do they pay a decent wage? Do the jobs match the preferences and needs of single parents? Which labor market institutions and policies support adequate jobs (for example, collective bargaining/unions)? Many scholars have studied single parents and labor market institutions for OECD countries (Lohman & Marx, forthcoming; Horeman & Marx, forthcoming; Esser & Olin, forthcoming; Nieuwenhuis & Maldonado, forthcoming). Nonetheless, studying the quality and quantity of jobs for single-parent families in 45 countries has not yet been achieved and can be an extension of this study.

Finally, and perhaps the most important limitation in this study and area for future research: how best to empirically consider a diverse set of countries. I ran several analyses with and without OECD countries to see whether the different countries achieve similar results. In any case, there is much more work to be done. As the research moves beyond the OECD countries, so too will the advancements in the methods to compare diverse countries.
Policy Implications

The main findings offer four policy suggestions to reduce poverty for single-parent families across 45 countries. These things matter for single-parent families: policies are important everywhere; employment, but also transfers; encourage shared parenting; and raising the global floor.

Policies matter and are important everywhere

An important aspect of comparative welfare state theory is that there is much variation in nations’ policies and institutions. This study argues that policies everywhere – at least in 45 countries – are very important in providing a minimum floor for all families. Minimum income protection is important for vulnerable families (Nelson & Marx, 2013) but not only applies to families in US and Europe but also in all countries. This is important for all families but essential to single-parent families that have higher risk of poverty.

All countries have income supports and family policies and these policies are effective at varying degrees in reducing poverty for families. Heymann and Earle (2009) demonstrate that even with diverse countries that many of the policy provisions and policy needs are quite similar across the world. Esser, Ferrarini, Nelson, and Sjöberg (2009) also argue against exaggerating the differences between high-income and middle- to low-income countries.

The study argues that certain work-family policies are effective in reducing single parent poverty everywhere. All countries will improve the lives of single parents and their families by implementing or improving upon these policies: paid leave for mothers, leave for both parents, leave to care for sick child, and working time regulations.
Paid maternity leave is the strongest policy effect on reducing single parent poverty. Paid maternity leave found in all countries (including UK, Denmark, South Africa, Colombia except the US) reduced poverty for single-parent families. Paid maternity leave is best when it is not too long and combined with leave for both parents. Working time regulations (rest leave) modestly reduced poverty for families. These policies matter and are important everywhere especially for single-parent families.

**Employment matters too, but it is not enough: Family transfers**

Employment matters a great deal to reduce poverty for all families. Atkinson’s book on inequality proposes strategies to focus less on transfers and more on the inequalities of the labor market. While this is an important way forward, and much of the literature is moving in this direction, family transfers are also important in reducing poverty for single-parent families. Social investment strategies to stimulate employment through education, training, child care and so forth are indeed valuable (Morel et al., 2012). Although, employment alone is simply not enough to reduce poverty. Many single parents are the working poor and in jobs characterized by low pay and limited employment protections. Strategies to increase employment (adequate employment with decent wages and supports) are essential, but not without also increasing income transfers. Jaehrling, Kalina, and Mesaros (2014) find that activation strategies, to increase single mother employment, alone, fail to reduce poverty rates.

Countries need both redistribution and employment to reducing poverty for vulnerable populations. Redistribution, especially family transfers, is extremely effective in reducing poverty for all countries. A very important insight is that all 45 countries redistribution income.
Even countries known less for redistribution in general still transfer income to single-parent families (South Korea).

Countries with higher poverty to begin with, must redistribute at higher levels to properly address poverty.

**Shared parenting brings resources to families**

Leave that incentives fathers to share in the responsibility of caregiving is important for all families especially in terms of gender equality. Although it seems that the main beneficiaries for leave for both parents is perhaps coupled parents (single parents benefiting less than coupled parents with long dad leave/dad bonus). These findings may suggest a Matthew effect, especially in the short term. However, in the long term, the literature suggests that targeting within a universal framework might be most beneficial to single parents. For example, these similar policies can be granted to single parents: single parent granted extra leave in cases where the other parent is absent. Additional leave, but leave that is not too long (more than 9 months).

However, as previously mentioned the other parent is often seen as absent from the family, while this is not necessarily the case. The other parent may have a relationship with their children and support in the caring of and providing for their family (Harkness & Salgado, forthcoming).

Fransson and colleagues found that Swedish children that live in shared residence are on par as children in coupled parent households in terms of child wellbeing outcomes (Fransson, Låftman, Östberg, Bergström, forthcoming).

Sweden has a high prevalence of co-parenting relationship that balance both parents being involved as providers and caregivers of their family. Zofie-Duvander and Korsell (forthcoming) examine leave shared between separated parents in Sweden. Parents are jointly
granted 6 months of paid leave before the child reaches 8 years old. In cases of separated parents that are co-parenting, parents must decide what is best for their children and work together to share and negotiate the leave. The policy is simple: when the parents agree they simply register online with an electronic signature and the paid leave can be transferred to either parents; when parents don’t agree, they lose the benefit. This poses an alternative model to the child support system that can pit separated parents against each other, versus a model that encourages parents to work together in benefit of their children.

The exciting part of these analyses is that leave shared between parents, such leave schemes that include the father, are no longer limited to the Nordic countries, but found in many countries everywhere – including Guatemala, South Africa, Serbia, Japan, Germany.

Raising the global floor for single-parent families

Moving forward, we must raise the global floor for all families, especially those most vulnerable: single-parent families. This study demonstrates that it can be done everywhere – not only in the Nordic countries but these models are found across the globe and they are effective in reducing poverty. Some countries have many more challenges ahead, while some offer alternative models to support families.

There is good cause to raise the floor. Heymann & Earle (2010), “Raising the global floor: dismantling the myth that we can’t afford good working conditions for everyone”, they make the case to include minimum laws and protections to allow parents to care for their families. They convincingly argue that employment conditions and family policies do not hinder countries’ ability to compete in the global economy but in fact, foster their competitiveness.
The United States is clearly lagging behind countries in terms of policies that support single parents and their families. This study has shown that this is not only the US compared to the typical welfare state leaders, but to the rest of the world. Why is this the case? The answer is simple. The US has inadequate or missing policy in several areas that are consequential to reducing single parent poverty—low income transfers, no child benefit, no paid maternity leave, no paid leave for both parents, no paid sick leave for children, and limited working time regulations.

The solution is simple too. We know what works best. We know which policies raise the floor for those at the bottom of the income distribution. The next step is to decide to take action to do better for single parents and their children.
<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Number of household observations</th>
<th>% of observations</th>
<th>Country</th>
<th>Year</th>
<th>Number of household observations</th>
<th>% of observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>2013</td>
<td>1692</td>
<td>0.45</td>
<td>India</td>
<td>2011</td>
<td>25643</td>
<td>6.87</td>
</tr>
<tr>
<td>Australia</td>
<td>2010</td>
<td>5726</td>
<td>1.53</td>
<td>Israel</td>
<td>2012</td>
<td>4131</td>
<td>1.11</td>
</tr>
<tr>
<td>Belgium</td>
<td>2000</td>
<td>797</td>
<td>0.21</td>
<td>Italy</td>
<td>2014</td>
<td>1918</td>
<td>0.51</td>
</tr>
<tr>
<td>Brazil</td>
<td>2013</td>
<td>49903</td>
<td>13.38</td>
<td>Japan</td>
<td>2008</td>
<td>1101</td>
<td>0.3</td>
</tr>
<tr>
<td>Canada</td>
<td>2010</td>
<td>7748</td>
<td>2.08</td>
<td>South Korea</td>
<td>2012</td>
<td>5338</td>
<td>1.43</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2013</td>
<td>1892</td>
<td>0.51</td>
<td>Luxembourg</td>
<td>2013</td>
<td>1426</td>
<td>0.38</td>
</tr>
<tr>
<td>China</td>
<td>2002</td>
<td>12323</td>
<td>3.3</td>
<td>Mexico</td>
<td>2012</td>
<td>4823</td>
<td>1.29</td>
</tr>
<tr>
<td>Colombia</td>
<td>2013</td>
<td>6976</td>
<td>1.87</td>
<td>Netherlands</td>
<td>2013</td>
<td>3362</td>
<td>0.9</td>
</tr>
<tr>
<td>Czech Rep</td>
<td>2013</td>
<td>2312</td>
<td>0.62</td>
<td>Norway</td>
<td>2013</td>
<td>65981</td>
<td>17.7</td>
</tr>
<tr>
<td>Germany</td>
<td>2013</td>
<td>6581</td>
<td>1.76</td>
<td>Panama</td>
<td>2013</td>
<td>5669</td>
<td>1.52</td>
</tr>
<tr>
<td>Denmark</td>
<td>2013</td>
<td>23859</td>
<td>6.4</td>
<td>Peru</td>
<td>2013</td>
<td>15243</td>
<td>4.09</td>
</tr>
<tr>
<td>Dom Rep</td>
<td>2007</td>
<td>4320</td>
<td>1.16</td>
<td>Poland</td>
<td>2013</td>
<td>14392</td>
<td>3.86</td>
</tr>
<tr>
<td>Estonia</td>
<td>2013</td>
<td>1895</td>
<td>0.51</td>
<td>Paraguay</td>
<td>2013</td>
<td>2925</td>
<td>0.78</td>
</tr>
<tr>
<td>Egypt</td>
<td>2012</td>
<td>7349</td>
<td>1.97</td>
<td>Serbia</td>
<td>2013</td>
<td>1253</td>
<td>0.34</td>
</tr>
<tr>
<td>Spain</td>
<td>2013</td>
<td>3995</td>
<td>1.07</td>
<td>Russia</td>
<td>2013</td>
<td>2138</td>
<td>0.57</td>
</tr>
<tr>
<td>Finland</td>
<td>2013</td>
<td>3570</td>
<td>0.96</td>
<td>Sweden</td>
<td>2005</td>
<td>3473</td>
<td>0.93</td>
</tr>
<tr>
<td>France</td>
<td>2010</td>
<td>6054</td>
<td>1.62</td>
<td>Slovenia</td>
<td>2012</td>
<td>1473</td>
<td>0.39</td>
</tr>
<tr>
<td>Georgia</td>
<td>2013</td>
<td>808</td>
<td>0.22</td>
<td>Slovak Rep</td>
<td>2013</td>
<td>2134</td>
<td>0.57</td>
</tr>
<tr>
<td>Greece</td>
<td>2013</td>
<td>2239</td>
<td>0.6</td>
<td>UK</td>
<td>2013</td>
<td>6428</td>
<td>1.72</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2006</td>
<td>9141</td>
<td>2.45</td>
<td>US</td>
<td>2013</td>
<td>20065</td>
<td>5.38</td>
</tr>
<tr>
<td>Hungary</td>
<td>2012</td>
<td>300</td>
<td>0.08</td>
<td>Uruguay</td>
<td>2013</td>
<td>18146</td>
<td>4.87</td>
</tr>
<tr>
<td>Ireland</td>
<td>2010</td>
<td>1587</td>
<td>0.43</td>
<td>South Africa</td>
<td>2012</td>
<td>3516</td>
<td>0.94</td>
</tr>
<tr>
<td>Iceland</td>
<td>2010</td>
<td>1387</td>
<td>0.37</td>
<td>Total</td>
<td></td>
<td>373,032</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 2: Median Equilized Income

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>median equivalized income in country currency</th>
<th>median equivalized income in USD</th>
<th>Country</th>
<th>Year</th>
<th>median equivalized income in country currency</th>
<th>median equivalized income in USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>2013</td>
<td>25702</td>
<td>$17,021.19</td>
<td>India</td>
<td>2011</td>
<td>35363</td>
<td>$2,017.00</td>
</tr>
<tr>
<td>Australia</td>
<td>2010</td>
<td>41996</td>
<td>$29,953.52</td>
<td>Israel</td>
<td>2013</td>
<td>78798</td>
<td>$19,811.26</td>
</tr>
<tr>
<td>Belgium</td>
<td>2000</td>
<td>672691</td>
<td>$25,169.76</td>
<td>Italy</td>
<td>2014</td>
<td>14708</td>
<td>$18,409.83</td>
</tr>
<tr>
<td>Brazil</td>
<td>2013</td>
<td>13444</td>
<td>$7,498.40</td>
<td>Japan</td>
<td>2008</td>
<td>2945654</td>
<td>$26,479.55</td>
</tr>
<tr>
<td>Canada</td>
<td>2010</td>
<td>36712</td>
<td>$30,483.16</td>
<td>South Korea</td>
<td>2012</td>
<td>21255420</td>
<td>$25,331.86</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2013</td>
<td>52578</td>
<td>$32,861.25</td>
<td>Luxembourg</td>
<td>2013</td>
<td>38502</td>
<td>$36,322.64</td>
</tr>
<tr>
<td>China</td>
<td>2002</td>
<td>4733</td>
<td>$1,728.42</td>
<td>Mexico</td>
<td>2012</td>
<td>47678</td>
<td>$6,435.99</td>
</tr>
<tr>
<td>Colombia</td>
<td>2013</td>
<td>5295826</td>
<td>$4,352.98</td>
<td>Netherlands</td>
<td>2013</td>
<td>23013</td>
<td>$26,697.22</td>
</tr>
<tr>
<td>Czech Rep</td>
<td>2013</td>
<td>228173</td>
<td>$17,021.71</td>
<td>Norway</td>
<td>2013</td>
<td>359843</td>
<td>$36,384.53</td>
</tr>
<tr>
<td>Germany</td>
<td>2013</td>
<td>21230</td>
<td>$27,174.40</td>
<td>Panama</td>
<td>2013</td>
<td>4947</td>
<td>$8,419.63</td>
</tr>
<tr>
<td>Denmark</td>
<td>2013</td>
<td>236619</td>
<td>$28,002.25</td>
<td>Peru</td>
<td>2013</td>
<td>10461</td>
<td>$6,480.57</td>
</tr>
<tr>
<td>Dom Rep</td>
<td>2007</td>
<td>71580</td>
<td>$4,626.44</td>
<td>Poland</td>
<td>2013</td>
<td>23520</td>
<td>$13,517.24</td>
</tr>
<tr>
<td>Estonia</td>
<td>2013</td>
<td>8100</td>
<td>$15,083.80</td>
<td>Paraguay</td>
<td>2013</td>
<td>18259280</td>
<td>$7,691.47</td>
</tr>
<tr>
<td>Egypt</td>
<td>2012</td>
<td>7200</td>
<td>$3,860.91</td>
<td>Serbia</td>
<td>2013</td>
<td>339470</td>
<td>$8,659.95</td>
</tr>
<tr>
<td>Spain</td>
<td>2013</td>
<td>15025</td>
<td>$20,060.08</td>
<td>Russia</td>
<td>2013</td>
<td>256344</td>
<td>$17,320.54</td>
</tr>
<tr>
<td>Finland</td>
<td>2013</td>
<td>25894</td>
<td>$27,214.59</td>
<td>Sweden</td>
<td>2005</td>
<td>189476</td>
<td>$22,966.67</td>
</tr>
<tr>
<td>France</td>
<td>2010</td>
<td>21021</td>
<td>$25,786.63</td>
<td>Slovenia</td>
<td>2012</td>
<td>13336</td>
<td>$20,846.46</td>
</tr>
<tr>
<td>Georgia</td>
<td>2013</td>
<td>3446</td>
<td>$4,301.13</td>
<td>Slovak Rep</td>
<td>2013</td>
<td>8107</td>
<td>$16,161.71</td>
</tr>
<tr>
<td>Greece</td>
<td>2013</td>
<td>9005</td>
<td>$12,700.99</td>
<td>UK</td>
<td>2013</td>
<td>18219</td>
<td>$24,787.76</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2006</td>
<td>13336</td>
<td>$4,766.15</td>
<td>US</td>
<td>2013</td>
<td>31955</td>
<td>$31,955.00</td>
</tr>
<tr>
<td>Hungary</td>
<td>2012</td>
<td>1466500</td>
<td>$12,329.89</td>
<td>Uruguay</td>
<td>2013</td>
<td>198768</td>
<td>$10,679.11</td>
</tr>
<tr>
<td>Ireland</td>
<td>2010</td>
<td>22320</td>
<td>$24,867.40</td>
<td>South Africa</td>
<td>2012</td>
<td>19516</td>
<td>$3,786.57</td>
</tr>
<tr>
<td>Iceland</td>
<td>2010</td>
<td>3563843</td>
<td>$29,776.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figures 1A

Trends in Single Parenthood

Austria | Australia | Belgium | Brazil | Canada
---|---|---|---|---
0.4 | 0.4 | 0.4 | 0.4 | 0.4
0.2 | 0.2 | 0.2 | 0.2 | 0.2

Switzerland | Colombia | China | Czech Rep | Germany
---|---|---|---|---
0.4 | 0.4 | 0.4 | 0.4 | 0.4
0.2 | 0.2 | 0.2 | 0.2 | 0.2

Denmark | Dominican Rep | Estonia | Egypt | Spain
---|---|---|---|---
0.4 | 0.4 | 0.4 | 0.4 | 0.4
0.2 | 0.2 | 0.2 | 0.2 | 0.2

Finland | France | Georgia | Greece | Guatemala
---|---|---|---|---
0.4 | 0.4 | 0.4 | 0.4 | 0.4
0.2 | 0.2 | 0.2 | 0.2 | 0.2

Hungary | Ireland | Israel | India | Iceland
---|---|---|---|---
0.4 | 0.4 | 0.4 | 0.4 | 0.4
0.2 | 0.2 | 0.2 | 0.2 | 0.2
Figure 1B
Trends in Single Parenthood

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Japan</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Korea</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Mexico</td>
<td>1980</td>
<td>1990</td>
<td>2000</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Norway</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Panama</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Peru</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Poland</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Paraguay</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Serbia</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Russia</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Sweden</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Slovak Rep</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>United States</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>Uruguay</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>South Africa</td>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
</tbody>
</table>
Figure 2A
Trends in Single Parent Employment
Figure 2B
Trends in Single Parent Employment
Figure 3A

Single Parent Poverty Rates

- Austria
- Australia
- Belgium
- Brazil
- Canada
- Switzerland
- China
- Colombia
- Czech Rep
- Germany
- Denmark
- Dominican Rep
- Egypt
- Spain
- Estonia
- Finland
- France
- Georgia
- Greece
- Guatemala
- Hungary
- Ireland
- Israel
- India
- Iceland
Figure 3B

Single Parent Poverty Rates

- Italy
- Japan
- South Korea
- Luxembourg
- Mexico
- Netherlands
- Norway
- Panama
- Peru
- Poland
- Paraguay
- Serbia
- Sweden
- Russia
- Slovenia
- Slovak Rep
- United Kingdom
- United States
- Uruguay
- South Africa
Figure 4A
Single and Coupled Parent Poverty Rates

- Austria
- Australia
- Belgium
- Brazil
- Canada
- Switzerland
- China
- Colombia
- Czech Rep
- Germany
- Denmark
- Dominican Rep
- Egypt
- Spain
- Estonia
- Finland
- France
- Georgia
- Greece
- Guatemala
- Hungary
- Ireland
- Israel
- India
- Iceland
Figure 4B

Single and Coupled Parent Poverty Rates

- Italy
- Japan
- South Korea
- Luxembourg
- Mexico
- Netherlands
- Norway
- Panama
- Peru
- Poland
- Paraguay
- Serbia
- Sweden
- Russia
- Slovenia
- Slovak Rep.
- United Kingdom
- United States
- Uruguay
- South Africa

Legend:
- Couples 50% Relative Poverty
- Single Parent 50% Relative Poverty
Figure 5A

Redistribution reducing poverty for single-parent families
Figure 6B

<table>
<thead>
<tr>
<th>Country</th>
<th>Before family transfers</th>
<th>After family transfers</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>cn02</td>
<td>-2%</td>
<td>26%</td>
<td>28%</td>
</tr>
<tr>
<td>pe13</td>
<td>-2%</td>
<td>23%</td>
<td>25%</td>
</tr>
<tr>
<td>pe13</td>
<td>-15%</td>
<td>22%</td>
<td>23%</td>
</tr>
<tr>
<td>mx12</td>
<td>-4%</td>
<td>21%</td>
<td>25%</td>
</tr>
<tr>
<td>br13</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>py13</td>
<td>-1%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>in12</td>
<td>0%</td>
<td>19%</td>
<td>20%</td>
</tr>
<tr>
<td>in11</td>
<td>-1%</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>da07</td>
<td>0%</td>
<td>19%</td>
<td>23%</td>
</tr>
<tr>
<td>co13</td>
<td>-4%</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>eg12</td>
<td>-1%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>ge13</td>
<td>-1%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>es18</td>
<td>-1%</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>za12</td>
<td>3%</td>
<td>15%</td>
<td>22%</td>
</tr>
<tr>
<td>gr13</td>
<td>0%</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>rs13</td>
<td>2%</td>
<td>14%</td>
<td>16%</td>
</tr>
<tr>
<td>it14</td>
<td>0%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>uy13</td>
<td>0%</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>us13</td>
<td>-1%</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>hu12</td>
<td>-3%</td>
<td>11%</td>
<td>17%</td>
</tr>
<tr>
<td>pe13</td>
<td>-1%</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td>ru13</td>
<td>3%</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>sc13</td>
<td>-4%</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>jp03</td>
<td>1%</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>ca10</td>
<td>2%</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>ar10</td>
<td>-4%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>au10</td>
<td>-3%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>si12</td>
<td>-4%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>uk18</td>
<td>-10%</td>
<td>7%</td>
<td>17%</td>
</tr>
<tr>
<td>lu13</td>
<td>-11%</td>
<td>7%</td>
<td>18%</td>
</tr>
<tr>
<td>kr13</td>
<td>-1%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>ch13</td>
<td>-3%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>le10</td>
<td>-3%</td>
<td>5%</td>
<td>12%</td>
</tr>
<tr>
<td>at13</td>
<td>-6%</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>cz13</td>
<td>0%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>be00</td>
<td>0%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>de13</td>
<td>-6%</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td>no13</td>
<td>-3%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>se05</td>
<td>0%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>in10</td>
<td>0%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>nl13</td>
<td>0%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>ti13</td>
<td>-6%</td>
<td>2%</td>
<td>9%</td>
</tr>
<tr>
<td>de13</td>
<td>-3%</td>
<td>2%</td>
<td>5%</td>
</tr>
</tbody>
</table>
### Figure 7

**Child support reducing poverty for single-parent families**

<table>
<thead>
<tr>
<th>Code</th>
<th>Before child support</th>
<th>After child support</th>
<th>The difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ue13</td>
<td>-2%</td>
<td>36%</td>
<td>38%</td>
</tr>
<tr>
<td>il12</td>
<td>-3%</td>
<td>28%</td>
<td>30%</td>
</tr>
<tr>
<td>pe13</td>
<td>-3%</td>
<td>26%</td>
<td>29%</td>
</tr>
<tr>
<td>ca10</td>
<td>-3%</td>
<td>26%</td>
<td>29%</td>
</tr>
<tr>
<td>es13</td>
<td>-4%</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>ku13</td>
<td>-2%</td>
<td>25%</td>
<td>27%</td>
</tr>
<tr>
<td>de13</td>
<td>-6%</td>
<td>25%</td>
<td>30%</td>
</tr>
<tr>
<td>tu14</td>
<td>-1%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>do07</td>
<td>-5%</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>uy13</td>
<td>-5%</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>au10</td>
<td>-4%</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>ee13</td>
<td>-1%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>fr10</td>
<td>-3%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>py13</td>
<td>-1%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>pl13</td>
<td>-6%</td>
<td>22%</td>
<td>28%</td>
</tr>
<tr>
<td>gr13</td>
<td>-2%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>ia10</td>
<td>-1%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>pe13</td>
<td>-3%</td>
<td>21%</td>
<td>24%</td>
</tr>
<tr>
<td>hu12</td>
<td>-1%</td>
<td>18%</td>
<td>24%</td>
</tr>
<tr>
<td>it10</td>
<td>-10%</td>
<td>18%</td>
<td>28%</td>
</tr>
<tr>
<td>ru13</td>
<td>-2%</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>be00</td>
<td>-6%</td>
<td>17%</td>
<td>23%</td>
</tr>
<tr>
<td>ch04</td>
<td>-19%</td>
<td>10%</td>
<td>35%</td>
</tr>
<tr>
<td>et13</td>
<td>-7%</td>
<td>15%</td>
<td>23%</td>
</tr>
<tr>
<td>rs13</td>
<td>-2%</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>no13</td>
<td>-3%</td>
<td>14%</td>
<td>17%</td>
</tr>
<tr>
<td>uk13</td>
<td>-1%</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>fl13</td>
<td>-3%</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>sk13</td>
<td>-5%</td>
<td>10%</td>
<td>16%</td>
</tr>
<tr>
<td>se05</td>
<td>-2%</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>dk13</td>
<td>-8%</td>
<td>8%</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>-8%</td>
<td>7%</td>
<td>15%</td>
</tr>
</tbody>
</table>
Figure 8A

Percent of single parents receiving child support

Austria  Australia  Belgium  Canada  Switzerland

Colombia  Germany  Denmark  Dominican Rep  Spain

Estonia  Finland  France  Greece  Guatemala

Hungary  Ireland  Israel  Iceland  Italy

Luxembourg  Netherlands  Norway  Panama  Peru
Figure 8B
Percent of single parents receiving child support

- Poland
- Serbia
- Sweden
- Russia
- Slovenia
- United Kingdom
- United States
- Uruguay
Figure 9A
Share of child support received as a % of disposable household income
Figure 9B

Share of child support received as a % of disposable household income
Figure 10A

Share of child support paid as a % of disposable household income
Figure 10B

Share of child support paid as a % of disposable household income
Figure 11A

Trends in child support reducing single parent poverty

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>After Child Support</th>
<th>Before Child Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Australia</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Belgium</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Brazil</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Canada</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>China</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Colombia</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Czech Rep</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Germany</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Denmark</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Dominican Rep</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Spain</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Estonia</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Finland</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>France</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Georgia</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Greece</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Hungary</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Ireland</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Israel</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>India</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Iceland</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Italy</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>South Korea</td>
<td>1990</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>0.4</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Figure 11B

Trends in child support reducing single parent poverty

Luxembourg  Mexico  Netherlands  Norway  Panama

Peru  Poland  Serbia  Sweden  Russia

Slovenia  Slovak Rep  United Kingdom  United States  Uruguay

South Africa
Figure 12

Association between family benefit design and reducing poverty

Poverty

Single-Parent Families [family benefit scheme from none to universal]

Coupled-Parent Families [Family benefit scheme: from none to universal]
Figure 13

Association between maternity leave and reducing poverty

Single-Parent Families [shorter to longer weeks of paid leave]

Coupled-Parent Families [shorter to longer weeks of paid leave]
Figure 14

Association: Leave for both parents and reducing poverty

Single-Parent Families [Leave for fathers: from none to dad bonus/long leave]

Coupled-Parent [Leave for fathers: from none to dad bonus/long leave]
Figure 15

Association: Leave to care for sick child and reducing poverty

Single-Parent Families [Leave: none, unpaid, paid]

Coupled-Parent Families [Leave: none, unpaid, paid]
Figure 16

Association: Rest leave and reducing poverty

[Plot showing the relationship between single-parent families with guaranteed hours of rest in a week and coupled-parent families with guaranteed hours of rest in a week, with countries plotted on the graph.]
Figure 17

Association: Annual leave and reducing poverty
Figure 18

Association: Sick leave and reducing poverty
Table 3A: Multilevel regression on single and coupled parent family poverty and leave and working time regulations

<table>
<thead>
<tr>
<th>Model: Controls</th>
<th>Model 2: Mom Leave</th>
<th>Model 3: Mom Leave + Emp</th>
<th>Model 4: Leave for both parents</th>
<th>Model 5: Leave for both parents</th>
<th>Model 6: Annual Leave</th>
<th>Model 7: Random Effect, Single Parent</th>
</tr>
</thead>
</table>

**Socio-demographic characteristics**

- **education**:
  - Model 1: Controls
    - B: -1.02 **
    - SE: 0.01
  - Model 2: Mom Leave
    - B: -1.01 **
    - SE: 0.01
  - Model 3: Mom Leave + Emp
    - B: -0.93 **
    - SE: 0.01
  - Model 4: Leave for both parents
    - B: -0.93 **
    - SE: 0.01
  - Model 5: Leave for both parents
    - B: -0.93 **
    - SE: 0.01
  - Model 6: Annual Leave
    - B: -0.93 **
    - SE: 0.01
  - Model 7: Random Effect, Single Parent
    - B: -0.93 **
    - SE: 0.01

- **age**:
  - B: -0.03 **
  - SE: 0.00

- **children > 5 years**:
  - B: 0.29 **
  - SE: 0.01

- **singleparent**:
  - B: 0.85 **
  - SE: 0.02

**Employment**

- no paid leave (ref)
  - B: -1.15 **
  - SE: 0.02

**Mom Leave**

- < 14 wks
  - B: -0.27
  - SE: 0.56
  - Model 1: Controls
  - B: 0.09
  - SE: 0.57
  - Model 2: Mom Leave
  - B: 0.28
  - SE: 0.55
  - Model 3: Mom Leave + Emp
  - B: 0.71
  - SE: 0.55
  - Model 4: Leave for both parents
  - B: 0.77
  - SE: 0.56
  - Model 5: Leave for both parents
  - B: 0.86
  - SE: 0.57

**Singleparent*momleave**

- no paid leave (ref)
  - B: -0.78 **
  - SE: 0.11

**Leave for both parents**

- no leave (ref)
  - B: 0.56
  - SE: 0.32

- < 3 weeks for dad
  - B: 0.22
  - SE: -0.17

- > 2 weeks for dad
  - B: 0.33
  - SE: 0.36

- bonus for dad/long leave
  - B: 0.33
  - SE: 0.36

**Singleparent*leave for both parents**

- no leave (ref)
  - B: 0.56
  - SE: 0.07

- < 3 weeks for dad
  - B: 0.34
  - SE: 0.08

- > 2 weeks for dad
  - B: 0.11
  - SE: 0.05

- bonus for dad/long leave
  - B: 0.11
  - SE: 0.05

**Working time regulations**

- rest leave
  - B: -0.02 **
  - SE: 0.01

- Singleparent*rest leave
  - B: 0.02 **
  - SE: 0.00

- annual leave
  - B: -0.01
  - SE: 0.01

- Singleparent*annual leave
  - B: 0.01 **
  - SE: 0.00

- **intercept**:
  - B: 0.54 **
  - SE: 0.09

**Random part**

- Country-level variance
  - B: 0.28
  - SE: 0.06

- Single Parent variance
  - B: 0.19

Author's calculations based on data from Luxembourg Study Database and World Policy Database.

*P < .05, **P < .01
Table 3B: Multilevel regression on single and coupled parent family poverty and leave and working time regulations, random effect

<table>
<thead>
<tr>
<th></th>
<th>Model 1: Controls</th>
<th>Model 2: Mom Leave</th>
<th>Model 3: Mom Leave + Emp</th>
<th>Model 4: Leave for both parents</th>
<th>Model 5: Rest Leave</th>
<th>Model 6: Annual Leave</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td><strong>Socio-demographic characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>education</td>
<td>-1.01 **</td>
<td>0.01</td>
<td>-1.01 **</td>
<td>0.01</td>
<td>-0.93 **</td>
<td>0.01</td>
</tr>
<tr>
<td>age</td>
<td>-0.02 **</td>
<td>0.00</td>
<td>-0.02 **</td>
<td>0.00</td>
<td>-0.02 **</td>
<td>0.00</td>
</tr>
<tr>
<td>children &gt; 5 years</td>
<td>0.30 **</td>
<td>0.01</td>
<td>0.30 **</td>
<td>0.01</td>
<td>0.28 **</td>
<td>0.01</td>
</tr>
<tr>
<td>singleparent</td>
<td>1.03 **</td>
<td>0.07</td>
<td>1.63 **</td>
<td>0.50</td>
<td>1.66 **</td>
<td>0.51</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no paid leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 14 wks</td>
<td>-0.06</td>
<td>0.58</td>
<td>0.07</td>
<td>0.65</td>
<td>0.25</td>
<td>0.55</td>
</tr>
<tr>
<td>14-25.9 wks</td>
<td>-0.13</td>
<td>0.58</td>
<td>-0.06</td>
<td>0.63</td>
<td>0.13</td>
<td>0.54</td>
</tr>
<tr>
<td>26-51.9 wks</td>
<td>-0.70</td>
<td>0.59</td>
<td>-0.64</td>
<td>0.63</td>
<td>-0.24</td>
<td>0.56</td>
</tr>
<tr>
<td>&gt; 52 wks</td>
<td>-0.42</td>
<td>0.58</td>
<td>-0.39</td>
<td>0.63</td>
<td>0.02</td>
<td>0.57</td>
</tr>
<tr>
<td><strong>Singleparent*momleave</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no paid leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 14 wks</td>
<td>-1.20 *</td>
<td>0.52</td>
<td>-1.69 *</td>
<td>0.54</td>
<td>-1.82 **</td>
<td>0.48</td>
</tr>
<tr>
<td>14-25.9 wks</td>
<td>-0.69</td>
<td>0.52</td>
<td>-0.94</td>
<td>0.53</td>
<td>-1.12 *</td>
<td>0.47</td>
</tr>
<tr>
<td>26-51.9 wks</td>
<td>-0.23</td>
<td>0.53</td>
<td>-0.53</td>
<td>0.53</td>
<td>-0.86</td>
<td>0.49</td>
</tr>
<tr>
<td>&gt; 52 wks</td>
<td>-0.29</td>
<td>0.51</td>
<td>-0.53</td>
<td>0.53</td>
<td>-1.10 *</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Leave for both parents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>leave, no incentives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 3 weeks for dad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 2 weeks for dad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singleparent*leave for both parents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>leave, no incentives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 3 weeks for dad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 2 weeks for dad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Working time regulations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rest leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singleparent*rest leave</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>annual leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Singleparent*annual leave</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intercept</strong></td>
<td>0.38 **</td>
<td>0.09</td>
<td>0.80</td>
<td>0.57</td>
<td>1.43 *</td>
<td>0.62</td>
</tr>
<tr>
<td><strong>Random part</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country-level variance (var cons)</td>
<td>0.42</td>
<td>0.09</td>
<td>0.31</td>
<td>0.06</td>
<td>0.37</td>
<td>0.08</td>
</tr>
<tr>
<td>Single Parent Variance</td>
<td>0.34</td>
<td>0.07</td>
<td>0.24</td>
<td>0.05</td>
<td>0.25</td>
<td>0.06</td>
</tr>
</tbody>
</table>

Author's calculations based on data from Luxembourg Study Database and World Policy Database

*P < .05, **P<.01
Table 4A: Multilevel regression on single and coupled parent family poverty and family benefit, leave for mothers, and working time regulation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Socio-demographic characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>education</td>
<td>-1.02 **</td>
<td>0.01</td>
<td>-1.02 **</td>
<td>0.01</td>
<td>-0.93 **</td>
<td>0.01</td>
</tr>
<tr>
<td>age</td>
<td>-0.03 **</td>
<td>0.00</td>
<td>-0.02 **</td>
<td>0.00</td>
<td>-0.02 **</td>
<td>0.00</td>
</tr>
<tr>
<td>children &gt; 5 years</td>
<td>0.29 **</td>
<td>0.01</td>
<td>0.30 **</td>
<td>0.01</td>
<td>0.29 **</td>
<td>0.01</td>
</tr>
<tr>
<td>singleparent</td>
<td>0.85 **</td>
<td>0.02</td>
<td>0.32 **</td>
<td>0.04</td>
<td>-0.09</td>
<td>0.04</td>
</tr>
<tr>
<td>Employment</td>
<td>-1.14 **</td>
<td>0.02</td>
<td>-1.16 **</td>
<td>0.02</td>
<td>-1.17 **</td>
<td>0.02</td>
</tr>
<tr>
<td>Family Benefit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no known cash benefits (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>means tested</td>
<td>0.10</td>
<td>0.25</td>
<td>-0.10</td>
<td>0.25</td>
<td>-0.02</td>
<td>0.28</td>
</tr>
<tr>
<td>universal</td>
<td>-0.38</td>
<td>0.24</td>
<td>-0.63 **</td>
<td>0.24</td>
<td>-0.43</td>
<td>0.29</td>
</tr>
<tr>
<td>Singleparent*family benefit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no known cash benefits (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>means tested</td>
<td>0.48 **</td>
<td>0.05</td>
<td>0.75 **</td>
<td>0.05</td>
<td>0.38 **</td>
<td>0.05</td>
</tr>
<tr>
<td>universal</td>
<td>0.81 **</td>
<td>0.05</td>
<td>1.08 **</td>
<td>0.05</td>
<td>0.49 **</td>
<td>0.06</td>
</tr>
<tr>
<td>Mom Leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no paid leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 14 wks</td>
<td>-0.15</td>
<td>0.62</td>
<td>0.22</td>
<td>0.63</td>
<td>0.14</td>
<td>0.67</td>
</tr>
<tr>
<td>14-25.9 wks</td>
<td>-0.24</td>
<td>0.61</td>
<td>0.12</td>
<td>0.62</td>
<td>0.00</td>
<td>0.64</td>
</tr>
<tr>
<td>26-51.9 wks</td>
<td>-0.54</td>
<td>0.60</td>
<td>-0.17</td>
<td>0.62</td>
<td>-0.20</td>
<td>0.65</td>
</tr>
<tr>
<td>&gt; 52 wks</td>
<td>-0.41</td>
<td>0.61</td>
<td>0.07</td>
<td>0.65</td>
<td>0.05</td>
<td>0.67</td>
</tr>
<tr>
<td>Singleparent*momleave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no paid leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 14 wks</td>
<td>-1.22 **</td>
<td>0.12</td>
<td>-1.62 **</td>
<td>0.13</td>
<td>-1.58 **</td>
<td>0.55</td>
</tr>
<tr>
<td>14-25.9 wks</td>
<td>-0.61 **</td>
<td>0.13</td>
<td>-0.99 **</td>
<td>0.13</td>
<td>-0.98</td>
<td>0.53</td>
</tr>
<tr>
<td>26-51.9 wks</td>
<td>-0.23</td>
<td>0.13</td>
<td>-0.62 **</td>
<td>0.14</td>
<td>-0.73</td>
<td>0.54</td>
</tr>
<tr>
<td>&gt; 52 wks</td>
<td>-0.27 *</td>
<td>0.13</td>
<td>-0.77 **</td>
<td>0.14</td>
<td>-0.75</td>
<td>0.56</td>
</tr>
<tr>
<td>Working time regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rest leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singleparent*rest leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>intercept</td>
<td>0.54 **</td>
<td>0.09</td>
<td>0.63 **</td>
<td>0.22</td>
<td>1.59 **</td>
<td>0.22</td>
</tr>
<tr>
<td>Random part</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country-level variance</td>
<td>0.28</td>
<td>0.06</td>
<td>0.26</td>
<td>0.06</td>
<td>0.27</td>
<td>0.06</td>
</tr>
<tr>
<td>Single Parent variance</td>
<td>0.20</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Author's calculations based on data from Luxembourg Study Database and World Policy Database

*P < .05, **P < .01
Table 4B: Multilevel regression on poverty and family benefit, leave for mothers, and working time regulation, with single parent random effect

<table>
<thead>
<tr>
<th></th>
<th>Model 1: Controls</th>
<th>Model 2: Family Benefit</th>
<th>Model 3: Employment</th>
<th>Model 4: Mom Leave</th>
<th>Model 5: Rest Leave</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( B )</td>
<td>( SE )</td>
<td>( B )</td>
<td>( SE )</td>
<td>( B )</td>
</tr>
<tr>
<td><strong>Socio-demographic characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>education</td>
<td>-1.01 **</td>
<td>0.01</td>
<td>-1.01 **</td>
<td>0.01</td>
<td>-0.93 **</td>
</tr>
<tr>
<td>age</td>
<td>-0.02 **</td>
<td>0.00</td>
<td>-0.02 **</td>
<td>0.00</td>
<td>-0.02 **</td>
</tr>
<tr>
<td>children &gt; 5 years</td>
<td>0.30 **</td>
<td>0.01</td>
<td>0.30 **</td>
<td>0.01</td>
<td>0.29 **</td>
</tr>
<tr>
<td>singleparent</td>
<td>1.03 **</td>
<td>0.07</td>
<td>0.39 *</td>
<td>0.20</td>
<td>-0.04</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-1.19 **</td>
<td>0.02</td>
<td>-1.19 **</td>
<td>0.02</td>
<td>-1.19 **</td>
</tr>
<tr>
<td><strong>Family Benefit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no known cash benefits (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provided certain cases</td>
<td>-0.26</td>
<td>0.36</td>
<td>-0.44</td>
<td>0.36</td>
<td>-0.37</td>
</tr>
<tr>
<td>means tested</td>
<td>0.09</td>
<td>0.29</td>
<td>-0.13</td>
<td>0.29</td>
<td>0.29</td>
</tr>
<tr>
<td>universal</td>
<td>-0.38</td>
<td>0.26</td>
<td>-0.65 **</td>
<td>0.26</td>
<td>-0.52</td>
</tr>
<tr>
<td><strong>Singleparent*family benefit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no known cash benefits (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provided certain cases</td>
<td>1.07 **</td>
<td>0.30</td>
<td>1.25 **</td>
<td>0.34</td>
<td>0.34</td>
</tr>
<tr>
<td>means tested</td>
<td>0.43</td>
<td>0.24</td>
<td>0.75 **</td>
<td>0.27</td>
<td>0.38</td>
</tr>
<tr>
<td>universal</td>
<td>0.94 **</td>
<td>0.22</td>
<td>1.21 **</td>
<td>0.25</td>
<td>0.59 **</td>
</tr>
<tr>
<td><strong>Mom Leave</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no paid leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 14 wks</td>
<td>-0.19</td>
<td>0.68</td>
<td>0.14</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>14-25.9 wks</td>
<td>-0.30</td>
<td>0.67</td>
<td>0.00</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>26-51.9 wks</td>
<td>-0.52</td>
<td>0.66</td>
<td>-0.20</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>&gt; 52 wks</td>
<td>-0.37</td>
<td>0.67</td>
<td>0.05</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td><strong>Singleparent*momleave</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no paid leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 14 wks</td>
<td>-1.14 *</td>
<td>0.56</td>
<td>-1.58 **</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>14-25.9 wks</td>
<td>-0.52</td>
<td>0.56</td>
<td>-0.98</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td>26-51.9 wks</td>
<td>-0.29</td>
<td>0.55</td>
<td>-0.73</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>&gt; 52 wks</td>
<td>-0.19</td>
<td>0.56</td>
<td>-0.75</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td><strong>Working time regulations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rest leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singleparent*rest leave</td>
<td>0.02 *</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Random part</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country-level variance</td>
<td>0.42</td>
<td>0.09</td>
<td>0.34</td>
<td>0.07</td>
<td>0.35</td>
</tr>
<tr>
<td>Single Parent variance</td>
<td>0.34</td>
<td>0.07</td>
<td>0.24</td>
<td>0.05</td>
<td>0.30</td>
</tr>
</tbody>
</table>

Author's calculations based on data from Luxembourg Study Database and World Policy Database

*P < .05, **P<.01
Table 5A: Multilevel regression on family poverty and leave for sick child, family benefit, and working regulation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Socio-demographic characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>education</td>
<td>1.02 **</td>
<td>0.01</td>
<td>-1.02 **</td>
<td>0.01</td>
<td>-0.93 **</td>
<td>0.01</td>
</tr>
<tr>
<td>age</td>
<td>-0.03 **</td>
<td>0.00</td>
<td>-0.02 **</td>
<td>0.00</td>
<td>-0.02 **</td>
<td>0.00</td>
</tr>
<tr>
<td>children &gt; 5 years</td>
<td>0.30 **</td>
<td>0.01</td>
<td>0.30 **</td>
<td>0.01</td>
<td>0.29 **</td>
<td>0.01</td>
</tr>
<tr>
<td>singleparent</td>
<td>0.85 **</td>
<td>0.02</td>
<td>0.42 **</td>
<td>0.03</td>
<td>0.15 **</td>
<td>0.03</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leave to care for sick child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unpaid leave for both parents</td>
<td>-0.22</td>
<td>0.19</td>
<td>-0.43</td>
<td>0.19</td>
<td>-0.42</td>
<td>0.19</td>
</tr>
<tr>
<td>paid leave for both parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singleparent*child sick leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unpaid leave for both parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>paid leave for both parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Regulation: Sick leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 week -3.9 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 weeks - 25.9 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 or more weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singleparent*sick leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no leave (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 week -3.9 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 weeks - 25.9 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 or more weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Benefit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no known cash benefits (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provided certain cases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>means tested</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>universal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singleparent*family benefit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no known cash benefits (ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provided certain cases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>means tested</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>universal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.54 **</td>
<td>0.09</td>
<td>0.61 **</td>
<td>0.17</td>
<td>1.53 **</td>
<td>0.17</td>
</tr>
<tr>
<td>Random part</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country-level variance</td>
<td>0.28</td>
<td>0.06</td>
<td>0.29</td>
<td>0.06</td>
<td>0.30</td>
<td>0.06</td>
</tr>
<tr>
<td>Single Parent variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Author’s calculations based on data from Luxembourg Study Database and World Policy Database

*P < .05, **P<.01
References


(un)intended consequences of family policy in the social investment state. Universiteit
Antwerpen.

Van Lancker, W., Ghysels, J., & Cantillon, B. (2014). The impact of child benefits on single
mother poverty: Exploring the role of targeting in 15 European countries. *International

Van Lancker, W. (forthcoming). Does the use of reconciliation policies enable single mothers to
work? A comparative examination of European countries. In Nieuwenhuis, R. and


wellbeing in different welfare states. In Nieuwenhuis, R. and Maldonado, L.C., (eds.) *The